CLIP EXPRESS℠ PRODUCT CATALOG

ClarkDietrich®



STRONGER THAN STEEL℠.

CFS FRAMING CONNECTORS



CONNECTIONS PLAY A VITAL ROLE. AND SO DOES PEACE OF MIND.

ClarkDietrich Clip Express℠ stands alone in the industry. The vast lineup of products, quick delivery service and philosophy are unique in every respect—and especially in sum total. That's because Clip Express was created to give our customers an unmatched level of confidence.

EVERYTHING YOU NEED FROM ONE CONVENIENT SOURCE.

We know that having the right products, at the right time, and at the right price is absolutely essential to getting the job done. Clip Express is a single source for the industry's widest and most cost-effective array of rigid, deflection, bridging, and general-purpose clips, connectors, supports and framing hardware for commercial and residential cold-formed steel framing.

CONSISTENT, HIGH-QUALITY PRODUCTS.

When you design or specify by ClarkDietrich product name or number, you get fully engineered and rigorously tested systems and connectors—the same precision-formed products each and every time. It's exactly the kind of thing you'd expect from a partner like ClarkDietrich. The products we manufacture—like FastClip™ Slide Clips and Fast Top™ Clips—are created specifically to work as a system. It's an approach that leads to enhanced performance on the job.

VALUE THAT CONTRIBUTES TO YOUR BOTTOM LINE.

While you may find a cheaper price than ClarkDietrich, you won't find a lower overall cost or better value. We offer unmatched service through numerous plants and engineering offices—and nationwide product availability. From technical assistance to complete engineering services, we've truly put together an incredible array of resources to help you be successful on any project. This catalog is a great example. It's one of the most comprehensive light-gauge steel connector, clip, support and framing hardware manuals or resources available.

CONNECTIONS YOU CAN COUNT ON.

If getting what you want, when and how you want it is a must, ClarkDietrich Clip Express is ready to deliver. In fact, a wide array of shipping options is available, from standard ground to overnight. If we get your order today, you can get it tomorrow.

Count on ClarkDietrich to deliver products, systems and services that keep your costs down and productivity up.

Need help with product selection, ordering, scheduling, delivery, or anything else? Call the Clip Express sales team:

Clip Express—866-638-1908

Need Product Submittals?
Use SubmittalPro® at clarkdietrich.com.



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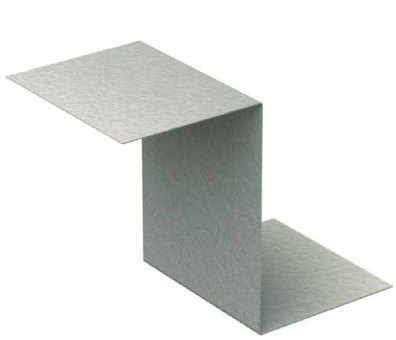
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Custom-Fabricated Specialty Products

When the job calls for a connection, clip or support that doesn't exist in this catalog, ClarkDietrich can create whatever you need. We can custom fabricate just about any shape, bend, angle or specialty framing clip to your exact specification. Manufactured using precision cutting and forming equipment, a diverse selection of specialized sizes and shapes is available—including prepunched holes and/or specialized slots. Simply submit your dimensioned drawings to your ClarkDietrich representative, and we'll do the rest!

Note: The performance and installation of custom-made products is the sole responsibility of the design professional and engineer of record. Any customer ordering a custom-fabricated clip, connector or support shall indemnify, defend and hold harmless ClarkDietrich and ClarkDietrich Engineering Services for any loss or damage arising in whole or in part.















MATERIAL SPECIFICATIONS

Gauge: 20 gauge (33mils)
Design Thickness: 0.0346 inches



Gauge: 18 gauge (43mils)
Design Thickness: 0.0451 inches

Gauge: 16 gauge (54mils)
Design Thickness: 0.0566 inches

Gauge: 14 gauge (68mils)
Design Thickness: 0.0713 inches



Gauge: 12 gauge (97mils)
Design Thickness: 0.1017 inches

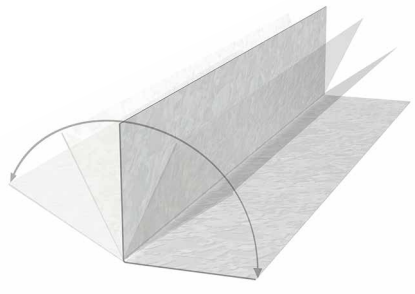
Gauge: 10 gauge (118mils)
Design Thickness: 0.1242 inches

Coating: CP90 or CP60
Must be specified at the time of order placement.
Yield Strength: 50ksi or 33ksi
Must be specified at the time of order placement.
ASTM: A653/A653M,
AISI: S240



INSTALLATION

Will vary based upon application. Consult the engineer of record.



Fastening Options

Connections can be made using a variety of fastening options. It is critical to specify the proper fastener to ensure the proper performance of the connections in light-gauge (cold-formed) steel construction. The most common and widely used connection methods are screw connections, powder-actuated fastener connections and weld connections. Each type of connection method has various advantages and disadvantages. Therefore, we provide data for the most common types so you can choose your preferred connection method.

SCREW CONNECTIONS

Self-drilling screws—These high-strength fasteners are used if the connection is multiple thicknesses of 33mils steel or thicker. One of the more common self-drilling screws is a #10-16 x 5/8 HWH SD (#10 diameter shaft, 16 threads per inch, 5/8 length, hex washer head self-drilling screw).



AISI Calculated Allowable Loads for Screw Connection

Material thickness (mils)	Design thickness (in)	Material Strength		#8-18 HWH Screw Dia. = 0.160		#10-16 HWH Screw Dia. = 0.190		#12-14 HWH Screw Dia. = 0.210		1/4"-14 HWH Screw Dia. = 0.240	
		Fy (ksi)	Fu (ksi)	Shear (lbs)	Tension (lbs)	Shear (lbs)	Tension (lbs)	Shear (lbs)	Tension (lbs)	Shear (lbs)	Tension (lbs)
33	0.0346	33	45	162	71	177	84	186	93	199	106
43	0.0451	33	45	241	92	263	109	277	121	296	138
54	0.0566	33	45	333	115	370	137	389	152	416	173
	0.0566	50	65	333	167	467	198	562	219	600	250
68	0.0713	33	45	–	–	467	173	550	191	588	218
	0.0713	50	65	–	–	467	249	667	276	849	315
97	0.1017	33	45	–	–	467	246	667	272	867	311
	0.1017	50	65	–	–	467	356	667	393	867	450
118	0.1242	33	45	–	–	–	–	667	333	867	380
	0.1242	50	65	–	–	–	–	667	480	867	549

AISI Calculated Allowable Bearing & Pullover for Screws

Material thickness (mils)	Design thickness (in)	Material Strength		#8-18 Screw Shank = 0.160 Head = 0.250		#10-16 Screw Shank = 0.190 Head = 0.375		#12-14 Screw Shank = 0.210 Head = 0.375		1/4"-14 Screw Shank = 0.240 Head = 0.500	
		Fy (ksi)	Fu (ksi)	Bearing (lbs)	Pullover (lbs)	Bearing (lbs)	Pullover (lbs)	Bearing (lbs)	Pullover (lbs)	Bearing (lbs)	Pullover (lbs)
33	0.0346	33	45	224	195	266	292	294	292	336	389
43	0.0451	33	45	292	254	347	381	384	381	438	507
54	0.0566	33	45	367	318	436	478	481	478	550	637
		50	65	530	460	629	690	695	690	795	920
68	0.0713	33	45	–	–	549	602	606	602	693	802
		50	65	–	–	792	869	876	869	1001	1159
97	0.1017	33	45	–	–	783	858	865	858	989	1144
		50	65	–	–	1130	1239	1249	1239	1428	1653
118	0.1242	33	45	–	–	–	–	1056	1048	1207	1397
		50	65	–	–	–	–	1526	1514	1744	2018

Notes:

1 All values were calculated using the 2001 AISI Specification w/2004 supplement.
2 Charts are based on Buildex TEK2 HWH screw capacities. All screws must meet minimum criteria outlined.
3 Shear strength for #8, #10, #12, and 1/4" screws must be greater than or equal to 1000 lbs, 1400 lbs, 2000 lbs and 2600 lbs respectively.
4 Tension strength for #8, #10, #12, and 1/4" screws must be greater than or equal to 1545 lbs, 1936 lbs, 2778 lbs and 4060 lbs respectively.
5 The minimum head diameter for #8 screws is 1/4". The minimum head diameter for #10 and #12 screws is 3/8". The minimum head diameter for 1/4" screws is 1/2".
6 Screw ultimate shear capacity is based on Buildex® DATA as a minimum.
7 Buildex is a registered trademark of Illinois Tool Works, Inc.



Proprietary deflection screws—Many of the ClarkDietrich deflection clips include our Proprietary Deflection Screw that has been specifically designed to provide friction-free deflection. These fasteners eliminate drag, binding or resistance that can often occur with common fasteners.



Proprietary Deflection Screw

Proprietary HD Deflection Screw (10ga and 12ga Clips Only)

Proprietary Deflection Screw & Proprietary HD Deflection Screw	
Average Ultimate Shear	2400 lbs
AISI S100 Factor of Safety (ASD)	3.0
Average Allowable Shear Load	800 lbs

POWDER-ACTUATED FASTENERS

Powder-actuated, or low-velocity driven fasteners, are commonly used to attach cold-formed steel framing members to concrete or structural steel supports. PAF pins are used for permanent attachments and are the most common type used for cold-formed construction.



Powder-Actuated Fasteners Allowable Loads

IN NORMAL WEIGHT CONCRETE (LBS)

Material thickness (mils)	Yield strength Fy (ksi)	Bearing (lbs)	Pullover (lbs)	PAF (Shank Dia.=0.145", Head Dia.=0.3") Min. Embedment 3/4"						PAF (Shank Dia.=0.145", Head Dia.=0.3") Min. Embedment 1"					
				2000psi		3000psi		4000psi		2000psi		3000psi		4000psi	
				Shear	Tension	Shear	Tension	Shear	Tension	Shear	Tension	Shear	Tension	Shear	Tension
33	33	203	234	95	70	110	90	125	110	140	90	160	120	185	155
43	33	265	304	95	70	110	90	125	110	140	90	160	120	185	155
54	33	333	382	95	70	110	90	125	110	140	90	160	120	185	155
	50	480	552	95	70	110	90	125	110	140	90	160	120	185	155
68	33	418	481	95	70	110	90	125	110	140	90	160	120	185	155
	50	604	695	95	70	110	90	125	110	140	90	160	120	185	155
97	33	597	686	95	70	110	90	125	110	140	90	160	120	185	155
	50	863	992	95	70	110	90	125	110	140	90	160	120	185	155
118	33	729	838	95	70	110	90	125	110	140	90	160	120	185	155
	50	1054	1211	95	70	110	90	125	110	140	90	160	120	185	155

Powder-Actuated Fasteners Allowable Loads

IN STRUCTURAL STEEL (LBS)

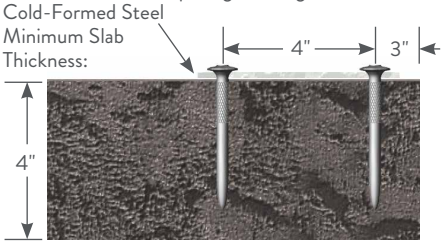
Material thickness (mils)	Yield strength Fy (ksi)	Bearing (lbs)	Pullover (lbs)	PAF (Shank Dia.=0.145", Head Dia.=0.3")									
				3/16"		1/4"		3/8"		1/2"		3/4"	
				Shear	Tension	Shear	Tension	Shear	Tension	Shear	Tension	Shear	Tension
33	33	203	234	425	455	620	800	680	810	605	850	545	500
43	33	265	304	425	455	620	800	680	810	605	850	545	500
54	33	333	382	425	455	620	800	680	810	605	850	545	500
	50	480	552	425	455	620	800	680	810	605	850	545	500
68	33	418	481	425	455	620	800	680	810	605	850	545	500
	50	604	695	425	455	620	800	680	810	605	850	545	500
97	33	597	686	425	455	620	800	680	810	605	850	545	500
	50	863	992	425	455	620	800	680	810	605	850	545	500
118	33	729	838	425	455	620	800	680	810	605	850	545	500
	50	1054	1211	425	455	620	800	680	810	605	850	545	500

Notes:

1 Bearing and pullover values were calculated using the 2001 AISI Specification w/2004 supplement.

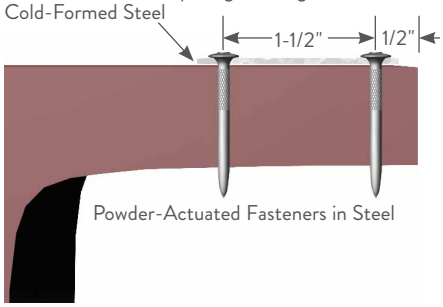
2 See General Note #6 on page 9 for additional information.

Minimum Fastener Spacing and Edge Distances:
Cold-Formed Steel
Minimum Slab
Thickness:



Powder-Actuated Fasteners in Concrete

Minimum Fastener Spacing and Edge Distances:
Cold-Formed Steel



Powder-Actuated Fasteners in Steel

Fastening Options

WELDED CONNECTIONS

Fillet welds—Used to make lap joints, corner joints and T-joint connections. Weld metal is deposited in a corner formed by the fit-up of the two members and penetrates and fuses with the base metal to form the joint.

Flare welds—Used to join rounded or curved pieces.

- A Flare Bevel groove weld is commonly used to join a rounded or curved piece to a flat piece.
- A Flare V groove weld is commonly used to join two rounded or curved parts.

Note: For graphical clarity, the weld illustrations do not show the penetration of the welded material. Weld penetration is critical in determining the quality of the weld.



AISI Allowable Loads for Welded Connections

Material thickness (mils)	Design thickness (in)	Material Strength		Fillet Weld		Flare Groove Weld	
		Fy (ksi)	Fu (ksi)	Longitudinal (lbs)	Transverse (lbs)	Longitudinal (lbs)	Transverse (lbs)
Values for a single one (1) inch weld							
43	0.0451	33	45	619	864	544	663
	0.0451	50	65	895	1247	785	958
54	0.0566	33	45	822	1084	682	832
	0.0566	50	65	1188	1566	985	1202
68	0.0713	33	45	1082	1365	859	1048
	0.0713	50	65	1563	1972	1241	1514
97	0.1017	33	45	1480	1480	1226	1480
	0.1017	50	65	1480	1480	1480	1480
118	0.1242	33	45	1808	1808	1497	1808
	0.1242	50	65	1808	1808	1808	1808
Values for a single two (2) inch weld							
43	0.0451	33	45	998	1727	1087	1326
	0.0451	50	65	1442	2495	1570	1915
54	0.0566	33	45	1253	2168	1364	1664
	0.0566	50	65	1809	3131	1971	2404
68	0.0713	33	45	1578	2731	1719	2096
	0.0713	50	65	2279	3944	2483	3028
97	0.1017	33	45	2884	2961	2452	2961
	0.1017	50	65	2961	2961	2961	2961
118	0.1242	33	45	3616	3616	2994	3616
	0.1242	50	65	3616	3616	3616	3616
Values for a single three (3) inch weld							
43	0.0451	33	45	1497	2591	1631	1989
	0.0451	50	65	2163	3742	2356	2873
54	0.0566	33	45	1879	3251	2047	2496
	0.0566	50	65	2714	4697	2956	3605
68	0.0713	33	45	2367	4096	2578	3144
	0.0713	50	65	3419	5916	3724	4542
97	0.1017	33	45	3376	4441	3678	4441
	0.1017	50	65	4441	4441	4441	4441
118	0.1242	33	45	4987	5424	4491	5424
	0.1242	50	65	5424	5424	5424	5424

Notes:

1 All values were calculated using the 2001 AISI Specification w/2004 supplement (Section E2).

2 Fxx values were based off of Fxx >= 70ksi and that Fxx > Fu.

3 Values include a factor of safety that varies depending on the AISI code calculation used.

4 Longer weld values can be found by following the AISI Specification or by calling Technical Services at 888-437-3244; however, using multiples of lengths shown for longer welds may result in incorrect values.

5 Weld values listed are based on a minimum effective throat of .707 times the design thickness.

General Notes

1. Install products per installation instructions detailed in this catalog.
2. Install all connectors and fasteners before load application.
3. Do not modify, change or alter any connector in this catalog.
4. Do not bend connectors unless they are specifically designed to be bent. Connectors that are not designed to be bent may fracture. Fractured steel will not carry load and must be replaced. Connectors that are designed to be bent shall only be bent one time.
5. Install fasteners per the manufacturer's instructions.
6. Load tables have been developed using the following fastener data:
   - Powder-Actuated Fastener (PAF)–Minimum shank diameter of 0.145" with a minimum head diameter of 0.300" placed in 3/16" steel minimum. All PAF pins must have a 5.0 safety factor and an allowable capacity greater than the values shown in the allowable load charts herein, either as a single pin or in multiples per each chart.
   - Design capacities of PAF fasteners used with light gauge steel connectors must comply with the provision of AISI S100 (2016) Section J5 Power-Actuated (PAF) Connections, as well as the PAF manufacture's design guidelines.
   - Hilti* Kwik-Con II–Reference 2011 Edition of the Hilti North American Product Technical Guide, Volume 2, page 340.
   - #10-16 Screws–Capacities as calculated according to the AISI North American Specification for the Design of Cold-Formed Steel Members. The ultimate nominal screw shear capacity must be 1400# or greater.
   - For additional allowable load tables and fastener options, please visit clarkdietrich.com.
7. Tabular footnotes must be followed and supercede general notes when in conflict.
8. Fasteners other than those specified may be substituted with the approval of the engineer of record.
9. Allowable loads and material data listed in this catalog supersedes all information in previous publications.
10. Allowable loads, in some cases, have been increased by one-third per allowable codes. It is important to verify that the actual installation meets the requirements to allow the one-third increase. If not, the engineer of record should adjust the loads down.
11. Listed loads are the maximum monotonic design loads to be applied to the connection based on testing or calculations. Load tables have been developed using Allowable Stress Design methodologies.
12. Allowable loads are the maximum forces applied in one direction only. When loads are applied in multiple directions, the engineer of record is responsible for verifying the maximum capabilities based on an appropriate interaction equation.
13. Where maximum movements (deflections) are specified, they are the total movement in both directions. The fastener positioning and size will affect the amount of allowable movement.
14. ClarkDietrich strongly recommends the following language be included in plans and specifications: "ClarkDietrich connectors were utilized in developing the plans and specifications for this project. Before substituting another brand, the engineer of record must verify the load capacities and approve the substitution in writing."

    *Hilti is a registered trademark of the Hilti Aktiengeseilschaft Corporation.
15. If your project requires DoD-compliant (or similar) blast design, please note that we provide connector capacity information necessary for DoD-compliant (or similar) design for our line of drift and deflection connectors.

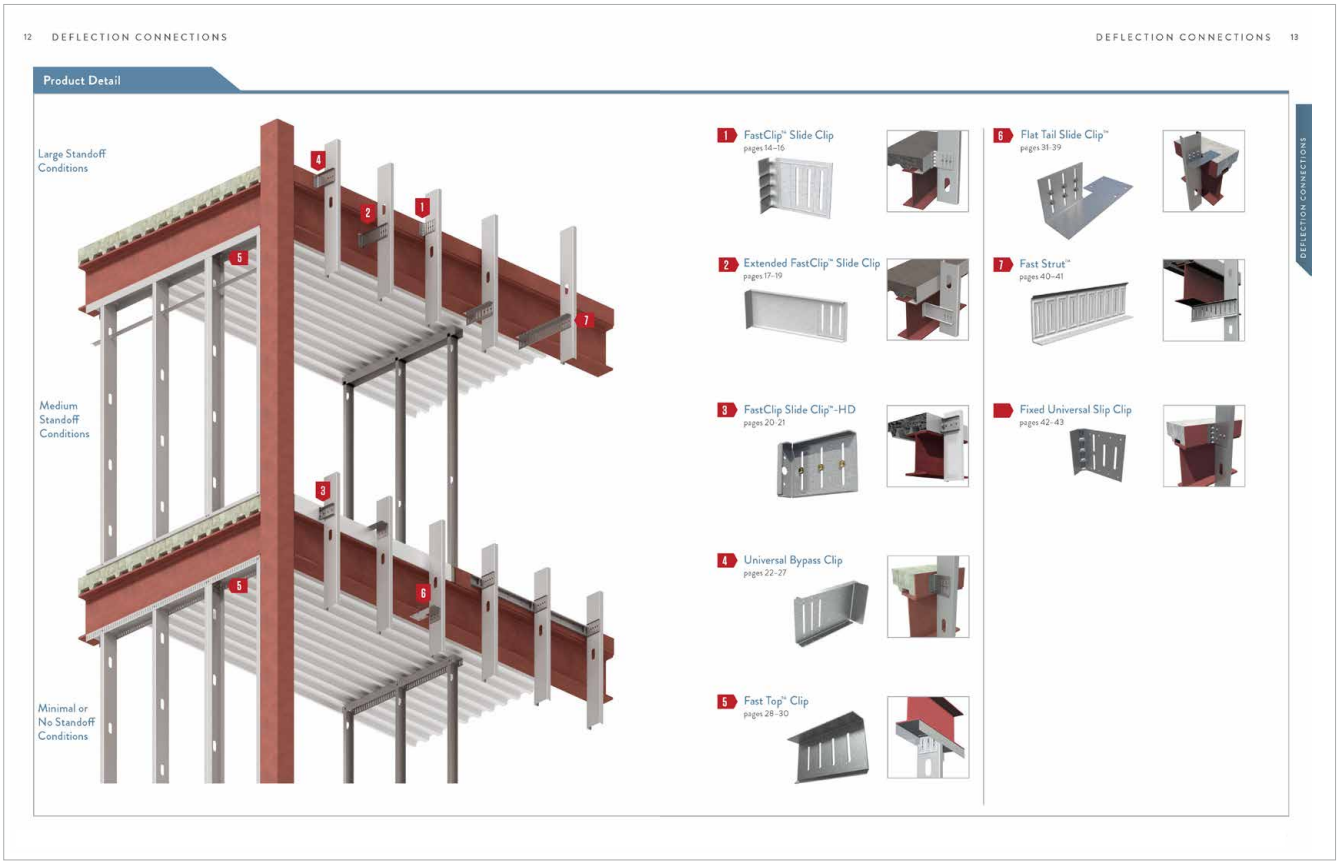
WARNING: Handling of these products without the proper use of hand and eye protection may result in injury.

How To Use This Catalog

This catalog is designed to help you select the right product or system for your construction applications. It is divided into seven major sections, with each one featuring a detailed building cutaway showcasing the products included in that section:

- Deflection Clips and Connections
- Drift Connections
- Rigid Connections
- Floor Framing Clips, Stiffeners, Supports and Hangers
- Bridging, Bracing and Backing Systems
- Roof and Truss Connections
- Specialty Clips and Fasteners

Example: Detailed building cutaway.

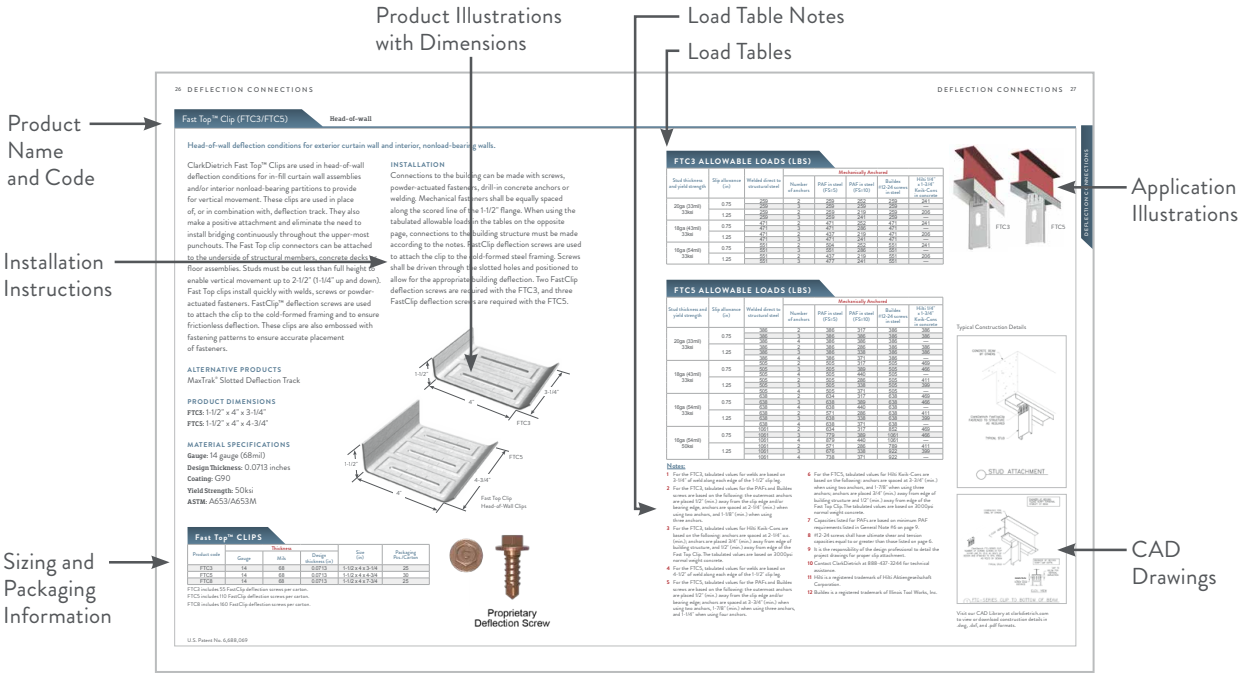


COMPREHENSIVE INDEX

At the back of the catalog, you'll find a quick reference index to our complete product offering. This index includes common names and product names, as well as common acronyms, to help you quickly find exactly what you're looking for.

PRODUCT PAGES

Each product page includes: an extensive product overview, features and benefits, detailed fastening instructions and patterns, in addition to the information shown below.



NOT ALL LOAD TABLES ARE CREATED EQUAL

It is critical that the allowable load tables for clips, connectors and fasteners are interpreted correctly—especially when comparing clip performance for a "ClarkDietrich or equal" specification. The allowable load for a clip assembly is governed by the capacity of the clip, plus the method of attachment to the structure. The ClarkDietrich tables include the attachment to the structure and not simply the clip capacity alone. When attaching a clip to the structure, the overall capacity can often be lower than the published value for the clip alone. Load tables that ignore the attachment to the structure essentially *imply that the clip or connector must be welded* to achieve the stated values. More often than not, clips and connectors will not be welded, based on installation quality and efficiency.

That's why ClarkDietrich publishes values for the most common attachment methods—so the designer or engineer can have confidence that all load requirements have been satisfied. For example, the tabulated values ClarkDietrich provides for the FastClip™ includes data for commonly used PAFs and Buildex* screws.

*Buildex is a registered trademark of Illinois Tool Works, Inc.

Example: ClarkDietrich allowable load table.

Anchor type	Stud thickness and yield strength	No. anchors to structure	Allowable load (lbs)
Buildex #12-24 Tek 5 Self-Drilling Screws to 3/16" Steel	20ga (33mils) 33ksi	2	425
		3	425
		4	425
	18ga (43mils) 33ksi	2	852
		3	852
		4	852
	16ga (54mils) 50ksi	2	852
		3	852
		4	852
	14ga (68mils) 50ksi	2	852
		3	852
		4	852
	12ga (97mils) 50ksi	2	852
		3	852
		4	852
PAF to 3/16" Steel*	20ga (33mils) 33ksi	2	511
		3	587
		4	587
	18ga (43mils) 33ksi	2	511
		3	767
		4	852
	16ga (54mils) 50ksi	2	852
		3	852
		4	852
	14ga (68mils) 50ksi	2	852
		3	852
		4	852
	12ga (97mils) 50ksi	2	852
		3	852
		4	852

Product Information

PRODUCT LABELING

The majority of the connectors listed in this catalog are identified using a very simple alphanumeric product code system. Each clip, connector or support is clearly embossed with an identifiable code so the installer can easily identify and use the proper connection hardware. For the engineer or architect, the embossed markings provide a very easy way to field verify that the correct connector or hanger is used.

PACKAGING

The majority of clips are packaged in distinct, easy-to-spot, blue buckets. Each bucket is clearly labeled with the product code, gauge, size, length, dimensions, piece counts, and any special markings as requested. Based on order quantity, buckets will be packed in skids for easy handling. Each skid will be clearly identified with master skid labels that display the same information as the buckets.



CLIP X EXPRESS® Available for overnight delivery
Call 866-638-1908

PROTECTIVE COATINGS

Coating designations for the clip and connector products in this catalog are displayed in the material specification section for each product. Special coatings are available on request. For more information, please contact your sales representative.

STEEL THICKNESS

The steel thickness of a connector, clip, support or hanger is referenced in terms of gauge or mils. The mils thickness measures the uncoated base metal material, and is a key contributor to the strength of the product.

Note: All products comply with ASTM and AISI standards and federal specifications as shown in the Code Approvals and Performance Standards in the back of this catalog. Minimum thickness is 95% of the design thickness, per AISI code. One mils is equivalent to 1/1000 (0.001) of an inch. So, a 20 gauge stud measuring the minimum uncoated base metal at 0.030 inches is 30 mils thick.

Steel Thickness

Gauge	Mils	Design thickness	Minimum thickness
25	18	0.0188"	0.0179"
20 DW	30	0.0312"	0.0296"
20 STR	33	0.0346"	0.0329"
18	43	0.0451"	0.0428"
16	54	0.0566"	0.0538"
14	68	0.0713"	0.0677"
12	97	0.1017"	0.0966"
10	118	0.1242"	0.1180"

YIELD STRENGTH (FY/PSI OR KSI)

The majority of clips, connectors, supports and framing hardware are manufactured from mil-certified, ASTM A1003 Structural Grade 50 Type H steel. KSI = kips/square inch = 1,000 lbs

METRIC SPECIFICATIONS

At your request, ClarkDietrich will provide "soft" metric conversions on its products and systems to help specifiers match metric design sizes. In addition, some products are available with hard metric dimensions from selected manufacturing facilities.

Support and Services

CLARKDIETRICH ENGINEERING SERVICES

**Smarter engineering and technical expertise.
It's support that extends beyond the structure itself.**

From the initial design phase to jobsite installation, we are all about providing inventive, yet practical and hands-on know-how to help you think outside the box—or to help you just get it done.

ClarkDietrich Engineering Services is a full-service consulting firm that believes strongly in value engineering and customer input. Our engineering fees and lead times are competitive, and our customer service exceeds the industry standard with consistent point-of-contact through our regional project managers.

We offer Building Information Modeling (BIM) services that include specialty engineering collaborative design. We support the BIM movement by offering add-on tools that allow our products, and the rich data attached to them, to quickly be imported into digital designs. Our team is also comprised of LEED®-accredited professionals to consult on sustainable building design.

- Electronically sealed shop drawings and calculations
- Preliminary sizing and pre-bid engineering pricing
- Reference plan on large projects
- Detailed wall sections, full elevation opening design and C-stud truss design

Our technical services team provides immediate response to questions ranging from general installation to detailed specification requirements, and can deliver one-day turnaround on technical sizing. We are experts on industry standards such as AISI, ASTM and SFIA. Our team also supports our online product submittal system, SubmittalPro®, and our design/engineering software is available as a free download from www.clarkdietrich.com.

- Product support and typical member sizing
- Framing detail recommendations
- Compliance and industry standards, such as AISI, ASTM and SFIA
- Engineering software and product submittal support
- LEED requirements support





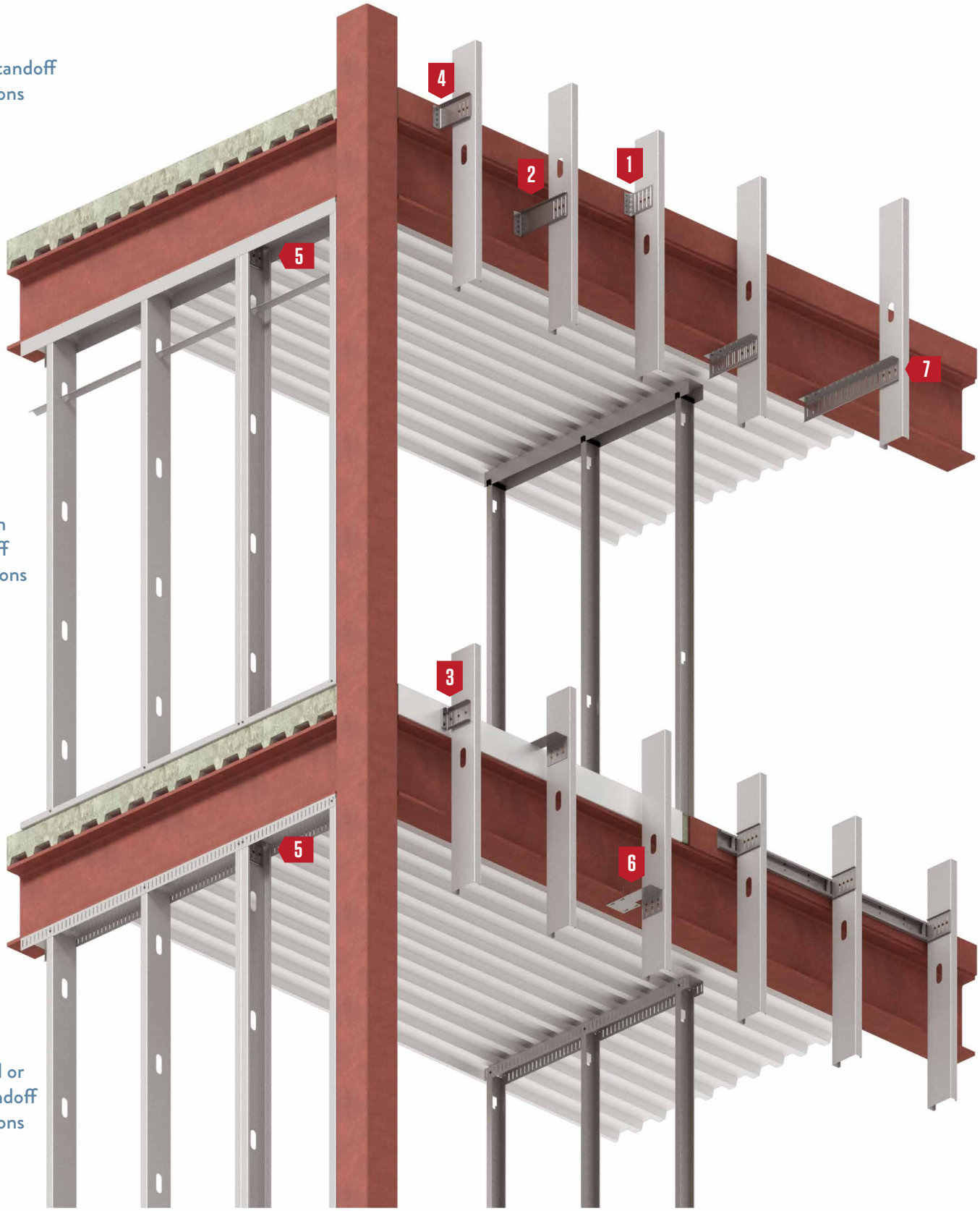
ClarkDietrich Engineering Services

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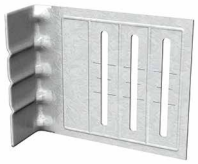
CENTRAL Crown Point, IN
NORTHEAST Bristol, CT
SOUTHEAST McDonough, GA
WEST Carlsbad, CA

The technical content of this literature is effective 04/09/26 and supersedes all previous information. Pub. No. CD-ClipExpress 04/26

Product Detail



1 FastClip™ Slide Clip
pages 14–21





2 Extended FastClip™ Slide Clip
pages 22–31





3 FastClip Slide Clip™-HD
pages 32-35



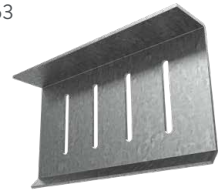


4 Universal Bypass Clip
pages 36–41





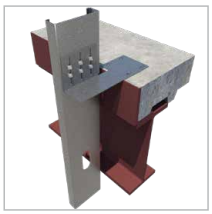
5 Fast Top™ Clip
pages 42–53





6 Flat Tail Slide Clip™
pages 54-62





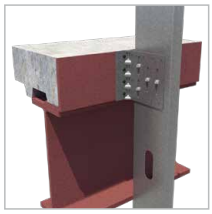
7 Fast Strut™
pages 64–71



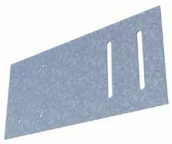


Fixed Universal Slip Clip
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Strut Plate
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The technical content of this literature is effective 04/09/26 and supersedes all previous information.

Pub. No. CD-ClipExpress 04/26

FastClip™ Slide Clip

Curtain Wall/Bypass

Vertical building movement up to 3" (1-1/2" up and 1-1/2" down)

ClarkDietrich FCSC deflection clips are used to attach exterior curtain wall studs to the building structure and provide for vertical building movement independent of the cold-formed steel framing. A ClarkDietrich FastClip™ deflection clip installs quickly with screws or powder-actuated fasteners, and provides adjustable standoff to ensure a plumb wall plane. Proprietary Deflection Screws are provided with each clip to ensure friction-free sliding. Each clip is also embossed with fastening patterns to ensure accurate placement of fasteners.

MATERIAL SPECIFICATIONS

Gauge: 14 gauge (68mils)
Design Thickness: 0.0713 inches

Gauge: 12 gauge (97mils)
Design Thickness: 0.1017 inches

Coating: G90
Yield Strength: 50ksi

PRODUCT DIMENSIONS

3-1/2" FastClip: 1-1/2" x 3-1/2" x 4-1/2"
5-1/2" FastClip: 1-1/2" x 5-1/2" x 4-1/2"

ALTERNATIVE PRODUCTS

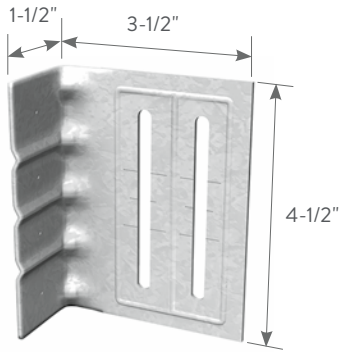
Fast Strut™
Flat Tail™ Slide Clip
FastClip™ Slide Clip HD
Universal Bypass Clip

CODE APPROVALS AND PERFORMANCE STANDARDS

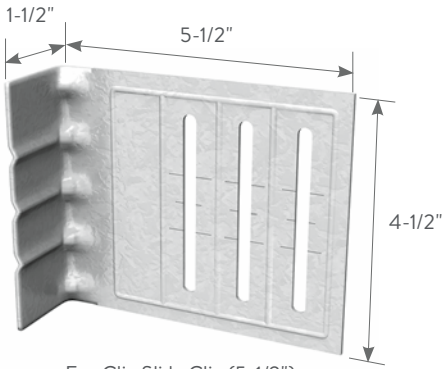
IAPMO ER-729
AISI S100

INSTALLATION

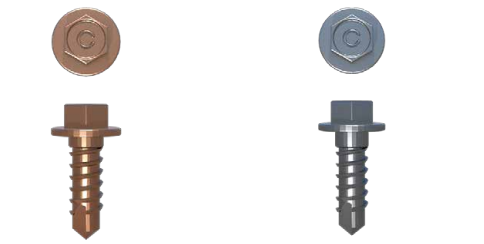
Connections to the building can be made with screws, powder-actuated fasteners or drill-in concrete anchors. Mechanical fasteners shall be located on the embossed marks given on the scored line of the 1-1/2" flange. Two or three Proprietary Deflection Screws (based upon clip size) are used to attach the clip to the cold-formed steel framing. Screws shall be driven through the slotted holes and positioned to allow for the appropriate building deflection.



FastClip Slide Clip (3-1/2")



FastClip Slide Clip (5-1/2")


Proprietary Deflection Screw

Proprietary HD Deflection Screw (10ga and 12ga Clips Only)

FastClip™ Slide Clips (FCSC)

Clip Designation	Product Thickness		Size (in)	Packaging Pcs./Carton
	mils (ga)	Design Thickness (in)		
FCSC3.5-68	68 (14)	0.0713	1-1/2 x 3-1/2 x 4-1/2	25
FCSC5.5-68	68 (14)	0.0713	1-1/2 x 5-1/2 x 4-1/2	25
FCSC5.5-97	97 (12)	0.1017	1-1/2 x 5-1/2 x 4-1/2	25

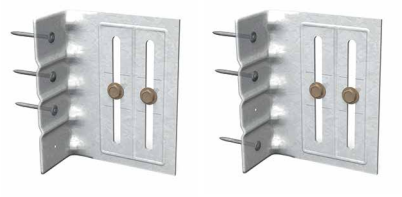


3-1/2" FCSC includes 55 Proprietary Deflection Screws per carton.
5-1/2" FCSC includes 80 Proprietary Deflection Screws for 14ga clip and 80 Proprietary HD Deflection Screw for 12ga clip per carton.

Intertek CCRR-0208
U.S. Patent No. 6,688,069



Location Options with (2) Anchors



Location Options with (3) Anchors



(4) Anchors



Location Options with (2) Anchors



Location Options with (3) Anchors



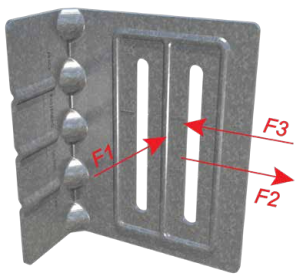
(4) Anchors



FRAMING CENTERED CONNECTION



FRAMING OFFSET CONNECTION



FastClip™ Slide Clip - 12ga

ATTACHMENT TO STRUCTURE: DESIGNED BY OTHERS

Clip Designation	Framing Member Details			Load Capacities (lbs)											
				In-Plane (F1)			Tension (F2)				Compression (F3)				
	Depth (in)	Max. Standoff (in)	Thickness mils (ga)	Nominal Load	ASD Load	LRFD Load	1/8" Service Load	Nominal Load	ASD Load	LRFD Load	1/8" Service Load	Nominal Load	ASD Load	LRFD Load
FCSC5.5-97	6	2	33 (20)	260	90	145	1520	1825	610	910	1540	1825	610	910
			43 (18)	425	145	215	1740	2625	905	1360	1840	2485	905	1360
			54 (16)	660	225	365	1915	3635	1250	2000	1975	3530	1810	2755
			68 (14)	985	330	490	2005	4200	1550	2325	1975	3745	1925	3075
			97 (12)	1240	425	680	2025	4200	1550	2325	2680	4035	2070	3315

Notes:

1. Listed capacities are in accordance with provisions of AISI S100-16 (R2020)/S2-20 and ICC-ES AC261.
2. FastClip attachment to structure designed by others. Listed capacities are applicable for FastClip to stud only (framing connection).
3. Proprietary HD Deflection Screws (0.25" dia) used to attach clips to framing members through the provided slotted holes. Listed capacities applicable for screws centered and off-centered/offset FastClip slots for framing connection.
4. The safety factor for ASD loads and resistance factor for LRFD loads are in accordance with Chapter K of AISI-S100.
5. The Proprietary HD Deflection Screws (0.25" dia) provide nominal shear capacity of 2400lbs and a nominal tension capacity of 4060lbs.
6. ASD and LRFD loads are based on nominal capacities only. 1/8" service loads are listed in a separate column. Designer shall use governing loads based on 1/8" service and strength.
7. It is the responsibility of the design professional to detail the project drawings for proper FastClip installation.
8. Other framing members may be used with these clips; however, it is the responsibility of the design professional to verify the framing members' capacities and potential failure modes.

ATTACHMENT TO STRUCTURE: #12 SCREWS TO 3/16" STEEL

Clip Designation	Stud Thickness / Yield Strength mils (ga) ksi	Max. Standoff (in)	Mechanically Anchored to Structure	Load Capacities (lbs) / Clip											
				In-Plane (F1)			Tension (F2)				Compression (F3)				
				Nominal Load	ASD Load	LRFD Load	1/8" Service Load	Nominal Load	ASD Load	LRFD Load	1/8" Service Load	Nominal Load	ASD Load	LRFD Load
FCSC5.5-97	33 (20) 33	2	2	260	90	145	1520	1825	610	910	1540	1825	610	910
			3	260	90	145	1520	1825	610	910	1540	1825	610	910
			4	260	90	145	1520	1825	610	910	1540	1825	610	910
	43 (18) 33	2	2	425	145	215	1740	2325	775	1165	1840	2325	775	1165
			3	425	145	215	1740	2625	905	1360	1840	2485	905	1360
			4	425	145	215	1740	2625	905	1360	1840	2485	905	1360
	54 (16) 50	2	2	660	225	365	1915	2325	775	1165	1975	2325	775	1165
			3	660	225	365	1915	3370	1125	1685	1975	3490	1165	1745
			4	660	225	365	1915	3635	1250	1925	1975	3530	1550	2325
	68 (14) 50	2	2	985	330	490	2005	2325	775	1165	1975	2325	775	1165
			3	985	330	490	2005	3370	1125	1685	1975	3490	1165	1745
			4	985	330	490	2005	3855	1285	1925	1975	3745	1550	2325
	97 (12) 50	2	2	1130	425	680	2025	2325	775	1165	2325	2325	775	1165
			3	1130	425	680	2025	3370	1125	1685	2680	3490	1165	1745
			4	1130	425	680	2025	3855	1285	1925	2680	4035	1550	2325

Notes:

1. Listed capacities are in accordance with provisions of AISI S100-16 (R2020)/S2-20 and ICC-ES AC261.
2. Tabulated load capacities are based on the following considerations:
   a. Framing Connection: Proprietary HD Deflection Screws (0.25" dia)
   b. Connection to Structure: #12 HWH Fasteners connected to 3/16" thick ASTM A36 Steel (see illustrations for base fastener locations)
   c. Other fasteners may be used to achieve full clip capacity but must be designed separately.
   d. Listed capacities have not been increased for wind, seismic, or other factors.
3. ASD and LRFD loads are based on nominal capacities only. 1/8" service loads are listed in a separate column. Designer shall use governing loads based on 1/8" service and strength.
4. Proprietary HD Deflection Screws (0.25" dia) used to attach clips to framing members through the provided slotted holes. Listed capacities applicable for screws centered and off-centered/offset FastClip slots for framing connection.
5. The safety factor for ASD loads and resistance factor for LRFD loads are in accordance with Chapter K of AISI-S100.
6. The #12 HWH Fasteners shall have a minimum nominal shear capacity of 2000lbs and minimum nominal tension capacity of 2778lbs according to ESR-1976 and manufacturer limits.
7. The Proprietary HD Deflection Screws (0.25" dia) provide nominal shear capacity of 2400lbs and a nominal tension capacity of 4060lbs.
8. Nominal capacities are listed for use in blast/seismic designs and they do not assume a safety factor or resistance factor.
9. It is the responsibility of the design professional to detail the project drawings for proper FastClip installation.

ATTACHMENT TO STRUCTURE: WELD TO 3/16" STEEL

Clip Designation	Stud Thickness / Yield Strength mils (ga) ksi	Max. Standoff (in)	Mechanically Anchored to Structure	Load Capacities (lbs) / Clip										
				In-Plane (F1)			Tension (F2)				Compression (F3)			
				Nominal Load	ASD Load	LRFD Load	1/8" Service Load	Nominal Load	ASD Load	LRFD Load	1/8" Service Load	Nominal Load	ASD Load	LRFD Load
FCSC5.5-97	33 (20) 33	2	(2) 1.25" Welds - along sides of short leg (weld starts from clip bend)	260	90	145	–	1825	610	910	–	1825	610	910
	43 (18) 33			425	145	215	–	2625	905	1360	–	2485	905	1360
	54 (16) 50			660	225	365	–	3285	1130	1700	–	3530	1810	2755
	68 (14) 50			985	330	490	–	3285	1130	1700	–	3745	1925	3075
	97 (12) 50			1130	425	680	–	3285	1130	1700	–	4035	2070	3315

Notes:

1. Listed capacities are in accordance with provisions of AISI S100-16 (R2020)/S2-20 and ICC-ES AC261.
2. Tabulated load capacities are based on the following considerations:
   a. Framing Connection: Proprietary HD Deflection Screws (0.25" dia)
   b. Connection to Structure: (2) 1-1/4" long Fillet Welds along sides of the structural connection leg for FCSC.
   c. Listed capacities have not been increased for wind, seismic, or other factors.
   d. E70XX (min) electrode Weld.
3. ASD and LRFD loads are based on nominal capacities only. Nominal capacities are listed for use in blast/seismic designs and they do not assume a safety factor or resistance factor.
4. Proprietary HD Deflection Screws (0.25" dia) used to attach clips to framing members through the provided slotted holes. Listed capacities applicable for screws centered and off-centered offset FastClip slots for framing connection.
5. The safety factor for ASD loads and resistance factor for LRFD loads are in accordance with Chapter K of AISI-S100.
6. The Proprietary HD Deflection Screws (0.25" dia) provide nominal shear capacity of 2400lbs and a nominal tension capacity of 4060lbs.
7. It is the responsibility of the design professional to detail the project drawings for proper FastClip installation.



ATTACHMENT TO STRUCTURE: 0.157" HILTI X-U PINS TO 3/16" STEEL

Clip Designation	Stud Thickness / Yield Strength mils (ga) ksi	Max. Standoff (in)	Mechanically Anchored to Structure	Load Capacities (lbs) / Clip										
				In-Plane (F1)			Tension (F2)				Compression (F3)			
				Nominal Load	ASD Load	LRFD Load	1/8" Service Load	Nominal Load	ASD Load	LRFD Load	1/8" Service Load	Nominal Load	ASD Load	LRFD Load
FCSC5.5-97	33 (20) 33	2	2	260	90	145	1520	1825	610	910	1540	1825	610	910
			3	260	90	145	1520	1825	610	910	1540	1825	610	910
			4	260	90	145	1520	1825	610	910	1540	1825	610	910
	43 (18) 33	2	2	425	145	215	1740	2400	800	1200	1840	2485	905	1360
			3	425	145	215	1740	2625	905	1360	1840	2485	905	1360
			4	425	145	215	1740	2625	905	1360	1840	2485	905	1360
	54 (16) 50	2	2	660	225	365	1915	2400	800	1200	1975	3000	1000	1500
			3	660	225	365	1915	3000	1000	1500	1975	3530	1500	2250
			4	660	225	365	1915	3430	1145	1715	1975	3530	1810	2755
	68 (14) 50	2	2	985	330	490	2005	2400	800	1200	1975	3000	1000	1500
			3	985	330	490	2005	3000	1000	1500	1975	3745	1500	2250
			4	985	330	490	2005	3430	1145	1715	1975	3745	1925	3000
	97 (12) 50	2	2	1130	425	680	2025	2400	800	1200	2680	3000	1000	1500
			3	1130	425	680	2025	3000	1000	1500	2680	4035	1500	2250
			4	1130	425	680	2025	3430	1145	1715	2680	4035	2000	3000

Notes:

1. Listed capacities are in accordance with provisions of AISI S100-16 (R2020)/S2-20, ICC-ES AC261 and ESR 2269.
2. Tabulated load capacities are based on the following considerations:
   a. Framing Connection: Proprietary HD Deflection Screws (0.25" dia)
   b. Connection to Structure: 0.157" Hilti X-U Pins connected to 3/16" thick ASTM A36 Steel (see illustrations for base fastener locations).
   c. Other fasteners may be used to achieve full clip capacity but must be designed separately.
   d. Listed capacities have not been increased for wind, seismic, or other factors.
3. ASD and LRFD loads are based on nominal capacities only. 1/8" service loads are listed in a separate column. Designer shall use governing loads based on 1/8" service and strength.
4. Proprietary HD Deflection Screws (0.25" dia) used to attach clips to framing members through the provided slotted holes. Listed capacities applicable for screws centered and off-centered/offset FastClip slots for framing connection.
5. The safety factor for ASD loads and resistance factor for LRFD loads are in accordance with Chapter K of AISI-S100 and ESR2269.
6. The Proprietary HD Deflection Screws (0.25" dia) provide nominal shear capacity of 2400lbs and a nominal tension capacity of 4060lbs.
7. The Hilti X-U Pin shall have a minimum nominal shear capacity of 3939lbs and minimum nominal tension capacity of 2872lbs according to Hilti Fastening Technical Guide, Edition 2024.
8. Hilti is a registered trademark of Hilti Aktiengeseilschaft Corporation.
9. It is the responsibility of the design professional to detail the project drawings for proper FastClip installation.

FastClip™ Slide Clip - 14ga

ATTACHMENT TO STRUCTURE: DESIGNED BY OTHERS

Clip Designation	Framing Member Details			Load Capacities (lbs)											
				In-Plane (F1)			Tension (F2)				Compression (F3)				
	Stud Depth (in)	Max. Standoff (in)	Thickness mils (ga)	Nominal Load	ASD Load	LRFD Load	1/8" Service Load	Nominal Load	ASD Load	LRFD Load	1/8" Service Load	Nominal Load	ASD Load	LRFD Load	
FCSC3.5-68	3-5/8	1	33 (20)	320	110	165	885	1085	375	600	895	1215	405	610	
			43 (18)	430	145	215	1135	1400	480	770	900	1705	605	905	
			54 (16)	690	235	380	1225	1795	620	990	1475	2490	1225	1840	
			68 (14)	760	260	420	1225	2255	775	1240	1585	2750	1415	2260	
			97 (12)	760	260	420	1245	2410	830	1330	1585	2905	1490	2385	
FCSC5.5-68	6	2	33 (20)	325	110	165	875	1735	595	910	1225	1730	610	910	
			43 (18)	385	135	215	970	2215	765	1220	1305	1745	895	1360	
			54 (16)	655	225	360	1020	3025	1040	1665	1340	1955	1005	1610	
			68 (14)	655	225	360	1065	3755	1295	2070	1540	2075	1065	1705	
			97 (12)	715	245	395	1070	4120	1420	2270	1540	2130	1095	1750	

Notes:

1. Listed capacities are in accordance with provisions of AISI S100-16 (R2020)/S2-20 and ICC-ES AC261.
2. FastClip attachment to structure designed by others. Listed capacities are applicable for FastClip to stud only (framing connection).
3. Proprietary Deflection Screws (0.25" dia) used to attach clips to framing members through the provided slotted holes. Listed capacities applicable for screws centered and off-centered/offset FastClip slots for framing connection.
4. The safety factor for ASD loads and resistance factor for LRFD loads are in accordance with Chapter K of AISI-S100.
5. The Proprietary Deflection Screws (0.25" dia) provide nominal shear capacity of 2400lbs and a nominal tension capacity of 4060lbs.
6. ASD and LRFD loads are based on nominal capacities only. 1/8" service loads are listed in a separate column. Designer shall use governing loads based on 1/8" service and strength.
7. It is the responsibility of the design professional to detail the project drawings for proper FastClip installation.
8. Other framing members may be used with these clips; however, it is the responsibility of the design professional to verify the framing members' capacities and potential failure modes.

ATTACHMENT TO STRUCTURE: #12 SCREWS TO 3/16" STEEL

Clip Designation	Stud Thickness / Yield Strength mils (ga) ksi	Max. Standoff (in)	Mechanically Anchored to Structure	Load Capacities (lbs) / Clip											
				In-Plane (F1)			Tension (F2)				Compression (F3)				
				Nominal Load	ASD Load	LRFD Load	1/8" Service Load	Nominal Load	ASD Load	LRFD Load	1/8" Service Load	Nominal Load	ASD Load	LRFD Load
FCSC3.5-68	33 (20) 33	1	2	320	110	165	885	1085	375	600	895	1215	405	610
			3	320	110	165	885	1085	375	600	895	1215	405	610
			4	320	110	165	885	1085	375	600	895	1215	405	610
	43 (18) 33	1	2	430	145	215	1135	1400	480	770	900	1705	605	905
			3	430	145	215	1135	1400	480	770	900	1705	605	905
			4	430	145	215	1135	1400	480	770	900	1705	605	905
	54 (16) 50	1	2	690	235	380	1225	1795	620	945	1475	2325	775	1165
			3	690	235	380	1225	1795	620	990	1475	2490	1165	1745
			4	690	235	380	1225	1795	620	990	1475	2490	1225	1840
	68 (14) 50	1	2	760	260	420	1225	1890	630	945	1585	2325	775	1165
			3	760	260	420	1225	2255	775	1180	1585	2750	1165	1745
			4	760	260	420	1225	2255	775	1240	1585	2750	1415	2260
	97 (12) 50	1	2	760	260	420	1245	1890	630	945	1585	2325	775	1165
			3	760	260	420	1245	2365	790	1180	1585	2905	1165	1745
			4	760	260	420	1245	2410	830	1330	1585	2905	1490	2325
FCSC5.5-68	33 (20) 33	2	2	325	110	165	875	1735	595	910	1225	1730	610	910
			3	325	110	165	875	1735	595	910	1225	1730	610	910
			4	325	110	165	875	1735	595	910	1225	1730	610	910
	43 (18) 33	2	2	385	135	215	970	1890	630	945	1305	1745	775	1165
			3	385	135	215	970	2215	765	1180	1305	1745	895	1360
			4	385	135	215	970	2215	765	1220	1305	1745	895	1360
	54 (16) 50	2	2	655	225	360	1020	1890	630	945	1340	1955	775	1165
			3	655	225	360	1020	2365	790	1180	1340	1955	1005	1610
			4	655	225	360	1020	2700	900	1350	1340	1955	1005	1610
	68 (14) 50	2	2	655	225	360	1065	1890	630	945	1540	2075	775	1165
			3	655	225	360	1065	2365	790	1180	1540	2075	1065	1705
			4	655	225	360	1065	2700	900	1350	1540	2075	1065	1705
	97 (12) 50	2	2	715	245	395	1070	1890	630	945	1540	2130	775	1165
			3	715	245	395	1070	2365	790	1180	1540	2130	1095	1745
			4	715	245	395	1070	2700	900	1350	1540	2130	1095	1750

Notes:

1 Listed capacities are in accordance with provisions of AISI S100-16 (R2020)/S2-20 and ICC-ES AC261.

2 Tabulated load capacities are based on the following considerations:
   a. Framing Connection: Proprietary Deflection Screws (0.25" dia)
   b. Connection to Structure: #12 HWH Fasteners connected to 3/16" thick ASTM A36 Steel (see illustrations for base fastener locations)
   c. Other fasteners may be used to achieve full clip capacity but must be designed separately.
   d. Listed capacities have not been increased for wind, seismic, or other factors.

3 ASD and LRFD loads are based on nominal capacities only. 1/8" service loads are listed in a separate column. Designer shall use governing loads based on 1/8" service and strength.

4 Proprietary Deflection Screws (0.25" dia) used to attach clips to framing members through the provided slotted holes. Listed capacities applicable for screws centered and off-centered/offset FastClip slots for framing connection.

5 The safety factor for ASD loads and resistance factor for LRFD loads are in accordance with Chapter K of AISI-S100.

6 The #12 HWH Fasteners shall have a minimum nominal shear capacity of 2000lbs and minimum nominal tension capacity of 2778lbs according to ESR-1976 and manufacturer limits.

7 The Proprietary Deflection Screws (0.25" dia) provide nominal shear capacity of 2400lbs and a nominal tension capacity of 4060lbs.

8 Nominal capacities are listed for use in blast/seismic designs and they do not assume a safety factor or resistance factor.

9 It is the responsibility of the design professional to detail the project drawings for proper FastClip installation.

FastClip™ Slide Clip - 14ga

ATTACHMENT TO STRUCTURE: WELD TO 3/16" STEEL

Clip Designation	Stud Thickness / Yield Strength mils (ga) ksi	Max. Standoff (in)	Mechanically Anchored to Structure	Load Capacities (lbs) / Clip										
				In-Plane (F1)			Tension (F2)				Compression (F3)			
				Nominal Load	ASD Load	LRFD Load	1/8" Service Load	Nominal Load	ASD Load	LRFD Load	1/8" Service Load	Nominal Load	ASD Load	LRFD Load
FCSC3.5-68	33 (20) 33	1	(2) 1.25" Welds - along sides of short leg (weld starts from clip bend)	320	110	165	–	1085	375	600	–	1215	405	610
	43 (18) 33			430	145	215	–	1400	480	770	–	1705	605	905
	54 (16) 50			690	235	380	–	1795	620	990	–	2490	1225	1840
	68 (14) 50			760	260	420	–	2255	775	1190	–	2750	1415	2260
	97 (12) 50			760	260	420	–	2295	790	1190	–	2905	1490	2385
FCSC5.5-68	33 (20) 33	2		325	110	165	–	1735	595	910	–	1730	610	910
	43 (18) 33			385	135	215	–	2215	765	1190	–	1745	895	1360
	54 (16) 50			655	225	360	–	2295	790	1190	–	1955	1005	1610
	68 (14) 50			655	225	360	–	2295	790	1190	–	2075	1065	1705
	97 (12) 50			715	245	395	–	2295	790	1190	–	2130	1095	1750

Notes:

1. Listed capacities are in accordance with provisions of AISI S100-16 (R2020)/S2-20 and ICC-ES AC261.
2. Tabulated load capacities are based on the following considerations:
   a. Framing Connection: Proprietary Deflection Screws (0.25" dia)
   b. Connection to Structure: (2) 1-1/4" long Fillet Welds along sides of the structural connection leg for FCSC.
   c. Listed capacities have not been increased for wind, seismic, or other factors.
   d. E70XX (min) electrode Weld.
3. ASD and LRFD loads are based on nominal capacities only. Nominal capacities are listed for use in blast/seismic designs and they do not assume a safety factor or resistance factor.
4. Proprietary Deflection Screws (0.25" dia) used to attach clips to framing members through the provided slotted holes. Listed capacities applicable for screws centered and off-centered/offset FastClip slots for framing connection.
5. The safety factor for ASD loads and resistance factor for LRFD loads are in accordance with Chapter K of AISI-S100.
6. The Proprietary Deflection Screws (0.25" dia) provide nominal shear capacity of 2400lbs and a nominal tension capacity of 4060lbs.
7. It is the responsibility of the design professional to detail the project drawings for proper FastClip installation.



ATTACHMENT TO STRUCTURE: 0.157" HILTI X-U PINS TO 3/16" STEEL

Clip Designation	Stud Thickness / Yield Strength mils (ga) ksi	Max. Standoff (in)	Mechanically Anchored to Structure	Load Capacities (lbs) / Clip											
				In-Plane (F1)			Tension (F2)				Compression (F3)				
				Nominal Load	ASD Load	LRFD Load	1/8" Service Load	Nominal Load	ASD Load	LRFD Load	1/8" Service Load	Nominal Load	ASD Load	LRFD Load	
FCSC3.5-68	33 (20) 33	1	2	320	110	165	885	1085	375	600	895	1215	405	610	
			3	320	110	165	885	1085	375	600	895	1215	405	610	
			4	320	110	165	885	1085	375	600	895	1215	405	610	
	43 (18) 33		2	430	145	215	1135	1400	480	770	900	1705	605	905	
			3	430	145	215	1135	1400	480	770	900	1705	605	905	
			4	430	145	215	1135	1400	480	770	900	1705	605	905	
	54 (16) 50		2	690	235	380	1225	1790	595	895	1475	2240	745	1120	
			3	690	235	380	1225	1795	620	990	1475	2490	1120	1680	
			4	690	235	380	1225	1795	620	990	1475	2490	1225	1840	
	68 (14) 50		2	760	260	420	1225	1790	595	895	1585	2240	745	1120	
			3	760	260	420	1225	2240	745	1120	1585	2750	1120	1680	
			4	760	260	420	1225	2255	775	1240	1585	2750	1415	2240	
	97 (12) 50		2	760	260	420	1245	1790	595	895	1585	2240	745	1120	
			3	760	260	420	1245	2240	745	1120	1585	2905	1120	1680	
			4	760	260	420	1245	2410	830	1280	1585	2905	1490	2240	
FCSC5.5-68	33 (20) 33	2	2	325	110	165	875	1735	595	895	1225	1730	610	910	
			3	325	110	165	875	1735	595	910	1225	1730	610	910	
			4	325	110	165	875	1735	595	910	1225	1730	610	910	
	43 (18) 33		2	385	135	215	970	1790	595	895	1305	1745	745	1120	
			3	385	135	215	970	2215	745	1120	1305	1745	895	1360	
			4	385	135	215	970	2215	765	1220	1305	1745	895	1360	
	54 (16) 50		2	655	225	360	1020	1790	595	895	1340	1955	745	1120	
			3	655	225	360	1020	2240	745	1120	1340	1955	1005	1610	
			4	655	225	360	1020	2560	855	1280	1340	1955	1005	1610	
	68 (14) 50		2	655	225	360	1065	1790	595	895	1540	2075	745	1120	
			3	655	225	360	1065	2240	745	1120	1540	2075	1065	1680	
			4	655	225	360	1065	2560	855	1280	1540	2075	1065	1705	
	97 (12) 50		2	715	245	395	1070	1790	595	895	1540	2130	745	1120	
			3	715	245	395	1070	2240	745	1120	1540	2130	1095	1680	
			4	715	245	395	1070	2560	855	1280	1540	2130	1095	1750	

Notes:

1 Listed capacities are in accordance with provisions of AISI S100-16 (R2020)/S2-20, ICC-ES AC261 and ESR 2269.

2 Tabulated load capacities are based on the following considerations:
   a. Framing Connection: Proprietary Deflection Screws (0.25" dia)
   b. Connection to Structure: 0.157" Hilti X-U Pins connected to 3/16" thick ASTM A36 Steel (see illustrations for base fastener locations).
   c. Other fasteners may be used to achieve full clip capacity but must be designed separately.
   d. Listed capacities have not been increased for wind, seismic, or other factors.

3 ASD and LRFD loads are based on nominal capacities only. 1/8" service loads are listed in a separate column. Designer shall use governing loads based on 1/8" service and strength.

4 Proprietary Deflection Screws (0.25" dia) used to attach clips to framing members through the provided slotted holes. Listed capacities applicable for screws centered and off-centered/offset FastClip slots for framing connection.

5 The safety factor for ASD loads and resistance factor for LRFD loads are in accordance with Chapter K of AISI-S100 and ESR2269.

6 The Proprietary Deflection Screws (0.25" dia) provide nominal shear capacity of 2400lbs and a nominal tension capacity of 4060lbs.

7 The Hilti X-U Pin shall have a minimum nominal shear capacity of 3939lbs and minimum nominal tension capacity of 2872lbs according to Hilti Fastening Technical Guide, Edition 2024.

8 Hilti is a registered trademark of Hilti Aktiengeseilschaft Corporation.

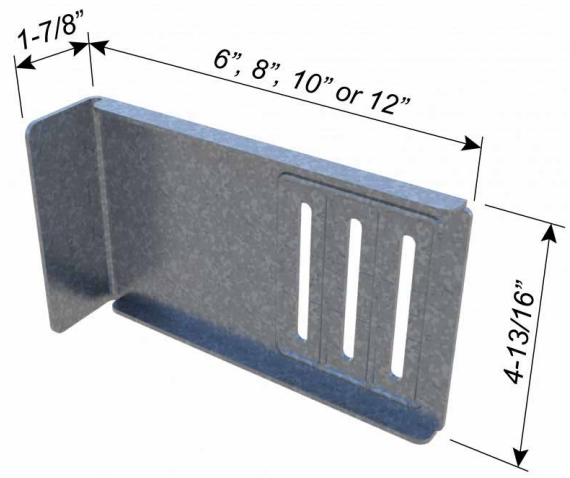
9 It is the responsibility of the design professional to detail the project drawings for proper FastClip installation.

Extended FastClip™ Slide Clip

Curtain Wall/Bypass

Vertical building movement up to 3" (1-1/2" up and 1-1/2" down) and commonly used for large standoff conditions

ClarkDietrich FCEC deflection clips are used to attach exterior curtain wall studs to the building structure and provide for vertical building movement independent of the cold-formed steel framing. The clips are available in standard lengths of 6," 8," 10" and 12" and are ideal for medium to larger standoff conditions. Extended FastClip™ deflection clips install quickly with screws, welds or powder-actuated fasteners, and provide adjustable standoff to ensure a plumb wall plane. Proprietary Deflection Screws are provided with each clip to ensure friction-free sliding.



MATERIAL SPECIFICATIONS

Gauge: 14 gauge (68mils)
Design Thickness: 0.0713 inches

Gauge: 12 gauge (97mils)
Design Thickness: 0.1017 inches

Coating: G90
Yield Strength: 50ksi

PRODUCT DIMENSIONS

6" Extended FastClip: 1-7/8" x 6" x 4-3/4"
8" Extended FastClip: 1-7/8" x 8" x 4-3/4"
10" Extended FastClip: 1-7/8" x 10" x 4-3/4"
12" Extended FastClip: 1-7/8" x 12" x 4-3/4"

CODE APPROVALS AND PERFORMANCE STANDARDS

IAPMO ER-729
AISI S100

ALTERNATIVE PRODUCTS

Fast Strut™
Universal Bypass Clip

Extended FastClip™ Slide Clip (FCEC)

Clip Designation	Product Thickness		Size (in)	Packaging Pcs./Bucket
	mils (ga)	Design Thickness (in)		
FCEC6-68	68 (14)	0.0713	1-7/8 x 6 x 4-3/4	25
FCEC6-97	97 (12)	0.1017	1-7/8 x 6 x 4-3/4	25
FCEC8-68	68 (14)	0.0713	1-7/8 x 8 x 4-3/4	25
FCEC8-97	97 (12)	0.1017	1-7/8 x 8 x 4-3/4	25
FCEC10-68	68 (14)	0.0713	1-7/8 x 10 x 4-3/4	25
FCEC10-97	97 (12)	0.1017	1-7/8 x 10 x 4-3/4	25
FCEC12-68	68 (14)	0.0713	1-7/8 x 12 x 4-3/4	25
FCEC12-97	97 (12)	0.1017	1-7/8 x 12 x 4-3/4	25

Includes 80 proprietary deflection screws per carton.
U.S. Patent No. 6,688,069

INSTALLATION

Connections to the building can be made with screws, welds, powder-actuated fasteners or drill-in concrete anchors. Mechanical fasteners shall be located on the embossed marks given on the scored line of the 1-7/8" flange. Three Proprietary Deflection Screws are used to attach the clip to the cold-formed steel framing. Screws shall be driven through the slotted holes and positioned to allow for the appropriate building deflection.

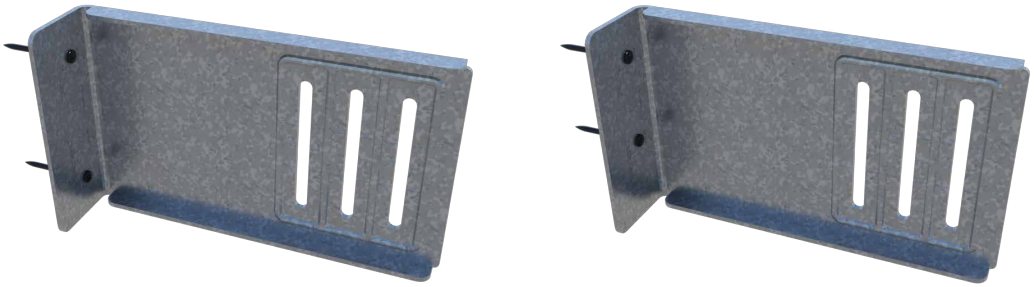


Proprietary
Deflection Screw

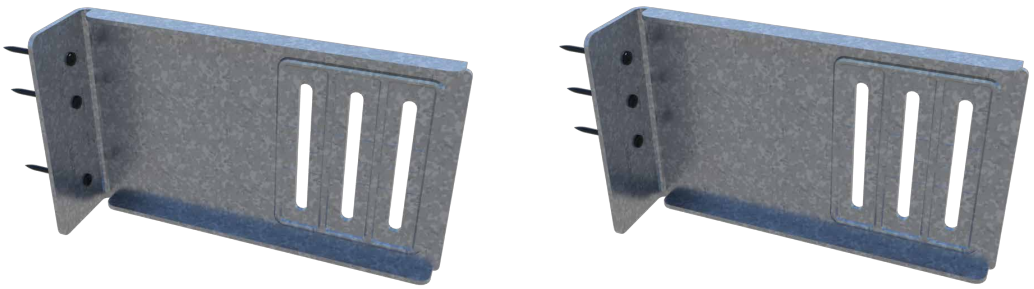


Proprietary
HD Deflection Screw
(10ga and 12ga Clips Only)

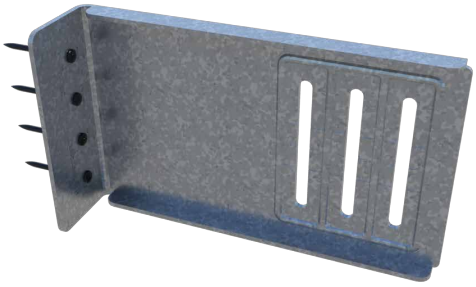
Proprietary Deflection Screws:
Many of the ClarkDietrich deflection clips include our proprietary deflection fastener that has been specifically designed to provide friction-free deflection. These fasteners eliminate drag, binding or resistance that can often occur with common fasteners.



Location Options with (2) Anchors



Location Options with (3) Anchors



(4) Anchors

The technical content of this literature is effective 04/09/26 and supersedes all previous information.

Extended FastClip™ Slide Clip - 12ga

ATTACHMENT TO STRUCTURE: DESIGNED BY OTHERS

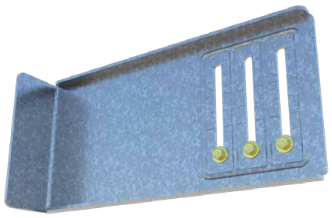
Clip Designation	Framing Member Details			Load Capacities (lbs)										
				In-Plane (F1)			Tension (F2)				Compression (F3)			
	Stud Depth (in)	Max. Standoff (in)	Stud Thickness mils (ga)	Nominal Load	ASD Load	LRFD Load	1/8" Service Load	Nominal Load	ASD Load	LRFD Load	1/8" Service Load	Nominal Load	ASD Load	LRFD Load
FCEC6-97	6	2-1/2	33 (20)	290	100	160	1540	1825	610	910	2075	1825	610	910
			43 (18)	430	145	215	1690	2715	905	1360	2825	2715	905	1360
			54 (16)	705	245	390	1785	3830	1320	2110	4135	5330	1840	2755
			68 (14)	985	330	490	1960	4200	1550	2325	4620	6175	2600	3900
			97 (12)	1405	470	700	1985	4200	1550	2325	4620	6685	3050	4570
FCEC8-97	6	4-1/2	33 (20)	325	110	165	1540	1825	610	910	2120	1825	610	910
			43 (18)	430	145	215	1615	2715	905	1360	2640	2690	905	1360
			54 (16)	715	245	390	1615	4015	1380	2210	4035	4460	1535	2455
			68 (14)	985	330	490	1770	4200	1550	2325	4560	5740	1975	3160
			97 (12)	1405	470	700	1770	4200	1550	2325	5600	7430	2555	4090
FCEC10-97	6	6-1/2	33 (20)	290	100	160	1500	1825	610	910	2180	1825	610	910
			43 (18)	430	145	215	1690	2715	905	1360	2755	2665	905	1360
			54 (16)	755	260	390	1710	4090	1405	2250	3895	4125	1420	2270
			68 (14)	985	330	490	1785	4200	1550	2325	4500	5485	1890	3020
			97 (12)	1405	470	700	1830	4200	1550	2325	5260	7625	2625	4200
FCEC12-97	6	8-1/2	33 (20)	270	110	165	1470	1825	610	910	2230	1825	610	910
			43 (18)	370	145	215	1605	2715	905	1360	2705	2670	905	1360
			54 (16)	555	260	390	1710	3980	1370	2190	3670	4060	1400	2235
			68 (14)	985	330	490	1730	4200	1550	2325	3820	4935	1700	2715
			97 (12)	1405	470	700	1815	4200	1550	2325	4895	6970	2400	3840

Notes:

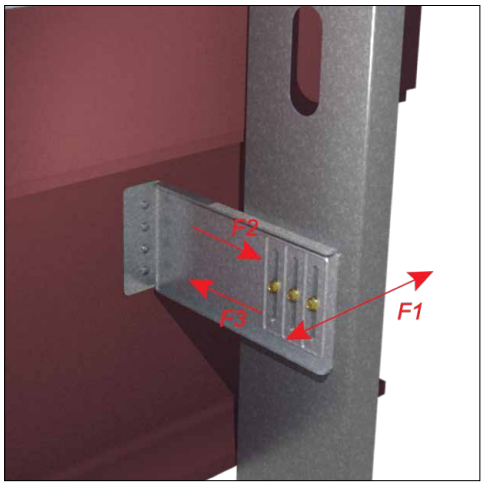
1. Listed capacities are in accordance with provisions of AISI S100-16 (R2020)/S2-20 and ICC-ES AC261.
2. Extended FastClip attachment to structure designed by others. Listed capacities are applicable for Extended FastClip to stud only (framing connection).
3. Proprietary HD Deflection Screws (0.25" dia) used to attach clips to framing members through the provided slotted holes. Listed capacities applicable for screws centered and off-centered/offset Extended FastClip slots for framing connection.
4. The safety factor for ASD loads and resistance factor for LRFD loads are in accordance with Chapter K of AISI-S100.
5. The Proprietary HD Deflection Screws (0.25" dia) provide nominal shear capacity of 2400lbs and a nominal tension capacity of 4060lbs.
6. ASD and LRFD loads are based on nominal capacities only. 1/8" service loads are listed in a separate column. Designer shall use governing loads based on 1/8" service and strength.
7. It is the responsibility of the design professional to detail the project drawings for proper Extended FastClip installation.
8. Other framing members may be used with these clips; however, it is the responsibility of the design professional to verify the framing members' capacities and potential failure modes.



FRAMING CENTERED CONNECTION



FRAMING OFFSET CONNECTION



ATTACHMENT TO STRUCTURE: WELD TO 3/16" STEEL

Clip Designation	Stud Thickness / Yield Strength mils (ga) ksi	Max. Standoff (in)	Mechanically Anchored to Structure	Load Capacities (lbs) / Clip										
				In-Plane (F1)			Tension (F2)				Compression (F3)			
				Nominal Load	ASD Load	LRFD Load	1/8" Service Load	Nominal Load	ASD Load	LRFD Load	1/8" Service Load	Nominal Load	ASD Load	LRFD Load
FCEC6-97	33 (20) 33	2-1/2	(2) 1" Welds along back/bend of short leg (each weld equally distanced from center of clip)	290	100	160	–	1825	610	910	–	1825	610	910
	43 (18) 33			430	145	215	–	2715	905	1360	–	2715	905	1360
	54 (16) 50			705	245	390	–	3830	1320	2110	–	5330	1840	2755
	68 (14) 50			940	330	490	–	5025	1730	2765	–	6175	2600	3900
	97 (12) 50			940	470	700	–	6250	2150	3440	–	6685	3050	4570
FCEC8-97	33 (20) 33	4-1/2		325	110	165	–	1825	610	910	–	1825	610	910
	43 (18) 33			430	145	215	–	2715	905	1360	–	2690	905	1360
	54 (16) 50			565	245	390	–	4015	1380	2210	–	4460	1535	2455
	68(14) 50			565	330	490	–	5485	1890	3020	–	5740	1975	3160
	97 (12) 50			565	340	505	–	6610	2275	3640	–	7430	2555	4090
FCEC10-97	33 (20) 33	6-1/2		290	100	160	–	1825	610	910	–	1825	610	910
	43 (18) 33			405	145	215	–	2715	905	1360	–	2665	905	1360
	54 (16) 50			405	240	360	–	4090	1405	2250	–	4125	1420	2270
	68 (14) 50			405	240	360	–	5305	1825	2920	–	5485	1890	3020
	97 (12) 50			405	240	360	–	6530	2245	3595	–	7625	2625	4200
FCEC12-97	33 (20) 33	8-1/2		270	110	165	–	1825	610	910	–	1825	610	910
	43 (18) 33			315	145	215	–	2715	905	1360	–	2670	905	1360
	54 (16) 50			315	190	280	–	3980	1370	2190	–	4060	1400	2235
	68 (14) 50			315	190	280	–	5175	1780	2850	–	4935	1700	2715
	97 (12) 50			315	190	280	–	6745	2320	3715	–	6970	2400	3840

Notes:

1 Listed Capacities are in accordance with provisions of AISI S100-16 (R2020)/S2-20 and ICC-ES AC261.

2 Tabulated load capacities are based on the following considerations:

a. Framing Connection: Proprietary HD Deflection Screws (0.25" dia)

b. Connection to Structure: (2) 1" long fillet weld equally spaced on back (bend) of the structural connection leg for FCEC to 3/16" thick ASTM A36 Steel.

c. Listed capacities have not been increased for wind, seismic, or other factors.

d. E70XX (min) electrode Weld.

3 ASD and LRFD loads are based on nominal capacities only. Nominal capacities are listed for use in blast/seismic designs and they do not assume a safety factor or resistance factor.

4 Proprietary HD Deflection Screws (0.25" dia) used to attach clips to framing members through the provided slotted holes. Listed capacities applicable for screws centered and off-centered/offset Extended FastClip slots for framing connection.

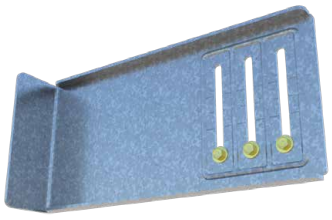
5 The safety factor for ASD loads and resistance factor for LRFD loads are in accordance with Chapter K of AISI-S100.

6 The Proprietary HD Deflection Screws (0.25" dia) provide nominal shear capacity of 2400lbs and a nominal tension capacity of 4060lbs.

7 It is the responsibility of the design professional to detail the project drawings for proper Extended FastClip installation.



FRAMING CENTERED CONNECTION



FRAMING OFFSET CONNECTION



Extended FastClip™ Slide Clip - 12ga

ATTACHMENT TO STRUCTURE: #12 SCREWS TO 3/16" STEEL

Clip Designation	Stud Thickness/ Yield Strength mils (ga) ksi	Max. standoff (in)	Mechanically anchored to structure	Load Capacities (lbs) / Clip											
				In-Plane (F1)			Tension (F2)				Compression (F3)				
				Nominal Load	ASD Load	LRFD Load	1/8" Service Load	Nominal Load	ASD Load	LRFD Load	1/8" Service Load	Nominal Load	ASD Load	LRFD Load	
FCEC6-97	33 (20) 33	2-1/2		290	100	160	1540	1825	610	910	1825	1825	610	910	
			3	290	100	160	1540	1825	610	910	1825	1825	610	910	
			4	290	100	160	1540	1825	610	910	1825	1825	610	910	
	43 (18) 33		2	430	145	215	1690	2325	775	1165	2325	2325	775	1165	
			3	430	145	215	1690	2715	905	1360	2715	2715	905	1360	
			4	430	145	215	1690	2715	905	1360	2715	2715	905	1360	
	54 (16) 50		2	705	245	390	1785	2325	775	1165	2325	2325	775	1165	
			3	705	245	390	1785	3370	1125	1685	3490	3490	1165	1745	
			4	705	245	390	1785	3830	1285	1925	4135	4200	1550	2325	
	68 (14) 50		2	940	330	490	1960	2325	775	1165	2325	2325	775	1165	
			3	940	330	490	1960	3370	1125	1685	3490	3490	1165	1745	
			4	940	330	490	1960	3855	1285	1925	4200	4200	1550	2325	
	97 (12) 50		2	940	470	700	1985	2325	775	1165	2325	2325	775	1165	
			3	940	470	700	1985	3370	1125	1685	3490	3490	1165	1745	
			4	940	470	700	1985	3855	1285	1925	4200	4200	1550	2325	
FCEC8-97	33 (20) 33	4-1/2	2	325	110	165	1540	1825	610	910	1825	1825	610	910	
			3	325	110	165	1540	1825	610	910	1825	1825	610	910	
			4	325	110	165	1540	1825	610	910	1825	1825	610	910	
	43 (18) 33		2	430	145	215	1615	2325	775	1165	2325	2325	775	1165	
			3	430	145	215	1615	2715	905	1360	2640	2690	905	1360	
			4	430	145	215	1615	2715	905	1360	2640	2690	905	1360	
	54 (16) 50		2	565	245	390	1615	2325	775	1165	2325	2325	775	1165	
			3	565	245	390	1615	3370	1125	1685	3490	3490	1165	1745	
			4	565	245	390	1615	3855	1285	1925	4035	4200	1535	2325	
	68 (14) 50		2	565	330	490	1770	2325	775	1165	2325	2325	775	1165	
			3	565	330	490	1770	3370	1125	1685	3490	3490	1165	1745	
			4	565	330	490	1770	3855	1285	1925	4200	4200	1550	2325	
	97 (12) 50		2	565	340	505	1770	2325	775	1165	2325	2325	775	1165	
			3	565	340	505	1770	3370	1125	1685	3490	3490	1165	1745	
			4	565	340	505	1770	3855	1285	1925	4200	4200	1550	2325	
FCEC10-97	33 (20) 33	6-1/2	2	290	100	160	1500	1825	610	910	1825	1825	610	910	
			3	290	100	160	1500	1825	610	910	1825	1825	610	910	
			4	290	100	160	1500	1825	610	910	1825	1825	610	910	
	43 (18) 33		2	405	145	215	1690	2325	775	1165	2325	2325	775	1165	
			3	405	145	215	1690	2715	905	1360	2665	2665	905	1360	
			4	405	145	215	1690	2715	905	1360	2665	2665	905	1360	
	54 (16) 50		2	405	240	360	1710	2325	775	1165	2325	2325	775	1165	
			3	405	240	360	1710	3370	1125	1685	3490	3490	1165	1745	
			4	405	240	360	1710	3855	1285	1925	3895	4125	1420	2270	
	68 (14) 50		2	405	240	360	1785	2325	775	1165	2325	2325	775	1165	
			3	405	240	360	1785	3370	1125	1685	3490	3490	1165	1745	
			4	405	240	360	1785	3855	1285	1925	4200	4200	1550	2325	
	97 (12) 50		2	405	240	360	1830	2325	775	1165	2325	2325	775	1165	
			3	405	240	360	1830	3370	1125	1685	3490	3490	1165	1745	
			4	405	240	360	1830	3855	1285	1925	4200	4200	1550	2325	
FCEC12-97	33 (20) 33	8-1/2	2	270	110	165	1470	1825	610	910	1825	1825	610	910	
			3	270	110	165	1470	1825	610	910	1825	1825	610	910	
			4	270	110	165	1470	1825	610	910	1825	1825	610	910	
	43 (18) 33		2	315	145	215	1605	2325	775	1165	2325	2325	775	1165	
			3	315	145	215	1605	2715	905	1360	2670	2670	905	1360	
			4	315	145	215	1605	2715	905	1360	2670	2670	905	1360	
	54 (16) 50		2	315	190	280	1710	2325	775	1165	2325	2325	775	1165	
			3	315	190	280	1710	3370	1125	1685	3490	3490	1165	1745	
			4	315	190	280	1710	3855	1285	1925	3670	4060	1400	2235	
	68 (14) 50		2	315	190	280	1730	2325	775	1165	2325	2325	775	1165	
			3	315	190	280	1730	3370	1125	1685	3490	3490	1165	1745	
			4	315	190	280	1730	3855	1285	1925	3820	4200	1550	2325	
	97 (12) 50		2	315	190	280	1815	2325	775	1165	2325	2325	775	1165	
			3	315	190	280	1815	3370	1125	1685	3490	3490	1165	1745	
			4	315	190	280	1815	3855	1285	1925	4200	4200	1550	2325	

Notes:

1 Listed capacities are in accordance with provisions of AISI S100-16 (R2020/ S2-20 and ICC-ES AC261.

2 Tabulated load capacities are based on the following considerations:
a. Framing Connection: Proprietary HD Deflection Screws (0.25" dia)
b. Connection to Structure: #12 HWH Fasteners connected to 3/16" thick ASTM A36 Steel (see illustrations for base fastener locations)
c. Other fasteners may be used to achieve full clip capacity but must be designed separately.
d. Listed capacities have not been increased for wind, seismic, or other factors.

3 ASD and LRFD loads are based on nominal capacities only. 1/8" service loads are listed in a separate column. Designer shall use governing loads based on 1/8" service and strength.

4 Proprietary HD Deflection Screws (0.25" dia) used to attach clips to framing members through the provided slotted holes. Listed capacities applicable for screws centered and off-centered/offset Extended FastClip slots for framing connection.

5 The safety factor for ASD loads and resistance factor for LRFD loads are in accordance with Chapter K of AISI-S100.

6 The #12 HWH Fasteners shall have a minimum nominal shear capacity of 2000lbs and minimum nominal tension capacity of 2778lbs according to ESR-1976 and Manufacturer Limits.

7 The Proprietary HD Deflection Screws (0.25" dia) provide nominal shear capacity of 2400lbs and a nominal tension capacity of 4060lbs.

8 Nominal capacities are listed for use in blast/seismic designs and they do not assume a safety factor or resistance factor.

9 It is the responsibility of the design professional to detail the project drawings for proper Extended FastClip installation.

ATTACHMENT TO STRUCTURE: 0.157" HILTI X-U PINS TO 3/16" STEEL

Clip Designation	Stud Thickness/ Yield Strength mils (ga) ksi	Max. Standoff (in)	Mechanically Anchored to Structure	Load Capacities (lbs) / Clip											
				In-Plane (F1)			Tension (F2)				Compression (F3)				
				Nominal Load	ASD Load	LRFD Load	1/8" Service Load	Nominal Load	ASD Load	LRFD Load	1/8" Service Load	Nominal Load	ASD Load	LRFD Load	
FCEC6-97	33 (20) 33	2-1/2	2	290	100	160	1540	1825	610	910	1825	1825	610	910	
			3	290	100	160	1540	1825	610	910	1825	1825	610	910	
			4	290	100	160	1540	1825	610	910	1825	1825	610	910	
	43 (18) 33		2	430	145	215	1690	2400	800	1200	2715	2715	905	1360	
			3	430	145	215	1690	2715	905	1360	2715	2715	905	1360	
			4	430	145	215	1690	2715	905	1360	2715	2715	905	1360	
	54 (16) 50		2	705	245	390	1785	2400	800	1200	3000	3000	1000	1500	
			3	705	245	390	1785	3000	1000	1500	4135	4500	1500	2250	
			4	705	245	390	1785	3430	1145	1715	4135	4950	1840	2755	
	68 (14) 50		2	940	330	490	1960	2400	800	1200	3000	3000	1000	1500	
			3	940	330	490	1960	3000	1000	1500	4500	4500	1500	2250	
			4	940	330	490	1960	3430	1145	1715	4620	4950	2000	3000	
	97 (12) 50		2	940	470	700	1985	2400	800	1200	3000	3000	1000	1500	
			3	940	470	700	1985	3000	1000	1500	4500	4500	1500	2250	
			4	940	470	700	1985	3430	1145	1715	4620	4950	2000	3000	
FCEC8-97	33 (20) 33	4-1/2	2	325	110	165	1540	1825	610	910	1825	1825	610	910	
			3	325	110	165	1540	1825	610	910	1825	1825	610	910	
			4	325	110	165	1540	1825	610	910	1825	1825	610	910	
	43 (18) 33		2	430	145	215	1615	2400	800	1200	2640	2690	905	1360	
			3	430	145	215	1615	2715	905	1360	2640	2690	905	1360	
			4	430	145	215	1615	2715	905	1360	2640	2690	905	1360	
	54 (16) 50		2	565	245	390	1615	2400	800	1200	3000	3000	1000	1500	
			3	565	245	390	1615	3000	1000	1500	4035	4460	1500	2250	
			4	565	245	390	1615	3430	1145	1715	4035	4460	1535	2455	
	68 (14) 50		2	565	330	490	1770	2400	800	1200	3000	3000	1000	1500	
			3	565	330	490	1770	3000	1000	1500	4500	4500	1500	2250	
			4	565	330	490	1770	3430	1145	1715	4560	4950	1975	3000	
	97 (12) 50		2	565	340	505	1770	2400	800	1200	3000	3000	1000	1500	
			3	565	340	505	1770	3000	1000	1500	4500	4500	1500	2250	
			4	565	340	505	1770	3430	1145	1715	4950	4950	2000	3000	
FCEC10-97	33 (20) 33	6-1/2	2	290	100	160	1500	1825	610	910	1825	1825	610	910	
			3	290	100	160	1500	1825	610	910	1825	1825	610	910	
			4	290	100	160	1500	1825	610	910	1825	1825	610	910	
	43 (18) 33		2	405	145	215	1690	2400	800	1200	2665	2665	905	1360	
			3	405	145	215	1690	2715	905	1360	2665	2665	905	1360	
			4	405	145	215	1690	2715	905	1360	2665	2665	905	1360	
	54 (16) 50		2	405	240	360	1710	2400	800	1200	3000	3000	1000	1500	
			3	405	240	360	1710	3000	1000	1500	3895	4125	1420	2250	
			4	405	240	360	1710	3430	1145	1715	3895	4125	1420	2270	
	68 (14) 50		2	405	240	360	1785	2400	800	1200	3000	3000	1000	1500	
			3	405	240	360	1785	3000	1000	1500	4500	4500	1500	2250	
			4	405	240	360	1785	3430	1145	1715	4500	4950	1890	3000	
	97 (12) 50		2	405	240	360	1830	2400	800	1200	3000	3000	1000	1500	
			3	405	240	360	1830	3000	1000	1500	4500	4500	1500	2250	
			4	405	240	360	1830	3430	1145	1715	4950	4950	2000	3000	
FCEC12-97	33 (20) 33	8-1/2	2	270	110	165	1470	1825	610	910	1825	1825	610	910	
			3	270	110	165	1470	1825	610	910	1825	1825	610	910	
			4	270	110	165	1470	1825	610	910	1825	1825	610	910	
	43 (18) 33		2	315	145	215	1605	2400	800	1200	2670	2670	905	1360	
			3	315	145	215	1605	2715	905	1360	2670	2670	905	1360	
			4	315	145	215	1605	2715	905	1360	2670	2670	905	1360	
	54 (16) 50		2	315	190	280	1710	2400	800	1200	3000	3000	1000	1500	
			3	315	190	280	1710	3000	1000	1500	3670	4060	1400	2235	
			4	315	190	280	1710	3430	1145	1715	3670	4060	1400	2235	
	68 (14) 50		2	315	190	280	1730	2400	800	1200	3000	3000	1000	1500	
			3	315	190	280	1730	3000	1000	1500	3820	4500	1500	2250	
			4	315	190	280	1730	3430	1145	1715	3820	4935	1700	2715	
	97 (12) 50		2	315	190	280	1815	2400	800	1200	3000	3000	1000	1500	
			3	315	190	280	1815	3000	1000	1500	4500	4500	1500	2250	
			4	315	190	280	1815	3430	1145	1715	4895	4950	2000	3000	

Notes:

1 Listed Capacities are in accordance with provisions of AISI S100-16 (R2020)/S2-20, ICC-ES AC261 and ESR 2269.

2 Tabulated load capacities are based on the following considerations:

a. Framing Connection: Proprietary HD Deflection Screws (0.25" dia)

b. Connection to Structure: 0.157" Hilti X-U Pins connected to 3/16" thick ASTM A36 Steel (see illustrations for base fastener locations).

c. Other fasteners may be used to achieve full clip capacity but must be designed separately.

d. Listed capacities have not been increased for wind, seismic, or other factors.

3 ASD and LRFD loads are based on nominal capacities only. 1/8" service loads are listed in a separate column. Designer shall use governing loads based on 1/8" service and strength.

4 Proprietary HD Deflection Screws (0.25" dia) used to attach clips to framing members through the provided slotted holes. Listed capacities applicable for screws centered and off-centered/offset Extended FastClip slots for framing connection.

5 The safety factor for ASD loads and resistance factor for LRFD loads are in accordance with Chapter K of AISI-S100 and ESR2269.

6 The Proprietary HD Deflection Screws (0.25" dia) provide nominal shear capacity of 2400lbs and a nominal tension capacity of 4060lbs.

7 The Hilti X-U Pin shall have a minimum nominal shear capacity of 3939lbs and minimum nominal tension capacity of 2872lbs according to Hilti Fastening Technical Guide, Edition 2024.

8 Hilti is a registered trademark of Hilti Aktiengeseilschaft Corporation.

9 It is the responsibility of the design professional to detail the project drawings for proper Extended FastClip installation.

The technical content of this literature is effective 04/09/26 and supersedes all previous information.

Extended FastClip™ Slide Clip - 14ga

ATTACHMENT TO STRUCTURE: DESIGNED BY OTHERS

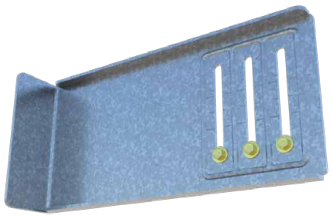
Clip Designation	Framing Member Details			Load Capacities (lbs)										
				In-Plane (F1)			Tension (F2)				Compression (F3)			
	Depth (in)	Max. Standoff (in)	Thickness mils (ga)	Nominal Load	ASD Load	LRFD Load	1/8" Service Load	Nominal Load	ASD Load	LRFD Load	1/8" Service Load	Nominal Load	ASD Load	LRFD Load
FCEC6-68	6	2-1/2	33 (20)	280	95	155	770	1815	610	910	1925	1770	610	910
			43 (18)	415	140	215	840	2265	780	1245	2535	2585	905	1360
			54 (16)	695	240	385	840	3140	1080	1730	3100	3325	1705	2730
			68 (14)	735	250	405	855	4060	1395	2235	3255	3740	1920	3075
			97 (12)	735	250	405	905	4200	1445	2315	3255	3740	1920	3075
FCEC8-68	6	4-1/2	33 (20)	275	95	150	925	1815	610	910	1950	1825	610	910
			43 (18)	355	120	195	960	2375	815	1305	2350	2565	905	1360
			54 (16)	735	255	390	995	3155	1085	1740	2940	3205	1645	2635
			68 (14)	735	255	405	995	4200	1500	2325	3360	3555	1825	2925
			97 (12)	735	255	405	1035	4200	1520	2325	3455	3555	1825	2925
FCEC10-68	6	6-1/2	33 (20)	315	110	165	905	1825	610	910	1865	1715	610	910
			43 (18)	405	145	215	905	2395	825	1320	2560	2595	905	1360
			54 (16)	695	260	390	905	3330	1145	1835	3255	3210	1650	2640
			68 (14)	795	275	440	905	4165	1435	2295	3415	3505	1800	2880
			97 (12)	795	275	440	950	4200	1535	2325	3495	3505	1800	2880
FCEC12-68	6	8-1/2	33 (20)	260	110	165	805	1775	610	910	2040	1825	610	910
			43 (18)	380	145	215	880	2290	790	1260	2685	2715	905	1360
			54 (16)	570	235	375	935	3265	1125	1800	3070	3190	1640	2620
			68 (14)	670	235	375	935	4165	1435	2295	3365	3440	1770	2830
			97 (12)	680	235	375	935	4200	1445	2315	3415	3440	1770	2830

Notes:

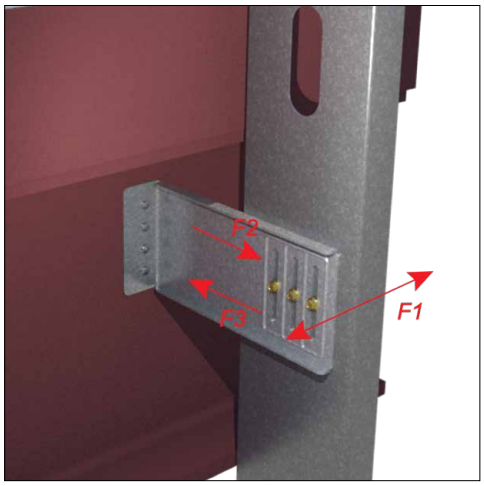
1. Listed capacities are in accordance with provisions of AISI S100-16 (R2020)/S2-20 and ICC-ES AC261.
2. Extended FastClip attachment to structure designed by others. Listed capacities are applicable for Extended FastClip to stud only (framing connection).
3. Proprietary Deflection Screws (0.25" dia) used to attach clips to framing members through the provided slotted holes. Listed capacities applicable for screws centered and off-centered/offset Extended FastClip slots for framing connection.
4. The safety factor for ASD loads and resistance factor for LRFD loads are in accordance with Chapter K of AISI-S100.
5. The Proprietary Deflection Screws (0.25" dia) provide nominal shear capacity of 2400lbs and a nominal tension capacity of 4060lbs.
6. ASD and LRFD loads are based on nominal capacities only. 1/8" service loads are listed in a separate column. Designer shall use governing loads based on 1/8" service and strength.
7. It is the responsibility of the design professional to detail the project drawings for proper Extended FastClip installation.
8. Other framing members may be used with these clips; however, it is the responsibility of the design professional to verify the framing members' capacities and potential failure modes.



FRAMING CENTERED CONNECTION



FRAMING OFFSET CONNECTION



ATTACHMENT TO STRUCTURE: WELD TO 3/16" STEEL

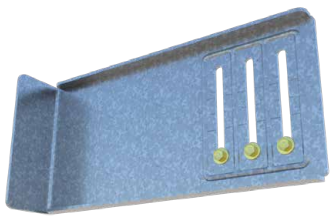
Clip Designation	Stud Thickness / Yield Strength mils (ga) ksi	Max. Standoff (in)	Mechanically Anchored to Structure	Load Capacities (lbs) / Clip										
				In-Plane (F1)			Tension (F2)				Compression (F3)			
				Nominal Load	ASD Load	LRFD Load	1/8" Service Load	Nominal Load	ASD Load	LRFD Load	1/8" Service Load	Nominal Load	ASD Load	LRFD Load
FCEC6-68	33 (20) 33	2-1/2	(2) 1" Welds along back of short leg (each weld equally distanced from center of clip)	280	95	155	–	1815	610	910	–	1770	610	910
	43 (18) 33			415	140	215	–	2265	780	1245	–	2585	905	1360
	54 (16) 50			690	240	385	–	3140	1080	1730	–	3325	1705	2730
	68 (14) 50			690	250	405	–	4060	1395	2235	–	3740	1920	3075
	97 (12) 50			690	250	405	–	4200	1445	2315	–	3740	1920	3075
FCEC8-68	33 (20) 33	4-1/2		275	95	150	–	1815	610	910	–	1825	610	910
	43 (18) 33			355	120	195	–	2375	815	1305	–	2565	905	1360
	54 (16) 50			415	250	370	–	3155	1085	1740	–	3205	1645	2635
	68 (14) 50			415	250	370	–	4360	1500	2400	–	3555	1825	2925
	97 (12) 50			415	250	370	–	4420	1520	2435	–	3555	1825	2925
FCEC10-68	33 (20) 33	6-1/2		295	110	165	–	1825	610	910	–	1715	610	910
	43 (18) 33			295	145	215	–	2395	825	1320	–	2595	905	1360
	54 (16) 50			295	175	265	–	3330	1145	1835	–	3210	1650	2640
	68 (14) 50			295	175	265	–	4165	1435	2295	–	3505	1800	2880
	97 (12) 50			295	175	265	–	4455	1535	2455	–	3505	1800	2880
FCEC12-68	33 (20) 33	8-1/2		230	110	165	–	1775	610	910	–	1825	610	910
	43 (18) 33			230	140	205	–	2290	790	1260	–	2715	905	1360
	54 (16) 50			230	140	205	–	3265	1125	1800	–	3190	1640	2620
	68 (14) 50			230	140	205	–	4165	1435	2295	–	3440	1770	2830
	97 (12) 50			230	140	205	–	4200	1445	2315	–	3440	1770	2830

Notes:

1. Listed capacities are in accordance with provisions of AISI S100-16 (R2020)/S2-20 and ICC-ES AC261.
2. Tabulated load capacities are based on the following considerations:
   a. Framing Connection: Proprietary Deflection Screws (0.25" dia)
   b. Connection to Structure: (2) 1" long fillet weld equally spaced on back (bend) of the structural connection leg for FCEC to 3/16" thick ASTM A36 Steel.
   c. Listed capacities have not been increased for wind, seismic, or other factors.
   d. E70XX (min) electrode Weld.
3. ASD and LRFD loads are based on nominal capacities only. Nominal capacities are listed for use in blast/seismic designs and they do not assume a safety factor or resistance factor.
4. Proprietary Deflection Screws (0.25" dia) used to attach clips to framing members through the provided slotted holes. Listed capacities applicable for screws centered and off-centered/offset Extended FastClip slots for framing connection.
5. The safety factor for ASD loads and resistance factor for LRFD loads are in accordance with Chapter K of AISI-S100.
6. The Proprietary Deflection Screws (0.25" dia) provide nominal shear capacity of 2400lbs and a nominal tension capacity of 4060lbs.
7. It is the responsibility of the design professional to detail the project drawings for proper Extended FastClip installation.



FRAMING CENTERED CONNECTION



FRAMING OFFSET CONNECTION



Extended FastClip™ Slide Clip - 14ga

ATTACHMENT TO STRUCTURE: #12 SCREWS TO 3/16" STEEL

Clip Designation	Stud Thickness/ Yield Strength mils (ga) ksi	Max. Standoff (in)	Mechanically Anchored to Structure	Load Capacities (lbs) / Clip											
				In-Plane (F1)			Tension (F2)				Compression (F3)				
				Nominal Load	ASD Load	LRFD Load	1/8" Service Load	Nominal Load	ASD Load	LRFD Load	1/8" Service Load	Nominal Load	ASD Load	LRFD Load	
FCEC6-68	33 (20) 33	2-1/2	2	280	95	155	770	1815	610	910	1770	1770	610	910	
			3	280	95	155	770	1815	610	910	1770	1770	610	910	
			4	280	95	155	770	1815	610	910	1770	1770	610	910	
	43 (18) 33		2	415	140	215	840	1890	630	945	2325	2325	775	1165	
			3	415	140	215	840	2265	780	1180	2535	2585	905	1360	
			4	415	140	215	840	2265	780	1245	2535	2585	905	1360	
	54 (16) 50		2	690	240	385	840	1890	630	945	2325	2325	775	1165	
			3	690	240	385	840	2365	790	1180	3100	3325	1165	1745	
			4	690	240	385	840	2700	900	1350	3100	3325	1550	2325	
	68 (14) 50		2	690	250	405	855	1890	630	945	2325	2325	775	1165	
			3	690	250	405	855	2365	790	1180	3255	3490	1165	1745	
			4	690	250	405	855	2700	900	1350	3255	3740	1550	2325	
	97 (12) 50		2	690	250	405	905	1890	630	945	2325	2325	775	1165	
			3	690	250	405	905	2365	790	1180	3255	3490	1165	1745	
			4	690	250	405	905	2700	900	1350	3255	3740	1550	2325	
FCEC8-68	33 (20) 33	4-1/2	2	275	95	150	925	1815	610	910	1825	1825	610	910	
			3	275	95	150	925	1815	610	910	1825	1825	610	910	
			4	275	95	150	925	1815	610	910	1825	1825	610	910	
	43 (18) 33		2	355	120	195	960	1890	630	945	2325	2325	775	1165	
			3	355	120	195	960	2365	790	1180	2350	2565	905	1360	
			4	355	120	195	960	2375	815	1305	2350	2565	905	1360	
	54 (16) 50		2	415	250	370	995	1890	630	945	2325	2325	775	1165	
			3	415	250	370	995	2365	790	1180	2940	3205	1165	1745	
			4	415	250	370	995	2700	900	1350	2940	3205	1550	2325	
	68 (14) 50		2	415	250	370	995	1890	630	945	2325	2325	775	1165	
			3	415	250	370	995	2365	790	1180	3360	3490	1165	1745	
			4	415	250	370	995	2700	900	1350	3360	3555	1550	2325	
	97 (12) 50		2	415	250	370	1035	1890	630	945	2325	2325	775	1165	
			3	415	250	370	1035	2365	790	1180	3455	3490	1165	1745	
			4	415	250	370	1035	2700	900	1350	3455	3555	1550	2325	
FCEC10-68	33 (20) 33	6-1/2	2	295	110	165	905	1825	610	910	1715	1715	610	910	
			3	295	110	165	905	1825	610	910	1715	1715	610	910	
			4	295	110	165	905	1825	610	910	1715	1715	610	910	
	43 (18) 33		2	295	145	215	905	1890	630	945	2325	2325	775	1165	
			3	295	145	215	905	2365	790	1180	2560	2595	905	1360	
			4	295	145	215	905	2395	825	1320	2560	2595	905	1360	
	54 (16) 50		2	295	175	265	905	1890	630	945	2325	2325	775	1165	
			3	295	175	265	905	2365	790	1180	3210	3210	1165	1745	
			4	295	175	265	905	2700	900	1350	3210	3210	1550	2325	
	68 (14) 50		2	295	175	265	905	1890	630	945	2325	2325	775	1165	
			3	295	175	265	905	2365	790	1180	3415	3490	1165	1745	
			4	295	175	265	905	2700	900	1350	3415	3505	1550	2325	
	97 (12) 50		2	295	175	265	950	1890	630	945	2325	2325	775	1165	
			3	295	175	265	950	2365	790	1180	3490	3490	1165	1745	
			4	295	175	265	950	2700	900	1350	3495	3505	1550	2325	
FCEC12-68	33 (20) 33	8-1/2	2	230	110	165	805	1775	610	910	1825	1825	610	910	
			3	230	110	165	805	1775	610	910	1825	1825	610	910	
			4	230	110	165	805	1775	610	910	1825	1825	610	910	
	43 (18) 33		2	230	140	205	880	1890	630	945	2325	2325	775	1165	
			3	230	140	205	880	2290	790	1180	2685	2715	905	1360	
			4	230	140	205	880	2290	790	1260	2685	2715	905	1360	
	54 (16) 50		2	230	140	205	935	1890	630	945	2325	2325	775	1165	
			3	230	140	205	935	2365	790	1180	3070	3190	1165	1745	
			4	230	140	205	935	2700	900	1350	3070	3190	1550	2325	
	68 (14) 50		2	230	140	205	935	1890	630	945	2325	2325	775	1165	
			3	230	140	205	935	2365	790	1180	3365	3440	1165	1745	
			4	230	140	205	935	2700	900	1350	3365	3440	1550	2325	
	97 (12) 50		2	230	140	205	935	1890	630	945	2325	2325	775	1165	
			3	230	140	205	935	2365	790	1180	3415	3440	1165	1745	
			4	230	140	205	935	2700	900	1350	3415	3440	1550	2325	

Notes:

1 Listed capacities are in accordance with provisions of AISI S100-16 (R2020/ S2-20 and ICC-ES AC261.

2 Tabulated load capacities are based on the following considerations:
a. Framing Connection: Proprietary Deflection Screws (0.25" dia)
b. Connection to Structure: #12 HWH Fasteners connected to 3/16" thick ASTM A36 Steel (see illustrations for base fastener locations)
c. Other fasteners may be used to achieve full clip capacity but must be designed separately.
d. Listed capacities have not been increased for wind, seismic, or other factors.

3 ASD and LRFD loads are based on nominal capacities only. 1/8" service loads are listed in a separate column. Designer shall use governing loads based on 1/8" service and strength.

4 Proprietary Deflection Screws (0.25" dia) used to attach clips to framing members through the provided slotted holes. Listed capacities applicable for screws centered and off-centered/offset Extended FastClip slots for framing connection.

5 The safety factor for ASD loads and resistance factor for LRFD loads are in accordance with Chapter K of AISI-S100.

6 The #12 HWH Fasteners shall have a minimum nominal shear capacity of 2000lbs and minimum nominal tension capacity of 2778lbs according to ESR-1976 and Manufacturer Limits.

7 The Proprietary Deflection Screws (0.25" dia) provide nominal shear capacity of 2400lbs and a nominal tension capacity of 4060lbs.

8 Nominal capacities are listed for use in blast/seismic designs and they do not assume a safety factor or resistance factor.

9 It is the responsibility of the design professional to detail the project drawings for proper Extended FastClip installation.

ATTACHMENT TO STRUCTURE: 0.157" HILTI X-U PINS TO 3/16" STEEL

Clip Designation	Stud Thickness/ Yield Strength mils (ga) ksi	Max Standoff (in)	Mechanically Anchored to Atructure	Load Capacities (lbs) / Clip											
				In-Plane (F1)			Tension (F2)				Compression (F3)				
				Nominal Load	ASD Load	LRFD Load	1/8" Service Load	Nominal Load	ASD Load	LRFD Load	1/8" Service Load	Nominal Load	ASD Load	LRFD Load
FCEC6-68	33 (20) 33	2-1/2	2	280	95	155	770	1790	595	895	1770	1770	610	910
			3	280	95	155	770	1815	610	910	1770	1770	610	910
			4	280	95	155	770	1815	610	910	1770	1770	610	910
	43 (18) 33		2	415	140	215	840	1790	595	895	2240	2240	745	1120
			3	415	140	215	840	2240	745	1120	2535	2585	905	1360
			4	415	140	215	840	2265	780	1245	2535	2585	905	1360
	54 (16) 50		2	690	240	385	840	1790	595	895	2240	2240	745	1120
			3	690	240	385	840	2240	745	1120	3100	3325	1120	1680
			4	690	240	385	840	2560	855	1280	3100	3325	1490	2240
	68 (14) 50		2	690	250	405	855	1790	595	895	2240	2240	745	1120
			3	690	250	405	855	2240	745	1120	3255	3360	1120	1680
			4	690	250	405	855	2560	855	1280	3255	3740	1490	2240
	97 (12) 50		2	690	250	405	905	1790	595	895	2240	2240	745	1120
			3	690	250	405	905	2240	745	1120	3255	3360	1120	1680
			4	690	250	405	905	2560	855	1280	3255	3740	1490	2240
FCEC8-68	33 (20) 33	4-1/2	2	275	95	150	925	1790	595	895	1825	1825	610	910
			3	275	95	150	925	1815	610	910	1825	1825	610	910
			4	275	95	150	925	1815	610	910	1825	1825	610	910
	43 (18) 33		2	355	120	195	960	1790	595	895	2240	2240	745	1120
			3	355	120	195	960	2240	745	1120	2350	2565	905	1360
			4	355	120	195	960	2375	815	1280	2350	2565	905	1360
	54 (16) 50		2	415	250	370	995	1790	595	895	2240	2240	745	1120
			3	415	250	370	995	2240	745	1120	2940	3205	1120	1680
			4	415	250	370	995	2560	855	1280	2940	3205	1490	2240
	68 (14) 50		2	415	250	370	995	1790	595	895	2240	2240	745	1120
			3	415	250	370	995	2240	745	1120	3360	3360	1120	1680
			4	415	250	370	995	2560	855	1280	3360	3555	1490	2240
	97 (12) 50		2	415	250	370	1035	1790	595	895	2240	2240	745	1120
			3	415	250	370	1035	2240	745	1120	3360	3360	1120	1680
			4	415	250	370	1035	2560	855	1280	3455	3555	1490	2240
FCEC10-68	33 (20) 33	6-1/2	2	295	110	165	905	1790	595	895	1715	1715	610	910
			3	295	110	165	905	1825	610	910	1715	1715	610	910
			4	295	110	165	905	1825	610	910	1715	1715	610	910
	43 (18) 33		2	295	145	215	905	1790	595	895	2240	2240	745	1120
			3	295	145	215	905	2240	745	1120	2560	2595	905	1360
			4	295	145	215	905	2395	825	1280	2560	2595	905	1360
	54 (16) 50		2	295	175	265	905	1790	595	895	2240	2240	745	1120
			3	295	175	265	905	2240	745	1120	3210	3210	1120	1680
			4	295	175	265	905	2560	855	1280	3210	3210	1490	2240
	68 (14) 50		2	295	175	265	905	1790	595	895	2240	2240	745	1120
			3	295	175	265	905	2240	745	1120	3360	3360	1120	1680
			4	295	175	265	905	2560	855	1280	3415	3505	1490	2240
	97 (12) 50		2	295	175	265	950	1790	595	895	2240	2240	745	1120
			3	295	175	265	950	2240	745	1120	3360	3360	1120	1680
			4	295	175	265	950	2560	855	1280	3495	3505	1490	2240
FCEC12-68	33 (20) 33	8-1/2	2	230	110	165	805	1775	595	895	1825	1825	610	910
			3	230	110	165	805	1775	610	910	1825	1825	610	910
			4	230	110	165	805	1775	610	910	1825	1825	610	910
	43 (18) 33		2	230	140	205	880	1790	595	895	2240	2240	745	1120
			3	230	140	205	880	2240	745	1120	2685	2715	905	1360
			4	230	140	205	880	2290	790	1260	2685	2715	905	1360
	54 (16) 50		2	230	140	205	935	1790	595	895	2240	2240	745	1120
			3	230	140	205	935	2240	745	1120	3070	3190	1120	1680
			4	230	140	205	935	2560	855	1280	3070	3190	1490	2240
	68 (14) 50		2	230	140	205	935	1790	595	895	2240	2240	745	1120
			3	230	140	205	935	2240	745	1120	3360	3360	1120	1680
			4	230	140	205	935	2560	855	1280	3365	3440	1490	2240
	97 (12) 50		2	230	140	205	935	1790	595	895	2240	2240	745	1120
			3	230	140	205	935	2240	745	1120	3360	3360	1120	1680
			4	230	140	205	935	2560	855	1280	3415	3440	1490	2240

Notes:

1 Listed Capacities are in accordance with provisions of AISI S100-16 (R2020)/ S2-20, ICC-ES AC261 and ESR 2269.

2 Tabulated load capacities are based on the following considerations:

a. Framing Connection: Proprietary Deflection Screws (0.25" dia)

b. Connection to Structure: 0.157" Hilti X-U Pins connected to 3/16" thick ASTM A36 Steel (see illustrations for base fastener locations).

c. Other fasteners may be used to achieve full clip capacity but must be designed separately.

d. Listed capacities have not been increased for wind, seismic, or other factors.

3 ASD and LRFD loads are based on nominal capacities only. 1/8" service loads are listed in a separate column. Designer shall use governing loads based on 1/8" service and strength.

4 Proprietary Deflection Screws (0.25" dia) used to attach clips to framing members through the provided slotted holes. Listed capacities applicable for screws centered and off-centered/offset Extended FastClip slots for framing connection.

5 The safety factor for ASD loads and resistance factor for LRFD loads are in accordance with Chapter K of AISI-S100 and ESR2269.

6 The Proprietary Deflection Screws (0.25" dia) provide nominal shear capacity of 2400lbs and a nominal tension capacity of 4060lbs.

7 The Hilti X-U Pin shall have a minimum nominal shear capacity of 3939lbs and minimum nominal tension capacity of 2872lbs according to Hilti Fastening Technical Guide, Edition 2024.

8 Hilti is a registered trademark of Hilti Aktiengeseilschaft Corporation.

9 It is the responsibility of the design professional to detail the project drawings for proper Extended FastClip installation.

FastClip™ Slide Clip w/Anchor Holes

Curtain Wall/Bypass Connected to Slab w/Anchor Bolt

Vertical building movement up to 3" (1-1/2" up and 1-1/2" down

ClarkDietrich FCSC-HD 68mils (14ga) is used to attach exterior curtain-wall studs to the building concrete structure and provide for vertical building movement independent of the cold-formed steel framing. Proprietary Deflection Screws are provided with each clip for attachment to the wall studs and allow for 3" vertical deflection (1-1/2" up and down) to ensure friction-free sliding. A 5/8" hole in the short leg of the clip allows for a 1/2" concrete anchor to be attached to the slab or (2) 3/8" holes allow for 1/4" anchors.

MATERIAL SPECIFICATIONS

Gauge: 14 gauge (68mils)
Design Thickness: 0.0713 inches
Yield Strength: 50ksi
Coating: G90

CODE APPROVALS AND PERFORMANCE STANDARDS

IAPMO ER-729
AISI S100

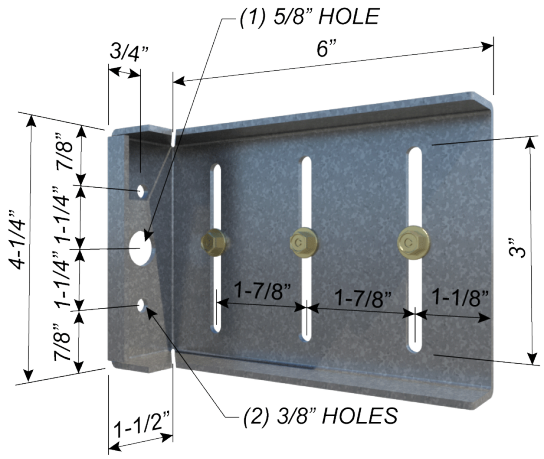
PRODUCT DIMENSIONS

FCSC-HD: 1-1/2" x 4-1/4" x 6" long

INSTALLATION

To attach the clip to the cold-formed steel framing stud, Proprietary Deflection Screws, shall be driven through the slotted holes and positioned to allow for the appropriate building deflection.

Attachment to the structure concrete slab can be made with 1/2" bolt anchor or (2) 1/4" anchors. Anchor connection design and edge distance requirements must be approved by a design professional before installation.



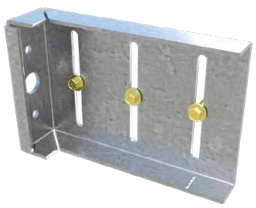
FCSC-HD Clips

Clip Designation	Product Thickness		Size (in)	Packaging Pcs./Bucket
	mils (ga)	Design Thickness (in)		
FCSC-HD	68 (14)	0.0713	1-1/2 x 6 x 4-1/4	25

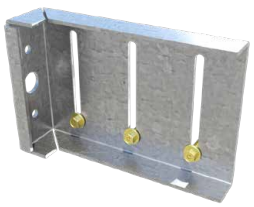
Includes (80) Proprietary Deflection Screws per carton.



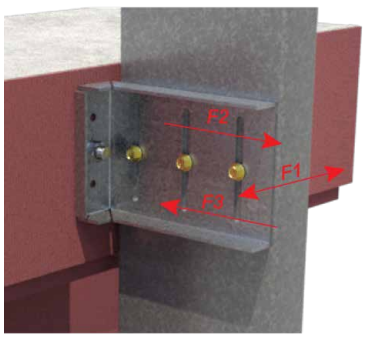
Proprietary Deflection Screw



FRAMING CENTERED CONNECTION



FRAMING OFFSET CONNECTION



ATTACHMENT TO STRUCTURE: DESIGNED BY OTHERS, (1) 1/2" Φ ANCHOR BOLT

Clip Designation	Framing Member Details			Load Capacities (lbs)											
				In-Plane (F1)			Tension (F2)				Compression (F3)				
	Stud Depth	Stud Thickness mils (ga)	Proprietary Deflection Screws	Nominal Load	ASD Load	LRFD Load	1/8" Service Load	Nominal Load	ASD Load	LRFD Load	1/8" Service Load	Nominal Load	ASD Load	LRFD Load
FCSC-HD	3-5/8	33 (20)	2	320	110	165	555	1215	405	610	1185	1215	405	610
		43 (18)	2	410	140	215	555	1740	600	905	1470	1780	605	905
		54 (16)	2	585	200	325	555	1740	600	955	2035	2560	880	1410
		68 (14)	2	820	280	450	600	1740	600	955	2385	3200	1100	1760
		97 (12)	2	820	280	450	600	1845	635	1015	2540	4015	1380	2210
	6	33 (20)	3	270	95	150	625	1765	605	910	1960	1825	610	910
		43 (18)	3	405	140	215	700	1875	645	1030	2325	2715	905	1360
		54 (16)	3	740	255	390	775	1875	645	1030	3440	4150	1430	2285
		68 (14)	3	910	315	490	830	1935	665	1065	3775	5080	1750	2800
		97 (12)	3	910	315	500	835	1950	670	1075	4595	7310	2515	4025

ATTACHMENT TO STRUCTURE: DESIGNED BY OTHERS, (2) 1/4" Φ ANCHORS

Clip Designation	Framing Member Details			Load Capacities (lbs)											
				In-Plane (F1)			Tension (F2)				Compression (F3)				
	Stud Depth	Stud Thickness mils (ga)	Proprietary Deflection Screws	Nominal Load	ASD Load	LRFD Load	1/8" Service Load	Nominal Load	ASD Load	LRFD Load	1/8" Service Load	Nominal Load	ASD Load	LRFD Load
FCSC-HD	3-5/8	33 (20)	2	320	110	165	750	1215	405	610	1185	1215	405	610
		43 (18)	2	410	140	215	750	1810	605	905	1470	1780	605	905
		54 (16)	2	585	200	325	795	2200	755	1210	2035	2560	880	1410
		68 (14)	2	820	280	450	795	2200	755	1210	2385	3200	1100	1760
		97 (12)	2	820	280	450	845	2200	755	1210	2540	4015	1380	2210
	6	33 (20)	3	270	95	150	725	1825	610	910	1960	1825	610	910
		43 (18)	3	405	140	215	725	2195	755	1210	2325	2715	905	1360
		54 (16)	3	740	255	390	840	2195	755	1210	3440	4150	1430	2285
		68 (14)	3	910	315	490	870	2245	775	1235	3775	5080	1750	2800
		97 (12)	3	910	315	500	970	2245	775	1235	4595	7310	2515	4025

Notes:

1 Listed capacities are in accordance with provisions of AISI S100-16(R2020)/S2-20, and ICC-ES AC261.

2 Tabulated load capacities are based on the following considerations:
- Framing Connection: Proprietary Deflection screws (0.25"dia)
- Connection to Structure: Designed by others.
- Listed capacities have not been increased for wind, seismic, or other factors.

3 ASD and LRFD loads are based on nominal capacities only. 1/8" service loads are listed in a separate column. Designer shall use governing loads based on 1/8" service and strength.

4 Nominal capacities are listed for use in blast/seismic designs and they do not assume a safety factor or resistance factor.

5 The safety factor for ASD loads and resistance factor for LRFD loads are in accordance with Chapter K of AISI-S100.

6 Proprietary Deflection Screws (0.25" dia) used to attach clips to framing members through the provided slotted holes.

7 Listed capacities applicable for framing screws centered and offset in FCSC-HD clip slots. For connection to structure, base anchors designed by others.

8 The Proprietary Deflection Screws (0.25" dia) provide nominal shear capacity of 2400lbs and a nominal tension capacity of 4060lbs.

9 It is the responsibility of the design professional to detail the project drawings for proper FCSC-HD installation.

10 Other framing members may be used with these clips; however, it is the responsibility of the design professional to verify the framing members' capacities and potential failure modes.

FastClip™ Slide Clip w/Anchor Holes

Curtain Wall/Bypass Connected to Slab w/Anchor Bolt

ATTACHMENT TO STRUCTURE: (1) 1/2" Φ KB-TZ2 ANCHOR BOLT

Clip Designation	Framing Member Details			Load Capacities (lbs) / Clip											
				In-Plane (F1)			Tension (F2)				Compression (F3)				
	Stud Depth	Stud Thickness mils (ga)	Proprietary Deflection Screws	Nominal Load	ASD Load	LRFD Load	1/8" Service Load	Nominal Load	ASD Load	LRFD Load	1/8" Service Load	Nominal Load	ASD Load	LRFD Load
FCSC-HD	3-5/8	33 (20)	2	320	110	165	555	1215	405	610	1185	1215	405	610
		43 (18)	2	410	140	215	555	1740	600	905	1470	1780	605	905
		54 (16)	2	585	200	325	555	1740	600	955	2035	2560	880	1410
		68 (14)	2	820	280	450	600	1740	600	955	2385	3200	1100	1760
		97 (12)	2	820	280	450	600	1845	635	1015	2540	4015	1380	2210
	6	33 (20)	3	270	95	150	625	1765	605	910	1960	1825	610	910
		43 (18)	3	405	140	215	700	1875	645	1030	2325	2715	905	1360
		54 (16)	3	740	255	390	775	1875	645	1030	3440	4150	1430	2285
		68 (14)	3	910	315	490	830	1935	665	1065	3775	5080	1750	2800
		97 (12)	3	910	315	500	835	1950	670	1075	4595	7310	2515	3895

Notes:

1 Listed capacities are in accordance with provisions of AISI S100-16(R2020)/S2-20, ICC-ES AC261 and ACI 318-19.

2 Tabulated load capacities are based on the following considerations:
- Framing Connection: Proprietary Deflection Screws (0.25" dia)
- Connection to Structure: (1) 1/2" Φ Hilti KB-TZ2 Anchor connected to minimum 3000psi Cracked Concrete. Minimum concrete thickness shall be 5-1/2", edge distance shall be 2-3/4".
- Embedment to Concrete: Nominal embedment = 2-1/2" for 1/2" KB-TZ2 anchor.
- Other fasteners/anchors may be used to achieve full clip capacity but must be designed separately.
- Listed capacities have not been increased for wind, seismic, or other factors.

3 ASD and LRFD loads are based on nominal capacities only. 1/8" service loads are listed in a separate column. Designer shall use governing loads based on 1/8" service and strength.

4 Proprietary Deflection Screws (0.25" dia) used to attach clips to framing members through the provided slotted holes.

5 Listed capacities applicable for framing screws centered and offset in FCSC-HD clip slots. For connection to structure, base anchors are assumed to be uniformly loaded.

6 The safety factor for ASD loads and resistance factor for LRFD loads are in accordance with Chapter K of AISI-S100 and ESR4266.

7 The Proprietary Deflection Screws (0.25" dia) provide nominal shear capacity of 2400lbs and a nominal tension capacity of 4060lbs.

8 The Hilti 1/2" Φ KB-TZ2 Anchor Bolt shall have a LRFD shear capacity of 2275 lbs and LRFD tension capacity of 2115lbs according to ESR 4266 and ACI 318-19.

9 Anchor strength in concrete considerations per ACI 318-19 and ESR 4266.

10 Nominal capacities are listed for use in blast/seismic designs and they do not assume a safety factor or resistance factor.

11 Hilti is a registered trademark of Hilti Aktiengeseilschaft Corporation.

12 It is the responsibility of the design professional to detail the project drawings for proper FCSC-HD installation.

13 Other framing members may be used with these clips; however, it is the responsibility of the design professional to verify the framing members' capacities and potential failure modes.

ATTACHMENT TO STRUCTURE: (2) 1/4" Φ KH-EZ ANCHORS

Clip Designation	Framing Member Details			Load Capacities (lbs) / Clip											
				In-Plane (F1)			Tension (F2)				Compression (F3)				
	Stud Depth	Stud Thickness mils (gauge)	Proprietary Deflection Screws	Nominal Load	ASD Load	LRFD Load	1/8" Service Load	Nominal Load	ASD Load	LRFD Load	1/8" Service Load	Nominal Load	ASD Load	LRFD Load
FCSC-HD	3-5/8	33 (20)	2	320	110	165	750	1215	405	610	1185	1215	405	610
		43 (18)	2	410	140	215	750	1810	605	905	1470	1780	605	905
		54 (16)	2	585	200	325	795	2200	755	1210	2035	2560	880	1410
		68 (14)	2	820	280	450	795	2200	755	1210	2385	3200	1100	1760
		97 (12)	2	820	280	450	845	2200	755	1210	2540	4015	1380	2210
	6	33 (20)	3	270	95	150	725	1825	610	910	1960	1825	610	910
		43 (18)	3	405	140	215	725	2195	755	1210	2325	2715	905	1360
		54 (16)	3	740	255	390	840	2195	755	1210	3440	4150	1430	2285
		68 (14)	3	910	315	490	870	2245	775	1235	3775	5080	1750	2800
		97 (12)	3	910	315	500	970	2245	775	1235	4595	7310	2515	3895

Notes:

1 Listed capacities are in accordance with provisions of AISI S100-16(R2020)/S2-20, ICC-ES AC261 and ACI 318-19.

2 Tabulated load capacities are based on the following considerations:
- Framing Connection: Proprietary Deflection Screws (0.25" dia)
- Connection to Structure: (2) 1/4" Φ Hilti KH-EZ Anchors spaced 2-1/2" apart connected to 3000psi Cracked Concrete. Minimum concrete thickness shall be 5-1/2", edge distance shall be 2".
- Embedment to Concrete: Nominal embedment depth = 2-1/2" for 1/4" KH-EZ anchor.
- Other fasteners/anchors may be used to achieve full clip capacity but must be designed separately.
- Listed capacities have not been increased for wind, seismic, or other factors.

3 ASD and LRFD loads are based on nominal capacities only. 1/8" service loads are listed in a separate column. Designer shall use governing loads based on 1/8" service and strength.

4 Proprietary Deflection Screws (0.25" dia) used to attach clips to framing members through the provided slotted holes.

5 Listed capacities applicable for framing screws centered and offset in FCSC-HD clip slots. For connection to structure, base anchors are assumed to be uniformly loaded.

6 The safety factor for ASD loads and resistance factor for LRFD loads are in accordance with Chapter K of AISI-S100 and ESR3027.

7 The Proprietary Deflection Screws (0.25" dia) provide nominal shear capacity of 2400lbs and a nominal tension capacity of 4060lbs.

8 The Hilti 1/4" Φ KH-EZ Anchors shall have a LRFD shear capacity of 1735lbs and LRFD tension capacity of 830lbs according to ESR 3027 and ACI 318-19.

9 Anchor strength in concrete considerations per ACI 318-19 and ESR 3027.

10 Nominal capacities are listed for use in blast/seismic designs and they do not assume a safety factor or resistance factor.

11 Hilti is a registered trademark of Hilti Aktiengeseilschaft Corporation.

12 It is the responsibility of the design professional to detail the project drawings for proper FCSC-HD installation.

13 Other framing members may be used with these clips; however, it is the responsibility of the design professional to verify the framing members' capacities and potential failure modes.

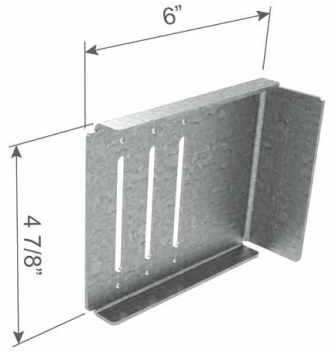
Universal Bypass Clip

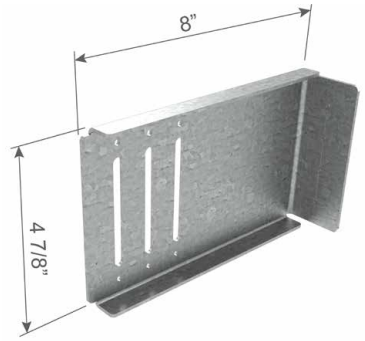
Provides either a rigid connection or vertical building movement up to 3"

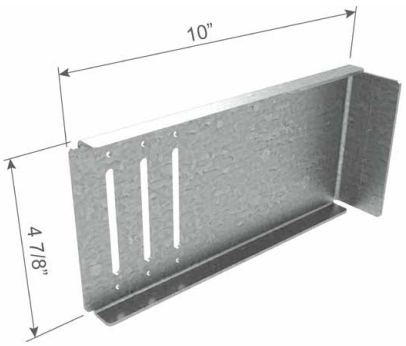
Universal Bypass Clips are used to attach exterior curtain wall studs to the building structure and provide either a rigid connection or deflecting connection for vertical building movement independent of the cold-formed steel framing.

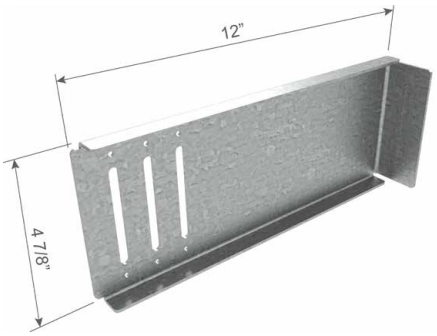
The clips are available in standard lengths of 6", 8", 10" and 12" and are ideal for medium to larger standoff conditions. Universal Bypass Clips install quickly with screws, welds or powder-actuated fasteners, and provide adjustable standoff to ensure a plumb wall plane. For deflection application, proprietary deflection screws are provided with each clip to ensure friction-free sliding.

- Eliminates shims and scabs.
- Provides vertical movement up to 3" (1-1/2" up and 1-1/2" down) when installed as a deflection application.
- Specially designed to simplify welding installation.
- Fast, one-piece universal installation. No left or right handed clips.
- Proprietary Deflection Screws provide frictionless slip connections. One bag (80 screws) included.









MATERIAL SPECIFICATIONS

Gauge: 14 gauge (68mils)
Design Thickness: 0.0713 inches

Gauge: 12 gauge (97mils)
Design Thickness: 0.1017 inches

Yield Strength: Structural Grade 50 Type H (ST50H), 50ksi (340 MPa)
Coating: G90 (Z275) hot-dipped galvanized coating
ASTM: A653, A1003

CODE APPROVALS

IAPMO ER-729

ALTERNATIVE PRODUCTS

FastClip™ Slide Clip
Extended FastClip™ Slide Clip
Extended Uni-Clip™

Universal Bypass Clip (UBC)

Clip Designation	Mils (ga)	Design Thickness (in)	Size (in)	Pcs/Bucket
UBC6-68	68 (14)	0.0713	1-7/8 x 6 x 4-7/8	25
UBC8-68	68 (14)	0.0713	1-7/8 x 8 x 4-7/8	25
UBC10-68	68 (14)	0.0713	1-7/8 x 10 x 4-7/8	25
UBC12-68	68 (14)	0.0713	1-7/8 x 12 x 4-7/8	25
UBC6-97	97 (12)	0.1017	1-7/8 x 6 x 4-7/8	25
UBC8-97	97 (12)	0.1017	1-7/8 x 8 x 4-7/8	25
UBC10-97	97 (12)	0.1017	1-7/8 x 10 x 4-7/8	25
UBC12-97	97 (12)	0.1017	1-7/8 x 12 x 4-7/8	25

INSTALLATION

Connections to the building can be made with screws, welds powder-actuated fasteners. Mechanical fasteners shall be located on the embossed marks given on the scored line of the 1-7/8" flange. Attach building anchors to the structure according to the manufacture's instructions. Anchors shall be installed through the embossments on the scored line of the clip as shown on the attached drawings. In no case shall anchors be installed more than 3/4" from the bend on the short leg of the clip. In cases of discrepancy between this information and the Design Engineer's details, the Design Engineer's details shall be followed.





For a Rigid Connection:
Attach the Universal Bypass Clip to cold-formed steel framing members using (6) #10-16 minimum self-drilling screws (not included) for the 14ga clip and (6) #12-14 minimum self-drilling screws (not included) for the 12ga clip, through the clip holes into the steel framing.

For a Deflection Connection:
Attach the Universal Bypass Clip to the cold-formed steel framing using (3) #14 Proprietary Deflection Screws (included) through the (3) slotted holes and positioned to allow for the appropriate building deflection.

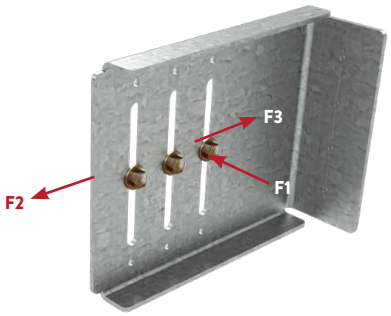
Proprietary Deflection Screws:
Many of the ClarkDietrich deflection clips include our proprietary deflection fastener that has been specifically designed to provide friction-free deflection. These fasteners eliminate drag, binding or resistance that can often occur with common fasteners.

Universal Bypass Clip

UBC - 14ga (As a Deflection Connection)

ATTACHMENT TO STRUCTURAL: DESIGNED BY OTHERS

Clip Designation	Stud Thickness / Yield Strength mils (ga) ksi	ASD Allowable Loads (lbs)		
		F1 (In-Plane) w/ (3) #14	F2 (Tension) w/ (3) #14	F3 (Compression) w/ (3) #14
UBC6-68 68mils (14ga)	33 (20) 33	110	605	605
	43 (18) 33	140	905	905
	54 (16) 50	255	1280	1430
	68 (14) 50	255	1280	1430
	97 (12) 50	255	1280	1430
UBC8-68 68mils (14ga)	33 (20) 33	110	605	605
	43 (18) 33	140	905	905
	54 (16) 50	190	1235	1340
	68 (14) 50	190	1235	1340
	97 (12) 50	190	1235	1340
UBC10-68 68mils (14ga)	33 (20) 33	110	605	605
	43 (18) 33	140	905	905
	54 (16) 50	150	1185	1325
	68 (14) 50	150	1185	1325
	97 (12) 50	150	1185	1325
UBC12-68 68mils (14ga)	33 (20) 33	90	605	605
	43 (18) 33	90	905	905
	54 (16) 50	90	1190	1300
	68 (14) 50	90	1190	1300
	97 (12) 50	90	1190	1300



Notes:

1 Allowable loads (ASD) listed represent the capacity of the clip to the stud only (framing connection).

2 Allowable Loads have not been increased for the wind, seismic, or other factors.

3 An 1/8-in service deflection load limit was applied to clips resisting F2 and F3 loads. In accordance with ICC AC 261, service deflection limit was not applied to clips resisting F1 loads.

4 For Deflection connection, one #14 shouldered screw (Deflection Screw) shall be installed per slot, placed at the center. #14 Deflection Screws are provided with each Universal Bypass Clip.

5 Listed capacities are based on the maximum screw pattern. For maximum screw pattern, fill #14 Deflection screws in each slot for a Deflection Clip.

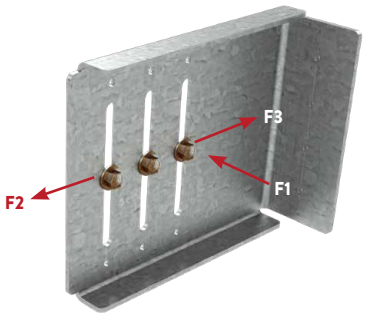
6 It is the responsibility of the design professional to design the attachment of the clips to the structure and verify that their capacity meets the requirements of the intended application.

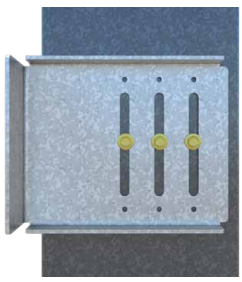
7 Nominal or LRFD loads are available upon request.

UBC - 14ga (As a Deflection Connection)

ATTACHMENT TO STRUCTURAL: WELDED

Clip Designation	Stud Thickness / Yield Strength mils (ga) ksi	ASD Allowable Loads (lbs)		
		F1 (In-Plane) w/ (3) #14	F2 (Tension) w/ (3) #14	F3 (Compression) w/ (3) #14
UBC6-68 68mils (14ga)	33 (20) 33	110	605	605
	43 (18) 33	140	905	905
	54 (16) 50	255	1275	1430
	68 (14) 50	255	1275	1430
	97 (12) 50	255	1275	1430
UBC8-68 68mils (14ga)	33 (20) 33	110	605	605
	43 (18) 33	140	905	905
	54 (16) 50	190	1275	1340
	68 (14) 50	190	1275	1340
	97 (12) 50	190	1275	1340
UBC10-68 68mils (14ga)	33 (20) 33	110	605	605
	43 (18) 33	140	905	905
	54 (16) 50	150	1275	1325
	68 (14) 50	150	1275	1325
	97 (12) 50	150	1275	1325
UBC12-68 68mils (14ga)	33 (20) 33	90	605	605
	43 (18) 33	90	905	905
	54 (16) 50	90	1275	1300
	68 (14) 50	90	1275	1300
	97 (12) 50	90	1275	1300





(3) #14 Deflection Screw Pattern Shown in a UBC6 Clip

Notes:

1 Allowable Loads (ASD) have not been increased for the wind, seismic, or other factors.

2 For Deflection clip, one #14 shouldered screw (UBC Deflection Screw) shall be installed per slot, placed at the center. Clip gauge-specific #14 UBC Deflection Screws are provided with each Universal Bypass Clip.

3 Listed capacities are based on the maximum screw pattern. For maximum screw pattern, fill #14 Deflection screws in each slot for a Deflection Clip.

4 The Allowable loads listed for welds are based on the following weld lengths:
- (2) Welds - 1" along back of short leg clip bend (each weld equally distanced from center of clip)

5 Use E70XX (min.) electrodes.

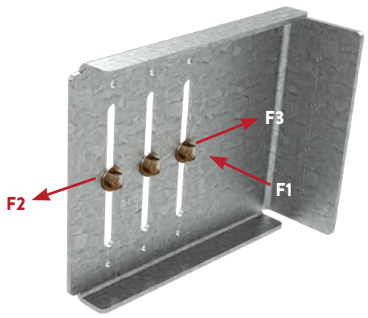
6 It is the responsibility of the design professional to verify that the connection design meets the requirements of the intended application.

7 Nominal or LRFD loads are available upon request.

UBC - 14ga (As a Deflection Connection)

ATTACHMENT TO STRUCTURAL: (4) #12-24 FASTENERS

Clip Designation	Stud Thickness / Yield Strength mils (ga) ksi	ASD Allowable Loads (lbs)		
		F1 (In-Plane) w/ (3) #14	F2 (Tension) w/ (3) #14	F3 (Compression) w/ (3) #14
UBC6-68 68mils (14ga)	33 (20) 33	110	605	605
	43 (18) 33	140	905	905
	54 (16) 50	255	1280	1430
	68 (14) 50	255	1280	1430
	97 (12) 50	255	1280	1430
UBC8-68 68mils (14ga)	33 (20) 33	110	605	605
	43 (18) 33	140	905	905
	54 (16) 50	190	1235	1340
	68 (14) 50	190	1235	1340
	97 (12) 50	190	1235	1340
UBC10-68 68mils (14ga)	33 (20) 33	110	605	605
	43 (18) 33	140	905	905
	54 (16) 50	150	1185	1325
	68 (14) 50	150	1185	1325
	97 (12) 50	150	1185	1325
UBC12-68 68mils (14ga)	33 (20) 33	90	605	605
	43 (18) 33	90	905	905
	54 (16) 50	90	1190	1300
	68 (14) 50	90	1190	1300
	97 (12) 50	90	1190	1300



Notes:

1 Allowable Loads (ASD) have not been increased for the wind, seismic, or other factors.

2 An 1/8-in service deflection load limit was applied to clips resisting F2 and F3 loads. In accordance with ICC AC 261, service deflection limit was not applied to clips resisting F1 loads.

3 For Deflection clip, one #14 shouldered screw (UBC Deflection Screw) shall be installed per slot, placed at the center. Clip gauge-specific #14 UBC Deflection Screws are provided with each UBC.

4 Listed capacities are based on the maximum screw pattern. For maximum screw pattern, fill #14 Deflection screws in each slot for a Deflection Clip.

5 #12-24 Fasteners shall be used for attachment to 3/16" steel structure. (4) Fastener configuration shall be used. Screws should be placed at indentations scribed on the short leg of the UBC clip.

6 The minimum edge distance for each fastener type shall comply with the fastener manufacturer's recommendation.

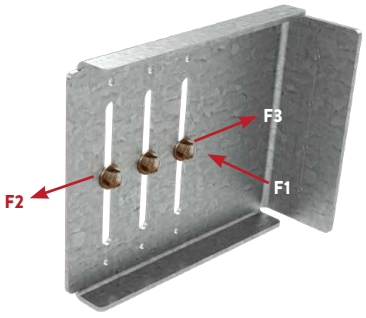
7 It is the responsibility of the design professional to verify that the connection design meets the requirements of the intended application.

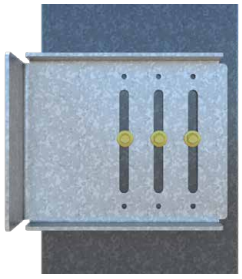
8 Nominal or LRFD loads are available upon request.

UBC - 14ga (As a Deflection Connection)

ATTACHMENT TO STRUCTURAL: (4) 0.157" PAFs

Clip Designation	Stud Thickness / Yield Strength mils (ga) ksi	ASD Allowable Loads (lbs)		
		F1 (In-Plane) w/ (3) #14	F2 (Tension) w/ (3) #14	F3 (Compression) w/ (3) #14
UBC6-68 68mils (14ga)	33 (20) 33	110	605	605
	43 (18) 33	140	905	905
	54 (16) 50	255	1280	1430
	68 (14) 50	255	1280	1430
	97 (12) 50	255	1280	1430
UBC8-68 68mils (14ga)	33 (20) 33	110	605	605
	43 (18) 33	140	905	905
	54 (16) 50	190	1235	1340
	68 (14) 50	190	1235	1340
	97 (12) 50	190	1235	1340
UBC10-68 68mils (14ga)	33 (20) 33	110	605	605
	43 (18) 33	140	905	905
	54 (16) 50	150	1185	1325
	68 (14) 50	150	1185	1325
	97 (12) 50	150	1185	1325
UBC12-68 68mils (14ga)	33 (20) 33	90	605	605
	43 (18) 33	90	905	905
	54 (16) 50	90	1190	1300
	68 (14) 50	90	1190	1300
	97 (12) 50	90	1190	1300





(3) #14 Deflection Screw Pattern Shown in a UBC6 Clip

Notes:

1 Allowable Loads (ASD) have not been increased for the wind, seismic, or other factors.

2 Capacities considered for Hilti PAFs are based on fastener strengths listed in ICC ESR-2269.

3 It is the responsibility of the design professional to verify that the connection design meets the requirements of the intended application.

4 Listed capacities are based on the maximum screw pattern. For maximum screw pattern, fill #14 Deflection screws in each slot for a Deflection Clip.

5 Nominal or LRFD loads are available upon request.

6 An 1/8-in service deflection load limit was applied to clips resisting F2 and F3 loads. In accordance with ICC AC 261, service deflection limit was not applied to clips resisting F1 loads.

7 For Deflection clip, one #14 shouldered screw (UBC Deflection Screw) shall be installed per slot, placed at the center. Clip gauge-specific #14 UBC Deflection Screws are provided with each UBC.

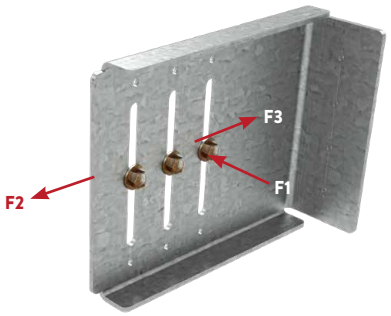
8 0.157" Hilti X-U PAFs shall be used for attachment to 3/16" steel structure. (4) Fastener configuration shall be used. PAFs should be placed at indentations scribed on the short leg of the UBC clip.

Universal Bypass Clip

UBC - 12ga (As a Deflection Connection)

ATTACHMENT TO STRUCTURAL: DESIGNED BY OTHERS

Clip Designation	Stud Thickness / Yield Strength	ASD Allowable Loads (lbs)		
		F1 (In-Plane) w/ (3) #14	F2 (Tension) w/ (3) #14	F3 (Compression) w/ (3) #14
UBC6-97 97mils (12ga)	33 (20) 33	110	605	605
	43 (18) 33	140	905	905
	54 (16) 50	260	1535	1680
	68 (14) 50	280	1535	1680
	97 (12) 50	280	1535	1680
UBC8-97 97mils (12ga)	33 (20) 33	110	605	605
	43 (18) 33	140	905	905
	54 (16) 50	225	1525	1685
	68 (14) 50	225	1525	1685
	97 (12) 50	225	1525	1685
UBC10-97 97mils (12ga)	33 (20) 33	110	605	605
	43 (18) 33	140	905	905
	54 (16) 50	185	1490	1630
	68 (14) 50	185	1490	1630
	97 (12) 50	185	1490	1630
UBC12-97 97mils (12ga)	33 (20) 33	90	605	605
	43 (18) 33	90	905	905
	54 (16) 50	90	1490	1630
	68(14) 50	90	1490	1630
	97 (12) 50	90	1490	1630



Notes:

1 Allowable loads (ASD) listed represent the capacity of the clip to the stud only. (Framing connection).

2 Allowable Loads have not been increased for the wind, seismic, or other factors.

3 An 1/8-in service deflection load limit was applied to clips resisting F2 and F3 loads. In accordance with ICC AC 261, service deflection limit was not applied to clips resisting F1 loads.

4 For Deflection connection, one #14 shouldered screw (Deflection Screw) shall be installed per slot, placed at the center. #14 Deflection Screws are provided with each Universal Bypass Clip.

5 Listed capacities are based on the maximum screw pattern. For maximum screw pattern, fill #14 Deflection screws in each slot for a Deflection Clip.

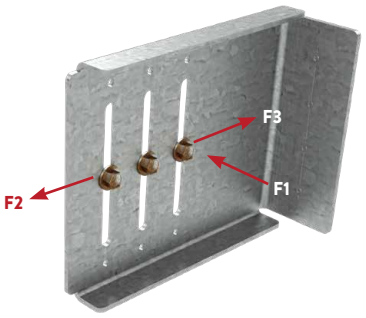
6 It is the responsibility of the design professional to design the attachment of the clips to the structure and verify that their capacity meets the requirements of the intended application.

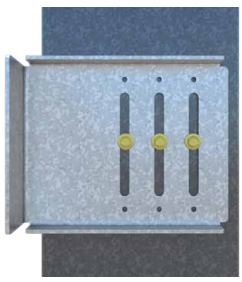
7 Nominal or LRFD loads are available upon request.

UBC - 12ga (As a Deflection Connection)

ATTACHMENT TO STRUCTURAL: WELDED

Clip Designation	Stud Thickness / Yield Strength mils (ga) ksi	ASD Allowable Loads (lbs)		
		F1 (In-Plane) w/ (3) #14	F2 (Tension) w/ (3) #14	F3 (Compression) w/ (3) #14
UBC6-97 97mils (12ga)	33 (20) 33	110	605	605
	43 (18) 33	140	905	905
	54 (16) 50	260	1535	1680
	68 (14) 50	280	1535	1680
	97 (12) 50	280	1535	1680
UBC8-97 97mils (12ga)	33 (20) 33	110	605	605
	43 (18) 33	140	905	905
	54 (16) 50	225	1535	1685
	68 (14) 50	225	1535	1685
	97 (12) 50	225	1535	1685
UBC10-97 97mils (12ga)	33 (20) 33	110	605	605
	43 (18) 33	140	905	905
	54 (16) 50	185	1535	1630
	68 (14) 50	185	1535	1630
	97 (12) 50	185	1535	1630
UBC12-97 97mils (12ga)	33 (20) 33	90	605	605
	43 (18) 33	90	905	905
	54 (16) 50	90	1535	1630
	68 (14) 50	90	1535	1630
	97 (12) 50	90	1535	1630





(3) #14 Deflection Screw Pattern Shown in a UBC6 Clip

Notes:

1 Allowable Loads (ASD) have not been increased for the wind, seismic, or other factors.

2 For Deflection clip, one #14 shouldered screw (UBC Deflection Screw) shall be installed per slot, placed at the center. Clip gauge-specific #14 UBC Deflection Screws are provided with each Universal Bypass Clip.

3 Listed capacities are based on the maximum screw pattern. For maximum screw pattern, fill #14 Deflection screws in each slot for a Deflection Clip.

4 The Allowable loads listed for welds are based on the following weld lengths:
- (2) Welds - 1" along back of short leg clip bend (each weld equally distanced from center of clip)

5 Use E70XX (min.) electrodes.

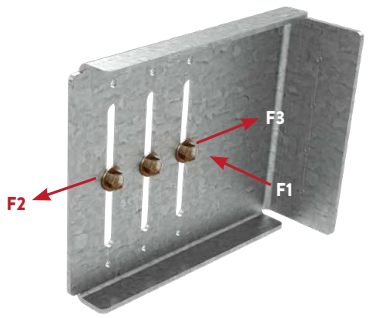
6 It is the responsibility of the design professional to verify that the connection design meets the requirements of the intended application.

7 Nominal or LRFD loads are available upon request.

UBC - 12ga (As a Deflection Connection)

ATTACHMENT TO STRUCTURAL: (4) #12-24 FASTENERS

Clip Designation	Stud Thickness / Yield Strength mils (ga) ksi	ASD Allowable Loads (lbs)		
		F1 (In-Plane) w/ (3) #14	F2 (Tension) w/ (3) #14	F3 (Compression) w/ (3) #14
UBC6-97 97mils (12ga)	33 (20) 33	110	605	605
	43 (18) 33	140	905	905
	54 (16) 50	260	1535	1680
	68 (14) 50	280	1535	1680
	97 (12) 50	280	1535	1680
UBC8-97 97mils (12ga)	33 (20) 33	110	605	605
	43 (18) 33	140	905	905
	54 (16) 50	225	1525	1685
	68 (14) 50	225	1525	1685
	97 (12) 50	225	1525	1685
UBC10-97 97mils (12ga)	33 (20) 33	110	605	605
	43 (18) 33	140	905	905
	54 (16) 50	185	1490	1630
	68 (14) 50	185	1490	1630
	97 (12) 50	185	1490	1630
UBC12-97 97mils (12ga)	33 (20) 33	90	605	605
	43 (18) 33	90	905	905
	54 (16) 50	90	1490	1630
	68 (14) 50	90	1490	1630
	97 (12) 50	90	1490	1630



Notes:

1 Allowable Loads (ASD) have not been increased for the wind, seismic, or other factors.

2 An 1/8-in service deflection load limit was applied to clips resisting F2 and F3 loads. In accordance with ICC AC 261, service deflection limit was not applied to clips resisting F1 loads.

3 For Deflection clip, one #14 shouldered screw (UBC Deflection Screw) shall be installed per slot, placed at the center. Clip gauge-specific #14 UBC Deflection Screws are provided with each UBC.

4 Listed capacities are based on the maximum screw pattern. For maximum screw pattern, fill #14 Deflection screws in each slot for a Deflection Clip.

5 #12-24 Fasteners shall be used for attachment to 3/16" steel structure. (4) Fastener configuration shall be used. Screws should be placed at indentations scribed on the short leg of the UBC clip.

6 The minimum edge distance for each fastener type shall comply with the fastener manufacturer's recommendation.

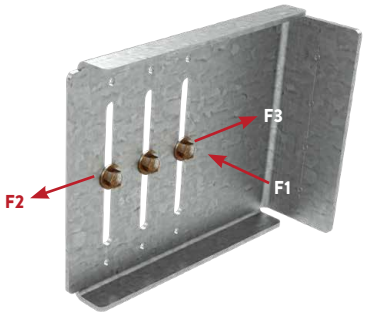
7 It is the responsibility of the design professional to verify that the connection design meets the requirements of the intended application.

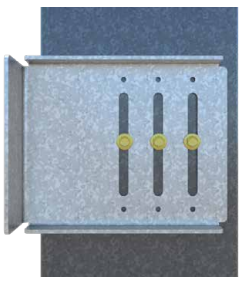
8 Nominal or LRFD loads are available upon request.

UBC - 12ga (As a Deflection Connection)

ATTACHMENT TO STRUCTURAL: (4) 0.157" PAFs

Clip Designation	Stud Thickness / Yield Strength mils (ga) ksi	ASD Allowable Loads (lbs)		
		F1 (In-Plane) w/ (3) #14	F2 (Tension) w/ (3) #14	F3 (Compression) w/ (3) #14
UBC6-97 97mils (12ga)	33 (20) 33	110	605	605
	43 (18) 33	140	905	905
	54 (16) 50	260	1535	1680
	68 (14) 50	280	1535	1680
	97 (12) 50	280	1535	1680
UBC8-97 97mils (12ga)	33 (20) 33	110	605	605
	43 (18) 33	140	905	905
	54 (16) 50	225	1525	1685
	68 (14) 50	225	1525	1685
	97 (12) 50	225	1525	1685
UBC10-97 97mils (12ga)	33 (20) 33	110	605	605
	43 (18) 33	140	905	905
	54 (16) 50	185	1490	1630
	68 (14) 50	185	1490	1630
	97 (12) 50	185	1490	1630
UBC12-97 97mils (12ga)	33 (20) 33	90	605	605
	43 (18) 33	90	905	905
	54 (16) 50	90	1490	1630
	68 (14) 50	90	1490	1630
	97 (12) 50	90	1490	1630





(3) #14 Deflection Screw Pattern Shown in a UBC6 Clip

Notes:

1 Allowable Loads (ASD) have not been increased for the wind, seismic, or other factors.

2 Capacities considered for Hilti PAFs are based on fastener strengths listed in ICC ESR-2269.

3 It is the responsibility of the design professional to verify that the connection design meets the requirements of the intended application.

4 Listed capacities are based on the maximum screw pattern. For maximum screw pattern, fill #14 Deflection screws in each slot for a Deflection Clip.

5 Nominal or LRFD loads are available upon request.

6 An 1/8-in service deflection load limit was applied to clips resisting F2 and F3 loads. In accordance with ICC AC 261, service deflection limit was not applied to clips resisting F1 loads.

7 For Deflection clip, one #14 shouldered screw (UBC Deflection Screw) shall be installed per slot, placed at the center. Clip gauge-specific #14 UBC Deflection Screws are provided with each UBC.

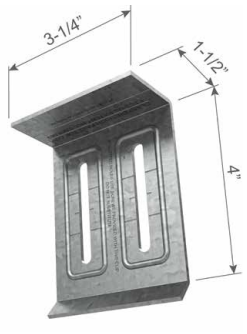
8 0.157" Hilti X-U PAFs shall be used for attachment to 3/16" steel structure. (4) Fastener configuration shall be used. PAFs should be placed at indentations scribed on the short leg of the UBC clip.

Fast Top™ Clip

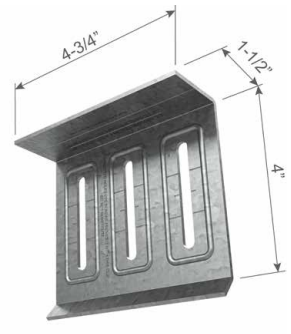
Head-of-wall connection

Head-of-wall deflection conditions for exterior curtain wall and interior, nonload-bearing walls

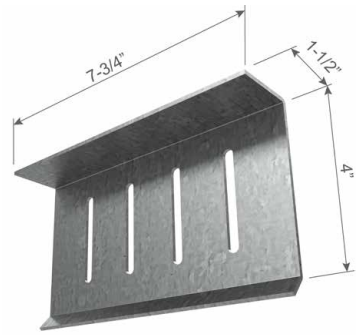
ClarkDietrich Fast Top™ Clips are used in head-of-wall deflection conditions for in-fill curtain wall assemblies and/or interior nonload-bearing partitions to provide for vertical movement. These clips are used in place of, or in combination with, deflection track. They also make a positive attachment and eliminate the need to install bridging continuously throughout the upper-most punchouts. The Fast Top clip connectors can be attached to the underside of structural members, concrete decks or floor assemblies. Studs must be cut less than full height to enable vertical movement up to 2-1/2" (1-1/4" up and down). Fast Top clips install quickly with welds, drill-in concrete anchors, screws or powder-actuated fasteners. Proprietary Deflection Screws are used to attach the clip to the cold-formed framing and to ensure frictionless deflection. These clips are also embossed with fastening patterns to ensure accurate placement of fasteners.



FTC3



FTC5



FTC8

MATERIAL SPECIFICATIONS

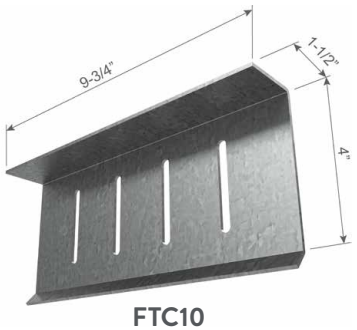
Gauge: 14 gauge (68mils)
Design Thickness: 0.0713 inches
Coating: G90
Yield Strength: 50ksi

CODE APPROVALS AND PERFORMANCE STANDARDS

IAPMO ER-729
AISI S100

ALTERNATIVE PRODUCTS

MaxTrak® Slotted Deflection Track



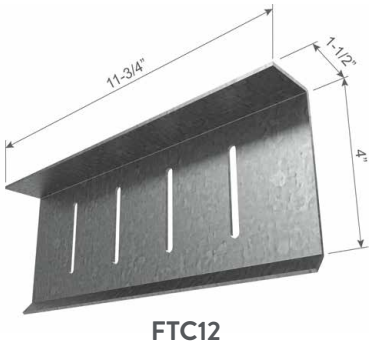
FTC10

Fast Top™ Clip (FTC)

Clip Designation	Product Thickness		Size (in)	Packaging Pcs./Bucket
	mils (ga)	Design Thickness (in)		
FTC3	68 (14)	0.0713	1-1/2 x 4 x 3-1/4	25
FTC5	68 (14)	0.0713	1-1/2 x 4 x 4-3/4	30
FTC8	68 (14)	0.0713	1-1/2 x 4 x 7-3/4	25
FTC10	68 (14)	0.0713	1-1/2 x 4 x 9-3/4	25
FTC12	68 (14)	0.0713	1-1/2 x 4 x 11-3/4	25

FTC3 includes 55 Proprietary Deflection Screws per carton.
FTC5 includes 110 Proprietary Deflection Screws per carton.
FTC8 includes 110 Proprietary Deflection Screws per carton.
FTC10 includes 110 Proprietary Deflection Screws per carton.
FTC12 includes 110 Proprietary Deflection Screws per carton.


Proprietary Deflection Screw

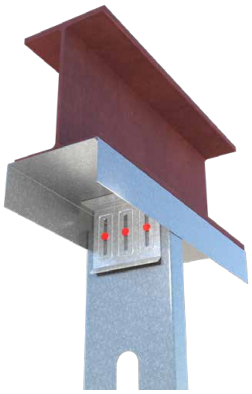


FTC12

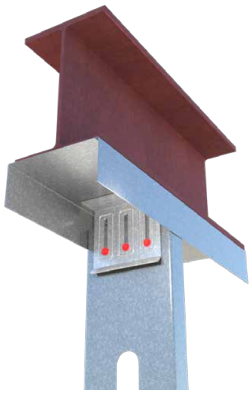
U.S. Patent No. 6,688,069

INSTALLATION

Connections to the building can be made with screws, powder-actuated fasteners, drill-in concrete anchors or welding. Mechanical fasteners shall be equally spaced along the center of the 1-1/2" flange. When using the tabulated allowable loads in the tables on the opposite page, connections to the building structure must be made according to the notes. Proprietary Deflection Screws are used to attach the clip to the cold-formed steel framing. Screws shall be driven through the slotted holes and positioned to allow for the appropriate building deflection. Two deflection screws are required with the FTC3, three deflection screws are required with the FTC5, and four deflection screws are required with the FTC8, FTC10, FTC12.

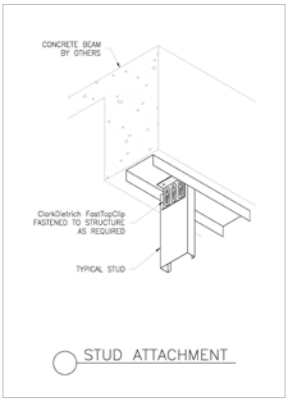


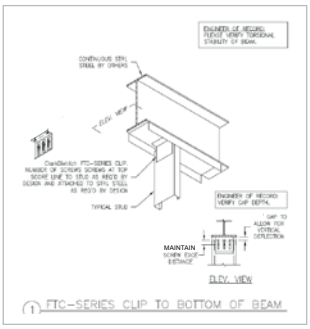
FRAMING CENTERED CONNECTION



FRAMING OFFSET CONNECTION

TYPICAL CONSTRUCTION DETAILS





Visit our CAD Library at cad.clarkdietrich.com to view or download construction details in .dwg, .dxf, and .pdf formats.

Fast Top™ Clip

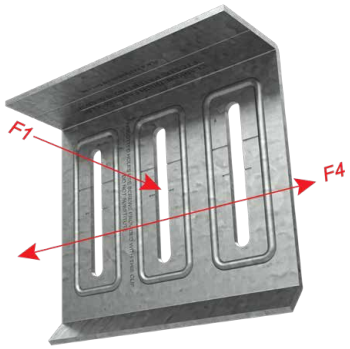
Head-of-wall connection

ATTACHMENT TO STRUCTURE: DESIGNED BY OTHERS

Clip Designation	Framing Member Details			Load Capacities (lbs)						
				In-Plane (F1) - Center			Shear (F4) - Center			
	Stud Depth (in)	Stud Thickness mils (ga)	Yield Strength Fy (ksi)	Nominal Load	ASD Load	LRFD Load	1/8" Service Load	Nominal Load	ASD Load	LRFD Load
FTC3	3-5/8	33 (20)	33	160	80	130	645	905	405	610
		43 (18)	33	220	115	180	720	1230	605	905
		54 (16)	50	270	140	225	740	1560	800	1285
		68 (14)	50	290	150	235	740	1565	805	1285
		97 (12)	50	325	165	265	740	1695	870	1395
FTC5	6	33 (20)	33	180	90	150	1355	1245	610	910
		43 (18)	33	240	125	200	1735	1820	905	1360
		54 (16)	50	350	180	290	1735	2700	1390	2220
		68 (14)	50	390	200	320	1735	2745	1410	2260
		97 (12)	50	420	215	345	1735	3235	1660	2660
FTC8	6	33 (20)	33	220	115	180	1640	1740	810	1215
		43 (18)	33	300	155	245	2940	2415	1205	1810
		54 (16)	50	470	240	385	3495	3510	1805	2885
		68 (14)	50	575	295	475	4340	4475	2300	3675
		97 (12)	50	700	360	575	4635	6250	3210	4815
FTC10	6	43 (18)	33	405	210	330	3475	2865	1205	1810
		54 (16)	50	525	270	430	4880	4435	2280	3645
		68 (14)	50	675	345	555	5610	5255	2700	4320
		97 (12)	50	920	470	755	5985	8205	2825	4520
FTC12	6	54 (16)	50	595	305	490	5315	4455	2285	3660
		68 (14)	50	785	400	645	6035	5320	2735	4375
		97 (12)	50	1090	560	895	7110	8925	3070	4815

Notes:

1. Listed capacities are in accordance with provisions of AISI S100-16 (R2020)/S2-20 and ICC-ES AC261.
2. Fast Top Clip attachment to structure designed by others. Listed capacities are applicable for Fast Top Clip to stud only (framing connection).
3. ClarkDietrich Proprietary Deflection Screws (0.25" dia) are designed to secure clips to framing members via the slotted holes provided.
4. The listed load capacities assume that the framing screws are positioned at the center of the slots.
5. A maximum deflection gap of 1-1/4" shall be maintained between the clip structural attachment and end/edge of framing member.
6. The safety factor for ASD loads and resistance factor for LRFD loads are in accordance with Chapter K of AISI-S100.
7. The ClarkDietrich Proprietary Deflection screws (0.25" dia) provide nominal shear capacity of 2400lbs and a nominal tension capacity of 4060lbs.
8. ASD and LRFD loads are based on nominal capacities only. 1/8" service loads are listed in a separate column. Designer shall use governing loads based on 1/8" service and strength.
9. It is the responsibility of the design professional to detail the project drawings for proper Fast Top Clip installation.
10. Other framing members may be used with these clips; however, it is the responsibility of the design professional to verify the framing members' capacities and potential failure modes.

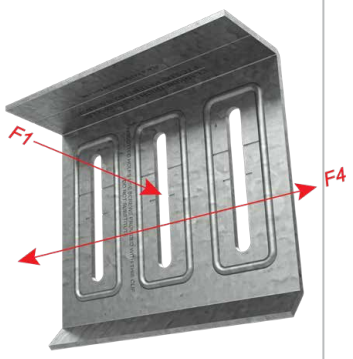


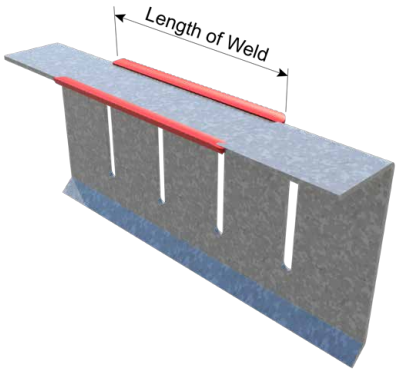
ATTACHMENT TO STRUCTURE: WELD TO 3/16" STEEL

Clip Designation	Framing Member Details		Mechanically Anchored to Structure	Load Capacities (lbs) / Clip										
				In-Plane (F1)			Shear (F4) - Center				Shear (F4) - Offset			
	Thickness mils (ga)	Yield Strength (ksi)		Nominal Load	ASD Load	LRFD Load	1/8" Service Load	Nominal Load	ASD Load	LRFD Load	1/8" Service Load	Nominal Load	ASD Load	LRFD Load
FTC3	33 (20)	33	(2) 3" Welds - along each edge of the short leg (each weld equally distanced from center of clip)	160	80	130	645	905	405	610	645	905	405	610
	43 (18)	33		220	115	180	720	1230	605	905	720	1230	605	905
	54 (16)	50		270	140	225	740	1560	800	1285	740	1560	800	1285
	68 (14)	50		290	150	235	740	1565	805	1285	740	1565	805	1285
	97 (12)	50		325	165	265	740	1695	870	1395	740	1695	870	1395
FTC5	33 (20)	33	(2) 4" Welds - along each edge of the short leg (each weld equally distanced from center of clip)	180	90	150	1245	1245	610	910	1245	1245	610	910
	43 (18)	33		240	125	200	1735	1820	905	1360	1735	1820	905	1360
	54 (16)	50		350	180	290	1735	2700	1390	2220	1735	2700	1390	2220
	68 (14)	50		390	200	320	1735	2745	1410	2260	1735	2745	1410	2260
	97 (12)	50		420	215	345	1735	3235	1660	2660	1735	3235	1660	2660
FTC8	33 (20)	33	(2) 5" Welds - along each edge of the short leg (each weld equally distanced from center of clip)	220	115	180	1640	1740	810	1215	1640	1740	810	1215
	43 (18)	33		300	155	245	2415	2415	1205	1810	2415	2415	1205	1810
	54 (16)	50		470	240	385	3495	3510	1805	2885	3495	3510	1805	2885
	68 (14)	50		575	295	475	4340	4475	2300	3675	4340	4475	2300	3675
	97 (12)	50		700	360	575	4635	6250	3210	5135	4635	5480	2740	4110
FTC10	43 (18)	33		405	210	330	2865	2865	1205	1810	2865	2865	1205	1810
	54 (16)	50		525	270	430	4435	4435	2280	3645	4435	4435	2280	3645
	68 (14)	50		675	345	555	5255	5255	2700	4320	5255	5255	2700	4110
	97 (12)	50		920	470	755	5985	7610	2825	4520	5480	5480	2740	4110
FTC12	54 (16)	50		595	305	490	4455	4455	2285	3660	4455	4455	2285	3660
	68 (14)	50		785	400	645	5320	5320	2735	4375	5320	5320	2735	4110
	97 (12)	50		1090	560	895	7110	7610	3070	4915	5480	5480	2740	4110

Notes:

1. Listed capacities are in accordance with provisions of AISI S100-16 (R2020)/S2-20 and ICC-ES AC261.
2. Tabulated load capacities are based on the following considerations:
   - a Framing Connection: ClarkDietrich Proprietary Deflection Screws (0.25" dia).
   - b Connection to Structure: weld along each edge of the structural connection leg (equally spaced from center of the clip) to 3/16" thick ASTM A36 Steel. Refer to table for length of weld.
   - c Listed capacities have not been increased for wind, seismic, or other factors.
   - d E70XX (min) electrode weld.
3. ASD and LRFD loads are based on nominal capacities only. Nominal capacities are listed for use in blast/seismic designs and they do not assume a safety factor or resistance factor.
4. ClarkDietrich Proprietary Deflection Screws (0.25" dia) used to attach clips to framing members through the provided slotted holes. Listed capacities were based on framing screws installed at the center and off-center of the slots.
5. The safety factor for ASD loads and resistance factor for LRFD loads are in accordance with Chapter K of AISI-S100.
6. The ClarkDietrich Proprietary Deflection screws (0.25" dia) provide nominal shear capacity of 2400lbs and a nominal tension capacity of 4060lbs.
7. It is the responsibility of the design professional to detail the project drawings for proper Fast Top Clip installations.





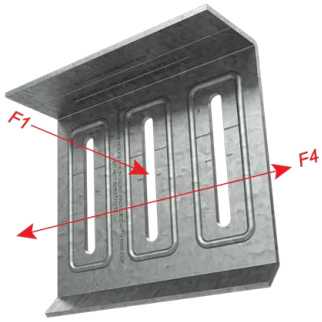
The technical content of this literature is effective 04/09/26 and supersedes all previous information.

Fast Top™ Clip

Head-of-wall connection

ATTACHMENT TO STRUCTURE: #12 SCREWS TO 3/16" STEEL

Clip Designation	Framing Member Details		Mechanically Anchored to Structure	Load Capacities (lbs) / Clip											
				In-Plane (F1)			Shear (F4) - Center				Shear (F4) - Offset				
	Thickness mils (ga)	Yield Strength (ksi)		Nominal Load	ASD Load	LRFD Load	1/8" Service Load	Nominal Load	ASD Load	LRFD Load	1/8" Service Load	Nominal Load	ASD Load	LRFD Load
FTC3	33 (20)	33	2	160	80	130	645	905	405	610	645	905	405	610
			3	160	80	130	645	905	405	610	645	905	405	610
	43 (18)	33	2	220	115	180	720	1230	605	905	720	1230	605	905
			3	220	115	180	720	1230	605	905	720	1230	605	905
	54 (16)	50	2	270	140	225	740	1560	690	1040	740	1385	460	690
			3	270	140	225	740	1560	800	1285	740	1560	740	1115
	68 (14)	50	2	290	150	235	740	1565	690	1040	740	1385	460	690
			3	290	150	235	740	1565	805	1285	740	1565	740	1115
	97 (12)	50	2	325	165	265	740	1695	690	1040	740	1385	460	690
			3	325	165	265	740	1695	870	1395	740	1695	740	1115
FTC5	33 (20)	33	2	180	90	150	1245	1245	610	910	1245	1245	540	810
			3	180	90	150	1245	1245	610	910	1245	1245	610	910
			4	180	90	150	1245	1245	610	910	1245	1245	610	910
	43 (18)	33	2	240	125	200	1735	1820	810	1215	1620	1620	540	810
			3	240	125	200	1735	1820	905	1360	1735	1820	905	1360
			4	240	125	200	1735	1820	905	1360	1735	1820	905	1360
	54 (16)	50	2	350	180	290	1735	2425	810	1215	1620	1620	540	810
			3	350	180	290	1735	2700	1300	1950	1735	2550	905	1360
			4	350	180	290	1735	2700	1390	2220	1735	2700	1280	1960
	68 (14)	50	2	390	200	320	1735	2425	810	1215	1620	1620	540	810
			3	390	200	320	1735	2745	1300	1950	1735	2550	905	1360
			4	390	200	320	1735	2745	1410	2260	1735	2745	1280	1960
	97 (12)	50	2	420	215	345	1735	2425	810	1215	1620	1620	540	810
			3	420	215	345	1735	3235	1300	1950	1735	2550	905	1360
			4	420	215	345	1735	3235	1590	2380	1735	3010	1280	1960
FTC8	33 (20)	33	3	220	115	180	1640	1740	810	1215	1640	1740	810	1215
			4	220	115	180	1640	1740	810	1215	1640	1740	810	1215
			5	220	115	180	1640	1740	810	1215	1640	1740	810	1215
	43 (18)	33	3	300	155	245	2415	2415	1205	1810	2415	2415	1090	1635
			4	300	155	245	2415	2415	1205	1810	2415	2415	1205	1810
			5	300	155	245	2415	2415	1205	1810	2415	2415	1205	1810
	54 (16)	50	3	470	240	385	3495	3510	1610	2410	3270	3270	1090	1635
			4	470	240	385	3495	3510	1805	2885	3495	3510	1735	2605
			5	470	240	385	3495	3510	1805	2885	3495	3510	1805	2885
	68 (14)	50	3	575	295	475	4340	4475	1610	2410	3270	3270	1090	1635
			4	575	295	475	4340	4475	2015	3025	4290	4290	1735	2605
			5	575	295	475	4340	4475	2300	3570	4340	4475	2060	3090
	97 (12)	50	3	700	360	575	4635	4825	1610	2410	3270	3270	1090	1635
			4	700	360	575	4635	5545	2015	3025	4290	4290	1735	2605
			5	700	360	575	4635	6190	2380	3570	4635	4885	2060	3090
FTC10	43 (18)	33	3	405	210	330	2865	2865	1205	1810	2865	2865	1205	1810
			4	405	210	330	2865	2865	1205	1810	2865	2865	1205	1810
			5	405	210	330	2865	2865	1205	1810	2865	2865	1205	1810
	54 (16)	50	3	525	270	430	4435	4435	1720	2580	4110	4110	1370	2055
			4	525	270	430	4435	4435	2165	3250	4435	4435	1905	2860
			5	525	270	430	4435	4435	2280	3645	4435	4435	2265	3400
	68 (14)	50	3	675	345	555	5165	5165	1720	2580	4110	4110	1370	2055
			4	675	345	555	5255	5255	2165	3250	5030	5030	1905	2860
			5	675	345	555	5255	5255	2560	3840	5255	5255	2265	3400
	97 (12)	50	3	920	470	755	5165	5165	1720	2580	4110	4110	1370	2055
			4	920	470	755	5985	6345	2165	3250	5030	5030	1905	2860
			5	920	470	755	5985	7030	2560	3840	5690	5690	2265	3400
FTC12	54 (16)	50	3	595	305	490	4455	4455	1810	2715	4455	4455	1620	2430
			4	595	305	490	4455	4455	2285	3425	4455	4455	2045	3070
			5	595	305	490	4455	4455	2285	3660	4455	4455	2285	3645
	68 (14)	50	3	785	400	645	5320	5320	1810	2715	4860	4860	1620	2430
			4	785	400	645	5320	5320	2285	3425	5320	5320	2045	3070
			5	785	400	645	5320	5320	2665	4000	5320	5320	2430	3645
	97 (12)	50	3	1090	555	850	5435	5435	1810	2715	4860	4860	1620	2430
			4	1090	560	895	6855	6855	2285	3425	5705	5705	2045	3070
			5	1090	560	895	7110	7745	2665	4000	6405	6405	2430	3645



Notes:

1 Listed capacities are in accordance with provisions of AISI S100-16 (R2020)/S2-20 and ICC-ES AC261.

2 Tabulated load capacities are based on the following considerations:

a. Framing Connection: ClarkDietrich Proprietary Deflection Screws (0.25" dia).

b. Connection to Structure: #12 HWH Fasteners connected to 3/16" thick ASTM A36 Steel (see illustrations for base fastener locations).

c. Other fasteners may be used to achieve full clip capacity but must be designed separately.

d. Listed capacities have not been increased for wind, seismic, or other factors.

3 ASD and LRFD loads are based on nominal capacities only. 1/8" service loads are listed in a separate column. Designer shall use governing loads based on 1/8" service and strength.

4 ClarkDietrich Deflection Screws (0.25" dia) used to attach clips to framing members through the provided slotted holes. Listed capacities were based on framing screws installed at the center and off-center of the slots.

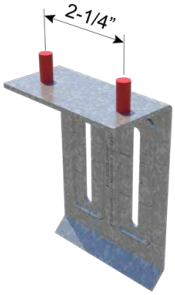
5 The safety factor for ASD loads and resistance factor for LRFD loads are in accordance with Chapter K of AISI-S100.

6 The #12 HWH Fasteners shall have a minimum nominal shear capacity of 2000lbs and minimum nominal tension capacity of 2778lbs according to ESR-1976 and Manufacturer Limits.

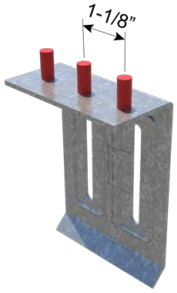
7 The ClarkDietrich Proprietary Deflection screws (0.25" dia) provide nominal shear capacity of 2400lbs and a nominal tension capacity of 4060lbs.

8 Nominal capacities are listed for use in blast/seismic designs and they do not assume a safety factor or resistance factor.

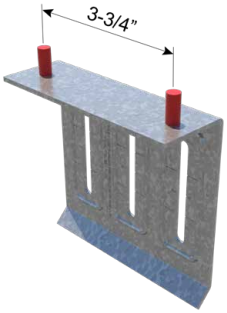
9 It is the responsibility of the design professional to detail the project drawings for proper Fast Top Clip installation.



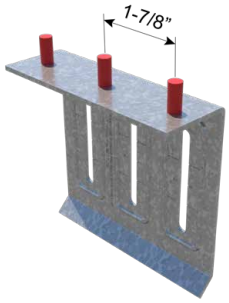
FTC3
(2) Anchor Condition



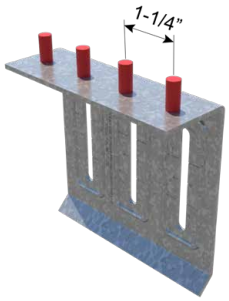
FTC3
(3) Anchor Condition



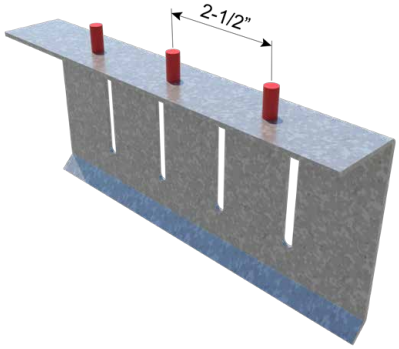
FTC5
(2) Anchor Condition



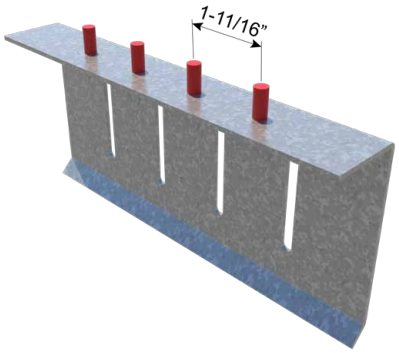
FTC5
(3) Anchor Condition



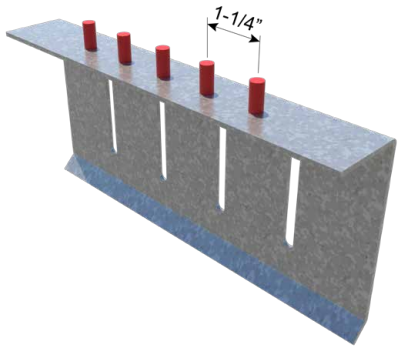
FTC5
(4) Anchor Condition



FTC8, FTC10, FTC12
(3) Anchor Condition



FTC8, FTC10, FTC12
(4) Anchor Condition



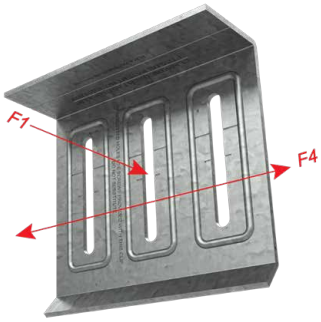
FTC8, FTC10, FTC12
(5) Anchor Condition

Fast Top™ Clip

Head-of-wall connection

ATTACHMENT TO STRUCTURE: 0.157" HILTI X-U PINS TO 3/16" STEEL (FS = 5)

Clip Designation	Framing Member Details		Mechanically Anchored to Structure	Load Capacities (lbs) / Clip											
				In-Plane (F1) -Center (FS = 5)			Shear (F4) - Center (FS = 5)				Shear (F4) - Offset (FS = 5)				
	Thickness mils (ga)	Yield Strength (ksi)		Nominal Load	ASD Load	LRFD Load	1/8" Service Load	Nominal Load	ASD Load	LRFD Load	1/8" Service Load	Nominal Load	ASD Load	LRFD Load
FTC3	33 (20)	33	2	160	80	130	645	1085	355	565	645	795	260	420
			3	160	80	130	645	1215	405	610	645	1030	340	540
	43 (18)	33	2	220	115	180	720	1085	355	565	720	795	260	420
			3	220	115	180	720	1400	455	730	720	1030	340	540
	54 (16)	50	2	270	140	225	740	1085	355	565	740	795	260	420
			3	270	140	225	740	1400	455	730	740	1030	340	540
	68 (14)	50	2	290	150	235	740	1085	355	565	740	795	260	420
			3	290	150	235	740	1400	455	730	740	1030	340	540
	97 (12)	50	2	325	165	265	740	1085	355	565	740	795	260	420
			3	325	165	265	740	1400	455	730	740	1030	340	540
FTC5	33 (20)	33	2	180	90	150	1355	1510	490	785	1140	1140	370	595
			3	180	90	150	1355	1825	610	910	1355	1480	485	775
			4	180	90	150	1355	1825	610	910	1355	1825	600	910
	43 (18)	33	2	240	125	200	1510	1510	490	785	1140	1140	370	595
			3	240	125	200	1735	1980	645	1030	1480	1480	485	775
			4	240	125	200	1735	2440	795	1270	1735	1835	600	960
	54 (16)	50	2	350	180	290	1510	1510	490	785	1140	1140	370	595
			3	350	180	290	1735	1980	645	1030	1480	1480	485	775
			4	350	180	290	1735	2440	795	1270	1735	1835	600	960
	68 (14)	50	2	390	200	320	1510	1510	490	785	1140	1140	370	595
			3	390	200	320	1735	1980	645	1030	1480	1480	485	775
			4	390	200	320	1735	2440	795	1270	1735	1835	600	960
	97 (12)	50	2	420	215	345	1510	1510	490	785	1140	1140	370	595
			3	420	215	345	1735	1980	645	1030	1480	1480	485	775
			4	420	215	345	1735	2440	795	1270	1735	1835	600	960
FTC8	33 (20)	33	3	220	115	180	1640	2435	810	1215	1640	2115	685	1100
			4	220	115	180	1640	2435	810	1215	1640	2435	810	1215
			5	220	115	180	1640	2435	810	1215	1640	2435	810	1215
	43 (18)	33	3	300	155	245	2720	2720	875	1405	2115	2115	685	1100
			4	300	155	245	2940	3420	1105	1765	2660	2660	865	1385
			5	300	155	245	2940	3620	1205	1810	2940	3195	1040	1660
	54 (16)	50	3	470	240	385	2720	2720	875	1405	2115	2115	685	1100
			4	470	240	385	3420	3420	1105	1765	2660	2660	865	1385
			5	470	240	385	3495	4090	1320	2110	3195	3195	1040	1660
	68 (14)	50	3	575	295	475	2720	2720	875	1405	2115	2115	685	1100
			4	575	295	475	3420	3420	1105	1765	2660	2660	865	1385
			5	575	295	475	4090	4090	1320	2110	3195	3195	1040	1660
	97 (12)	50	3	700	360	575	2720	2720	875	1405	2115	2115	685	1100
			4	700	360	575	3420	3420	1105	1765	2660	2660	865	1385
			5	700	360	575	4090	4090	1320	2110	3195	3195	1040	1660
FTC10	43 (18)	33	3	405	210	330	3080	3080	990	1585	2450	2450	795	1270
			4	405	210	330	3475	3620	1205	1810	3110	3110	1005	1610
			5	405	210	330	3475	3620	1205	1810	3475	3620	1205	1810
	54 (16)	50	3	525	270	430	3080	3080	990	1585	2450	2450	795	1270
			4	525	270	430	3905	3905	1255	2005	3110	3110	1005	1610
			5	525	270	430	4680	4680	1500	2400	3745	3745	1210	1935
	68 (14)	50	3	675	345	555	3080	3080	990	1585	2450	2450	795	1270
			4	675	345	555	3905	3905	1255	2005	3110	3110	1005	1610
			5	675	345	555	4680	4680	1500	2400	3745	3745	1210	1935
	97 (12)	50	3	920	385	615	3080	3080	990	1585	2450	2450	795	1270
			4	920	470	755	3905	3905	1255	2005	3110	3110	1005	1610
			5	920	470	755	4680	4680	1500	2400	3745	3745	1210	1935
FTC12	54 (16)	50	3	595	305	490	3400	3400	1090	1740	2760	2760	890	1425
			4	595	305	490	4325	4325	1385	2215	3515	3515	1135	1815
			5	595	305	490	5175	5175	1655	2645	4235	4235	1365	2180
	68 (14)	50	3	785	385	615	3400	3400	1090	1740	2760	2760	890	1425
			4	785	400	645	4325	4325	1385	2215	3515	3515	1135	1815
			5	785	400	645	5175	5175	1655	2645	4235	4235	1365	2180
	97 (12)	50	3	1090	385	615	3400	3400	1090	1740	2760	2760	890	1425
			4	1090	475	760	4325	4325	1385	2215	3515	3515	1135	1815
			5	1090	550	880	5175	5175	1655	2645	4235	4235	1365	2180



Notes:

1 Listed capacities are in accordance with provisions of AISI S100-16 (R2020)/S2-20, ICC-ES AC261 and ESR 2269.

2 Tabulated load capacities are based on the following considerations:

a Framing Connection: ClarkDietrich Proprietary Deflection Screws (0.25" dia).

b Connection to Structure: 0.157" Hilti X-U Pins connected to 3/16" thick ASTM A36 Steel (see illustrations for base fastener locations).

c Other fasteners may be used to achieve full clip capacity but must be designed separately.

d Listed capacities have not been increased for wind, seismic, or other factors.

3 ASD and LRFD loads are based on nominal capacities only. 1/8" service loads are listed in a separate column. Designer shall use governing loads based on 1/8" service and strength.

4 ClarkDietrich Deflection Screws (0.25" dia) used to attach clips to framing members through the provided slotted holes. Listed capacities were based on framing screws installed at the center and off-center of the slots.

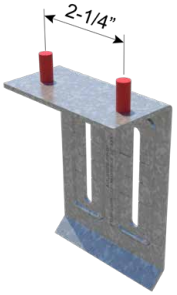
5 The safety factor for ASD loads and resistance factor for LRFD loads are in accordance with Chapter K of AISI-S100 and ESR2269.

6 The ClarkDietrich Proprietary Deflection screws (0.25" dia) provide nominal shear capacity of 2400lbs and a nominal tension capacity of 4060lbs.

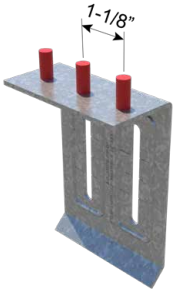
7 The Hilti X-U Pin shall have a minimum nominal shear capacity of 3939lbs and minimum nominal tension capacity of 2872lbs according to Hilti Fastening Technical Guide, Edition 2024.

8 Hilti is a registered trademark of Hilti Aktiengeseilschaft Corporation.

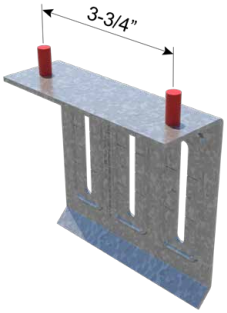
9 It is the responsibility of the design professional to detail the project drawings for proper Fast Top Clip installation.



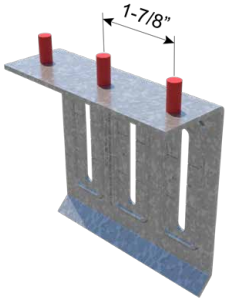
FTC3
(2) Anchor Condition



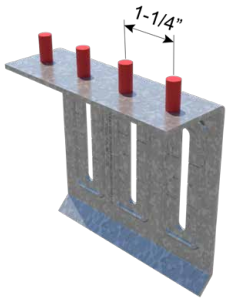
FTC3
(3) Anchor Condition



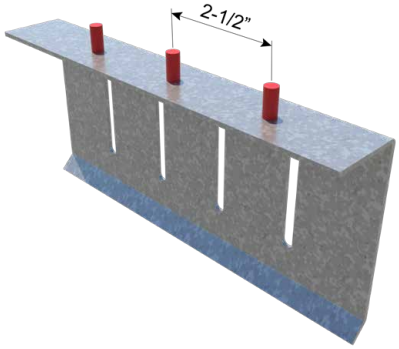
FTC5
(2) Anchor Condition



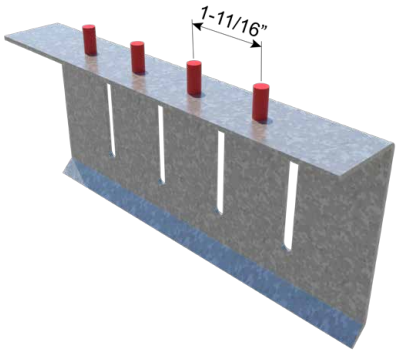
FTC5
(3) Anchor Condition



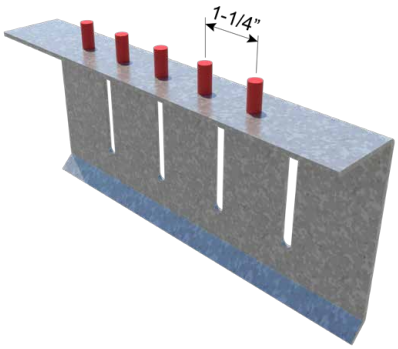
FTC5
(4) Anchor Condition



FTC8, FTC10, FTC12
(3) Anchor Condition



FTC8, FTC10, FTC12
(4) Anchor Condition



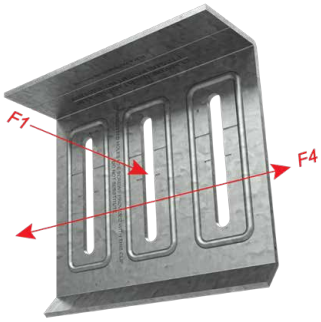
FTC8, FTC10, FTC12
(5) Anchor Condition

Fast Top™ Clip

Head-of-wall connection

ATTACHMENT TO STRUCTURE: 0.157" HILTI X-U PINS TO 3/16" STEEL (FS = 10)

Clip Designation	Framing Member Details		Mechanically Anchored to Structure	Load Capacities (lbs) / Clip											
				In-Plane (F1) -Center (FS = 10)			Shear (F4) - Center (FS = 10)				Shear (F4) - Offset (FS = 10)				
	Thickness mils (ga)	Yield Strength (ksi)		Nominal Load	ASD Load	LRFD Load	1/8" Service Load	Nominal Load	ASD Load	LRFD Load	1/8" Service Load	Nominal Load	ASD Load	LRFD Load
FTC3	33 (20)	33	2	160	80	130	645	1085	215	345	645	795	165	260
			3	160	80	130	645	1215	280	445	645	1030	210	335
	43 (18)	33	2	220	115	180	720	1085	215	345	720	795	165	260
			3	220	115	180	720	1400	280	445	720	1030	210	335
	54 (16)	50	2	270	140	225	740	1085	215	345	740	795	165	260
			3	270	140	225	740	1400	280	445	740	1030	210	335
	68 (14)	50	2	290	140	225	740	1085	215	345	740	795	165	260
			3	290	150	235	740	1400	280	445	740	1030	210	335
	97 (12)	50	2	325	140	225	740	1085	215	345	740	795	165	260
			3	325	165	265	740	1400	280	445	740	1030	210	335
FTC5	33 (20)	33	2	180	90	150	1355	1510	290	465	1140	1140	230	365
			3	180	90	150	1355	1825	385	615	1355	1480	300	475
			4	180	90	150	1355	1825	475	760	1355	1825	370	590
	43 (18)	33	2	240	125	200	1510	1510	290	465	1140	1140	230	365
			3	240	125	200	1735	1980	385	615	1480	1480	300	475
			4	240	125	200	1735	2440	475	760	1735	1835	370	590
	54 (16)	50	2	350	140	225	1510	1510	290	465	1140	1140	230	365
			3	350	180	290	1735	1980	385	615	1480	1480	300	475
			4	350	180	290	1735	2440	475	760	1735	1835	370	590
	68 (14)	50	2	390	140	225	1510	1510	290	465	1140	1140	230	365
			3	390	190	305	1735	1980	385	615	1480	1480	300	475
			4	390	200	320	1735	2440	475	760	1735	1835	370	590
	97 (12)	50	2	420	140	225	1510	1510	290	465	1140	1140	230	365
			3	420	190	305	1735	1980	385	615	1480	1480	300	475
			4	420	215	345	1735	2440	475	760	1735	1835	370	590
FTC8	33 (20)	33	3	220	115	180	1640	2435	510	815	1640	2115	410	660
			4	220	115	180	1640	2435	640	1025	1640	2435	520	830
			5	220	115	180	1640	2435	765	1215	1640	2435	620	990
	43 (18)	33	3	300	155	245	2720	2720	510	815	2115	2115	410	660
			4	300	155	245	2940	3420	640	1025	2660	2660	520	830
			5	300	155	245	2940	3620	765	1215	2940	3195	620	990
	54 (16)	50	3	470	190	305	2720	2720	510	815	2115	2115	410	660
			4	470	235	380	3420	3420	640	1025	2660	2660	520	830
			5	470	240	385	3495	4090	765	1215	3195	3195	620	990
	68 (14)	50	3	575	190	305	2720	2720	510	815	2115	2115	410	660
			4	575	235	380	3420	3420	640	1025	2660	2660	520	830
			5	575	275	440	4090	4090	765	1215	3195	3195	620	990
	97 (12)	50	3	700	190	305	2720	2720	510	815	2115	2115	410	660
			4	700	235	380	3420	3420	640	1025	2660	2660	520	830
			5	700	275	440	4090	4090	765	1215	3195	3195	620	990
FTC10	43 (18)	33	3	405	190	305	3080	3080	565	905	2450	2450	465	750
			4	405	210	330	3475	3620	715	1145	3110	3110	590	945
			5	405	210	330	3475	3620	855	1365	3475	3620	710	1135
	54 (16)	50	3	525	190	305	3080	3080	565	905	2450	2450	465	750
			4	525	235	380	3905	3905	715	1145	3110	3110	590	945
			5	525	270	430	4680	4680	855	1365	3745	3745	710	1135
	68 (14)	50	3	675	190	305	3080	3080	565	905	2450	2450	465	750
			4	675	235	380	3905	3905	715	1145	3110	3110	590	945
			5	675	275	440	4680	4680	855	1365	3745	3745	710	1135
	97 (12)	50	3	920	190	305	3080	3080	565	905	2450	2450	465	750
			4	920	235	380	3905	3905	715	1145	3110	3110	590	945
			5	920	275	440	4680	4680	855	1365	3745	3745	710	1135
FTC12	54 (16)	50	3	595	190	305	3400	3400	615	980	2760	2760	515	825
			4	595	235	380	4325	4325	780	1245	3515	3515	655	1050
			5	595	275	440	5175	5175	925	1485	4235	4235	785	1260
	68 (14)	50	3	785	190	305	3400	3400	615	980	2760	2760	515	825
			4	785	235	380	4325	4325	780	1245	3515	3515	655	1050
			5	785	275	440	5175	5175	925	1485	4235	4235	785	1260
	97 (12)	50	3	1090	190	305	3400	3400	615	980	2760	2760	515	825
			4	1090	235	380	4325	4325	780	1245	3515	3515	655	1050
			5	1090	275	440	5175	5175	925	1485	4235	4235	785	1260



Notes:

1 Listed capacities are in accordance with provisions of AISI S100-16 (R2020)/S2-20, ICC-ES AC261 and ESR 2269.

2 Tabulated load capacities are based on the following considerations:

a Framing Connection: ClarkDietrich Deflection Screws (0.25" dia)

b Connection to Structure: 0.157" Hilti X-U Pins connected to 3/16" thick ASTM A36 Steel (see illustrations for base fastener locations).

c Other fasteners may be used to achieve full clip capacity but must be designed separately.

d Listed capacities have not been increased for wind, seismic, or other factors.

3 ASD and LRFD loads are based on nominal capacities only. 1/8" service loads are listed in a separate column. Designer shall use governing loads based on 1/8" service and strength.

4 ClarkDietrich Deflection Screws (0.25" dia) used to attach clips to framing members through the provided slotted holes. Listed capacities were based on framing screws installed at the center and off-center of the slots.

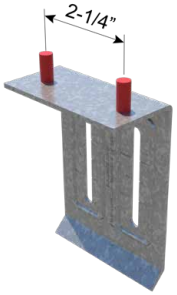
5 The safety factor for ASD loads and resistance factor for LRFD loads are in accordance with Chapter K of AISI-S100 and ESR2269.

6 The ClarkDietrich Deflection screws (0.25" dia) provide nominal shear capacity of 2400lbs and a nominal tension capacity of 4060lbs.

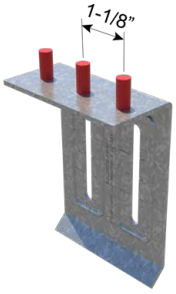
7 The Hilti X-U Pin shall have a minimum nominal shear capacity of 3939lbs and minimum nominal tension capacity of 2872lbs according to Hilti Fastening Technical Guide, Edition 2024.

8 Hilti is a registered trademark of Hilti Aktiengeseilschaft Corporation.

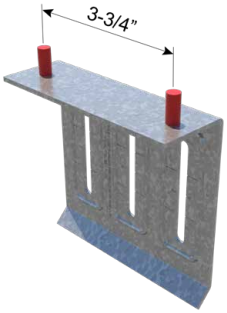
9 It is the responsibility of the design professional to detail the project drawings for proper Fast Top Clip installation.



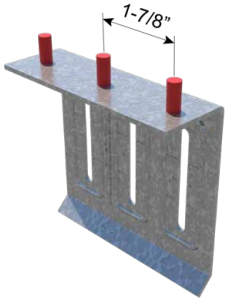
FTC3
(2) Anchor Condition



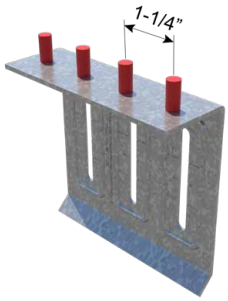
FTC3
(3) Anchor Condition



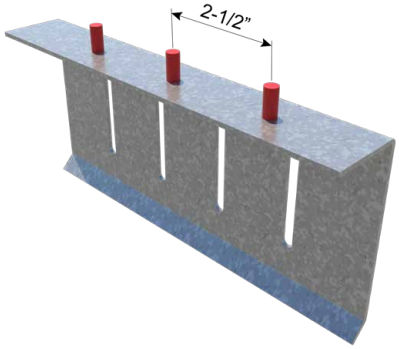
FTC5
(2) Anchor Condition



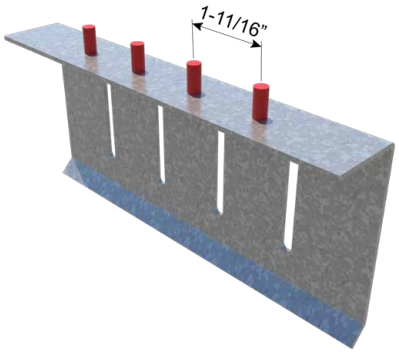
FTC5
(3) Anchor Condition



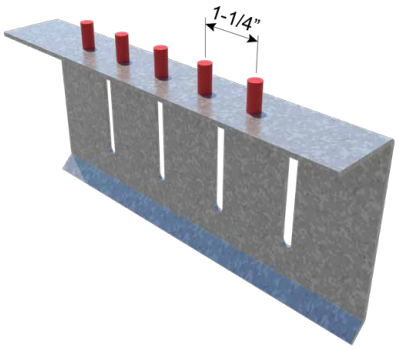
FTC5
(4) Anchor Condition



FTC8, FTC10, FTC12
(3) Anchor Condition



FTC8, FTC10, FTC12
(4) Anchor Condition



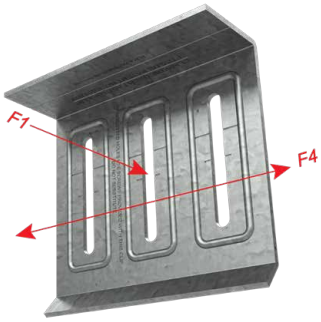
FTC8, FTC10, FTC12
(5) Anchor Condition

Fast Top™ Clip

Head-of-wall connection

ATTACHMENT TO STRUCTURE: 1/4" HILTI KH-EZ IN 3000PSI CRACKED CONCRETE

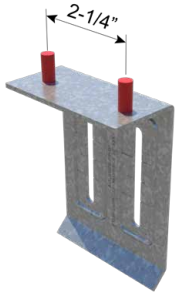
Clip Designation	Framing Member Details		Mechanically Anchored to Structure	Load Capacities (lbs) / Clip										
				In-Plane (F1) -Center			Shear (F4) - Center				Shear (F4) - Offset			
	Thickness mils (ga)	Yield Strength (ksi)		Nominal Load	ASD Load	LRFD Load	1/8" Service Load	Nominal Load	ASD Load	LRFD Load	1/8" Service Load	Nominal Load	ASD Load	LRFD Load
FTC3	33 (20)	33	2	160	80	130	645	930	390	610	645	755	315	530
	43 (18)	33	2	220	115	180	720	930	390	650	720	755	315	530
	54 (16)	50	2	270	140	225	740	930	390	650	740	755	315	530
	68 (14)	50	2	290	150	235	740	930	390	650	740	755	315	530
	97 (12)	50	2	325	165	265	740	930	390	650	740	755	315	530
FTC5	33 (20)	33	2	180	90	150	930	930	390	650	755	755	315	530
			3	180	90	150	1210	1210	510	850	1135	1135	475	795
	43 (18)	33	2	240	125	200	930	930	390	650	755	755	315	530
			3	240	125	200	1210	1210	510	850	1135	1135	475	795
	54 (16)	50	2	350	180	290	930	930	390	650	755	755	315	530
			3	350	180	290	1210	1210	510	850	1135	1135	475	795
	68 (14)	50	2	390	200	320	930	930	390	650	755	755	315	530
			3	390	200	320	1210	1210	510	850	1135	1135	475	795
	97 (12)	50	2	420	215	345	930	930	390	650	755	755	315	530
			3	420	215	345	1210	1210	510	850	1135	1135	475	795
FTC8	33 (20)	33	2	220	115	180	930	930	390	650	755	755	315	530
			3	220	115	180	1210	1210	510	850	1135	1135	475	795
	43 (18)	33	2	300	155	245	930	930	390	650	755	755	315	530
			3	300	155	245	1210	1210	510	850	1135	1135	475	795
	54 (16)	50	2	470	240	385	930	930	390	650	755	755	315	530
			3	470	240	385	1210	1210	510	850	1135	1135	475	795
	68 (14)	50	2	575	285	475	930	930	390	650	755	755	315	530
			3	575	295	475	1210	1210	510	850	1135	1135	475	795
	97 (12)	50	2	680	285	475	930	930	390	650	755	755	315	530
			3	700	360	575	1210	1210	510	850	1135	1135	475	795
FTC10	43 (18)	33	2	405	210	330	930	930	390	650	755	755	315	530
			3	405	210	330	1210	1210	510	850	1135	1135	475	795
	54 (16)	50	2	525	270	430	930	930	390	650	755	755	315	530
			3	525	270	430	1210	1210	510	850	1135	1135	475	795
	68 (14)	50	2	675	285	475	930	930	390	650	755	755	315	530
			3	675	345	555	1210	1210	510	850	1135	1135	475	795
	97 (12)	50	2	680	285	475	930	930	390	650	755	755	315	530
			3	920	420	700	1210	1210	510	850	1135	1135	475	795
FTC12	54 (16)	50	2	595	285	475	930	930	390	650	755	755	315	530
			3	595	305	490	1210	1210	510	850	1135	1135	475	795
	68 (14)	50	2	680	285	475	930	930	390	650	755	755	315	530
			3	785	400	645	1210	1210	510	850	1135	1135	475	795
	97 (12)	50	2	680	285	475	930	930	390	650	755	755	315	530
			3	1000	420	700	1210	1210	510	850	1135	1135	475	795



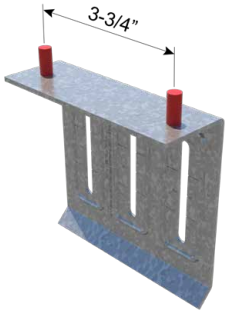
Notes:

1 Listed capacities are in accordance with provisions of AISI S100-16 (R2020)/S2-20, ICC-ES AC261 and ACI 318-19.
2 Tabulated load capacities are based on the following considerations:
- a Framing Connection: ClarkDietrich Deflection Screws (0.25" dia).
- b Connection to Structure: 1/4" Hilti KH-EZ Anchors to 3000psi Cracked Concrete (see illustrations for base fastener locations).
- c Minimum concrete thickness shall be 4-1/8", edge distance shall be 2.75".
- d Embedment to Concrete: Nominal embedment depth = 2-1/2" for 1/4" KH-EZ anchors.
- e Other fasteners may be used to achieve full clip capacity but must be designed separately.
- f Listed capacities have not been increased for wind, seismic, or other factors.

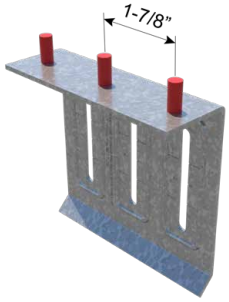
3 ASD and LRFD loads are based on nominal capacities only. 1/8" service loads are listed in a separate column. Designer shall use governing loads based on 1/8" service loads and ASD/LRFD loads.
4 ClarkDietrich Proprietary Deflection Screws (0.25" dia) used to attach clips to framing members through the provided slotted holes. Listed capacities were based on framing screws installed at the center and off-center of the slots.
5 The safety factor for ASD loads and resistance factor for LRFD loads are in accordance with Chapter K of AISI-S100 and ESR3027.
6 The ClarkDietrich Proprietary Deflection screws (0.25" dia) provide nominal shear capacity of 2400lbs and a nominal tension capacity of 4060lbs.
7 The Hilti 1/4" Φ KH-EZ Anchors shall have a LRFD shear capacity of 1735lbs and LRFD tension capacity of 830lbs according to ESR 3027 and ACI 318-19.
8 Nominal capacities are listed for use in blast/seismic designs and they do not assume a safety factor or resistance factor.
9 Hilti is a registered trademark of Hilti Aktiengeseilschaft Corporation.
10 It is the responsibility of the design professional to detail the project drawings for proper Fast Top Clip installation.



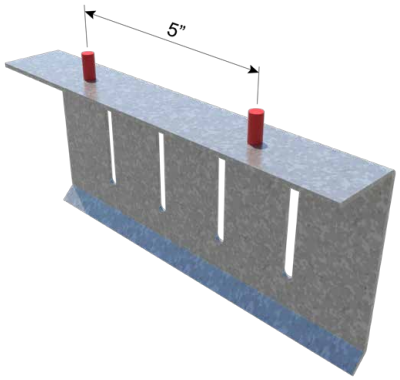
FTC3
(2) Anchor Condition



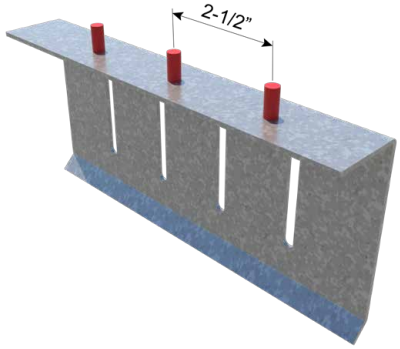
FTC5
(2) Anchor Condition



FTC5
(3) Anchor Condition



FTC8, FTC10, FTC12
(2) Anchor Condition



FTC8, FTC10, FTC12
(3) Anchor Condition

Flat Tail™ Slide Clip

Curtain Wall/Bypass

Allows for vertical building movement and provides a horizontal standoff

ClarkDietrich's Flat Tail™ Slide Clip is used to attach exterior curtain wall studs to the building structure and provide for 2-1/4" vertical building movement independent of the cold-formed steel framing. A Flat Tail Slide Clip provides variable standoff and eliminates the need for shims or additional framing components. The clip easily fastens to the floor/ceiling beam and is secured to the stud with ClarkDietrich Proprietary HD Deflection Screws. The clip restricts lateral movement, but enables vertical movement.

INSTALLATION

Connection to the building can be made with screws, powder-actuated fasteners (PAFs), or by welding. Mechanical fasteners shall be located in the pilot holes. (2) Proprietary HD Deflection Screws are required in each slot to attach the clip to the cold-formed steel framing. Screws shall be placed in the slot with 1" center-to-center spacing using guide lines as a reference.

CLIP THICKNESS

Gauge: 12 gauge (97mils)
Design Thickness: 0.1017 inches

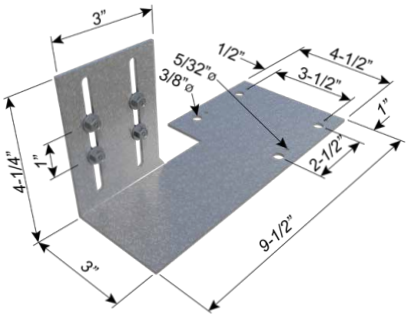
Gauge: 10 gauge (118mils)
Design Thickness: 0.1242 inches

MATERIAL SPECIFICATIONS

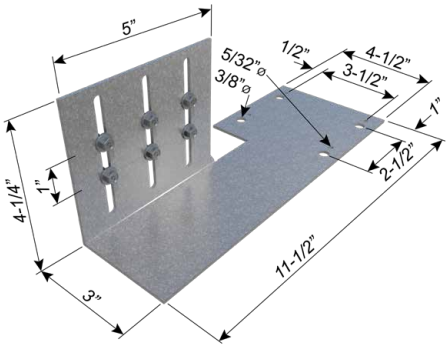
Coatings: G90
Yield Strength: 50ksi
ASTM: A653/A1003

CODE APPROVALS

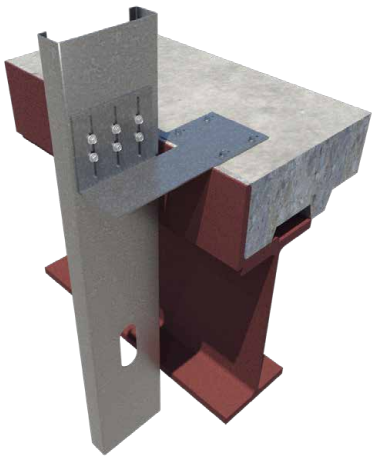
IAPMO ER-729



FTSC3



FTSC6



Flat Tail™ Slide Clip (FTSC)

Clip Designation	Product Thickness		Size (in)	Packaging Pcs/Bucket
	mils (ga)	Design Thickness (in)		
FTSC3-97	97 (12)	0.1017	4-1/2 x 9-1/2 x 4-1/4	25
FTSC3-118	118 (10)	0.1242	4-1/2 x 9-1/2 x 4-1/4	25

Clip Designation	Product Thickness		Size (in)	Packaging Pcs/Bucket
	mils (ga)	Design Thickness (in)		
FTSC6-97	97 (12)	0.1017	4-1/2 x 11-1/2 x 4-1/4	25
FTSC6-118	118 (10)	0.1242	4-1/2 x 11-1/2 x 4-1/4	25

Notes:

- Clips: 25 clips per bucket.
- Includes 110 Proprietary HD Deflection Screws for FTSC3 per bucket.
- Includes 160 Proprietary HD Deflection Screws for FTSC6 per bucket.

PROPRIETARY DEFLECTION SCREWS

Many of the ClarkDietrich deflection clips include our Proprietary Deflection Screw that has been specifically designed to provide friction-free deflection. These fasteners eliminate drag, binding or resistance that can often occur with common fasteners.

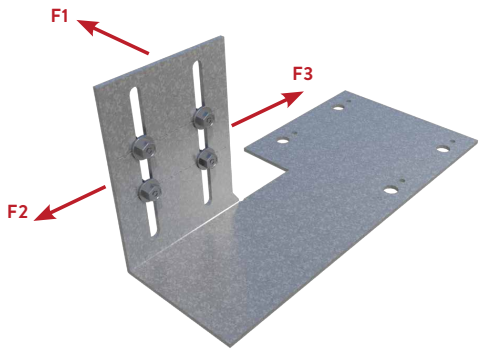


Proprietary
HD Deflection Screw
(10ga and 12ga Clips Only)

ATTACHMENT TO STRUCTURE: DESIGNED BY OTHERS

3-5/8" Flat Tail™ Slide Clip (FTSC3)

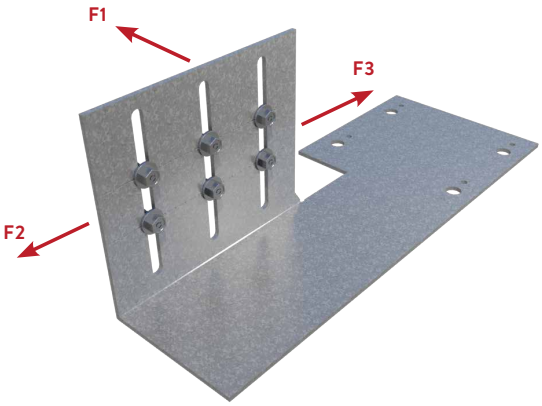
Clip Designation	Stud Thickness / Yield Strength mils (ga) ksi	Attachment to Structure	ASD Allowable Loads (lbs)		
			F1 Load	F2 Load	F3 Load
FTSC3-97	33 (20) 33	(2) Fasteners to be designed by others	110	416	388
	43 (18) 33		144	548	397
	54 (16) 50		261	759	596
	68 (14) 50		268	766	673
	97 (12) 50		468	909	699
	33 (20) 33	(4) Fasteners to be designed by others	110	506	428
	43 (18) 33		144	660	397
	54 (16) 50		261	759	596
	68 (14) 50		268	766	673
	97 (12) 50		468	909	769
FTSC3-118	33 (20) 33	(2) Fasteners to be designed by others	110	607	406
	43 (18) 33		144	816	603
	54 (16) 50		261	816	774
	68 (14) 50		328	924	834
	97 (12) 50		468	924	924
	33 (20) 33	(4) Fasteners to be designed by others	110	607	445
	43 (18) 33		144	816	603
	54 (16) 50		261	816	789
	68 (14) 50		328	924	860
	97 (12) 50		468	924	924



FTSC3

6" Flat Tail™ Slide Clip (FTSC6)

Clip Designation	Stud Thickness / Yield Strength mils (ga) ksi	Attachment to Structure	ASD Allowable Loads (lbs)		
			F1 Load	F2 Load	F3 Load
FTSC6-97	33 (20) 33	(2) Fasteners to be designed by others	165	845	551
	43 (18) 33		216	946	724
	54 (16) 50		316	1057	914
	68 (14) 50		444	1163	962
	97 (12) 50		444	1383	1063
	33 (20) 33	(4) Fasteners to be designed by others	165	869	594
	43 (18) 33		216	959	755
	54 (16) 50		392	1057	930
	68 (14) 50		476	1220	1055
	97 (12) 50		650	1558	1314
FTSC6-118	33 (20) 33	(2) Fasteners to be designed by others	165	861	594
	43 (18) 33		216	1173	874
	54 (16) 50		337	1515	1181
	68 (14) 50		492	1682	1265
	97 (12) 50		492	2026	1439
	33 (20) 33	(4) Fasteners to be designed by others	165	953	594
	43 (18) 33		216	1221	891
	54 (16) 50		392	1515	1215
	68 (14) 50		492	1682	1439
	97 (12) 50		702	2026	1523



FTSC6

Notes:

1 Allowable loads (ASD) listed represent the capacity of the clip to the stud only (framing connection).

2 Allowable loads have not been increased for wind, seismic, or other factors.

3 (2) #14 Shouldered screws (Proprietary HD Deflection Screws) shall be used per slot, placed with 1-in center-to-center spacing.
- (4) total screws for the FTSC3 (3-5/8" Clip)
- (6) total screws for the FTSC6 (6" Clip)
- #14 Proprietary HD Deflection Screws are provided with each Flat Tail Slide Clip

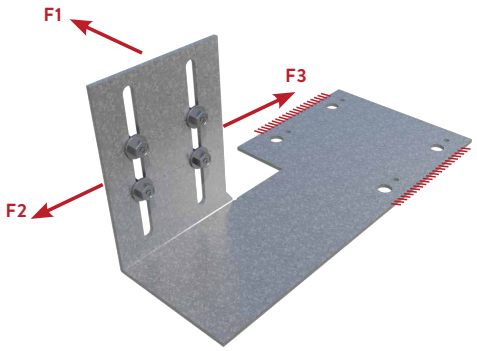
4 It is the responsibility of the design professional to detail the attachment of the clips and verify that their capacity meets the requirements of the intended application.

Flat Tail™ Slide Clip

ATTACHMENT TO STRUCTURE: WELDED

3-5/8" Flat Tail™ Slide Clip (FTSC3)

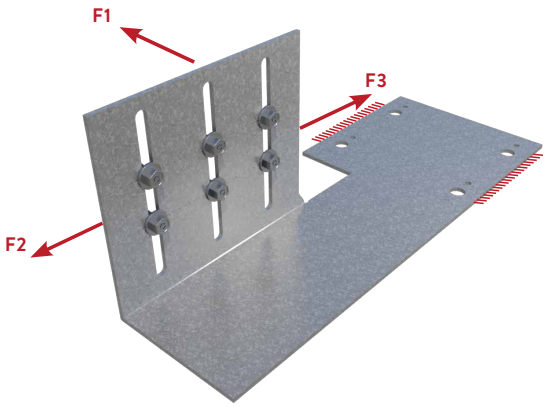
Clip Designation	Stud Thickness / Yield Strength mils (ga) ksi	Attachment to Structure	ASD Allowable Loads (lbs)		
			F1 Load	F2 Load	F3 Load
FTSC3-97	33 (20) 33	(2) Welds - min. 2" length each on either ends	110	506	428
	43 (18) 33		144	660	397
	54 (16) 50		261	759	596
	68 (14) 50		268	766	673
	97 (12) 50		468	909	769
FTSC3-118	33 (20) 33	(2) Welds - min. 2" length each on either ends	110	607	445
	43 (18) 33		144	816	603
	54 (16) 50		261	816	789
	68 (14) 50		328	924	860
	97 (12) 50		468	924	924



FTSC3

6" Flat Tail™ Slide Clip (FTSC6)

Clip Designation	Stud Thickness / Yield Strength mils (ga) ksi	Attachment to Structure	ASD Allowable Loads (lbs)		
			F1 Load	F2 Load	F3 Load
FTSC6-97	33 (20) 33	(2) Welds - min. 2-3/4" length each on either ends	165	869	594
	43 (18) 33		216	959	755
	54 (16) 50		392	1057	930
	68 (14) 50		476	1220	1055
	97 (12) 50		650	1558	1314
FTSC6-118	33 (20) 33	(2) Welds - min. 2-3/4" length each on either ends	165	953	594
	43 (18) 33		216	1221	891
	54 (16) 50		392	1515	1215
	68 (14) 50		492	1682	1316
	97 (12) 50		702	2026	1523



FTSC6

Notes:

1 Allowable loads have not been increased for wind, seismic, or other factors.

2 (2) #14 Shouldered screws (Proprietary HD Deflection Screws) shall be used per slot - placed with 1-in center-to-center spacing.
- (4) total screws for the FTSC3 (3-5/8" Clip)
- (6) total screws for the FTSC6 (6" Clip)
- #14 Proprietary HD Deflection Screws are provided with each Flat Tail Slide Clip

3 The tabulated values for welds are based on the following weld lengths:
- For FTSC3 (3-5/8" Clip) use (2) 2" of weld along parallel edges of the Flat Tail structural attachment leg. (As shown)
- For FTSC6 (6" Clip) use (2) 2-3/4" of weld along parallel edges of the Flat Tail structural attachment leg. (As shown)

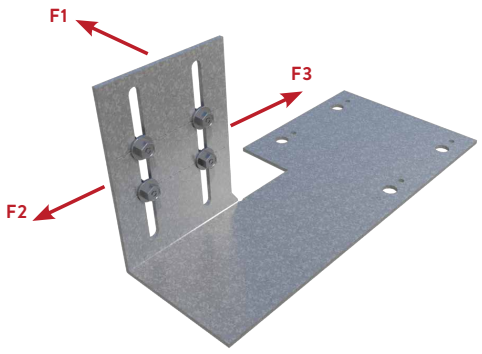
4 Use E70XX (min.) electrodes.

5 It is the responsibility of the design professional to detail the attachment of the clips and verify that their capacity meets the requirements of the intended application.

ATTACHMENT TO STRUCTURE: 1/4-28 FASTENERS INTO STEEL

3-5/8" Flat Tail™ Slide Clip (FTSC3)

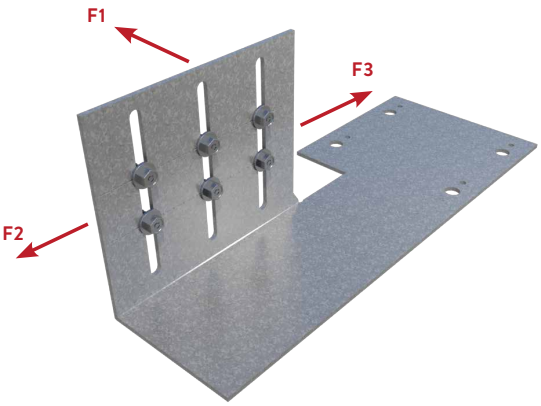
Clip Designation	Stud Thickness / Yield Strength mils (ga) ksi	Attachment to Structure	ASD Allowable Loads (lbs)		
			F1 Load	F2 Load	F3 Load
FTSC3-97	33 (20) 33	(2) 1/4-28 Fasteners to 3/16" Steel	110	416	388
	43 (18) 33		144	548	397
	54 (16) 50		261	759	596
	68 (14) 50		268	766	673
	97 (12) 50		305	847	699
	33 (20) 33	(4) 1/4-28 Fasteners to 3/16" Steel	110	506	428
	43 (18) 33		144	660	397
	54 (16) 50		261	759	596
	68 (14) 50		268	766	673
	97 (12) 50		468	909	769
FTSC3-118	33 (20) 33	(2) 1/4-28 Fasteners to 3/16" Steel	110	607	406
	43 (18) 33		144	816	603
	54 (16) 50		261	816	774
	68 (14) 50		328	924	834
	97 (12) 50		337	924	924
	33 (20) 33	(4) 1/4-28 Fasteners to 3/16" Steel	110	607	445
	43 (18) 33		144	816	603
	54 (16) 50		261	816	789
	68 (14) 50		328	924	860
	97 (12) 50		468	924	924



FTSC3

6" Flat Tail™ Slide Clip (FTSC6)

Clip Designation	Stud Thickness / Yield Strength mils (ga) ksi	Attachment to Structure	ASD Allowable Loads (lbs)		
			F1 Load	F2 Load	F3 Load
FTSC6-97	33 (20) 33	(2) 1/4-28 Fasteners to 3/16" Steel	165	845	551
	43 (18) 33		216	847	724
	54 (16) 50		283	847	847
	68 (14) 50		283	847	847
	97 (12) 50		283	847	847
	33 (20) 33	(4) 1/4-28 Fasteners to 3/16" Steel	165	869	594
	43 (18) 33		216	959	755
	54 (16) 50		392	1057	930
	68 (14) 50		476	1220	1055
	97 (12) 50		639	1288	1288
FTSC6-118	33 (20) 33	(2) 1/4-28 Fasteners to 3/16" Steel	165	861	594
	43 (18) 33		216	931	874
	54 (16) 50		314	931	931
	68 (14) 50		314	931	931
	97 (12) 50		314	931	931
	33 (20) 33	(4) 1/4-28 Fasteners to 3/16" Steel	165	953	594
	43 (18) 33		216	1221	891
	54 (16) 50		392	1375	1215
	68 (14) 50		492	1375	1316
	97 (12) 50		702	1375	1375



FTSC6

Notes:

1 Allowable loads have not been increased for wind, seismic, or other factors.

2 (2) #14 Shouldered screws (Proprietary HD Deflection Screws) shall be used per slot - placed with 1-in center-to-center spacing.
- (4) total screws for the FTSC3 (3-5/8" Clip)
- (6) total screws for the FTSC6 (6" Clip)
- #14 Proprietary HD Deflection Screws are provided with each Flat Tail Slide Clip

3 1/4-28 Fasteners shall be used for attachment to steel structure. (2) Fastener condition shall be used when a larger offset is required between the structure and the stud. In all other conditions (4) Fastener condition shall be used. Screws to be placed through 5/32" pilot holes in FTSC.

4 The minimum edge distance for each fastener type shall comply with the fastener manufacturer's recommendation.

5 Capacities listed for 1/4-28 Fasteners are based on screw strengths listed in ICC ESR-1976.

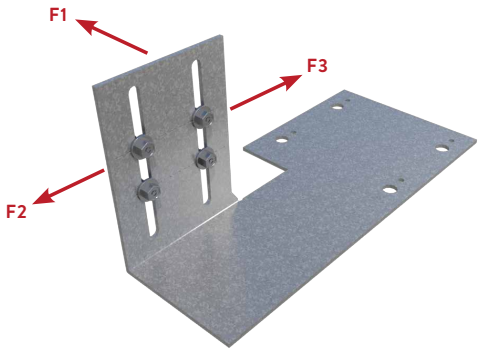
6 It is the responsibility of the design professional to detail the attachment of the clips and verify that their capacity meets the requirements of the intended application.

Flat Tail™ Slide Clip

ATTACHMENT TO STRUCTURE: 12-24 FASTENERS INTO STEEL

3-5/8" Flat Tail™ Slide Clip (FTSC3)

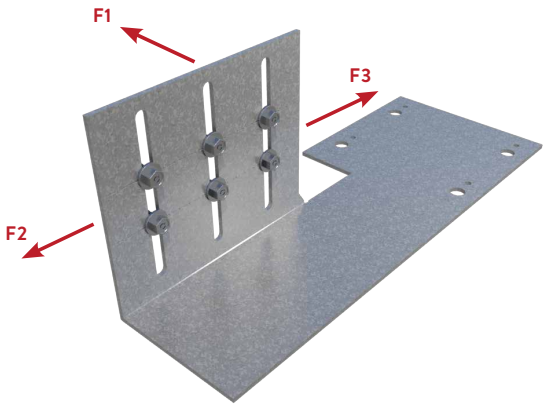
Clip Designation	Stud Thickness / Yield Strength mils (ga) ksi	Attachment to Structure	ASD Allowable Loads (lbs)		
			F1 Load	F2 Load	F3 Load
FTSC3-97	33 (20) 33	(2) 12-24 Fasteners to 3/16" Steel	110	416	388
	43 (18) 33		144	548	397
	54 (16) 50		258	716	596
	68 (14) 50		258	716	673
	97 (12) 50		258	716	699
	33 (20) 33	(4) 12-24 Fasteners to 3/16" Steel	110	506	428
	43 (18) 33		144	660	397
	54 (16) 50		261	759	596
	68 (14) 50		268	766	673
	97 (12) 50		468	909	769
FTSC3-118	33 (20) 33	(2) 12-24 Fasteners to 3/16" Steel	110	607	406
	43 (18) 33		144	763	603
	54 (16) 50		261	763	763
	68 (14) 50		276	763	763
	97 (12) 50		276	763	763
	33 (20) 33	(4) 12-24 Fasteners to 3/16" Steel	110	607	445
	43 (18) 33		144	816	603
	54 (16) 50		261	816	789
	68 (14) 50		328	924	860
	97 (12) 50		468	924	924



FTSC3

6" Flat Tail™ Slide Clip (FTSC6)

Clip Designation	Stud Thickness / Yield Strength mils (ga) ksi	Attachment to Structure	ASD Allowable Loads (lbs)		
			F1 Load	F2 Load	F3 Load
FTSC6-97	33 (20) 33	(2) 12-24 Fasteners to 3/16" Steel	165	716	551
	43 (18) 33		216	716	716
	54 (16) 50		239	716	716
	68 (14) 50		239	716	716
	97 (12) 50		239	716	716
	33 (20) 33	(4) 12-24 Fasteners to 3/16" Steel	165	869	594
	43 (18) 33		216	959	755
	54 (16) 50		392	1057	930
	68 (14) 50		476	1096	1055
	97 (12) 50		541	1096	1096
FTSC6-118	33 (20) 33	(2) 12-24 Fasteners to 3/16" Steel	165	763	594
	43 (18) 33		216	763	763
	54 (16) 50		256	763	763
	68 (14) 50		256	763	763
	97 (12) 50		256	763	763
	33 (20) 33	(4) 12-24 Fasteners to 3/16" Steel	165	953	594
	43 (18) 33		216	1145	891
	54 (16) 50		392	1145	1145
	68 (14) 50		492	1145	1145
	97 (12) 50		576	1145	1145



FTSC6

Notes:

1 Allowable loads have not been increased for wind, seismic, or other factors.

2 (2) #14 Shouldered screws (Proprietary HD Deflection Screws) shall be used per slot - placed with 1-in center-to-center spacing.
- (4) total screws for the FTSC3 (3-5/8" Clip)
- (6) total screws for the FTSC6 (6" Clip)
- #14 Proprietary HD Deflection Screws are provided with each Flat Tail Slide Clip

3 #12-24 Fasteners shall be used for attachment to steel structure. (2) Fastener condition shall be used when a larger offset is required between the structure and the stud. In all other conditions (4) Fastener condition shall be used. Screws to be placed through 5/32" pilot holes in FTSC.

4 The minimum edge distance for each fastener type shall comply with the fastener manufacturer's recommendation.

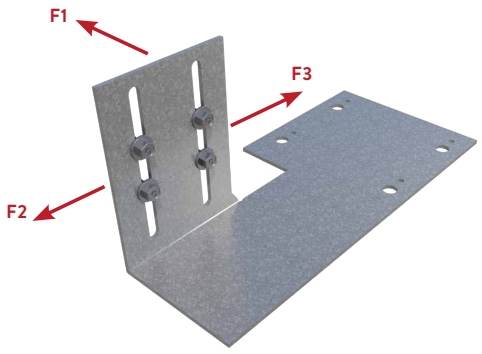
5 Capacities listed for 12-24 Fasteners are based on screw strengths listed in ICC ESR-1976.

6 It is the responsibility of the design professional to detail the attachment of the clips and verify that their capacity meets the requirements of the intended application.

ATTACHMENT TO STRUCTURE: PAF's INTO STEEL

3-5/8" Flat Tail™ Slide Clip (FTSC3)

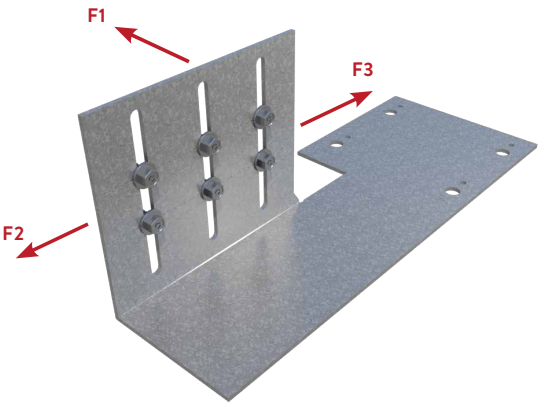
Clip Designation	Stud Thickness / Yield Strength mils (ga) ksi	Attachment to Structure	ASD Allowable Loads (lbs)		
			F1 Load	F2 Load	F3 Load
FTSC3-97	33 (20) 33	(2) 0.157" PAFs in 3/16" Steel	110	416	388
	43 (18) 33		144	548	397
	54 (16) 50		230	641	596
	68 (14) 50		230	641	641
	97 (12) 50		230	641	641
	33 (20) 33	(4) 0.157" PAFs in 3/16" Steel	110	506	428
	43 (18) 33		144	660	397
	54 (16) 50		261	759	596
	68 (14) 50		268	766	673
	97 (12) 50		468	909	769
FTSC3-118	33 (20) 33	(2) 0.157" PAFs in 3/16" Steel	110	607	406
	43 (18) 33		144	641	603
	54 (16) 50		230	641	641
	68 (14) 50		230	641	641
	97 (12) 50		230	641	641
	33 (20) 33	(4) 0.157" PAFs in 3/16" Steel	110	607	445
	43 (18) 33		144	816	603
	54 (16) 50		261	816	789
	68 (14) 50		328	924	860
	97 (12) 50		468	924	924



FTSC3

6" Flat Tail™ Slide Clip (FTSC6)

Clip Designation	Stud Thickness / Yield Strength mils (ga) ksi	Attachment to Structure	ASD Allowable Loads (lbs)		
			F1 Load	F2 Load	F3 Load
FTSC6-97	33 (20) 33	(2) 0.157" PAFs in 3/16" Steel	165	641	551
	43 (18) 33		211	641	641
	54 (16) 50		211	641	641
	68 (14) 50		211	641	641
	97 (12) 50		211	641	641
	33 (20) 33	(4) 0.157" PAFs in 3/16" Steel	165	869	594
	43 (18) 33		216	959	755
	54 (16) 50		392	1025	930
	68 (14) 50		476	1025	1025
	97 (12) 50		484	1025	1025
FTSC6-118	33 (20) 33	(2) 0.157" PAFs in 3/16" Steel	165	641	594
	43 (18) 33		211	641	641
	54 (16) 50		211	641	641
	68 (14) 50		211	641	641
	97 (12) 50		211	641	641
	33 (20) 33	(4) 0.157" PAFs in 3/16" Steel	165	953	594
	43 (18) 33		216	1025	891
	54 (16) 50		392	1025	1025
	68 (14) 50		484	1025	1025
	97 (12) 50		484	1025	1025



FTSC6

Notes:

1 Allowable loads have not been increased for wind, seismic, or other factors.

2 (2) #14 Shouldered screws (Proprietary HD Deflection Screws) shall be used per slot - placed with 1-in center-to-center spacing.
- (4) total screws for the FTSC3 (3-5/8" Clip)
- (6) total screws for the FTSC6 (6" Clip)
- #14 Proprietary HD Deflection Screws are provided with each Flat Tail Slide Clip

3 0.157" Hilti XU PAF's shall be used for attachment to steel structure. (2) Fastener condition shall be used when a larger offset is required between the structure and the stud. In all other conditions (4) Fastener condition shall be used. PAF's should be located at cross intersections scribed on the FTSC clip.

4 The minimum edge distance for each fastener type shall comply with the fastener manufacturer's recommendation.

5 Capacities listed for Hilti PAFs are based on fastener strengths listed in ICC ESR-2269.

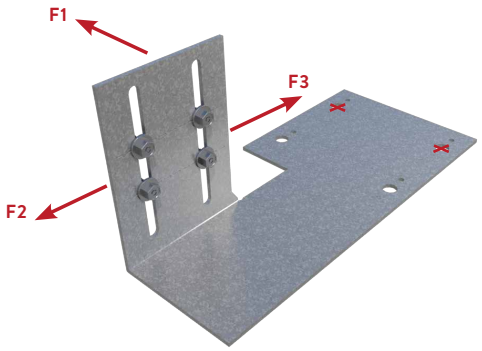
6 It is the responsibility of the design professional to detail the attachment of the clips and verify that their capacity meets the requirements of the intended application.

Flat Tail™ Slide Clip

ATTACHMENT TO STRUCTURE HILTI KWIK IN CONCRETE

3-5/8" Flat Tail™ Slide Clip (FTSC3)

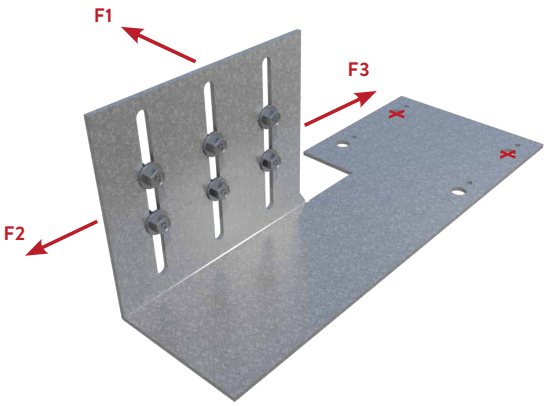
Clip Designation	Stud Thickness / Yield Strength mils (ga) ksi	Attachment to Structure	ASD Allowable Loads (lbs)		
			F1 Load	F2 Load	F3 Load
FTSC3-97	33 (20) 33	(2) 1/4" Hilti KWIK HUS-EZ (2-1/2" Embedment into 3000 psi uncracked concrete)	110	416	388
	43 (18) 33		144	548	397
	54 (16) 50		261	759	596
	68 (14) 50		268	766	673
	97 (12) 50		303	847	699
FTSC3-118	33 (20) 33	(2) 1/4" Hilti KWIK HUS-EZ (2-1/2" Embedment into 3000 psi uncracked concrete)	110	607	406
	43 (18) 33		144	816	603
	54 (16) 50		261	816	774
	68 (14) 50		303	847	834
	97 (12) 50		303	847	847



FTSC3

6" Flat Tail™ Slide Clip (FTSC6)

Clip Designation	Stud Thickness / Yield Strength mils (ga) ksi	Attachment to Structure	ASD Allowable Loads (lbs)		
			F1 Load	F2 Load	F3 Load
FTSC6-97	33 (20) 33	(2) 1/4" Hilti KWIK HUS-EZ (2-1/2" Embedment into 3000 psi uncracked concrete)	165	845	551
	43 (18) 33		216	847	724
	54 (16) 50		277	847	847
	68 (14) 50		277	847	847
	97 (12) 50		277	847	847
FTSC6-118	33 (20) 33	(2) 1/4" Hilti KWIK HUS-EZ (2-1/2" Embedment into 3000 psi uncracked concrete)	165	847	594
	43 (18) 33		216	847	847
	54 (16) 50		277	847	847
	68 (14) 50		277	847	847
	97 (12) 50		277	847	847



FTSC6

Notes:

1 Allowable loads have not been increased for wind, seismic, or other factors.

2 (2) #14 Shouldered screws (Proprietary HD Deflection Screws) shall be used per slot - placed with 1-in center-to-center spacing.
- (4) total screws for the FTSC3 (3-5/8" Clip)
- (6) total screws for the FTSC6 (6" Clip)
- #14 Proprietary HD Deflection Screws are provided with each Flat Tail Slide Clip

3 1/4" Hilti KWIK HUS-EZ Anchors shall be used for attachment to concrete structure. Anchors shall only be placed in 3/8" diameter holes.

4 Capacities listed in the table/notes consider a 3" minimum edge distance for 1/4" Hilti KWIK HUS-EZ anchors embedded 2-1/2" deep into 3000 psi uncracked concrete.

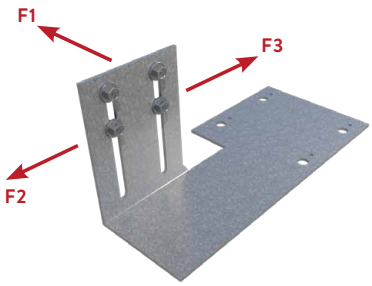
5 The load adjustment for 3-1/2" spacing between concrete anchors has been accounted in the tabulated values.

6 The minimum concrete thickness (7" thick for 2-1/2" embedment) shall comply with the fastener manufacturer's recommendation.

7 It is the responsibility of the design professional to detail the attachment of the clips and verify that their capacity meets the requirements of the intended application.

3-5/8" Flat Tail™ Slide Clip (FTSC3)

Clip Designation	Stud Thickness / Yield Strength mils (ga) ksi	Mechanically Anchored to Structure	ASD Allowable Loads (lbs)					
			Concentric			Eccentric		
			F1 Load	F2 Load	F3 Load	F1 Load	F2 Load	F3Load
FTSC3-97	97 (12) 50	(2) Fasteners to be designed by others	468	909	699	468	918	647
FTSC3-118	118 (10) 50		468	924	924	468	866	822



FTSC3

3-5/8" Flat Tail™ Slide Clip (FTSC3)

Clip Designation	Stud Thickness / Yield Strength mils (ga) ksi	Mechanically Anchored to Structure	ASD Allowable Loads (lbs)					
			Concentric			Eccentric		
			F1 Load	F2 Load	F3 Load	F1 Load	F2 Load	F3Load
FTSC3-97	97 (12) 50	(2) 1/4-28 Fasteners in 3/16" steel	305	847	699	251	689	647
FTSC3-118	118 (10) 50		337	924	924	272	744	744

3-5/8" Flat Tail™ Slide Clip (FTSC3)

Clip Designation	Stud Thickness / Yield Strength mils (ga) ksi	Mechanically Anchored to Structure	ASD Allowable Loads (lbs)					
			Concentric			Eccentric		
			F1 Load	F2 Load	F3 Load	F1 Load	F2 Load	F3Load
FTSC3-97	97 (12) 50	(2) 12-24 Fasteners in 3/16" steel	258	716	699	213	585	585
FTSC3-118	118 (10) 50		276	763	763	225	616	616

3-5/8" Flat Tail™ Slide Clip (FTSC3)

Clip Designation	Stud Thickness / Yield Strength mils (ga) ksi	Mechanically Anchored to Structure	ASD Allowable Loads (lbs)					
			Concentric			Eccentric		
			F1 Load	F2 Load	F3 Load	F1 Load	F2 Load	F3Load
FTSC3-97	97 (12) 50	(2) 0.157" PAFs in 3/16" steel	230	641	641	195	538	538
FTSC3-118	118 (10) 50		230	641	641	195	538	538

3-5/8" Flat Tail™ Slide Clip (FTSC3)

Clip Designation	Stud Thickness / Yield Strength mils (ga) ksi	Mechanically Anchored to Structure	ASD Allowable Loads (lbs)					
			Concentric			Eccentric		
			F1 Load	F2 Load	F3 Load	F1 Load	F2 Load	F3Load
FTSC3-97	97 (12) 50	(2) 1/4" Hilti Kwik HUS-EZ 2-1/2" Embedment in to 3000psi uncracked	303	847	699	259	717	647
FTSC3-118	118 (10) 50		303	847	847	259	717	717

Notes:

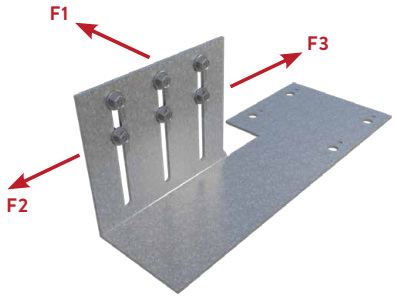
- FTSC3 loads based on (4) Proprietary HD Deflection Screws
- FTSC6 loads based on (6) Proprietary HD Deflection Screws

The technical content of this literature is effective 04/09/26 and supersedes all previous information.

Flat Tail™ Slide Clip

6" Flat Tail™ Slide Clip (FTSC6)

Clip Designation	Stud Thickness / Yield Strength mils (ga) ksi	Mechanically Anchored to Structure	ASD Allowable Loads (lbs)					
			Concentric			Eccentric		
			F1 Load	F2 Load	F3 Load	F1 Load	F2 Load	F3Load
FTSC6-97	97 (12) 50	(2) Fasteners to be designed by others	444	1383	1063	407	1474	1051
FTSC6-118	118 (10) 50		492	2026	1439	622	1962	1629



FTSC6

6" Flat Tail™ Slide Clip (FTSC6)

Clip Designation	Stud Thickness / Yield Strength mils (ga) ksi	Mechanically Anchored to Structure	ASD Allowable Loads (lbs)					
			Concentric			Eccentric		
			F1 Load	F2 Load	F3 Load	F1 Load	F2 Load	F3Load
FTSC6-97	97 (12) 50	(2) 1/4-28 Fasteners in 3/16" steel	283	847	847	236	689	689
FTSC6-118	118 (10) 50		314	931	931	257	744	744

6" Flat Tail™ Slide Clip (FTSC6)

Clip Designation	Stud Thickness / Yield Strength mils (ga) ksi	Mechanically Anchored to Structure	ASD Allowable Loads (lbs)					
			Concentric			Eccentric		
			F1 Load	F2 Load	F3 Load	F1 Load	F2 Load	F3Load
FTSC6-97	97 (12) 50	(2) 12-24 Fasteners in 3/16" steel	239	716	716	200	585	585
FTSC6-118	118 (10) 50		256	763	763	212	616	616

6" Flat Tail™ Slide Clip (FTSC6)

Clip Designation	Stud Thickness / Yield Strength mils (ga) ksi	Mechanically Anchored to Structure	ASD Allowable Loads (lbs)					
			Concentric			Eccentric		
			F1 Load	F2 Load	F3 Load	F1 Load	F2 Load	F3Load
FTSC6-97	97 (12) 50	(2) 0.157" PAFs in 3/16" steel	211	641	641	181	538	538
FTSC6-118	118 (10) 50		211	641	641	181	538	538

6" Flat Tail™ Slide Clip (FTSC6)

Clip Designation	Stud Thickness / Yield Strength mils (ga) ksi	Mechanically Anchored to Structure	ASD Allowable Loads (lbs)					
			Concentric			Eccentric		
			F1 Load	F2 Load	F3 Load	F1 Load	F2 Load	F3Load
FTSC6-97	97 (12) 50	(2) 1/4" Hilti Kwik HUS-EZ 2-1/2" Embedment in to 3000psi uncracked	277	847	847	240	717	717
FTSC6-118	118 (10) 50		277	847	847	240	717	717

Notes:

- FTSC3 loads based on (4) Proprietary HD Deflection Screws
- FTSC6 loads based on (6) Proprietary HD Deflection Screws

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Pub. No. CD-ClipExpress 04/26

Fast Strut™ — Curtain Wall/Bypass

Commonly used for large standoff conditions

The ClarkDietrich Fast Strut™ curtain wall connector employs the FastClip™ technology for curtain wall stud attachment and is commonly used when large standoff conditions exist. Provides vertical movement up to 2-1/2" (1-1/4" up and 1-1/4" down). Fast Strut products are available in standard lengths of 12-1/4" and 15-1/4" and extended lengths of 18", 20", 22" and 24" long to allow framing attachment well beyond the perimeter of the structural steel—or when the spandrel beams are set back from the edge of the structure. Fast Struts are attached to the underside of structural members with screws, welds or powder-actuated fasteners. Studs are plumbed and secured with propriety screws for friction-free deflection. FS12 and FS15 are embossed with fastening patterns embossed with fastening patterns to ensure accurate placement of fasteners.

MATERIAL SPECIFICATIONS

Gauge: 14 gauge (68mils)
Design Thickness: 0.0713 inches
Coating: G90
Yield Strength: 50ksi

PRODUCT DIMENSIONS

FS12: 4" x 1-1/2" x 12-1/4"
FS15: 4" x 1-1/2" x 15-1/4"
Extended Lengths: 4" x 1-1/2" x 18", 20", 22" and 24"

CODE APPROVALS AND PERFORMANCE STANDARDS

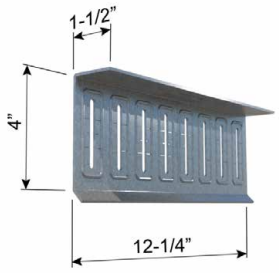
IAPMO ER-729
AISI S100

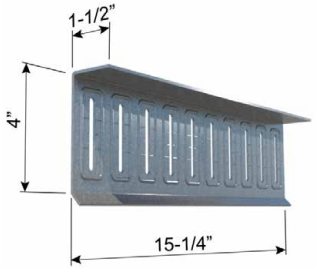
ALTERNATIVE PRODUCTS

FastClip™ Slide Clip

INSTALLATION

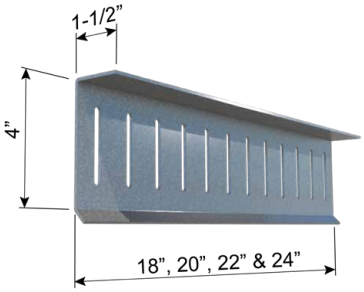
Connections to the building can be made with screws, powder-actuated fasteners, drill-in concrete anchors or welding. Mechanical fasteners shall be equally spaced along the scored line of the 1-1/2" flange. The Fast Strut must engage the building structure a minimum of 4". When using the tabulated allowable loads indicated in the table on the opposite page, connections to the building structure must be made according to the notes. Two or three Proprietary Deflection Screws are used to attach the Fast Strut to the cold-formed steel framing. Screws shall be driven through the slotted holes and positioned to allow for the appropriate building deflection. Refer to tables for number of fasteners.







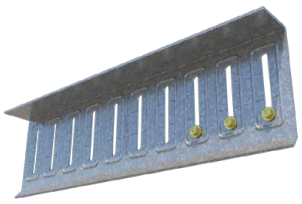
Proprietary Deflection Screw



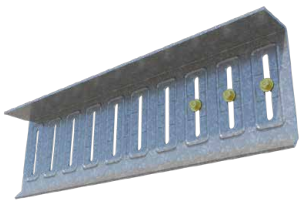
Fast Strut™ (FS12, FS15, FS18, FS20, FS22, FS24)

Clip Designation	Thickness		Size (in)	Packaging Pcs./Carton
	mils (ga)	Design Thickness (in)		
FS12	68 (14)	0.0713	4 x 1-1/2 x 12-1/4	10
FS15	68 (14)	0.0713	4 x 1-1/2 x 15-1/4	10
FS18	68 (14)	0.0713	4 x 1-1/2 x 18	10
FS20	68 (14)	0.0713	4 x 1-1/2 x 20	10
FS22	68 (14)	0.0713	4 x 1-1/2 x 22	10
FS24	68 (14)	0.0713	4 x 1-1/2 x 24	10
Custom lengths	68 (14)	0.0713	per customer specs	10

Includes 55 deflection screws per carton.
U.S. Patent No. 6,688,069



FRAMING OFFSET CONNECTION



FRAMING CENTERED CONNECTION

ATTACHMENT TO STRUCTURE: DESIGNED BY OTHERS

Clip Designation	Framing Member Spec			Load Capacities (lbs) / Clip											
				In-Plane (F1)			Tension (F2)				Compression (F3)				
	Stud Depth (in)	Proprietary Deflection Screws	Stud Thickness mils (ga)	Nominal Load	ASD Load	LRFD Load	1/8" Service Load	Nominal Load	ASD Load	LRFD Load	1/8" Service Load	Nominal Load	ASD Load	LRFD Load
FS12	3-5/8	2	33 (20)	355	120	195	1345	1470	505	810	1170	1310	450	720
			43 (18)	565	195	290	1390	1760	605	970	1480	1780	610	980
			54 (16)	760	255	380	1730	2370	815	1305	1755	2445	840	1345
			68 (14)	1000	335	500	1825	3145	1080	1730	2135	3435	1180	1890
			97 (12)	1280	440	705	1910	3530	1215	1945	2470	4300	1480	2370
	6	3	33 (20)	325	110	180	1140	2160	745	1190	1665	2280	785	1255
			43 (18)	500	170	275	1510	2625	905	1445	2005	2690	925	1480
			54 (16)	760	255	380	2050	3810	1310	2100	2380	3980	1370	2190
			68 (14)	1000	335	500	2145	4635	1595	2555	2810	4815	1660	2650
			97 (12)	1495	505	760	2220	5475	1885	2915	3370	5830	1945	2915
FS15	6	3	33 (20)	385	135	215	1815	2170	745	1195	2070	2215	760	1220
			43 (18)	580	195	290	1945	2575	885	1415	2420	2745	945	1510
			54 (16)	760	255	380	2315	3905	1345	2150	2670	3860	1330	2125
			68 (14)	1000	335	500	2255	4600	1585	2530	3280	4765	1640	2625
			97 (12)	1515	505	760	2490	5590	1925	2915	3735	5830	1945	2915
	8	3	33 (20)	385	135	215	1750	2080	715	1145	2025	2140	735	1180
			43 (18)	580	195	290	2025	2625	905	1445	2420	2750	945	1515
			54 (16)	760	255	380	2405	3910	1345	2150	3105	4110	1415	2265
			68 (14)	1000	335	500	2435	4685	1615	2580	3330	4875	1680	2685
			97 (12)	1515	505	760	2385	5185	1785	2855	3710	5815	1945	2915
FS18	6	3	33 (20)	330	115	180	1930	2115	730	1165	2205	2125	730	1170
			43 (18)	580	195	290	2055	2505	860	1380	2685	2685	925	1480
			54 (16)	760	255	380	2345	3810	1310	2095	3040	4030	1385	2220
			68 (14)	1000	335	500	2835	4420	1520	2435	3940	4815	1655	2650
			97 (12)	1515	505	760	2935	5830	1945	2915	4430	5830	1945	2915
	8	3	33 (20)	330	115	180	1790	2055	705	1130	2150	2110	725	1165
			43 (18)	580	195	290	2025	2590	890	1425	2675	2680	925	1475
			54 (16)	760	255	380	2375	3855	1325	2120	3245	3995	1375	2200
			68 (14)	1000	335	500	2670	4725	1625	2600	3615	4835	1665	2660
			97 (12)	1515	505	760	3010	5650	1945	2915	4140	5830	1945	2915
FS20	6	3	33 (20)	362	123	192	1943	2133	735	1175	2087	2150	738	1183
			43 (18)	553	195	290	2085	2518	865	1387	2470	2660	917	1467
			54 (16)	737	255	380	2532	3827	1317	2105	2992	3948	1358	2175
			68 (14)	962	335	500	2893	4427	1523	2438	3773	4757	1752	2738
			97 (12)	1350	505	760	3075	5830	1945	2915	4340	5507	1945	2915
	8	3	33 (20)	362	123	192	1890	2068	710	1138	2067	2088	718	1152
			43 (18)	553	195	290	2142	2597	893	1428	2567	2630	907	1448
			54 (16)	737	255	380	2462	3835	1318	2110	3125	3963	1363	2182
			68 (14)	962	335	500	2768	4675	1608	2573	3678	4823	1758	2745
			97 (12)	1350	505	760	3070	5665	1945	2915	4127	5490	1945	2915
FS22	6	3	33 (20)	393	132	203	1957	2152	740	1185	1968	2175	747	1197
			43 (18)	527	195	290	2115	2532	870	1393	2255	2635	908	1453
			54 (16)	713	255	380	2718	3843	1323	2115	2943	3867	1332	2130
			68 (14)	923	335	500	2952	4433	1527	2442	3607	4698	1848	2827
			97 (12)	1185	505	760	3215	5830	1945	2915	4250	5183	1945	2915
	8	3	33 (20)	393	132	203	1990	2082	715	1147	1983	2067	712	1138
			43 (18)	527	195	290	2258	2603	897	1432	2458	2580	888	1422
			54 (16)	713	255	380	2548	3815	1312	2100	3005	3932	1352	2163
			68 (14)	923	335	500	2867	4625	1592	2547	3742	4812	1852	2830
			97 (12)	1185	505	760	3130	5680	1945	2915	4113	5150	1945	2915
FS24	6	3	33 (20)	425	140	215	1970	2170	745	1195	1850	2200	755	1210
			43 (18)	500	195	290	2145	2545	875	1400	2040	2610	900	1440
			54 (16)	690	255	380	2905	3860	1330	2125	2895	3785	1305	2085
			68 (14)	885	335	500	3010	4440	1530	2445	3440	4640	1945	2915
			97 (12)	1020	505	760	3355	5830	1945	2915	4160	4860	1945	2915
	8	3	33 (20)	425	140	215	2090	2095	720	1155	1900	2045	705	1125
			43 (18)	500	195	290	2375	2610	900	1435	2350	2530	870	1395
			54 (16)	690	255	380	2635	3795	1305	2090	2885	3900	1340	2145
			68 (14)	885	335	500	2965	4575	1575	2520	3805	4800	1945	2915
			97 (12)	1020	505	760	3190	5695	1945	2915	4100	4810	1945	2915



TYPICAL CONSTRUCTION APPLICATION

Notes:

1 Listed capacities are in accordance with provisions of AISI S100-16 (R2020)/S2-20 and ICC-ES AC261.

2 Fast Strut attachment to structure designed by others. Listed capacities are applicable for Fast Strut to stud only (framing connection).

3 Proprietary Deflection Screws (0.25" dia) used to attach clips to framing members through the provided slotted holes. Listed capacities applicable for screws centered and off-centered/offset Fast Strut clip slots for framing connection.

4 The safety factor for ASD loads and resistance factor for LRFD loads are in accordance with Chapter K of AISI-S100.

5 The Proprietary Deflection Screws (0.25" dia) provide nominal shear capacity of 2400lbs and a nominal tension capacity of 4060lbs.

6 ASD and LRFD loads are based on nominal capacities only. 1/8" service loads are listed in a separate column. Designer shall use governing loads based on 1/8" service and strength.

7 It is the responsibility of the design professional to detail the project drawings for proper Fast Strut installation.

8 Other framing members may be used with these clips; however it is the responsibility of the design professional to verify the framing members' capacities and potential failure modes.

The technical content of this literature is effective 04/09/26 and supersedes all previous information.

Fast Strut™ — Curtain Wall/Bypass

ATTACHMENT TO STRUCTURE: WELD TO 3/16" STEEL

Clip Designation	Framing Member Spec			Load Capacities (lbs) / Clip											
				In-Plane (F1)			Tension (F2)				Compression (F3)				
	Stud Depth (in)	Proprietary Deflection Screws	Stud Thickness mils (ga)	Nominal Load	ASD Load	LRFD Load	1/8" Service Load	Nominal Load	ASD Load	LRFD Load	1/8" Service Load	Nominal Load	ASD Load	LRFD Load
FS12	3-5/8	2	33 (20)	355	120	195	1345	1470	505	810	1170	1310	450	720
			43 (18)	565	195	290	1390	1760	605	970	1480	1780	610	980
			54 (16)	760	255	380	1730	2370	815	1305	1755	2445	840	1345
			68 (14)	1000	335	500	1825	3145	1080	1730	2135	3435	1180	1890
			97 (12)	1150	440	705	1910	3530	1215	1945	2470	4300	1480	2370
	6	3	33 (20)	325	110	180	1140	2160	745	1190	1665	2280	785	1255
			43 (18)	500	170	275	1510	2625	905	1445	2005	2690	925	1480
			54 (16)	760	255	380	2050	3810	1310	2100	2380	3980	1370	2190
			68 (14)	1000	335	500	2145	4635	1595	2555	2810	4815	1660	2650
			97 (12)	1150	505	760	2220	5035	1885	3015	3370	5035	2160	3460
FS15	6	3	33 (20)	385	135	215	1815	2170	745	1195	2070	2215	760	1220
			43 (18)	580	195	290	1945	2575	885	1415	2420	2745	945	1510
			54 (16)	760	255	380	2315	3905	1345	2150	2670	3860	1330	2125
			68 (14)	940	335	500	2255	4600	1585	2530	3280	4765	1640	2625
			97 (12)	940	470	705	2490	5035	1925	3080	3735	5035	2520	3775
	8	3	33 (20)	385	135	215	1750	2080	715	1145	2025	2140	735	1180
			43 (18)	580	195	290	2025	2625	905	1445	2420	2750	945	1515
			54 (16)	760	255	380	2405	3910	1345	2150	3105	4110	1415	2265
			68 (14)	940	335	500	2435	4685	1615	2580	3330	4875	1680	2685
			97 (12)	940	470	705	2385	5035	1785	2855	3710	5035	2000	3205
FS18	6	3	33 (20)	330	115	180	1930	2115	730	1165	2125	2125	730	1170
			43 (18)	580	195	290	2055	2505	860	1380	2685	2685	925	1480
			54 (16)	760	255	380	2345	3810	1310	2095	3040	4030	1385	2220
			68 (14)	790	335	500	2835	4420	1520	2435	3940	4815	1655	2650
			97 (12)	790	395	595	2935	5035	2085	3335	4430	5035	2520	3775
	8	3	33 (20)	330	115	180	1790	2055	705	1130	2110	2110	725	1165
			43 (18)	580	195	290	2025	2590	890	1425	2675	2680	925	1475
			54 (16)	760	255	380	2375	3855	1325	2120	3245	3995	1375	2200
			68 (14)	790	335	500	2670	4725	1625	2600	3615	4835	1665	2660
			97 (12)	790	395	595	3010	5035	1945	3110	4140	5035	2520	3775
FS20	6	3	33 (20)	360	125	190	1945	2135	735	1175	2035	2150	740	1185
			43 (18)	555	195	290	2085	2520	865	1385	2470	2660	915	1465
			54 (16)	705	255	380	2530	3825	1315	2105	2990	3950	1360	2175
			68 (14)	715	325	485	2895	4425	1525	2440	3775	4755	1900	3025
			97 (12)	715	360	535	3075	5035	2070	3310	4340	4975	2510	3775
	8	3	33 (20)	360	125	190	1890	2070	710	1140	2040	2090	720	1150
			43 (18)	555	195	290	2140	2595	895	1430	2565	2630	905	1450
			54 (16)	705	255	380	2460	3835	1320	2110	3125	3965	1365	2180
			68 (14)	715	325	485	2770	4675	1610	2575	3680	4825	1930	3030
			97 (12)	715	360	535	3070	5035	1950	3120	4125	4960	2505	3775
FS22	6	3	33 (20)	395	130	205	1955	2150	740	1185	1940	2175	745	1195
			43 (18)	525	195	290	2115	2530	870	1395	2255	2635	910	1455
			54 (16)	655	255	380	2720	3845	1325	2115	2945	3865	1330	2130
			68 (14)	655	310	465	2950	4435	1525	2440	3605	4700	2140	3400
			97 (12)	655	325	490	3215	5035	2050	3280	4250	4920	2505	3775
	8	3	33 (20)	395	130	205	1990	2080	715	1145	1970	2065	710	1140
			43 (18)	525	195	290	2260	2605	895	1430	2460	2580	890	1420
			54 (16)	655	255	380	2550	3815	1310	2100	3005	3930	1350	2165
			68 (14)	655	310	465	2865	4625	1590	2545	3740	4810	2200	3405
			97 (12)	655	325	490	3130	5035	1955	3125	4115	4885	2485	3775
FS24	6	3	33 (20)	425	140	215	1970	2170	745	1195	1850	2200	755	1210
			43 (18)	500	195	290	2145	2545	875	1400	2040	2610	900	1440
			54 (16)	600	255	380	2905	3860	1330	2125	2895	3785	1305	2085
			68 (14)	600	300	450	3010	4440	1530	2445	3440	4640	2385	3775
			97 (12)	600	300	450	3355	5035	2035	3255	4160	4860	2495	3775
	8	3	33 (20)	425	140	215	2090	2095	720	1155	1900	2045	705	1125
			43 (18)	500	195	290	2375	2610	900	1435	2350	2530	870	1395
			54 (16)	600	255	380	2635	3795	1305	2090	2885	3900	1340	2145
			68 (14)	600	300	450	2965	4575	1575	2520	3805	4800	2465	3775
			97 (12)	600	300	450	3190	5035	1960	3135	4100	4810	2470	3775

Notes:

1 Listed Capacities are in accordance with provisions of AISI S100-16(R2020)/S2-20 and ICC-ES AC261.

2 Tabulated load capacities are based on the following considerations:
- Framing Connection: Proprietary Deflection Screws (0.25" dia)
- Connection to Structure: 4-in long Fillet Welds along each edge of the 1-1/2" Fast Strut Leg (structure) connected to 3/16" thick ASTM A36 Steel.
- Requires a minimum of 4-in of structure engagement
- Listed capacities have not been increased for wind, seismic, or other factors
- E70XX (min) electrode weld.

3 ASD and LRFD loads are based on nominal capacities only. Nominal capacities are listed for use in blast/seismic designs and they do not assume a safety factor or resistance factor.

4 Proprietary Deflection Screws (0.25" dia) used to attach clips to framing members through the provided slotted holes. Listed capacities applicable for screws centered and off-centered/offset Fast Strut clip slots for framing connection.

5 The safety factor for ASD loads and resistance factor for LRFD loads are in accordance with Chapter K of AISI-S100.

6 The Proprietary Deflection Screws (0.25" dia) provide nominal shear capacity of 2400lbs and a nominal tension capacity of 4060lbs.

7 It is the responsibility of the design professional to detail the project drawings for proper Fast Strut installation.

8 Other framing members may be used with these clips; however, it is the responsibility of the design professional to verify the framing members' capacities and potential failure modes.

ATTACHMENT TO STRUCTURE: (2) 1/4" Φ HILTI KH-EZ ANCHORS

Clip Designation	Framing Member Spec			Load Capacities (lbs) / Clip											
				In-Plane (F1)			Tension (F2)				Compression (F3)				
	Stud Depth (in)	Proprietary Deflection Screws	Stud Thickness mils (ga)	Nominal Load	ASD Load	LRFD Load	1/8" Service Load	Nominal Load	ASD Load	LRFD Load	1/8" Service Load	Nominal Load	ASD Load	LRFD Load
FS12	3-5/8	2	33 (20)	355	120	195	775	775	350	505	775	775	350	505
			43 (18)	395	195	280	775	775	350	505	775	775	350	505
			54 (16)	395	195	280	775	775	350	505	775	775	350	505
			68 (14)	395	195	280	775	775	350	505	775	775	350	505
			97 (12)	395	195	280	775	775	350	505	775	775	350	505
	6	3	33 (20)	325	110	180	775	775	350	505	775	775	350	505
			43 (18)	395	170	275	775	775	350	505	775	775	350	505
			54 (16)	395	195	280	775	775	350	505	775	775	350	505
			68 (14)	395	195	280	775	775	350	505	775	775	350	505
			97 (12)	395	195	280	775	775	350	505	775	775	350	505
FS15	6	3	33 (20)	345	135	215	775	775	350	505	775	775	350	505
			43 (18)	345	165	240	775	775	350	505	775	775	350	505
			54 (16)	345	165	240	775	775	350	505	775	775	350	505
			68 (14)	345	165	240	775	775	350	505	775	775	350	505
			97 (12)	345	165	240	775	775	350	505	775	775	350	505
	8	3	33 (20)	345	135	215	775	775	350	505	775	775	350	505
			43 (18)	345	165	240	775	775	350	505	775	775	350	505
			54 (16)	345	165	240	775	775	350	505	775	775	350	505
			68 (14)	345	165	240	775	775	350	505	775	775	350	505
			97 (12)	345	165	240	775	775	350	505	775	775	350	505
FS18	6	3	33 (20)	305	115	180	775	775	350	505	775	775	350	505
			43 (18)	305	145	210	775	775	350	505	775	775	350	505
			54 (16)	305	145	210	775	775	350	505	775	775	350	505
			68 (14)	305	145	210	775	775	350	505	775	775	350	505
			97 (12)	305	145	210	775	775	350	505	775	775	350	505
	8	3	33 (20)	305	115	180	775	775	350	505	775	775	350	505
			43 (18)	305	145	210	775	775	350	505	775	775	350	505
			54 (16)	305	145	210	775	775	350	505	775	775	350	505
			68 (14)	305	145	210	775	775	350	505	775	775	350	505
			97 (12)	305	145	210	775	775	350	505	775	775	350	505
FS20	6	3	33 (20)	280	115	175	775	775	350	505	775	775	350	505
			43 (18)	280	135	195	775	775	350	505	775	775	350	505
			54 (16)	280	135	195	775	775	350	505	775	775	350	505
			68 (14)	280	135	195	775	775	350	505	775	775	350	505
			97 (12)	280	135	195	775	775	350	505	775	775	350	505
	8	3	33 (20)	280	115	175	775	775	350	505	775	775	350	505
			43 (18)	280	135	195	775	775	350	505	775	775	350	505
			54 (16)	280	135	195	775	775	350	505	775	775	350	505
			68 (14)	280	135	195	775	775	350	505	775	775	350	505
			97 (12)	280	135	195	775	775	350	505	775	775	350	505
FS22	6	3	33 (20)	260	120	175	775	775	350	505	775	775	350	505
			43 (18)	260	125	185	775	775	350	505	775	775	350	505
			54 (16)	260	125	185	775	775	350	505	775	775	350	505
			68 (14)	260	125	185	775	775	350	505	775	775	350	505
			97 (12)	260	125	185	775	775	350	505	775	775	350	505
	8	3	33 (20)	260	120	175	775	775	350	505	775	775	350	505
			43 (18)	260	125	185	775	775	350	505	775	775	350	505
			54 (16)	260	125	185	775	775	350	505	775	775	350	505
			68 (14)	260	125	185	775	775	350	505	775	775	350	505
			97 (12)	260	125	185	775	775	350	505	775	775	350	505
FS24	6	3	33 (20)	245	120	170	775	775	350	505	775	775	350	505
			43 (18)	245	120	170	775	775	350	505	775	775	350	505
			54 (16)	245	120	170	775	775	350	505	775	775	350	505
			68 (14)	245	120	170	775	775	350	505	775	775	350	505
			97 (12)	245	120	170	775	775	350	505	775	775	350	505
	8	3	33 (20)	245	120	170	775	775	350	505	775	775	350	505
			43 (18)	245	120	170	775	775	350	505	775	775	350	505
			54 (16)	245	120	170	775	775	350	505	775	775	350	505
			68 (14)	245	120	170	775	775	350	505	775	775	350	505
			97 (12)	245	120	170	775	775	350	505	775	775	350	505

Notes:

1 Listed capacities are in accordance with provisions of AISI S100-16(R2020)/S2-20, ICC-ES AC261 and ACI 318-19.

2 Tabulated load capacities are based on the following considerations:
- Framing Connection: Proprietary Deflection Screws (0.25" dia)
- Connection to Structure: 2 x 1/4" Φ Hilti KH-EZ Anchors spaced 2-3/4" apart connected to minimum 3000psi Cracked Concrete. Minimum concrete thickness shall be 4-1/8", edge distance shall be 2".
- Embedment to Concrete: Nominal embedment of 2-1/2" for 1/4" Φ KH-EZ anchor per manufacturer's recommendation.
- Other fasteners/anchors may be used to achieve full clip capacity but must be designed separately.
- Listed capacities have not been increased for wind, seismic, or other factors.

3 ASD and LRFD loads are based on nominal capacities only. 1/8" service loads are listed in a separate column. Designer shall use governing loads based on 1/8" service and strength.

4 Proprietary Deflection Screws (0.25" dia) used to attach clips to framing members through the provided slotted holes. Listed capacities applicable for screws centered and off-centered/offset Fast Strut clip slots for framing connection.

5 The safety factor for ASD loads and resistance factor for LRFD loads are in accordance with Chapter K of AISI-S100 and ESR3027.

6 The Proprietary Deflection Screws (0.25" dia) provide nominal shear capacity of 2400lbs and a nominal tension capacity of 4060lbs.

7 The Hilti 1/4" Φ KH-EZ Anchor Bolt shall have a LRFD shear capacity of 1735lbs and LRFD tension capacity of 830lbs according to ESR 3027 and ACI 318-19.

8 Anchor strength in concrete considerations per ACI 318-19 and ESR 3027

9 Nominal capacities are listed for use in blast/seismic designs and they do not assume a safety factor or resistance factor.

10 Hilti is a registered trademark of Hilti Aktiengeseilschaft Corporation.

11 It is the responsibility of the design professional to detail the project drawings for proper Fast Strut installation.

12 Other framing members may be used with these clips; however, it is the responsibility of the design professional to verify the framing members' capacities and potential failure modes.

Fast Strut™ — Curtain Wall/Bypass

ATTACHMENT TO STRUCTURE: #12 SCREWS TO 3/16" STEEL

Clip Designation	Framing Member Spec			No. of Base Connection Fasteners	Load Capacities (lbs) / Clip											
					In-Plane (F1)			Tension (F2)				Compression (F3)				
	Stud Depth (in)	Proprietary Deflection Screws	Stud Thickness mils (ga)		Nominal Load	ASD Load	LRFD Load	1/8" Service Load	Nominal Load	ASD Load	LRFD Load	1/8" Service Load	Nominal Load	ASD Load	LRFD Load
FS12	3-5/8	2	33 (20)	2	355	120	195	1345	1470	505	810	1170	1310	450	720
				3	355	120	195	1345	1470	505	810	1170	1310	450	720
			43 (18)	2	460	155	230	1390	1760	605	970	1480	1780	610	980
				3	460	155	230	1390	1760	605	970	1480	1780	610	980
			54 (16)	2	460	155	230	1730	2330	800	1205	1755	2330	800	1205
				3	460	155	230	1730	2370	815	1305	1755	2445	840	1345
			68 (14)	2	460	155	230	1825	2330	800	1205	2135	2330	800	1205
				3	460	155	230	1825	3145	1080	1655	2135	3190	1105	1655
			97 (12)	2	460	155	230	1910	2330	800	1205	2330	2330	800	1205
				3	460	155	230	1910	3190	1105	1655	2470	3190	1105	1655
	6	3	33 (20)	2	325	110	180	1140	2160	745	1190	1665	2280	785	1205
				3	325	110	180	1140	2160	745	1190	1665	2280	785	1255
			43 (18)	2	460	155	230	1510	2330	800	1205	2005	2330	800	1205
				3	460	155	230	1510	2625	905	1445	2005	2690	925	1480
			54 (16)	2	460	155	230	2050	2330	800	1205	2330	2330	800	1205
				3	460	155	230	2050	3190	1105	1655	2380	3190	1105	1655
			68 (14)	2	460	155	230	2145	2330	800	1205	2330	2330	800	1205
				3	460	155	230	2145	3190	1105	1655	2810	3190	1105	1655
			97 (12)	2	460	155	230	2220	2330	800	1205	2330	2330	800	1205
				3	460	155	230	2220	3190	1105	1655	3190	3190	1105	1655
FS15	6	3	33 (20)	2	375	125	190	1815	2170	745	1195	2070	2215	760	1205
				3	375	125	190	1815	2170	745	1195	2070	2215	760	1220
			43 (18)	2	375	125	190	1945	2330	800	1205	2330	2330	800	1205
				3	375	125	190	1945	2575	885	1415	2420	2745	945	1510
			54 (16)	2	375	125	190	2315	2330	800	1205	2330	2330	800	1205
				3	375	125	190	2315	3190	1105	1655	2670	3190	1105	1655
			68 (14)	2	375	125	190	2255	2330	800	1205	2330	2330	800	1205
				3	375	125	190	2255	3190	1105	1655	3190	3190	1105	1655
			97 (12)	2	375	125	190	2330	2330	800	1205	2330	2330	800	1205
				3	375	125	190	2490	3190	1105	1655	3190	3190	1105	1655
	8	3	33 (20)	2	375	125	190	1750	2080	715	1145	2025	2140	735	1180
				3	375	125	190	1750	2080	715	1145	2025	2140	735	1180
			43 (18)	2	375	125	190	2025	2330	800	1205	2330	2330	800	1205
				3	375	125	190	2025	2625	905	1445	2420	2750	945	1515
			54 (16)	2	375	125	190	2330	2330	800	1205	2330	2330	800	1205
				3	375	125	190	2405	3190	1105	1655	3105	3190	1105	1655
			68 (14)	2	375	125	190	2330	2330	800	1205	2330	2330	800	1205
				3	375	125	190	2435	3190	1105	1655	3190	3190	1105	1655
			97 (12)	2	375	125	190	2330	2330	800	1205	2330	2330	800	1205
				3	375	125	190	2385	3190	1105	1655	3190	3190	1105	1655
FS18	6	3	33 (20)	2	315	105	160	1930	2115	730	1165	2125	2125	730	1170
				3	315	105	160	1930	2115	730	1165	2125	2125	730	1170
			43 (18)	2	315	105	160	2055	2330	800	1205	2330	2330	800	1205
				3	315	105	160	2055	2505	860	1380	2685	2685	925	1480
			54 (16)	2	315	105	160	2330	2330	800	1205	2330	2330	800	1205
				3	315	105	160	2345	3190	1105	1655	3040	3190	1105	1655
			68 (14)	2	315	105	160	2330	2330	800	1205	2330	2330	800	1205
				3	315	105	160	2835	3190	1105	1655	3190	3190	1105	1655
			97 (12)	2	315	105	160	2330	2330	800	1205	2330	2330	800	1205
				3	315	105	160	2935	3190	1105	1655	3190	3190	1105	1655
	8	3	33 (20)	2	315	105	160	1790	2055	705	1130	2110	2110	725	1165
				3	315	105	160	1790	2055	705	1130	2110	2110	725	1165
			43 (18)	2	315	105	160	2025	2330	800	1205	2330	2330	800	1205
				3	315	105	160	2025	2590	890	1425	2675	2680	925	1475
			54 (16)	2	315	105	160	2330	2330	800	1205	2330	2330	800	1205
				3	315	105	160	2375	3190	1105	1655	3190	3190	1105	1655
			68 (14)	2	315	105	160	2330	2330	800	1205	2330	2330	800	1205
				3	315	105	160	2670	3190	1105	1655	3190	3190	1105	1655
			97 (12)	2	315	105	160	2330	2330	800	1205	2330	2330	800	1205
				3	315	105	160	3010	3190	1105	1655	3190	3190	1105	1655



TYPICAL CONSTRUCTION APPLICATION

Notes:

1 Listed capacities are in accordance with provisions of AISI S100-16(R2020)/S2-20 and ICC-ES AC261.

2 Tabulated load capacities are based on the following considerations:
- Framing Connection: Proprietary Deflection Screws (0.25" dia)
- Connection to Structure: #12 HWH Fasteners connected to 3/16" thick ASTM A36 Steel
- Requires a minimum of 4" of structure engagement.
- Other fasteners may be used to achieve full clip capacity but must be designed separately.
- Listed capacities have not been increased for wind, seismic, or other factors.

3 ASD and LRFD loads are based on nominal capacities only. 1/8" service loads are listed in a separate column. Designer shall use governing loads based on 1/8" service and strength.

4 Nominal capacities are listed for use in blast/seismic designs and they do not assume a safety factor or resistance factor.

5 Proprietary Deflection Screws (0.25" dia) used to attach clips to framing members through the provided slotted holes. Listed capacities applicable for screws centered and off-centered/offset Fast Strut clip slots for framing connection.

6 The safety factor for ASD loads and resistance factor for LRFD loads are in accordance with Chapter K of AISI-S100.

7 The #12 HWH Fasteners shall have a minimum nominal shear capacity of 2000lbs and minimum nominal tension capacity of 2778lbs according to ESR-1976 and Manufacturer Limits.

8 The Proprietary Deflection Screws (0.25" dia) provide nominal shear capacity of 2400lbs and a nominal tension capacity of 4060lbs.

9 It is the responsibility of the design professional to detail the project drawings for proper Fast Strut installation.

10 Other framing members may be used with these clips; however, it is the responsibility of the design professional to verify the framing members' capacities and potential failure modes.

ATTACHMENT TO STRUCTURE: #12 SCREWS TO 3/16" STEEL (CONT'D)

Clip Designation	Framing Member Spec			No. of Base Connection Fasteners	Load Capacities (lbs) / Clip											
					In-Plane (F1)			Tension (F2)				Compression (F3)				
	Stud Depth (in)	Proprietary Deflection Screws	Stud Thickness mils (ga)		Nominal Load	ASD Load	LRFD Load	1/8" Service Load	Nominal Load	ASD Load	LRFD Load	1/8" Service Load	Nominal Load	ASD Load	LRFD Load
FS20	6	3	33 (20)	2	285	95	145	1945	2135	735	1175	2035	2150	740	1180
				3	285	95	145	1945	2135	735	1175	2035	2150	740	1185
			43 (18)	2	285	95	145	2085	2330	800	1205	2285	2330	800	1205
				3	285	95	145	2085	2520	865	1385	2470	2660	915	1465
			54 (16)	2	285	95	145	2330	2330	800	1205	2330	2330	800	1205
				3	285	95	145	2530	3190	1105	1655	2990	3190	1105	1655
			68 (14)	2	285	95	145	2330	2330	800	1205	2330	2330	800	1205
				3	285	95	145	2895	3190	1105	1655	3190	3190	1105	1655
			97 (12)	2	285	95	145	2330	2330	800	1205	2330	2330	800	1205
				3	285	95	145	3020	3190	1105	1655	3190	3190	1105	1655
	6	3	33 (20)	2	285	95	145	1890	2070	710	1140	2040	2090	720	1150
				3	285	95	145	1890	2070	710	1140	2040	2090	720	1150
			43 (18)	2	285	95	145	2140	2330	800	1205	2330	2330	800	1205
				3	285	95	145	2140	2595	895	1430	2565	2630	905	1450
			54 (16)	2	285	95	145	2330	2330	800	1205	2330	2330	800	1205
				3	285	95	145	2460	3190	1105	1655	3090	3190	1105	1655
			68 (14)	2	285	95	145	2330	2330	800	1205	2330	2330	800	1205
				3	285	95	145	2770	3190	1105	1655	3190	3190	1105	1655
			97 (12)	2	285	95	145	2330	2330	800	1205	2330	2330	800	1205
				3	285	95	145	3070	3190	1105	1655	3190	3190	1105	1655
FS22	6	3	33 (20)	2	260	85	130	1955	2150	740	1185	1940	2175	745	1195
				3	260	85	130	1955	2150	740	1185	1940	2175	745	1195
			43 (18)	2	260	85	130	2115	2330	800	1205	2160	2330	800	1205
				3	260	85	130	2115	2530	870	1395	2255	2635	910	1455
			54 (16)	2	260	85	130	2330	2330	800	1205	2330	2330	800	1205
				3	260	85	130	2720	3190	1105	1655	2945	3190	1105	1655
			68 (14)	2	260	85	130	2330	2330	800	1205	2330	2330	800	1205
				3	260	85	130	2950	3190	1105	1655	3190	3190	1105	1655
			97 (12)	2	260	85	130	2330	2330	800	1205	2330	2330	800	1205
				3	260	85	130	3105	3190	1105	1655	3190	3190	1105	1655
	8	3	33 (20)	2	260	85	130	1990	2080	715	1145	1970	2065	710	1140
				3	260	85	130	1990	2080	715	1145	1970	2065	710	1140
			43 (18)	2	260	85	130	2260	2330	800	1205	2330	2330	800	1205
				3	260	85	130	2260	2605	895	1430	2460	2580	890	1420
			54 (16)	2	260	85	130	2330	2330	800	1205	2330	2330	800	1205
				3	260	85	130	2550	3190	1105	1655	2985	3190	1105	1655
			68 (14)	2	260	85	130	2330	2330	800	1205	2330	2330	800	1205
				3	260	85	130	2865	3190	1105	1655	3190	3190	1105	1655
			97 (12)	2	260	85	130	2330	2330	800	1205	2330	2330	800	1205
				3	260	85	130	3130	3190	1105	1655	3190	3190	1105	1655
FS24	6	3	33 (20)	2	240	80	120	1970	2170	745	1195	1850	2200	755	1205
				3	240	80	120	1970	2170	745	1195	1850	2200	755	1210
			43 (18)	2	240	80	120	2145	2330	800	1205	2040	2330	800	1205
				3	240	80	120	2145	2545	875	1400	2040	2610	900	1440
			54 (16)	2	240	80	120	2330	2330	800	1205	2330	2330	800	1205
				3	240	80	120	2905	3190	1105	1655	2895	3190	1105	1655
			68 (14)	2	240	80	120	2330	2330	800	1205	2330	2330	800	1205
				3	240	80	120	3010	3190	1105	1655	3190	3190	1105	1655
			97 (12)	2	240	80	120	2330	2330	800	1205	2330	2330	800	1205
				3	240	80	120	3190	3190	1105	1655	3190	3190	1105	1655
	8	3	33 (20)	2	240	80	120	2090	2095	720	1155	1900	2045	705	1125
				3	240	80	120	2090	2095	720	1155	1900	2045	705	1125
			43 (18)	2	240	80	120	2330	2330	800	1205	2330	2330	800	1205
				3	240	80	120	2375	2610	900	1435	2350	2530	870	1395
			54 (16)	2	240	80	120	2330	2330	800	1205	2330	2330	800	1205
				3	240	80	120	2635	3190	1105	1655	2885	3190	1105	1655
			68 (14)	2	240	80	120	2330	2330	800	1205	2330	2330	800	1205
				3	240	80	120	2965	3190	1105	1655	3190	3190	1105	1655
			97 (12)	2	240	80	120	2330	2330	800	1205	2330	2330	800	1205
				3	240	80	120	3190	3190	1105	1655	3190	3190	1105	1655



TYPICAL CONSTRUCTION APPLICATION

Notes:

1 Listed capacities are in accordance with provisions of AISI S100-16(R2020)/S2-20 and ICC-ES AC261.

2 Tabulated load capacities are based on the following considerations:
- Framing Connection: Proprietary Deflection Screws (0.25" dia)
- Connection to Structure: #12 HWH Fasteners connected to 3/16" thick ASTM A36 Steel. See illustration for base connection.
- Requires a minimum of 4" of structure engagement.
- Other fasteners may be used to achieve full clip capacity but must be designed separately.
- Listed capacities have not been increased for wind, seismic, or other factors.

3 ASD and LRFD loads are based on nominal capacities only. 1/8" service loads are listed in a separate column. Designer shall use governing loads based on 1/8" service and strength.

4 Nominal capacities are listed for use in blast/seismic designs and they do not assume a safety factor or resistance factor.

5 Proprietary Deflection Screws (0.25" dia) used to attach clips to framing members through the provided slotted holes. Listed capacities applicable for screws centered and off-centered/offset Fast Strut clip slots for framing connection.

6 The safety factor for ASD loads and resistance factor for LRFD loads are in accordance with Chapter K of AISI-S100.

7 The #12 HWH Fasteners shall have a minimum nominal shear capacity of 2000lbs and minimum nominal tension capacity of 2778lbs according to ESR-1976 and Manufacturer Limits.

8 The Proprietary Deflection Screws (0.25" dia) provide nominal shear capacity of 2400lbs and a nominal tension capacity of 4060lbs.

9 It is the responsibility of the design professional to detail the project drawings for proper Fast Strut installation.

10 Other framing members may be used with these clips; however, it is the responsibility of the design professional to verify the framing members' capacities and potential failure modes.

The technical content of this literature is effective 04/09/26 and supersedes all previous information.

Fast Strut™ Curtain Wall/Bypass

ATTACHMENT TO STRUCTURE: 0.157" HILTI X-U TO 3/16" STEEL

Clip Designation	Framing Member Spec			No. of Base Connection Fasteners	Load Capacities (lbs) / Clip											
					In-Plane (F1)			Tension (F2)				Compression (F3)				
	Stud Depth (in)	Proprietary Deflection Screws	Stud Thickness mils (ga)		Nominal Load	ASD Load	LRFD Load	1/8" Service Load	Nominal Load	ASD Load	LRFD Load	1/8" Service Load	Nominal Load	ASD Load	LRFD Load	
FS12	3-5/8	2	33 (20)	2	355	120	185	1315	1315	425	655	1170	1310	425	655	
				3	355	120	185	1345	1470	505	810	1170	1310	450	720	
			43 (18)	2	375	120	185	1315	1315	425	655	1315	1315	425	655	
				3	375	120	185	1390	1705	555	850	1480	1705	555	850	
			54 (16)	2	375	120	185	1315	1315	425	655	1315	1315	425	655	
				3	375	120	185	1705	1705	555	850	1705	1705	555	850	
			68 (14)	2	375	120	185	1315	1315	425	655	1315	1315	425	655	
				3	375	120	185	1705	1705	555	850	1705	1705	555	850	
			97 (12)	2	375	120	185	1315	1315	425	655	1315	1315	425	655	
				3	375	120	185	1705	1705	555	850	1705	1705	555	850	
	6	3	33 (20)	2	325	110	180	1140	1315	425	655	1315	1315	425	655	
				3	325	110	180	1140	1705	555	850	1665	1705	555	850	
			43 (18)	2	375	120	185	1315	1315	425	655	1315	1315	425	655	
				3	375	120	185	1510	1705	555	850	1705	1705	555	850	
			54 (16)	2	375	120	185	1315	1315	425	655	1315	1315	425	655	
				3	375	120	185	1705	1705	555	850	1705	1705	555	850	
			68 (14)	2	375	120	185	1315	1315	425	655	1315	1315	425	655	
				3	375	120	185	1705	1705	555	850	1705	1705	555	850	
			97 (12)	2	375	120	185	1315	1315	425	655	1315	1315	425	655	
				3	375	120	185	1705	1705	555	850	1705	1705	555	850	
FS15	6	3	33 (20)	2	325	100	160	1315	1315	425	655	1315	1315	425	655	
				3	325	100	160	1705	1705	555	850	1705	1705	555	850	
			43 (18)	2	325	100	160	1315	1315	425	655	1315	1315	425	655	
				3	325	100	160	1705	1705	555	850	1705	1705	555	850	
			54 (16)	2	325	100	160	1315	1315	425	655	1315	1315	425	655	
				3	325	100	160	1705	1705	555	850	1705	1705	555	850	
			68 (14)	2	325	100	160	1315	1315	425	655	1315	1315	425	655	
				3	325	100	160	1705	1705	555	850	1705	1705	555	850	
			97 (12)	2	325	100	160	1315	1315	425	655	1315	1315	425	655	
				3	325	100	160	1705	1705	555	850	1705	1705	555	850	
	8	3	33 (20)	2	325	100	160	1315	1315	425	655	1315	1315	425	655	
				3	325	100	160	1705	1705	555	850	1705	1705	555	850	
			43 (18)	2	325	100	160	1315	1315	425	655	1315	1315	425	655	
				3	325	100	160	1705	1705	555	850	1705	1705	555	850	
			54 (16)	2	325	100	160	1315	1315	425	655	1315	1315	425	655	
				3	325	100	160	1705	1705	555	850	1705	1705	555	850	
			68 (14)	2	325	100	160	1315	1315	425	655	1315	1315	425	655	
				3	325	100	160	1705	1705	555	850	1705	1705	555	850	
			97 (12)	2	325	100	160	1315	1315	425	655	1315	1315	425	655	
				3	325	100	160	1705	1705	555	850	1705	1705	555	850	
FS18	6	3	33 (20)	2	285	90	140	1315	1315	425	655	1315	1315	425	655	
				3	285	90	140	1705	1705	555	850	1705	1705	555	850	
			43 (18)	2	285	90	140	1315	1315	425	655	1315	1315	425	655	
				3	285	90	140	1705	1705	555	850	1705	1705	555	850	
			54 (16)	2	285	90	140	1315	1315	425	655	1315	1315	425	655	
				3	285	90	140	1705	1705	555	850	1705	1705	555	850	
			68 (14)	2	285	90	140	1315	1315	425	655	1315	1315	425	655	
				3	285	90	140	1705	1705	555	850	1705	1705	555	850	
			97 (12)	2	285	90	140	1315	1315	425	655	1315	1315	425	655	
				3	285	90	140	1705	1705	555	850	1705	1705	555	850	
	8	3	33 (20)	2	285	90	140	1315	1315	425	655	1315	1315	425	655	
				3	285	90	140	1705	1705	555	850	1705	1705	555	850	
			43 (18)	2	285	90	140	1315	1315	425	655	1315	1315	425	655	
				3	285	90	140	1705	1705	555	850	1705	1705	555	850	
			54 (16)	2	285	90	140	1315	1315	425	655	1315	1315	425	655	
				3	285	90	140	1705	1705	555	850	1705	1705	555	850	
			68 (14)	2	285	90	140	1315	1315	425	655	1315	1315	425	655	
				3	285	90	140	1705	1705	555	850	1705	1705	555	850	
			97 (12)	2	285	90	140	1315	1315	425	655	1315	1315	425	655	
				3	285	90	140	1705	1705	555	850	1705	1705	555	850	



TYPICAL CONSTRUCTION APPLICATION

Notes:

1 Listed capacities are in accordance with provisions of AISI S100-16(R2020)/S2-20, ICC-ES AC261 and ESR 2269.

2 Tabulated load capacities are based on the following considerations:
- Framing Connection: Proprietary Deflection Screws (0.25" dia).
- Connection to Structure: 0.157" Hilti X-U Pins connected to 3/16" thick ASTM A36 Steel. See illustration for base connection.
- Requires a minimum of 4" of structure engagement.
- Other fasteners may be used to achieve full clip capacity but must be designed separately.
- Listed capacities have not been increased for wind, seismic, or other factors.

3 ASD and LRFD loads are based on nominal capacities only. 1/8" service loads are listed in a separate column. Designer shall use governing loads based on 1/8" service and strength.

4 Nominal capacities are listed for use in blast/seismic designs and they do not assume a safety factor or resistance factor.

5 Proprietary Deflection Screws (0.25" dia) used to attach clips to framing members through the provided slotted holes. Listed capacities applicable for screws centered and off-centered/offset Fast Strut clip slots for framing connection.

6 The safety factor for ASD loads and resistance factor for LRFD loads are in accordance with Chapter K of AISI-S100 and ESR2269.

7 The Proprietary Deflection Screws (0.25" dia) provide nominal shear capacity of 2400lbs and a nominal tension capacity of 4060lbs.

8 The Hilti X-U Pin shall have a minimum nominal shear capacity of 3939lbs and minimum nominal tension capacity of 2872lbs according to Hilti Fastening Technical Guide, Edition 2024.

9 Hilti is a registered trademark of Hilti Aktiengeseilschaft Corporation.

10 It is the responsibility of the design professional to detail the project drawings for proper Fast Strut installation.

11 Other framing members may be used with these clips; however, it is the responsibility of the design professional to verify the framing members' capacities and potential failure modes.

ATTACHMENT TO STRUCTURE: 0.157" HILTI X-U TO 3/16" STEEL (CONT'D)

Clip Designation	Framing Member Spec			No. of Base Connection Fasteners	Load Capacities (lbs) / Clip											
					In-Plane (F1)			Tension (F2)				Compression (F3)				
	Stud Depth (in)	Proprietary Deflection Screws	Stud Thickness mils (ga)		Nominal Load	ASD Load	LRFD Load	1/8" Service Load	Nominal Load	ASD Load	LRFD Load	1/8" Service Load	Nominal Load	ASD Load	LRFD Load
FS20	6	3	33 (20)	2	265	85	130	1315	1315	425	655	1315	1315	425	655
				3	265	85	130	1705	1705	555	850	1705	1705	555	850
			43 (18)	2	265	85	130	1315	1315	425	655	1315	1315	425	655
				3	265	85	130	1705	1705	555	850	1705	1705	555	850
			54 (16)	2	265	85	130	1315	1315	425	655	1315	1315	425	655
				3	265	85	130	1705	1705	555	850	1705	1705	555	850
			68 (14)	2	265	85	130	1315	1315	425	655	1315	1315	425	655
				3	265	85	130	1705	1705	555	850	1705	1705	555	850
			97 (12)	2	265	85	130	1315	1315	425	655	1315	1315	425	655
				3	265	85	130	1705	1705	555	850	1705	1705	555	850
	6	3	33 (20)	2	265	85	130	1315	1315	425	655	1315	1315	425	655
				3	265	85	130	1705	1705	555	850	1705	1705	555	850
			43 (18)	2	265	85	130	1315	1315	425	655	1315	1315	425	655
				3	265	85	130	1705	1705	555	850	1705	1705	555	850
			54 (16)	2	265	85	130	1315	1315	425	655	1315	1315	425	655
				3	265	85	130	1705	1705	555	850	1705	1705	555	850
			68 (14)	2	265	85	130	1315	1315	425	655	1315	1315	425	655
				3	265	85	130	1705	1705	555	850	1705	1705	555	850
			97 (12)	2	265	85	130	1315	1315	425	655	1315	1315	425	655
				3	265	85	130	1705	1705	555	850	1705	1705	555	850
FS22	6	3	33 (20)	2	250	75	125	1315	1315	425	655	1315	1315	425	655
				3	250	75	125	1705	1705	555	850	1705	1705	555	850
			43 (18)	2	250	75	125	1315	1315	425	655	1315	1315	425	655
				3	250	75	125	1705	1705	555	850	1705	1705	555	850
			54 (16)	2	250	75	125	1315	1315	425	655	1315	1315	425	655
				3	250	75	125	1705	1705	555	850	1705	1705	555	850
			68 (14)	2	250	75	125	1315	1315	425	655	1315	1315	425	655
				3	250	75	125	1705	1705	555	850	1705	1705	555	850
			97 (12)	2	250	75	125	1315	1315	425	655	1315	1315	425	655
				3	250	75	125	1705	1705	555	850	1705	1705	555	850
	8	3	33 (20)	2	250	75	125	1315	1315	425	655	1315	1315	425	655
				3	250	75	125	1705	1705	555	850	1705	1705	555	850
			43 (18)	2	250	75	125	1315	1315	425	655	1315	1315	425	655
				3	250	75	125	1705	1705	555	850	1705	1705	555	850
			54 (16)	2	250	75	125	1315	1315	425	655	1315	1315	425	655
				3	250	75	125	1705	1705	555	850	1705	1705	555	850
			68 (14)	2	250	75	125	1315	1315	425	655	1315	1315	425	655
				3	250	75	125	1705	1705	555	850	1705	1705	555	850
			97 (12)	2	250	75	125	1315	1315	425	655	1315	1315	425	655
				3	250	75	125	1705	1705	555	850	1705	1705	555	850
FS24	6	3	33 (20)	2	230	70	115	1315	1315	425	655	1315	1315	425	655
				3	230	70	115	1705	1705	555	850	1705	1705	555	850
			43 (18)	2	230	70	115	1315	1315	425	655	1315	1315	425	655
				3	230	70	115	1705	1705	555	850	1705	1705	555	850
			54 (16)	2	230	70	115	1315	1315	425	655	1315	1315	425	655
				3	230	70	115	1705	1705	555	850	1705	1705	555	850
			68 (14)	2	230	70	115	1315	1315	425	655	1315	1315	425	655
				3	230	70	115	1705	1705	555	850	1705	1705	555	850
			97 (12)	2	230	70	115	1315	1315	425	655	1315	1315	425	655
				3	230	70	115	1705	1705	555	850	1705	1705	555	850
	8	3	33 (20)	2	230	70	115	1315	1315	425	655	1315	1315	425	655
				3	230	70	115	1705	1705	555	850	1705	1705	555	850
			43 (18)	2	230	70	115	1315	1315	425	655	1315	1315	425	655
				3	230	70	115	1705	1705	555	850	1705	1705	555	850
			54 (16)	2	230	70	115	1315	1315	425	655	1315	1315	425	655
				3	230	70	115	1705	1705	555	850	1705	1705	555	850
			68 (14)	2	230	70	115	1315	1315	425	655	1315	1315	425	655
				3	230	70	115	1705	1705	555	850	1705	1705	555	850
			97 (12)	2	230	70	115	1315	1315	425	655	1315	1315	425	655
				3	230	70	115	1705	1705	555	850	1705	1705	555	850



TYPICAL CONSTRUCTION APPLICATION

Notes:

1 Listed capacities are in accordance with provisions of AISI S100-16(R2020)/S2-20, ICC-ES AC261 and ESR 2269.

2 Tabulated load capacities are based on the following considerations:
- Framing Connection: Proprietary Deflection Screws (0.25" dia).
- Connection to Structure: 0.157" Hilti X-U Pins connected to 3/16" thick ASTM A36 Steel. See illustration for base connection.
- Requires a minimum of 4" of structure engagement.
- Other fasteners may be used to achieve full clip capacity but must be designed separately.
- Listed capacities have not been increased for wind, seismic, or other factors.

3 ASD and LRFD loads are based on nominal capacities only. 1/8" service loads are listed in a separate column. Designer shall use governing loads based on 1/8" service and strength.

4 Nominal capacities are listed for use in blast/seismic designs and they do not assume a safety factor or resistance factor.

5 Proprietary Deflection Screws (0.25" dia) used to attach clips to framing members through the provided slotted holes. Listed capacities applicable for screws centered and off-centered/offset Fast Strut clip slots for framing connection.

6 The safety factor for ASD loads and resistance factor for LRFD loads are in accordance with Chapter K of AISI-S100 and ESR2269.

7 The Proprietary Deflection Screws (0.25" dia) provide nominal shear capacity of 2400lbs and a nominal tension capacity of 4060lbs.

8 The Hilti X-U Pin shall have a minimum nominal shear capacity of 3939lbs and minimum nominal tension capacity of 2872lbs according to Hilti Fastening Technical Guide, Edition 2024.

9 Hilti is a registered trademark of Hilti Aktiengeseilschaft Corporation.

10 It is the responsibility of the design professional to detail the project drawings for proper Fast Strut installation.

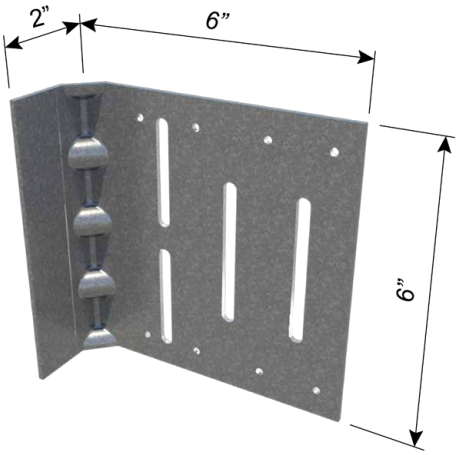
11 Other framing members may be used with these clips; however, it is the responsibility of the design professional to verify the framing members' capacities and potential failure modes.

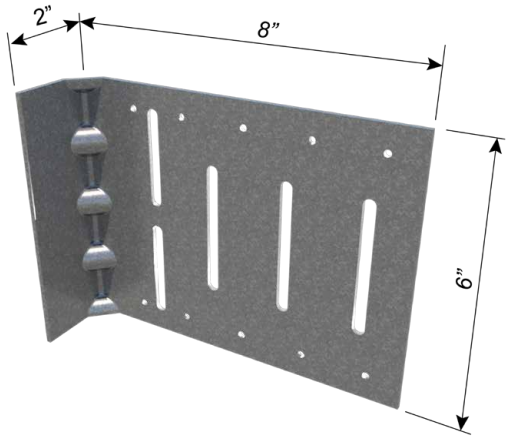
Fixed Universal Slip Clip

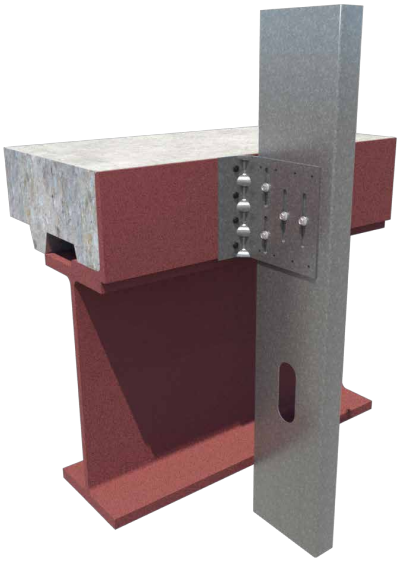
Ideal for curtain wall/bypass conditions

The clips are available in standard lengths of 6" and 8" in 12 and 10 gauge. They are ideal for curtain wall/bypass conditions. FUS clips install quickly and provide adjustable standoff to ensure a plumb wall plane. For deflection application, proprietary heavy duty deflection screws are provided with each clip to ensure friction-free sliding.

- Eliminates shims and scabs.
- Provides vertical movement up to 1" when installed as a deflection application
- Fast, one-piece universal installation. No left- or right-handed clips.
- Can be used in applications where significantly higher capacities are required.
- Proprietary heavy duty deflection screws provide frictionless slip connections.







PRODUCT DIMENSIONS

Lengths: 6" or 8"

MATERIAL SPECIFICATIONS

Gauge: 12 gauge (97mils)
Design Thickness: 0.1017 inches

Gauge: 10 gauge (118mils)
Design Thickness: 0.1242 inches

Coating: G90
Yield Strength: 50ksi

CODE APPROVALS AND PERFORMANCE STANDARDS

IAPMO ER-729
AISI S100

Fixed Universal Slip Clip (FUS6, FUS8)

Clip Designation	Thickness		Clip Length (in)	Packaging Pcs./Box
	mils (ga)	Design Thickness (in)		
FUS6-97	97 (12)	0.1017	6	10
FUS8-97			8	10
FUS6-118	118 (10)	0.1242	6	10
FUS8-118			8	10

INSTALLATION

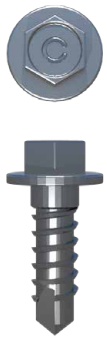
Connections to the building can be made with screws, welds, powder-actuated fasteners. Mechanical fasteners shall be located on the embossed marks given on the scored line of the 2" flange. Attach building anchors to the structure according to the manufacturer's instructions. Anchors shall be installed through the embossments on the scored line of the clip as shown on the attached drawings. In no case shall anchors be installed more than 3/4" from the bend on the short leg of the clip. In cases of discrepancy between this information and the Design Engineer's details, the Design Engineer's details shall be followed.

For a Deflection Connection:

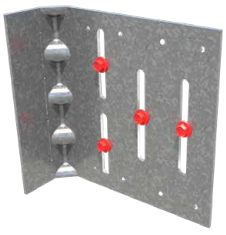
Attach the FUS clip to cold-formed steel framing members using proprietary heavy duty deflection screws (included) through the slotted holes and position for the appropriate building deflection. For the FUS6 clip all slotted holes shall have a screw. For the FUS8 clip the (2) outer slotted holes and the (2) stacked slotted holes must have screws. For a deflection connection, screws should not be installed in any non-slotted holes.

Proprietary HD Deflection Screws:

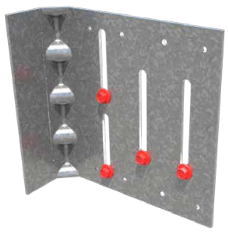
Many of the ClarkDietrich deflection clips include our proprietary heavy duty deflection fasteners that have been specifically designed to provide friction-free deflection. These fasteners eliminate drag, binding or resistance that can often occur with common fasteners. For the FUS clip, we supply a heavy duty version of the deflection screw. ClarkDietrich's Proprietary HD screws are utilized on the FUS clip only when used for a deflection condition.



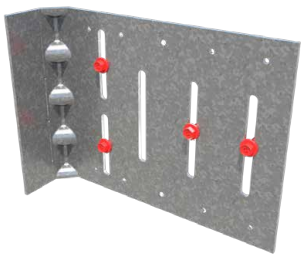
Proprietary HD Deflection Screws



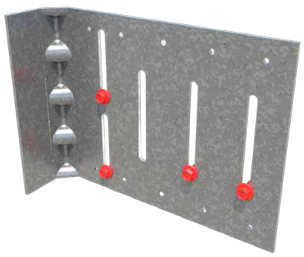
FUS6 FRAMING CENTERED CONNECTION



FUS6 FRAMING OFFSET CONNECTION



FUS8 FRAMING CENTERED CONNECTION



FUS8 FRAMING OFFSET CONNECTION

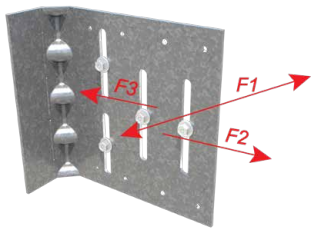
Fixed Universal Slip Clip

ATTACHMENT TO STRUCTURE: DESIGNED BY OTHERS

Clip Designation	Framing Member Details			Load Capacities (lbs)											
				In-Plane (F1)			Tension (F2)				Compression (F3)				
	Stud Depth	No. of Screws to Framing	Stud Thickness mils (ga)	Nominal Load	ASD Load	LRFD Load	1/8" Service Load	Nominal Load	ASD Load	LRFD Load	1/8" Service Load	Nominal Load	ASD Load	LRFD Load	
FUS6-97	6	4	33 (20)	360	125	200	2340	3005	1035	1655	2750	3330	1170	1755	
			43 (18)	560	195	310	2415	4280	1475	2360	3130	4175	1745	2615	
			54 (16)	795	275	440	3115	5970	2055	3290	4270	6110	2105	3365	
			68 (14)	1320	455	730	3450	7785	2680	4290	4685	7985	2750	4400	
			97 (12)	2600	895	1405	3575	8950	2985	4475	4625	11010	3790	6065	
FUS8-97	8	4	33 (20)	325	110	180	2315	3065	1170	1755	2565	3070	1170	1755	
			43 (18)	520	180	285	2565	4450	1530	2450	3235	4100	1410	2260	
			54 (16)	990	340	545	3095	6620	2280	3645	4220	6210	2140	3420	
			68 (14)	1380	475	760	3210	8040	2770	4430	4620	7595	2615	4185	
			97 (12)	2365	815	1305	3465	8950	2985	4475	5015	11230	3865	6095	
FUS6-118	6	4	33 (20)	360	125	200	2560	2675	1170	1755	3055	3325	1170	1755	
			43 (18)	560	195	310	2810	4345	1495	2395	3550	5200	1745	2615	
			54 (16)	1005	345	550	3050	6915	2380	3675	4655	6895	2375	3675	
			68 (14)	1310	450	720	4120	8440	2905	4475	5010	8570	2950	4720	
			97 (12)	2810	935	1405	4030	8950	2985	4475	6220	12190	4065	6095	
FUS8-118	8	4	33 (20)	325	110	180	2650	2710	1170	1755	2880	3030	1170	1755	
			43 (18)	485	170	270	2895	5230	1745	2615	3915	5045	1745	2615	
			54 (16)	1030	355	565	3475	7210	2450	3675	4865	7350	2450	3675	
			68 (14)	1270	440	700	3560	8480	2920	4475	5605	8580	2955	4725	
			97 (12)	2675	920	1405	4535	8950	2985	4475	6885	12010	4065	6095	

Notes:

1. Listed capacities are in accordance with provisions of AISI S100-16 (R2020)/S2-20 and ICC-ES AC261.
2. FUS attachment to structure designed by others. Listed capacities are applicable for FUS to stud only (framing connection).
3. Tabulated loads are based on maximum stud standoff distance of 1-1/2" from base structure.
4. ClarkDietrich Proprietary HD Deflection Screws (0.25" dia) used to attach clips to framing members through the provided slotted holes. Listed capacities applicable for framing screws centered and off-centered in FUS slots.
5. The safety factor for ASD loads and resistance factor for LRFD loads are in accordance with Chapter K of AISI-S100.
6. The ClarkDietrich Proprietary HD Deflection screws (0.25" dia) provide nominal shear capacity of 2400lbs and a nominal tension capacity of 4060lbs.
7. ASD and LRFD loads are based on nominal capacities only. 1/8" service loads are listed in a separate column. Designer shall use governing loads based on 1/8" service and strength.
8. Nominal capacities are listed for use in blast/seismic designs and they do not assume a safety factor or resistance factor.
9. It is the responsibility of the design professional to detail the project drawings for proper FUS installation.
10. Other framing members may be used with these clips; however, it is the responsibility of the design professional to verify the framing members' capacities and potential failure modes.



ATTACHMENT TO STRUCTURE: WELD TO 3/16" STEEL

Clip Designation	Framing Member Details		Mechanically Anchored to Structure	Load Capacities (lbs) / Clip										
				In-Plane (F1)			Tension (F2)				Compression (F3)			
	Thickness mils (ga)	No. of Screws to Framing		Nominal Load	ASD Load	LRFD Load	1/8" Service Load	Nominal Load	ASD Load	LRFD Load	1/8" Service Load	Nominal Load	ASD Load	LRFD Load
FUS6-97	33 (20)	4	(2) 1.5" Welds - along short leg (see illustration)	360	125	200	2340	1810	905	1360	2750	3330	1170	1755
	43 (18)			560	195	310	2415	1810	905	1360	3130	4175	1745	2615
	54 (16)			695	275	440	3115	1810	905	1360	4270	6110	2105	3365
	68 (14)			695	350	520	3450	1810	905	1360	4685	7985	2750	4400
	97 (12)			695	350	520	3575	1810	905	1360	4625	11010	3790	6065
FUS8-97	33 (20)	4		325	110	180	2315	1810	905	1360	2565	3070	1170	1755
	43 (18)			520	180	285	2565	1810	905	1360	3235	4100	1410	2260
	54 (16)			530	265	400	3095	1810	905	1360	4220	6210	2140	3420
	68 (14)			530	265	400	3210	1810	905	1360	4620	7595	2615	4185
	97 (12)			530	265	400	3465	1810	905	1360	5015	11230	3865	6095
FUS6-118	33 (20)	4		360	125	200	2560	2210	1105	1660	3055	3325	1170	1755
	43 (18)			560	195	310	2810	2210	1105	1660	3550	5200	1745	2615
	54 (16)			850	345	550	3050	2210	1105	1660	4655	6895	2375	3675
	68 (14)			850	425	640	4120	2210	1105	1660	5010	8570	2950	4720
	97 (12)			850	425	640	4030	2210	1105	1660	6220	12190	4065	6095
FUS8-118	33 (20)	4		325	110	180	2650	2210	1105	1660	2880	3030	1170	1755
	43 (18)			485	170	270	2895	2210	1105	1660	3915	5045	1745	2615
	54 (16)			650	325	490	3475	2210	1105	1660	4865	7350	2450	3675
	68 (14)			650	325	490	3560	2210	1105	1660	5605	8580	2955	4725
	97 (12)			650	325	490	4535	2210	1105	1660	6885	12010	4065	6095

Notes:

1 Listed Capacities are in accordance with provisions of AISI S100-16 (R2020)/S2-20 and ICC-ES AC261.

2 Tabulated load capacities are based on the following considerations:

- a Framing Connection: Minimum 4 x ClarkDietrich Proprietary HD Deflection Screws (0.25" dia)
- b Connection to Structure: (2) 1.5" long fillet weld along short leg of FUS to 3/16" thick ASTM A36 Steel (see illustration).
- c Listed capacities have not been increased for wind, seismic, or other factors.
- d E70XX (min) electrode Weld.
- e Tabulated loads are based on maximum stud standoff distance of 1-1/2" from base structure.

3 ASD and LRFD loads are based on nominal capacities only. Nominal capacities are listed for use in blast/seismic designs and they do not assume a safety factor or resistance factor.

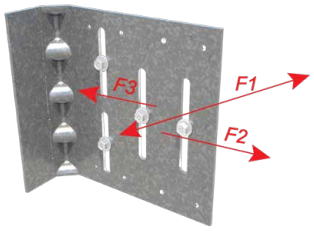
4 ClarkDietrich Proprietary HD Deflection Screws (0.25" dia) used to attach clips to framing members through the provided slotted holes. Listed capacities applicable for screws centered and off-centered/offset FUS slots for framing connection.

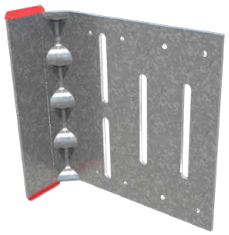
5 The safety factor for ASD loads and resistance factor for LRFD loads are in accordance with Chapter K of AISI-S100.

6 The ClarkDietrich Proprietary HD Deflection screws (0.25" dia) provide nominal shear capacity of 2400lbs and a nominal tension capacity of 4060lbs.

7 Nominal capacities are listed for use in blast/seismic designs and they do not assume a safety factor or resistance factor.

8 It is the responsibility of the design professional to detail the project drawings for proper FUS installation.





The technical content of this literature is effective 04/09/26 and supersedes all previous information.

Pub. No. CD-ClipExpress 04/26

Fixed Universal Slip Clip

ATTACHMENT TO STRUCTURE: #12 SCREWS TO 3/16" STEEL

Clip Designation	Framing Member Details		Mechanically Anchored to Structure	Load Capacities (lbs) / Clip										
				In-Plane (F1)			Tension (F2)				Compression (F3)			
	Thickness mils (ga)	No. of Screws to Framing		Nominal Load	ASD Load	LRFD Load	1/8" Service Load	Nominal Load	ASD Load	LRFD Load	1/8" Service Load	Nominal Load	ASD Load	LRFD Load
FUS6-97	33 (20)	4	2	360	125	200	2340	2630	880	1315	2750	3330	1170	1755
			3	360	125	200	2340	3005	1035	1655	2750	3330	1170	1755
			4	360	125	200	2340	3005	1035	1655	2750	3330	1170	1755
	43 (18)	4	2	560	195	310	2415	2630	880	1315	3130	4175	1745	2615
			3	560	195	310	2415	3950	1315	1975	3130	4175	1745	2615
			4	560	195	310	2415	4280	1475	2360	3130	4175	1745	2615
	54 (16)	4	2	795	275	440	3115	2630	880	1315	4270	5555	1850	2965
			3	795	275	440	3115	3950	1315	1975	4270	6110	2105	3365
			4	795	275	440	3115	5265	1755	2630	4270	6110	2105	3365
	68 (14)	4	2	1265	420	630	3450	2630	880	1315	4685	5555	1850	2965
			3	1320	455	730	3450	3950	1315	1975	4685	7985	2750	4400
			4	1320	455	730	3450	5265	1755	2630	4685	7985	2750	4400
	97 (12)	4	2	1265	420	630	3575	2630	880	1315	4625	5555	1850	2965
				1465	590	880	3575	3950	1315	1975	4625	8335	2780	4445
			4	2115	705	1055	3575	5265	1755	2630	4625	11010	3705	5925
FUS8-97	33 (20)	4	2	325	110	180	2315	2785	930	1395	2565	3070	1170	1755
			3	325	110	180	2315	3065	1170	1755	2565	3070	1170	1755
			4	325	110	180	2315	3065	1170	1755	2565	3070	1170	1755
	43 (18)	4	2	520	180	285	2565	2785	930	1395	3235	4100	1410	2260
			3	520	180	285	2565	4175	1390	2090	3235	4100	1410	2260
			4	520	180	285	2565	4450	1530	2450	3235	4100	1410	2260
	54 (16)	4	2	990	340	545	3095	2785	930	1395	4220	5555	1850	2965
			3	990	340	545	3095	4175	1390	2090	4220	6210	2140	3420
			4	990	340	545	3095	5570	1855	2785	4220	6210	2140	3420
	68 (14)	4	2	1265	420	630	3210	2785	930	1395	4620	5555	1850	2965
			3	1380	475	760	3210	4175	1390	2090	4620	7595	2615	4185
			4	1380	475	760	3210	5570	1855	2785	4620	7595	2615	4185
	97 (12)	4	2	1265	420	630	3465	2785	930	1395	5015	5555	1850	2965
			3	1465	590	880	3465	4175	1390	2090	5015	8335	2780	4445
			4	2115	705	1055	3465	5570	1855	2785	5015	11110	3705	5925
FUS6-118	33 (20)	4	2	360	125	200	2560	2675	1000	1500	3055	3325	1170	1755
			3	360	125	200	2560	2675	1170	1755	3055	3325	1170	1755
			4	360	125	200	2560	2675	1170	1755	3055	3325	1170	1755
	43 (18)	4	2	560	195	310	2810	2995	1000	1500	3550	5200	1745	2615
			3	560	195	310	2810	4345	1495	2245	3550	5200	1745	2615
			4	560	195	310	2810	4345	1495	2395	3550	5200	1745	2615
	54 (16)	4	2	1005	345	550	3050	2995	1000	1500	4655	5555	1850	2965
			3	1005	345	550	3050	4495	1500	2245	4655	6895	2375	3675
			4	1005	345	550	3050	5990	1995	2995	4655	6895	2375	3675
	68 (14)	4	2	1265	420	630	4120	2995	1000	1500	5010	5555	1850	2965
			3	1310	450	720	4120	4495	1500	2245	5010	8335	2780	4445
			4	1310	450	720	4120	5990	1995	2995	5010	8570	2950	4720
	97 (12)	4	2	1265	420	630	4030	2995	1000	1500	6220	5555	1850	2965
			3	1465	590	880	4030	4495	1500	2245	6220	8335	2780	4445
			4	2115	705	1055	4030	5990	1995	2995	6220	11110	3705	5925
FUS8-118	33 (20)	4	2	325	110	180	2650	2710	1065	1600	2880	3030	1170	1755
			3	325	110	180	2650	2710	1170	1755	2880	3030	1170	1755
			4	325	110	180	2650	2710	1170	1755	2880	3030	1170	1755
	43 (18)	4	2	485	170	270	2895	3195	1065	1600	3915	5045	1745	2615
			3	485	170	270	2895	4795	1600	2395	3915	5045	1745	2615
			4	485	170	270	2895	5230	1745	2615	3915	5045	1745	2615
	54 (16)	4	2	1030	355	565	3475	3195	1065	1600	4865	5555	1850	2965
			3	1030	355	565	3475	4795	1600	2395	4865	7350	2450	3675
			4	1030	355	565	3475	6390	2130	3195	4865	7350	2450	3675
	68 (14)	4	2	1265	420	630	3560	3195	1065	1600	5605	5555	1850	2965
			3	1270	440	700	3560	4795	1600	2395	5605	8335	2780	4445
			4	1270	440	700	3560	6390	2130	3195	5605	8580	2955	4725
	97 (12)	4	2	1265	420	630	4535	3195	1065	1600	6885	5555	1850	2965
			3	1465	590	880	4535	4795	1600	2395	6885	8335	2780	4445
			4	2115	705	1055	4535	6390	2130	3195	6885	11110	3705	5925

Notes:

1 Listed capacities are in accordance with provisions of AISI S100-16 (R2020)/S2-20 and ICC-ES AC261.

2 Tabulated load capacities are based on the following considerations:

- a Framing connection: Minimum 4 x ClarkDietrich Proprietary HD Deflection Screws (0.25" dia).
- b Connection to structure: #12 HWH Fasteners connected to 3/16" thick ASTM A36 Steel (see illustrations for base fastener locations).
- c Other fasteners may be used to achieve full clip capacity but must be designed separately.
- d Listed capacities have not been increased for wind, seismic, or other factors.
- e Tabulated loads are based on maximum stud standoff distance of 1-1/2" from base structure.

3 ASD and LRFD loads are based on nominal capacities only. 1/8" service loads are listed in a separate column. Designer shall use governing loads based on 1/8" service and strength.

4 ClarkDietrich Proprietary HD Deflection Screws (0.25" dia) used to attach clips to framing members through the provided slotted holes. Listed capacities applicable for screws centered and off-centered/offset FUS slots for framing connection.

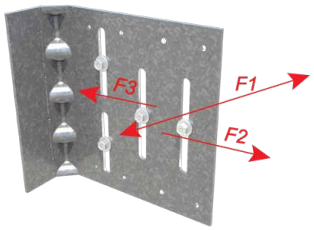
5 The safety factor for ASD loads and resistance factor for LRFD loads are in accordance with Chapter K of AISI-S100.

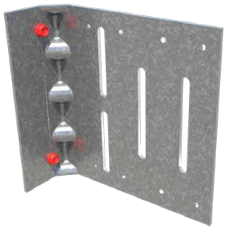
6 The #12 HWH Fasteners shall have a minimum nominal shear capacity of 2000lbs and minimum nominal tension capacity of 2778lbs according to ESR-1976 and Manufacturer Limits.

7 The ClarkDietrich Proprietary HD Deflection screws (0.25" dia) provide nominal shear capacity of 2400lbs and a nominal tension capacity of 4060lbs.

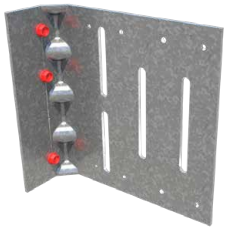
8 Nominal capacities are listed for use in blast/seismic designs and they do not assume a safety factor or resistance factor.

9 It is the responsibility of the design professional to detail the project drawings for proper FUS installation.

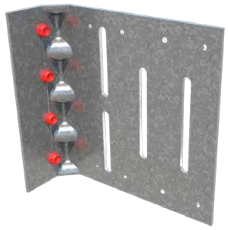




FUS
(2) Anchor Condition



FUS
(3) Anchor Condition



FUS
(4) Anchor Condition

NOTE: Each clip is embossed with fastening patterns to ensure accurate placement of fasteners.

Fixed Universal Slip Clip

ATTACHMENT TO STRUCTURE: 0.157" HILTI X-U PINS TO 3/16" STEEL (FS = 5)

Clip Designation	Framing Member Details		Mechanically Anchored to Structure	Load Capacities (lbs) / Clip										
				In-Plane (F1)			Tension (F2)				Compression (F3)			
	Thickness mils (ga)	No. of Screws to Framing		Nominal Load	ASD Load	LRFD Load	1/8" Service Load	Nominal Load	ASD Load	LRFD Load	1/8" Service Load	Nominal Load	ASD Load	LRFD Load
FUS6-97	33 (20)	4	2	360	125	200	2340	2475	825	1320	2750	3330	1150	1755
			3	360	125	200	2340	3005	1035	1655	2750	3330	1170	1755
			4	360	125	200	2340	3005	1035	1655	2750	3330	1170	1755
	43 (18)	4	2	560	195	310	2415	2475	825	1320	3130	4175	1150	1840
			3	560	195	310	2415	3715	1240	1980	3130	4175	1725	2615
			4	560	195	310	2415	4280	1475	2360	3130	4175	1745	2615
	54 (16)	4	2	795	275	440	3115	2475	825	1320	4270	5745	1150	1840
			3	795	275	440	3115	3715	1240	1980	4270	6110	1725	2755
			4	795	275	440	3115	4950	1650	2640	4270	6110	2105	3365
	68 (14)	4	2	1320	280	445	3450	2475	825	1320	4685	5745	1150	1840
			3	1320	385	615	3450	3715	1240	1980	4685	7985	1725	2755
			4	1320	455	730	3450	4950	1650	2640	4685	7985	2300	3675
	97 (12)	4	2	1395	280	445	3575	2475	825	1320	4625	5745	1150	1840
			3	1920	385	615	3575	3715	1240	1980	4625	8615	1725	2755
			4	2365	475	755	3575	4950	1650	2640	4625	11010	2300	3675
FUS8-97	33 (20)	4	2	325	110	180	2315	2475	825	1320	2565	3070	1150	1755
			3	325	110	180	2315	3065	1170	1755	2565	3070	1170	1755
			4	325	110	180	2315	3065	1170	1755	2565	3070	1170	1755
	43 (18)	4	2	520	180	285	2565	2475	825	1320	3235	4100	1150	1840
			3	520	180	285	2565	3715	1240	1980	3235	4100	1410	2260
			4	520	180	285	2565	4450	1530	2450	3235	4100	1410	2260
	54 (16)	4	2	990	280	445	3095	2475	825	1320	4220	5745	1150	1840
			3	990	340	545	3095	3715	1240	1980	4220	6210	1725	2755
			4	990	340	545	3095	4950	1650	2640	4220	6210	2140	3420
	68 (14)	4	2	1380	280	445	3210	2475	825	1320	4620	5745	1150	1840
			3	1380	385	615	3210	3715	1240	1980	4620	7595	1725	2755
			4	1380	475	755	3210	4950	1650	2640	4620	7595	2300	3675
	97 (12)	4	2	1395	280	445	3465	2475	825	1320	5015	5745	1150	1840
			3	1920	385	615	3465	3715	1240	1980	5015	8615	1725	2755
			4	2365	475	755	3465	4950	1650	2640	5015	11230	2300	3675
FUS6-118	33 (20)	4	2	360	125	200	2560	2475	825	1320	3055	3325	1150	1755
			3	360	125	200	2560	2675	1170	1755	3055	3325	1170	1755
			4	360	125	200	2560	2675	1170	1755	3055	3325	1170	1755
	43 (18)	4	2	560	195	310	2810	2475	825	1320	3550	5200	1150	1840
			3	560	195	310	2810	3715	1240	1980	3550	5200	1725	2615
			4	560	195	310	2810	4345	1495	2395	3550	5200	1745	2615
	54 (16)	4	2	1005	280	445	3050	2475	825	1320	4655	5745	1150	1840
			3	1005	345	550	3050	3715	1240	1980	4655	6895	1725	2755
			4	1005	345	550	3050	4950	1650	2640	4655	6895	2300	3675
	68 (14)	4	2	1310	280	445	4120	2475	825	1320	5010	5745	1150	1840
			3	1310	385	615	4120	3715	1240	1980	5010	8570	1725	2755
			4	1310	450	720	4120	4950	1650	2640	5010	8570	2300	3675
	97 (12)	4	2	1395	280	445	4030	2475	825	1320	6220	5745	1150	1840
			3	1920	385	615	4030	3715	1240	1980	6220	8615	1725	2755
			4	2365	475	755	4030	4950	1650	2640	6220	11490	2300	3675
FUS8-118	33 (20)	4	2	325	110	180	2650	2475	825	1320	2880	3030	1150	1755
			3	325	110	180	2650	2710	1170	1755	2880	3030	1170	1755
			4	325	110	180	2650	2710	1170	1755	2880	3030	1170	1755
	43 (18)	4	2	485	170	270	2895	2475	825	1320	3915	5045	1150	1840
			3	485	170	270	2895	3715	1240	1980	3915	5045	1725	2615
			4	485	170	270	2895	4950	1650	2615	3915	5045	1745	2615
	54 (16)	4	2	1030	280	445	3475	2475	825	1320	4865	5745	1150	1840
			3	1030	355	565	3475	3715	1240	1980	4865	7350	1725	2755
			4	1030	355	565	3475	4950	1650	2640	4865	7350	2300	3675
	68 (14)	4	2	1270	280	445	3560	2475	825	1320	5605	5745	1150	1840
			3	1270	385	615	3560	3715	1240	1980	5605	8580	1725	2755
			4	1270	440	700	3560	4950	1650	2640	5605	8580	2300	3675
	97 (12)	4	2	1395	280	445	4535	2475	825	1320	6885	5745	1150	1840
			3	1920	385	615	4535	3715	1240	1980	6885	8615	1725	2755
			4	2365	475	755	4535	4950	1650	2640	6885	11490	2300	3675

Notes:

1 Listed capacities are in accordance with provisions of AISI S100-16 (R2020)/S2-20, ICC-ES AC261 and ESR 2269.

2 Tabulated load capacities are based on the following considerations:

- a Framing connection: Minimum 4 x ClarkDietrich Proprietary HD Deflection Screws (0.25" dia).
- b Connection to structure: 0.157" Hilti X-U Pins connected to 3/16" thick ASTM A36 Steel (see illustrations for base fastener locations).
- c Other fasteners may be used to achieve full clip capacity but must be designed separately.
- d Listed capacities have not been increased for wind, seismic, or other factors.
- e Tabulated loads are based on maximum stud standoff distance of 1-1/2" from base structure.

3 ASD and LRFD loads are based on nominal capacities only. 1/8" service loads are listed in a separate column. Designer shall use governing loads based on 1/8" service and strength.

4 ClarkDietrich Proprietary HD Deflection Screws (0.25" dia) used to attach clips to framing members through the provided slotted holes. Listed capacities applicable for screws centered and off-centered/offset FUS slots for framing connection.

5 The safety factor for ASD loads and resistance factor for LRFD loads are in accordance with Chapter K of AISI-S100 and ESR2269.

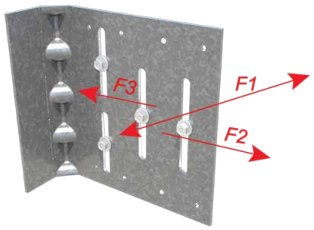
6 The ClarkDietrich Proprietary HD Deflection screws (0.25" dia) provide nominal shear capacity of 2400lbs and a nominal tension capacity of 4060lbs.

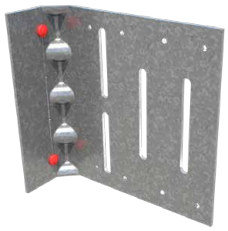
7 Nominal capacities are listed for use in blast/seismic designs and they do not assume a safety factor or resistance factor.

8 The Hilti X-U Pin shall have a minimum nominal shear capacity of 3939lbs and minimum nominal tension capacity of 2872lbs according to Hilti Fastening Technical Guide, Edition 2024.

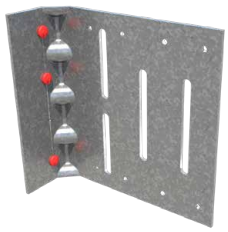
9 Hilti is a registered trademark of Hilti Aktiengeseilschaft Corporation.

10 It is the responsibility of the design professional to detail the project drawings for proper FUS installation.

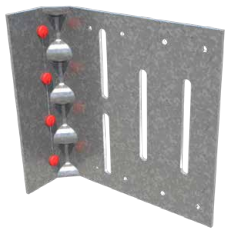




FUS
(2) PAF Condition



FUS
(3) PAF Condition



FUS
(4) PAF Condition

Fixed Universal Slip Clip

ATTACHMENT TO STRUCTURE: 0.157" HILTI X-U PINS TO 3/16" STEEL (FS = 10)

Clip Designation	Framing Member Details		Mechanically Anchored to Structure	Load Capacities (lbs) / Clip										
				In-Plane (F1)			Tension (F2)				Compression (F3)			
	Thickness mils (ga)	No. of Screws to Framing		Nominal Load	ASD Load	LRFD Load	1/8" Service Load	Nominal Load	ASD Load	LRFD Load	1/8" Service Load	Nominal Load	ASD Load	LRFD Load
FUS6-97	33 (20)	4	2	360	125	200	2340	2475	575	920	2750	3330	575	920
			3	360	125	200	2340	3005	860	1380	2750	3330	860	1380
			4	360	125	200	2340	3005	1035	1655	2750	3330	1150	1755
	43 (18)	4	2	560	140	225	2415	2475	575	920	3130	4175	575	920
			3	560	190	305	2415	3715	860	1380	3130	4175	860	1380
			4	560	195	310	2415	4280	1150	1840	3130	4175	1150	1840
	54 (16)	4	2	795	140	225	3115	2475	575	920	4270	5745	575	920
			3	795	190	305	3115	3715	860	1380	4270	6110	860	1380
			4	795	235	380	3115	4950	1150	1840	4270	6110	1150	1840
	68 (14)	4	2	1320	140	225	3450	2475	575	920	4685	5745	575	920
			3	1320	190	305	3450	3715	860	1380	4685	7985	860	1380
			4	1320	235	380	3450	4950	1150	1840	4685	7985	1150	1840
	97 (12)	4	2	1395	140	225	3575	2475	575	920	4625	5745	575	920
			3	1920	190	305	3575	3715	860	1380	4625	8615	860	1380
			4	2365	235	380	3575	4950	1150	1840	4625	11010	1150	1840
FUS8-97	33 (20)	4	2	325	110	180	2315	2475	575	920	2565	3070	575	920
			3	325	110	180	2315	3065	860	1380	2565	3070	860	1380
			4	325	110	180	2315	3065	1150	1755	2565	3070	1150	1755
	43 (18)	4	2	520	140	225	2565	2475	575	920	3235	4100	575	920
			3	520	180	285	2565	3715	860	1380	3235	4100	860	1380
			4	520	180	285	2565	4450	1150	1840	3235	4100	1150	1840
	54 (16)	4	2	990	140	225	3095	2475	575	920	4220	5745	575	920
			3	990	190	305	3095	3715	860	1380	4220	6210	860	1380
			4	990	235	380	3095	4950	1150	1840	4220	6210	1150	1840
	68 (14)	4	2	1380	140	225	3210	2475	575	920	4620	5745	575	920
			3	1380	190	305	3210	3715	860	1380	4620	7595	860	1380
			4	1380	235	380	3210	4950	1150	1840	4620	7595	1150	1840
	97 (12)	4	2	1395	140	225	3465	2475	575	920	5015	5745	575	920
			3	1920	190	305	3465	3715	860	1380	5015	8615	860	1380
			4	2365	235	380	3465	4950	1150	1840	5015	11230	1150	1840
FUS6-118	33 (20)	4	2	360	125	200	2560	2475	575	920	3055	3325	575	920
			3	360	125	200	2560	2675	860	1380	3055	3325	860	1380
			4	360	125	200	2560	2675	1150	1755	3055	3325	1150	1755
	43 (18)	4	2	560	140	225	2810	2475	575	920	3550	5200	575	920
			3	560	190	305	2810	3715	860	1380	3550	5200	860	1380
			4	560	195	310	2810	4345	1150	1840	3550	5200	1150	1840
	54 (16)	4	2	1005	140	225	3050	2475	575	920	4655	5745	575	920
			3	1005	190	305	3050	3715	860	1380	4655	6895	860	1380
			4	1005	235	380	3050	4950	1150	1840	4655	6895	1150	1840
	68 (14)	4	2	1310	140	225	4120	2475	575	920	5010	5745	575	920
			3	1310	190	305	4120	3715	860	1380	5010	8570	860	1380
			4	1310	235	380	4120	4950	1150	1840	5010	8570	1150	1840
	97 (12)	4	2	1395	140	225	4030	2475	575	920	6220	5745	575	920
			3	1920	190	305	4030	3715	860	1380	6220	8615	860	1380
			4	2365	235	380	4030	4950	1150	1840	6220	11490	1150	1840
FUS8-118	33 (20)	4	2	325	110	180	2650	2475	575	920	2880	3030	575	920
			3	325	110	180	2650	2710	860	1380	2880	3030	860	1380
			4	325	110	180	2650	2710	1150	1755	2880	3030	1150	1755
	43 (18)	4	2	485	140	225	2895	2475	575	920	3915	5045	575	920
			3	485	170	270	2895	3715	860	1380	3915	5045	860	1380
			4	485	170	270	2895	4950	1150	1840	3915	5045	1150	1840
	54 (16)	4	2	1030	140	225	3475	2475	575	920	4865	5745	575	920
			3	1030	190	305	3475	3715	860	1380	4865	7350	860	1380
			4	1030	235	380	3475	4950	1150	1840	4865	7350	1150	1840
	68 (14)	4	2	1270	140	225	3560	2475	575	920	5605	5745	575	920
			3	1270	190	305	3560	3715	860	1380	5605	8580	860	1380
			4	1270	235	380	3560	4950	1150	1840	5605	8580	1150	1840
	97 (12)	4	2	1395	140	225	4535	2475	575	920	6885	5745	575	920
			3	1150	115	235	4535	3715	860	1380	6885	8615	860	1380
			4	1920	190	305	4535	4950	1150	1840	6885	11490	1150	1840

Notes:

1 Listed capacities are in accordance with provisions of AISI S100-16 (R2020)/S2-20, ICC-ES AC261 and ESR 2269.

2 Tabulated load capacities are based on the following considerations:

- a Framing connection: Minimum 4 x ClarkDietrich Proprietary HD Deflection Screws (0.25" dia).
- b Connection to structure: 0.157" Hilti X-U Pins connected to 3/16" thick ASTM A36 Steel (see illustrations for base fastener locations).
- c Other fasteners may be used to achieve full clip capacity but must be designed separately.
- d Listed capacities have not been increased for wind, seismic, or other factors.
- e Tabulated loads are based on maximum stud standoff distance of 1-1/2" from base structure.

3 ASD and LRFD loads are based on nominal capacities only. 1/8" service loads are listed in a separate column. Designer shall use governing loads based on 1/8" service and strength.

4 ClarkDietrich Proprietary HD Deflection Screws (0.25" dia) used to attach clips to framing members through the provided slotted holes. Listed capacities applicable for screws centered and off-centered/offset FUS slots for framing connection.

5 The safety factor for ASD loads and resistance factor for LRFD loads are in accordance with Chapter K of AISI-S100 and ESR2269.

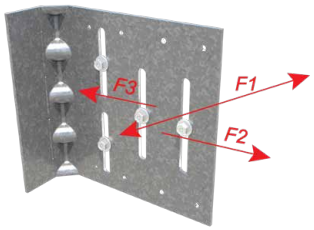
6 The ClarkDietrich Proprietary HD Deflection screws (0.25" dia) provide nominal shear capacity of 2400lbs and a nominal tension capacity of 4060lbs.

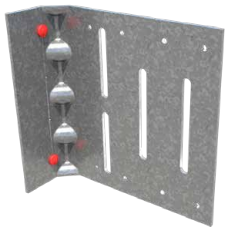
7 Nominal capacities are listed for use in blast/seismic designs and they do not assume a safety factor or resistance factor.

8 The Hilti X-U Pin shall have a minimum nominal shear capacity of 3939lbs and minimum nominal tension capacity of 2872lbs according to Hilti Fastening Technical Guide, Edition 2024.

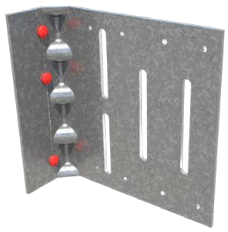
9 Hilti is a registered trademark of Hilti Aktiengeseilschaft Corporation.

10 It is the responsibility of the design professional to detail the project drawings for proper FUS installation.

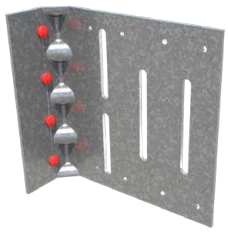




FUS
(2) PAF Condition



FUS
(3) PAF Condition



FUS
(4) PAF Condition

Strut Plate

Designed to accommodate vertical movement

Designed to accommodate vertical movement, this plate connects steel studs while preventing the transfer of vertical loads. It is ideal for conditions where one stud projects beyond another or where a stud terminates at the face of a concrete pier or column. When the attachment surface aligns with the stud web, the plate allows for direct fastening, reducing the need for added materials or framing buildup commonly required with traditional connectors.

- Vertical movement up to 2-1/2" (1-1/4" up and 1-1/4" down)
- Reduces framing buildup
- Proprietary Deflection Screws included

CLIP THICKNESS

Gauge: 16 gauge (54mils)
Design Thickness: 0.0566 inches

Gauge: 14 gauge (68mils)
Design Thickness: 0.0713 inches

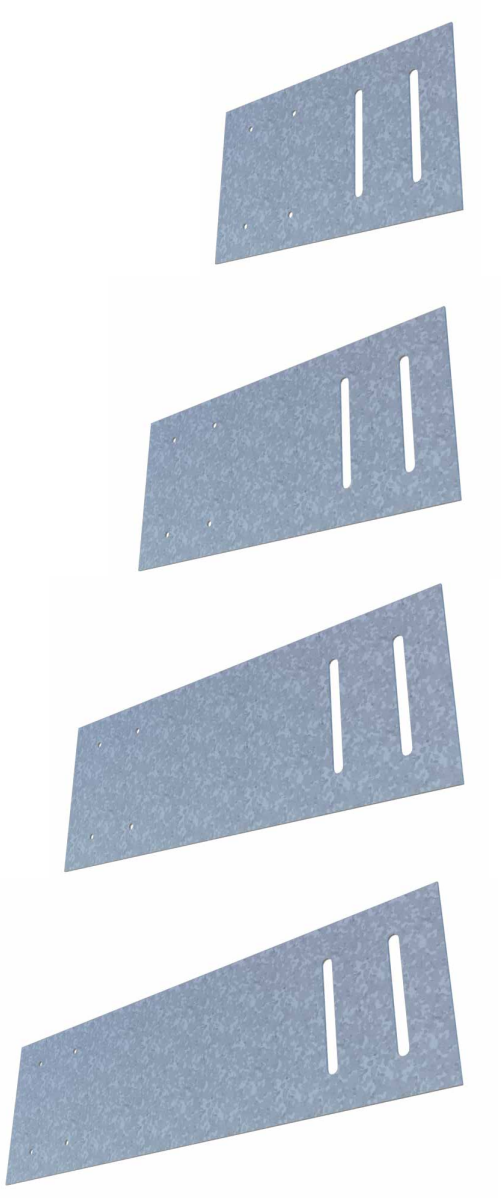
Coatings: G90
Yield Strength: 50ksi

CODE APPROVALS AND PERFORMANCE STANDARDS

AISI S100

INSTALLATION

Align the plate at the connection point so the attachment surface is flush with the stud web and oriented to allow vertical movement. Fasten the plate to the primary stud using four (4) #10 self-drilling screws in the fixed holes. Attach the adjoining stud using two (2) proprietary deflection screws through the slotted holes. Verify the connection permits vertical movement and does not transfer vertical loads.



Strut Plate (SP)

Clip Designation	Part Description	Thickness	Connector Dimensions	Connectors/ Bucket	Deflection Screws/ Bucket
SP7-54	7" Strut Plate - 16ga	0.0538" (16ga)	4" x 7"	25	55
SP7-68	7" Strut Plate - 14ga	0.0677" (14ga)	4" x 7"	25	55
SP9-54	9" Strut Plate - 16ga	0.0538" (16ga)	4" x 9"	25	55
SP9-68	9" Strut Plate - 14ga	0.0677" (14ga)	4" x 9"	25	55
SP11-54	11" Strut Plate - 16ga	0.0538" (16ga)	4" x 11"	25	55
SP11-68	11" Strut Plate - 14ga	0.0677" (14ga)	4" x 11"	25	55
SP13-54	13" Strut Plate - 16ga	0.0538" (16ga)	4" x 13"	25	55
SP13-68	13" Strut Plate - 14ga	0.0677" (14ga)	4" x 13"	25	55

68mil (14ga) STRUT PLATE DESIGN TABLE (SPXX-68)

Clip Designation	Stud/Framing Thickness mil (ga)	Allowable Loads (lbs) F2 (Tension)	F3 (Compression)
SP7-68	33 (20)	425	440
	43 (18)	585	585
	54 (16)	740	735
	68 (14)	955	1085
	98 (12)	1165	1435
SP9-68	33 (20)	425	430
	43 (18)	585	585
	54 (16)	740	735
	68 (14)	955	1045
	98 (12)	1165	1340
SP11-68	33 (20)	425	380
	43 (18)	585	510
	54 (16)	740	635
	68 (14)	955	740
	98 (12)	1165	840
SP13-68	33 (20)	425	375
	43 (18)	585	410
	54 (16)	740	450
	68 (14)	955	550
	98 (12)	1165	655



Notes:

1 Listed Capacities are based on calculations and structural testing performed in accordance with AISI S100-16 (2020) w/S2-20 and ICC-ES AC261.
2 Tabulated load capacities were determined from testing and the following considerations:
  a Framing connection - Direct screw shear
  b Base connection - Direct screw shear
3 Allowable loads incorporates 1/8" serviceability limit, a safety factor of 3.0, and applicable material adjustment factors.
4 Two (2) #14 x 3/4" Hex Washer Head (HWH) deflection screws, each with a nominal shear capacity of 2400lbs, were used to secure the clip to the framing through the provided slots.
5 Four (4) #10-16 HWH fasteners, with a minimum nominal shear and tension capacity of 1400lbs and 1936lbs respectively, were used to attach clip to structure.
6 The design professional is responsible for providing project drawings that detail the proper installation of the connector.

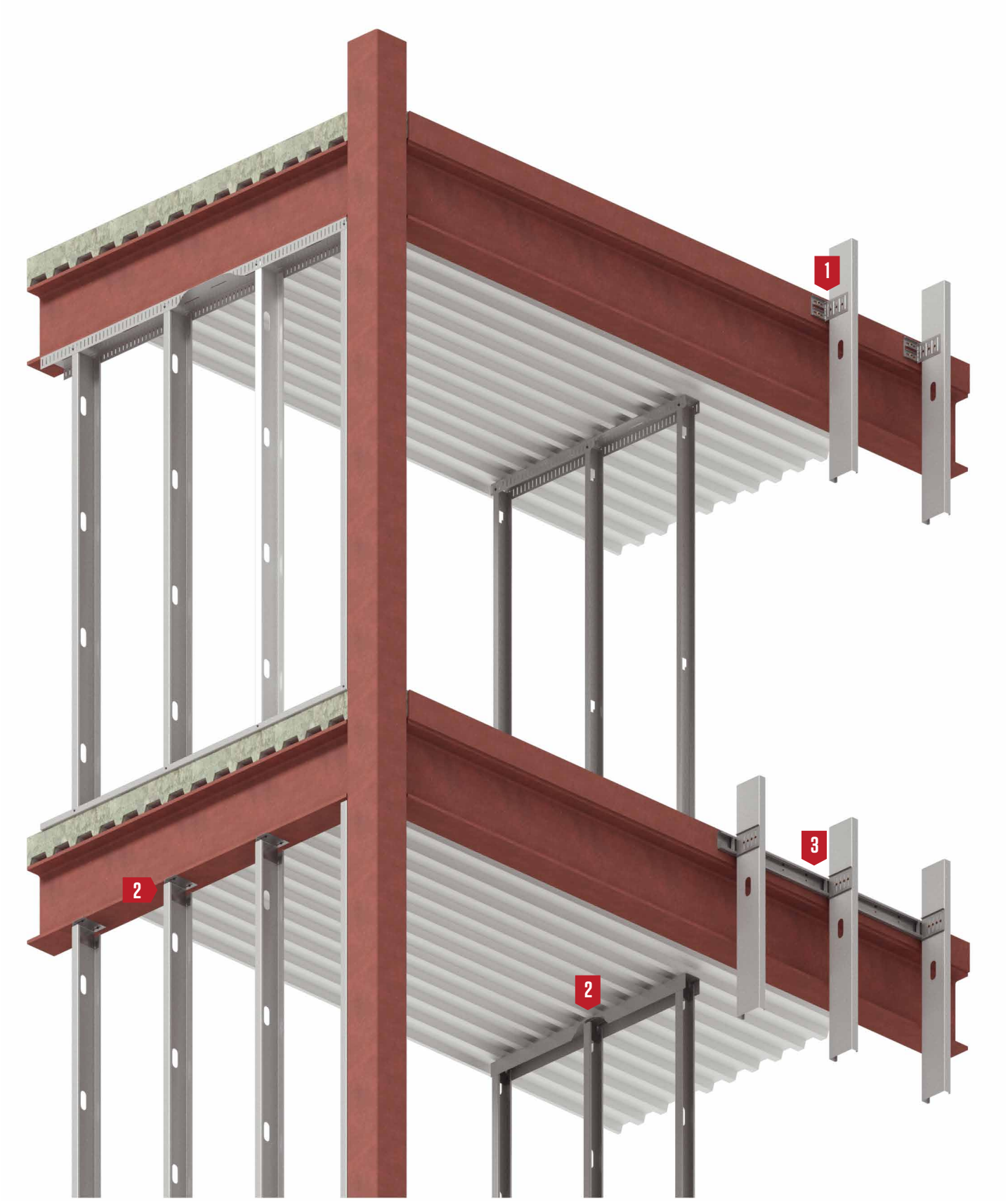
54mil (16ga) STRUT PLATE DESIGN TABLE (SPXX-54)

Clip Designation	Stud/Framing Thickness mil (ga)	Allowable Loads (lbs) F2 (Tension)	F3 (Compression)
SP7-54	33 (20)	375	355
	43 (18)	565	545
	54 (16)	740	735
	68 (14)	945	1085
	98 (12)	1135	1435
SP9-54	33 (20)	375	355
	43 (18)	565	545
	54 (16)	740	735
	68 (14)	945	855
	98 (12)	1135	950
SP11-54	33 (20)	375	355
	43 (18)	565	510
	54 (16)	740	635
	68 (14)	945	740
	98 (12)	1135	740
SP13-54	33 (20)	375	275
	43 (18)	565	405
	54 (16)	740	450
	68 (14)	945	550
	98 (12)	1135	620

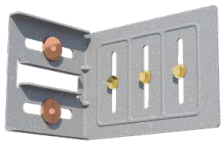
Notes:

1 Listed Capacities are based on calculations and structural testing performed in accordance with AISI S100-16 (2020) w/S2-20 and ICC-ES AC261.
2 Tabulated load capacities were determined from testing and the following considerations:
  a Framing connection - Direct screw shear
  b Base connection - Direct screw shear
3 Allowable loads incorporates 1/8" serviceability limit, a safety factor of 3.0, and applicable material adjustment factors.
4 Two (2) #14 x 3/4" Hex Washer Head (HWH) deflection screws, each with a nominal shear capacity of 2400lbs, were used to secure the clip to the framing through the provided slots.
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6 The design professional is responsible for providing project drawings that detail the proper installation of the connector.

Product Detail



1 **Drift FastClip™ Slide Clip**
pages 86–91





2 **Drift Head-of-Wall Clip**
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3 **Drift Rail and Clip**
Drift Headed Rail & Clip
pages 98–115





The technical content of this literature is effective 04/09/26 and supersedes all previous information.

Drift FastClip™ Slide Clip - 68mils (14ga)

Curtain Wall/Bypass with Drift & Vertical Deflection

Vertical and lateral building movement up to 2"

ClarkDietrich Drift FastClip™ Slide Clip 68mils (14ga) is used to attach exterior curtain-wall studs to the building structure and provide for both vertical and lateral movement. Proprietary Deflection Screws are provided with each clip for attachment to the wall studs and allow for 2" vertical deflection (1" up and down) to ensure friction-free sliding. Step bushings are provided for the connection to the structure and allow for 2" lateral deflection (1" left and right).

MATERIAL SPECIFICATIONS

Gauge: 14 gauge (68mils)
Design Thickness: 0.0713 inches
Yield Strength: 50ksi
Coating: G90

PRODUCT DIMENSIONS

D-FCSC3.5: 3-3/4" x 4" x 3-1/2" long
D-FCSC6: 3-3/4" x 4" x 6" long
D-FCSC8: 3-3/4" x 4" x 7-3/4" long

CODE APPROVALS & PERFORMANCE STANDARDS

IAPMO ER-729
AISI S100

ALTERNATIVE PRODUCTS

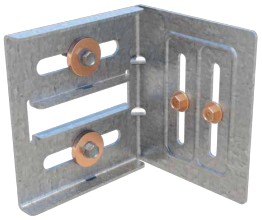
Drift Rail and Clip

INSTALLATION

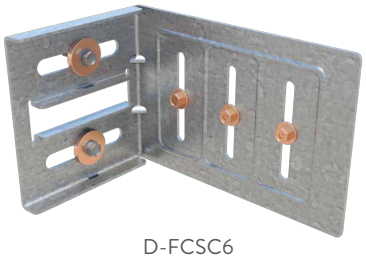
To attach the clip to the cold-formed steel framing, two, three or four Proprietary Deflection Screws (based upon clip size), shall be driven through the slotted holes and positioned to allow for the appropriate building deflection.

Attachment to the primary structure can be made with fasteners, or bolt anchors. Structure attachments shall be driven through the drift bushings and the Drift FastClip™ - centered or offset in the drift slots.

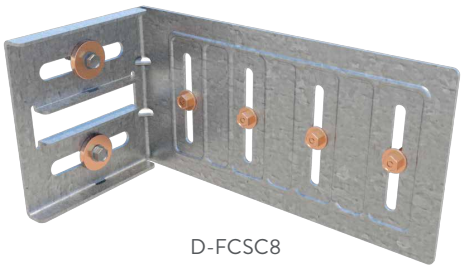




D-FCSC3.5
(2) Bushings per Clip
(2) Slots & Deflection Screws per Clip



D-FCSC6
(2) Bushings per Clip
(3) Slots & Deflection Screws per Clip



D-FCSC8
(2) Bushings per Clip
(4) Slots & Deflection Screws per Clip

Drift FastClip™ Slide Clip (D-FCSC)

Clip Designation	Thickness		Size (in)	Bushings per Clip	Slots / Deflection Screws per Clip
	mils (ga)	Design Thickness (in)			
D-FCSC3.5-68	68 (14)	0.0713	3-1/2	2	2
D-FCSC6-68	68 (14)	0.0713	6	2	3
D-FCSC8-68	68 (14)	0.0713	7-3/4	2	4

Packaging:
D-FCSC3.5 includes (55) Proprietary Deflection Screws & (50) Bushings
D-FCSC6 includes (80) Proprietary Deflection Screws & (50) Bushings
D-FCSC8 includes (110) Proprietary Deflection Screws & (50) Bushings



Copper Colored Bushing for 14ga Clips



Proprietary Deflection Screws (For Stud Connection)

ATTACHMENT TO STRUCTURE: DESIGNED BY OTHERS

Clip Designation	Framing Member Details				Load Capacities (lbs) / Clip											
					Tension (F2) - Center				Tension (F2) - Offset				Compression (F3)			
	Stud Depth (in)	Proprietary Deflection Screws	Stud Thickness mils (ga)	Yield Strength, ksi	1/8" Service Load	Nominal Load	ASD Load	LRFD Load	1/8" Service Load	Nominal Load	ASD Load	LRFD Load	1/8" Service Load	Nominal Load	ASD Load	LRFD Load
D-FCSC3.5-68	3-5/8	2	33 (20)	33	645	1070	405	610	335	1000	405	335	1340	1215	405	610
			43 (18)	33	825	1485	605	905	335	1380	605	335	1815	1810	605	905
			54 (16)	50	845	1825	950	1420	335	1825	950	335	2475	2910	1225	1840
			68 (14)	50	970	1825	950	1420	395	1825	950	395	2480	3015	1550	2480
D-FCSC6-68	6	3	33 (20)	33	680	1405	610	910	330	1440	495	330	2005	1825	610	910
			43 (18)	33	905	1825	905	1360	365	1825	640	365	2465	2340	905	1360
			54 (16)	50	915	1825	950	1420	395	1825	725	395	3500	3395	1745	2755
			68 (14)	50	990	1825	950	1420	450	1825	950	450	3930	4180	2145	3435
D-FCSC8-68	8	4	33 (20)	33	680	1430	735	1175	320	1305	450	320	1850	1740	810	1215
			43 (18)	33	710	1430	735	1175	410	1720	590	410	2485	2345	1205	1810
			54 (16)	50	710	1430	735	1175	415	1825	685	415	2520	2560	1315	2105
			68 (14)	50	890	1540	790	1265	440	1825	950	440	3040	2890	1485	2375

Notes:

1 Listed capacities are in accordance with provisions of AISI S100-16 (R2020)/S2-20, and ICC-ES AC261.
2 Tabulated load capacities are based on the following considerations:
   a. Framing Connection: ClarkDietrich Proprietary Deflection Screws (0.25" dia)
   b. Connection to Structure: Designed by others.
   c. Listed capacities have not been increased for wind, seismic, or other factors.
3 ASD and LRFD loads are based on nominal capacities only. 1/8" service loads are listed in a separate column. Designer shall use governing loads based on 1/8" service load and ASD/LRFD loads.
4 Nominal capacities are listed for use in blast/seismic designs and they do not assume a safety factor or resistance factor.
5 The safety factor for ASD loads and resistance factor for LRFD loads are in accordance with Chapter K of AISI-S100.
6 ClarkDietrich Proprietary Deflection Screws (0.25" dia) used to attach clips to framing members through the provided slotted holes.
7 Listed capacities applicable for framing screws centered and offset in D-FCSC clip slots. For connection to structure, base anchors designed by others.
8 The ClarkDietrich Proprietary Deflection screws (0.25" dia) provide nominal shear capacity of 2400lbs and a nominal tension capacity of 4060lbs.
9 It is the responsibility of the design professional to detail the project drawings for proper D-FCSC68 clip installation.
10 Other framing members may be used with these clips; however, it is the responsibility of the design professional to verify the framing members' capacities and potential failure modes.

ATTACHMENT TO STRUCTURE: (2) 1/4" Φ FASTENERS TO 3/16" STEEL

Clip Designation	Stud Thickness / Yield Strength mils (ga) ksi	Proprietary Deflection Screws	Mechanically Anchored to Structure	Load Capacities (lbs) / Clip											
				Tension (F2) - Center				Tension (F2) - Offset				Compression (F3)			
				1/8" Service Load	Nominal Load	ASD Load	LRFD Load	1/8" Service Load	Nominal Load	ASD Load	LRFD Load	1/8" Service Load	Nominal Load	ASD Load	LRFD Load
D-FCSC3.5-68	33 (20) 33	2	(2) 1/4"-20 fasteners in 3/16" steel	645	1070	365	590	335	1000	510	765	1215	1215	605	905
	43 (18) 33			825	1485	630	950	335	1380	510	765	1810	1810	945	1510
	54 (16) 50			845	1825	630	950	335	1525	510	765	2475	2910	1495	2390
	68 (14) 50			970	1825	630	950	395	1525	510	765	2480	3015	1040	1660
	97 (12) 50			970	1825	630	950	395	1525	510	765	2480	3015	1040	1660
D-FCSC6-68	33 (20) 33	3		680	1405	485	775	330	1440	510	765	1825	1825	905	1360
	43 (18) 33			905	1825	630	950	365	1525	510	765	2340	2340	1200	1920
	54 (16) 50			915	1825	630	950	395	1525	510	765	3395	3395	1745	2790
	68 (14) 50			990	1825	630	950	450	1525	510	765	3930	4180	2145	3435
	97 (12) 50			990	1825	630	950	450	1525	510	765	3930	4180	2145	3435
D-FCSC8-68	33 (20) 33	4		680	1430	630	950	320	1305	450	715	1740	1740	895	1430
	43 (18) 33			710	1430	630	950	410	1525	510	765	2345	2345	1205	1925
	54 (16) 50			710	1430	630	950	415	1525	510	765	2520	2560	1315	2105
	68 (14) 50			890	1540	630	950	440	1525	510	765	2890	2890	1485	2375
	97 (12) 50			890	1540	630	950	440	1525	510	765	2890	2890	1485	2375

Notes:

1 Listed capacities are in accordance with provisions of AISI S100-16 (R2020)/S2-20 and ICC-ES AC261.
2 Tabulated load capacities are based on the following considerations:
   a. Framing Connection: ClarkDietrich Proprietary Deflection Screws (0.25" dia)
   b. Connection to Structure: (2) 1/4" Φ Fasteners connected through provided drift bushings to 3/16" thick ASTM A36 Steel (see illustrations for base connection details)
   c. Listed capacities have not been increased for wind, seismic, or other factors.
3 ASD and LRFD loads are based on nominal capacities only. 1/8" service loads are listed in a separate column. Designer shall use governing loads based on 1/8" service loads and ASD/LRFD loads.
4 ClarkDietrich Deflection Screws (0.25" dia) used to attach clips to framing members through the provided slotted holes. Listed capacities applicable for screws centered and off-centered/ offset D-FCSC Clip slots for framing connection.
5 The safety factor for ASD loads and resistance factor for LRFD loads are in accordance with Chapter K of AISI-S100.
6 1/4" fasteners in steel shall have a nominal shear capacity of 2970 lbs and minimum tension capacity of 2307 lbs according to ESR-1976 and manufacturer's limits.
7 1/4" fasteners shall be attached to the structure in accordance with manufacturer's installation instructions.
8 The ClarkDietrich Proprietary Deflection screws (0.25" dia) provide nominal shear capacity of 2400lbs and a nominal tension capacity of 4060lbs.
9 Nominal capacities are listed for use in blast/seismic designs and they do not assume a safety factor or resistance factor.
10 It is the responsibility of the design professional to detail the project drawings for proper D-FCSC68 clip installation.

Drift FastClip™ Slide Clip - 68mils (14ga)

Curtain Wall/Bypass with Drift & Vertical Deflection

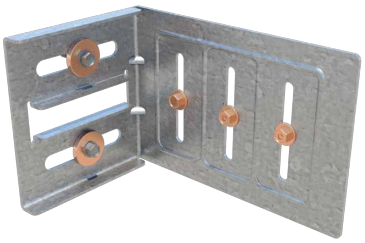
ATTACHMENT TO STRUCTURE: (2) 1/4" Φ HILTI KH-EZ ANCHORS

Clip Designation	Stud Thickness / Yield Strength mils (ga) ksi	Proprietary Deflection Screws	Mechanically Anchored to Structure	Load Capacities (lbs) / Clip											
				Tension (F2) - Center				Tension (F2) - Offset				Compression (F3)			
				1/8" Service Load	Nominal Load	ASD Load	LRFD Load	1/8" Service Load	Nominal Load	ASD Load	LRFD Load	1/8" Service Load	Nominal Load	ASD Load	LRFD Load
D-FCSC3.5-68	33 (20) 33	2	(2) 1/4" Hilti Kwik HUS-EZ (2-1/2" Embedment in to 3000psi cracked concrete)	645	1070	365	865	335	1000	435	695	1215	1215	605	905
	43 (18) 33			825	1440	540	865	335	1160	435	695	1810	1810	945	1510
	54 (16) 50			845	1440	540	865	335	1160	435	695	2475	2910	1495	2390
	68 (14) 50			970	1440	540	865	395	1160	435	695	2480	3015	1040	1660
	97 (12) 50			970	1440	540	865	395	1160	435	695	2480	3015	1040	1660
D-FCSC6-68	33 (20) 33	3		680	1405	485	865	330	1160	435	695	1825	1825	905	1360
	43 (18) 33			905	1440	540	590	365	1160	435	695	2340	2340	1200	1920
	54 (16) 50			915	1440	540	865	395	1160	435	695	3395	3395	1745	2790
	68 (14) 50			990	1440	540	865	450	1160	435	695	3930	4180	2145	3435
	97 (12) 50			990	1440	540	865	450	1160	435	695	3930	4180	2145	3435
D-FCSC8-68	33 (20) 33	4		680	1430	540	865	320	1160	435	695	1740	1740	895	1430
	43 (18) 33			710	1430	540	775	410	1160	435	695	2345	2345	1205	1925
	54 (16) 50			710	1430	540	865	415	1160	435	695	2520	2560	1315	2105
	68 (14) 50			890	1440	540	865	440	1160	435	695	2890	2890	1485	2375
	97 (12) 50			890	1440	540	865	440	1160	435	695	2890	2890	1485	2375

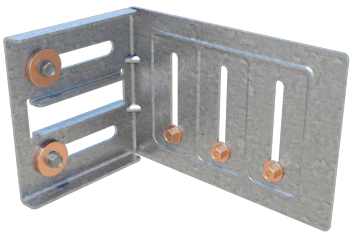
Notes:

1 Listed capacities are in accordance with provisions of AISI S100-16 (R2020)/S2-20, ICC-ES AC261 and ACI 318-19.
2 Tabulated load capacities are based on the following considerations:
- **a.** Framing Connection: ClarkDietrich Proprietary Deflection Screws (0.25" dia)
- **b.** Connection to Structure: (2) 1/4" Φ Hilti KH-EZ Anchors connected through provided drift bushings to 3000psi cracked concrete. Minimum concrete thickness shall be 6-1/2", edge distance shall be 2-1/4".
- **c.** Embedment to Concrete: Nominal embedment depth = 2-1/2" for 1/4" KH-EZ anchors.
- **d.** Other fasteners/anchors may be used to achieve full clip capacity but must be designed separately.
- **e.** Listed capacities have not been increased for wind, seismic, or other factors.

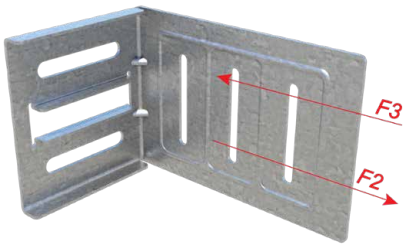
3 ASD and LRFD loads are based on nominal capacities only. 1/8" service loads are listed in a separate column. Designer shall use governing loads based on 1/8" service loads and ASD/LRFD Loads.
4 ClarkDietrich Proprietary Deflection Screws (0.25" dia) used to attach clips to framing members through the provided slotted holes.
5 Listed capacities applicable for framing screws centered and offset in D-FCSC clip slots. For connection to structure, base anchors are assumed to be uniformly loaded.
6 The safety factor for ASD loads and resistance factor for LRFD loads are in accordance with Chapter K of AISI-S100 and ESR3027.
7 The ClarkDietrich Proprietary Deflection Screws (0.25" dia) provide nominal shear capacity of 2400lbs and a nominal tension capacity of 4060lbs.
8 The Hilti 1/4" Φ KH-EZ Anchors shall have a LRFD shear capacity of 1735lbs and LRFD tension capacity of 830lbs according to ESR 3027 and ACI 318-19.
9 Anchor Strength in Concrete considerations per ACI 318-19 and ESR 3027.
10 Nominal capacities are listed for use in blast/seismic designs and they do not assume a safety factor or resistance factor.
11 Hilti is a registered trademark of Hilti Aktiengeseilschaft Corporation.
12 It is the responsibility of the design professional to detail the project drawings for proper D-FCSC68 clip installation.



STRUCTURE AND FRAMING CENTERED CONNECTION[1]
Drift Bushings & Framing Fasteners



STRUCTURE AND FRAMING OFFSET CONNECTION[2]
Drift Bushings & Framing Fasteners



TENSION (F2) / COMPRESSION (F3)

Drift FastClip™ Slide Clip - 97mils (12ga)

Curtain Wall/Bypass with Drift & Vertical Deflection

Vertical and lateral building movement up to 2".

ClarkDietrich Drift FastClip™ Slide Clip 97mils (12ga) is used to attach exterior curtain-wall studs to the building structure and provide for both vertical and lateral movement. Proprietary HD Deflection Screws are provided with each clip for attachment to the wall studs and allow for 2" vertical deflection (1" up and down) to ensure friction-free sliding. Step bushings are provided for the connection to the structure and allow for 2" lateral deflection (1" left and right).

MATERIAL SPECIFICATIONS

Gauge: 12 gauge (97mils)
Design Thickness: 0.1017 inches
Yield Strength: 50ksi
Coating: G90

PRODUCT DIMENSIONS

D-FCSC3.5: 3-3/4" x 4" x 3-1/2" long
D-FCSC6: 3-3/4" x 4" x 6" long
D-FCSC8: 3-3/4" x 4" x 7-3/4" long

CODE APPROVALS & PERFORMANCE STANDARDS

IAPMO ER-729
AISI S100

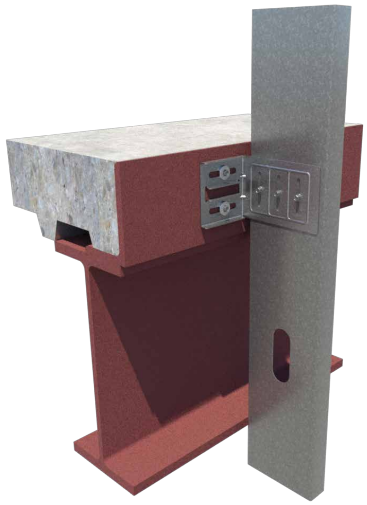
ALTERNATIVE PRODUCTS

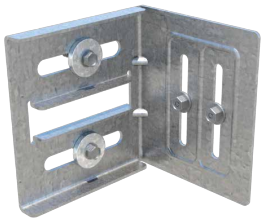
Drift Rail and Clip

INSTALLATION

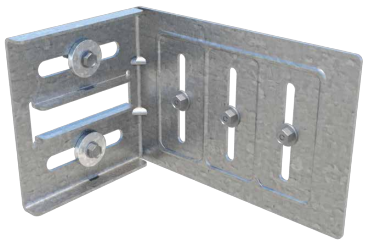
To attach the clip to the cold-formed steel framing, two, three or four Proprietary HD Deflection Screws (based upon clip size), shall be driven through the slotted holes and positioned to allow for the appropriate building deflection.

Attachment to the primary structure can be made with fasteners, or bolt anchors. Structure attachments shall be driven through the drift bushings and the Drift FastClip™ - centered or offset in the drift slots.

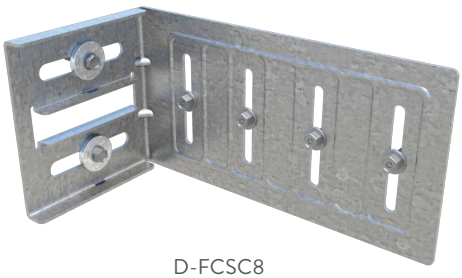




D-FCSC3.5



D-FCSC6

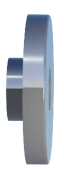


D-FCSC8

Drift FastClip™ Slide Clip (D-FCSC)

Clip Designation	Thickness		Size (in)	Bushings per Clip	Slots / Deflection Screws per Clip
	mils (ga)	Design Thickness (in)			
D-FCSC3.5-97	97 (12)	0.1017	3-1/2	2	2
D-FCSC6-97	97 (12)	0.1017	6	2	3
D-FCSC8-97	97 (12)	0.1017	7-3/4	2	4

Packaging: 25 Clips per Bucket
D-FCSC3.5 includes (55) Proprietary HD Deflection Screws & (50) Bushings
D-FCSC6 includes (80) Proprietary HD Deflection Screws & (50) Bushings
D-FCSC8 includes (110) Proprietary HD Deflection Screws & (50) Bushings



Silver Colored Bushing for 12ga Clips



Proprietary HD Deflection Screws (10ga and 12ga clips only)

The technical content of this literature is effective 04/09/26 and supersedes all previous information.

Drift FastClip™ Slide Clip - 97mils (12ga)

Curtain Wall/Bypass with Drift & Vertical Deflection

ATTACHMENT TO STRUCTURE: DESIGNED BY OTHERS

Clip Designation	Framing Member Details				Load Capacities (lbs) / Clip											
					Tension (F2) - Center				Tension (F2) - Offset				Compression (F3)			
	Stud Depth (in)	Proprietary HD Deflection Screws	Stud Thickness mils (ga)	Yield Strength, ksi	1/8" Service Load	Nominal Load	ASD Load	LRFD Load	1/8" Service Load	Nominal Load	ASD Load	LRFD Load	1/8" Service Load	Nominal Load	ASD Load	LRFD Load
D-FCSC3.5-97	3-5/8	2	43 (18)	33	1020	1745	600	905	355	1420	605	905	1775	1810	605	905
			54 (16)	50	1220	2390	1065	1600	440	1950	1005	1600	2690	3360	1225	1840
			68 (14)	50	1230	2570	1065	1600	520	2980	1025	1600	2910	4185	1735	2600
			97 (12)	50	1275	2595	1065	1600	540	3200	1065	1600	3850	5950	2030	3050
D-FCSC6-97	6	3	43 (18)	33	1335	2450	840	1350	475	2110	905	1360	2930	2715	905	1360
			54 (16)	50	1380	2450	1065	1600	475	2110	725	1160	3860	4325	1840	2755
			68 (14)	50	1380	2655	1065	1600	590	2885	990	1590	4625	5875	2600	3900
			97 (12)	50	1435	2655	1065	1600	615	3200	1065	1600	5140	7970	3050	4570
D-FCSC8-97	8	4	43 (18)	33	1360	2735	1065	1600	485	2335	805	1285	2930	3185	1205	1810
			54 (16)	50	1360	2735	1065	1600	485	2515	865	1385	4750	4995	2450	3675
			68 (14)	50	1495	2735	1065	1600	485	3200	1065	1600	5195	6100	3135	5015
			97 (12)	50	1495	2735	1065	1600	535	3200	1065	1600	6505	7260	3730	5965

Notes:

1 Listed capacities are in accordance with provisions of AISI S100-16 (R2020)/S2-20, and ICC-ES AC261.
2 Tabulated load capacities are based on the following considerations:
  a. Framing Connection: ClarkDietrich Proprietary HD Deflection Screws (0.25" dia)
  b. Connection to Structure: Designed by others.
  c. Listed capacities have not been increased for wind, seismic, or other factors.
3 ASD and LRFD loads are based on nominal capacities only. 1/8" service loads are listed in a separate column. Designer shall use governing loads based on 1/8" service load and ASD/LRFD loads.
4 Nominal capacities are listed for use in blast/seismic designs and they do not assume a safety factor or resistance factor.
5 The safety factor for ASD loads and resistance factor for LRFD loads are in accordance with Chapter K of AISI-S100.
6 ClarkDietrich Proprietary HD Deflection Screws (0.25" dia) used to attach clips to framing members through the provided slotted holes.
7 Listed capacities applicable for framing screws centered and offset in D-FCSC clip slots. For connection to structure, base anchors designed by others.
8 The ClarkDietrich Proprietary HD Deflection screws (0.25" dia) provide nominal shear capacity of 2400lbs and a nominal tension capacity of 4060lbs.
9 It is the responsibility of the design professional to detail the project drawings for proper D-FCSC97 clip installation.
10 Other framing members may be used with these clips; however, it is the responsibility of the design professional to verify the framing members' capacities and potential failure modes.

ATTACHMENT TO STRUCTURE: (2) 1/4" Φ FASTENERS TO 3/16" STEEL

Clip Designation	Stud Thickness / Yield Strength mils (ga) ksi	Proprietary HD Deflection Screws	Mechanically Anchored to Structure	Load Capacities (lbs) / Clip											
				Tension (F2) - Center				Tension (F2) - Offset				Compression (F3)			
				1/8" Service Load	Nominal Load	ASD Load	LRFD Load	1/8" Service Load	Nominal Load	ASD Load	LRFD Load	1/8" Service Load	Nominal Load	ASD Load	LRFD Load
D-FCSC3.5-97	33 (20) 33	2	(2) 1/4"-20 fasteners in 3/16" steel	645	1070	365	590	335	1000	510	765	1215	1215	605	905
	43 (18) 33			1020	1745	600	905	355	1420	605	905	1775	1810	605	905
	54 (16) 50			1220	2305	840	1260	440	1950	675	1015	2690	3360	1225	1840
	68 (14) 50			1230	2305	840	1260	520	2025	675	1015	2910	4185	1735	2600
	97 (12) 50			1275	2305	840	1260	540	2025	675	1015	3850	5950	2030	3050
D-FCSC6-97	33 (20) 33	3		680	1405	485	775	330	1440	510	765	1825	1825	905	1360
	43 (18) 33			1335	2305	840	1260	475	2025	675	1015	2715	2715	905	1360
	54 (16) 50			1380	2305	840	1260	475	2025	675	1015	3860	4325	1840	2755
	68 (14) 50			1380	2305	840	1260	590	2025	675	1015	4625	5875	2600	3900
	97 (12) 50			1435	2305	840	1260	615	2025	675	1015	5140	7970	3050	4570
D-FCSC8-97	33 (20) 33	4		680	1430	630	950	320	1305	450	715	1740	1740	895	1430
	43 (18) 33			1360	2305	840	1260	485	2025	675	1015	2930	3185	1205	1810
	54 (16) 50			1360	2305	840	1260	485	2025	675	1015	4750	4995	2450	3675
	68 (14) 50			1495	2305	840	1260	485	2025	675	1015	5195	6100	3135	5015
	97 (12) 50			1495	2305	840	1260	535	2025	675	1015	6505	7260	3210	5965

Notes:

1 Listed capacities are in accordance with provisions of AISI S100-16 (R2020)/S2-20 and ICC-ES AC261.
2 Tabulated load capacities are based on the following considerations:
  a. Framing Connection: ClarkDietrich Proprietary HD Deflection Screws (0.25" dia)
  b. Connection to Structure: (2) 1/4" Φ Fasteners connected through provided drift bushings to 3/16" thick ASTM A36 Steel (see illustrations for base connection details)
  c. Listed capacities have not been increased for wind, seismic, or other factors.
3 ASD and LRFD loads are based on nominal capacities only. 1/8" service loads are listed in a separate column. Designer shall use governing loads based on 1/8" service loads and ASD/LRFD loads.
4 ClarkDietrich Proprietary HD Deflection Screws (0.25" dia) used to attach clips to framing members through the provided slotted holes. Listed capacities applicable for screws centered and off-centered/offset D-FCSC Clip slots for framing connection.
5 The safety factor for ASD loads and resistance factor for LRFD loads are in accordance with Chapter K of AISI-S100.
6 1/4" fasteners in steel shall have a nominal shear capacity of 2970lbs and minimum tension capacity of 2307lbs according to ESR-1976 and manufacturer's limits.
7 1/4" fasteners shall be attached to the structure in accordance with manufacturer's installation instructions.
8 The ClarkDietrich Proprietary HD Deflection screws (0.25" dia) provide nominal shear capacity of 2400lbs and a nominal tension capacity of 4060lbs.
9 Nominal capacities are listed for use in blast/seismic designs and they do not assume a safety factor or resistance factor.
10 It is the responsibility of the design professional to detail the project drawings for proper D-FCSC97 clip installation.

ATTACHMENT TO STRUCTURE: (2) 1/4" Φ HILTI KH-EZ ANCHORS

Clip Designation	Stud Thickness / Yield Strength mils (ga) ksi	Proprietary HD Deflection Screws	Mechanically Anchored to Structure	Load Capacities (lbs) / Clip											
				Tension (F2) - Center				Tension (F2) - Offset				Compression (F3)			
				1/8" Service Load	Nominal Load	ASD Load	LRFD Load	1/8" Service Load	Nominal Load	ASD Load	LRFD Load	1/8" Service Load	Nominal Load	ASD Load	LRFD Load
D-FCSC3.5-97	33 (20) 33	2	(2) 1/4" Hilti Kwik HUS-EZ (2-1/2" Embedment in to 3000psi cracked concrete)	645	1070	365	865	335	1000	435	695	1215	1215	605	905
	43 (18) 33			1020	1440	540	865	355	1160	435	695	1775	1810	605	905
	54 (16) 50			1220	1440	540	865	440	1160	435	695	2690	3360	1225	1840
	68 (14) 50			1230	1440	540	865	520	1160	435	695	2910	4185	1735	2600
	97 (12) 50			1275	1440	540	865	540	1160	435	695	3850	5950	2030	3050
D-FCSC6-97	33 (20) 33	3		680	1405	485	865	330	1160	435	695	1825	1825	905	1360
	43 (18) 33			1335	1440	540	865	475	1160	435	695	2715	2715	905	1360
	54 (16) 50			1380	1440	540	865	475	1160	435	695	3860	4325	1840	2755
	68 (14) 50			1380	1440	540	865	590	1160	435	695	4625	5875	2600	3900
	97 (12) 50			1435	1440	540	865	615	1160	435	695	5140	7970	3050	4570
D-FCSC8-97	33 (20) 33	4		680	1430	540	865	320	1160	435	695	1740	1740	895	1430
	43 (18) 33			1360	1440	540	865	485	1160	435	695	2930	3185	1205	1810
	54 (16) 50			1360	1440	540	865	485	1160	435	695	4750	4995	2450	3675
	68 (14) 50			1440	1440	540	865	485	1160	435	695	5195	6100	3135	5015
	97 (12) 50			1440	1440	540	865	535	1160	435	695	6505	7260	3730	5965

Notes:

1 Listed capacities are in accordance with provisions of AISI S100-16 (R2020)/S2-20, ICC-ES AC261 and ACI 318-19.

2 Tabulated load capacities are based on the following considerations:

a. Framing Connection: ClarkDietrich Proprietary HD Deflection Screws (0.25" dia)

b. Connection to Structure: (2) 1/4" Φ Hilti KH-EZ Anchors connected through provided drift bushings to 3000psi Cracked Concrete. Minimum concrete thickness shall be 6-1/2", edge distance shall be 2-1/4".

c. Embedment to Concrete: Nominal embedment depth = 2-1/2" for 1/4" KH-EZ anchors.

d. Other fasteners/anchors may be used to achieve full clip capacity but must be designed separately.

e. Listed capacities have not been increased for wind, seismic, or other factors.

3 ASD and LRFD loads are based on nominal capacities only. 1/8" service loads are listed in a separate column. Designer shall use governing loads based on 1/8" service loads and ASD/LRFD loads.

4 ClarkDietrich Proprietary HD Deflection Screws (0.25" dia) used to attach clips to framing members through the provided slotted holes.

5 Listed capacities applicable for framing screws centered and offset in D-FCSC clip slots. For connection to structure, base anchors are assumed to be uniformly loaded.

6 The safety factor for ASD loads and resistance factor for LRFD loads are in accordance with Chapter K of AISI-S100 and ESR3027.

7 The ClarkDietrich Proprietary HD Deflection screws (0.25" dia) provide nominal shear capacity of 2400lbs and a nominal tension capacity of 4060lbs.

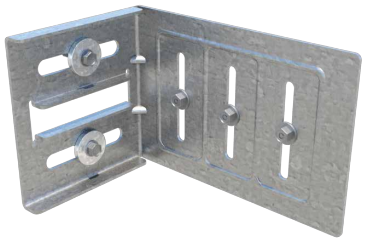
8 The Hilti 1/4" Φ KH-EZ Anchors shall have a LRFD shear capacity of 1735lbs and LRFD tension capacity of 830lbs according to ESR 3027 and ACI 318-19.

9 Anchor Strength in Concrete considerations per ACI 318-19 and ESR 3027.

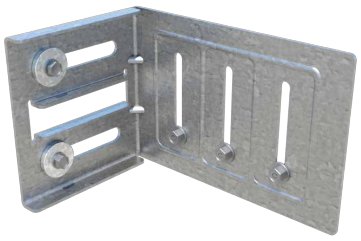
10 Nominal capacities are listed for use in blast/seismic designs and they do not assume a safety factor or resistance factor.

11 Hilti is a registered trademark of Hilti Aktiengeseilschaft Corporation.

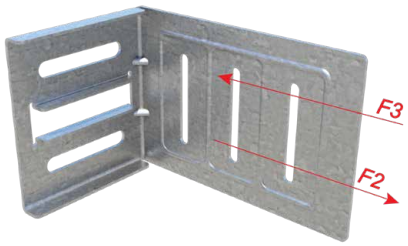
12 It is the responsibility of the design professional to detail the project drawings for proper D-FCSC97 clip installation.



STRUCTURE AND FRAMING
CENTERED CONNECTION[1]
Drift Bushings & Framing Fasteners



STRUCTURE AND FRAMING
OFFSET CONNECTION[2]
Drift Bushings & Framing Fasteners



TENSION (F2) / COMPRESSION (F3)

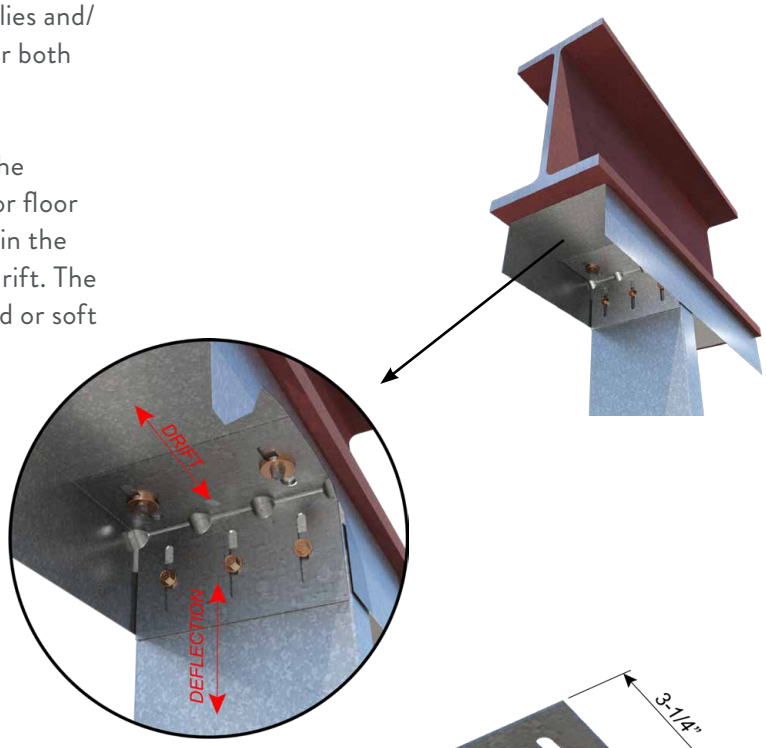
Drift Head-of-Wall

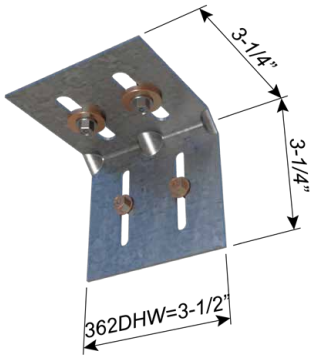
Head-of-Wall drift and deflection connection

Head-of-Wall drift and deflection for exterior curtain wall and interior nonload-bearing walls

ClarkDietrich's Drift Head-of-Wall Clips are used in deflection conditions for in-fill curtain wall assemblies and/or interior nonload-bearing partitions to provide for both vertical (deflection) and lateral (drift) movement.

The Drift Head-of-Wall Clips can be attached to the underside of structural members, concrete decks or floor assemblies. Structural attachments are positioned in the center of the slot with a bushing to allow building drift. The Drift Head-of-Wall clip can be installed on the hard or soft side of the stud.





MATERIAL SPECIFICATIONS

Gauge: 18 gauge (43mils)
Design Thickness: 0.0451 inches

Gauge: 14 gauge (68mils)
Design Thickness: 0.0713 inches

Gauge: 12 gauge (97mils)
Design Thickness: 0.1017 inches

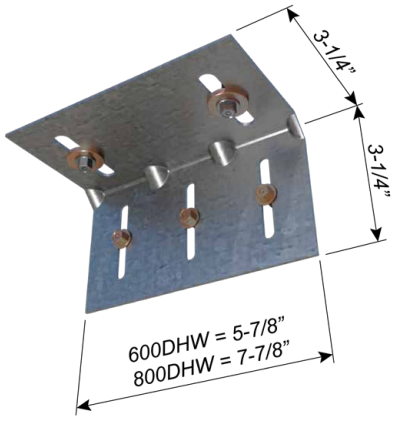
Yield Strength: 50ksi
Coating: G90

CODE APPROVALS & PERFORMANCE STANDARDS

IAPMO ER-729
AISI S100

Drift Head-of-Wall (DHW)

Clip Designation	mils (ga)	Design Thickness (in)	Clip Length (in)	Clips/ Bucket	Bushings/ Bucket	Screws/ Bucket
362DHW-43	43 (18)	0.0451	3-1/2	50	100	110
362DHW-68	68 (14)	0.0713	3-1/2	50	100	110
362DHW-97	97 (12)	0.1017	3-1/2	50	100	110
600DHW-43	43 (18)	0.0451	5-7/8	50	100	160
600DHW-68	68 (14)	0.0713	5-7/8	50	100	160
600DHW-97	97 (12)	0.1017	5-7/8	25	50	80
800DHW-43	43 (18)	0.0451	7-7/8	50	100	160
800DHW-68	68 (14)	0.0713	7-7/8	25	50	80
800DHW-97	97 (12)	0.1017	7-7/8	25	50	80



INSTALLATION

Attach to primary structure using 1/4" fasteners with drift bushings for steel applications or 1/4" anchors with drift bushings for concrete. Proprietary Deflection Screws are used to attach the clip to the cold-formed steel framing. Screws shall be driven through the slotted holes and positioned to allow for the appropriate building deflection.

Drift Bushing and Deflection Screws

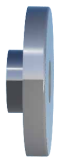
Step bushings are provided for the connection to the structure and allow for 2" lateral deflection (1" left and right). Proprietary Deflection Screws are provided for the connection of the clip to the stud, and allow for 2" vertical deflection (1" up and down). These fasteners eliminate drag, binding or resistance that can often occur with common fasteners.



Copper Colored Bushing for 18ga and 14ga Clips



Proprietary Deflection Screws (For Stud Connection)



Silver Colored Bushing for 12ga Clips



Proprietary HD Deflection Screws (12ga clips only) (For Stud Connection)

Drift Head-of-Wall

Head-of-Wall drift and deflection connection

Drift Head-of-Wall (DHW-43)

DEFLECTION CONNECTIONS

Clip Designation	Framing Details			Loads Capacities (lbs)							
				Shear (F4) - Center*				Shear (F4) - Offset*			
	Stud Depth (in)	Thickness mils (ga)	Yield Strength (ksi)	1/8" Service Load	Nominal Load	ASD Load	LRFD Load	1/8" Service Load	Nominal Load	ASD Load	LRFD Load
362DHW-43	3-5/8	33 (20)	33	40	505	260	415	15	575	295	475
		43 (18)	33	45	545	280	445	15	795	410	655
		54 (16)	50	80	545	280	445	20	1040	535	855
600DHW-43	6	33 (20)	33	135	765	395	630	55	990	510	815
		43 (18)	33	235	805	415	665	75	1255	605	905
		54 (16)	50	265	860	440	705	90	1700	605	905
800DHW-43	8	33 (20)	33	480	1095	560	900	155	1160	400	640
		43 (18)	33	490	1355	605	905	185	1575	540	870
		54 (16)	50	530	1810	605	905	225	1810	605	905

Drift Head-of-Wall (DHW-68)

DEFLECTION CONNECTIONS

Clip Designation	Framing Details			Loads Capacities (lbs)							
				Shear (F4) - Center*				Shear (F4) - Offset*			
	Stud Depth (in)	Thickness mils (ga)	Yield Strength (ksi)	1/8" Service Load	Nominal Load	ASD Load	LRFD Load	1/8" Service Load	Nominal Load	ASD Load	LRFD Load
362DHW-68	3-5/8	33 (20)	33	160	835	405	610	100	710	365	585
		43 (18)	33	200	1295	605	905	120	1065	545	875
		54 (16)	50	200	1295	445	715	120	1530	525	840
		68 (14)	50	215	1295	445	715	130	1860	640	1025
		97 (12)	50	220	1485	510	820	130	2085	720	1150
600DHW-68	6	33 (20)	33	535	1225	610	910	195	1155	595	910
		43 (18)	33	535	1825	830	1325	195	1955	905	1360
		54 (16)	50	610	2695	925	1485	280	2620	900	1445
		68 (14)	50	610	2795	965	1540	280	3010	1035	1655
		97 (12)	50	620	2795	965	1540	315	3960	1365	2180
800DHW-68	8	33 (20)	33	1210	1680	610	910	445	1490	610	910
		43 (18)	33	1285	2540	905	1360	455	2660	905	1360
		54 (16)	50	1410	3745	1290	2065	455	3700	1275	2040
		68 (14)	50	1455	3980	1370	2190	455	4305	1460	2195
		97 (12)	50	1540	4280	1460	2195	460	4385	1460	2195

Drift Head-of-Wall (DHW-97)

DEFLECTION CONNECTIONS

Clip Designation	Framing Details			Loads Capacities (lbs)							
				Shear (F4) - Center*				Shear (F4) - Offset*			
	Stud Depth (in)	Thickness mils (ga)	Yield Strength (ksi)	1/8" Service Load	Nominal Load	ASD Load	LRFD Load	1/8" Service Load	Nominal Load	ASD Load	LRFD Load
362DHW-97	3-5/8	33 (20)	33	150	850	405	610	85	885	405	610
		43 (18)	33	220	1275	605	905	85	1430	605	905
		54 (16)	50	240	1655	570	910	125	1790	615	985
		68 (14)	50	240	1675	575	925	130	1945	670	1070
		97 (12)	50	330	1675	575	925	145	1960	675	1080
600DHW-97	6	33 (20)	33	665	1155	595	910	270	1490	610	910
		43 (18)	33	690	1615	830	1325	325	2360	905	1360
		54 (16)	50	875	2750	945	1515	325	3210	1105	1770
		68 (14)	50	1000	2750	945	1515	325	3425	1180	1885
		97 (12)	50	1200	2970	1020	1635	415	3425	1180	1885
800DHW-97	8	33 (20)	33	1355	1350	610	910	340	1725	610	910
		43 (18)	33	1580	2145	905	1360	410	2715	905	1360
		54 (16)	50	1640	4525	1560	2495	520	4420	1520	2435
		68 (14)	50	1640	5195	1790	2860	740	4420	1520	2435
		97 (12)	50	2320	5390	1855	2970	740	4470	1540	2460

Notes:

1 Listed capacities were derived from calculations and structural tests in accordance with provisions of AISI S100-16(R2020)/S2-20 and ICC-ES AC261.

2 ASD and LRFD loads are based on calculated nominal capacities only without considering 1/8" service loads. Designer shall use governing loads based on 1/8" service and strength capacities.

3 The safety factor for ASD loads and resistance factor for LRFD loads are calculated in accordance with Chapter K of AISI-S100.

4 *The shear deflection tests were carried out with:
- Center condition (fasteners (w/drift bushings) and framing screws centered in slots)
- Off-set condition (fasteners (w/drift bushings) and framing screws at far end of slots).

5 For Center Condition a stand-off distance of 1" was provided between end of the framing and clip structural leg.

6 For Offset Condition a stand-off distance of 2" was provided between end of the framing and clip structural leg.

7 ClarkDietrich Proprietary Deflection Screws (0.25" dia) were used to attach clips to framing members through the provided slotted holes.

8 It is the responsibility of the design professional to detail the project drawings for proper Drift Head-of-Wall installation.

9 Other framing members may be used with these clips; however, it is the responsibility of the design professional to verify the framing members' capacities and potential failure modes.

Drift Head-of-Wall (DHW-43)

Table 1

Clip Designation	Stud Thickness / Yield Strength mils (ga) ksi	Mechanically Anchored to Structure	Load Capacities (Lbs) / Clip							
			Shear (F4) - Center				Shear (F4) - Offset			
			1/8" Service Load	Nominal Load	ASD Load	LRFD Load	1/8" Service Load	Nominal Load	ASD Load	LRFD Load
362DHW-43	33 (20) 33	1/4" - 20 Fasteners in 3/16" Steel	40	505	260	415	15	575	295	475
	43 (18) 33		45	545	280	445	15	795	410	655
	54 (16) 50		80	545	280	445	20	1040	535	855
600DHW-43	33 (20) 33		135	765	395	630	55	990	510	815
	43 (18) 33		235	805	415	665	75	1255	605	905
	54 (16) 50		265	860	440	705	90	1700	605	905
800DHW-43	33 (20) 33		480	1095	560	900	155	1160	400	640
	43 (18) 33		490	1355	605	905	185	1575	540	870
	54 (16) 50		530	1810	605	905	225	1810	605	905

Table 2

Clip Designation	Stud Thickness / Yield Strength mils (ga) ksi	Mechanically Anchored to Structure	Load Capacities (Lbs) / Clip							
			Shear (F4) - Center				Shear (F4) - Offset			
			1/8" Service Load	Nominal Load	ASD Load	LRFD Load	1/8" Service Load	Nominal Load	ASD Load	LRFD Load
362DHW-43	33 (20) 33	1/4" Hilti Kwik HUS-EZ (2-1/2" Embedment in to 3000psi cracked concrete)	40	505	260	415	15	575	295	475
	43 (18) 33		45	545	280	445	15	795	410	655
	54 (16) 50		80	545	280	445	20	1040	535	855
600DHW-43	33 (20) 33		135	765	395	630	55	990	510	815
	43 (18) 33		235	805	415	665	75	1215	605	905
	54 (16) 50		265	860	440	705	90	1215	605	905
800DHW-43	33 (20) 33		480	1095	560	900	155	1160	400	640
	43 (18) 33		490	1215	605	905	185	1575	540	870
	54 (16) 50		530	1215	605	905	225	1810	605	905

Notes:

1 Listed capacities were derived from calculations and structural tests in accordance with provisions of AISI S100-16(R2020)/S2-20, ICC-ES AC261, and ACI 318-19.

2 Table-1 shall be applicable when 1/4" fasteners (w/drift bushings) are used for attachment to steel structure.

3 Table-2 shall be applicable when 1/4" Hilti Kwik HUS-EZ Anchors (w/ drift bushings) are used for attachment to concrete structure.

4 ASD and LRFD loads are based on calculated nominal capacities only. 1/8" service loads are listed in a separate column. Designer shall use governing loads based on 1/8" service and strength.

5 Lateral bridging within 12" of the connection is recommended to minimize torsional effects on the stud.

6 DHW clip allows up to 2" (±1") of vertical displacement, and 2" (±1") of drift in the place of the wall.

- **a.** "Center" condition is for the Center configuration of both Drift and Vertical Displacement
- **b.** "Offset" condition is for the Offset configuration of both Drift and Vertical Displacement

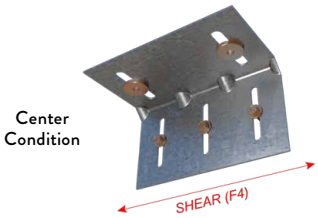
7 ClarkDietrich Proprietary Deflection Screws (0.25" dia) shall be used to attach clips to framing members through the provided slotted holes.

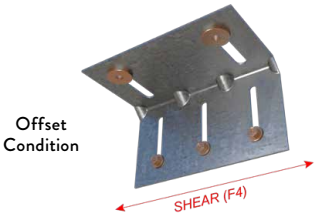
8 For anchors in concrete, the listed values are applicable only for following:

- **a.** Anchor embedment depth of 2-1/2"
- **b.** Minimum of 4.5" edge distance perpendicular to concrete edge
- **c.** Anchor attachment spacing provided for 362DHW, 600DHW and 800DHW
- **d.** Minimum concrete thickness of 4-1/8"
- **e.** 3000psi normal weight cracked concrete

9 Capacities have not been increased for wind, seismic, or other factors.

10 It is the responsibility of the design professional to detail the project drawings for proper Drift Head-of-Wall installation.





Drift Head-of-Wall

Head-of-Wall drift and deflection connection

Drift Head-of-Wall (DHW-68)

Table 1

Clip Designation	Stud Thickness / Yield Strength mils (ga) ksi	Mechanically Anchored to Structure	Load Capacities (Lbs) / Clip							
			Shear (F4) - Center				Shear (F4) - Offset			
			1/8" Service Load	Nominal Load	ASD Load	LRFD Load	1/8" Service Load	Nominal Load	ASD Load	LRFD Load
362DHW-68	33 (20) 33	1/4" - 20 Fasteners in 3/16" Steel	150	835	405	610	85	710	365	585
	43 (18) 33		200	1275	445	715	85	1065	525	840
	54 (16) 50		200	1295	445	715	120	1530	525	840
	68 (14) 50		215	1295	445	715	130	1860	640	1025
	97 (12) 50		220	1485	510	820	130	1960	675	1080
600DHW-68	33 (20 33		535	1155	595	910	195	1155	595	910
	43 (18) 33		535	1615	830	1325	195	1955	905	1360
	54 (16) 50		610	2695	925	1485	280	2620	900	1445
	68 (14) 50		610	2750	945	1515	280	3010	1035	1655
	97 (12) 50		620	2795	965	1540	315	3425	1180	1885
800DHW-68	33(20) 33		1210	1350	610	910	340	1490	610	910
	43 (18) 33		1285	2145	905	1360	410	2660	905	1360
	54 (16) 50		1410	3745	1290	2065	455	3700	1275	2040
	68 (14) 50		1455	3980	1370	2190	455	4305	1460	2195
	97 (12) 50		1540	4280	1460	2195	460	4385	1460	2195

Table 2

Clip Designation	Stud Thickness / Yield Strength mils (ga) ksi	Mechanically Anchored to Structure	Load Capacities (Lbs) / Clip							
			Shear (F4) - Center				Shear (F4) - Offset			
			1/8" Service Load	Nominal Load	ASD Load	LRFD Load	1/8" Service Load	Nominal Load	ASD Load	LRFD Load
362DHW-68	33 (20) 33	1/4" Hilti Kwik HUS-EZ (2-1/2" Embedment in to 3000psi cracked concrete)	150	835	405	610	85	710	365	585
	43 (18) 33		200	1275	445	715	85	1065	525	840
	54 (16) 50		200	1295	445	715	120	1530	525	840
	68 (14) 50		215	1295	445	715	130	1860	640	1025
	97 (12) 50		220	1485	510	820	130	1930	665	1080
600DHW-68	33 (20) 33		535	1155	595	910	195	1155	595	910
	43 (18) 33		535	1295	665	1110	195	1295	665	1110
	54 (16) 50		610	1930	665	1110	280	1930	665	1110
	68 (14) 50		610	1930	665	1110	280	1930	665	1110
	97 (12) 50		620	1930	665	1110	315	1930	665	1110
800DHW-68	33 (20) 33		1210	1295	610	910	340	1295	610	910
	43 (18) 33		1285	1295	665	1110	410	1295	665	1110
	54 (16) 50		1410	1930	665	1110	455	1930	665	1110
	68 (14) 50		1455	1930	665	1110	455	1930	665	1110
	97 (12) 50		1540	1930	665	1110	460	1930	665	1110

Notes:

1 Listed capacities were derived from calculations and structural tests in accordance with provisions of AISI S100-16(R2020)/S2-20, ICC-ES AC261, and ACI 318-19.

2 Table-1 shall be applicable when 1/4" fasteners (w/drift bushings) are used for attachment to steel structure.

3 Table-2 shall be applicable when 1/4" Hilti Kwik HUS-EZ Anchors (w/ drift bushings) are used for attachment to concrete structure.

4 ASD and LRFD loads are based on calculated nominal capacities only. 1/8" service loads are listed in a separate column. Designer shall use governing loads based on 1/8" service and strength.

5 Lateral bridging within 12" of the connection is recommended to minimize torsional effects on the stud.

6 DHW clip allows up to 2" (±1") of vertical displacement, and 2" (±1") of drift in the place of the wall.

- **a.** "Center" condition is for the Center configuration of both Drift and Vertical Displacement
- **b.** "Offset" condition is for the Offset configuration of both Drift and Vertical Displacement

7 ClarkDietrich Proprietary Deflection Screws (0.25" dia) shall be used to attach clips to framing members through the provided slotted holes.

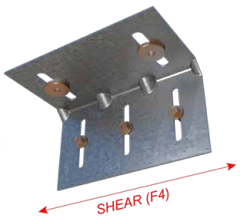
8 For anchors in concrete, the listed values are applicable only for following:

- **a.** Anchor embedment depth of 2-1/2"
- **b.** Minimum of 4.5" edge distance perpendicular to concrete edge
- **c.** Anchor attachment spacing provided for 362DHW, 600DHW and 800DHW
- **d.** Minimum concrete thickness of 4-1/8"
- **e.** 3000psi normal weight cracked concrete

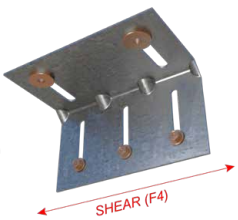
9 Capacities have not been increased for wind, seismic, or other factors.

10 It is the responsibility of the design professional to detail the project drawings for proper Drift Head-of-Wall installation.

Center Condition



Offset Condition



Drift Head-of-Wall (DHW-97)

Table 1

Clip Designation	Stud Thickness / Yield Strength mils (ga) ksi	Mechanically Anchored to Structure	Load Capacities (Lbs) / Clip							
			Shear (F4) - Center				Shear (F4) - Offset			
			1/8" Service Load	Nominal Load	ASD Load	LRFD Load	1/8" Service Load	Nominal Load	ASD Load	LRFD Load
362DHW-97	33 (20) 33	1/4" - 20 Fasteners in 3/16" Steel	150	850	405	610	85	885	405	610
	43 (18) 33		220	1275	570	905	85	1430	605	905
	54 (16) 50		240	1655	570	910	125	1790	615	985
	68 (14) 50		240	1675	575	925	130	1945	670	1070
	97 (12) 50		330	1675	575	925	145	1960	675	1080
600DHW-97	33 (20) 33		665	1155	595	910	270	1490	610	910
	43 (18) 33		690	1615	830	1325	325	2360	905	1360
	54 (16) 50		875	2750	945	1515	325	3210	1105	1770
	68 (14) 50		1000	2750	945	1515	325	3425	1180	1885
	97 (12) 50		1200	2970	1020	1635	415	3425	1180	1885
800DHW-97	33 (20) 33		1355	1350	610	910	340	1725	610	910
	43 (18) 33		1580	2145	905	1360	410	2715	905	1360
	54 (16) 50		1640	4525	1560	2495	520	4420	1520	2435
	68 (14) 50		1640	5195	1790	2860	740	4420	1520	2435
	97 (12) 50		2320	5390	1855	2970	740	4470	1540	2460

Table 2

Clip Designation	Stud Thickness / Yield Strength mils (ga) ksi	Mechanically Anchored to Structure	Load Capacities (Lbs) / Clip							
			Shear (F4) - Center				Shear (F4) - Offset			
			1/8" Service Load	Nominal Load	ASD Load	LRFD Load	1/8" Service Load	Nominal Load	ASD Load	LRFD Load
362DHW-97	33 (20) 33	1/4" Hilti Kwik HUS-EZ (2-1/2" Embedment in to 3000psi cracked concrete)	150	850	405	610	85	885	405	610
	43 (18) 33		220	1275	570	905	85	1295	605	905
	54 (16) 50		240	1655	570	910	125	1790	615	985
	68 (14) 50		240	1675	575	925	130	1930	665	1070
	97 (12) 50		330	1675	575	925	145	1930	665	1080
600DHW-97	33 (20) 33		665	1155	595	910	270	1295	610	910
	43 (18) 33		690	1295	665	1110	325	1295	665	1110
	54 (16) 50		875	1930	665	1110	325	1930	665	1110
	68 (14) 50		1000	1930	665	1110	325	1930	665	1110
	97 (12) 50		1200	1930	665	1110	415	1930	665	1110
800DHW-97	33 (20) 33		1355	1295	610	910	340	1295	610	910
	43 (18) 33		1580	1295	665	1110	410	1295	665	1110
	54 (16) 50		1640	1930	665	1110	520	1930	665	1110
	68 (14) 50		1640	1930	665	1110	740	1930	665	1110
	97 (12) 50		2320	1930	665	1110	740	1930	665	1110

Notes:

1 Listed capacities were derived from calculations and structural tests in accordance with provisions of AISI S100-16(R2020)/S2-20, ICC-ES AC261, and ACI 318-19.

2 Table-1 shall be applicable when 1/4" fasteners (w/drift bushings) are used for attachment to steel structure.

3 Table-2 shall be applicable when 1/4" Hilti Kwik HUS-EZ Anchors (w/ drift bushings) are used for attachment to concrete structure.

4 ASD and LRFD loads are based on calculated nominal capacities only. 1/8" service loads are listed in a separate column. Designer shall use governing loads based on 1/8" service and strength.

5 Lateral bridging within 12" of the connection is recommended to minimize torsional effects on the stud.

6 DHW clip allows up to 2" (±1") of vertical displacement, and 2" (±1") of drift in the place of the wall.

- **a.** "Center" condition is for the Center configuration of both Drift and Vertical Displacement
- **b.** "Offset" condition is for the Offset configuration of both Drift and Vertical Displacement

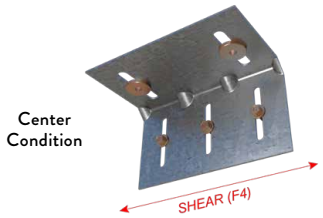
7 ClarkDietrich Proprietary Deflection Screws (0.25" dia) shall be used to attach clips to framing members through the provided slotted holes.

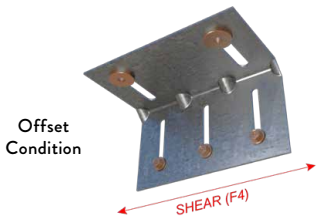
8 For anchors in concrete, the listed values are applicable only for following:

- **a.** Anchor embedment depth of 2-1/2"
- **b.** Minimum of 4.5" edge distance perpendicular to concrete edge
- **c.** Anchor attachment spacing provided for 362DHW, 600DHW and 800DHW
- **d.** Minimum concrete thickness of 4-1/8"
- **e.** 3000psi normal weight cracked concrete

9 Capacities have not been increased for wind, seismic, or other factors.

10 It is the responsibility of the design professional to detail the project drawings for proper Drift Head-of-Wall installation.





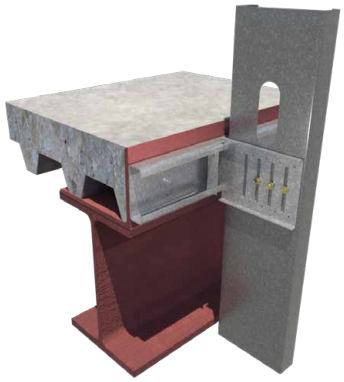
The technical content of this literature is effective 04/09/26 and supersedes all previous information.

Drift Rail and Clip

Curtain Wall/Bypass with Drift and Vertical Deflection

Vertical and lateral building movement

ClarkDietrich Drift Rail (DR) or Drift Headed Rail (DHR) with Drift Rail Clip (DRC), is a uniquely designed two-piece system that is used to attach curtain-wall studs to the building structure and allows for vertical and lateral movement or to be rigidly attached. The system utilizes a C-Shaped Drift Rail and distinctively designed Drift Rail Clips that rotate into position for easy installation. The multifaceted Drift Rail Clips use Proprietary Deflection Screws for attachment to the wall studs and allows for 3" vertical deflection (1-1/2" up and down) and is also designed with 1/8" holes to rigidly attach wall studs.



Drift Rail
(DR) Installation



Drift Headed Rail
(DHR) Installation

MATERIAL SPECIFICATIONS

Yield Strength: 50ksi
Coating: G90
ASTM: A653 / A1003

DRIFT RAIL (S)

Gauge: 12ga (97mils)
Design Thickness: 0.1017"
Min. Thickness: 0.0966"

HEADED STUD MATERIAL SPECIFICATIONS

Yield Strength: Grade 1010 through 1020, 51ksi
ASTM: A29/A108
AWS: D1.1
Dimensions: 3/8" dia. x 3" long with 3/4" head dia.

DRIFT RAIL CLIP

Gauge: 12ga (97mils)
Design Thickness: 0.1017"
Min. Thickness: 0.0966"

Gauge: 14ga (68mils)
Design Thickness: 0.0713"
Min. Thickness: 0.0677"

CODE APPROVALS & PERFORMANCE STANDARDS

IAPMO ER-729 (DHR not included)

ALTERNATIVE PRODUCTS

Drift FastClip™ Slide Clip

DRC - 12ga Clip / 12ga Rail

Clip Designation	Thickness mils (ga)	Size (in)	No. of slots per Clip	No. of holes per clip	Drift Clips per box	Prop. Screws per box
DRC3-97	97 (12)	3.3875	2	4	25	55 or 80
DRC6-97		5.875	4	8	25	55 or 80
DRC8-97		7.325	4	8	25	55 or 80

DRC - 14ga Clip / 12ga Rail

Clip Designation	Thickness mils (ga)	Size (in)	No. of slots per Clip	No. of holes per clip	Drift Clips per box	Prop. Screws per box
DRC3-68	68 (14)	3.3875	2	4	25	55 or 80
DRC6-68		5.875	4	8	25	55 or 80
DRC8-68		7.325	4	8	25	55 or 80

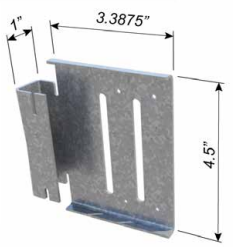
Note: 12' Drift Rail(s) are individually packaged.



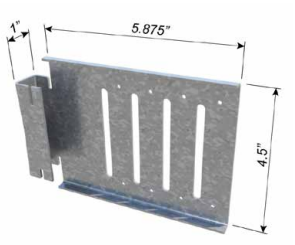
Proprietary Deflection Screw



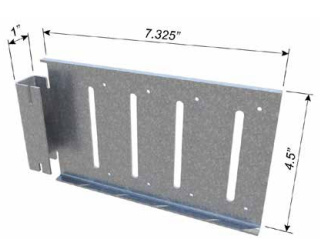
Proprietary HD Deflection Screw (10ga and 12ga Clips Only)



DRC3

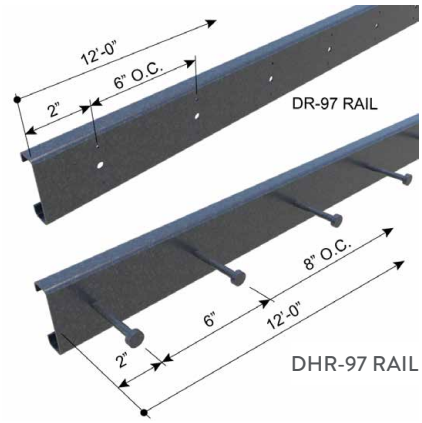


DRC6



DRC8

DR-97 RAIL



The technical content of this literature is effective 04/09/26 and supersedes all previous information.

Pub. No. CD-ClipExpress 04/26

Drift Rail and Clip

INSTALLATION

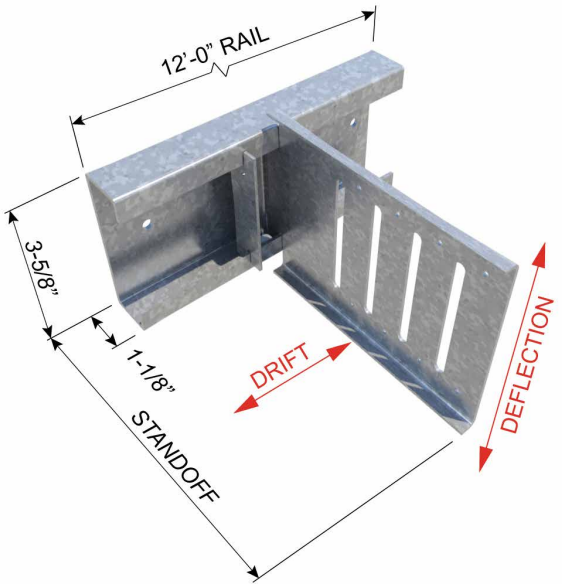
Install the Drift Rail to minimum 3/16-in thick steel support structure using:

- Welds
- PAF fasteners
- Self-drilling screws

Install the Drift Rail to concrete support structure using:

- Expansion anchors
- Screw anchors
- Cast In Place / Embedded (Drift Headed Rail only)

Pilot holes are provided along the length of the Drift Rail web at a spacing of 6-in on-center. (DR rail only)



Design load capacities for commonly used fasteners are tabulated in the product Design Guide and include:

- Hilti X-U Universal Knurled Shank Fasteners
- #12-24 HWH Fasteners
- Hilti 1/4" KWIK HUS-EZ anchor

With the Drift Rail or Drift Headed Rail installed on the structure, the Drift Clips can be positioned as required:

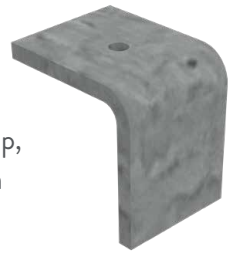
- The framing stud web must contact the flat face of the long leg of the Drift Clip.
- Note that one of the four slots in the channel portion of the Drift Clip is longer than the others.
- Tilt the Drift Clip and position it so that the longer slot initially engages one leg of the Drift Rail.
- Rotate the Drift Clip to the vertical position, engaging all four slots with the Drift Rail legs.

Connection between the Drift Clip and Framing Studs:

- For bypass connections, Proprietary Deflection Screws are placed through each slotted hole of the long leg, of the Drift Clip to the web of the stud. The required number and location of the slotted holes used to secure the stud is determined by the required design load capacity.
- For rigid connections, self-drilling screws are placed through the pilot holes around the perimeter of the long leg of the Drift Clip to the web of the stud.

To restrict clip lateral movement (Drift) along the Drift Rail, install one of two types of stops:

- Drift Locking Angle (DRLA) is an L-shaped clip
  - The long leg is inserted into the channel of the Drift Rail Clip,
  - The short leg is secured to the flange of the Drift Rail with a #10 self-drilling screw
- Drift Locking Clip (DRLC) is a C-shaped clip
  - The DRLC sits within the channel of the Drift Clip, and straddles the flanges of the Drift Rail.
  - The two outside legs of the DRLC are secured to each flange of the Drift Rail with a #10 self-drilling screw.



Drift Locking Angle (DRLA)



Drift Locking Clip (DRLC)

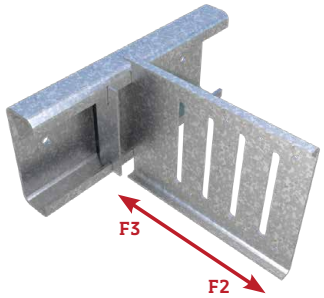
Drift Rail and Clip - Structural Attachment Designed by Others

ATTACHMENT TO STRUCTURAL: DESIGNED BY OTHERS
ATTACHMENT TO STUD: AS A DEFLECTION CONNECTION

Drift Rail and Clip - 12ga Clip / 12ga Rail

ALLOWABLE DRIFT RAIL CLIP LOADS USING CLIP AS A DEFLECTION CONNECTION

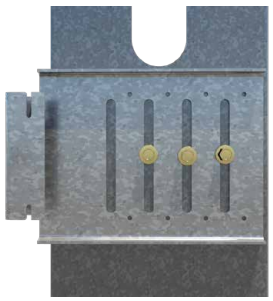
Clip Designation	Stud mils (ga)	Framing Connection		ASD Allowable Loads (lbs)	
		Screw Pattern	No. of Screws	F2 (Tension)	F3 (Compression)
DRC3-97	33 (20)	See Figure	(2) x #14	560	600
	43 (18)		(2) x #14	655	670
	54 (16)		(2) x #14	1000	970
	68 (14)		(2) x #14	1085	1325
	97 (12)		(2) x #14	1085	2040
DRC6-97	33 (20)	See Figure	(3) x #14	560	600
	43 (18)		(3) x #14	655	670
	54 (16)		(3) x #14	1000	970
	68 (14)		(3) x #14	1085	1325
	97 (12)		(3) x #14	1085	2040
DRC8-97	33 (20)	See Figure	(3) x #14	560	620
	43 (18)		(3) x #14	655	730
	54 (16)		(3) x #14	1000	1060
	68 (14)		(3) x #14	1085	1340
	97 (12)		(3) x #14	1085	1965



Drift Rail and Clip - 14ga Clip / 12ga Rail

ALLOWABLE DRIFT RAIL CLIP LOADS USING CLIP AS A DEFLECTION CONNECTION

Clip Designation	Stud Mils (Gauge)	Framing Connection		ASD Allowable Loads (lbs)	
		Screw Pattern	No. of Screws	F2 (Tension)	F3 (Compression)
DRC3-68	33 (20)	See Figure	(2) x #14	490	440
	43 (18)		(2) x #14	540	520
	54 (16)		(2) x #14	850	870
	68 (14)		(2) x #14	850	1170
	97 (12)		(2) x #14	850	1600
DRC6-68	33 (20)	See Figure	(3) x #14	490	440
	43 (18)		(3) x #14	540	520
	54 (16)		(3) x #14	850	870
	68 (14)		(3) x #14	850	1170
	97 (12)		(3) x #14	850	1600
DRC8-68	33 (20)	See Figure	(3) x #14	490	485
	43 (18)		(3) x #14	540	620
	54 (16)		(3) x #14	850	900
	68 (14)		(3) x #14	850	1105
	97 (12)		(3) x #14	850	1710



(3) #14 Deflection Screw Pattern Shown in a DRC6 Clip

Notes:

1 Allowable loads (ASD) listed are for Drift Rail Clip to stud only (framing connection).

2 Drift Rail attachment to structure designed by others. Drift Rail attachment to the structure should occur at every 6" o.c., and each connection capacity should satisfy the design load requirement of the project. Listed Drift Rail clip load capacities must be evaluated along with clip-to-structure connection capacity to establish the governing load capacity of the assembly.

3 Allowable loads have not been increased for wind, seismic, or other factors.

4 Minimum (2) x #14 shouldered screws (for DRC3) and (3) x #14 shouldered screws (for DRC6 and DRC8) must be used to secure the Drift Rail Clip for attachment to stud (#14 shouldered screws provided with each Drift Rail Clip).

5 It is the responsibility of the designer to properly detail connections on the contract drawings.

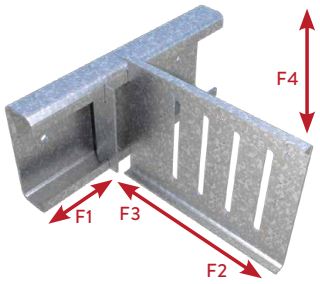
Drift Rail and Clip - Structural Attachment Designed by Others

ATTACHMENT TO STRUCTURAL: DESIGNED BY OTHERS
ATTACHMENT TO STUD: FIXED CONNECTION W/(4)#10-16

Drift Rail and Clip - 12ga Clip / 12ga Rail

ALLOWABLE DRIFT RAIL CLIP LOADS USING CLIP AS A FIXED CONNECTION

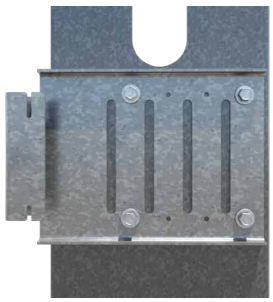
Clip Designation	Stud mils (ga)	Framing Connection		ASD Allowable Loads (lbs)			
		Screw Pattern	No. of Screws	F1 (In-Plane)	F2 (Tension)	F3 (Compression)	F4 (Shear)
DRC3-97	33 (20)	See Figure	(4) x #10	155	560	600	280
	43 (18)		(4) x #10	155	655	670	415
	54 (16)		(4) x #10	155	1000	970	840
	68 (14)		(4) x #10	155	1085	1325	865
	97 (12)		(4) x #10	155	1085	2040	865
DRC6-97	33 (20)	See Figure	(4) x #10	155	560	600	235
	43 (18)		(4) x #10	155	655	670	345
	54 (16)		(4) x #10	155	1000	970	705
	68 (14)		(4) x #10	155	1085	1325	725
	97 (12)		(4) x #10	155	1085	2040	725
DRC8-97	33 (20)	See Figure	(4) x #10	140	560	620	240
	43 (18)		(4) x #10	140	655	730	360
	54 (16)		(4) x #10	140	1000	1060	725
	68 (14)		(4) x #10	140	1085	1340	745
	97 (12)		(4) x #10	140	1085	1965	745



Drift Rail and Clip - 14ga Clip / 12ga Rail

ALLOWABLE DRIFT RAIL CLIP LOADS USING CLIP AS A FIXED CONNECTION

Clip Designation	Stud mils (ga)	Framing Connection		ASD Allowable Loads (lbs)			
		Screw Pattern	No. of Screws	F1 (In-Plane)	F2 (Tension)	F3 (Compression)	F4 (Shear)
DRC3-68	33 (20)	See Figure	(4) x #10	115	490	440	280
	43 (18)		(4) x #10	115	540	520	415
	54 (16)		(4) x #10	115	850	870	740
	68 (14)		(4) x #10	115	850	1170	740
	97 (12)		(4) x #10	115	850	1600	805
DRC6-68	33 (20)	See Figure	(4) x #10	115	490	440	235
	43 (18)		(4) x #10	115	540	520	345
	54 (16)		(4) x #10	115	850	870	705
	68 (14)		(4) x #10	115	850	1170	725
	97 (12)		(4) x #10	115	850	1600	725
DRC8-68	33 (20)	See Figure	(4) x #10	120	490	485	240
	43 (18)		(4) x #10	120	540	620	360
	54 (16)		(4) x #10	120	850	900	725
	68 (14)		(4) x #10	120	850	1105	745
	97 (12)		(4) x #10	120	850	1710	745



(4) #10 Screw Pattern Shown in a DRC6 Clip

Notes:

1 Allowable loads (ASD) listed are for Drift Rail Clip to stud only (framing connection).

2 Drift Rail attachment to structure designed by others. Drift Rail attachment to the structure should occur at every 6" o.c., and each connection capacity should satisfy the design load requirement of the project. Listed Drift Rail clip load capacities must be evaluated along with clip-to-structure connection capacity to establish the governing load capacity of the assembly.

3 Allowable loads have not been increased for wind, seismic, or other factors.

4 Minimum (4) x #10-16 screws must be used to secure the Drift Rail Clip for attachment to stud.

5 It is the responsibility of the designer to properly detail connections on the contract drawings.

6 F1 (In-Plane) loads are based on using a Drift Locking Clip (DRLC) or Drift Locking Angle (DRLA) restricting Drift Clip lateral movement.

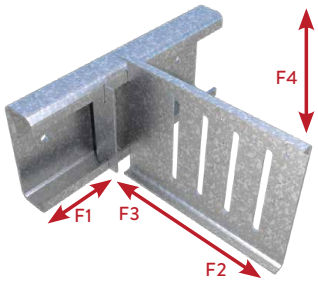
Drift Rail and Clip - Structural Attachment Designed by Others

ATTACHMENT TO STRUCTURAL: DESIGNED BY OTHERS
ATTACHMENT TO STUD: FIXED CONNECTION W/(8)#10-16

Drift Rail and Clip - 12ga Clip / 12ga Rail

ALLOWABLE DRIFT RAIL CLIP LOADS USING CLIP AS A FIXED CONNECTION

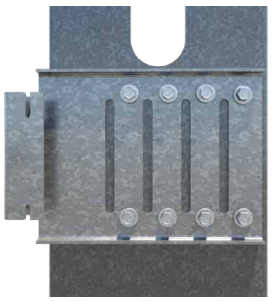
Clip Designation	Stud mils (ga)	Framing Connection		ASD Allowable Loads (lbs)			
		Screw Pattern	No. of Screws	F1 (In-Plane)	F2 (Tension)	F3 (Compression)	F4 (Shear)
DRC6-97	20 (33)	See Figure	(8) x #10	155	560	600	395
	18 (43)		(8) x #10	155	655	670	585
	16 (54)		(8) x #10	155	1000	970	875
	14 (68)		(8) x #10	155	1085	1325	920
	12 (97)		(8) x #10	155	1085	2040	920
DRC8-97	20 (33)	See Figure	(8) x #10	140	560	620	375
	18 (43)		(8) x #10	140	655	730	555
	16 (54)		(8) x #10	140	1000	1060	910
	14 (68)		(8) x #10	140	1085	1340	910
	12 (97)		(8) x #10	140	1085	1965	910



Drift Rail and Clip - 14ga Clip / 12ga Rail

ALLOWABLE DRIFT RAIL CLIP LOADS USING CLIP AS A FIXED CONNECTION

Clip Designation	Stud mils (ga)	Framing Connection		ASD Allowable Loads (lbs)			
		Screw Pattern	No. of Screws	F1 (In-Plane)	F2 (Tension)	F3 (Compression)	F4 (Shear)
DRC6-68	20 (33)	See Figure	(8) x #10	115	490	440	395
	18 (43)		(8) x #10	115	540	520	585
	16 (54)		(8) x #10	115	850	870	740
	14 (68)		(8) x #10	115	850	1170	740
	12 (97)		(8) x #10	115	850	1600	805
DRC8-68	20 (33)	See Figure	(8) x #10	120	490	485	375
	18 (43)		(8) x #10	120	540	620	555
	16 (54)		(8) x #10	120	850	900	800
	14 (68)		(8) x #10	120	850	1105	800
	12 (97)		(8) x #10	120	850	1710	865



(8) #10 Screw Pattern Shown in a DRC6 Clip

Notes:

1 Allowable loads (ASD) listed are for Drift Rail Clip to stud only (framing connection).

2 Drift Rail attachment to structure designed by others. Drift Rail attachment to the structure should occur at every 6" o.c., and each connection capacity should satisfy the design load requirement of the project. Listed Drift Rail clip load capacities must be evaluated along with clip-to-structure connection capacity to establish the governing load capacity of the assembly.

3 Allowable loads have not been increased for wind, seismic, or other factors.

4 Minimum (4) x #10-16 screws must be used to secure the Drift Rail Clip for attachment to stud.

5 It is the responsibility of the designer to properly detail connections on the contract drawings.

6 F1 (In-Plane) loads are based on using a Drift Locking Clip (DRLC) or Drift Locking Angle (DRLA) restricting Drift Clip lateral movement.

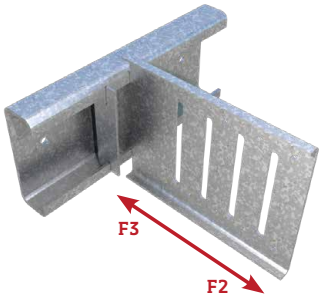
Drift Rail and Clip - Attachment Using (2) #12-24 Fasteners

ATTACHMENT TO STRUCTURAL STEEL: #12-24 FASTENERS
ATTACHMENT TO STUD: AS A DEFLECTION CONNECTION

Drift Rail and Clip - 12ga Clip / 12ga Rail

ALLOWABLE DRIFT RAIL CLIP LOADS USING CLIP AS A DEFLECTION CONNECTION

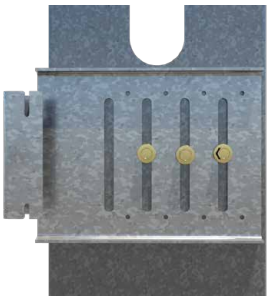
Clip Designation	Stud mils (ga)	Anchor to Structure	Framing Connection		ASD Allowable Loads (lbs)	
			Screw Pattern	No. of Screws	F2 (Tension)	F3 (Compression)
DRC3-97	33 (20)	(2) x #12-24 HWH Fasteners to 3/16" ASTM A36 Steel	See Figure	(2) x #14	560	600
	43 (18)			(2) x #14	655	670
	54 (16)			(2) x #14	1000	970
	68 (14)			(2) x #14	1030	1325
	97 (12)			(2) x #14	1030	2040
DRC6-97	33 (20)	(2) x #12-24 HWH Fasteners to 3/16" ASTM A36 Steel	See Figure	(3) x #14	560	600
	43 (18)			(3) x #14	655	670
	54 (16)			(3) x #14	1000	970
	68 (14)			(3) x #14	1030	1325
	97 (12)			(3) x #14	1030	2040
DRC8-97	33 (20)	(2) x #12-24 HWH Fasteners to 3/16" ASTM A36 Steel	See Figure	(3) x #14	560	620
	43 (18)			(3) x #14	655	730
	54 (16)			(3) x #14	1000	1060
	68 (14g			(3) x #14	1030	1340
	97(12)			(3) x #14	1030	1965



Drift Rail and Clip - 14ga Clip / 12ga Rail

ALLOWABLE DRIFT RAIL CLIP LOADS USING CLIP AS A DEFLECTION CONNECTION

Clip designation	Stud mils (ga)	Anchor to Structure	Framing Connection		ASD Allowable Loads (lbs)	
			Screw Pattern	No. of Screws	F2 (Tension)	F3 (Compression)
DRC3-68	33 (20)	(2) x #12-24 HWH Fasteners to 3/16" ASTM A36 Steel	See Figure	(2) x #14	490	440
	43 (18)			(2) x #14	540	520
	54 (16)			(2) x #14	850	870
	68 (14)			(2) x #14	850	1170
	97 (12)			(2) x #14	850	1600
DRC6-68	33 (20)	(2) x #12-24 HWH Fasteners to 3/16" ASTM A36 Steel	See Figure	(3) x #14	490	440
	43 (18)			(3) x #14	540	520
	54 (16)			(3) x #14	850	870
	68 (14)			(3) x #14	850	1170
	97 (12)			(3) x #14	850	1600
DRC8-68	33 (20)	(2) x #12-24 HWH Fasteners to 3/16" ASTM A36 Steel	See Figure	(3) x #14	490	485
	43 (18)			(3) x #14	540	620
	54 (16)			(3) x #14	850	900
	68 (14)			(3) x #14	850	1105
	97 (12)			(3) x #14	850	1710



(3) #14 Deflection Screw Pattern Shown in a DRC6 Clip

Notes:

1 Allowable loads (ASD) listed are for Drift Rail Clip where Drift Rail is attached to 3/16" thick ASTM A36 steel using (2) x #12-24 HWH fasteners spaced 2" apart at 6" on center spacing.

2 (2) x #12-24 HWH fasteners must be fastened at every 6" o.c. for Drift Rail attachment to 3/16" ASTM A36 steel structure. Other fasteners may be used to achieve full clip capacity but must be designed separately.

3 Allowable loads have not been increased for wind, seismic, or other factors.

4 Minimum (2) x #14 shouldered screws (for DRC3) and (3) x #14 shouldered screws (for DRC6 and DRC8) must be used to secure the Drift Rail Clip for attachment to stud (#14 shouldered screws provided with each Drift Rail Clip).

5 It is the responsibility of the designer to properly detail connections on the contract drawings.

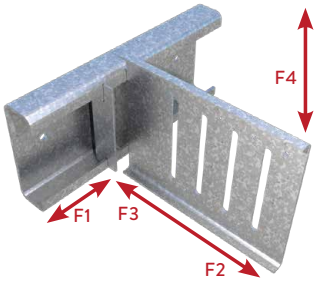
Drift Rail and Clip - Attachment Using (2) #12-24 Fasteners

ATTACHMENT TO STRUCTURAL STEEL: #12-24 FASTENERS
ATTACHMENT TO STUD: FIXED CONNECTION W/(4)#10-16

Drift Rail and Clip - 12ga Clip / 12ga Rail

ALLOWABLE DRIFT RAIL CLIP LOADS USING CLIP AS A FIXED CONNECTION

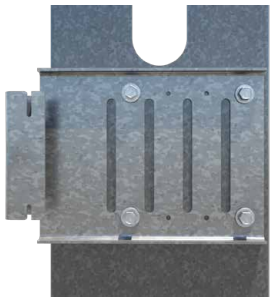
Clip Designation	Stud mils (ga)	Anchor to Structure	Framing Connection		ASD Allowable Loads (lbs)			
			Screw Pattern	No. of Screws	F1 (In-Plane)	F2 (Tension)	F3 (Compression)	F4 (Shear)
DRC3-97	33 (20)	(2) x #12-24 HWH Fasteners to 3/16" ASTM A36 Steel	See Figure	(4) x #10	155	560	600	280
	43 (18)			(4) x #10	155	655	670	415
	54 (16)			(4) x #10	155	1000	970	840
	68 (14)			(4) x #10	155	1030	1325	865
	97 (12)			(4) x #10	155	1030	2040	865
DRC6-97	33 (20)	(2) x #12-24 HWH Fasteners to 3/16" ASTM A36 Steel	See Figure	(4) x #10	155	560	600	235
	43 (18)			(4) x #10	155	655	670	345
	54 (16)			(4) x #10	155	1000	970	705
	68 (14)			(4) x #10	155	1030	1325	725
	97 (12)			(4) x #10	155	1030	2040	725
DRC8-97	33 (20)	(2) x #12-24 HWH Fasteners to 3/16" ASTM A36 Steel	See Figure	(4) x #10	140	560	620	240
	43 (18)			(4) x #10	140	655	730	360
	54 (16)			(4) x #10	140	1000	1060	725
	68 (14)			(4) x #10	140	1030	1340	745
	97 (12)			(4) x #10	140	1030	1965	745



Drift Rail and Clip - 14ga Clip / 12ga Rail

ALLOWABLE DRIFT RAIL CLIP LOADS USING CLIP AS A FIXED CONNECTION

Clip Designation	Stud mils (ga)	Anchor to Structure	Framing Connection		ASD Allowable Loads (lbs)			
			Screw Pattern	No. of Screws	F1 (In-Plane)	F2 (Tension)	F3 (Compression)	F4 (Shear)
DRC3-68	33 (20)	(2) x #12-24 HWH Fasteners to 3/16" ASTM A36 Steel	See Figure	(4) x #10	115	490	440	280
	43 (18)			(4) x #10	115	540	520	415
	54 (16)			(4) x #10	115	850	870	740
	68 (14)			(4) x #10	115	850	1170	740
	97 (12)			(4) x #10	115	850	1600	805
DRC6-68	33 (20)	(2) x #12-24 HWH Fasteners to 3/16" ASTM A36 Steel	See Figure	(4) x #10	115	490	440	235
	43 (18)			(4) x #10	115	540	520	345
	54 (16)			(4) x #10	115	850	870	705
	68 (14)			(4) x #10	115	850	1170	725
	97(12)			(4) x #10	115	850	1600	725
DRC8-68	33 (20)	(2) x #12-24 HWH Fasteners to 3/16" ASTM A36 Steel	See Figure	(4) x #10	120	490	485	240
	43 (18)			(4) x #10	120	540	620	360
	54 (16)			(4) x #10	120	850	900	725
	68 (14)			(4) x #10	120	850	1105	745
	97 (12)			(4) x #10	120	850	1710	745



(4) #10 Screw Pattern Shown in a DRC6 Clip

Notes:

1 Allowable loads (ASD) listed are for Drift Rail Clip where Drift Rail is attached to 3/16" thick ASTM A36 steel using (2) x #12-24 HWH fasteners spaced 2" apart at 6" on center spacing.

2 (2) x #12-24 HWH fasteners must be fastened at every 6" o.c. for Drift Rail attachment to 3/16" ASTM A36 steel structure. Other fasteners may be used to achieve full clip capacity but must be designed separately.

3 Allowable loads have not been increased for wind, seismic, or other factors.

4 Where fasteners are loaded simultaneously, load interaction must be considered following fastener manufacturer guidelines.

5 Use linear load interaction for combined loading conditions.

6 Minimum (4) x #10-16 screws must be used to secure the Drift Rail Clip for attachment to stud.

7 It is the responsibility of the designer to properly detail connections on the contract drawings.

8 F1 (In-Plane) loads are based on using a Drift Locking Clip (DRLC) or Drift Locking Angle (DRLA) restricting Drift Clip lateral movement.

The technical content of this literature is effective 04/09/26 and supersedes all previous information.

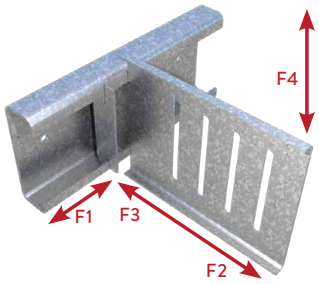
Drift Rail and Clip - Attachment Using (2) #12-24 Fasteners

ATTACHMENT TO STRUCTURAL STEEL: #12-24 FASTENERS
ATTACHMENT TO STUD: FIXED CONNECTION W/(8)#10-16

Drift Rail and Clip - 12ga Clip / 12ga Rail

ALLOWABLE DRIFT RAIL CLIP LOADS USING CLIP AS A FIXED CONNECTION

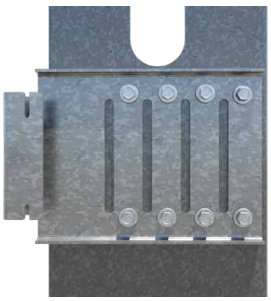
Clip Designation	Stud mils (ga)	Anchor to Structure	Framing Connection		ASD Allowable Loads (lbs)			
			Screw Pattern	No. of Screws	F1 (In-Plane)	F2 (Tension)	F3 (Compression)	F4 (Shear)
DRC6-97	33 (20)	(2) x #12-24 HWH Fasteners to 3/16" ASTM A36 Steel	See Figure	(8) x #10	155	560	600	395
	43 (18)			(8) x #10	155	655	670	585
	54 (16)			(8) x #10	155	1000	970	875
	68 (14)			(8) x #10	155	1030	1325	920
	97 (12)			(8) x #10	155	1030	2040	920
DRC8-97	33 (20)	(2) x #12-24 HWH Fasteners to 3/16" ASTM A36 Steel	See Figure	(8) x #10	140	560	620	375
	43 (18)			(8) x #10	140	655	730	555
	54 (16)			(8) x #10	140	1000	1060	910
	68 (14)			(8) x #10	140	1030	1340	910
	97 (12)			(8) x #10	140	1030	1965	910



Drift Rail and Clip - 14ga Clip / 12ga Rail

ALLOWABLE DRIFT RAIL CLIP LOADS USING CLIP AS A FIXED CONNECTION

Clip Designation	Stud mils (ga)	Anchor to Structure	Framing Connection		ASD Allowable Loads (lbs)			
			Screw Pattern	No. of Screws	F1 (In-Plane)	F2 (Tension)	F3 (Compression)	F4 (Shear)
DRC6-68	33 (20)	(2) x #12-24 HWH Fasteners to 3/16" ASTM A36 Steel	See Figure	(8) x #10	115	490	440	395
	43 (18)			(8) x #10	115	540	520	585
	54 (16)			(8) x #10	115	850	870	740
	68 (14)			(8) x #10	115	850	1170	740
	97 (12)			(8) x #10	115	850	1600	805
DRC8-68	33 (20)	(2) x #12-24 HWH Fasteners to 3/16" ASTM A36 Steel	See Figure	(8) x #10	120	490	485	375
	43 (18)			(8) x #10	120	540	620	555
	54 (16)			(8) x #10	120	850	900	800
	68 (14)			(8) x #10	120	850	1105	800
	97 (12)			(8) x #10	120	850	1710	865



(8) #10 Screw Pattern Shown in a DRC6 Clip

Notes:

1 Allowable loads (ASD) listed are for Drift Rail Clip where Drift Rail is attached to 3/16" thick ASTM A36 steel using (2) x #12-24 HWH fasteners spaced 2" apart at 6" on center spacing.

2 (2) x #12-24 HWH fasteners must be fastened at every 6" o.c. for Drift Rail attachment to 3/16" ASTM A36 steel structure. Other fasteners may be used to achieve full clip capacity but must be designed separately.

3 Allowable loads have not been increased for wind, seismic, or other factors.

4 Where fasteners are loaded simultaneously, load interaction must be considered following fastener manufacturer guidelines.

5 Use linear load interaction for combined loading conditions.

6 Minimum (8) x #10-16 screws must be used to secure the Drift Rail Clip for attachment to stud.

7 It is the responsibility of the designer to properly detail connections on the contract drawings.

8 F1 (In-Plane) loads are based on using a Drift Locking Clip (DRLC) or Drift Locking Angle (DRLA) restricting Drift Clip lateral movement.

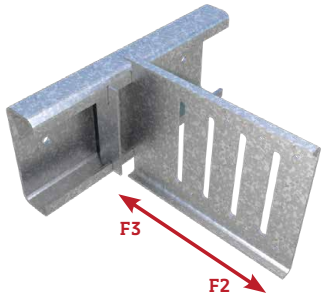
Drift Rail and Clip - Attachment Using (2) Hilti X-U Fasteners

ATTACHMENT TO STRUCT. STEEL: HILTI X-U FASTENERS
ATTACHMENT TO STUD: AS A DEFLECTION CONNECTION

Drift Rail and Clip - 12ga Clip / 12ga Rail

ALLOWABLE DRIFT RAIL CLIP LOADS USING CLIP AS A DEFLECTION CONNECTION

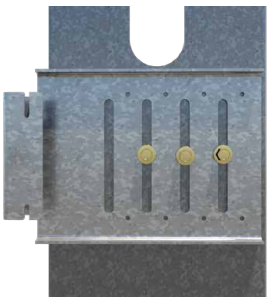
Clip Designation	Stud mils (ga)	Anchor to Structure	Framing Connection		ASD Allowable Loads (lbs)	
			Screw Pattern	No. of Screws	F2 (Tension)	F3 (Compression)
DRC3-97	33 (20)	(2) x Hilti X-U Universal Knurled Shank Fasteners to 3/16" ASTM A36 Steel	See Figure	(2) x #14	560	600
	43 (18)			(2) x #14	655	670
	54 (16)			(2) x #14	1000	970
	68 (14)			(2) x #14	1070	1325
	97 (12)			(2) x #14	1070	2040
DRC6-97	33 (20)	(2) x Hilti X-U Universal Knurled Shank Fasteners to 3/16" ASTM A36 Steel	See Figure	(3) x #14	560	600
	43 (18)			(3) x #14	655	670
	54 (16)			(3) x #14	1000	970
	68 (14)			(3) x #14	1070	1325
	97 (12)			(3) x #14	1070	2040
DRC8-97	33 (20)	(2) x Hilti X-U Universal Knurled Shank Fasteners to 3/16" ASTM A36 Steel	See Figure	(3) x #14	560	620
	43 (18)			(3) x #14	655	730
	54 (16)			(3) x #14	1000	1060
	68 (14)			(3) x #14	1070	1340
	97 (12)			(3) x #14	1070	1965



Drift Rail and Clip - 14ga Clip / 12ga Rail

ALLOWABLE DRIFT RAIL CLIP LOADS USING CLIP AS A DEFLECTION CONNECTION

Clip Designation	Stud Mils (Gauge)	Anchor to Structure	Framing Connection		ASD Allowable Loads (lbs)	
			Screw Pattern	No. of Screws	F2 (Tension)	F3 (Compression)
DRC3-68	33 (20)	(2) x Hilti X-U Universal Knurled Shank Fasteners to 3/16" ASTM A36 Steel	See Figure	(2) x #14	490	440
	43 (18)			(2) x #14	540	520
	54 (16)			(2) x #14	850	870
	68 (14)			(2) x #14	850	1170
	97 (12)			(2) x #14	850	1600
DRC6-68	33 (20)	(2) x Hilti X-U Universal Knurled Shank Fasteners to 3/16" ASTM A36 Steel	See Figure	(3) x #14	490	440
	43 (18)			(3) x #14	540	520
	54 (16)			(3) x #14	850	870
	68 (14)			(3) x #14	850	1170
	97 (12)			(3) x #14	850	1600
DRC8-68	33 (20)	(2) x Hilti X-U Universal Knurled Shank Fasteners to 3/16" ASTM A36 Steel	See Figure	(3) x #14	490	485
	43 (18)			(3) x #14	540	620
	54 (16)			(3) x #14	850	900
	68 (14)			(3) x #14	850	1105
	97 (12)			(3) x #14	850	1710



(3) #14 Deflection Screw Pattern Shown in a DRC6 Clip

Notes:

1 Allowable loads (ASD) listed are for Drift Rail Clip where Drift Rail is attached to 3/16" thick ASTM A36 steel using (2) x Hilti X-U Universal Knurled Shank fasteners spaced 2" apart at 6" on center spacing.

2 (2) x Hilti X-U Universal Knurled Shank fasteners must be fastened at every 6" o.c. for Drift Rail attachment to 3/16" ASTM A36 steel structure. Other fasteners may be used to achieve full clip capacity but must be designed separately.

3 Allowable loads have not been increased for wind, seismic, or other factors.

4 Minimum (2) x #14 shouldered screws (for DRC3) and (3) x #14 shouldered screws (for DRC6 and DRC8) must be used to secure the Drift Rail Clip for attachment to stud (#14 shouldered screws provided with each Drift Rail Clip).

5 It is the responsibility of the designer to properly detail connections on the contract drawings.

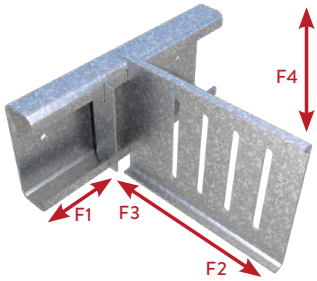
Drift Rail and Clip - Attachment Using (2) Hilti X-U Fasteners

ATTACHMENT TO STRUCT. STEEL: HILTI X-U FASTENERS
ATTACHMENT TO STUD: FIXED CONNECTION W/(4)#10-16

Drift Rail and Clip - 12ga Clip / 12ga Rail

ALLOWABLE DRIFT RAIL CLIP LOADS USING CLIP AS A FIXED CONNECTION

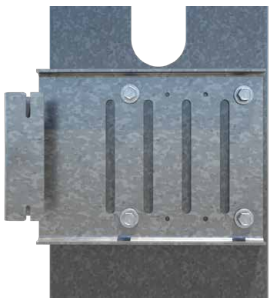
Clip Designation	Stud mils (ga)	Anchor to Structure	Framing Connection		ASD Allowable Loads (lbs)			
			Screw Pattern	No. of Screws	F1 (In-Plane)	F2 (Tension)	F3 (Compression)	F4 (Shear)
DRC3-97	33 (20)	(2) x Hilti X-U Universal Knurled Shank Fasteners to 3/16" ASTM A36 Steel	See Figure	(4) x #10	155	560	600	280
	43 (18)			(4) x #10	155	655	670	415
	54 (16)			(4) x #10	155	1000	970	840
	68 (14)			(4) x #10	155	1070	1325	865
	97 (12)			(4) x #10	155	1070	2040	865
DRC6-97	33 (20)	(2) x Hilti X-U Universal Knurled Shank Fasteners to 3/16" ASTM A36 Steel	See Figure	(4) x #10	155	560	600	235
	43 (18)			(4) x #10	155	655	670	345
	54 (16)			(4) x #10	155	1000	970	705
	68 (14)			(4) x #10	155	1070	1325	725
	97 (12)			(4) x #10	155	1070	2040	725
DRC8-97	33 (20)	(2) x Hilti X-U Universal Knurled Shank Fasteners to 3/16" ASTM A36 Steel	See Figure	(4) x #10	140	560	620	240
	43 (18)			(4) x #10	140	655	730	360
	54 (16)			(4) x #10	140	1000	1060	725
	68 (14)			(4) x #10	140	1070	1340	745
	97 (12)			(4) x #10	140	1070	1965	745



Drift Rail and Clip - 14ga Clip / 12ga Rail

ALLOWABLE DRIFT RAIL CLIP LOADS USING CLIP AS A FIXED CONNECTION

Clip Designation	Stud mils (ga)	Anchor to Structure	Framing Connection		ASD Allowable Loads (lbs)			
			Screw Pattern	No. of Screws	F1 (In-Plane)	F2 (Tension)	F3 (Compression)	F4 (Shear)
DRC3-68	33 (20)	(2) x Hilti X-U Universal Knurled Shank Fasteners to 3/16" ASTM A36 Steel	See Figure	(4) x #10	115	490	440	280
	43 (18)			(4) x #10	115	540	520	415
	54 (16)			(4) x #10	115	850	870	740
	68 (14)			(4) x #10	115	850	1170	740
	97 (12)			(4) x #10	115	850	1600	805
DRC6-68	33 (20)	(2) x Hilti X-U Universal Knurled Shank Fasteners to 3/16" ASTM A36 Steel	See Figure	(4) x #10	115	490	440	235
	43 (18)			(4) x #10	115	540	520	345
	54 (16)			(4) x #10	115	850	870	705
	68 (14)			(4) x #10	115	850	1170	725
	97 (12)			(4) x #10	115	850	1600	725
DRC8-68	33 (20)	(2) x Hilti X-U Universal Knurled Shank Fasteners to 3/16" ASTM A36 Steel	See Figure	(4) x #10	120	490	485	240
	43 (18)			(4) x #10	120	540	620	360
	54 (16)			(4) x #10	120	850	900	725
	68 (14)			(4) x #10	120	850	1105	745
	97 (12)			(4) x #10	120	850	1710	745



(4) #10 Screw Pattern Shown in a DRC6 Clip

Notes:

1 Allowable loads (ASD) listed are for Drift Rail Clip where Drift Rail is attached to 3/16" thick ASTM A36 steel using (2) x Hilti X-U Universal Knurled Shank fasteners spaced 2" apart at 6" on center spacing.

2 (2) x Hilti X-U Universal Knurled Shank fasteners must be fastened at every 6" o.c. for Drift Rail attachment to 3/16" ASTM A36 steel structure. Other fasteners may be used to achieve full clip capacity but must be designed separately.

3 Allowable loads have not been increased for wind, seismic, or other factors.

4 Where fasteners are loaded simultaneously, load interaction must be considered following fastener manufacturer guidelines.

5 Use linear load interaction for combined loading conditions.

6 Minimum (4) x #10-16 screws must be used to secure the Drift Rail Clip for attachment to stud.

7 It is the responsibility of the designer to properly detail connections on the contract drawings.

8 F1 (In-Plane) loads are based on using a Drift Locking Clip (DRLC) or Drift Locking Angle (DRLA) restricting Drift Clip lateral movement.

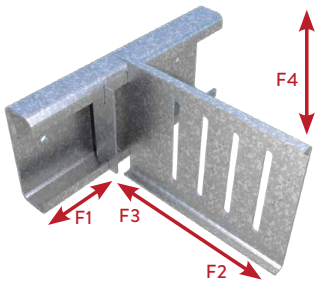
Drift Rail and Clip - Attachment Using (2) Hilti X-U Fasteners

ATTACHMENT TO STRUCT. STEEL: HILTI X-U FASTENERS
ATTACHMENT TO STUD: FIXED CONNECTION W/(8)#10-16

Drift Rail and Clip - 12ga Clip / 12ga Rail

ALLOWABLE DRIFT RAIL CLIP LOADS USING CLIP AS A FIXED CONNECTION

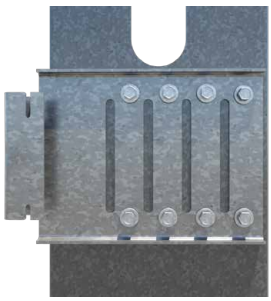
Clip Designation	Stud mils (ga)	Anchor to Structure	Framing Connection		ASD Allowable Loads (lbs)			
			Screw Pattern	No. of Screws	F1 (In-Plane)	F2 (Tension)	F3 (Compression)	F4 (Shear)
DRC6-97	33 (20)	(2) x Hilti X-U Universal Knurled Shank Fasteners to 3/16" ASTM A36 Steel	See Figure	(8) x #10	155	560	600	395
	43 (18)			(8) x #10	155	655	670	585
	54 (16)			(8) x #10	155	1000	970	875
	68 (14)			(8) x #10	155	1070	1325	920
	97 (12)			(8) x #10	155	1070	2040	920
DRC8-97	33 (20)	(2) x Hilti X-U Universal Knurled Shank Fasteners to 3/16" ASTM A36 Steel	See Figure	(8) x #10	140	560	620	375
	43 (18)			(8) x #10	140	655	730	555
	54 (16)			(8) x #10	140	1000	1060	910
	68 (14)			(8) x #10	140	1070	1340	910
	97 (12)			(8) x #10	140	1070	1965	910



Drift Rail and Clip - 14ga Clip / 12ga Rail

ALLOWABLE DRIFT RAIL CLIP LOADS USING CLIP AS A FIXED CONNECTION

Clip Designation	Stud mils (ga)	Anchor to Structure	Framing Connection		ASD Allowable Loads (lbs)			
			Screw Pattern	No. of Screws	F1 (In-Plane)	F2 (Tension)	F3 (Compression)	F4 (Shear)
DRC6-68	33 (20)	(2) x Hilti X-U Universal Knurled Shank Fasteners to 3/16" ASTM A36 Steel	See Figure	(8) x #10	115	490	440	395
	43 (18)			(8) x #10	115	540	520	585
	54 (16)			(8) x #10	115	850	870	740
	68 (14)			(8) x #10	115	850	1170	740
	97 (12)			(8) x #10	115	850	1600	805
DRC8-68	33 (20)	(2) x Hilti X-U Universal Knurled Shank Fasteners to 3/16" ASTM A36 Steel	See Figure	(8) x #10	120	490	485	375
	43 (18)			(8) x #10	120	540	620	555
	54 (16)			(8) x #10	120	850	900	800
	68 (14)			(8) x #10	120	850	1105	800
	97 (12)			(8) x #10	120	850	1710	865



(8) #10 Screw Pattern Shown in a DRC6 Clip

Notes:

1 Allowable loads (ASD) listed are for Drift Rail Clip where Drift Rail is attached to 3/16" thick ASTM A36 steel using (2) x Hilti X-U Universal Knurled Shank fasteners spaced 2" apart at 6" on center spacing.

2 (2) x Hilti X-U Universal Knurled Shank fasteners must be fastened at every 6" o.c. for Drift Rail attachment to 3/16" ASTM A36 steel structure. Other fasteners may be used to achieve full clip capacity but must be designed separately.

3 Allowable loads have not been increased for wind, seismic, or other factors.

4 Where fasteners are loaded simultaneously, load interaction must be considered following fastener manufacturer guidelines.

5 Use linear load interaction for combined loading conditions.

6 Minimum (8) x #10-16 screws must be used to secure the Drift Rail Clip for attachment to stud.

7 It is the responsibility of the designer to properly detail connections on the contract drawings.

8 F1 (In-Plane) loads are based on using a Drift Locking Clip (DRLC) or Drift Locking Angle (DRLA) restricting Drift Clip lateral movement.

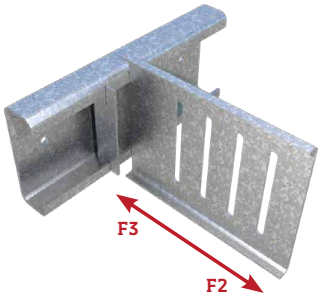
Drift Rail and Clip - Attachment Using (1) ¼" Hilti KWIK HUS-EZ

ATTACHMENT TO CONCRETE: 1/4" HILTI KWIK HUS-EZ
ATTACHMENT TO STUD: AS A DEFLECTION CONNECTION

Drift Rail and Clip - 12ga Clip / 12ga Rail

ALLOWABLE DRIFT RAIL CLIP LOADS USING CLIP AS A DEFLECTION CONNECTION

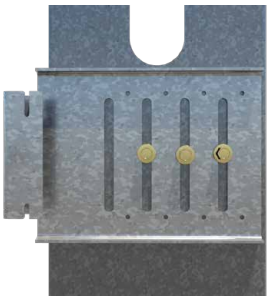
Clip Designation	Stud mils (ga)	Anchor to Structure	Framing Connection		ASD Allowable Loads (lbs)	
			Screw Pattern	No. of Screws	F2 (Tension)	F3 (Compression)
DRC3-97	33 (20)	(1) x 1/4" Hilti KWIK HUS-EZ @ 6" o.c. (3000psi uncracked concrete)	See Figure	(2) x #14	560	600
	43 (18)			(2) x #14	655	670
	54 (16)			(2) x #14	1000	970
	68 (14)			(2) x #14	1045	1325
	97 (12)			(2) x #14	1045	2040
DRC6-97	33 (20)	(1) x 1/4" Hilti KWIK HUS-EZ @ 6" o.c. (3000psi uncracked concrete)	See Figure	(3) x #14	560	600
	43 (18)			(3) x #14	655	670
	54 (16)			(3) x #14	1000	970
	68 (14)			(3) x #14	1045	1325
	97 (12)			(3) x #14	1045	2040
DRC8-97	33 (20)	(1) x 1/4" Hilti KWIK HUS-EZ @ 6" o.c. (3000psi uncracked concrete)	See Figure	(3) x #14	560	620
	43 (18)			(3) x #14	655	730
	54 (16)			(3) x #14	1000	1060
	68 (14)			(3) x #14	1045	1340
	97 (12)			(3) x #14	1045	1965



Drift Rail and Clip - 14ga Clip / 12ga Rail

ALLOWABLE DRIFT RAIL CLIP LOADS USING CLIP AS A DEFLECTION CONNECTION

Clip Designation	Stud mils (ga)	Anchor to Structure	Framing Connection		ASD Allowable Loads (lbs)	
			Screw Pattern	No. of Screws	F2 (Tension)	F3 (Compression)
DRC3-68	33 (20)	(1) x 1/4" Hilti KWIK HUS-EZ @ 6" o.c. (3000psi uncracked concrete)	See Figure	(2) x #14	490	440
	43 (18)			(2) x #14	540	520
	54 (16)			(2) x #14	850	870
	68 (14)			(2) x #14	850	1170
	97 (12)			(2) x #14	850	1600
DRC6-68	33 (20)	(1) x 1/4" Hilti KWIK HUS-EZ @ 6" o.c. (3000psi uncracked concrete)	See Figure	(3) x #14	490	440
	43 (18)			(3) x #14	540	520
	54 (16)			(3) x #14	850	870
	68 (14)			(3) x #14	850	1170
	97 (12)			(3) x #14	850	1600
DRC8-68	33 (20)	(1) x 1/4" Hilti KWIK HUS-EZ @ 6" o.c. (3000psi uncracked concrete)	See Figure	(3) x #14	490	485
	43 (18)			(3) x #14	540	620
	54 (16)			(3) x #14	850	900
	68 (14)			(3) x #14	850	1105
	97 (12)			(3) x #14	850	1710



(3) #14 Deflection Screw Pattern Shown in a DRC6 Clip

Notes:

1 Allowable loads (ASD) listed are for Drift Rail Clip where Drift Rail is attached to 3000psi uncracked concrete using (1) x 1/4" Hilti X KWIK HUS-EZ anchor only.

2 (1) x 1/4" Hilti KWIK HUS-EZ anchors (nom. embedment depth of 2-1/2", 3000psi uncracked concrete) should be fastened at every 6" o.c. for Drift Rail attachment to structure. Other anchors may be used to achieve full clip capacity but must be designed separately.

3 Allowable loads have not been increased for wind, seismic, or other factors.

4 Minimum (2) x #14 shouldered screws (for DRC3) and (3) x #14 shouldered screws (for DRC6 and DRC8) must be used to secure the Drift Rail Clip for attachment to stud (#14 shouldered screws provided with each Drift Rail Clip).

5 It is the responsibility of the designer to properly detail connections on the contract drawings.

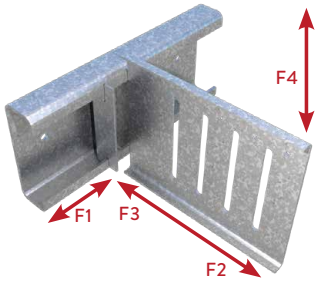
Drift Rail and Clip - Attachment Using (1) ¼" Hilti KWIK HUS-EZ

ATTACHMENT TO CONCRETE: 1/4" HILTI KWIK HUS-EZ
ATTACHMENT TO STUD: FIXED CONNECTION W/(4)#10-16

Drift Rail and Clip - 12ga Clip / 12ga Rail

ALLOWABLE DRIFT RAIL CLIP LOADS USING CLIP AS A FIXED CONNECTION

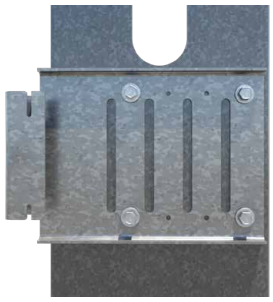
Clip Designation	Stud mils (ga)	Anchor to Structure	Framing Connection		ASD Allowable Loads (lbs)			
			Screw Pattern	No. of Screws	F1 (In-Plane)	F2 (Tension)	F3 (Compression)	F4 (Shear)
DRC3-97	33 (20)	(1) x 1/4" Hilti KWIK HUS-EZ @ 6" o.c. (3000psi uncracked concrete)	See Figure	(4) x #10	155	560	600	280
	43 (18)			(4) x #10	155	655	670	415
	54 (16)			(4) x #10	155	1000	970	840
	68 (14)			(4) x #10	155	1045	1325	865
	97 (12)			(4) x #10	155	1045	2040	865
DRC6-97	33 (20)	(1) x 1/4" Hilti KWIK HUS-EZ @ 6" o.c. (3000psi uncracked concrete)	See Figure	(4) x #10	155	560	600	235
	43 (18)			(4) x #10	155	655	670	345
	54 (16)			(4) x #10	155	1000	970	705
	68 (14)			(4) x #10	155	1045	1325	725
	97 (12)			(4) x #10	155	1045	2040	725
DRC8-97	33 (20)	(1) x 1/4" Hilti KWIK HUS-EZ @ 6" o.c. (3000psi uncracked concrete)	See Figure	(4) x #10	140	560	620	240
	43 (18)			(4) x #10	140	655	730	360
	54 (16)			(4) x #10	140	1000	1060	725
	68 (14)			(4) x #10	140	1045	1340	745
	97 (12)			(4) x #10	140	1045	1965	745



Drift Rail and Clip - 14ga Clip / 12ga Rail

ALLOWABLE DRIFT RAIL CLIP LOADS USING CLIP AS A FIXED CONNECTION

Clip Designation	Stud mils (ga)	Anchor to Structure	Framing Connection		ASD Allowable Loads (lbs)			
			Screw Pattern	No. of Screws	F1 (In-Plane)	F2 (Tension)	F3 (Compression)	F4 (Shear)
DRC3-68	33 (20)	(1) x 1/4" Hilti KWIK HUS-EZ @ 6" o.c. (3000psi uncracked concrete)	See Figure	(4) x #10	115	490	440	280
	43 (18)			(4) x #10	115	540	520	415
	54 (16)			(4) x #10	115	850	870	740
	68 (14)			(4) x #10	115	850	1170	740
	97 (12)			(4) x #10	115	850	1600	805
DRC6-68	33 (20)	(1) x 1/4" Hilti KWIK HUS-EZ @ 6" o.c. (3000psi uncracked concrete)	See Figure	(4) x #10	115	490	440	235
	43 (18)			(4) x #10	115	540	520	345
	54 (16)			(4) x #10	115	850	870	705
	68 (14)			(4) x #10	115	850	1170	725
	97 (12)			(4) x #10	115	850	1600	725
DRC8-68	33 (20)	(1) x 1/4" Hilti KWIK HUS-EZ @ 6" o.c. (3000psi uncracked concrete)	See Figure	(4) x #10	120	490	485	240
	43 (18)			(4) x #10	120	540	620	360
	54 (16)			(4) x #10	120	850	900	725
	68 (14)			(4) x #10	120	850	1105	745
	97 (12)			(4) x #10	120	850	1710	745



(4) #10 Screw Pattern Shown in a DRC6 Clip

Notes:

1 Allowable loads (ASD) listed are for Drift Rail Clip where Drift Rail is attached to 3000psi uncracked concrete using (1) x 1/4" Hilti KWIK HUS-EZ anchor only.

2 (1) x 1/4" Hilti KWIK HUS-EZ anchors (nom. embedment depth of 2-1/2", 3000psi uncracked concrete) should be fastened at every 6" o.c. for Drift Rail attachment to structure. Other anchors may be used to achieve full clip capacity but must be designed separately.

3 Allowable loads have not been increased for wind, seismic, or other factors.

4 Where anchors are loaded simultaneously, load interaction must be considered following anchor manufacturer guidelines.

5 Use linear load interaction for combined loading conditions.

6 Minimum (4) x #10-16 screws must be used to secure the Drift Rail Clip for attachment to stud.

7 It is the responsibility of the designer to properly detail connections on the contract drawings.

8 F1 (In-Plane) loads are based on using a Drift Locking Clip (DRLC) or Drift Locking Angle (DRLA) restricting Drift Clip lateral movement.

The technical content of this literature is effective 04/09/26 and supersedes all previous information.

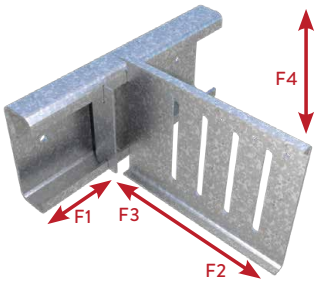
Drift Rail and Clip - Attachment Using (1) ¼" Hilti KWIK HUS-EZ

ATTACHMENT TO CONCRETE: 1/4" HILTI KWIK HUS-EZ
ATTACHMENT TO STUD: FIXED CONNECTION W/(8)#10-16

Drift Rail and Clip - 12ga Clip / 12ga Rail

ALLOWABLE DRIFT RAIL CLIP LOADS USING CLIP AS A FIXED CONNECTION

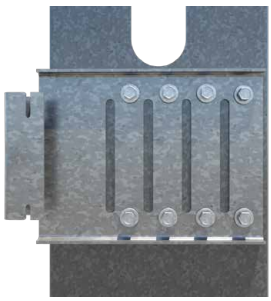
Clip Designation	Stud mils (ga)	Anchor to Structure	Framing Connection		ASD Allowable Loads (lbs)			
			Screw Pattern	No. of Screws	F1 (In-Plane)	F2 (Tension)	F3 (Compression)	F4 (Shear)
DRC6-97	33 (20)	(1) x 1/4" Hilti KWIK HUS-EZ @ 6" o.c. (3000psi uncracked concrete)	See Figure	(8) x #10	155	560	600	395
	43 (18)			(8) x #10	155	655	670	585
	54 (16)			(8) x #10	155	1000	970	875
	68 (14)			(8) x #10	155	1045	1325	920
	97 (12)			(8) x #10	155	1045	2040	920
DRC8-97	33 (20)	(1) x 1/4" Hilti KWIK HUS-EZ @ 6" o.c. (3000psi uncracked concrete)	See Figure	(8) x #10	140	560	620	375
	43 (18)			(8) x #10	140	655	730	555
	54 (16)			(8) x #10	140	1000	1060	910
	68 (14)			(8) x #10	140	1045	1340	910
	97 (12)			(8) x #10	140	1045	1965	910



Drift Rail and Clip - 14ga Clip / 12ga Rail

ALLOWABLE DRIFT RAIL CLIP LOADS USING CLIP AS A FIXED CONNECTION

Clip Designation	Stud mils (ga)	Anchor to Structure	Framing Connection		ASD Allowable Loads (lbs)			
			Screw Pattern	No. of Screws	F1 (In-Plane)	F2 (Tension)	F3 (Compression)	F4 (Shear)
DRC6-68	33 (20)	(1) x 1/4" Hilti KWIK HUS-EZ @ 6" o.c. (3000psi uncracked concrete)	See Figure	(8) x #10	115	490	440	395
	43 (18)			(8) x #10	115	540	520	585
	54 (16)			(8) x #10	115	850	870	740
	68 (14)			(8) x #10	115	850	1170	740
	97 (12)			(8) x #10	115	850	1600	805
DRC8-68	33 (20)	(1) x 1/4" Hilti KWIK HUS-EZ @ 6" o.c. (3000psi uncracked concrete)	See Figure	(8) x #10	120	490	485	375
	43 (18)			(8) x #10	120	540	620	555
	54 (16)			(8) x #10	120	850	900	800
	68 (14)			(8) x #10	120	850	1105	800
	97 (12)			(8) x #10	120	850	1710	865



(8) #10 Screw Pattern Shown in a DRC6 Clip

Notes:

1 Allowable loads (ASD) listed are for Drift Rail Clip where Drift Rail is attached to 3000psi uncracked concrete using (1) x 1/4" Hilti KWIK HUS-EZ anchor only.

2 (1) x 1/4" Hilti KWIK HUS-EZ anchors (nom. embedment depth of 2-1/2", 3000psi uncracked concrete) should be fastened at every 6" o.c. for Drift Rail attachment to structure. Other anchors may be used to achieve full clip capacity but must be designed separately.

3 Allowable loads have not been increased for wind, seismic, or other factors.

4 Where anchors are loaded simultaneously, load interaction must be considered following anchor manufacturer guidelines.

5 Use linear load interaction for combined loading conditions.

6 Minimum (8) x #10-16 screws must be used to secure the Drift Rail Clip for attachment to stud.

7 It is the responsibility of the designer to properly detail connections on the contract drawings.

8 F1 (In-Plane) loads are based on using a Drift Locking Clip (DRLC) or Drift Locking Angle (DRLA) restricting Drift Clip lateral movement.

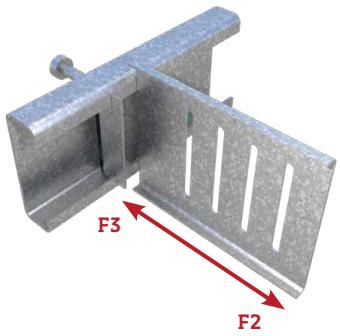
Drift Headed Rail and Clip - Cast In Place

ATTACHMENT TO STRUCTURE: CAST IN PLACE
ATTACHMENT TO STUD: AS A DEFLECTION CONNECTION

Drift Headed Rail and Clip - 12ga Clip / 12ga Rail

ALLOWABLE DRIFT RAIL CLIP LOADS USING CLIP AS A DEFLECTION CONNECTION

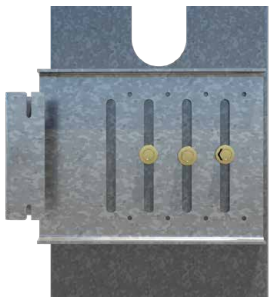
Clip Designation	Stud mils (ga)	Framing Connection		ASD Allowable Loads (lbs)	
		Screw Pattern	No. of Screws	F2 (Tension)	F3 (Compression)
DRC3-97	33 (20)	See Figure	(2) x #14	560	600
	43 (18)		(2) x #14	655	670
	54 (16)		(2) x #14	1000	970
	68 (14)		(2) x #14	1085	1325
	97 (12)		(2) x #14	1085	2040
DRC6-97	33 (20)	See Figure	(3) x #14	560	600
	43 (18)		(3) x #14	655	670
	54 (16)		(3) x #14	1000	970
	68 (14)		(3) x #14	1085	1325
	97 (12)		(3) x #14	1085	2040
DRC8-97	33 (20)	See Figure	(3) x #14	560	620
	43 (18)		(3) x #14	655	730
	54 (16)		(3) x #14	1000	1060
	68 (14)		(3) x #14	1085	1340
	97 (12)		(3) x #14	1085	1965



Drift Headed Rail and Clip - 14ga Clip / 12ga Rail

ALLOWABLE DRIFT RAIL CLIP LOADS USING CLIP AS A DEFLECTION CONNECTION

Clip Designation	Stud mils (ga)	Framing Connection		ASD Allowable Loads (lbs)	
		Screw Pattern	No. of Screws	F2 (Tension)	F3 (Compression)
DRC3-68	33 (20)	See Figure	(2) x #14	490	440
	43 (18)		(2) x #14	540	520
	54 (16)		(2) x #14	850	870
	68 (14)		(2) x #14	850	1170
	97 (12)		(2) x #14	850	1600
DRC6-68	33 (20)	See Figure	(3) x #14	490	440
	43 (18)		(3) x #14	540	520
	54 (16)		(3) x #14	850	870
	68 (14)		(3) x #14	850	1170
	97 (12)		(3) x #14	850	1600
DRC8-68	33 (20)	See Figure	(3) x #14	490	485
	43 (18)		(3) x #14	540	620
	54 (16)		(3) x #14	850	900
	68 (14)		(3) x #14	850	1105
	97 (12)		(3) x #14	850	1710



(3) #14 Deflection Screw Pattern Shown in a DRC6 Clip

Notes:

1. Allowable loads (ASD) listed are for Drift Rail Clip to stud only (framing connection).
2. Maximum tension on DHR-97 anchor should not exceed 1,600 lbs ASD. In tension and shear, the strength of the DHR-97 anchor itself should be considered. The weld does not need to be considered in tension or shear as the load table and 1,600 lbs ASD tension maximum are inclusive of the strength of the welds. Designers must check Drift Headed Rail (DHR-97) tension and shear anchorage capacity in concrete per ACI 318 based on actual edge distance and concrete compressive strength.
3. Allowable loads have not been increased for wind, seismic, or other factors.
4. Minimum (2) x #14 shouldered screws (for DRC3) and (3) x #14 shouldered screws (for DRC6 and DRC8) must be used to secure the Drift Rail Clip for attachment to stud (#14 shouldered screws provided with each Drift Rail Clip).
5. It is the responsibility of the designer to properly detail connections on the contract drawings.

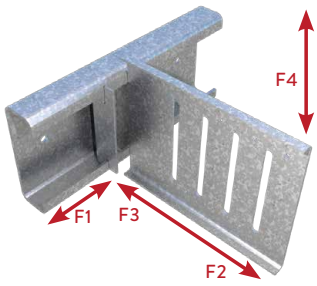
Drift Headed Rail and Clip - Cast In Place

ATTACHMENT TO STRUCTURE: CAST IN PLACE
ATTACHMENT TO STUD: FIXED CONNECTION W/(4)#10-16

Drift Headed Rail and Clip - 12ga Clip / 12ga Rail

ALLOWABLE DRIFT RAIL CLIP LOADS USING CLIP AS A FIXED CONNECTION

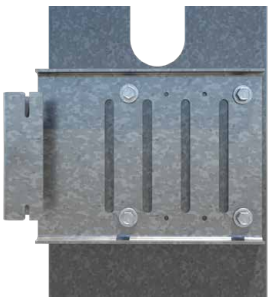
Clip Designation	Stud mils (ga)	Framing Connection		ASD Allowable Loads (lbs)			
		Screw Pattern	No. of Screws	F1 (In-Plane)	F2 (Tension)	F3 (Compression)	F4 (Shear)
DRC3-97	33 (20)	See Figure	(4) x #10	155	560	600	280
	43 (18)		(4) x #10	155	655	670	415
	54 (16)		(4) x #10	155	1000	970	840
	68 (14)		(4) x #10	155	1085	1325	865
	97 (12)		(4) x #10	155	1085	2040	865
DRC6-97	33 (20)	See Figure	(4) x #10	155	560	600	235
	43 (18)		(4) x #10	155	655	670	345
	54 (16)		(4) x #10	155	1000	970	705
	68 (14)		(4) x #10	155	1085	1325	725
	97 (12)		(4) x #10	155	1085	2040	725
DRC8-97	33 (20)	See Figure	(4) x #10	140	560	620	240
	43 (18)		(4) x #10	140	655	730	360
	54 (16)		(4) x #10	140	1000	1060	725
	68 (14)		(4) x #10	140	1085	1340	745
	97 (12)		(4) x #10	140	1085	1965	745



Drift Headed Rail and Clip - 14ga Clip / 12ga Rail

ALLOWABLE DRIFT RAIL CLIP LOADS USING CLIP AS A FIXED CONNECTION

Clip Designation	Stud mils (ga)	Framing Connection		ASD Allowable Loads (lbs)			
		Screw Pattern	No. of Screws	F1 (In-Plane)	F2 (Tension)	F3 (Compression)	F4 (Shear)
DRC3-68	33 (20)	See Figure	(4) x #10	115	490	440	280
	43 (18)		(4) x #10	115	540	520	415
	54 (16)		(4) x #10	115	850	870	740
	68 (14)		(4) x #10	115	850	1170	740
	97 (12)		(4) x #10	115	850	1600	805
DRC6-68	33 (20)	See Figure	(4) x #10	115	490	440	235
	43 (18)		(4) x #10	115	540	520	345
	54 (16)		(4) x #10	115	850	870	705
	68 (14)		(4) x #10	115	850	1170	725
	97 (12)		(4) x #10	115	850	1600	725
DRC8-68	33 (20)	See Figure	(4) x #10	120	490	485	240
	43 (18)		(4) x #10	120	540	620	360
	54 (16)		(4) x #10	120	850	900	725
	68 (14)		(4) x #10	120	850	1105	745
	97 (12)		(4) x #10	120	850	1710	745



(4) #10 Screw Pattern Shown in a DRC6 Clip

Notes:

1 Allowable loads (ASD) listed are for Drift Rail Clip to stud only (framing connection).

2 Maximum tension on DHR-97 anchor should not exceed 1,600 lbs ASD. In tension and shear, the strength of the DHR-97 anchor itself should be considered. The weld does not need to be considered in tension or shear as the load table and 1,600 lbs ASD tension maximum are inclusive of the strength of the welds. Designers must check Drift Headed Rail (DHR-97) tension and shear anchorage capacity in concrete per ACI 318 based on actual edge distance and concrete compressive strength.

3 Allowable loads have not been increased for wind, seismic, or other factors.

4 Minimum (4) x #10-16 screws must be used to secure the Drift Rail Clip for attachment to stud.

5 It is the responsibility of the designer to properly detail connections on the contract drawings.

6 F1 (In-Plane) loads are based on using a Drift Locking Clip (DRLC) or Drift Locking Angle (DRLA) restricting Drift Clip lateral movement.

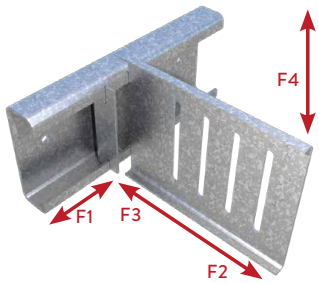
Drift Headed Rail and Clip - Cast In Place

ATTACHMENT TO STRUCTURE: CAST IN PLACE
ATTACHMENT TO STUD: FIXED CONNECTION W/(8)#10-16

Drift Headed Rail and Clip - 12ga Clip / 12ga Rail

ALLOWABLE DRIFT RAIL CLIP LOADS USING CLIP AS A FIXED CONNECTION

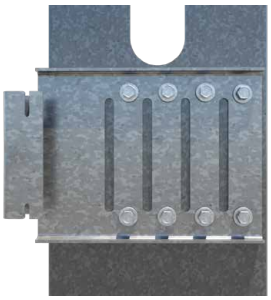
Clip Designation	Stud mils (ga)	Framing Connection		ASD Allowable Loads (lbs)			
		Screw Pattern	No. of Screws	F1 (In-Plane)	F2 (Tension)	F3 (Compression)	F4 (Shear)
DRC6-97	33 (20)	See Figure	(8) x #10	155	560	600	395
	43 (18)		(8) x #10	155	655	670	585
	54 (16)		(8) x #10	155	1000	970	875
	68 (14)		(8) x #10	155	1085	1325	920
	97 (12)		(8) x #10	155	1085	2040	920
DRC8-97	33 (20)	See Figure	(8) x #10	140	560	620	375
	43 (18)		(8) x #10	140	655	730	555
	54 (16)		(8) x #10	140	1000	1060	910
	68 (14)		(8) x #10	140	1085	1340	910
	97 (12)		(8) x #10	140	1085	1965	910



Drift Headed Rail and Clip - 14ga Clip / 12ga Rail

ALLOWABLE DRIFT RAIL CLIP LOADS USING CLIP AS A FIXED CONNECTION

Clip Designation	Stud mils (ga)	Framing Connection		ASD Allowable Loads (lbs)			
		Screw Pattern	No. of Screws	F1 (In-Plane)	F2 (Tension)	F3 (Compression)	F4 (Shear)
DRC6-68	33 (20)	See Figure	(8) x #10	115	490	440	395
	43 (18)		(8) x #10	115	540	520	585
	54 (16)		(8) x #10	115	850	870	740
	68 (14)		(8) x #10	115	850	1170	740
	97 (12)		(8) x #10	115	850	1600	805
DRC8-68	33 (20)	See Figure	(8) x #10	120	490	485	375
	43 (18)		(8) x #10	120	540	620	555
	54 (16)		(8) x #10	120	850	900	800
	68 (14)		(8) x #10	120	850	1105	800
	97 (12)		(8) x #10	120	850	1710	865



(8) #10 Screw Pattern Shown in a DRC6 Clip

Notes:

1 Allowable loads (ASD) listed are for Drift Rail Clip to stud only (framing connection).

2 Maximum tension on DHR-97 anchor should not exceed 1,600 lbs ASD. In tension and shear, the strength of the DHR-97 anchor itself should be considered. The weld does not need to be considered in tension or shear as the load table and 1,600 lbs ASD tension maximum are inclusive of the strength of the welds. Designers must check Drift Headed Rail (DHR-97) tension and shear anchorage capacity in concrete per ACI 318 based on actual edge distance and concrete compressive strength.

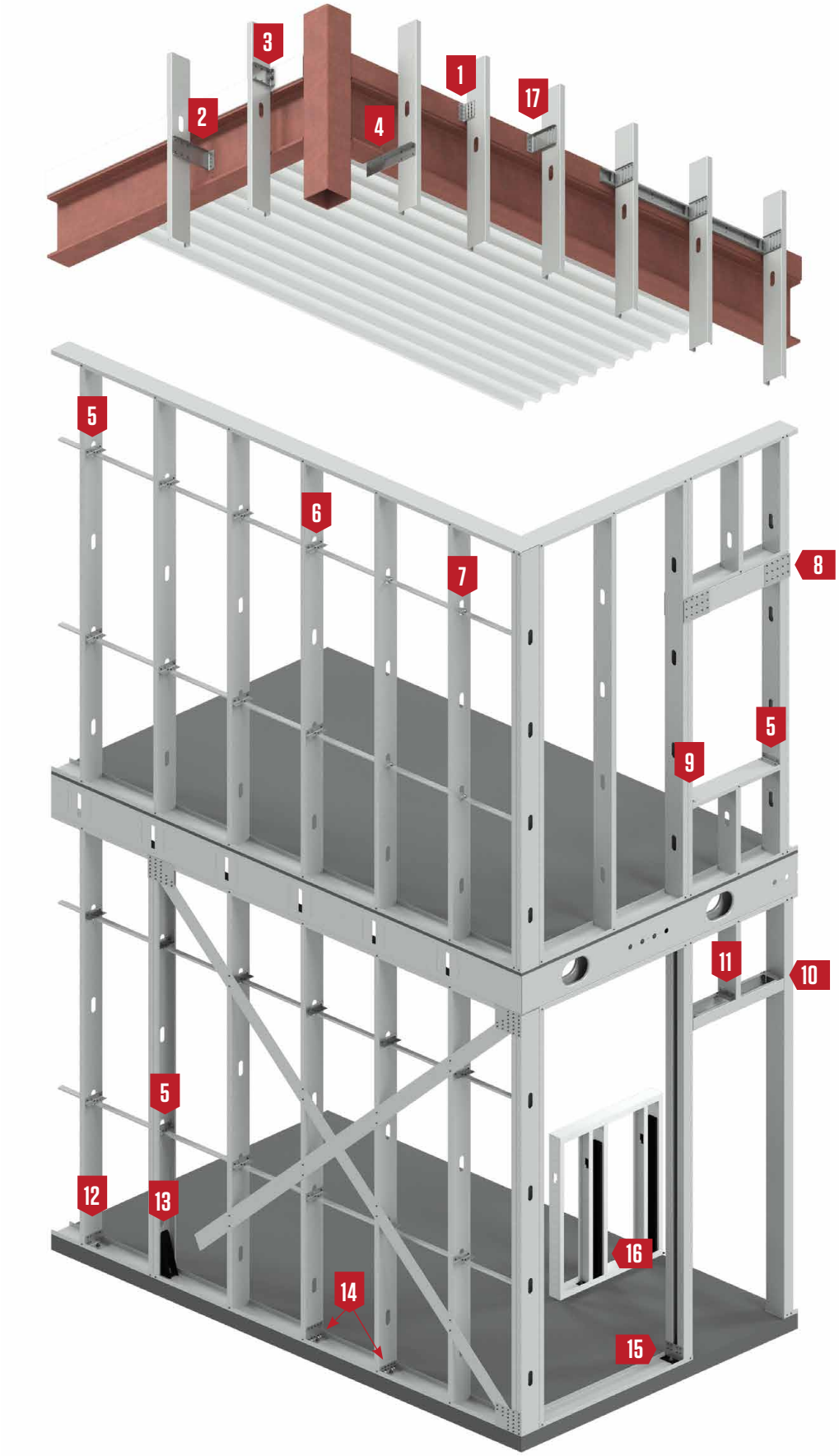
3 Allowable loads have not been increased for wind, seismic, or other factors.

4 Minimum (4) x #10-16 screws must be used to secure the Drift Rail Clip for attachment to stud.

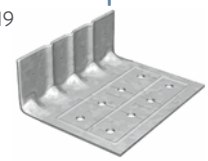
5 It is the responsibility of the designer to properly detail connections on the contract drawings.

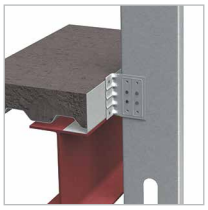
6 F1 (In-Plane) loads are based on using a Drift Locking Clip (DRLC) or Drift Locking Angle (DRLA) restricting Drift Clip lateral movement.

Product Detail

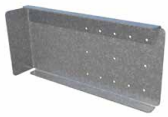


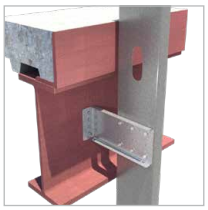
1 **Uni-Clip™ End Clip**
pages 118–119





2 **Extended Uni-Clip™**
pages 120-124



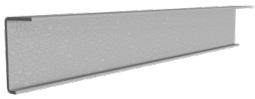


3 **Extended Uni-Clip™ with Anchor Holes**
pages 126-127



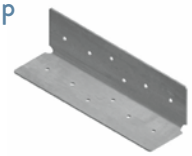


4 **Extended SwiftClip™ LE-Series™**
page 136





5 **SwiftClip™ L-Series™ Support Clip**
pages 134-135





6 **EasyClip U-Series™ Clip Angle**
page 137



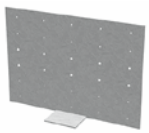


7 **FastBridge™ Clip**
pages 144-145





8 **H-Series™ Universal Header Hanger**
pages 146-147





9 **EasyClip S-Series™ Support Clip**
pages 138-139





10 **HDSC Header Bracket**
pages 230-233



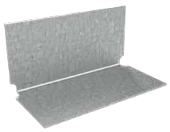


11 **Header Cripple Stud Clip**
page 242





12 **EasyClip™ A-Series™ End Clip**
pages 140-141



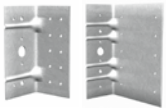


13 **ClarkDietrich Holdown and Holdown Plate**
pages 148-155





14 **EasyClip D- and T-Series™ Anchor Clips**
pages 142-143







15 **ClarkDietrich Moment Clip**
pages 156-157





16 **ClarkDietrich Pony Wall (Heavy & Lite)**
pages 158-165





17 **Universal Bypass Clip**
pages 128–133





The technical content of this literature is effective 04/09/26 and supersedes all previous information.

Pub. No. CD-ClipExpress 04/26

Uni-Clip™ End Clip

For numerous rigid framing connections and conditions, including two-axis loading, shear and tension.

ClarkDietrich's Uni-Clip™ end clip is a universal framing clip used to attach and support numerous rigid framing conditions. The Uni-Clip framing clip has a stiffened corner that provides superior design values. Embossed fastening patterns ensure easy, accurate placement of screws or powder-actuated fasteners. Designed to transfer large horizontal and vertical loads, this clip is ideal for most rigid connections, including shear, tension and two-axis loading.

ALTERNATIVE PRODUCTS

EasyClip™ D-Series™ Anchor Clip
EasyClip T-Series™ Tall Anchor Clip
EasyClip E-Series™ Support Clip
Universal Bypass Clip

PRODUCT DIMENSIONS

3-1/2" x 1-1/2" x 4-1/2"

MATERIAL SPECIFICATIONS

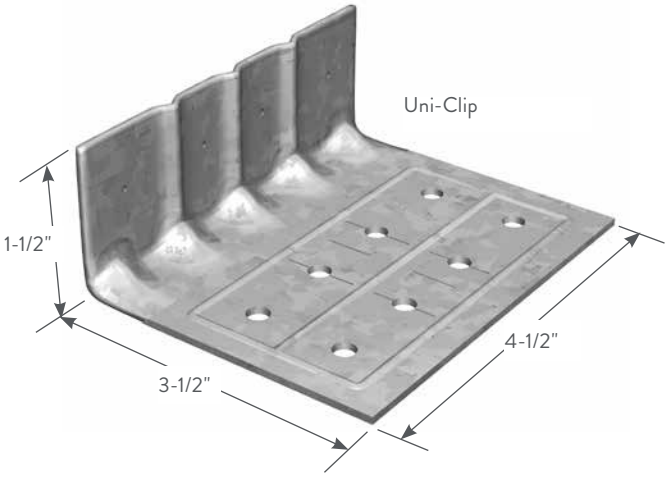
Gauge: 14 gauge (68mils)
Design Thickness: 0.0713 inches
Coating: G90
Yield Strength: 50ksi
ASTM: A653/A653M

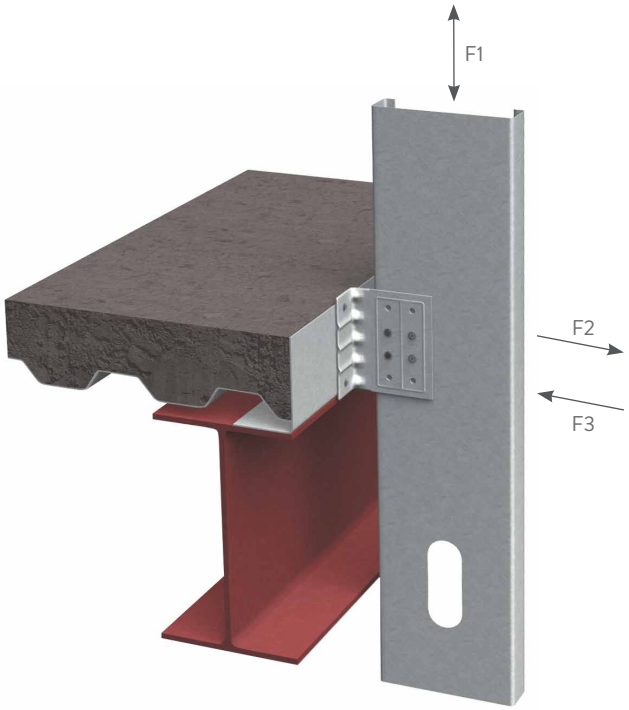
INSTALLATION

Uni-Clip end clips are attached to cold-formed steel framing members using #10 minimum self-drilling screws driven through the clip holes into the steel framing. Follow the required fastener and anchor placement patterns to achieve the allowable load. Connections to the primary building frame can be made with powder-actuated fasteners, screws or welds per design requirement.

CODE APPROVALS & PERFORMANCE STANDARDS

IAPMO ER-731

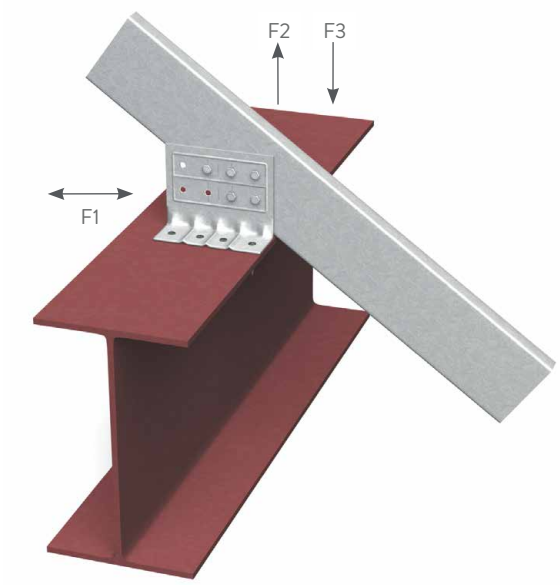




Uni-Clip™ End Clip (UCEC)

Clip Designation	Thickness		Size (in)	Packaging Pcs./Carton
	mils (ga)	Design Thickness (in)		
UCEC	68 (14)	0.0713	3-1/2 x 1-1/2 x 4-1/2	25

U.S. Patent No. 6,688,069



Location Options with (4) Screws



Option A



Option B



Option C



Location Options with (8) Screws



Location Options with (2) Anchors

Uni-Clip™ (UCEC) Allowable Loads (lbs)

Anchor Type	Stud Thickness / Yield Strength mils (ga) ksi	No. Anchors to Structure	Number/Configuration of Screws to Stud Framing											
			8 Screws			4 Screws (Option A)			4 Screws (Option B)			4 Screws (Option C)		
			F1	F2	F3	F1	F2	F3	F1	F2	F3	F1	F2	F3
Buildex #12-24 Tek 5 Self-Drilling Screws to 3/16" Steel	33 (20) 33	2	529	1121	1121	192	561	561	177	561	561	272	561	561
		3	529	1121	1121	192	561	561	177	561	561	272	561	561
		4	529	1121	1121	192	561	561	177	561	561	272	561	561
	43 (18) 33	2	784	1227	1664	285	832	832	263	832	832	404	832	832
		3	784	1664	1664	285	832	832	263	832	832	404	832	832
		4	784	1664	1664	285	832	832	263	832	832	404	832	832
	54 (16) 33	2	1105	1227	1889	402	920	1172	371	1172	1172	569	1172	1172
		3	1105	1841	1889	402	1172	1172	371	1172	1172	569	1172	1172
		4	1105	2345	1889	402	1172	1172	371	1172	1172	569	1172	1172
	54 (16) 50	2	1370	1227	1889	568	920	1417	523	1227	1209	804	1227	1655
		3	1560	1841	1889	568	1380	1417	523	1655	1209	804	1655	1655
		4	1560	2454	1889	568	1655	1417	523	1655	1209	804	1655	1655
PAF to 3/16" Steel*	33 (20) 33	2	529	511	1121	192	383	561	177	511	561	272	511	561
		3	529	767	1121	192	561	561	177	561	561	272	561	561
		4	529	1022	1121	192	561	561	177	561	561	272	561	561
	43 (18) 33	2	784	511	1664	285	383	832	263	511	832	404	511	832
		3	784	767	1664	285	575	832	263	767	832	404	767	832
		4	784	1022	1664	285	767	832	263	832	832	404	832	832
	54 (16) 33	2	1105	511	1889	402	383	1172	371	511	1172	569	511	1172
		3	1105	767	1889	402	575	1172	371	767	1172	569	767	1172
		4	1105	1022	1889	402	767	1172	371	1022	1172	569	1022	1172
	54 (16) 50	2	1117	511	1889	568	383	1417	523	511	1209	804	511	1655
		3	1560	767	1889	568	575	1417	523	767	1209	804	767	1655
		4	1560	1022	1889	568	767	1417	523	1022	1209	804	1022	1655

*See General Note #6 on page 9 for the definition of PAF, minimum requirements and other additional information.



Location Options with (3) Anchors



Location Options with (3) Anchors



Location Options with (4) Anchors

Notes:

1 The 1/3 stress increase for wind shall not be used.

2 Attach the Uni-Clip to the stud framing using Buildex #10-16 (min.) self-drilling screws.

3 When using 2 anchors, use the outermost marks on the short leg of the clips for anchor placement.

4 Attach building anchors to the structure according to the manufacturer's instructions. Anchors shall be installed through the embossments on the scored line of the 1-1/2" leg of the clip.

5 When using #12-24 for clips that have load combinations of F1, F2 and F3, use a linear interaction for combinations of F1 and F3, and a squared interaction for combinations of F1 and F2. When using PAFs, use a linear interaction for combinations of F1 and F3, and for combinations of F1 and F2.

6 Capacities listed for PAFs are based on minimum PAF requirements listed in General Note #6 on page 9.

7 It is the responsibility of the design professional to detail the project drawings for proper clip installation.

8 For connections to concrete, or other technical assistance, contact ClarkDietrich at 888-437-3244.

9 Buildex is a registered trademark of Illinois Tool Works Inc.

Extended Uni-Clip™

The Extended Uni-Clip™ connects exterior studs to the primary structure of the building, while resisting horizontal and vertical loads.

ClarkDietrich's Extended Uni-Clip™ rigid framing clip is used to attach exterior wall studs to the structure of the building. Designed to resist horizontal and vertical loads, the extended rigid clips install easily with screws, powder-actuated fasteners, or welds. This clip is ideal for all medium and large standoff conditions.

ALTERNATIVE PRODUCTS

Universal Bypass Clip

PRODUCT DIMENSIONS

6" Extended Uni-Clip: 1-7/8" x 4-7/8" x 6"
8" Extended Uni-Clip: 1-7/8" x 4-7/8" x 8"
10" Extended Uni-Clip: 1-7/8" x 4-7/8" x 10"
12" Extended Uni-Clip: 1-7/8" x 4-7/8" x 12"

MATERIAL SPECIFICATIONS

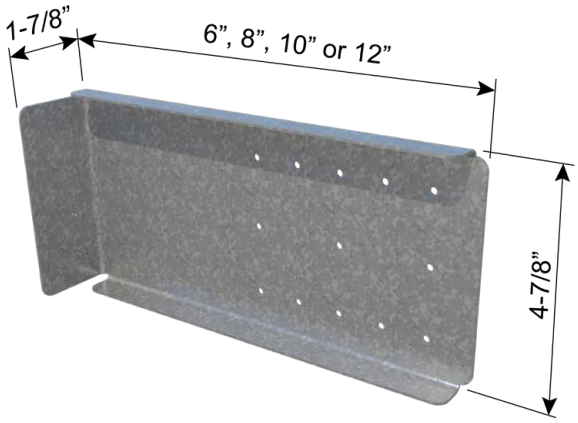
Gauge: 14 gauge (68mils)
Design Thickness: 0.0713 inches
Coating: G90
Yield Strength: 50 ksi
ASTM: A653/A653M

INSTALLATION

Attach the Extended Uni-Clip rigid clips to cold-formed steel framing members using #12 minimum self-drilling screws driven through the clip holes into the steel framing. Follow the required fastener placement patterns to achieve the allowable load. Connections to the primary building frame can also be made with powder-actuated fasteners or welds per design requirement.

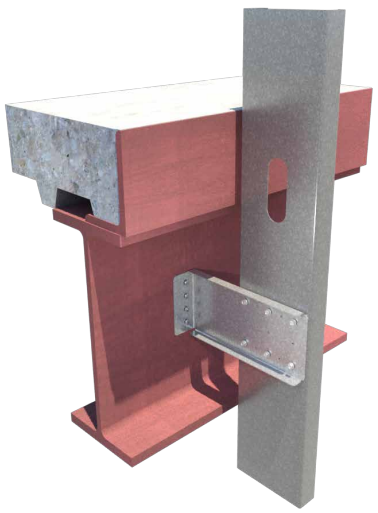
CODE APPROVALS & PERFORMANCE STANDARDS

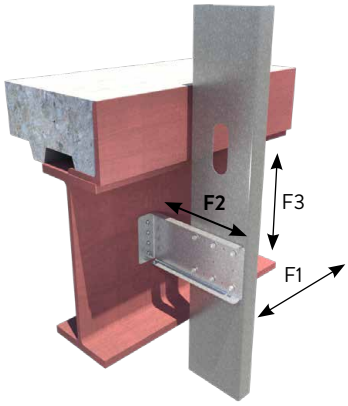
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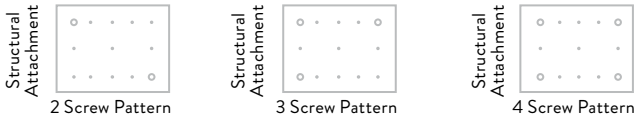


Extended Uni-Clip™ (UXRC)

Clip Designation	Thickness		Size (in)	Packaging Pcs./ Bucket
	mils (ga)	Design Thickness (in)		
UXRC6	68 (14)	0.0713	1-7/8 x 4-7/8 x 6	25
UXRC8	68 (14)	0.0713	1-7/8 x 4-7/8 x 8	25
UXRC10	68 (14)	0.0713	1-7/8 x 4-7/8 x 10	25
UXRC12	68 (14)	0.0713	1-7/8 x 4-7/8 x 12	25



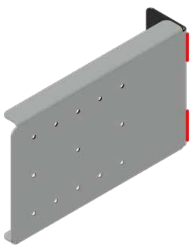




6" UXRC Screw Pattern—No Offset

6" Extended Uni-Clip™ (UXRC) Allowable Loads (KIPS)

Base Connection	Stud Thickness mils (ga)	Stud Fy (ksi)	6" Extended Uni-Clip								
			F1 Load (kips)			F2 Load (kips)			F3 Load (kips)		
			2 screws	3 screws	4 screws	2 screws	3 screws	4 screws	2 screws	3 screws	4 screws
Weld (Fillet/Flare Groove)	33 (20)	33	0.191	0.286	0.381	0.377	0.565	0.754	0.220	0.344	0.433
	43 (18)	33	0.248	0.373	0.497	0.561	0.841	1.122	0.328	0.511	0.644
	54 (16)	33	0.312	0.468	0.624	0.789	1.183	1.577	0.460	0.719	0.905
	54 (16)	50	0.450	0.675	0.899	1.139	1.708	2.278	0.665	1.038	1.307
	68 (14)	50	0.567	0.851	0.899	1.333	2.000	2.278	0.779	1.215	1.531
	97 (12)	50	0.809	0.899	0.899	1.333	2.000	2.278	0.779	1.215	1.531
(4) #12-24 (3/16" steel)	33 (20)	33	0.191	0.286	0.339	0.377	0.565	0.754	0.220	0.344	0.433
	43 (18)	33	0.248	0.339	0.339	0.561	0.841	1.122	0.328	0.511	0.644
	54 (16)	33	0.312	0.339	0.339	0.789	1.183	1.256	0.460	0.719	0.905
	54 (16)	50	0.339	0.339	0.339	1.139	1.256	1.256	0.665	1.038	1.307
	68 (14)	50	0.339	0.339	0.339	1.256	1.256	1.256	0.779	1.215	1.531
	97 (12)	50	0.339	0.339	0.339	1.256	1.256	1.256	0.779	1.215	1.531
(4) Hilti X-U (3/16" steel)	33 (20)	33	0.191	0.286	0.339	0.377	0.565	0.754	0.220	0.344	0.433
	43 (18)	33	0.248	0.339	0.339	0.561	0.841	0.875	0.328	0.511	0.644
	54 (16)	33	0.312	0.339	0.339	0.789	0.875	0.875	0.460	0.719	0.905
	54 (16)	50	0.339	0.339	0.339	0.875	0.875	0.875	0.665	1.038	1.307
	68 (14)	50	0.339	0.339	0.339	0.875	0.875	0.875	0.779	1.215	1.531
	97 (12)	50	0.339	0.339	0.339	0.875	0.875	0.875	0.779	1.215	1.531
(4) Hilti X-U (1" embedment in 3000psi concrete)	33 (20)	33	0.191	0.286	0.339	0.360	0.360	0.360	0.220	0.344	0.433
	43 (18)	33	0.248	0.339	0.339	0.360	0.360	0.360	0.328	0.511	0.644
	54 (16)	33	0.312	0.339	0.339	0.360	0.360	0.360	0.460	0.719	0.747
	54 (16)	50	0.339	0.339	0.339	0.360	0.360	0.360	0.665	0.747	0.747
	68 (14)	50	0.339	0.339	0.339	0.360	0.360	0.360	0.747	0.747	0.747
	97 (12)	50	0.339	0.339	0.339	0.360	0.360	0.360	0.747	0.747	0.747
(2) Kwik-Cons II (1-3/4" embedment in 3000psi concrete)	33 (20)	33	0.191	0.286	0.339	0.377	0.565	0.754	0.220	0.344	0.433
	43 (18)	33	0.248	0.339	0.339	0.561	0.841	0.922	0.328	0.511	0.644
	54 (16)	33	0.312	0.339	0.339	0.789	0.922	0.922	0.460	0.719	0.905
	54 (16)	50	0.339	0.339	0.339	0.922	0.922	0.922	0.665	1.038	1.160
	68 (14)	50	0.339	0.339	0.339	0.922	0.922	0.922	0.779	1.160	1.160
	97 (12)	50	0.339	0.339	0.339	0.922	0.922	0.922	0.779	1.160	1.160



Welded Base Connection

Notes:

1 Capacities listed in the table/notes assume that no load reductions are required for spacing or edge distance of Hilti pins in steel, Kwik-Cons, or screws. Load reductions are enforced for spacing or edge distance of Hilti X-U in concrete.

2 Weld capacities are based on (2) 1" welds on the outer radius of the bend starting at the outer edges of the clip.

3 Allowable loads have not been increased for wind, seismic, or other factors.

4 The F1 values are calculated based on the moment capacity of the clip cross section.

5 Capacities are based on the use of #12 screws to clip-stud interface.

6 The embedment depth of Kwik Cons in 3000psi concrete is 1-3/4". The embedment depth of Hilti X-U in 3000psi concrete is 1".

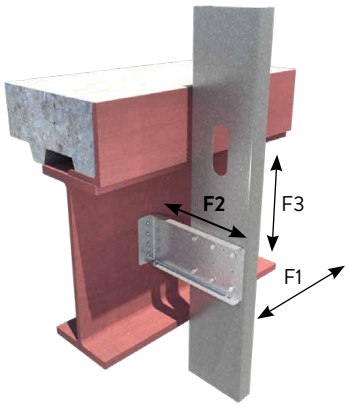
7 The Hilti X-U pins and #12-24 screws are embedded in 3/16" structural steel.

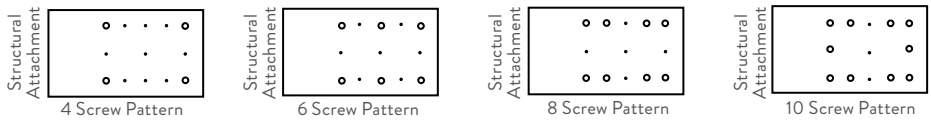
8 Torsional effects are considered on screw group for F3 allowable loads.

9 Use a linear interaction equation for connections involving any combination of F1, F2, and F3.

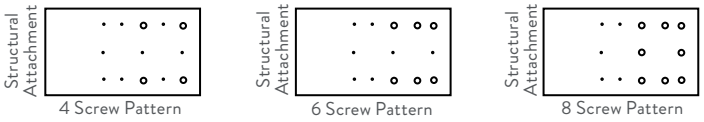
10 Hilti is a registered trademark of the Hilti Akfiengeseilchaft Corporation.

Extended Uni-Clip™





8" UXRC Screw Pattern—2" Offset



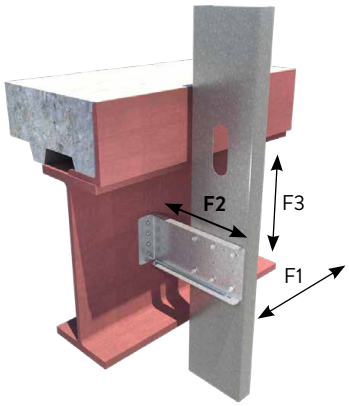
8" UXRC Screw Pattern—4" Offset

8" Extended Uni-Clip™ (UXRC) Allowable Loads (KIPS)

Base Connection	Stud Thickness mils (ga)	Stud Fy (ksi)	8" Extended Uni-Clip														
			2" Offset												4" Offset		
			F1 Load (kips)				F2 Load (kips)				F3 Load (kips)				F3 Load (kips)		
			4 screws	6 screws	8 screws	10 screws	4 screws	6 screws	8 screws	10 screws	4 screws	6 screws	8 screws	10 screws	4 screws	6 screws	8 screws
Weld (Fillet/Flare Groove)	33 (20)	33	0.381	0.453	0.453	0.453	0.754	1.131	1.508	1.884	0.310	0.435	0.572	0.686	0.214	0.306	0.363
	43 (18)	33	0.453	0.453	0.453	0.453	1.122	1.683	2.243	2.278	0.462	0.647	0.851	1.022	0.318	0.456	0.540
	54 (16)	33	0.453	0.453	0.453	0.453	1.577	2.278	2.278	2.278	0.649	0.909	1.196	1.436	0.447	0.640	0.759
	54 (16)	50	0.453	0.453	0.453	0.453	2.278	2.278	2.278	2.278	0.938	1.313	1.728	2.075	0.645	0.925	1.097
	68 (14)	50	0.453	0.453	0.453	0.453	2.278	2.278	2.278	2.278	1.098	1.538	2.022	2.278	0.756	1.083	1.284
	97 (12)	50	0.453	0.453	0.453	0.453	2.278	2.278	2.278	2.278	1.098	1.538	2.022	2.278	0.756	1.083	1.284
(4) #12-24 (3/16" steel)	33 (20)	33	0.301	0.301	0.301	0.301	0.754	1.131	1.256	1.256	0.310	0.435	0.572	0.686	0.214	0.306	0.363
	43 (18)	33	0.301	0.301	0.301	0.301	1.122	1.256	1.256	1.256	0.462	0.647	0.851	1.022	0.318	0.456	0.540
	54 (16)	33	0.301	0.301	0.301	0.301	1.256	1.256	1.256	1.256	0.649	0.909	1.196	1.436	0.447	0.640	0.759
	54 (16)	50	0.301	0.301	0.301	0.301	1.256	1.256	1.256	1.256	0.938	1.313	1.728	1.864	0.645	0.925	1.097
	68 (14)	50	0.301	0.301	0.301	0.301	1.256	1.256	1.256	1.256	1.098	1.538	1.864	1.864	0.756	1.083	1.284
	97 (12)	50	0.301	0.301	0.301	0.301	1.256	1.256	1.256	1.256	1.098	1.538	1.864	1.864	0.756	1.083	1.284
(4) Hilti X-U (3/16" steel)	33 (20)	33	0.301	0.301	0.301	0.301	0.754	0.875	0.875	0.875	0.310	0.435	0.572	0.686	0.214	0.306	0.363
	43 (18)	33	0.301	0.301	0.301	0.301	0.875	0.875	0.875	0.875	0.462	0.647	0.851	1.022	0.318	0.456	0.540
	54 (16)	33	0.301	0.301	0.301	0.301	0.875	0.875	0.875	0.875	0.649	0.909	1.196	1.436	0.447	0.640	0.759
	54 (16)	50	0.301	0.301	0.301	0.301	0.875	0.875	0.875	0.875	0.938	1.313	1.728	1.864	0.645	0.925	1.097
	68 (14)	50	0.301	0.301	0.301	0.301	0.875	0.875	0.875	0.875	1.098	1.538	1.864	1.864	0.756	1.083	1.284
	97 (12)	50	0.301	0.301	0.301	0.301	0.875	0.875	0.875	0.875	1.098	1.538	1.864	1.864	0.756	1.083	1.284
(4) Hilti X-U (1" embedment in 3000psi concrete)	33 (20)	33	0.301	0.301	0.301	0.301	0.360	0.360	0.360	0.360	0.310	0.435	0.572	0.686	0.214	0.306	0.363
	43 (18)	33	0.301	0.301	0.301	0.301	0.360	0.360	0.360	0.360	0.462	0.647	0.747	0.747	0.318	0.456	0.540
	54 (16)	33	0.301	0.301	0.301	0.301	0.360	0.360	0.360	0.360	0.649	0.747	0.747	0.747	0.447	0.640	0.747
	54 (16)	50	0.301	0.301	0.301	0.301	0.360	0.360	0.360	0.360	0.747	0.747	0.747	0.747	0.645	0.747	0.747
	68 (14)	50	0.301	0.301	0.301	0.301	0.360	0.360	0.360	0.360	0.747	0.747	0.747	0.747	0.747	0.747	0.747
	97 (12)	50	0.301	0.301	0.301	0.301	0.360	0.360	0.360	0.360	0.747	0.747	0.747	0.747	0.747	0.747	0.747
(2) Kwik-Cons II (1-3/4" embedment in 3000psi concrete)	33 (20)	33	0.301	0.301	0.301	0.301	0.754	0.922	0.922	0.922	0.310	0.435	0.572	0.686	0.214	0.306	0.363
	43 (18)	33	0.301	0.301	0.301	0.301	0.922	0.922	0.922	0.922	0.462	0.647	0.851	1.022	0.318	0.456	0.540
	54 (16)	33	0.301	0.301	0.301	0.301	0.922	0.922	0.922	0.922	0.649	0.909	1.160	1.160	0.447	0.640	0.759
	54 (16)	50	0.301	0.301	0.301	0.301	0.922	0.922	0.922	0.922	0.938	1.160	1.160	1.160	0.645	0.925	1.097
	68 (14)	50	0.301	0.301	0.301	0.301	0.922	0.922	0.922	0.922	1.098	1.160	1.160	1.160	0.756	1.083	1.160
	97 (12)	50	0.301	0.301	0.301	0.301	0.922	0.922	0.922	0.922	1.098	1.160	1.160	1.160	0.756	1.083	1.160

Notes:

1. Capacities listed in the table/notes assume that no load reductions are required for spacing or edge distance of Hilti X-U pins in steel, Kwik-Cons, or screws. Load reductions are enforced for spacing or edge distance of Hilti X-U in concrete.
2. Weld capacities are based on (2) 1" welds on the outer radius of the bend starting at the outer edges of the clip.
3. Allowable loads have not been increased for wind, seismic, or other factors.
4. The F1 values are calculated based on the moment capacity of the clip cross section.
5. Capacities are based on the use of #12 screws to clip-stud interface.
6. The embedment depth of Kwik-Cons in 3000psi normal weight concrete is 1-3/4". The embedment depth of Hilti X-U in 3000psi normal weight concrete is 1".
7. The Hilti X-U pins and #12-24 screws are embedded in 3/16" structural steel.
8. Torsional effects are considered on screw group for F3 allowable loads.
9. Use a linear interaction equation for connections involving any combination of F1, F2, and F3.
10. Hilti is a registered trademark of the Hilti Akfiengeseilchaft Corporation.
11. Hilti X-U PAFs shown in table may not be substituted without prior approval from ClarkDietrich Engineering Services.

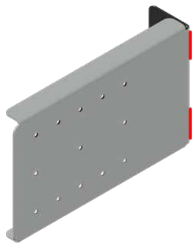




10" UXRC Screw Pattern—4" Offset

10" Extended Uni-Clip™ (UXRC) Allowable Loads (KIPS)

Base Connection	Stud Thickness Mil (gauge)	Stud Fy (ksi)	10" Extended Uni-Clip 4" Offset								
			F1 Load (kips)			F2 Load (kips)			F3 Load (kips)		
			4 screws	6 screws	10 screws	4 screws	6 screws	10 screws	4 screws	6 screws	10 screws
Weld (Fillet/Flare Groove)	33 (20)	33	0.228	0.228	0.228	0.754	1.131	1.884	0.239	0.328	0.523
	43 (18)	33	0.228	0.228	0.228	1.122	1.683	2.278	0.356	0.488	0.779
	54 (16)	33	0.228	0.228	0.228	1.577	2.278	2.278	0.500	0.686	1.095
	54 (16)	50	0.228	0.228	0.228	2.278	2.278	2.278	0.722	0.991	1.581
	68 (14)	50	0.228	0.228	0.228	2.278	2.278	2.278	0.845	1.160	1.851
	97 (12)	50	0.228	0.228	0.228	2.278	2.278	2.278	0.845	1.160	1.851
(4) #12-24 (3/16" steel)	33 (20)	33	0.133	0.133	0.133	0.754	1.131	1.256	0.239	0.328	0.523
	43 (18)	33	0.133	0.133	0.133	1.122	1.256	1.256	0.356	0.488	0.779
	54 (16)	33	0.133	0.133	0.133	1.256	1.256	1.256	0.500	0.686	1.095
	54 (16)	50	0.133	0.133	0.133	1.256	1.256	1.256	0.722	0.991	1.581
	68 (14)	50	0.133	0.133	0.133	1.256	1.256	1.256	0.845	1.160	1.596
	97 (12)	50	0.133	0.133	0.133	1.256	1.256	1.256	0.845	1.160	1.596
(4) Hilti X-U (3/16" steel)	33 (20)	33	0.133	0.133	0.133	0.754	0.875	0.875	0.239	0.328	0.523
	43 (18)	33	0.133	0.133	0.133	0.875	0.875	0.875	0.356	0.488	0.779
	54 (16)	33	0.133	0.133	0.133	0.875	0.875	0.875	0.500	0.686	1.095
	54 (16)	50	0.133	0.133	0.133	0.875	0.875	0.875	0.722	0.991	1.581
	68 (14)	50	0.133	0.133	0.133	0.875	0.875	0.875	0.845	1.160	1.596
	97 (12)	50	0.133	0.133	0.133	0.875	0.875	0.875	0.845	1.160	1.596
(4) Hilti X-U (1" embedment in 3000psi concrete)	33 (20)	33	0.133	0.133	0.133	0.360	0.360	0.360	0.239	0.328	0.523
	43 (18)	33	0.133	0.133	0.133	0.360	0.360	0.360	0.356	0.488	0.747
	54 (16)	33	0.133	0.133	0.133	0.360	0.360	0.360	0.500	0.686	0.747
	54 (16)	50	0.133	0.133	0.133	0.360	0.360	0.360	0.722	0.747	0.747
	68 (14)	50	0.133	0.133	0.133	0.360	0.360	0.360	0.747	0.747	0.747
	97 (12)	50	0.133	0.133	0.133	0.360	0.360	0.360	0.747	0.747	0.747
(2) Kwik-Cons II (1-3/4" embedment in 3000psi concrete)	33 (20)	33	0.133	0.133	0.133	0.754	0.922	0.922	0.239	0.328	0.523
	43 (18)	33	0.133	0.133	0.133	0.922	0.922	0.922	0.356	0.488	0.779
	54 (16)	33	0.133	0.133	0.133	0.922	0.922	0.922	0.500	0.686	1.095
	54 (16)	50	0.133	0.133	0.133	0.922	0.922	0.922	0.722	0.991	1.160
	68 (14)	50	0.133	0.133	0.133	0.922	0.922	0.922	0.845	1.160	1.160
	97 (12)	50	0.133	0.133	0.133	0.922	0.922	0.922	0.845	1.160	1.160



Welded Base Connection

Notes:

1 Capacities listed in the table/notes assume that no load reductions are required for spacing or edge distance of Hilti pins in steel, Kwik-Cons, or screws. Load reductions are enforced for spacing or edge distance of Hilti X-U in concrete.

2 Weld capacities are based on (2) 1" welds on the outer radius of the bend starting at the outer edges of the clip.

3 Allowable loads have not been increased for wind, seismic, or other factors.

4 The F1 values are calculated based on the moment capacity of the clip cross section.

5 Capacities are based on the use of #12 screws to clip-stud interface.

6 The embedment depth of Kwik Cons in 3000psi concrete is 1-3/4". The embedment depth of Hilti X-U in 3000psi concrete is 1".

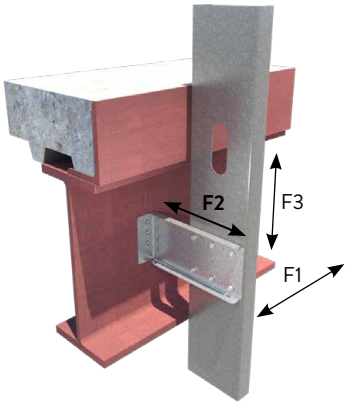
7 The Hilti X-U pins and #12-24 screws are embedded in 3/16" structural steel.

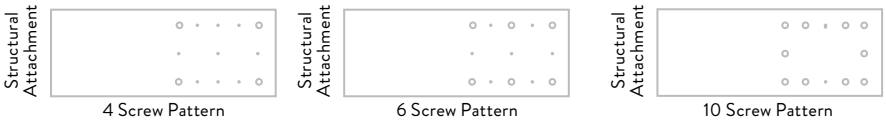
8 Torsional effects are considered on screw group for F3 allowable loads.

9 Use a linear interaction equation for connections involving any combination of F1, F2, and F3.

10 Hilti is a registered trademark of the Hilti Akfiengeseilchaft Corporation.

Extended Uni-Clip™

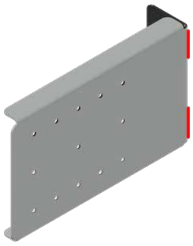




12" UXRC Screw Pattern—6" Offset

12" Extended Uni-Clip™ (UXRC) Allowable Loads (KIPS)

Base Connection	Stud Thickness mils (ga)	Stud Fy (ksi)	12" Extended Uni-Clip 6" Offset								
			F1 Load (kips)			F2 Load (kips)			F3 Load (kips)		
			4 screws	6 screws	10 screws	4 screws	6 screws	10 screws	4 screws	6 screws	10 screws
Weld (Fillet/Flare Groove)	33 (20)	33	0.131	0.131	0.131	0.754	1.131	1.884	0.193	0.261	0.420
	43 (18)	33	0.131	0.131	0.131	1.122	1.683	2.278	0.287	0.389	0.625
	54 (16)	33	0.131	0.131	0.131	1.577	2.278	2.278	0.404	0.547	0.879
	54 (16)	50	0.131	0.131	0.131	2.278	2.278	2.278	0.584	0.790	1.269
	68 (14)	50	0.131	0.131	0.131	2.278	2.278	2.278	0.683	0.925	1.485
	97 (12)	50	0.131	0.131	0.131	2.278	2.278	2.278	0.683	0.925	1.485
(4) #12-24 (3/16" steel)	33 (20)	33	0.095	0.095	0.095	0.754	0.950	0.950	0.193	0.261	0.420
	43 (18)	33	0.095	0.095	0.095	0.950	0.950	0.950	0.287	0.389	0.625
	54 (16)	33	0.095	0.095	0.095	0.950	0.950	0.950	0.404	0.547	0.879
	54 (16)	50	0.095	0.095	0.095	0.950	0.950	0.950	0.584	0.790	1.269
	68 (14)	50	0.095	0.095	0.095	0.950	0.950	0.950	0.683	0.925	1.329
	97 (12)	50	0.095	0.095	0.095	0.950	0.950	0.950	0.683	0.925	1.329
(4) Hilti X-U (3/16" steel)	33 (20)	33	0.095	0.095	0.095	0.754	0.875	0.875	0.193	0.261	0.420
	43 (18)	33	0.095	0.095	0.095	0.875	0.875	0.875	0.287	0.389	0.625
	54 (16)	33	0.095	0.095	0.095	0.875	0.875	0.875	0.404	0.547	0.879
	54 (16)	50	0.095	0.095	0.095	0.875	0.875	0.875	0.584	0.790	1.269
	68 (14)	50	0.095	0.095	0.095	0.875	0.875	0.875	0.683	0.925	1.329
	97 (12)	50	0.095	0.095	0.095	0.875	0.875	0.875	0.683	0.925	1.329
(4) Hilti X-U (1" embedment in 3000psi concrete)	33 (20)	33	0.095	0.095	0.095	0.360	0.360	0.360	0.193	0.261	0.420
	43 (18)	33	0.095	0.095	0.095	0.360	0.360	0.360	0.287	0.389	0.625
	54 (16)	33	0.095	0.095	0.095	0.360	0.360	0.360	0.404	0.547	0.747
	54 (16)	50	0.095	0.095	0.095	0.360	0.360	0.360	0.584	0.747	0.747
	68 (14)	50	0.095	0.095	0.095	0.360	0.360	0.360	0.683	0.747	0.747
	97 (12)	50	0.095	0.095	0.095	0.360	0.360	0.360	0.683	0.747	0.747
(2) Kwik-Cons II (1-3/4" embedment in 3000psi concrete)	33 (20)	33	0.095	0.095	0.095	0.754	0.922	0.922	0.193	0.261	0.420
	43 (18)	33	0.095	0.095	0.095	0.922	0.922	0.922	0.287	0.389	0.625
	54 (16)	33	0.095	0.095	0.095	0.922	0.922	0.922	0.404	0.547	0.879
	54 (16)	50	0.095	0.095	0.095	0.922	0.922	0.922	0.584	0.790	1.160
	68 (14)	50	0.095	0.095	0.095	0.922	0.922	0.922	0.683	0.925	1.160
	97 (12)	50	0.095	0.095	0.095	0.922	0.922	0.922	0.683	0.925	1.160



Welded Base Connection

Notes:

1 Capacities listed in the table/notes assume that no load reductions are required for spacing or edge distance of Hilti pins in steel, Kwik-Cons, or screws. Load reductions are enforced for spacing or edge distance of Hilti X-U in concrete.
2 Weld capacities are based on (2) 1" welds on the outer radius of the bend starting at the outer edges of the clip.
3 Allowable loads have not been increased for wind, seismic, or other factors.
4 The F1 values are calculated based on the moment capacity of the clip cross section.
5 Capacities are based on the use of #12 screws to clip-stud interface.
6 The embedment depth of Kwik Cons in 3000psi concrete is 1-3/4". The embedment depth of Hilti X-U in 3000psi concrete is 1".
7 The Hilti X-U pins and #12-24 screws are embedded in 3/16" structural steel.
8 Torsional effects are considered on screw group for F3 allowable loads.
9 Use a linear interaction equation for connections involving any combination of F1, F2, and F3.
10 Hilti is a registered trademark of the Hilti Akfiengeseilchaft Corporation.

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Pub. No. CD-ClipExpress 04/26

Extended Uni-Clip™ w/Anchor Holes

Connects exterior studs to the primary structure of the building, while resisting horizontal and vertical loads.

ClarkDietrich's UXRC6-HD 68mils (14ga) rigid framing clip is used to attach exterior wall studs to the structure of the building. This clip is designed to resist horizontal and vertical loads. (1) 5/8" hole in the short leg of the clip allows for a 1/2" concrete anchor to be attached to the slab. (2) 3/8" holes allow 1/4" anchors.



MATERIAL SPECIFICATIONS

Gauge: 14 gauge (68mils)
Design Thickness: 0.0713 inches
Coating: G90
Yield Strength: 50 ksi
ASTM: A653/A653M

PRODUCT DIMENSIONS

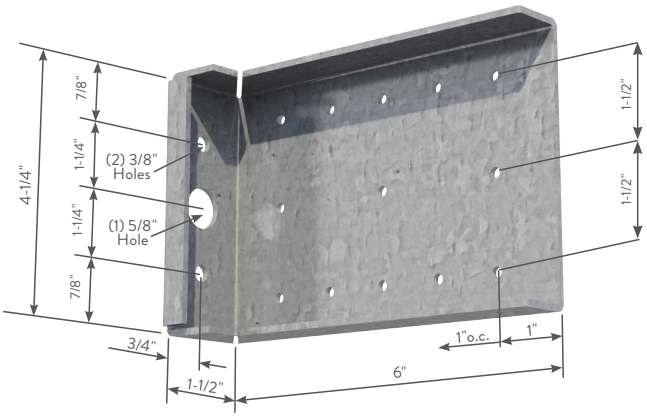
6" Extended Uni-Clip: 1-1/2" x 4-1/4" x 6"

INSTALLATION

Attach the Extended Uni-Clip rigid clips to cold-formed steel framing members using #12 minimum self-drilling screws driven through the clip holes into the steel framing. Follow the required fastener placement patterns to achieve the allowable load. Attachement to the structure concrete slab can be made with (1) 1/2" or (2) 1/4" bolt anchors. Anchor connection design and edge distance requirements must be approved by a design professional before installation.

CODE APPROVALS & PERFORMANCE STANDARDS

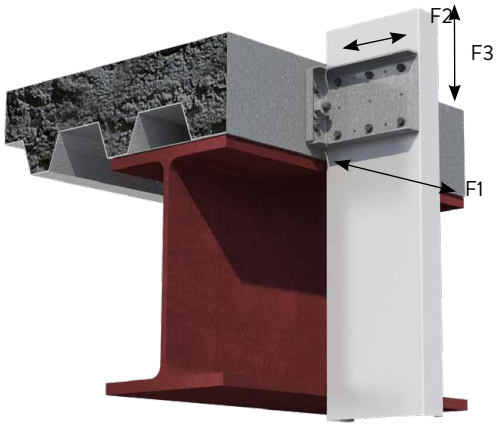
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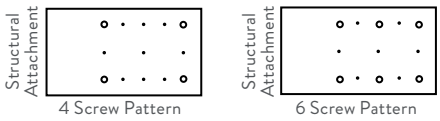


UXRC6-HD

Extended Uni-Clip™ (UXRC6-HD)

Clip Designation	Thickness		Size (in)	Packaging Pcs./ Bucket
	mils (ga)	Design Thickness (in)		
UXRC6-HD	68 (14)	0.0713	1-1/2 x 4-1/4 x 6	25





UXRC6-HD Screw Pattern

Extended Uni-Clip™ (UXRC6-HD) Allowable Loads

ANCHOR DESIGN BY OTHERS

Clip Designation	Stud Thickness mils (ga)	Stud fy (ksi)	Mechanically Anchored to Structure	ASD Allowable Loads (lb.)					
				F1 Load		F2 Load		F3 Load	
				w/4 #12-14	w/6 #12-14	w/4 #12-14	w/6 #12-14	w/4 #12-14	w/6 #12-14
UXRC6-HD 14ga (68mils)	33 (20)	33	Anchors to be designed by others	165	165	754	1131	361	471
	43 (18)	33		232	232	1122	1428*	537	701
	54 (16)	50		405	405	1428*	1428*	1091	1423
	68 (14)	50		527	527	1568*	1568*	1488	1600
	97 (12)	50		809	809	1667*	1667*	1488	1908

* Capacities governed by 1/8" service load criteria.

Extended Uni-Clip™ (UXRC6-HD) Allowable Loads

CONSIDERING ANCHOR CAPACITIES

Clip Designation	Stud Thickness mils (ga)	Stud fy (ksi)	Mechanically Anchored to Structure	ASD Allowable Loads (lb.)					
				F1 Load		F2 Load		F3 Load	
				w/4 #12-14	w/6 #12-14	w/4 #12-14	w/6 #12-14	w/4 #12-14	w/6 #12-14
UXRC6-HD 14ga (68mils)	33 (20)	33	(1) 1/2" Hilti KWIK Bolt TZ[2] (3000 psi uncracked concrete)	165	165	754	1131	351	471
	43 (18)	33		232	232	1122	1199	502	682
	54 (16)	50		405	405	1199	1199	983	1280
	68 (14)	50		527	527	1339	1339	1336	1413
	97 (12)	50		809	809	1339	1339	1488	1628
	33 (20)	33	(2) 1/4" Hilti KWIK HUS-EZ[3] (3000 psi uncracked concrete)	141	141	754	1131	361	471
	43 (18)	33		207	207	1122	1403	537	701
	54 (16)	50		397	397	1403	1403	1091	1423
	68 (14)	50		484	484	1403	1403	1488	1600
	97 (12)	50		803	803	1403	1403	1488	1838

Notes:

1 Table-1 contains the allowable load capacity of the clip and the screw connection to the CFS stud. When the mechanical anchors between the clip and the support structure are designed by others, pull-over shall be included in the evaluation of F2 loads, and bearing shall be included in the evaluation of F3 loads.

2 Table-2 considers capacities listed in Notes 3 and 4 (below) when the specified connectors to the structure are used.

3 When using 1/2" Hilti KWIK Bolt TZ anchor (nominal embedment depth of 2-3/8") into 3000psi concrete, anchor capacity shall be limited to:
- **a** Tension capacity/anchor: 1509-lbs (uncracked concrete) and 1069-lbs (cracked concrete)
- **b** Shear capacity/anchor: 1628-lbs (uncracked concrete) and 1153-lbs (cracked concrete)

4 When using 1/4" Hilti KWIK HUS-EZ anchor (nominal embedment depth of 2-1/2")into 3000psi concrete, anchor capacity shall be limited to:
- a Tension capacity/anchor: 752-lbs (uncracked concrete) and 374-lbs (cracked concrete)
- b Shear capacity/anchor: 919-lbs (uncracked concrete) and 651-lbs (cracked concrete)

5 Connector capacities listed in Note 4 utilize load adjustment/reduction (anchor spacing) factors of 0.72 for tension and 0.60 for shear as per 2016 Hilti Anchor Fastening Technical Guide (see Hilti Table 6 and 7 under section 3.3.6.3).

6 Where anchors are loaded simultaneously in tension and shear, interaction must be considered following anchor manufacturer guidelines.

7 Capacities listed in the table/notes did not consider load adjustment for edge distance of anchors. For no reduction in the listed capacities, the following requirements needed to be met for the concrete surface where the clip attaches:
- **a** When using 1/2" Hilti KWIK Bolt TZ anchor embedded 2-3/8" deep into 3000psi concrete, minimum edge distance shall be:
  - i) 5-1/2" for uncracked concrete;
  - ii) 4-1/8" for cracked concrete
- **b** When using 1/4" Hilti KWIK HUS-EZ anchors embedded 2-1/2" deep into 3000psi concrete, minimum edge distance shall be:
  - i) 4-1/2" for uncracked concrete
  - ii) 4-1/2" for cracked concrete

8 Other anchors may be used to achieve the full clip capacity but must be designed separately.

9 Allowable loads have not been increased for wind, seismic, or other factors.

10 Hilti is a registered trademark of Hilti Aktiengeseilschaft Corporation.

11 It is the responsibility of the designer to properly detail connections on the contract drawings.

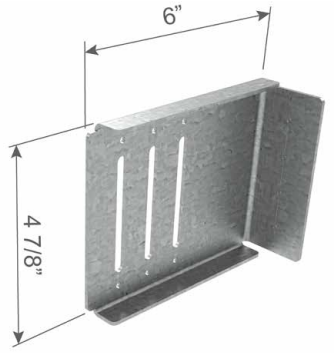
Universal Bypass Clip

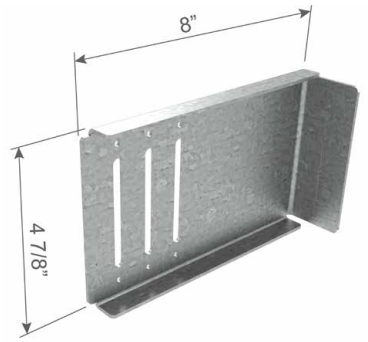
Provides either a rigid connection or vertical building movement up to 3"

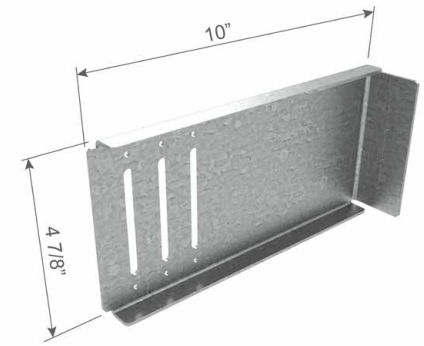
Universal Bypass Clips are used to attach exterior curtain wall studs to the building structure and provide either a rigid connection or deflecting connection for vertical building movement independent of the cold-formed steel framing.

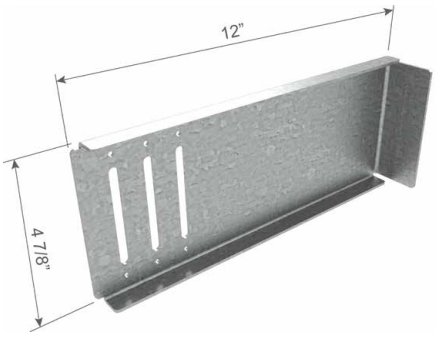
The clips are available in standard lengths of 6", 8", 10" and 12" and are ideal for medium to larger standoff conditions. Universal Bypass Clips install quickly with screws, welds or powder-actuated fasteners, and provide adjustable standoff to ensure a plumb wall plane. For deflection application, proprietary deflection screws are provided with each clip to ensure friction-free sliding.

- Eliminates shims and scabs.
- Provides vertical movement up to 3" (1-1/2" up and 1-1/2"down) when installed as a deflection application.
- Specially designed to simplify welding installation.
- Fast, one-piece universal installation. No left or right handed clips.
- Proprietary deflection screws provide frictionless slip connections. One bag (80 screws) included.









ALTERNATIVE PRODUCTS

FastClip™ Slide Clip
Extended FastClip™ Slide Clip
Extended Uni-Clip™

MATERIAL SPECIFICATIONS

Gauge: 14 gauge (68mils)
Design Thickness: 0.0713 inches

Gauge: 12 gauge (97mils)
Design Thickness: 0.1017 inches

Yield Strength: Structural Grade 50 Type H (ST50H), 50ksi (340 MPa)
Coating: G90 (Z275) hot-dipped galvanized coating
ASTM: A653, A1003

Universal Bypass Clip (UBC)

Clip Designation	mils (ga)	Design Thickness (in)	Size (in)	Pcs/Bucket
UBC6-68	68 (14)	0.0713	1-7/8" x 6" x 4-7/8"	25
UBC8-68	68 (14)	0.0713	1-7/8" x 8" x 4-7/8"	25
UBC10-68	68 (14)	0.0713	1-7/8" x 10" x 4-7/8"	25
UBC12-68	68 (14)	0.0713	1-7/8" x 12" x 4-7/8"	25
UBC6-97	97 (12)	0.1017	1-7/8" x 6" x 4-7/8"	25
UBC8-97	97 (12)	0.1017	1-7/8" x 8" x 4-7/8"	25
UBC10-97	97 (12)	0.1017	1-7/8" x 10" x 4-7/8"	25
UBC12-97	97 (12)	0.1017	1-7/8" x 12" x 4-7/8"	25

INSTALLATION

Connections to the building can be made with screws, welds powder-actuated fasteners. Mechanical fasteners shall be located on the embossed marks given on the scored line of the 1-7/8" flange. Attach building anchors to the structure according to the manufacture's instructions. Anchors shall be installed through the embossments on the scored line of the clip as shown on the attached drawings. In no case shall anchors be installed more than 3/4" from the bend on the short leg of the clip. In cases of discrepancy between this information and the Design Engineer's details, the Design Engineer's details shall be followed.





For a Rigid Connection:
Attach the Universal Bypass Clip to cold-formed steel framing members using (6) #10-16 minimum self-drilling screws (not included) for the 14ga clip and (6) #12-14 minimum self-drilling screws (not included) for the 12ga clip, through the clip holes into the steel framing.

For a Deflection Connection:
Attach the Universal Bypass Clip to the cold-formed steel framing using (3) #14 proprietrary deflection screws (included) through the (3) slotted holes and positioned to allow for the appropriate building deflection.

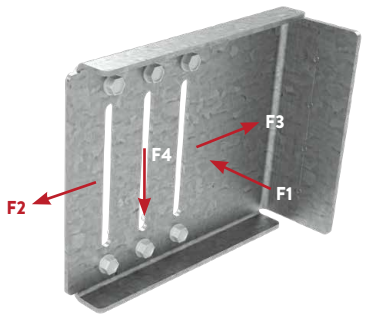
Proprietary Deflection Screws:
Many of the ClarkDietrich deflection clips include our proprietary deflection fastener that has been specifically designed to provide friction-free deflection. These fasteners eliminate drag, binding or resistance that can often occur with common fasteners.

Universal Bypass Clip

UBC - 14ga (As a Rigid Connection w/ (6) screws)

ATTACHMENT TO STRUCTURAL: DESIGNED BY OTHERS

Clip Designation	Stud Thickness/ Yield Strength mils (ga) ksi	ASD Allowable Loads (lbs)			
		F1 (In-Plane) w/ (6) #10-16	F2 (Tension) w/ (6) #10-16	F3 (Compression) w/ (6) #10-16	F4 (Shear) w/ (6) #10-16
UBC6-68	33 (20) 33	165	1060	1060	395
	43 (18) 33	215	1450	1575	590
	54 (16) 50	255	1450	1590	1055
	68 (14) 50	255	1450	1590	1055
	97 (12) 50	255	1450	1590	1055
UBC8-68	33 (20) 33	165	1060	1060	290
	43 (18) 33	215	1450	1405	430
	54 (16) 50	220	1450	1405	770
	68 (14) 50	220	1450	1405	770
	97 (12) 50	220	1450	1405	770
UBC10-68	33 (20) 33	165	1060	1060	225
	43 (18) 33	190	1450	1385	340
	54 (16) 50	190	1450	1385	605
	68 (14) 50	190	1450	1385	605
	97 (12) 50	190	1450	1385	605
UBC12-68	33 (20) 33	160	1060	1060	185
	43 (18) 33	160	1430	1285	280
	54 (16) 50	160	1430	1285	495
	68 (14) 50	160	1430	1285	495
	97 (12) 50	160	1430	1285	495



Notes:

1 Allowable loads (ASD) listed represent the capacity of the clip to the stud only. (Framing Connection)

2 Allowable Loads have not been increased for the wind, seismic, or other factors.

3 An 1/8-in service deflection load limit was applied to clips resisting F2, F3 and F4 loads. In accordance with ICC AC 261, service deflection limit was not applied to clips resisting F1 loads.

4 Listed capacities are based on the maximum screw pattern. For maximum screw pattern for a Rigid Clip, fill screws in (6) round holes.

5 For 12ga Rigid clip, (6) #12-14 screws shall be installed in the pilot holes. For 14ga Rigid clip, (6) #10-16 screws shall be installed in the pilot holes.

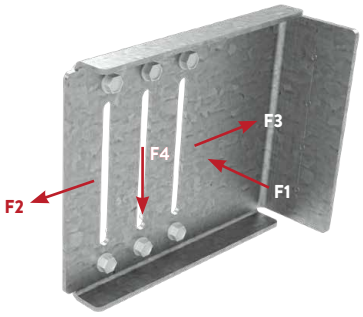
6 It is the responsibility of the design professional to design the attachment of the clips to the structure and verify that their capacity meets the requirements of the intended application.

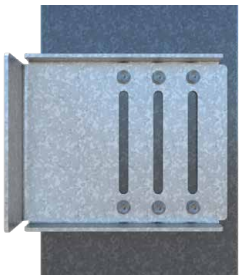
7 Nominal or LRFD loads are available upon request.

UBC - 14ga (As a Rigid Connection w/ (6) screws)

ATTACHMENT TO STRUCTURAL: WELDED

Clip Designation	Stud Thickness/ Yield Strength mils (ga) ksi	ASD Allowable Loads (lbs)			
		F1 (In-Plane) w/ (6) #10-16	F2 (Tension) w/ (6) #10-16	F3 (Compression) w/ (6) #10-16	F4 (Shear) w/ (6) #10-16
UBC6-68	33 (20) 33	165	1060	1060	395
	43 (18) 33	215	1575	1575	590
	54 (16) 50	255	1755	1590	1055
	68 (14) 50	255	1755	1590	1055
	97 (12) 50	255	1755	1590	1055
UBC8-68	33 (20) 33	165	1060	1060	290
	43 (18) 33	215	1575	1405	430
	54 (16) 50	220	1675	1405	770
	68 (14) 50	220	1675	1405	770
	97 (12) 50	220	1675	1405	770
UBC10-68	33 (20) 33	165	1060	1060	225
	43 (18) 33	190	1575	1385	340
	54 (16) 50	190	1675	1385	605
	68 (14) 50	190	1675	1385	605
	97 (12) 50	190	1675	1385	605
UBC12-68	33 (20) 33	160	1060	1060	185
	43 (18) 33	160	1575	1285	280
	54 (16) 50	160	1675	1285	495
	68 (14) 50	160	1675	1285	495
	97 (12) 50	160	1675	1285	495





12ga Clip: (6) #12-14 Screws
14ga Clip: (6) #10-16 Screws
Shown in a UBC6 Clip

Notes:

1 Allowable Loads (ASD) have not been increased for the wind, seismic, or other factors.

2 Listed capacities are based on the maximum screw pattern. For maximum screw pattern for a Rigid Clip, fill screws in (6) round holes.

3 For 12ga Rigid clip, (6) #12-14 screws shall be installed in the pilot holes. For 14ga Rigid clip, (6) #10-16 screws shall be installed in the pilot holes.

4 The Allowable loads listed for welds are based on the following weld lengths:
- (2) Welds - 1" along back of short leg clip bend (each weld equally distanced from center of clip).

5 Use E70XX (min.) electrodes.

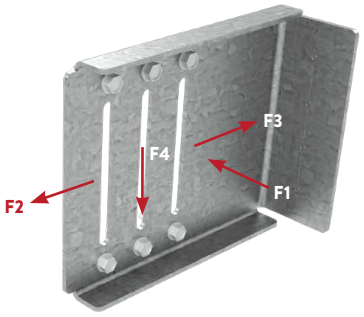
6 It is the responsibility of the design professional to verify that the connection design meets the requirements of the intended application.

7 Nominal or LRFD loads are available upon request.

UBC - 14ga (As a Rigid Connection w/ (6) screws)

ATTACHMENT TO STRUCTURAL: (4) #12-24 FASTENERS

Clip Designation	Stud Thickness / Yield Strength mils (ga) ksi	ASD Allowable Loads (lbs)			
		F1 (In-Plane) w/ (6) #10-16	F2 (Tension) w/ (6) #10-16	F3 (Compression) w/ (6) #10-16	F4 (Shear) w/ (6) #10-16
UBC6-68	33 (20) 33	165	1060	1060	395
	43 (18) 33	215	1450	1575	590
	54 (16) 50	255	1450	1590	1055
	68 (14) 50	255	1450	1590	1055
	97 (12) 50	255	1450	1590	1055
UBC8-68	33 (20) 33	165	1060	1060	290
	43 (18) 33	215	1450	1405	430
	54 (16) 50	220	1450	1405	770
	68 (14) 50	220	1450	1405	770
	97 (12) 50	220	1450	1405	770
UBC10-68	33 (20) 33	165	1060	1060	225
	43 (18) 33	190	1450	1385	340
	54 (16) 50	190	1450	1385	605
	68 (14) 50	190	1450	1385	605
	97 (12) 50	190	1450	1385	605
UBC12-68	33 (20) 33	160	1060	1060	185
	43 (18) 33	160	1430	1285	280
	54 (16) 50	160	1430	1285	495
	68 (14) 50	160	1430	1285	495
	97 (12) 50	160	1430	1285	495



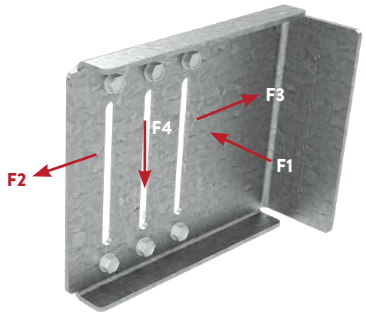
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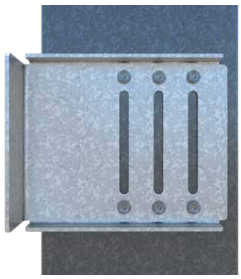
1 Allowable Loads (ASD) have not been increased for the wind, seismic, or other factors.
2 An 1/8-in service deflection load limit was applied to clips resisting F2, F3 and F4 loads. In accordance with ICC AC 261, service deflection limit was not applied to clips resisting F1 loads.
3 Listed capacities are based on the maximum screw pattern. For maximum screw pattern for a Rigid Clip, fill screws in (6) round holes.
4 For 12ga Rigid clip, (6) #12-14 screws shall be installed in the pilot holes. For 14ga Rigid clip, (6) #10-16 screws shall be installed in the pilot holes.
5 #12-24 Fasteners shall be used for attachment to steel structure. (4) Fastener configuration shall be used. Screws should be placed at indentations scribed on the short leg of the UBC clip.
6 The minimum edge distance for each fastener type shall comply with the fastener manufacturer's recommendation.
7 It is the responsibility of the design professional to verify that the connection design meets the requirements of the intended application.
8 Nominal or LRFD loads are available upon request.

UBC - 14ga (As a Rigid Connection w/ (6) screws)

ATTACHMENT TO STRUCTURAL: (4) 0.157" PAFs

Clip Designation	Stud Thickness / Yield Strength mils (ga) ksi	ASD Allowable Loads (lbs)			
		F1 (In-Plane) w/ (6) #10-16	F2 (Tension) w/ (6) #10-16	F3 (Compression) w/ (6) #10-16	F4 (Shear) w/ (6) #10-16
UBC6-68	33 (20) 33	165	1060	1060	395
	43 (18) 33	215	1450	1575	590
	54 (16) 50	255	1450	1590	1055
	68 (14) 50	255	1450	1590	1055
	97 (12) 50	255	1450	1590	1055
UBC8-68	33 (20) 33	165	1060	1060	290
	43 (18) 33	215	1450	1405	430
	54 (16) 50	220	1450	1405	770
	68 (14) 50	220	1450	1405	770
	97 (12) 50	220	1450	1405	770
UBC10-68	33 (20) 33	165	1060	1060	225
	43 (18) 33	190	1450	1385	340
	54 (16) 50	190	1450	1385	605
	68 (14) 50	190	1450	1385	605
	97 (12) 50	190	1450	1385	605
UBC12-68	33 (20) 33	160	1060	1060	185
	43 (18) 33	160	1430	1285	280
	54 (16) 50	160	1430	1285	495
	68 (14) 50	160	1430	1285	495
	97 (12) 50	160	1430	1285	495





12ga Clip: (6) #12-14 Screws
14ga Clip: (6) #10-16 Screws
Shown in a UBC6 Clip

Notes:

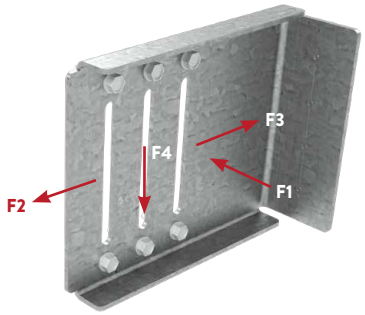
1 Allowable Loads (ASD) have not been increased for the wind, seismic, or other factors.
2 Nominal or LRFD loads are available upon request.
3 Listed capacities are based on the maximum screw pattern. For maximum screw pattern for a Rigid Clip, fill screws in (6) round holes.
4 For 12ga Rigid clip, (6) #12-14 screws shall be installed in the pilot holes. For 14ga Rigid clip, (6) #10-16 screws shall be installed in the pilot holes.
5 0.157" Hilti X-U PAFs shall be used for attachment to steel structure. (4) Fastener configuration shall be used. PAFs should be placed at indentations scribed on the short leg of the UBC clip.
6 Capacities considered for Hilti PAFs are based on fastener strengths listed in ICC ESR-2269.
7 It is the responsibility of the design professional to verify that the connection design meets the requirements of the intended application.
8 An 1/8-in service deflection load limit was applied to clips resisting F2, F3 and F4 loads. In accordance with ICC AC 261, service deflection limit was not applied to clips resisting F1 loads.

Universal Bypass Clip

UBC - 12ga (As a Rigid Connection w/ (6) screws)

ATTACHMENT TO STRUCTURAL: DESIGNED BY OTHERS

Clip Designation	Stud Thickness / Yield Strength mils (ga) ksi	ASD Allowable Loads (lbs)			
		F1 (In-Plane) w/ (6) #12-14	F2 (Tension) w/ (6) #12-14	F3 (Compression) w/ (6) #12-14	F4 (Shear) w/ (6) #12-14
UBC6-97	33 (20) 33	190	1130	1130	425
	43 (18) 33	245	1680	1680	630
	54 (16) 50	265	2115	2540	1230
	68 (14) 50	265	2115	2540	1230
	97 (12) 50	265	2115	2540	1230
UBC8-97	33 (20) 33	190	1130	1130	310
	43 (18) 33	240	1680	1680	460
	54 (16) 50	240	2115	2315	885
	68 (14) 50	240	2115	2315	885
	97 (12) 50	240	2115	2315	885
UBC10-97	33 (20) 33	190	1130	1130	245
	43 (18) 33	225	1680	1680	360
	54 (16) 50	225	2115	2055	690
	68 (14) 50	225	2115	2055	690
	97 (12) 50	225	2115	2055	690
UBC12-97	33 (20) 33	190	1130	1130	200
	43 (18) 33	195	1680	1680	295
	54 (16) 50	195	2115	2055	605
	68 (14) 50	195	2115	2055	630
	97 (12) 50	195	2115	2055	630



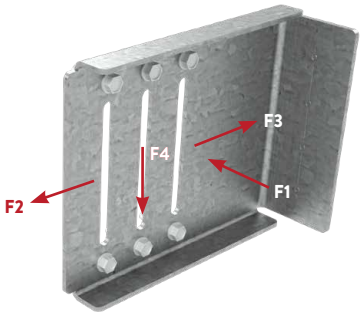
Notes:

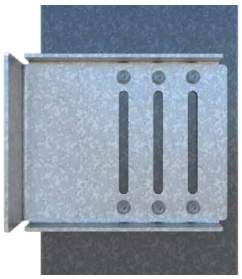
1 Allowable loads (ASD) listed represent the capacity of the clip to the stud only. (Framing Connection)
2 Allowable Loads have not been increased for the wind, seismic, or other factors.
3 An 1/8-in service deflection load limit was applied to clips resisting F2, F3 and F4 loads. In accordance with ICC AC 261, service deflection limit was not applied to clips resisting F1 loads.
4 Listed capacities are based on the maximum screw pattern. For maximum screw pattern for a Rigid Clip, fill screws in (6) round holes.
5 For 12ga Rigid clip, (6) #12-14 screws shall be installed in the pilot holes. For 14ga Rigid clip, (6) #10-16 screws shall be installed in the pilot holes.
6 It is the responsibility of the design professional to design the attachment of the clips to the structure and verify that their capacity meets the requirements of the intended application.
7 Nominal or LRFD loads are available upon request.

UBC - 12ga (As a Rigid Connection w/ (6) screws)

ATTACHMENT TO STRUCTURAL: WELDED

Clip Designation	Stud Thickness / Yield Strength mils (ga) ksi	ASD Allowable Loads (lbs)			
		F1 (In-Plane) w/ (6) #12-14	F2 (Tension) w/ (6) #12-14	F3 (Compression) w/ (6) #12-14	F4 (Shear) w/ (6) #12-14
UBC6-97	33(20) 33	190	1130	1130	425
	43 (18) 33	245	1680	1680	630
	54 (16) 50	265	2110	2540	1230
	68 (14) 50	265	2110	2540	1230
	97 (12) 50	265	2110	2540	1230
UBC8-97	33 (20) 33	190	1130	1130	310
	43 (18) 33	240	1680	1680	460
	54 (16) 50	240	2110	2315	885
	68 (14) 50	240	2110	2315	885
	97 (12) 50	240	2110	2315	885
UBC10-97	33 (20) 33	190	1130	1130	245
	43 (18) 33	225	1680	1680	360
	54 (16) 50	225	2110	2055	690
	68 (14) 50	225	2110	2055	690
	97 (12) 50	225	2110	2055	690
UBC12-97	33 (20) 33	190	1130	1130	200
	43 (18) 33	195	1680	1680	295
	54 (16) 50	195	2110	2055	605
	68 (14) 50	195	2110	2055	630
	97 (12) 50	195	2110	2055	630





12ga Clip: (6) #12-14 Screws
14ga Clip: (6) #10-16 Screws
Shown in a UBC6 Clip

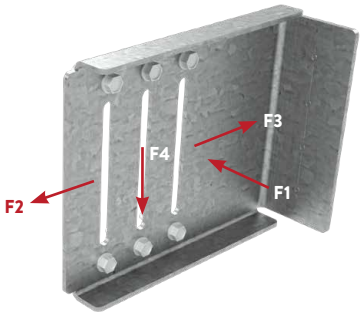
Notes:

1 Allowable Loads (ASD) have not been increased for the wind, seismic, or other factors.
2 Listed capacities are based on the maximum screw pattern. For maximum screw pattern for a Rigid Clip, fill screws in (6) round holes.
3 For 12ga Rigid clip, (6) #12-14 screws shall be installed in the pilot holes. For 14ga Rigid clip, (6) #10-16 screws shall be installed in the pilot holes.
4 The Allowable loads listed for welds are based on the following weld lengths:
- (2) Welds - 1" along back of short leg clip bend (each weld equally distanced from center of clip).
5 Use E70XX (min.) electrodes.
6 It is the responsibility of the design professional to verify that the connection design meets the requirements of the intended application.
7 Nominal or LRFD loads are available upon request.

UBC - 12ga (As a Rigid Connection w/ (6) screws)

ATTACHMENT TO STRUCTURAL: (4) #12-24 FASTENERS

Clip Designation	Stud Thickness / Yield Strength mils (ga) ksi	ASD Allowable Loads (lbs)			
		F1 (In-Plane) w/ (6) #12-14	F2 (Tension) w/ (6) #12-14	F3 (Compression) w/ (6) #12-14	F4 (Shear) w/ (6) #12-14
UBC6-97	33 (20) 33	190	1130	1130	425
	43 (18) 33	245	1680	1680	630
	54 (16) 50	265	2115	2540	1230
	68 (14) 50	265	2115	2540	1230
	97 (12) 50	265	2115	2540	1230
UBC8-97	33 (20) 33	190	1130	1130	310
	43 (18) 33	240	1680	1680	460
	54 (16) 50	240	2115	2315	885
	68 (14) 50	240	2115	2315	885
	97 (12) 50	240	2115	2315	885
UBC10-97	33 (20) 33	190	1130	1130	245
	43 (18) 33	225	1680	1680	360
	54 (16) 50	225	2115	2055	690
	68 (14) 50	225	2115	2055	690
	97 (12) 50	225	2115	2055	690
UBC12-97	33 (20) 33	190	1130	1130	200
	43 (18) 33	195	1680	1680	295
	54 (16) 50	195	2115	2055	605
	68 (14) 50	195	2115	2055	630
	97 (12) 50	195	2115	2055	630



Notes:

1 Allowable Loads (ASD) have not been increased for the wind, seismic, or other factors.

2 An 1/8-in service deflection load limit was applied to clips resisting F2, F3 and F4 loads. In accordance with ICC AC 261, service deflection limit was not applied to clips resisting F1 loads.

3 Listed capacities are based on the maximum screw pattern. For maximum screw pattern for a Rigid Clip, fill screws in (6) round holes.

4 For 12ga Rigid clip, (6) #12-14 screws shall be installed in the pilot holes. For 14ga Rigid clip, (6) #10-16 screws shall be installed in the pilot holes.

5 #12-24 Fasteners shall be used for attachment to steel structure. (4) Fastener configuration shall be used. Screws should be placed at indentations scribed on the short leg of the UBC clip.

6 The minimum edge distance for each fastener type shall comply with the fastener manufacturer's recommendation.

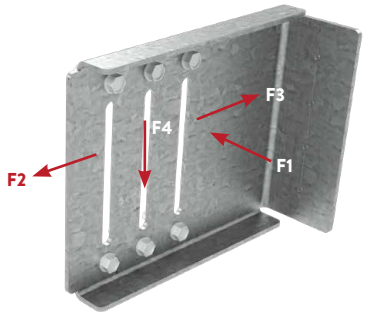
7 It is the responsibility of the design professional to verify that the connection design meets the requirements of the intended application.

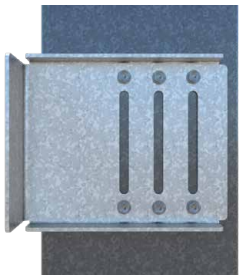
8 Nominal or LRFD loads are available upon request.

UBC - 12ga (As a Rigid Connection w/ (6) screws)

ATTACHMENT TO STRUCTURAL: (4) 0.157" PAFs

Clip Designation	Stud Thickness / Yield Strength mils (ga) ksi	ASD Allowable Loads (lbs)			
		F1 (In-Plane) w/ (6) #12-14	F2 (Tension) w/ (6) #12-14	F3 (Compression) w/ (6) #12-14	F4 (Shear) w/ (6) #12-14
UBC6-97	33 (20) 33	190	1130	1130	425
	43 (18) 33	245	1680	1680	630
	54 (16) 50	265	2000	2540	1230
	68 (14) 50	265	2000	2540	1230
	97 (12) 50	265	2000	2540	1230
UBC8-97	33 (20) 33	190	1130	1130	310
	43 (18) 33	240	1680	1680	460
	54 (16) 50	240	2000	2315	885
	68 (14) 50	240	2000	2315	885
	97 (12) 50	240	2000	2315	885
UBC10-97	33 (20) 33	190	1130	1130	245
	43 (18) 33	225	1680	1680	360
	54 (16) 50	225	2000	2055	690
	68 (14) 50	225	2000	2055	690
	97 (12) 50	225	2000	2055	690
UBC12-97	33 (20) 33	190	1130	1130	200
	43 (18) 33	195	1680	1680	295
	54 (16) 50	195	2000	2055	605
	68 (14) 50	195	2000	2055	630
	97 (12) 50	195	2000	2055	630





12ga Clip: (6) #12-14 Screws
14ga Clip: (6) #10-16 Screws
Shown in a UBC6 Clip

Notes:

1 Allowable Loads (ASD) have not been increased for the wind, seismic, or other factors.

2 Nominal or LRFD loads are available upon request.

3 Listed capacities are based on the maximum screw pattern. For maximum screw pattern for a Rigid Clip, fill screws in (6) round holes.

4 For 12ga Rigid clip, (6) #12-14 screws shall be installed in the pilot holes. For 14ga Rigid clip, (6) #10-16 screws shall be installed in the pilot holes.

5 0.157" Hilti X-U PAFs shall be used for attachment to steel structure. (4) Fastener configuration shall be used. PAFs should be placed at indentations scribed on the short leg of the UBC clip.

6 Capacities considered for Hilti PAFs are based on fastener strengths listed in ICC ESR-2269.

7 It is the responsibility of the design professional to verify that the connection design meets the requirements of the intended application.

8 An 1/8-in service deflection load limit was applied to clips resisting F2, F3 and F4 loads. In accordance with ICC AC 261, service deflection limit was not applied to clips resisting F1 loads.

SwiftClip™ L-Series™ Support Clip

Support for the most demanding applications

SwiftClip™ L-Series™ support clips are used in multiple construction projects, specifically in conjunction with structural studs and track. The L-shaped clips fit between the stud flanges, so that shorter length clips do not need to be ordered. These labor time-savers include prepunched holes for quicker screw attachments, and are punched to accommodate for CRC lateral bracing connections.

ALTERNATIVE PRODUCTS

EasyClip™ E-Series™ Support Clip
EasyClip S-Series™ Support Clip
EasyClip U-Series™ Clip Angle
FastBridge™ Clip
EasyClip X-Series™ Clip Angle
EasyClip A-Series™ End Clip

MATERIAL SPECIFICATIONS

Gauge: 16 gauge (54mils)
Design Thickness: 0.0566 inches

Gauge: 14 gauge (68mils)
Design Thickness: 0.0713 inches

Gauge: 12 gauge (97mils)
Design Thickness: 0.1017 inches

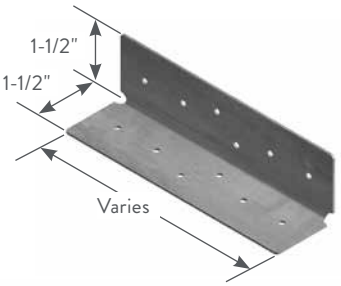
Coating: G90
Yield Strength: 50ksi
ASTM: A653/A653M

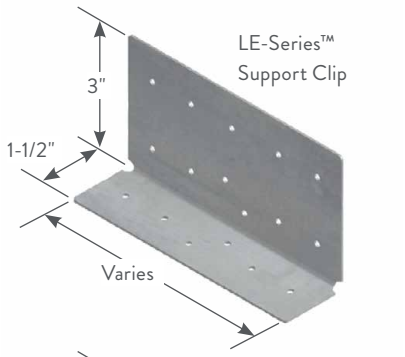
CODE APPROVALS & PERFORMANCE STANDARDS

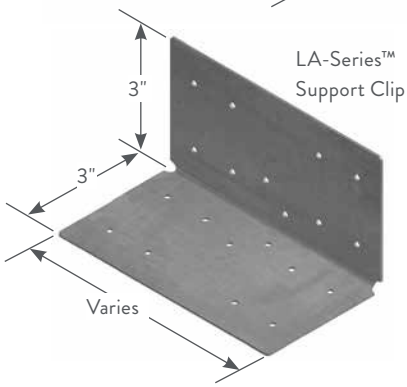
IAPMO ER-731

SwiftClip™ L-Series™ Support Clip

Clip Designation	Thickness		Size (in)	Common application	Packaging Pcs./Bucket
	mils (ga)	Design Thickness (in)			
LS543	54 (16)	0.0566	1-1/2 x 1-1/2 x 3-1/4	CRC/Openings	300
LS683	68 (14)	0.0713		Openings	300
LS973	97 (12)	0.1017		Openings	200
LS545	54 (16)	0.0566	1-1/2 x 1-1/2 x 5-1/2	CRC/Openings/Joists	200
LS685	68 (14)	0.0713		Openings/Joists	200
LS975	97 (12)	0.1017		Openings/Joists	100
LS547	54 (16)	0.0566	1-1/2 x 1-1/2 x 7-1/4	CRC/Openings/Joists	150
LS687	68 (14)	0.0713		Openings/Joists	100
LS977	97 (12)	0.1017		Openings/Joists	100
LS549	54 (16)	0.0566	1-1/2 x 1-1/2 x 9-1/4	Joists	100
LS689	68 (14)	0.0713		Joists	100
LS979	97 (12)	0.1017		Joists	50
LS541	54 (16)	0.0566	1-1/2 x 1-1/2 x 11-1/4	Joists	100
LS681	68 (14)	0.0713		Joists	50
LS971	97 (12)	0.1017		Joists	50
LS5413	54 (16)	0.0566	1-1/2 x 1-1/2 x 13-1/4	Joists	50
LS6813	68 (14)	0.0713		Joists	50
LS9713	97 (12)	0.1017		Joists	25
LE543	54 (16)	0.0566	1-1/2 x 3 x 3-1/4	Fixed/Joists/Trusses	100
LE683	68 (14)	0.0713		Fixed/Joists/Trusses	100
LE973	97 (12)	0.1017		Fixed/Joists/Trusses	50
LE545	54 (16)	0.0566	1-1/2 x 3 x 5-1/2	Fixed/Joists/Trusses	100
LE685	68 (14)	0.0713		Fixed/Joists/Trusses	100
LE975	97 (12)	0.1017		Fixed/Joists/Trusses	50
LE547	54 (16)	0.0566	1-1/2 x 3 x 7-1/4	Fixed/Joists/Trusses	100
LE687	68 (14)	0.0713		Fixed/Joists/Trusses	50
LE977	97 (12)	0.1017		Fixed/Joists/Trusses	50
LA543	54 (16)	0.0566	3 x 3 x 3-1/4	Joists/Trusses	100
LA683	68 (14)	0.0713		Joists/Trusses	100
LA973	97 (12)	0.1017		Joists/Trusses	50
LA545	54 (16)	0.0566	3 x 3 x 5-1/2	Joists/Trusses	100
LA685	68 (14)	0.0713		Joists/Trusses	50
LA975	97 (12)	0.1017		Joists/Trusses	50
LA547	54 (16)	0.0566	3 x 3 x 7-1/4	Joists/Trusses	50
LA687	68 (14)	0.0713		Joists/Trusses	50
LA977	97 (12)	0.1017		Joists/Trusses	50







Allowable Shear Load Table

Clip Designation	No. of Screws/Leg	Stud Thickness (Yield Strength)				
		20ga (33mils) 33ksi	18ga (43mils) 33ksi	16ga (54mils) 50ksi	14ga (68mils) 50ksi	12ga (97mils) 50ksi
LS543	2	294	438	777	777	777
	4	437	651	1154	1154	1154
LS683	2	294	438	777	777	777
	4	437	651	1154	1154	1154
LS973	2	294	438	777	777	777
	4	437	651	1154	1154	1154
LS545	2	333	496	880	880	880
	4	619	921	1635	1635	1635
LS685	2	333	496	880	880	880
	4	619	921	1635	1635	1635
LS975	2	333	496	880	880	880
	4	619	921	1635	1635	1635
LS547	4	651	968	1718	1718	1718
	6	966	1438	2551	2551	2551
LS687	4	651	968	1718	1718	1718
	6	966	1438	2551	2551	2551
LS977	4	651	968	1718	1718	1718
	6	966	1438	2551	2551	2551
LS549	4	670	997	1768	1768	1768
	6	1007	1498	2658	2658	2658
LS689	4	670	997	1768	1768	1768
	6	1007	1498	2658	2658	2658
LS979	4	670	997	1768	1768	1768
	6	1007	1498	2658	2658	2658
LS541	4	681	1013	1798	1798	1798
	6	1013	1508	2675	2675	2675
LS681	4	681	1013	1798	1798	1798
	6	1013	1508	2675	2675	2675
LS971	4	681	1013	1798	1798	1798
	6	1013	1508	2675	2675	2675
LS5413	4	688	1024	1816	1816	1816
	6	1020	1518	2694	2694	2694
LS6813	4	688	1024	1816	1816	1816
	6	1020	1518	2694	2694	2694
LS9713	4	688	1024	1816	1816	1816
	6	1020	1518	2694	2694	2694

1 Shear values for clips are based on attachment to cold-formed steel members. Attachment to other substrates must be designed separately.

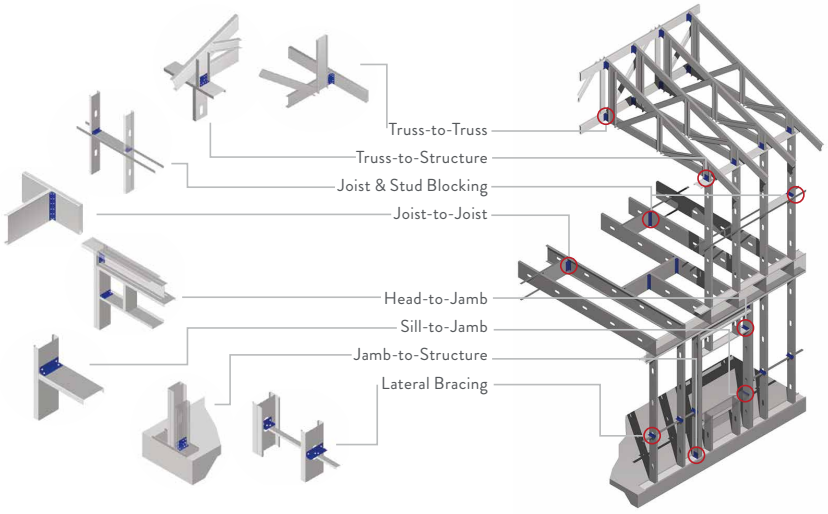
2 Place the first two screws in each leg in the outermost screw holes. Place the next two screws (if needed) in center holes next to the CRC holes (diagonal). The next screws (if needed) are placed moving from the outermost holes toward the center, symmetrically.

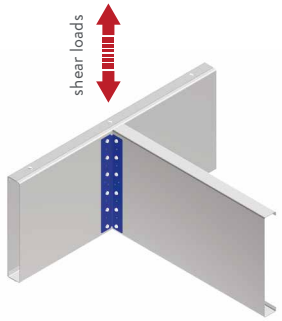
3 Shear values are based on the tilting bearing modes of failure Eq. E4.3.1-1, E4.3.1-2.4. Allowable screw shear is based on a factor of safety of 3.0. #10 screws (0.19" min. diameter) must have minimum ultimate shear strength of 1400 lbs.

4 Screws must have three threads exposed after installation.

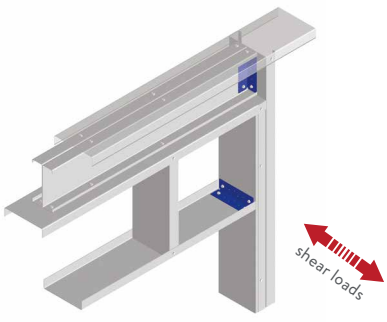
5 It is the responsibility of the design engineer to detail the attachment of clips and verify their capacity meets the application. This table is intended for use by qualified engineers.

6 For technical assistance or additional load charts, contact ClarkDietrich at 888-437-3244.

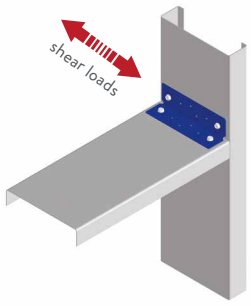




Joist-to-Joist Connections



Head-to-Jamb Connections



Sill-to-Jamb Connections

The technical content of this literature is effective 04/09/26 and supersedes all previous information.

Pub. No. CD-ClipExpress 04/26

Extended SwiftClip™ LE-Series

Used in rigid attachments of wall studs to the structure

ClarkDietrich's Extended SwiftClip™ LE-Series rigid framing clip is used to attach exterior wall studs to the structure of the building. Designed to resist horizontal and vertical loads, the extended rigid clips install easily with screws, powder-actuated fasteners, or welds. This clip is ideal for all medium and large standoff conditions. These clips are unpunched as the specific application will determine the appropriate number and placement of fasteners.

PRODUCT DIMENSIONS

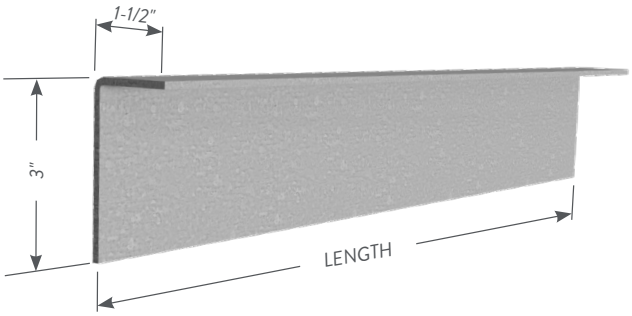
- 1-1/2" x 3" legs for up to 20" long clips
- 1-1/2" x 2-5/8" legs + 1/2" return for clips longer than 20"
- All clips: 68 mils (14 gauge) 50ksi, CP90
- LE-Series clips are unpunched
- Lengths available: 16", 18", 20", 24", 30", 36"

CODE APPROVALS & PERFORMANCE STANDARDS

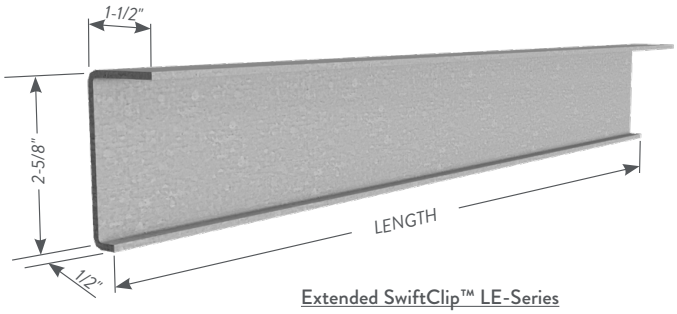
IAPMO ER-731

INSTALLATION

Extended SwiftClip™ LE-Series are attached to cold-formed steel framing members using #10 minimum self-drilling screws. Clips can also be welded to the cold-formed steel framing. Connections to the building frame can be made with powder-actuated fasteners, drill-in concrete anchors or welding. The appropriate type, number and placement of fasteners need to be determined by a design professional and engineer of record.



Extended SwiftClip™ LE-Series
Profile for clips up to 20" long



Extended SwiftClip™ LE-Series
Profile for clips longer than 20"

Extended SwiftClip™ LE-Series

Clip Designation	Thickness		Size (in)	Packaging Pcs./Box
	mils (ga)	Design Thickness (in)		
LE6816	68 (14)	0.0713	1-1/2 x 3 x 16	10
LE6818			1-1/2 x 3 x 18	
LE6820			1-1/2 x 3 x 20	
LE6824	68 (14)	0.0713	1-1/2 x 2-5/8 x 24	10
LE6830			1-1/2 x 2-5/8 x 30	
LE6836			1-1/2 x 2-5/8 x 36	

Extended SwiftClip™ LE-Series Allowable Loads

Product Code	Gross Section Properties								
	Area (in^2)	Ix (in^4)	Iy (in^4)	Sx (in^3)	Sy (in^3)	rx (in)	ry (in)	x(c) (in)	y(c) (in)
Extended SwiftClip™ < 20in	0.311	0.304	0.056	0.155	0.046	0.988	0.424	0.281	1.04
Extended SwiftClip™ > 20in	0.311	0.282	0.054	0.176	0.054	0.952	0.418	0.307	1.02

Notes:

1 Extended SwiftClip™ LE-Series intended for axial compression and tension loading.
2 Ix, Iy are the gross moment of inertia about the X-axis and Y-axis, respectively.
3 Sx, Sy are the section modulus about the X-axis and Y-axis, respectively.
4 rx, ry are the radius of gyration about the X-axis and Y-axis, respectively.
5 x(c), y(c) are the distances of the centroid to the X-axis and Y-axis attachment planes.



EasyClip™ U-Series™ Clip Angle

Secures U-channel (cold-rolled channel) to framing members for lateral bridging, miscellaneous rigid connections, and multipurpose reinforcing supports

ClarkDietrich EasyClip™ U-Series™ clip angles are used to secure U-channel to wall studs for lateral bridging or for miscellaneous rigid connections. U-channel is passed through the stud knockout and an EasyClip U-Series clip is screw-attached or welded to provide a rigid connection. Available in a variety of lengths and gauges, EasyClip U-Series clips are prepunched for faster and more accurate fastener placement. U-Series clip angles and U-channel should not be used in bridging applications when the stud width exceeds 6".

ALTERNATIVE PRODUCTS

FastBridge™ Clip
EasyClip™ X-Series™ Clip Angle
SwiftClip™ LS-Series™ Support Clip
Spazzer® 5400 and Spazzer® 9200 Spacer Bars

PRODUCT DIMENSIONS

1-1/2" x 1-1/2" x 3-3/8"
1-1/2" x 1-1/2" x 5-3/4"
1-1/2" x 1-1/2" x 7-3/4"
1-1/2" x 1-1/2" x 9-3/4"

MATERIAL SPECIFICATIONS

Gauge: 16 gauge (54mils)
Design Thickness: 0.0566 inches

Gauge: 14 gauge (68mils)
Design Thickness: 0.0713 inches

Gauge: 12 gauge (97mils)
Design Thickness: 0.1017 inches

Coating: G90
Yield Strength: 50ksi
ASTM: A653/A653M

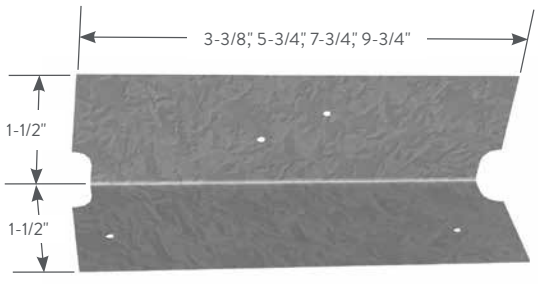


INSTALLATION

U-channel is inserted into the stud punchout (as specified by design) and rotated into place. U-Series clip angles are attached horizontally to the outside or hard side of the cold-formed steel (CFS) framing members. The clip must be firmly seated against the web of the U-channel. The clip should not be more than 1/4" less than the cold-formed framing member. U-Series clips are fastened using #10 minimum self-drilling screws driven through the clip holes into the steel framing. Clips may also be welded to the CFS framing.

EasyClip™ U-Series™ Clip Angles

Clip Designation	Thickness		Size (in)	Packaging Pcs./Bucket
	mils (ga)	Design Thickness (in)		
U543	54 (16)	0.0566	1-1/2 x 1-1/2 x 3-3/8	400
U545	54 (16)	0.0566	1-1/2 x 1-1/2 x 5-3/4	200
U547	54 (16)	0.0566	1-1/2 x 1-1/2 x 7-3/4	100
U549	54 (16)	0.0566	1-1/2 x 1-1/2 x 9-3/4	100
U683	68 (14)	0.0713	1-1/2 x 1-1/2 x 3-3/8	200
U685	68 (14)	0.0713	1-1/2 x 1-1/2 x 5-3/4	170
U687	68 (14)	0.0713	1-1/2 x 1-1/2 x 7-3/4	100
U689	68 (14)	0.0713	1-1/2 x 1-1/2 x 9-3/4	100
U973	97 (12)	0.1017	1-1/2 x 1-1/2 x 3-3/8	200
U975	97 (12)	0.1017	1-1/2 x 1-1/2 x 5-3/4	130
U977	97 (12)	0.1017	1-1/2 x 1-1/2 x 7-3/4	100
U979	97 (12)	0.1017	1-1/2 x 1-1/2 x 9-3/4	80



EasyClip U-Series Clip Angle

The technical content of this literature is effective 04/09/26 and supersedes all previous information.

EasyClip™ S-Series™ Support Clip

For rigid connection applications not requiring a long leg

ClarkDietrich EasyClip™ S-Series™ support clips are commonly used for rigid connections in window and door framing, joist, bypass or other miscellaneous connections to secure one framing member to another, or to secure framing members to the structural frame. This high-performance, multi-use utility clip is ideal for corner reinforcements, stair openings, and numerous support applications. Available in a variety of lengths and gauges, EasyClip S-Series clips are prepunched for faster and more accurate fastener placement.

ALTERNATIVE PRODUCTS

EasyClip™ U-Series™ Clip Angle
EasyClip X-Series™ Clip Angle
EasyClip D-Series™ Anchor Clip
SwiftClip™ LS-Series™ Support Clip

PRODUCT DIMENSIONS

1-1/2" x 1-1/2" x 3"
1-1/2" x 1-1/2" x 5"
1-1/2" x 1-1/2" x 7"
1-1/2" x 1-1/2" x 9"
1-1/2" x 1-1/2" x 11"

CODE APPROVALS & PERFORMANCE STANDARDS

IAPMO ER-731

MATERIAL SPECIFICATIONS

Gauge: 16 gauge (54mils)
Design Thickness: 0.0566 inches

Gauge: 14 gauge (68mils)
Design Thickness: 0.0713 inches

Gauge: 12 gauge (97mils)
Design Thickness: 0.1017 inches

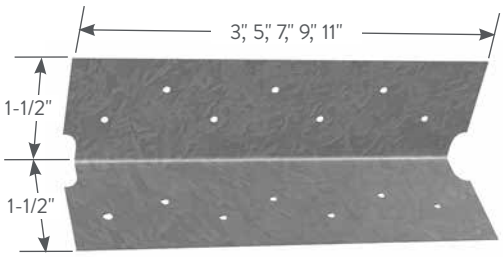
Coating: G90
Yield Strength: 50ksi
ASTM: A653/A653M

INSTALLATION

EasyClip S-Series support clips are attached to the cold-formed steel (CFS) framing members using #10 minimum self-drilling screws driven through the clip holes into the steel framing. When not filling all holes, install fasteners symmetrically starting at the top and bottom edges and move toward the center of the clip. Clip can also be welded to the CFS framing. Connections to the building frame can be made with powder-actuated fasteners, drill-in concrete anchors or welding. When using the tabular values for a welded clip, provide a full weld to the structure, top to bottom, along the outside of the clip. A 3/4" minimum weld on the outside edge of the 1-1/2" leg is also required to control warping or to hold the clip in place before final welding.

EasyClip™ S-Series™ Support Clips

Clip Designation	Thickness		Size (in)	Packaging Pcs./ Bucket
	mils (ga)	Design Thickness (in)		
S543	54 (16)	0.0566	1-1/2 x 1-1/2 x 3	400
S545	54 (16)	0.0566	1-1/2 x 1-1/2 x 5	200
S547	54 (16)	0.0566	1-1/2 x 1-1/2 x 7	100
S549	54 (16)	0.0566	1-1/2 x 1-1/2 x 9	100
S541	54 (16)	0.0566	1-1/2 x 1-1/2 x 11	100
S683	68 (14)	0.0713	1-1/2 x 1-1/2 x 3	200
S685	68 (14)	0.0713	1-1/2 x 1-1/2 x 5	200
S687	68 (14)	0.0713	1-1/2 x 1-1/2 x 7	100
S689	68 (14)	0.0713	1-1/2 x 1-1/2 x 9	100
S681	68 (14)	0.0713	1-1/2 x 1-1/2 x 11	100
S973	97 (12)	0.1017	1-1/2 x 1-1/2 x 3	200
S975	97 (12)	0.1017	1-1/2 x 1-1/2 x 5	150
S977	97 (12)	0.1017	1-1/2 x 1-1/2 x 7	100
S979	97 (12)	0.1017	1-1/2 x 1-1/2 x 9	80
S971	97 (12)	0.1017	1-1/2 x 1-1/2 x 11	70



EasyClip S-Series Support Clip

EasyClip™ S-Series™ Support Clips Allowable Clip Capacities (lbs)

USING #10-16 SELF-DRILLING SCREWS

Clip Designation	No. of Screws to Steel Framing (1)	Stud Thickness and Yield Strength								
		20ga (33mils) 33ksi			18ga (43mils) 33ksi			16ga (54mils) 50ksi		
		F1	F2	F3	F1	F2	F3	F1	F2	F3
S543	3	295 (295)	210 (531)	531	437 (437)	210 (788)	788	777 (555)	210 (1195)	1400
S545	2	317 (317)	354 (354)	354	470 (470)	371 (525)	525	835 (835)	371 (933)	933
	5	651 (651)	371 (885)	885	965 (965)	371 (1313)	1313	1716 (1460)	371 (2105)	2333
S547	4	653 (653)	531 (708)	708	969 (969)	531 (1050)	1050	1722 (1722)	531 (1867)	1867
	7	1029 (1029)	531 (1239)	1239	1526 (1526)	531 (1838)	1838	2712 (2456)	531 (3015)	3267
S549	4	679 (679)	692 (708)	708	1007 (1007)	692 (1050)	1050	1790 (1790)	692 (1867)	1867
	9	1408 (1408)	692 (1593)	1593	2090 (2090)	692 (2363)	2363	3714 (3452)	692 (3925)	4200
S541	6	1015 (1015)	852 (1062)	1062	1505 (1505)	852 (1576)	1576	2675 (2675)	852 (2800)	2800
	11	1785 (1785)	852 (1947)	1947	2648 (2648)	852 (2889)	2889	4706 (4432)	852 (4835)	5133
S683	3	295 (295)	333 (531)	531	437 (437)	333 (788)	788	777 (699)	333 (1400)	1400
S685	2	317 (317)	354 (354)	354	470 (470)	525 (525)	525	835 (835)	587 (933)	933
	5	651 (651)	587 (885)	885	965 (965)	587 (1313)	1313	1716 (1716)	587 (2333)	2333
S687	4	653 (653)	708 (708)	708	969 (969)	841 (1050)	1050	1722 (1722)	841 (1867)	1867
	7	1029 (1029)	841 (1239)	1239	1526 (1526)	841 (1838)	1838	2712 (2712)	841 (3267)	3267
S689	4	679 (679)	708 (708)	708	1007 (1007)	1050 (1050)	1050	1790 (1790)	1095 (1867)	1867
	9	1408 (1408)	1095 (1593)	1593	2090 (2090)	1095 (2363)	2363	3714 (3714)	1095 (4200)	4200
S681	6	1015 (1015)	1062 (1062)	1062	1505 (1505)	1349 (1576)	1576	2675 (2675)	1349 (2800)	2800
	11	1785 (1785)	1349 (1947)	1947	2648 (2648)	1349 (2889)	2889	4706 (4706)	1349 (5133)	5133
S973	3	295 (295)	531 (531)	531	437 (437)	679 (788)	788	777 (777)	679 (1400)	1400
S975	2	317 (317)	354 (354)	354	470 (470)	525 (525)	525	835 (835)	933 (933)	933
	5	651 (651)	885 (885)	885	965 (965)	1196 (1313)	1313	1716 (1716)	1196 (2333)	2333
S977	4	653 (653)	708 (708)	708	969 (969)	1050 (1050)	1050	1722 (1722)	1713 (1867)	1867
	7	1029 (1029)	1239 (1239)	1239	1526 (1526)	1713 (1838)	1838	2712 (2712)	1713 (3267)	3267
S979	4	679 (679)	708 (708)	708	1007 (1007)	1050 (1050)	1050	1790 (1790)	1867 (1867)	1867
	9	1408 (1408)	1593 (1593)	1593	2090 (2090)	2229 (2363)	2363	3714 (3714)	2229 (4200)	4200
S971	6	1015 (1015)	1062 (1062)	1062	1505 (1505)	1576 (1576)	1576	2675 (2675)	2746 (2800)	2800
	11	1785 (1785)	1947 (1947)	1947	2648 (2648)	2746 (2889)	2889	4706 (4706)	2746 (5133)	5133

Notes:

Screw Capacity Notes:

1 The tabulated value indicates the number of screws in a single clip leg attached to the cold-formed steel (CFS) framing.

2 Screws shall be attached in a symmetric manner, starting at the outside holes and moving to the center. Reference Figure 1 on opposite page.

3 The allowable values for F1 are based only on the shear capacity of the clip leg attached to the CFS framing. The capacity of the attachment to other materials and structures must be checked separately.

4 The allowable values for F2 assume mechanical fasteners are attached to the structure, and are along the vertical centerline of the clip leg. Mechanical fasteners to other materials and structures must be checked separately.

5 The screw diameter must be 0.19" (min.) for #10 screws.

6 The ultimate screw shear strength must be a minimum of 1400 lbs for #10 screws.

7 When clips have combinations of F1, F2, and F3, use a linear interaction for combinations of F1 and F3, and a squared interaction for combinations of F1 and F2.

8 Screws must be long enough so that at least three exposed threads are visible after installation.

9 Allowable loads have not been increased 33% for wind or seismic.

10 For connections made to 14 gauge (68mils) and 12 gauge (97mils), use the tabulated values for 16 gauge (54mils), 50ksi.

11 It is the responsibility of the design professional to detail the drawings for proper clip attachment.

12 Contact ClarkDietrich at 888-437-3244 for technical assistance.

Weld Capacity Notes:

1 F1 and F2 values in parentheses are maximum shear and tension capacities when the clips are welded to the base structure (min 3/16" — 36ksi steel).

2 Listed weld capacities are computed assuming an E70XX welding rod or wire.

3 The clips are to be welded to the structure along the back corner and along the complete length of the clip. When secondary welds are used to hold the clip in place, they are not used in capacity calculations.

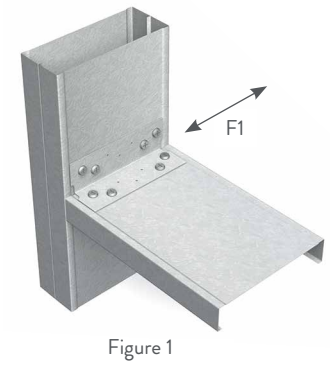
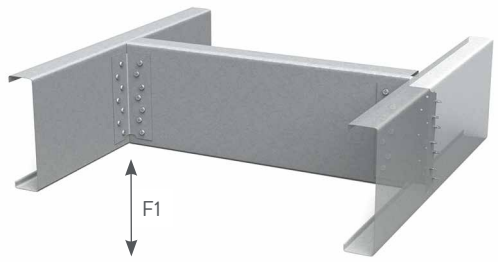
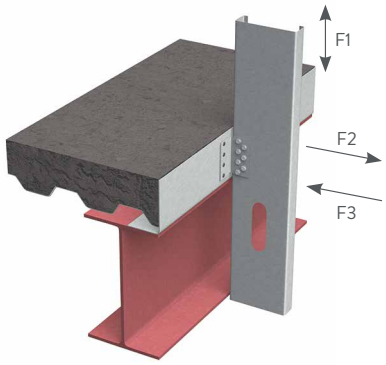


Figure 1





EasyClip™ A-Series™ End Clip

For knee-wall connections or to reinforce jamb stud connections at the primary frame

ClarkDietrich EasyClip™ A-Series™ end clips are most commonly used to reinforce connections in knee-wall applications or to reinforce jamb stud connections to the primary frame. These clips are unpunched as the specific application will determine the appropriate number and placement of fasteners.

ALTERNATIVE PRODUCTS

EasyClip™ D-Series™ Anchor Clip
EasyClip T-Series™ Tall Anchor Clip
SwiftClip™ LA-Series™ Support Clip

PRODUCT DIMENSIONS

3" x 3" x 3"
3" x 3" x 6"

MATERIAL SPECIFICATIONS

Gauge: 16 gauge (54mils)
Design Thickness: 0.0566 inches

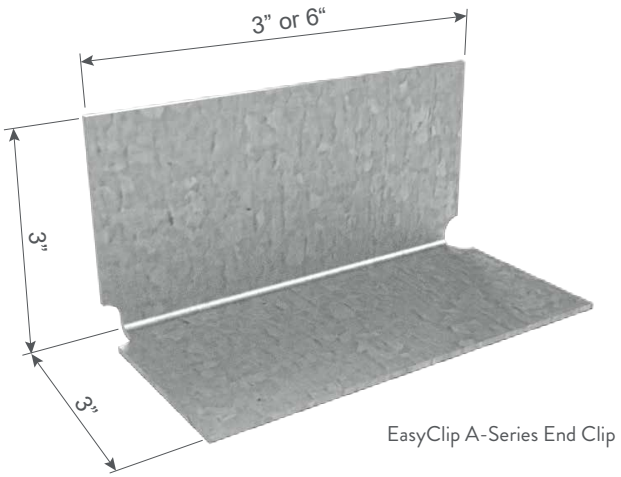
Gauge: 14 gauge (68mils)
Design Thickness: 0.0713 inches

Gauge: 12 gauge (97mils)
Design Thickness: 0.1017 inches

Coating: G90
Yield Strength: 50ksi
ASTM: A653/A653M

INSTALLATION

EasyClip A-Series end clips are attached to cold-formed steel (CFS) framing members using #10 minimum self-drilling screws. Clips can also be welded to the CFS framing. Connections to the building frame can be made with powder-actuated fasteners, drill-in concrete anchors or welding. When using the tabular values for a welded clip, provide a full weld to the structure, top to bottom, along the outside of the clip. A 3/4" minimum weld to the outside edge of the 3" leg is also recommended to control warping or to hold the clip in place before final welding.



EasyClip A-Series End Clip

EasyClip™ A-Series™ End Clips

Clip Designation	Thickness		Size (in)	Packaging Pcs./Bucket
	mils (ga)	Design Thickness (in)		
A543	54 (16)	0.0566	3 x 3 x 3	100
A546	54 (16)	0.0566	3 x 3 x 6	100
A683	68 (14)	0.0713	3 x 3 x 3	100
A686	68 (14)	0.0713	3 x 3 x 6	100
A973	97 (12)	0.1017	3 x 3 x 3	100
A976	97 (12)	0.1017	3 x 3 x 6	50

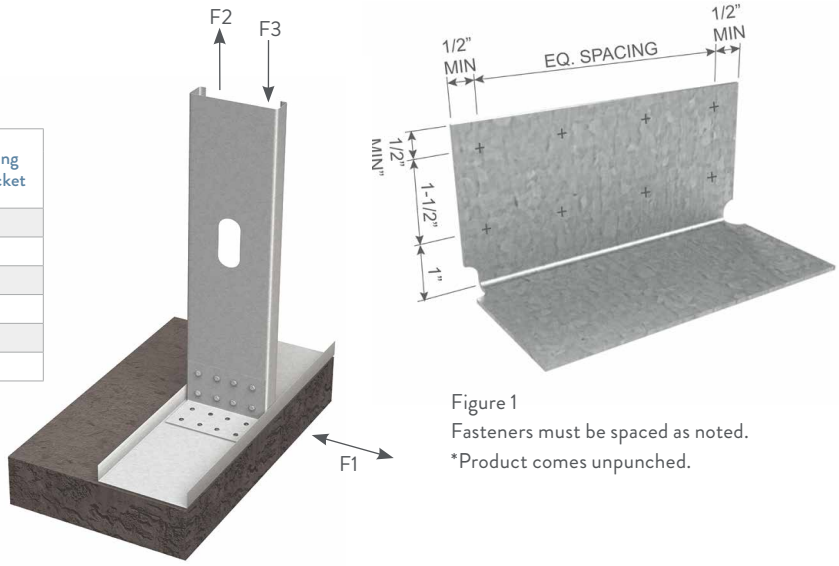


Figure 1
Fasteners must be spaced as noted.
*Product comes unpunched.

EasyClip™ A-Series™ End Clips Allowable Clip Capacities (lbs)

USING #10-16 SELF-DRILLING SCREWS

Clip Designation	No. of Screws to Steel Framing (1)	Stud Thickness and Yield Strength								
		20ga (33mils) 33ksi			18ga (43mils) 33ksi			16ga (54mils) 50ksi		
		F1	F2	F3	F1	F2	F3	F1	F2	F3
A543	4	354 (354)	120 (708)	708	525 (375)	120 (1050)	1050	775 (375)	120 (1365)	1381
	6	531 (375)	120 (1062)	1062	775 (375)	120 (1365)	1381	775 (375)	120 (1365)	1381
A546	6	531 (531)	241 (1062)	1062	788 (788)	241 (1576)	1576	1400 (1355)	241 (2730)	2800
	8	708 (708)	241 (1416)	1416	1050 (1050)	241 (2101)	2101	1867 (1355)	241 (2730)	3452
	10	885 (885)	241 (1770)	1770	1313 (1313)	241 (2626)	2626	2333 (1355)	241 (2730)	3452
	12	1062 (1062)	241 (2124)	2124	1576 (1355)	241 (2730)	3151	2634 (1355)	241 (2730)	3452
A683	4	354 (354)	190 (708)	708	525 (472)	190 (1050)	1050	933 (472)	190 (1718)	1867
	6	531 (472)	190 (1062)	1062	788 (472)	190 (1576)	1576	1149 (472)	190 (1718)	2353
A686	6	531 (531)	381 (1062)	1062	788 (788)	381 (1576)	1576	1400 (1400)	381 (2800)	2800
	8	708 (708)	381 (1416)	1416	1050 (1050)	381 (2101)	2101	1867 (1705)	381 (3436)	3733
	10	885 (885)	381 (1770)	1770	1313 (1313)	381 (2626)	2626	2333 (1705)	381 (3436)	4667
	12	1062 (1062)	381 (2124)	2124	1576 (1576)	381 (3151)	3151	2800 (1705)	381 (3436)	5600
A973	4	354 (354)	388 (708)	708	525 (525)	388 (1050)	1050	933 (673)	388 (1867)	1867
	6	531 (531)	388 (1062)	1062	788 (673)	388 (1576)	1576	1400 (673)	388 (2451)	2800
A976	6	531 (531)	775 (1062)	1062	788 (788)	775 (1576)	1576	1400 (1400)	775 (2800)	2800
	8	708 (708)	775 (1416)	1416	1050 (1050)	775 (2101)	2101	1867 (1867)	775 (3733)	3733
	10	885 (885)	775 (1770)	1770	1313 (1313)	775 (2626)	2626	2333 (2333)	775 (4667)	4667
	12	1062 (1062)	775 (2124)	2124	1576 (1576)	775 (3151)	3151	2800 (2432)	775 (4903)	5600

Notes:

Screw Capacity Notes:

1 The tabulated value indicates the number of screws in a single clip leg attached to the cold-formed steel (CFS) framing.

2 Screws shall be attached in a symmetric manner starting at the top and bottom moving to the center, see Figure 1 opposite page.

3 The allowable values for F1 are based only on the shear capacity of the clip leg attached to the CFS framing. The capacity of the attachment to other materials and structures must be checked separately.

4 The allowable values for F2 assume mechanical fasteners are attached to the structure and are located no more than 1" away from the angle bend. Mechanical fasteners to other materials and structures must be checked separately.

5 This table is intended for use by qualified engineers only. It is the responsibility of the engineer to verify that the tabulated values apply to a specific connection application.

6 When clips have combinations of F1, F2 and F3, use a linear interaction for combinations of F1 and F3, and a squared interaction for combinations of F1 and F2.

7 Allowable loads have not been increased 33% for wind or seismic.

8 For connections made to 14 gauge (68mils) and 12 gauge (97mils), use the tabulated values for 16 gauge (54mils), 50ksi.

9 It is the responsibility of the design professional to detail the drawings for proper clip attachment.

10 Contact ClarkDietrich at 888-437-3244 for technical assistance.

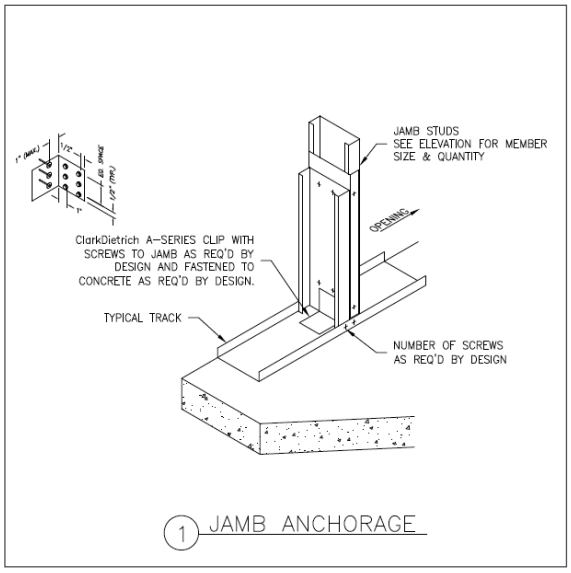
Weld Capacity Notes:

1 F1 and F2 values in parentheses are maximum shear and tension capacities when the clips are welded to the base structure (min. 3/16" – 36ksi steel).

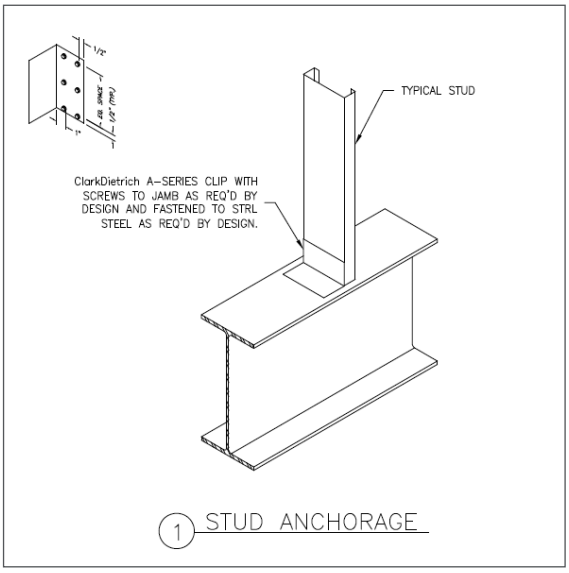
2 Listed weld capacities are computed assuming an E70XX welding rod or wire.

3 The clips are to be welded to the structure along the back corner along the complete length of the clip. When secondary welds are used to hold the clip in place, they are not used in capacity calculations. 3/4" min. secondary weld as required to control warping or to hold clip in place before final welding.

TYPICAL CONSTRUCTION DETAILS



1 JAMB ANCHORAGE



1 STUD ANCHORAGE

Visit our CAD Library at clarkdietrich.com to view or download construction details in .dwg, .dxf, and .pdf formats.

EasyClip™ D-Series™ Anchor Clip/EasyClip™ T-Series™ Tall Anchor Clip

Cost-effective tie-down solutions for knee walls, shearwalls and truss connections

ClarkDietrich EasyClip™ D-Series™ anchor clips and T-Series™ tall anchor clips are high-performance, cost-effective solutions for knee wall-to-foundation connections, light-duty shearwall-to-foundation connections and truss-to-wall connections. These multi-application clips feature reinforced stiffening ribs that provide superior design values for maximum performance. The EasyClip D-Series anchor clips and T-Series tall anchor clips are designed to resist horizontal, torsional and vertical (uplift) loads. These clips are prepunched with a series of attachment holes including anchor bolt, Kwik-Con and screw holes, for efficient and accurate fastener placement.

ALTERNATIVE PRODUCTS

EasyClip™ A-Series™ End Clip
SwiftClip™ LA-Series™ Support Clip
Uni-Clip™

PRODUCT DIMENSIONS

EasyClip D-Series:
2" x 2" x 3-1/2"
2" x 2" x 5-1/2"

EasyClip T-Series:
2" x 4" x 3-1/2"
2" x 4" x 5-1/2"

MATERIAL SPECIFICATIONS

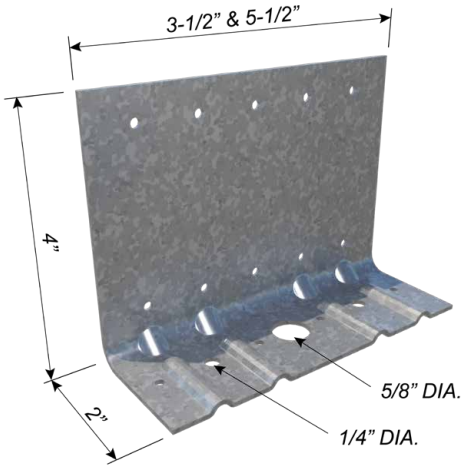
Gauge: 14 gauge (68mils)
Design Thickness: 0.0713 inches

Gauge: 12 gauge (97mils)
Design Thickness: 0.1017 inches

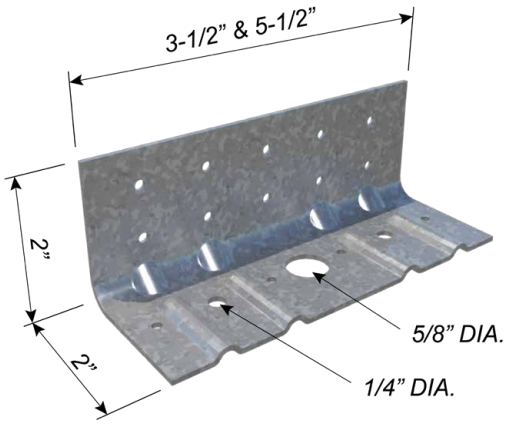
Coating: G90
Yield Strength: 50ksi
ASTM: A653/A653M

INSTALLATION

Install EasyClip D-Series and T-Series anchor clips by attaching the screw hole-only leg to the web of the stud, joist, rafter or track with the applicable number of fasteners (screws or welds). Secure bottom leg (anchor bolt hole) to structure using prepunched holes provided with appropriate fastener type and number of fasteners according to design based on load requirements.



EasyClip T-Series Tall Anchor Clip



EasyClip D-Series Anchor Clip

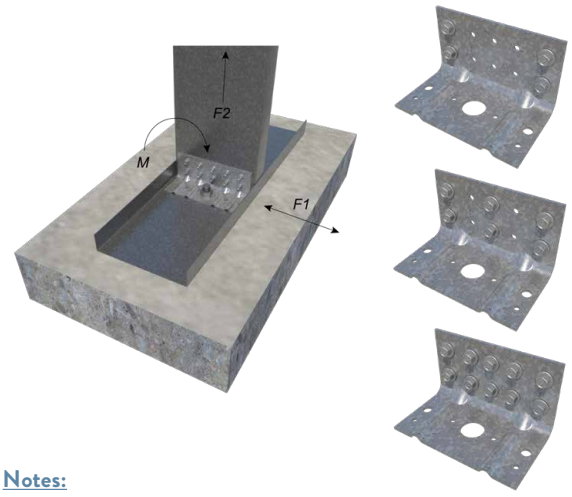
EasyClip™ D-Series™ Anchor Clips and T-Series™ Tall Anchor Clips

Clip Designation	Thickness		Size (in)	Packaging Pcs./Bucket
	mils (ga)	Design Thickness (in)		
D683	68 (14)	0.0713	2 x 2 x 3-1/2	40
T683	68 (14)	0.0713	2 x 4 x 3-1/2	40
D685	68 (14)	0.0713	2 x 2 x 5-1/2	40
T685	68 (14)	0.0713	2 x 4 x 5-1/2	40
D973	97 (12)	0.1017	2 x 2 x 3-1/2	40
T973	97 (12)	0.1017	2 x 4 x 3-1/2	40
D975	97 (12)	0.1017	2 x 2 x 5-1/2	40
T975	97 (12)	0.1017	2 x 4 x 5-1/2	40

EasyClip™ D-Series™ Anchor Clips and T-Series™ Tall Anchor Clips

ALLOWABLE LOADS (LBS)

Clip Designation	Stud Thickness mils (ga)	Stud Fy (ksi)	F1 (Shear), (lbs)			F2 (Tension), (lbs)			M (Moment), (in-lbs)	
			Number of #10-16 Screws to Stud						Kwik-Cons/ screws	1/2" Dia. Kwik-Bolts
			4	6	10	4	6	10		
D683	33 (20)	33	374	466	664*	444	444	444	1418	1068
	43 (18)	33	556	692*	986*#	444	444	444	1675	1068
	54 (16)	33	783*	974*#	1389*#	444	444	444	1675	1068
	54 (16)	50	1107*#	1377*#	1962*#	444	444	444	1675	1068
D973	33 (20)	33	374	466	664	560	840	889	1418	1418
	43 (18)	33	556	692	986*	832	889	889	2107*	2054
	54 (16)	33	783	974*	1389*#	889	889	889	2447*	2054
	54 (16)	50	1107*	1377*#	1962*#	889	889	889	2447*	2054
T683	33 (20)	33	280	383	604	444	444	444	1787*	1106
	43 (18)	33	416	569	897	444	444	444	2072*	1106
	54 (16)	33	586	802*	1264*#	444	444	444	2072*	1106
	54 (16)	50	828*	1133*#	1786*#	444	444	444	2072*	1106
T973	33 (20)	33	280	383	604	560	840	889	1787*	1787
	43 (18)	33	416	569	897	832	889	889	2527*	2110
	54 (16)	33	586	802	1264*	889	889	889	2527*	2110
	54 (16)	50	828	1133*	1786*#	889	889	889	2527*	2110
D685	33 (20)	33	456	599	879	560	698	698	2019	2019
	43 (18)	33	677	890	1306*	698	698	698	2865*	2234
	54 (16)	33	954	1254*	1839*#	698	698	698	2865*	2234
	54 (16)	50	1348*	1772*	2599*#%	698	698	698	2865*	2234
D975	33 (20)	33	456	599	879	560	840	889	2019	2019
	43 (18)	33	677	890	1306*	832	889	889	2999*	2999
	54 (16)	33	954	1254*	1839*#	889	889	889	3477*	3167
	54 (16)	50	1348*	1772*	2599*#%	889	889	889	3477*	3167
T685	33 (20)	33	337	445	678	560	698	698	2298*	1968
	43 (18)	33	501	661	1008*	698	698	698	3415*	1968
	54 (16)	33	706	931	1420*	698	698	698	3509*	1968
	54 (16)	50	997*	1316*	2006*#%	698	698	698	3509*	1968
T975	33 (20)	33	337	445	678	560	840	889	2298*	2298
	43 (18)	33	501	661	1008*	832	889	889	3415*	3059
	54 (16)	33	706	931	1420*	889	889	889	4416*	3059
	54 (16)	50	997*	1316*	2006*#%	889	889	889	4416*	3059



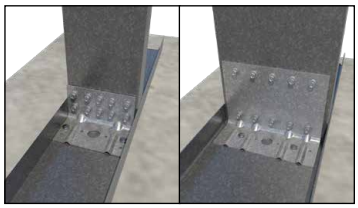


Figure 1 Kwik-Cons

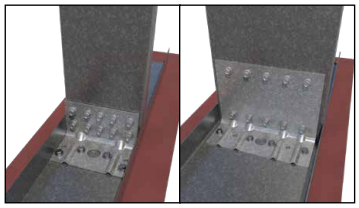


Figure 2 #12-24 screws

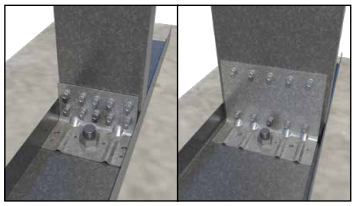


Figure 3 Kwik-Bolts

Notes:

1 Capacities listed in the table/notes assume that no load reductions are required for spacing or edge distance of Kwik-Cons, screws, or Kwik-Bolts.

2 An " * " in the shear column indicates that the shear capacity is limited to 642 lbs for D683 and T683 clips, 917 lbs for D973 and T973 clips, and 994 lbs for D685, D975, T685, and T975 clips when using 1/4" x 1-3/4" Hilti® Kwik-Cons to 3000psi concrete as shown in Figure 1.

3 A " # " in the shear column indicates that the shear capacity is limited to 963 lbs for D683 and T683 clips, 1374 lbs for D973 and T973 clips, and 1816 lbs for D685, D975, T685, and T975 clips when using #12-24 self-tapping screws to 3/16" A36 steel as shown in Figure 2.

4 A " % " in the shear column indicates that the shear capacity is limited to 1970 lbs when using 1/2" x 2-1/4" Hilti Kwik-Bolts to 3000psi concrete as shown in Figure 3.

5 A " * " in the moment column indicates that moment capacity is limited to 1706 in.-lb. for 3" clips, and 2231 in.-lb. for 5" clips when using 1/4" x 1-3/4" Hilti-Cons to 3000psi concrete as shown in Figure 1.

6 Tabulated moment capacity is limited to a serviceability of 0.02 radians, or 1.1 degrees of rotation at the connection.

7 For 20 and 18 gauge studs, the tabulated moment capacity is based on 18 gauge minimum base track, with (1) #10-16 screw at each track leg to stud flange. For 16 gauge and heavier studs, the base track shall be 14 gauge minimum.

8 Tabulated moment capacity is based on a stud to clip connection using (6) #10-16 screws.

9 For single-bolt connections, rotational restraint must be provided by the base track.

10 For 14 gauge (68mils) and 12 gauge (97mils), use the tabulated values for 16 gauge (54mils), 50ksi studs.

11 It is the responsibility of the designer to properly detail connections on the contract drawings.

12 Use a linear interaction equation for connections involving any combination of F1, F2, and M.

13 Hilti is a registered trademark of Hilti Aktiengeseilschaft Corporation.

The technical content of this literature is effective 04/09/26 and supersedes all previous information.

FastBridge™ Clip

Secures U-channel (cold-rolled channel) framing members for load-bearing or curtain wall applications

The ClarkDietrich FastBridge clip is used to secure U-Channel or Cold-Rolled Channel (CRC) to structural or non-structural wall studs when used in load-bearing, curtain wall or drywall framing applications. The wall stud friction fit design allows for as little as one screw for the connection to the U-channel.

The FastBridge clip is a stiffened, G90 galvanized steel clip that's tested and designed to facilitate the rapid, efficient installation of 1-1/2" U-channel lateral bracing for exterior curtain wall framing, load-bearing walls or interior partitions constructed of structural or non-structural studs.

- FB33 for use with 20ga-16ga structural studs or ProSTUD® Drywall Studs
- FB43 for use with 20ga-16ga structural studs
- FB68 for use with 16ga-12ga structural studs

ALTERNATIVE PRODUCTS

- Spazzer® 5400 and 9200 Bridging Bar
- U-Channel with SwiftClip™ LS-Series™ Support Clip
- EasyClip™ U-Series™ Clips

INSTALLATION

U-Channel is inserted into the stud punchout (spacing as specified by design) and rotated into place (leg down). Place the FastBridge Clip inside the punchout (stiffened wings down) and twist allowing the friction fit design to hold the clip into place. The clip must be firmly seated over the top web of the U-channel. FastBridge clips are fastened using #10 self-drilling screws driven through the clip hole into the U-channel. More than one screw may be need depending on design. The FastBridge clip should not be used in studs over 8" wide.

MATERIAL SPECIFICATIONS

Gauge: 20 gauge STR (33mils)
Design Thickness: 0.0346 inches

Gauge: 18 gauge (43mils)
Design Thickness: 0.0451 inches

Gauge: 14 gauge (68mils)
Design Thickness: 0.0713 inches

Coating: G90

CODE APPROVALS & PERFORMANCE STANDARDS

ASTM: S100, S220, S240





FastBridge™ Clip Angles (FB)

Clip Designation	Thickness				Knockout Size	Packaging Pcs./Bucket
	mils (ga)	Yield Strength	Design Thickness (in)	Min. Thickness (in)		
FB33	33 (20 STR)	33ksi	0.0346	0.0329	1-1/2"	200
FB43	43 (18)	50ksi	0.0451	0.0428	1-1/2"	200
FB68	68 (14)	50ksi	0.0713	0.0677	1-1/2"	200

U.S. Patent No. D692,746 and Canadian Patent No. 152,547

FastBridge™ Clip Angles (FB43) Allowable Clip Capacities (lbs)

Clip Designation	No. of Screws to Steel Framing	Stud Depth (in)	Allowable Connector Capacity	Stud Thickness and Yield Strength		
				33mils (20ga)	43mils (18ga)	54mils (16ga)
FB43	1	3.625	Axial Brace Stiffness (lbs/in)	1140	1330	2270
	2			1220	1480	2270
	1		Axial Brace Strength (lbs)	178	210	273
	2			275	318	424
	1		Torsional Moment (in-lbs)	148	182	208
	2			331	430	556
FB43	1	4.00	Axial Brace Stiffness (lbs/in)	1030	1460	2170
	2			1190	1520	3030
	1		Axial Brace Strength (lbs)	191	213	263
	2			283	321	426
	1		Torsional Moment (in-lbs)	137	182	234
	2			403	403	498
FB43	1	6.00	Axial Brace Stiffness (lbs/in)	790	990	1730
	2			990	1160	1930
	1		Axial Brace Strength (lbs)	107	214	290
	2			263	324	450
	1		Torsional Moment (in-lbs)	166	170	172
	2			296	406	567
FB43	1	8.00	Axial Brace Stiffness (lbs/in)	—	750	1910
	2			—	750	1960
	1		Axial Brace Strength (lbs)	—	212	272
	2			—	302	438
	1		Torsional Moment (in-lbs)	—	152	343
	2			—	461	526

FastBridge™ Clip Angles (FB68) Allowable Clip Capacities (lbs)

Clip Designation	No. of Screws to Steel Framing	Stud Depth (in)	Allowable Connector Capacity	Stud Thickness and Yield Strength		
				54mils (16ga)	68mils (14ga)	97mils (12ga)
FB68	1	3.625	Axial Brace Stiffness (lbs/in)	3410	4410	6270
	2			4010	6880	7585
	1		Axial Brace Strength (lbs)	465	520	573
	2			665	732	823
	1		Torsional Moment (in-lbs)	332	440	435
	2			735	894	1150
FB68	1	4.00	Axial Brace Stiffness (lbs/in)	3060	3440	6740
	2			3710	4670	8960
	1		Axial Brace Strength (lbs)	475	505	505
	2			676	752	878
	1		Torsional Moment (in-lbs)	382	462	564
	2			724	802	938
FB68	1	6.00	Axial Brace Stiffness (lbs/in)	2270	3240	3200
	2			2710	3870	3530
	1		Axial Brace Strength (lbs)	468	506	515
	2			682	788	885
	1		Torsional Moment (in-lbs)	294	412	670
	2			686	758	1004
FB68	1	8.00	Axial Brace Stiffness (lbs/in)	1940	2500	2530
	2			1960	2810	3015
	1		Axial Brace Strength (lbs)	463	510	517
	2			637	747	898
	1		Torsional Moment (in-lbs)	310	512	674
	2			682	788	963

Notes:

1 Allowable loads are based on the use of cold-formed steel studs with a minimum yield strength of Fy=33ksi and tensile strength of Fu=45ksi for 43mils (18ga) or thinner; and a minimum yield strength Fy=50ksi and tensile strength Fu=65ksi for 54mils (16ga) or thicker.

2 Allowable loads are based on 54mils (16ga) u-channel bridging with a minimum yield strength Fy=33ksi and tensile strength Fu=45ksi.

3 Allowable loads are for the bridging connection only. The strength and serviceability of the framing members is the responsibility of the designer.

4 Allowable loads are based on #10 self-drilling screws with a nominal diameter of 0.190 in. and a washer diameter of 0.375 in. Fasteners must have a minimum nominal shear strength of Pss=1718 lbs and a nominal tensile strength of Pts=2654 lbs.

5 Allowable loads may not be increased for wind or seismic load.

6 Allowable loads are for use when using ASD design methodology. For LRFD loads, multiply ASD allowable loads by 1.6.

7 Allowable brace loads are based on ultimate test loads divided by a safety factor. Serviceability limits are not considered. Brace stiffness requirements are detailed in AISI S100 Section D3.3.

8 Axial brace stiffness values apply to both ASD and LRFD designs.

H-Series™ Universal Header Hanger

Connect box headers to jambs or beams to columns.

The H-Series™ universal header hanger is used to connect box headers to jambs or beams to columns and transfer large vertical loads. This universal hanger is designed so one part can be used for either side of the connection. The hanger also features a support tab for proper alignment and easy installation.

The H-Series hanger is also prepunched with a series of round, square and triangle holes to ensure proper fastener placement for specified loads.

ALTERNATIVE PRODUCTS

HDS® Framing System, HDSC Header Bracket, GP-Series™ Unpunched Gusset Plate

PRODUCT DIMENSIONS

6" x 8-1/2"

MATERIAL SPECIFICATIONS

Gauge: 18 gauge (43mils)
Design Thickness: 0.0451 inches

Gauge: 16 gauge (54mils)
Design Thickness: 0.0566 inches

Gauge: 14 gauge (68mils)
Design Thickness: 0.0713 inches

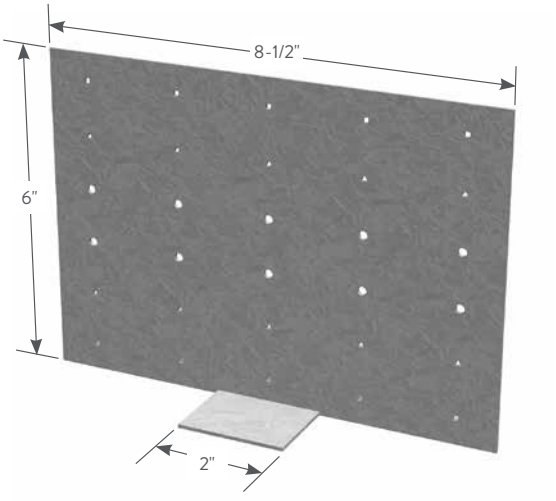
Coating: G90
Yield Strength: 33ksi for 18 gauge
50ksi for 14 & 16 gauge

ASTM: A653/A653M

INSTALLATION

Install the H-Series universal header hanger to the jamb studs with the required number of screws as needed to achieve required loading. Normally two connectors are required, one on each side of the header.

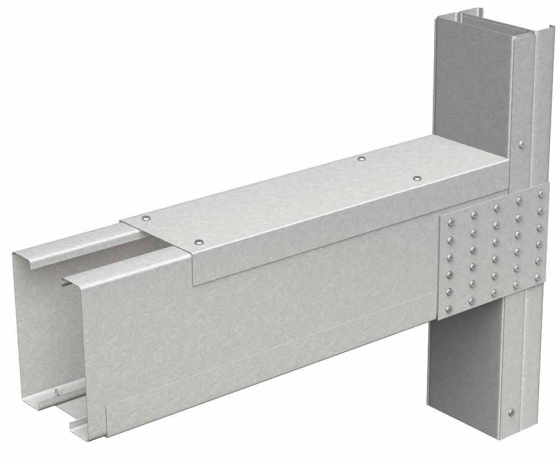
Position header on header support tabs and secure header to header hanger with number of fasteners required by design.



H-Series Universal Header Hanger

H-Series™ Universal Header Hangers

Clip Designation	Thickness		Size (in)	Packaging Pcs./Bucket
	mils (ga)	Design Thickness (in)		
H436	43mils (18ga)	0.0451	6 x 8-1/2	50
H546	54mils (16ga)	0.0566	6 x 8-1/2	50
H686	68mils (14ga)	0.0713	6 x 8-1/2	50



SCREW OPTIONS



(10) Screws
(6) at Header (4) at Jamb



(20) Screws
(12) at Header (8) at Jamb



(30) Screws
(18) at Header (12) at Jamb

Allowable Loading Chart for Single Connectors

Connector	Framing mils (ga)	Framing Fy (ksi)	10 Screws		20 Screws		30 Screws	
			Jamb capacity	Header capacity	Jamb capacity	Header capacity	Jamb capacity	Header capacity
H436 Using #10"-16" Screws	33 (20)	33	561	307	1121	507	1361	637
	43 (18)	33	832	455	1361	753	1361	945
	54 (16)	33	832	455	1361	753	1361	945
		50	832	455	1361	753	1361	945
	68 (14)	33	832	455	1361	753	1361	945
		50	832	455	1361	753	1361	945
	97 (12)	33	832	455	1361	753	1361	945
		50	832	455	1361	753	1361	945
H546 Using #10"-16" Screws	33 (20)	33	561	307	1121	507	1682	637
	43 (18)	33	832	455	1664	753	2496	945
	54 (16)	33	1172	641	2345	1061	2634	1332
		50	1682	919	2634	1522	2634	1910
	68 (14)	33	1655	905	2634	1498	2634	1880
		50	1682	919	2634	1522	2634	1910
	97 (12)	33	1682	919	2634	1522	2634	1910
		50	1682	919	2634	1522	2634	1910
H686 Using 1/4"-14" Screws	33 (20)	33	630	344	1260	570	1890	716
	43 (18)	33	935	511	1870	846	2805	1062
	54 (16)	33	1318	720	2635	1193	3821	1497
		50	1997	1091	3821	1807	3821	2268
	68 (14)	33	1860	1017	3720	1684	3821	2113
		50	2818	1541	3821	2551	3821	3201
	97 (12)	33	2818	1541	3821	2551	3821	3201
		50	2818	1541	3821	2551	3821	3201

Notes:

1 To determine the connection capacity, use the minimum value from the jamb and header columns. For instance, using an H686 for the 30-screw option with a 16 gauge, 50ksi jamb stud and a 12 gauge, 50ksi header, the allowable load per plate is 3201 lbs (i.e., the minimum of 3821 lbs for the jamb and 3201 lbs for the header).

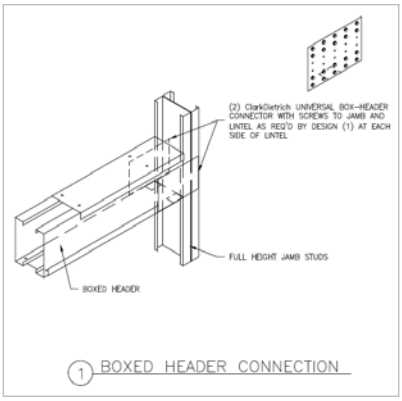
2 For the H436 and the H546, the tabulated capacity is based on #10-16 screws with an ultimate screw shear capacity of 1400 lbs per screw. For the H686, the tabulated capacity is based on 1/4"-14 screws with an ultimate screw shear capacity of 2600 lbs per screw.

3 H436 connectors are 33ksi, H546 and H686 connectors are 50ksi.

4 Reference figures above for screw placement of the 10-, 20- and 30-screw options.

5 Values are based on a minimum of (2) back-to-back jamb studs as shown above.

Typical Construction Details



Visit our CAD Library at clarkdietrich.com to view or download construction details in .dwg, .dxf, and .pdf formats.

ClarkDietrich Holdown

Secure and hold down shearwalls to the structure foundation

ClarkDietrich holdowns provide cost-effective shearwall attachment and are used to transfer tension loads between floors or from structural members to the foundation. Two-piece welded construction comes in three sizes for optimal performance. Installation is made easy with prepunched holes.



Screwed Holdown | Bolted Holdown

ALTERNATIVE PRODUCTS

EasyClip™ T-Series™ Tall Anchor Clip
Moment Clip

PRODUCT DIMENSIONS

CD8-S, CD8-B: 2-5/8" x 11"
CD10-S, CD10-B: 2-5/8" x 13-1/2"
CD15-S, CD15-B: 2-5/8" x 19"

MATERIAL SPECIFICATIONS

Gauge: 7 gauge (171.3mils) with 1/2" bearing plate
Steel Thickness: 0.1713 inches
Anchor Hole Size:
CD8-S, CD8-B, CD10-S, CD10-B: 7/8" x 1-1/8"
CD15-S, CD15-B: 1" x 1-1/8"
ASTM: A36, A1011
Coating: Envirocron® Powder Coating

INSTALLATION

Install the holdowns using anchor bolts or alternate anchorage calculated to resist the tension load for your specific application. Use steel nylon locking nuts or thread adhesive to minimize the chance of nut spin. Anchor bolt washer is not required.

For the screwed holdowns, secure the CD holdown to the steel framing member by filling all the prepunched holes with #14 self-tapping screws to achieve listed capacities.

For the bolted holdowns, secure the CD holdown to the steel framing member with 3/4" and 1/2" diameter bolts in the prepunched holes per the design load table to achieve listed capacities. Field drill holes in the framing member as required to accomodate the required bolts.

Boundary members (back-to-back studs) shall be designed by a qualified professional. To tie back-to-back stud members together, the Designer must determine the fasteners required to bind members to act as one unit. CD holdowns can be welded per Designer's recommendation and specification. Welding procedures shall be qualified as specified in AWS D1.3.

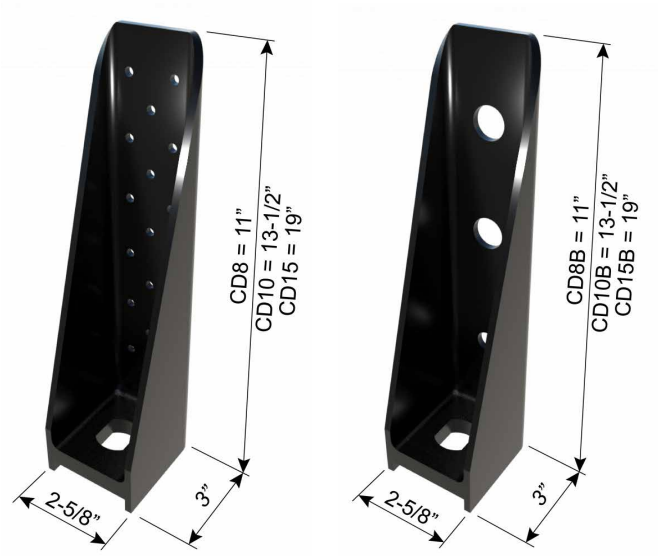
Welded connections used for cold-formed steel structural members in which the thickness of the thinnest connected part is 0.18 inch or less shall comply to AISI S100-2012 specification Section E2.

Reference section R603.9.4.2 of the International Residential Code (IRC) for holdown requirements in residential applications. Consult the engineer of record for commercial applications.

ClarkDietrich Holdowns

Product Code	Thickness		Size (in)	Packaging
	mils (ga)	Design Thickness (in)		
CD8-S	171.3 (7)	0.188	2-5/8 x 11	Dependent on Order Quantity
CD10-S	171.3 (7)	0.188	2-5/8 x 13-1/2	
CD15-S	171.3 (7)	0.188	2-5/8 x 19	

Product Code	Thickness		Size (in)	Packaging
	mils (ga)	Design Thickness (in)		
CD8-B	171.3 (7)	0.188	2-5/8 x 11	Dependent on Order Quantity
CD10-B	171.3 (7)	0.188	2-5/8 x 13-1/2	
CD15-B	171.3 (7)	0.188	2-5/8 x 19	



SOURCES OF DEFLECTION AT THE SHEARWALL HOLDOWN CONNECTIONS:

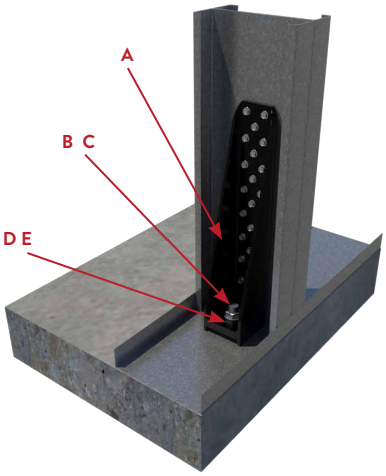
A Eccentricity in stud—when a holdown is installed on only one side of the stud, an eccentricity exists during loading that can cause additional movement in the shearwall system.

B Nut spin—unrestrained anchor bolt nuts can spin loose during cyclic loading: the use of steel nylon locking nuts or thread adhesive may prevent nut spin.

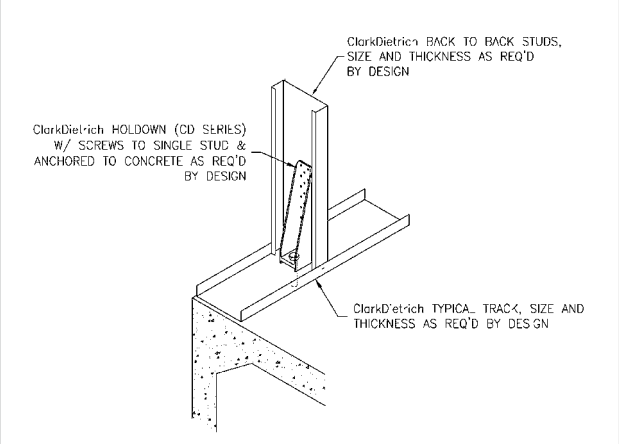
C Lack of nut tightening—additional movement can occur when nuts are not tightened sufficiently.

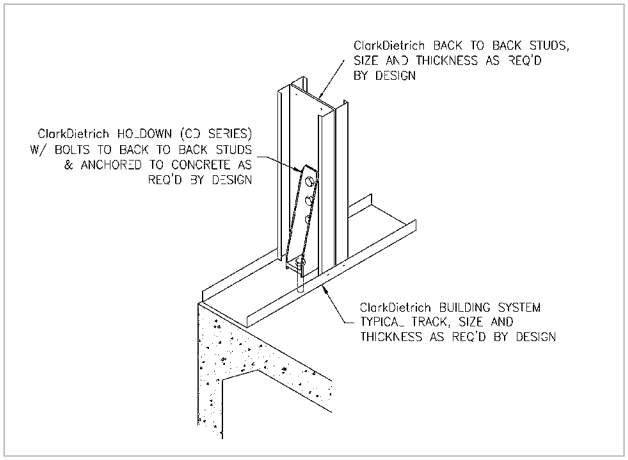
D Deflection of the holdown—deflection can occur in the holdown under load caused by stresses due to earthquake or high wind.

E Vertical deflection at the holdown seat caused by stud rotation—lateral displacement at the top of the wall rotates the stud around its base causing the holdown base plate to displace vertically.



TYPICAL CONSTRUCTION DETAILS





Visit our CAD Library at clarkdietrich.com to view or download construction details in .dwg, .dxf, and .pdf formats.

ClarkDietrich Holdown

ClarkDietrich CD8-S, CD10-S, CD15-S Holdowns

SINGLE FRAMING MEMBER WITH SCREWS

Product Code	Height	Fasteners		Stud Member Thickness	ASD		LRFD		Nominal Tension Load (lbs)
		Anchor Diameter	Stud Fasteners		Tension Load (lbs)	Deflection at ASD Load (in)	Tension Load (lbs)	Deflection at LRFD Load (in)	
CD8-S	11"	7/8"	(17) #14 Screws	1-33mils (1-20ga)	1905	0.081	2860	0.107	5720
				1-43mils (1-18ga)	2485	0.057	3730	0.079	7455
				1-54mils (1-16ga)	4505	0.064	6755	0.086	13510
				1-68mils (1-14ga)	5675	0.058	8510	0.079	17020
				1-97mils (1-12ga)	8095	0.051	12140	0.072	24280
CD10-S	13-1/2"	7/8"	(23) #14 Screws	1-33mils (1-20ga)	2325	0.049	3490	0.066	6975
				1-43mils (1-18ga)	3030	0.034	4550	0.052	9095
				1-54mils (1-16ga)	5495	0.038	8245	0.055	16485
				1-68mils (1-14ga)	6920	0.041	10385	0.059	20765
				1-97mils (1-12ga)	9875	0.044	14810	0.062	29620
CD15-S	19"	1"	(32) #14 Screws	1-33mils (1-20ga)	2675	0.025	4015	0.040	8025
				1-43mils (1-18ga)	3485	0.026	5230	0.037	10460
				1-54mils (1-16ga)	6320	0.016	9480	0.030	18955
				1-68mils (1-14ga)	7960	0.025	11940	0.036	23880
				1-97mils (1-12ga)	11355	0.036	17035	0.050	34065

Notes:

1 The designer is responsible for design checks for the substrate the Holdown is attached to and the anchorage to the substrate. The capacities listed in the table may exceed those of the substrate and/or the anchorage to the substrate.

2 Tabulated loads may exceed ASTM A36 or A307 anchor bolt tension capacities.

3 Stud/framing member design by qualified professional. Tabulated loads are based on minimum 1-5/8" wide flanged stud/framing member.

4 1/4" self-drilling screws can be substituted for #14 self-drilling screws.

5 Deflection at ASD and LRFD loads includes fastener slip, holdown elongation and anchor bolt elongation.

6 Nominal tension load is based on the average ultimate (peak) load from tests. AISI Lateral Design standard requires holdown to have nominal strength to resist lesser of amplified seismic load or what the system can deliver.

7 For ASD and LRFD loads, safety factor of 3.0 and resistance factor of 0.50 was applied.

ClarkDietrich CD8-B, CD10-B, CD15-B Holdowns

SINGLE FRAMING MEMBER WITH BOLTS

Product Code	Height	Fasteners		Stud Member Thickness	ASD		LRFD		Nominal Tension Load (lbs)
		Anchor Diameter	Stud Fasteners		Tension Load (lbs)	Deflection at ASD Load (in)	Tension Load (lbs)	Deflection at LRFD Load (in)	
CD8-B	11"	7/8"	(2) 3/4" Dia. Bolts + (1) 1/2" Dia. Bolt	1-33mils (1-20ga)	2015	0.079	2910	0.103	4475
				1-43mils (1-18ga)	2630	0.163	3795	0.211	5835
				1-54mils (1-16ga)	4765	0.141	6875	0.177	10575
				1-68mils (1-14ga)	6000	0.271	8660	0.315	13325
				1-97mils (1-12ga)	8560	0.275	12355	0.317	19005
CD10-B	13-1/2"	7/8"	(3) 3/4" Dia. Bolts + (1) 1/2" Dia. Bolt	1-33mils (1-20ga)	2460	0.142	3550	0.182	5460
				1-43mils (1-18ga)	3205	0.055	4630	0.103	7120
				1-54mils (1-16ga)	5815	0.126	8390	0.171	12905
				1-68mils (1-14ga)	7320	0.148	10565	0.192	16255
				1-97mils (1-12ga)	10445	0.190	15070	0.249	23185
CD15-B	19"	1"	(4) 3/4" Dia. Bolts + (1) 1/2" Dia. Bolt	1-33mils (1-20ga)	2705	0.127	3905	0.153	6005
				1-43mils (1-18ga)	3525	0.074	5090	0.105	7830
				1-54mils (1-16ga)	6395	0.121	9225	0.154	14195
				1-68mils (1-14ga)	8055	0.170	11620	0.198	17880
				1-97mils (1-12ga)	11490	0.196	16580	0.235	25505

Notes:

1 The designer is responsible for design checks for the substrate the Holdown is attached to and the anchorage to the substrate. The capacities listed in the table may exceed those of the substrate and/or the anchorage to the substrate.

2 Tabulated loads may exceed ASTM A36 or A307 anchor bolt tension capacities.

3 Stud/framing member design by qualified professional. Tabulated loads are based on minimum 1-5/8" wide flanged stud/framing member.

4 At a minimum, bolts to framing/stud connection shall comply with ASTM A307. Both 3/4-inch diameter and 1/2" diameter bolt shall be used (as listed in the design table) to achieve tabulated capacities.

5 Deflection at ASD and LRFD loads includes fastener slip, holdown elongation and anchor bolt elongation.

6 Nominal tension load is based on the average ultimate (peak) load from tests. AISI Lateral Design standard requires holdown to have nominal strength to resist lesser of amplified seismic load or what the system can deliver.

7 For ASD and LRFD loads, safety factor of 2.22 and resistance factor of 0.65 was applied.

ClarkDietrich CD8-S, CD10-S, CD15-S Holdowns

BACK-TO-BACK FRAMING MEMBER WITH SCREWS

Product Code	Height	Fasteners		Stud member thickness	ASD		LRFD		Nominal Tension Load (lbs)
		Anchor Diameter	Stud Fasteners		Tension Load (lbs)	Deflection at ASD Load (in)	Tension Load (lbs)	Deflection at LRFD Load (in)	
CD8-S	11"	7/8"	(17) #14 Screws	2-33mils (2-20ga)	6962	0.08	11139	0.119	20885
				2-43mils (2-18ga)	8164	0.07	13062	0.124	24492
				2-54mils (2-16ga)	11253	0.083	18005	0.126	33759
				2-68mils (2-14ga)	12240	0.095	19585	0.135	36721
				2-97mils (2-12ga)	12240	0.095	19585	0.135	36721
CD10-S	13-1/2"	7/8"	(23) #14 Screws	2-33mils (2-20ga)	7293	0.12	11669	0.16	21880
				2-43mils (2-18ga)	9314	0.068	14902	0.106	27941
				2-54mils (2-16ga)	12502	0.083	20004	0.125	37507
				2-68mils (2-14ga)	12899	0.083	20638	0.127	38697
				2-97mils (2-12ga)	12899	0.083	20638	0.127	38697
CD15-S	19"	1"	(32) #14 Screws	2-33mils (2-20ga)	7610	0.098	12177	0.125	22831
				2-43mils (2-18ga)	9235	0.067	14776	0.104	27705
				2-54mils (2-16ga)	13532	0.088	21650	0.128	40595
				2-68mils (2-14ga)	13695	0.063	21911	0.096	41084
				2-97mils (2-12ga)	13695	0.063	21911	0.096	41084

Notes:

1 The designer is responsible for design checks for the substrate the Holdown is attached to and the anchorage to the substrate. The capacities listed in the table may exceed those of the substrate and/or the anchorage to the substrate.

2 Tabulated loads may exceed ASTM A36 or A307 anchor bolt tension capacities.

3 Stud/framing member design by qualified professional. Tabulated loads are based on minimum 1-5/8" wide flanged stud/framing member.

4 1/4" self-drilling screws can be substituted for #14 self-drilling screws.

5 Deflection at ASD and LRFD loads includes fastener slip, holdown elongation and anchor bolt elongation.

6 Nominal tension load is based on the average ultimate (peak) load from tests. AISI Lateral Design standard requires holdown to have nominal strength to resist lesser of amplified seismic load or what the system can deliver.

7 For ASD and LRFD loads, safety factor of 3.0 and resistance factor of 0.50 was applied.

ClarkDietrich CD8-B, CD10-B, CD15-B Holdowns

BACK-TO-BACK FRAMING MEMBER WITH BOLTS

Product Code	Height	Fasteners		Stud Member Thickness	ASD		LRFD		Nominal Tension Load (lbs)
		Anchor Diameter	Stud Fasteners		TensionLoad (lbs)	Deflection at ASD Load (in)	Tension Load (lbs)	Deflection at LRFD Load (in)	
CD8-B	11"	7/8"	(2) 3/4" Dia. Bolts + (1) 1/2" Dia. Bolt	2-33mils (2-20ga)	4030	0.206	5820	0.243	8950
				2-43mils (2-18ga)	5255	0.149	7585	0.192	11670
				2-54mils (2-16ga)	9530	0.182	13750	0.240	21155
				2-68mils (2-14ga)	12005	0.268	17325	0.333	26650
				2-97mils (2-12ga)	13650	0.286	19700	0.368	30305
CD10-B	13-1/2"	7/8"	(3) 3/4" Dia. Bolts + (1) 1/2" Dia. Bolt	2-33mils (2-20ga)	4920	0.222	7100	0.274	10920
				2-43mils (2-18ga)	6410	0.264	9255	0.314	14235
				2-54mils (2-16ga)	11625	0.260	16775	0.313	25810
				2-68mils (2-14ga)	14645	0.201	21130	0.258	32510
				2-97mils (2-12ga)	15045	0.205	21715	0.263	33405
CD15-B	19"	1"	(4) 3/4" Dia. Bolts + (1) 1/2" Dia. Bolt	2-33mils (2-20ga)	5410	0.166	7810	0.193	12015
				2-43mils (2-18ga)	7055	0.202	10180	0.235	15660
				2-54mils (2-16ga)	12790	0.175	18455	0.228	28390
				2-68mils (2-14ga)	16110	0.208	23245	0.270	35760
				2-97mils (2-12ga)	17685	0.222	25520	0.290	39265

Notes:

1 The designer is responsible for design checks for the substrate the Holdown is attached to and the anchorage to the substrate. The capacities listed in the table may exceed those of the substrate and/or the anchorage to the substrate.

2 Tabulated loads may exceed ASTM A36 or A307 anchor bolt tension capacities.

3 Stud/framing member design by qualified professional. Tabulated loads are based on minimum 1-5/8" wide flanged stud/framing member and the minimum stud thickness for fastener connection.

4 At a minimum, bolts to framing/stud connection shall comply with ASTM A307. Both 3/4-inch diameter and 1/2" diameter bolt shall be used (as listed in the design table) to achieve tabulated capacities.

5 Deflection at ASD and LRFD loads includes fastener slip, holdown elongation and anchor bolt elongation.

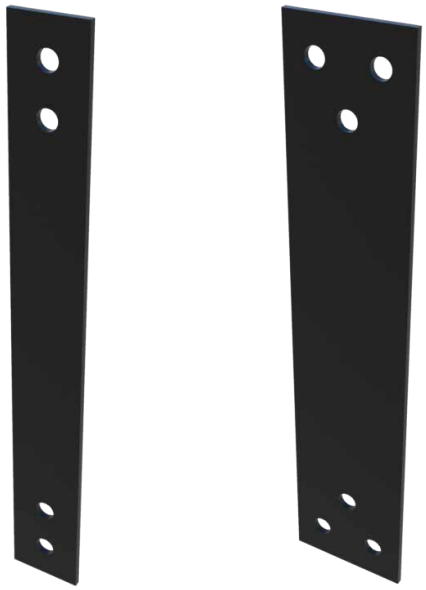
6 Nominal tension load is based on the average ultimate (peak) load from tests. AISI Lateral Design standard requires holdown to have nominal strength to resist lesser of amplified seismic load or what the system can deliver.

7 For ASD and LRFD loads, safety factor of 2.22 and resistance factor of 0.65 was applied.

Holdown Plate

Secure and hold down structural steel endposts between floors or to the foundation embed plate (by others)

ClarkDietrich HDP holdown plates are designed for taller construction and higher tension loads; transferring the tension loads between floors or from structural members to the foundation embed plate (by others). The HDP holdown plates are pre-punched and available in six sizes that can be bolted or welded. They can be used for panelized construction or stick-built construction.



ALTERNATIVE PRODUCTS

ClarkDietrich Holdown

PRODUCT DIMENSIONS

300HDP025: 1/4" x 3" X 24"
300HDP038: 3/8" x 3" X 24"
300HDP050: 1/2" x 3" X 30"
500HDP025: 1/4" x 5" X 24"
500HDP038: 3/8" x 5" X 24"
500HDP050: 1/2" x 5" X 30"

MATERIAL SPECIFICATIONS

Steel Thickness: 1/4", 3/8" and 1/2" Plate
Bolt Hole Size: 13/16"
ASTM: 1/4" and 3/8" A36 Plate
1/2" A572 Gr50 Plate
Coating: Envirocron® Powder Coating

INSTALLATION

Field trimming, welding or drilling will be required when installing holdown plates. When trimming cold-formed steel, use a grinder or plasma cutter. No torch cutting.

Clean all trimmed, cut, drilled and welded areas and paint with a zinc-rich (cold galvanize) paint.

Endpost must align from level to level and holdown plates set flat on the post components before welding or bolting.

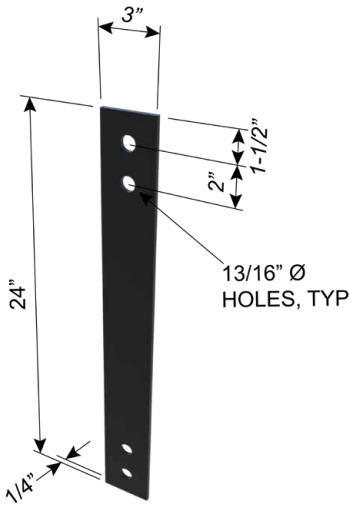
Holdown plates are intended for tension loads and not tested for compression loads. Endposts with bearing gaps must have a structural shim installed for full compression load path.

CD holdown plates can be welded or bolted, but a designer of record shall check the endpost connection capacity and provide a specific connection detail for each project.

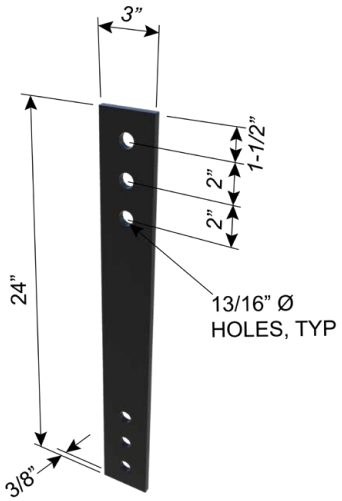
Welding to cold-formed steel endpost members shall be with 97 mils (50Ksi) minimum with a maximum weld size of 1/8" fillet. Welder shall be certified for sheet steel welding.

ClarkDietrich Holdown Plate (HDP) - 3" Wide

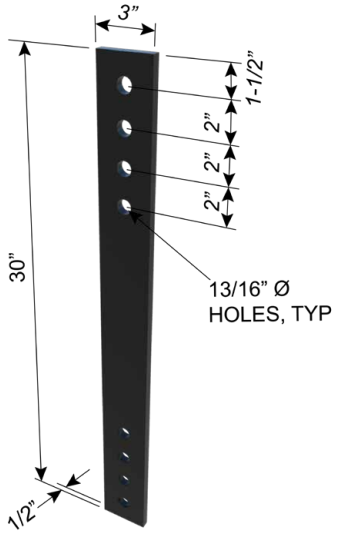
Product Code	Thickness (in)	Width (in)	Length (in)	Holes per End	Packaging
300HDP025	1/4	3	24	2	250
300HDP038	3/8	3	24	3	200
300HDP050	1/2	3	30	4	100



300HDP025



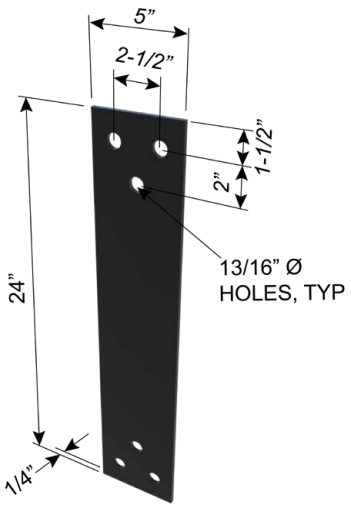
300HDP038



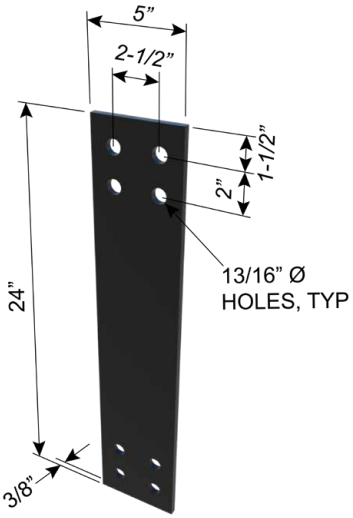
300HDP050

ClarkDietrich Holdown Plate (HDP) - 5" Wide

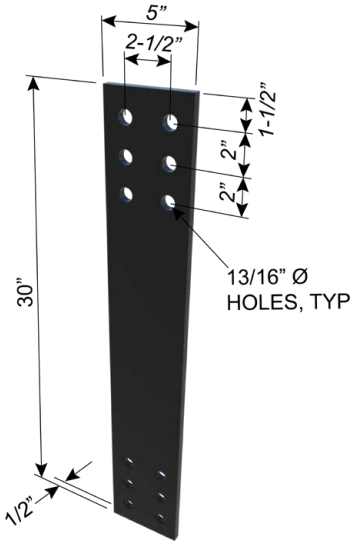
Product Code	Thickness (in)	Width (in)	Length (in)	Holes per End	Packaging
500HDP025	1/4	5	24	3	150
500HDP038	3/8	5	24	4	100
500HDP050	1/2	5	30	6	50



500HDP025



500HDP038



500HDP050

The technical content of this literature is effective 04/09/26 and supersedes all previous information.
Pub. No. CD-ClipExpress 04/26

Holdown Plate

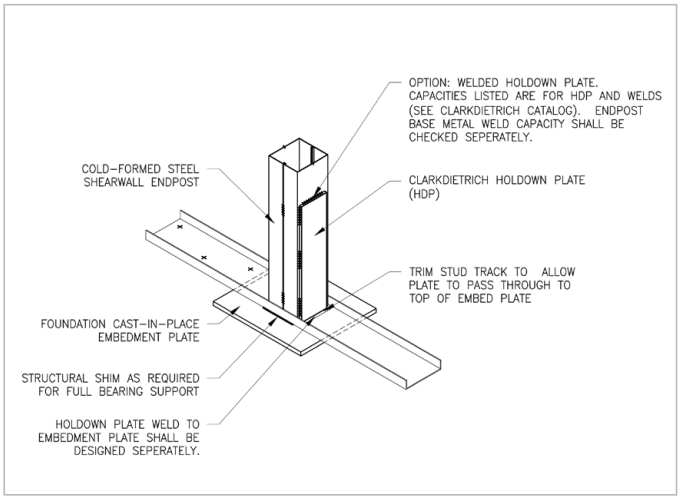
Holdown Plate (HDP): Bolted

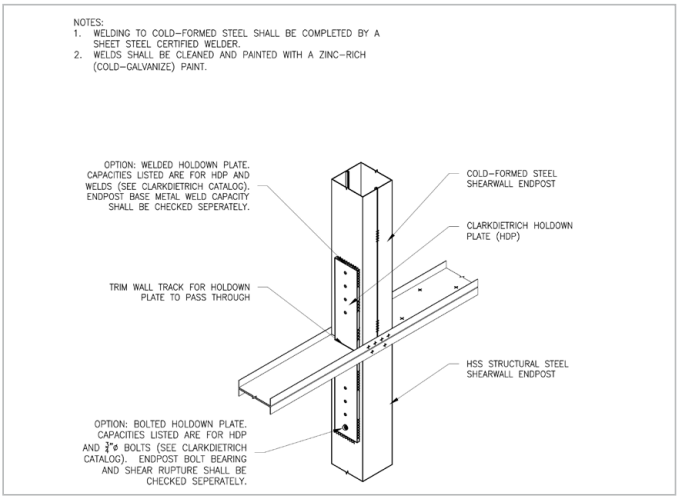
Product Code	Plate Dimensions and Properties					Fastener at Each End	HDP Tension Capacities		
	Thickness (in)	Width (in)	Length (in)	Yield Strength (ksi)	Tensile Strength (ksi)		Nominal Strength, kips	ASD load, kips	LRFD load, kips
300HDP025	0.250	3	24	36	58	(2) 3/4" Bolts	27.00	15.86	23.79
300HDP038	0.375	3	24	36	58	(3) 3/4" Bolts	40.50	23.79	35.68
300HDP050	0.500	3	30	50	65	(4) 3/4" Bolts	71.09	35.55	53.32
500HDP025	0.250	5	24	36	58	(3) 3/4" Bolts	45.00	24.47	36.70
500HDP038	0.375	5	24	36	58	(4) 3/4" Bolts	67.50	36.70	55.05
500HDP050	0.500	5	30	50	65	(6) 3/4" Bolts	109.69	54.84	82.27

Notes:

1 Listed capacities are based on AISI S100-16 (2020) w/S2-20 and ANSI/AISC 360-16.
2 Limitations of hole spacing and edge distance are per ANSI/AISC 360-16 Section J3.
3 HDP025 and HDP038 plates use A36 steel, HDP050 plate use A572-Gr50 steel.
4 For fasteners, use 3/4" x 2-1/2" A325T (full thread) bolts with F436 washers and A563 heavy hex nut.
5 Nominal strengths are controlled by HDP plate tensile yielding.
6 ASD and LRFD loads are controlled by HDP plate tensile rupture.
7 Capacities listed for HDP plate and bolt only, substrate connection capacities should be checked separately.

TYPICAL CONSTRUCTION DETAILS





Visit our CAD Library at clarkdietrich.com to view or download construction details in .dwg, .dxf, and .pdf formats.

Holdown Plate (HDP): Welded

Product Code	Plate Dimensions and Properties					Size of Weld (thickness), w (in)	HDP Weld Tension Capacities		
	Thickness (in)	Width (in)	Length (in)	Yield Strength F_y (ksi)	Tensile Strength F_u (ksi)		Nominal Strength, kips	ASD Load, kips	LRFD Load, kips
300HDP025	0.250	3	24	36	58	1/8"	27.00	16.17	24.30
300HDP038	0.375	3	24	36	58	3/16"	40.50	24.25	36.45
300HDP050	0.500	3	30	50	65	5/16"	75.00	44.91	67.50
500HDP025	0.250	5	24	36	58	1/8"	45.00	26.95	40.50
500HDP038	0.375	5	24	36	58	3/16"	67.50	40.42	60.75
500HDP050	0.500	5	30	50	65	5/16"	125.00	74.85	112.50

Product Code	Longitudinal Weld Length/Side		
	Nominal Strength (in)	ASD Load (in)	LRFD Load (in)
300HDP025	5	6	6
300HDP038	5	6	6
300HDP050	5	5	5
500HDP025	8	9	9
500HDP038	8	9	9
500HDP050	7	9	9

Notes:

1 Listed capacities and weld lengths are based on AISI S100-16 (2020) w/S2-20 ans ANSI/AISC 360-16.
2 Listed capacities applicable for Fillet Welds only.
3 Listed capacities are based on E60xx or E70xx electrodes for A36 steel plates, E70XX electrodes for A572-Gr50 steel plates.
4 Limitations of weld size (thickness of weld) are per ANSI/AISC 360-16 Section J2.
5 HDP025 and HDP038 plates use A36 steel, HDP050 plate use A572-Gr50 steel.
6 Weld capacities are controlled by HDP plate tensile yielding.
7 Capacities listed for HDP plate only, substrate connection capacities should be checked separately.

ClarkDietrich Moment Clip

Moment connection for knee walls and shear walls to the structure foundation

ClarkDietrich moment clips are high-performance, cost effective solutions for knee wall-to-foundation connections and shear wall-to-foundation connections. These multi-application clips feature a 1/4" thick A36 steel stiffening plate that provides superior design values for maximum performance. The moment clips are designed to resist horizontal, torsional and vertical (uplift) loads. These clips are prepunched with a series of attachment holes for steel framing connections and a 1/2" anchor bolt hole for foundation connections.

PRODUCT DIMENSIONS

2" x 4" x 3-1/2"
2" x 4" x 5-1/2"
2" x 4" x 7-1/2"

1/4" A36 steel stiffening plate
1-3/4" x 3-3/8"
1-3/4" x 5-3/8"
1-3/4" x 7-3/8"

MATERIAL SPECIFICATIONS

Gauge: 14 gauge (68mils)
Design Thickness: 0.0713 inches

Gauge: 12 gauge (97mils)
Design Thickness: 0.1017 inches

Gauge: 10 gauge (118mils)
Design Thickness: 0.1242 inches

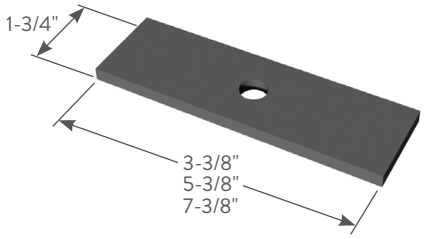
Coating: G90
Yield Strength: 50ksi
ASTM: A36, A653, A1003

INSTALLATION

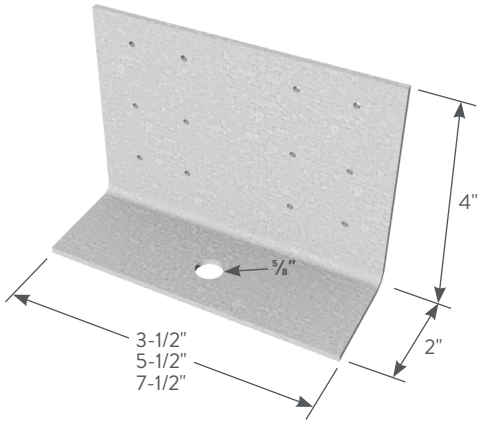
Secure the Moment Clip to the steel framing member by using #12 screws in the prepunched holes. Number of screws and screw pattern is based on load required to achieve listed capacities.

Place 1/4" steel stiffening plate on top of short leg of Moment Clip so anchor holes are aligned.

Secure 1/4" steel stiffening plate and Moment Clip to foundation using 1/2" x 2" long Hilti Kwik-Bolt 3 or alternate anchorage calculated to resist the tension load for your specific application.



1/4" Stiffening Plate



ClarkDietrich Moment Clip



ClarkDietrich Moment Clip w/ Stiffening Plate

ClarkDietrich Moment Clips (MC Series)

Clip Designation	Thickness		Size (in)	Packaging Pcs./Bucket
	mils (ga)	Design Thickness (in)		
MC683P	68 (14)	0.0713	2 x 4 x 3-1/2	25
MC685P	68 (14)	0.0713	2 x 4 x 5-1/2	25
MC687P	68 (14)	0.0713	2 x 4 x 7-1/2	25
MC973P	97 (12)	0.1017	2 x 4 x 3-1/2	25
MC975P	97 (12)	0.1017	2 x 4 x 5-1/2	25
MC977P	97 (12)	0.1017	2 x 4 x 7-1/2	25
MC103P	68 (14)	0.1242	2 x 4 x 3-1/2	25
MC105P	97 (12)	0.1242	2 x 4 x 5-1/2	25
MC107P	118 (10)	0.1242	2 x 4 x 7-1/2	25

ClarkDietrich Moment Clips Allowable Loads

Clip Designation	Stud Member Thickness mils (ga)	Stud Fy (ksi)	F1 (Shear), (lbs)			F2 (Tension), (lbs)			M (Moment), (in-lbs)			Rotational Stiffness for Wind Deflection (in-lbs/radian)
			Number of #12 Screws to Stud						1/2" dia. Anchor to Structure			
			4	6	12	4	6	12	4	6	12	
MC683P 2" x 4" x 3-1/2" 68mils (14ga)	33 (20)	33	372	508	840	754	1131	2261[2]	1401	1784	2462[3]	133,000
	43 (18)	33	554	756	1250	1122	1683[2]	2736[2]	2084[3]	2581[3]	2581[3]	
	54 (16)	50	1126	1536	2086[1]	2278[2]	2736[2]	2736[2]	2743[3]	2743[3]	2743[3]	
	68 (14)	50	1535	2086[1]	2086[1]	2736[2]	2736[2]	2736[2]	2756[3]	2756[3]	2756[3]	
	97 (12)	50	1535	2086[1]	2086[1]	2736[2]	2736[2]	2736[2]	2756[3]	2756[3]	2756[3]	
MC973P 2" x 4" x 3-1/2" 97mils (12ga)	33 (20)	33	372	508	840	754	1131	2261[2]	1401	1784[3]	2560[3]	140,100
	43 (18)	33	554	756	1250	1122	1683[2]	3365[2]	2084[3]	2655	2862[3]	
	54 (16)	50	1126	1536	2538[1]	2278[2]	3417[2]	3832	2862[3]	2862[3]	2862[3]	
	68 (14)	50	1535	2094[1]	2975[1]	3107[2]	3832	3832	2862[3]	2862[3]	2862[3]	
	97 (12)	50	1535	2094[1]	2975[1]	3107[2]	3832	3832	2862[3]	2862[3]	2862[3]	
MC103P 2" x 4" x 3-1/2" 118mils (10ga)	33 (20)	33	372	508	840	754	1131	2261[2]	1401	1784[3]	2609[3]	143,900
	43 (18)	33	554	756	1250	1122	1683[2]	3365[2]	2084[3]	2655	2945[3]	
	54 (16)	50	1126	1536	2538[1]	2278[2]	3417[2]	3828[2]	2945[3]	2945[3]	2945[3]	
	68 (14)	50	1535	2094[1]	3462[1]	3107[2]	3828[2]	3828[2]	2945[3]	2945[3]	2945[3]	
	97 (12)	50	1535	2094[1]	3462[1]	3107[2]	3828[2]	3828[2]	2945[3]	2945[3]	2945[3]	
MC685P 2" x 4" x 5-1/2" 68mils (14ga)	33 (20)	33	441	630	1029	754	1131	2261[2]	1778	2417	3396[3]	252,000
	43 (18)	33	656	937	1531	1122	1683[2]	2736[2]	2646	3597[3]	4993[3]	
	54 (16)	50	1333	1903[1]	2086[1]	2278[2]	2736[2]	2736[2]	5307[3]	5307[3]	5307[3]	
	68 (14)	50	1818[1]	2086[1]	2086[1]	2736[2]	2736[2]	2736[2]	5363[3]	5363[3]	5363[3]	
	97 (12)	50	1818[1]	2086[1]	2086[1]	2736[2]	2736[2]	2736[2]	5363[3]	5363[3]	5363[3]	
MC975P 2" x 4" x 5-1/2" 97mils (12ga)	33 (20)	33	441	630	1029	754	1131	2261[2]	1778	2417	3396[3]	274,400
	43 (18)	33	656	937	1531	1122	1683[2]	3365[2]	2646	3597[3]	5025[3]	
	54 (16)	50	1333	1903[1]	2975[1]	2278[2]	3417[2]	4181[2]	5373[3]	5980[3]	5980[3]	
	68 (14)	50	1818[1]	2595[1]	2975[1]	3107[2]	4181[2]	4181[2]	5980[3]	5980[3]	5980[3]	
	97 (12)	50	1818[1]	2595[1]	2975[1]	3107[2]	4181[2]	4181[2]	5980[3]	5980[3]	5980[3]	
MC105P 2" x 4" x 5-1/2" 118mils (10ga)	33 (20)	33	441	630	1029	754	1131	2261[2]	1778	2417	3396[3]	288,700
	43 (18)	33	656	937	1531	1122	1683[2]	3365[2]	2646	3597[3]	5053[3]	
	54 (16)	50	1333	1903[1]	3109[1]	2278[2]	3417[2]	4236[2]	5373[3]	6133[3]	6133[3]	
	68 (14)	50	1818[1]	2595[1]	3633[1]	3107[2]	4236[2]	4236[2]	6133[3]	6133[3]	6133[3]	
	97 (12)	50	1818[1]	2595[1]	3633[1]	3107[2]	4236[2]	4236[2]	6133[3]	6133[3]	6133[3]	
MC687P 2" x 4" x 7-1/2" 68mils (14ga)	43 (18)	33	791	1164	1928[1]	1122	1683[2]	2736[2]	3646	5199[3]	6903[3]	387,600
	54 (16)	50	1606	2086[1]	2086[1]	2278[2]	2736[2]	2736[2]	7403[3]	7656[3]	7656[3]	
	68 (14)	50	2086[1]	2086[1]	2086[1]	2736[2]	2736[2]	2736[2]	8186[3]	8186[3]	8186[3]	
	97 (12)	50	2086[1]	2086[1]	2086[1]	2736[2]	2736[2]	2736[2]	8186[3]	8186[3]	8186[3]	
MC977P 2" x 4" x 7-1/2" 97mils (12ga)	43 (18)	33	791	1164	1928[1]	1122	1683[2]	3365[2]	3646	5199[3]	6903[3]	449,000
	54 (16)	50	1606	2363[1]	2975[1]	2278[2]	3417[2]	3835	7403[3]	8979[3]	8979[3]	
	68 (14)	50	2190[1]	2975[1]	2975[1]	3107[2]	3875[2]	3875[2]	8979[3]	8979[3]	8979[3]	
	97 (12)	50	2190[1]	2975[1]	2975[1]	3107[2]	3875[2]	3875[2]	8979[3]	8979[3]	8979[3]	
MC107P 2" x 4" x 7-1/2" 118mils (10ga)	43 (18)	33	791	1164	1928[1]	1122	1683[2]	3365[2]	3646	5199	6903[3]	451,000
	54 (16)	50	1606	2363[1]	3633[1]	2278[2]	3417[2]	3835[2]	7403[3]	9180[3]	9180[3]	
	68 (14)	50	2190[1]	3223[1]	3633[1]	3107[2]	4236[2]	4236[2]	9282[3]	9282[3]	9282[3]	
	97 (12)	50	2190[1]	3223[1]	3633[1]	3107[2]	4236[2]	4236[2]	9282[3]	9282[3]	9282[3]	

Notes:

1 Cells marked with a " 1 " in shear column indicate that the shear capacity is limited to 1628 lbs when using 1/2" x 2" Hilti Kwik-Bolts into 3000psi concrete.

2 Cells marked with a " 2 " in tension column indicate that the tension capacity is limited to 1509 lbs when using 1/2" x 2" Hilti Kwik-Bolts into 3000psi concrete.

3 Cells marked with a " 3 " in the moment column indicate that the moment capacity is limited to 1761 in-lbs for 3-Series clips, 2767 in-lbs for 5-Series clips, and 3773 in-lbs for 7-Series clips when using 1/2" x 2" Hilti Kwik-Bolts into 3000psi concrete.

4 Capacities listed in the table/notes assume that no load reductions are required for spacing or edge distance of Kwik-Bolts.

5 Capacities listed in the table represent the capacity of the clip and the screws to the stud. Capacities listed in notes 1–3 are limits if the specified connector to the structure is used.

Other 1/2" dia. anchors may be used to achieve the full clip capacity but must be designed separately.

6 Moment capacities listed as Max. load/Factor of Safety. Loads must be limited by serviceability load taken as stiffness times the serviceability limit in radians.

7 Stiffness is the max. allowable clip moment divided by the clip rotation measured at the max. allowable clip moment.

8 No stud-to-track connection is required. Higher loads can be achieved when stud-to-track is connected.

9 Use a linear interaction equation for connections involving any combination of F1, F2, and M.

10 Allowable loads have not been increased for wind, seismic, or other factors.

11 Torsional effects are considered on screw group for F1 & F2 (Shear & Tension) allowable loads.

12 Hilti is a registered trademark of Hilti Aktiengeseilschaft Corporation.

13 It is the responsibility of the designer to properly detail connections on the contract drawings.

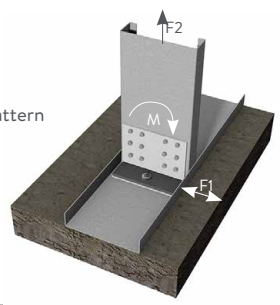


4 Screw Pattern



6 Screw Pattern

ClarkDietrich Moment Clip w/ 12 Screw Pattern & Anchor Bolt



The technical content of this literature is effective 04/09/26 and supersedes all previous information.

Pub. No. CD-ClipExpress 04/26

Pony Wall Heavy (12ga)

Partial wall framing connection to the floor

The ClarkDietrich Pony Wall Heavy is intended to support out-of-plane loading of cantilevered partial wall systems that are unsupported at the top track. Out-of-plane loads are transferred to the floor system through the base-plate, which is welded to the Pony Wall Heavy stud member.

INSTALLATION

Install the Pony Wall inside the track or directly to the floor structure. Anchor to the floor as designed by EOR. Attach the studs to both flanges of the Pony Wall. A minimum of 3-1/2" stud member can be used.

PRODUCT DIMENSIONS

PW24 = 23-3/4" tall with 3-3/8" wide x 8" long plate
PW36 = 35-3/4" tall with 3-3/8" wide x 8" long plate
PW48 = 47-3/4" tall with 3-3/8" wide x 8" long plate
PW60 = 59-3/4" tall with 3-3/8" wide x 8" long plate



MATERIAL SPECIFICATIONS

Plate Material: ASTM A36 1/2" thick hot rolled steel
Stud Material: ASTM A1011 SS Grade 50, 50ksi (340 MPa)
12ga (97mils), 0.1017" Design thickness, 0.0966" Min. thickness
Coating: Envirocron® Powder Coating
Packaging: Individually
ASTM: A36, A1011

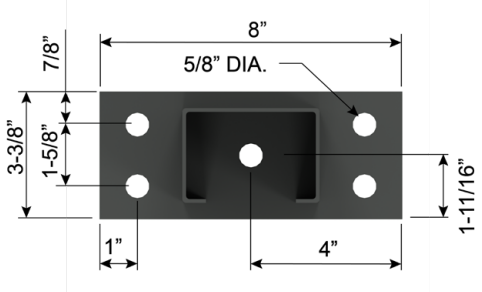
Pony Wall Heavy (PW)

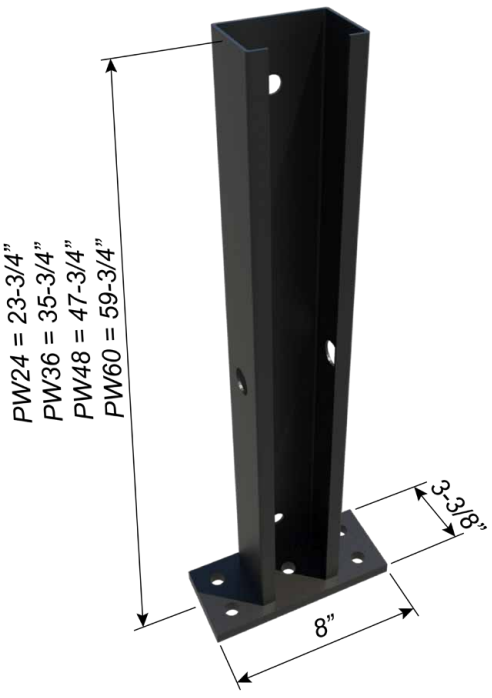
Product Code	Thickness		Size (in)	Packaging
	mils (ga)	Design Thickness (in)		
PW24	97 (12)	0.1017	23-3/4"	Individually
PW36			35-3/4"	Individually
PW48			47-3/4"	Individually
PW60			59-3/4"	Individually

Pony Wall Heavy (PW) Rotational Stiffness

Product Code	Member Length, in	No. of Anchors	Rotational Stiffness for Wind Deflection (in-lbs/rad)*
PW	24/36/48/60	1	945,000
		4	1,128,775

*Rotational stiffness is the max allowable moment divided by the Pony Wall Heavy (PW) rotation measured at the max allowable moment.





Pony Wall Heavy (PW) Allowable Loads

CONCENTRATED LOAD AT FREE END

MATERIAL SPECIFICATION:

PONY WALL HEAVY STUD

Material Thickness: 12ga (97mils), 0.1017" design thickness
Material Strength: Structural grade 50, 50ksi minimum yield strength
ASTM: A1011

PONY WALL HEAVY BASE PLATE

Material Thickness: 1/2" minimum thickness
Material Strength: 36ksi minimum yield strength
ASTM: A36



Pony Wall Heavy (PW) Allowable Loads

CONCENTRATED LOAD AT FREE END

Member Designation	Pony Wall Length (in)	Max Point Load @ Cantilever End, lbs					Moment (ASD) Due to Point Load, in-lbs				
		L/720*	L/360*	L/240*	L/180*	Max	L/720*	L/360*	L/240*	L/180*	Max
Pony Wall Heavy	24	165	330	495	661	763	3964	7927	11891	15854	18316
	36	73	147	220	294	509	2642	5285	7927	10569	18316
	48	41	83	124	165	382	1982	3964	5945	7927	18316
	60	26	53	79	106	305	1585	3171	4756	6342	18316

* The values shown are based on deflection of the strut member only which has an effective moment of inertia = 0.7739in^4. For overall assembly deflection, designers also need to consider deflection due to rotation at the base. The values needed for this additional analysis are provided in the rotational stiffness table.

Notes:

1 ClarkDietrich Pony Wall Heavy is intended to support out-of-plane loading of cantilevered partial wall systems that are unsupported at the top track.
2 Out-of-plane loads are transferred to the floor system through the base-plate, which is welded to Pony Wall Heavy member.
3 ClarkDietrich Pony Wall Heavy (PW) may be used in place of standard framing members, or in conjunction with them to frame the wall.
4 Listed allowable loads are based on Allowable Stress Design (ASD).
5 Base connection between ClarkDietrich Pony Wall Heavy and support structure are designed by others.
6 Serviceability/deflection needs to be checked separately. To do this, designers need to consider deflection of strut (effective moment of inertia = 0.7739in^4) and deflection due to rotation at the base (see rotational stiffness table).
7 Listed maximum point load at cantilever end calculated using maximum allowable moment. When both point load and uniform loads are applied, combined loads should be limited to maximum allowable moment.
8 It is the responsibility of the designer to properly detail connections on the contract drawings.

Pony Wall Heavy (PW) Allowable Loads w/Anchors

CONCENTRATED LOAD AT FREE END

Member Designation	Pony Wall Length, in	Anchors to Structure	No. of Anchors	Max Point Load @ Cantilever End, lbs					Allowable Base Moment, in-lbs				
				L/720*	L/360*	L/240*	L/180*	Max	L/720	L/360	L/240	L/180	Max
PW24	24	1/2" ϕ Hilti KB1 Expansion Anchor (3-5/8" Nominal Embedment, 3000psi Uncracked concrete)	1	142	142	142	142	142	3403	3403	3403	3403	3403
			4	165	330	452	452	452	3964	7927	10840	10840	10840
PW36	36		1	73	95	95	95	95	2642	3403	3403	3403	3403
			4	73	147	220	294	301	2642	5285	7927	10569	10840
PW48	48		1	41	71	71	71	71	1982	3403	3403	3403	3403
			4	41	83	124	165	226	1982	3964	5945	7927	10840
PW60	60		1	26	53	57	57	57	1585	3171	3403	3403	3403
			4	26	53	79	106	181	1585	3171	4756	6342	10840

* The values shown are based on deflection of the strut member only which has an effective moment of inertia = 0.7739 in^4. For overall assembly deflection, designers also need to consider deflection due to rotation at the base. The values needed for this additional analysis are provided in the rotational stiffness table.



(1) Anchor to structure



(4) Anchors to structure

Notes:

1 ClarkDietrich Pony Wall Heavy is intended to support out-of-plane loading of cantilevered partial wall systems that are unsupported at the top track.
2 Out-of-plane loads are transferred to the floor system through base-plate, which is welded to Pony Wall member.
3 ClarkDietrich Pony Wall Heavy (PW) may be used in place of standard framing members, or in conjunction with them to frame the wall.
4 Listed allowable loads are based on Allowable Stress Design (ASD).
5 Serviceability/deflection needs to be checked separately. To do this, designers need to consider deflection of strut (effective moment of inertia = 0.7739 in^4) and deflection due to rotation at the base (see rotational stiffness table).
6 Above listed capacities w/anchors shall be used only when using 1/2" ϕ Hilti KB1 Expansion Anchors to concrete.
7 Other anchors may be used to achieve full Pony Wall Heavy capacity, but must be designed separately.
8 Above listed capacities have not been increased for wind, seismic, or other factors.
9 Hilti is a registered trademark of Hilti Aktiengeseilschaft Corporation.
10 It is the designer's responsibility to check for minimum concrete edge distance and minimum concrete thickness when using anchors.
11 It is the responsibility of the designer to properly detail connections on the contract drawings.

Pony Wall Heavy (12ga)

Pony Wall Heavy (PW) Allowable Loads

MAXIMUM ALLOWABLE LOADS

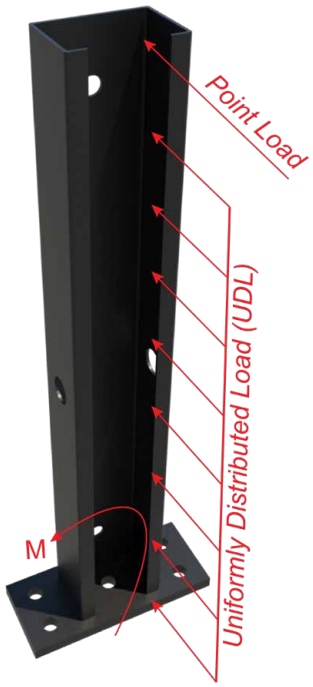
MATERIAL SPECIFICATION:

PONY WALL HEAVY STUD

Material Thickness: 12ga (97mils), 0.1017" design thickness
Material Strength: Structural grade 50, 50ksi minimum yield strength
ASTM: A1011

PONY WALL HEAVY BASE PLATE

Material Thickness: 1/2" minimum thickness
Material Strength: 36ksi minimum yield strength
ASTM: A36

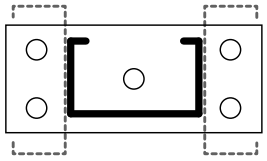


Pony Wall Heavy (PW) Allowable Loads

Member Designation	Pony Wall Length (in)	Anchors to Structure	Strength based capacity (ASD)		
			Allowable Moment, in-lbs	Max Point Load @ Cantilever End, lbs	Max Uniform Live (UDL) Load, lbs/ft
Pony Wall	24	Designed by others	18,316	763	763
	36			509	339
	48			382	191
	60			305	122

Notes:

1 ClarkDietrich Pony Wall Heavy (PW) is intended to support out-of-plane loading of cantilevered partial wall systems that are unsupported at the top track.
2 Out-of-plane loads are transferred to the floor system through the base-plate, which is welded to Pony Wall Heavy member.
3 ClarkDietrich Pony Wall Heavy (PW) may be used in place of standard framing members, or in conjunction with them to frame the wall.
4 Listed allowable loads are based on Allowable Stress Design (ASD).
5 Base connection between ClarkDietrich Pony Wall Heavy and support structure are designed by others.
6 Serviceability/deflection needs to be checked separately. To do this, designers need to consider deflection of strut (effective moment of inertia = 0.7739 in^4) and deflection due to rotation at the base (see rotational stiffness table).
7 Listed maximum point load at cantilever end calculated using maximum allowable moment. Similarly, listed maximum uniformly distributed load calculated using maximum allowable moment. When both point load and uniform loads are applied, combined loads should be limited to maximum allowable moment.
8 It is the responsibility of the designer to properly detail connections on the contract drawings.



Uniformly distributed loads are based on framing members placed on each side of the Pony Wall

Pony Wall Heavy (PW) Allowable Loads w/Anchors

Member Designation	Anchors to Structure	Strength Based Capacity (ASD)	
		No. of Anchors to Structure	Allowable Base Moment, in-lbs
PW24/PW36/PW48/P60	1/2" ϕ Hilti KB1 Expansion Anchor (3-5/8" Nominal Embedment, 3000psi Uncracked Concrete)	1	3,403
		4	10,840

Notes:

1 ClarkDietrich Pony Wall Heavy is intended to support out-of-plane loading of cantilevered partial wall systems that are unsupported at the top track.
2 Out-of-plane loads are transferred to the floor system through base-plate, which is welded to Pony Wall Heavy member.
3 ClarkDietrich Pony Wall Heavy (PW) may be used in place of standard framing members, or in conjunction with them to frame the wall.
4 Listed allowable loads are based on Allowable Stress Design (ASD).
5 Serviceability/deflection needs to be checked separately. To do this, designers need to consider deflection of strut (effective moment of inertia = 0.7739 in^4) and deflection due to rotation at the base (see rotational stiffness table).
6 Above listed capacities w/anchors shall be used only when using 1/2" ϕ Hilti KB1 Expansion Anchors to concrete.
7 Other anchors may be used to achieve full Pony Wall Heavy capacity, but must be designed separately.
8 Above listed capacities have not been increased for wind, seismic, or other factors.
9 Hilti is a registered trademark of Hilti Aktiengeseilschaft Corporation.
10 It is the designer's responsibility to check for minimum concrete edge distance and minimum concrete thickness when using anchors.
11 It is the responsibility of the designer to properly detail connections on the contract drawings.



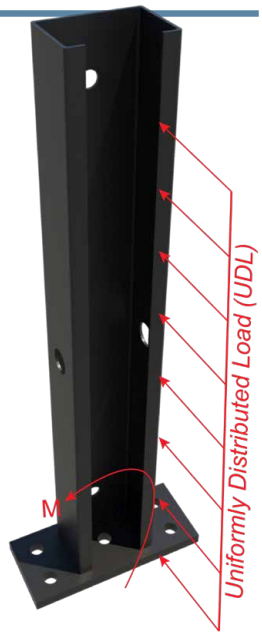
(1) Anchor to structure



(4) Anchors to structure

Pony Wall Heavy (PW) Allowable Loads

UNIFORMLY DISTRIBUTED LOAD



MATERIAL SPECIFICATION:

PONY WALL HEAVY STUD

Material Thickness: 12ga (97mils), 0.1017" design thickness
Material Strength: Structural grade 50, 50ksi minimum yield strength
ASTM: A1011

PONY WALL HEAVY BASE PLATE

Material Thickness: 1/2" minimum thickness
Material Strength: 36ksi minimum yield strength
ASTM: A36

Pony Wall Heavy (PW) Allowable Loads

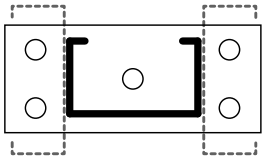
UNIFORMLY DISTRIBUTED LOAD

Member Designation	Pony Wall Length (in)	Uniformly Distributed Load, lbs/ft					Moment (ASD) Due to Uniform Load, in-lbs				
		L/720*	L/360*	L/240*	L/180*	Max	L/720*	L/360*	L/240*	L/180*	Max
Pony Wall Heavy	24	220	440	661	763	763	5,285	10,569	15,854	18,316	18,316
	36	65	130	196	261	339	3,523	7,046	10,569	14,093	18,316
	48	28	55	83	110	191	2,642	5,285	7,927	10,569	18,316
	60	14	28	42	56	122	2,114	4,228	6,342	8,456	18,316

* The values shown are based on deflection of the strut member only which has an effective moment of inertia = 0.7739 in⁴. For overall assembly deflection, designers also need to consider deflection due to rotation at the base. The values needed for this additional analysis are provided in the rotational stiffness table.

Notes:

1 ClarkDietrich Pony Wall Heavy is intended to support out-of-plane loading of cantilevered partial wall systems that are unsupported at the top track.
2 Out-of-plane loads are transferred to the floor system through the base-plate, which is welded to Pony Wall member.
3 ClarkDietrich Pony Wall Heavy (PW) may be used in place of standard framing members, or in conjunction with them to frame the wall.
4 Listed allowable loads are based on Allowable Stress Design (ASD).
5 Base connection between ClarkDietrich Pony Wall Heavy and support structure are designed by others.
6 Serviceability/deflection needs to be checked separately. To do this, designers need to consider deflection of strut (effective moment of inertia = 0.7739 in⁴) and deflection due to rotation at the base (see rotational stiffness table).
7 Listed maximum point load at cantilever end calculated using maximum allowable moment. When both point load and uniform loads are applied, combined loads should be limited to maximum allowable moment.
8 It is the responsibility of the designer to properly detail connections on the contract drawings.



Uniformly distributed loads are based on framing members placed on each side of the Pony Wall

Pony Wall Heavy (PW) Allowable Loads w/Anchors

UNIFORMLY DISTRIBUTED LOAD

Member Designation	Pony Wall Length (in)	Anchors to Structure	No. of Anchors	Uniformly Distributed Loads, lbs/ft					Allowable Base Moment, in-lbs				
				L/720	L/360	L/240	L/180	Max	L/720	L/360	L/240	L/180	Max
PW24	24	1/2" ϕ Hilti KB1 Expansion Anchor (3-5/8" Nominal Embedment, 3000psi Uncracked concrete)	1	142	142	142	142	142	3,403	3,403	3,403	3,403	3,403
			4	220	440	452	452	452	5,285	10,569	10,840	10,840	10,840
PW36	36		1	63	63	63	63	63	3,403	3,403	3,403	3,403	3,403
			4	65	130	196	201	201	3,523	7,046	10,569	10,840	10,840
PW48	48		1	28	35	35	35	35	2,642	3,403	3,403	3,403	3,403
			4	28	55	83	110	113	2,642	5,285	7,927	10,569	10,840
PW60	60		1	14	23	23	23	23	2,114	3,403	3,403	3,403	3,403
			4	14	28	42	56	72	2,114	4,228	6,342	8,456	10,840

* The values shown are based on deflection of the strut member only which has an effective moment of inertia = 0.7739 in⁴. For overall assembly deflection, designers also need to consider deflection due to rotation at the base. The values needed for this additional analysis are provided in the rotational stiffness table.



(1) Anchor to structure



(4) Anchors to structure

Notes:

1 ClarkDietrich Pony Wall Heavy is intended to support out-of-plane loading of cantilevered partial wall systems that are unsupported at the top track.
2 Out-of-plane loads are transferred to the floor system through base-plate, which is welded to Pony Wall member.
3 ClarkDietrich Pony Wall Heavy (PW) may be used in place of standard framing members, or in conjunction with them to frame the wall
4 Listed allowable loads are based on Allowable Stress Design (ASD).
5 Serviceability/deflection needs to be checked separately. To do this, designers need to consider deflection of strut (effective moment of inertia = 0.7739 in⁴) and deflection due to rotation at the base (see rotational stiffness table).
6 Above listed capacities w/anchors shall be used only when using 1/2" ϕ Hilti KB1 Expansion Anchors to concrete.
7 Other anchors may be used to achieve full Pony Wall Heavy capacity, but must be designed separately.
8 Above listed capacities have not been increased for wind, seismic, or other factors.
9 Hilti is a registered trademark of Hilti Aktiengeseilschaft Corporation.
10 It is the designer's responsibility to check for minimum concrete edge distance and minimum concrete thickness when using anchors.
11 It is the responsibility of the designer to properly detail connections on the contract drawings.

Pony Wall Lite (16ga)

Partial wall framing connection to the floor

The ClarkDietrich Pony Wall Lite is intended to support out-of-plane loading of cantilevered partial wall systems that are unsupported at the top track. Out-of-plane loads are transferred to the floor system through the base-plate, which is welded to the Pony Wall Lite stud member.

PRODUCT DIMENSIONS

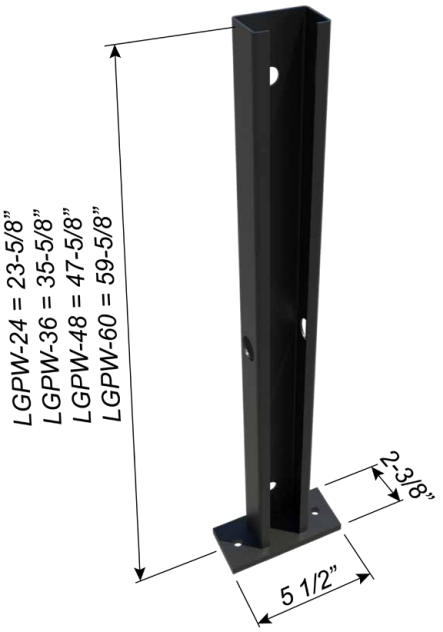
LGPW24 = 23-5/8" tall with 2-3/8" wide x 5-1/2" long plate
LGPW36 = 35-5/8" tall with 2-3/8" wide x 5-1/2" long plate
LGPW48 = 47-5/8" tall with 2-3/8" wide x 5-1/2" long plate
LGPW60 = 59-5/8" tall with 2-3/8" wide x 5-1/2" long plate

MATERIAL SPECIFICATIONS

Plate Material: ASTM A36, 3/8" thick hot rolled steel
Stud Material: ASTM A1011 SS Grade 50, 50ksi (340 MPa)
16ga (54mils), 0.0566" Design thickness, 0.0538" Min. thickness
Coating: Envirocron® Powder Coating
Packaging: Individually
ASTM: A36, A1011

INSTALLATION

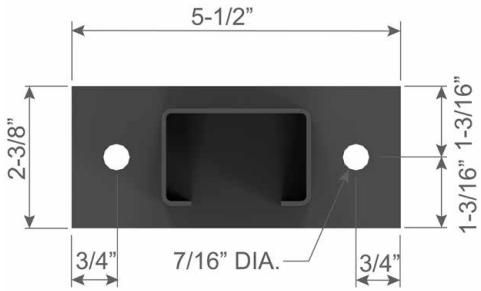
Install the Pony Wall Lite inside the track or directly to the floor structure. Anchor to the floor as designed by EOR. Attach the studs to both flanges of the Pony Wall Lite. A minimum of 2-1/2" stud member can be used.



Pony Wall Lite (LGPW)

Product Code	Thickness		Size (in)	Packaging
	mils (ga)	Design Thickness (in)		
LGPW24	54 (16)	0.0566	23-5/8	Individually
LGPW36			35-5/8	
LGPW48			47-5/8	
LGPW60			59-5/8	





Pony Wall Lite (LGPW) Allowable Loads

CONCENTRATED LOAD AT FREE END

MATERIAL SPECIFICATION:

PONY WALL LITE STUD

Material Thickness: 16ga (54mils), 0.0566" design thickness

Material Strength: Structural grade 50, 50ksi minimum yield strength

ASTM: A1011

PONY WALL LITE BASE PLATE

Material Thickness: 3/8" minimum thickness

Material Strength: 36ksi minimum yield strength

ASTM: A36



Pony Wall Lite (LGPW) Allowable Loads

CONCENTRATED LOAD AT FREE END

Member Designation	Pony Wall Length (in)	Max Point Load @ Cantilever End, lbs			Moment (ASD) Due to Point Load, in-lbs		
		L/240	L/180	Max	L/240	L/180	Max
Pony Wall LIte	24	86	115	177	2074	2766	4253
	36	38	51	118	1383	1844	4253
	48	22	29	89	1037	1383	4253
	60	14	18	71	830	1106	4253

Notes:

1 Pony Wall Lite is intended to support out-of-plane loading of cantilevered partial wall systems that are unsupported at the top track.
2 Out-of-plane loads are transferred to the floor system through the base-plate, which is welded to Pony Wall Lite member.
3 Pony Wall Lite may be used in place of standard framing members, or in conjunction with them to frame the wall.
4 Listed allowable loads are based on Allowable Stress Design (ASD).
5 Base connection between Pony Wall Lite and support structure are designed by others.
6 For serviceability/deflection calculations of Pony Wall Lite, use effective moment of inertia = 0.1350 in^4 (54mils), 0.1626in^4 (68mils)
7 Listed maximum point load (@ cantilever end calculated using maximum allowable moment. When both point load and uniform loads are applied, combined loads should be limited to maximum allowable moment.
8 It is the responsibility of the designer to properly detail connections on the contract drawings.

Pony Wall Lite (LGPW) Allowable Loads w/Anchors

CONCENTRATED LOAD AT FREE END

Member Designation	Pony Wall Length, (in)	Anchors to Structure	No. of Anchors	Max Point Load @ Cantilever End, lbs			Allowable Base Moment, in-lbs		
				L/240	L/180	Max	L/240	L/180	Max
LGPW24	24	3/8" ϕ Hilti KB1 (2-3/8" Nominal Embedment, 3000psi Uncracked concrete)	2	73	73	73	1749	1749	1749
LGPW36	36			38	49	49	1383	1749	1749
LGPW48	48			22	29	36	1037	1383	1749
LGPW60	60			14	18	29	830	1106	1749

Notes:

1 Pony Wall Lite is intended to support out-of-plane loading of cantilevered partial wall systems that are unsupported at the top track.
2 Out-of-plane loads are transferred to the floor system through base-plate, which is welded to Pony Wall Lite member.
3 Pony Wall Lite may be used in place of standard framing members, or in conjunction with them to frame the wall.
4 Listed allowable loads are based on Allowable Stress Design (ASD).
5 For serviceability/deflection calculations of Pony Wall Lite, use effective moment of inertia = 0.1350 in^4 (54mils), 0.1626in^4 (68mils)
6 Above listed capacities w/anchors shall be used only when using 3/8" ϕ Hilti KB1 anchors to concrete.
7 Other anchors may be used to achieve full Pony Wall Lite capacity, but must be designed separately.
8 Above listed capacities have not been increased for wind, seismic, or other factors.
9 Hilti is a registered trademark of Hilti Aktiengeseilschaft Corporation.
10 It is the designer's responsibility to check for minimum concrete edge distance and minimum concrete thickness when using anchors.
11 It is the responsibility of the designer to properly detail connections on the contract drawings.



(2) Anchors to structure

Pony Wall Lite (16ga)

Pony Wall Lite (LGPW) Allowable Loads

MAXIMUM ALLOWABLE LOADS

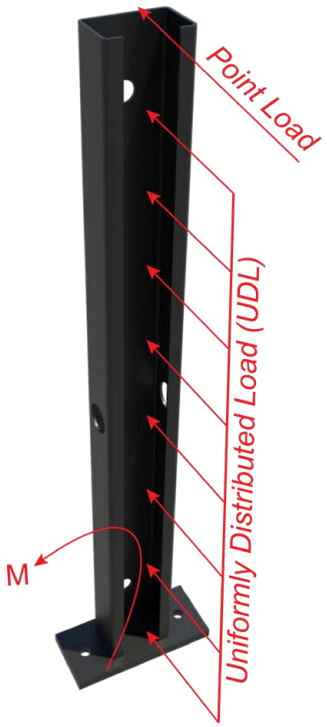
MATERIAL SPECIFICATION:

PONY WALL LITE STUD

Material Thickness: 16ga (54mils), 0.0566" design thickness
Material Strength: Structural grade 50, 50ksi minimum yield strength
ASTM: A1011

PONY WALL LITE BASE PLATE

Material Thickness: 3/8" minimum thickness
Material Strength: 36ksi minimum yield strength
ASTM: A36

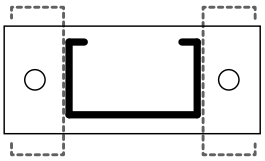


Pony Wall Lite (LGPW) Allowable Loads

Member Designation	Pony Wall Length (in)	Anchors to Structure	Strength Based Capacity (ASD)		
			Allowable Moment, in-lbs	Max Point Load @ Cantilever End, lbs	Max Uniform Live (UDL) Load, lbs/ft
Pony Wall Lite	24	Designed by Others	4253	177	177
	36			118	79
	48			89	44
	60			71	28

Notes:

1 Pony Wall Lite is intended to support out-of-plane loading of cantilevered partial wall systems that are unsupported at the top track.
2 Out-of-plane loads are transferred to the floor system through the base-plate, which is welded to Pony Wall Lite member.
3 Pony Wall Lite may be used in place of standard framing members, or in conjunction with them to frame the wall.
4 Listed allowable loads are based on Allowable Stress Design (ASD).
5 Base connection between Pony Wall Lite and support structure are designed by others.
6 For serviceability/deflection calculations of Pony Wall Lite, use effective moment of inertia = 0.1350 in^4 (54mils), 0.1626in^4 (68mils)
7 Listed maximum point load @ cantilever end calculated using maximum allowable moment. Similarly, listed maximum uniformly distributed load calculated using maximum allowable moment. When both point load and uniform loads are applied, combined loads should be limited to maximum allowable moment.
8 It is the responsibility of the designer to properly detail connections on the contract drawings.



Uniformly distributed loads are based on framing members placed on each side of the Pony Wall

Pony Wall Lite (LGPW) Allowable Loads w/Anchors

Member Designation	Anchors to Structure	Strength Based Capacity (ASD)	
		No. of Anchors to Structure	Allowable Base Moment, in-lbs
LGPW24, LGPW36, LGPW48, LGPW60	3/8" ϕ Hilti KB1 (2-3/8" Nominal Embedment, 3000psi Uncracked concrete)	2	1749



(2) Anchors to structure

Notes:

1 Pony Wall Lite is intended to support out-of-plane loading of cantilevered partial wall systems that are unsupported at the top track.
2 Out-of-plane loads are transferred to the floor system through base-plate, which is welded to Pony Wall Lite member.
3 Pony Wall Lite may be used in place of standard framing members, or in conjunction with them to frame the wall.
4 Listed allowable loads are based on Allowable Stress Design (ASD).
5 For serviceability/deflection calculations of Pony Wall Lite, use effective moment of inertia = 0.1350 in^4 (54mils), 0.1626in^4 (68mils)
6 Above listed capacities w/anchors shall be used only when using 3/8" ϕ Hilti KB1 anchors to concrete.
7 Other anchors may be used to achieve full Pony Wall Lite capacity, but must be designed separately.
8 Above listed capacities have not been increased for wind, seismic, or other factors.
9 Hilti is a registered trademark of Hilti Aktiengeseilschaft Corporation.
10 It is the designer's responsibility to check for minimum concrete edge distance and minimum concrete thickness when using anchors.
11 It is the responsibility of the designer to properly detail connections on the contract drawings.

Pony Wall Lite (LGPW) Allowable Loads

UNIFORMLY DISTRIBUTED LOAD

MATERIAL SPECIFICATION:

PONY WALL LITE STUD

Material Thickness: 16ga (54mils), 0.0566" design thickness

Material Strength: Structural grade 50, 50ksi minimum yield strength

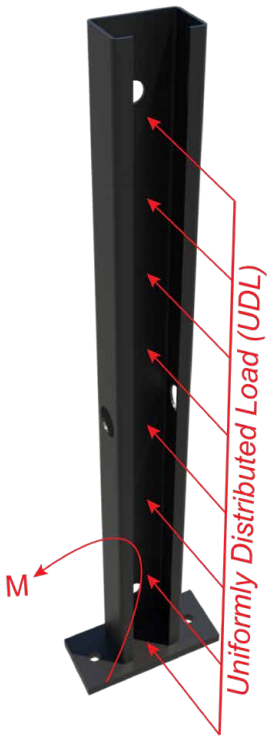
ASTM: A1011

PONY WALL LITE BASE PLATE

Material Thickness: 3/8" minimum thickness

Material Strength: 36ksi minimum yield strength

ASTM: A36



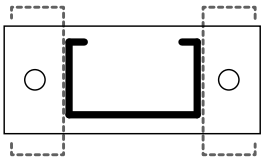
Pony Wall Lite (LGPW) Allowable Loads

UNIFORMLY DISTRIBUTED LOAD

Member Designation	Pony Wall Length (in)	Uniformly Distributed Load, lbs/ft			Moment (ASD) Due to Uniform Load, in-lbs		
		L/240	L/180	Max	L/240	L/180	Max
Pony Wall Lite	24	115	154	177	2766	3688	4253
	36	34	46	79	1844	2458	4253
	48	14	19	44	1383	1844	4253
	60	7	10	28	1106	1475	4253

Notes:

1 Pony Wall Lite is intended to support out-of-plane loading of cantilevered partial wall systems that are unsupported at the top track.
2 Out-of-plane loads are transferred to the floor system through the base-plate, which is welded to Pony Wall Lite member.
3 Pony Wall Lite may be used in place of standard framing members, or in conjunction with them to frame the wall.
4 Listed allowable loads are based on Allowable Stress Design (ASD).
5 Base connection between Pony Wall Lite and support structure are designed by others.
6 For serviceability/deflection calculations of Pony Wall Lite, use effective moment of inertia = 0.1350 in^4 (54mils), 0.1626in^4 (68mils)
7 Listed maximum uniformly distributed load calculated using maximum allowable moment. When both point load and uniform loads are applied, combined loads should be limited to maximum allowable moment.
8 It is the responsibility of the designer to properly detail connections on the contract drawings.



Uniformly distributed loads are based on framing members placed on each side of the Pony Wall

Pony Wall Lite (LGPW) Allowable Loads w/Anchors

UNIFORMLY DISTRIBUTED LOAD

Member Designation	Pony Wall Length, (in)	Anchors to Structure	No. of Anchors	Uniformly Distributed Loads, lbs/ft			Allowable Base Moment, in-lbs		
				L/240	L/180	Max	L/240	L/180	Max
LGPW24	24	3/8" ϕ Hilti KB1 (2-3/8" Nominal Embedment, 3000psi Uncracked concrete)	2	73	73	73	1749	1749	1749
LGPW36	36			32	32	32	1749	1749	1749
LGPW48	48			14	18	18	1383	1749	1749
LGPW60	60			7	10	12	1106	1475	1749



(2) Anchors to structure

Notes:

1 Pony Wall Lite is intended to support out-of-plane loading of cantilevered partial wall systems that are unsupported at the top track.
2 Out-of-plane loads are transferred to the floor system through base-plate, which is welded to Pony Wall Lite member.
3 Pony Wall Lite may be used in place of standard framing members, or in conjunction with them to frame the wall.
4 Listed allowable loads are based on Allowable Stress Design (ASD).
5 For serviceability/deflection calculations of Pony Wall Lite, use effective moment of inertia = 0.1350 in^4 (54mils), 0.1626in^4 (68mils)
6 Above listed capacities w/anchors shall be used only when using 3/8" ϕ Hilti KB1 anchors to concrete.
7 Other anchors may be used to achieve full Pony Wall Lite capacity, but must be designed separately.
8 Above listed capacities have not been increased for wind, seismic, or other factors.
9 Hilti is a registered trademark of Hilti Aktiengeseilschaft Corporation.
10 It is the designer's responsibility to check for minimum concrete edge distance and minimum concrete thickness when using anchors.
11 It is the responsibility of the designer to properly detail connections on the contract drawings.

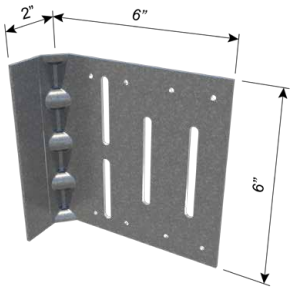
The technical content of this literature is effective 04/09/26 and supersedes all previous information. Pub. No. CD-ClipExpress 04/26

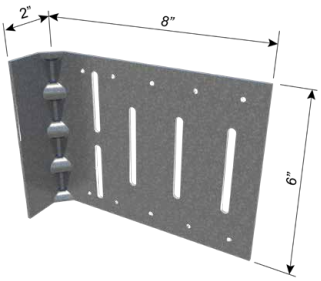
Fixed Universal Slip Clip

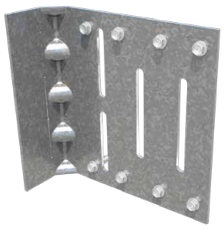
Ideal for curtain wall/bypass conditions

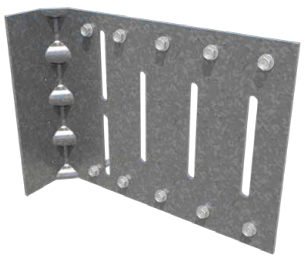
The clips are available in standard lengths of 6" and 8" in 12 and 10 gauge. They are ideal for curtain wall/bypass conditions. FUS clips install quickly and provide adjustable standoff to ensure a plumb wall plane.

- Eliminates shims and scabs.
- Fast, one-piece universal installation. No left- or right-handed clips.
- Can be used in applications where significantly higher capacities are required.









PRODUCT DIMENSIONS

Lengths: 6" or 8"

MATERIAL SPECIFICATIONS

Gauge: 12 gauge (97mils)
Design Thickness: 0.1017 inches

Gauge: 10 gauge (118mils)
Design Thickness: 0.1242 inches

Coating: G90
Yield Strength: 50ksi

CODE APPROVALS AND PERFORMANCE STANDARDS

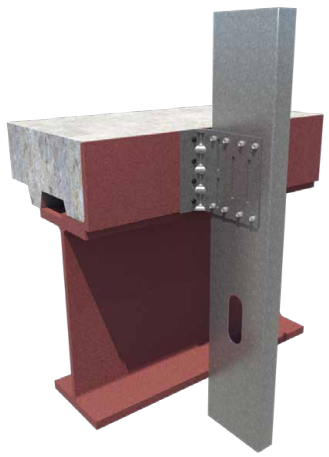
IAPMO ER-729
AISI S100

INSTALLATION

Connections to the building can be made with screws, welds, powder-actuated fasteners. Mechanical fasteners shall be located on the embossed marks given on the scored line of the 2" flange. Attach building anchors to the structure according to the manufacturer's instructions. Anchors shall be installed through the embossments on the scored line of the clip as shown on the attached drawings. In no case shall anchors be installed more than 3/4" from the bend on the short leg of the clip. In cases of discrepancy between this information and the Design Engineer's details, the Design Engineer's details shall be followed.

For a Rigid Connection:

Attach the FUS clip to cold-formed steel framing members using (4) or (8) #12 screws (not included) for the FUS6 clip and (6) or (10) #12 self-drilling screws (not included) for the FUS8 clip through the clip holes into the steel framing. For a rigid connection, screws should not be installed in any of the slotted holes.



Fixed Universal Slip Clip (FUS6, FUS8)

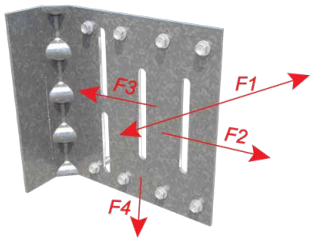
Clip Designation	Thickness		Clip Length (in)	Packaging Pcs./Box
	mils (ga)	Design Thickness (in)		
FUS6-97	97 (12)	0.1017	6	10
FUS8-97			8	10
FUS6-118	118 (10)	0.1242	6	10
FUS8-118			8	10

ATTACHMENT TO STRUCTURE: DESIGNED BY OTHERS

Clip Designation	Framing Member Details			Load Capacities (lbs)															
				In-Plane (F1)			Tension (F2)				Compression (F3)				Shear (F4)				
	Stud Depth	No. of Screws to Framing	Stud Thickness mils (ga)	Nominal Load	ASD Load	LRFD Load	1/8" Service Load	Nominal Load	ASD Load	LRFD Load	1/8" Service Load	Nominal Load	ASD Load	LRFD Load	1/8" Service Load	Nominal Load	ASD Load	LRFD Load	
FUS6-97	6	4	33 (20)	420	140	225	3050	2260	755	1130	3005	2260	755	1130	3095	1140	380	570	
			43 (18)	625	215	345	3530	3365	1120	1685	3385	3365	1120	1685	3625	1695	565	845	
			54 (16)	990	340	545	3530	6835	2280	3415	4485	6265	2155	3415	4410	3440	1145	1720	
			68 (14)	1315	445	710	3530	8000	2665	4000	4870	7600	2615	4000	6635	4025	1340	2015	
			97 (12)	2280	785	1215	3530	8000	2665	4000	5525	8000	2665	4000	7375	4025	1340	2015	
FUS6-97	6	8	33 (20)	420	140	225	3050	4525	1510	2260	3005	3565	1510	2260	3095	2050	685	1025	
			43 (18)	625	215	345	3530	6730	2245	3365	3385	4380	2245	3365	3625	3050	1015	1525	
			54 (16)	990	340	545	3530	8480	2920	4475	4485	6265	2155	3450	4410	6190	2065	3095	
			68 (14)	1315	445	710	3530	8905	2985	4475	4870	7600	2615	4185	6635	7245	2415	3625	
			97 (12)	2280	785	1215	3530	8950	2985	4475	5525	12720	4375	7005	7375	7245	2415	3625	
FUS8-97	8	6	33 (20)	395	135	220	3265	3390	1130	1695	3445	3390	1130	1695	1490	1215	405	605	
			43 (18)	610	210	335	3510	5050	1685	2525	3850	4840	1685	2525	2940	1810	605	905	
			54 (16)	1080	370	595	3530	8765	2985	4475	5030	6670	2295	3675	3695	3670	1225	1835	
			68 (14)	1395	470	750	3530	8950	2985	4475	5415	7700	2650	4240	5970	4300	1435	2150	
			97 (12)	2425	810	1215	3530	8925	2985	4475	6420	12000	4000	6000	6035	4300	1435	2150	
FUS8-97	8	10	33 (20)	395	135	220	3265	5655	1885	2825	3445	4240	1885	2825	1490	1860	620	930	
			43 (18)	610	210	335	3510	8190	2805	4205	3850	4840	2485	3980	2940	2765	920	1385	
			54 (16)	1080	370	595	3530	8765	2985	4475	5030	6670	2295	3675	3695	5620	1875	2810	
			68 (14)	1395	470	750	3530	8950	2985	4475	5415	7700	2650	4240	5970	6580	2195	3290	
			97 (12)	2425	810	1215	3530	8925	2985	4475	6420	12460	4290	6860	6035	6580	2195	3290	
FUS6-118	6	4	33 (20)	420	140	225	3605	2260	755	1130	3005	2260	755	1130	3925	1140	380	570	
			43 (18)	655	225	360	4055	3365	1120	1685	4685	3365	1120	1685	4350	1695	565	845	
			54 (16)	1025	350	565	4905	6835	2280	3415	5510	6835	2280	3415	7380	3440	1145	1720	
			68 (14)	1370	470	755	4865	8000	2665	4000	5835	8000	2665	4000	7690	4025	1340	2015	
			97 (12)	2285	785	1215	5590	8000	2665	4000	6460	8000	2665	4000	7690	4025	1340	2015	
FUS6-118	6	8	33 (20)	420	140	225	3605	4525	1510	2260	3005	3565	1510	2260	3925	2050	685	1025	
			43 (18)	655	225	360	4055	6730	2245	3365	4685	5805	2245	3365	4350	3050	1015	1525	
			54 (16)	1025	350	565	4905	8950	2985	4475	5510	8240	2835	4535	7380	6190	2065	3095	
			68 (14)	1370	470	755	4865	8950	2985	4475	5835	9505	3270	5235	7690	7245	2415	3625	
			97 (12)	2285	785	1215	5590	8950	2985	4475	6460	14050	4835	7740	7690	7245	2415	3625	
FUS8-118	8	6	33 (20)	395	135	220	3740	3390	1130	1695	3445	3390	1130	1695	1750	1215	405	605	
			43 (18)	625	215	345	4035	5050	1685	2525	4985	5050	1685	2525	3910	1810	605	905	
			54 (16)	1070	370	590	4890	8950	2985	4475	6845	8615	2965	4745	8075	3670	1225	1835	
			68 (14)	1455	500	800	5320	8950	2985	4475	7480	9910	3410	5460	7370	4300	1435	2150	
			97 (12)	2425	810	1215	5550	8950	2985	4475	8985	12000	4000	6000	7370	4300	1435	2150	
FUS8-118	8	10	33 (20)	395	135	220	3740	5655	1885	2825	3445	4240	1885	2825	1750	1860	620	930	
			43 (18)	625	215	345	4035	8415	2805	4205	4985	6640	2805	4205	3910	2765	920	1385	
			54 (16)	1070	370	590	4890	8950	2985	4475	6845	8615	2965	4745	8075	5620	1875	2810	
			68 (14)	1455	500	800	5320	8950	2985	4475	7480	9910	3410	5460	7370	6580	2195	3290	
			97 (12)	2425	810	1215	5550	8950	2985	4475	8985	13720	4725	7555	7370	6580	2195	3290	

Notes:

1 Listed capacities are in accordance with provisions of AISI S100-16 (R2020)/S2-20, AISI D114, and ICC-ES AC261.
2 FUS attachment to structure designed by others. Listed capacities are applicable for FUS to stud only (framing connection).
3 Tabulated loads are based on maximum stud standoff distance of 1" from base structure.
4 #12 Screws (0.216" dia) were used to attach clips to framing members through the provided clip holes.
5 The safety factor for ASD loads and resistance factor for LRFD loads are in accordance with Chapter K of AISI-S100.
6 The #12 screws provide nominal shear capacity of 2000lbs and a nominal tension capacity of 2778lbs.
7 ASD and LRFD loads are based on nominal capacities only. 1/8" service loads are listed in a separate column. Designer shall use governing loads based on 1/8" service and strength.
8 Nominal capacities are listed for use in blast/seismic designs and they do not assume a safety factor or resistance factor.
9 It is the responsibility of the design professional to detail the project drawings for proper FUS installation.
10 Other framing members may be used with these clips; however, it is the responsibility of the design professional to verify the framing members' capacities and potential failure modes.



Fixed Universal Slip Clip

ATTACHMENT TO STRUCTURE: WELD TO 3/16" STEEL

Clip Designation	Framing Member Details		Mechanically Anchored to Structure	Load Capacities (lbs) / Clip															
				In-Plane (F1)			Tension (F2)				Compression (F3)				Shear (F4)				
	Thickness mils (ga)	No. of Screws to Framing		Nominal Load	ASD Load	LRFD Load	1/8" Service Load	Nominal Load	ASD Load	LRFD Load	1/8" Service Load	Nominal Load	ASD Load	LRFD Load	1/8" Service Load	Nominal Load	ASD Load	LRFD Load	
FUS6-97	33 (20)	4	(2) 1.5" Welds - along short leg (see illustration)	420	140	225	3050	1810	755	1130	3005	2260	755	1130	3095	1140	380	570	
	43 (18)			625	215	345	3685	1810	905	1360	3385	3365	1120	1685	3625	1695	565	845	
	54 (16)			695	340	520	3855	1810	905	1360	4485	6265	2155	3415	4410	3440	1145	1720	
	68 (14)			695	350	520	4130	1810	905	1360	4870	7600	2615	4000	6635	4025	1340	2015	
	97 (12)			695	350	520	4590	1810	905	1360	5525	8000	2665	4000	7375	4025	1340	2015	
FUS6-97	33 (20)	8		420	140	225	3050	1810	905	1360	3005	3565	1510	2260	3095	2050	685	1025	
	43 (18)			625	215	345	3685	1810	905	1360	3385	4380	2245	3365	3625	3050	1015	1525	
	54 (16)			695	340	520	3855	1810	905	1360	4485	6265	2155	3450	4410	5870	2065	3095	
	68 (14)			695	350	520	4130	1810	905	1360	4870	7600	2615	4185	6635	5870	2415	3625	
	97 (12)			695	350	520	4590	1810	905	1360	5525	12720	4375	7005	7375	5870	2415	3625	
FUS8-97	33 (20)	6		395	135	220	3265	1810	905	1360	3445	3390	1130	1695	1490	1215	405	605	
	43 (18)			530	210	335	3510	1810	905	1360	3850	4840	1685	2525	2940	1810	605	905	
	54 (16)			530	265	400	3955	1810	905	1360	5030	6670	2295	3675	3695	3670	1225	1835	
	68 (14)			530	265	400	4260	1810	905	1360	5415	7700	2650	4240	5970	4300	1435	2150	
	97 (12)			530	265	400	4285	1810	905	1360	6420	12000	4000	6000	6035	4300	1435	2150	
FUS8-97	33 (20)	10		395	135	220	3265	1810	905	1360	3445	4240	1885	2825	1490	1860	620	930	
	43 (18)			530	210	335	3510	1810	905	1360	3850	4840	2485	3980	2940	2765	920	1385	
	54 (16)			530	265	400	3955	1810	905	1360	5030	6670	2295	3675	3695	5100	1875	2810	
	68 (14)			530	265	400	4260	1810	905	1360	5415	7700	2650	4240	5970	5100	2195	3290	
	97 (12)			530	265	400	4285	1810	905	1360	6420	12460	4290	6860	6035	5100	2195	3290	
FUS6-118	33 (20)	4		420	140	225	3605	2210	755	1130	3005	2260	755	1130	3925	1140	380	570	
	43 (18)			655	225	360	4055	2210	1105	1660	4685	3365	1120	1685	4350	1695	565	845	
	54 (16)			850	350	565	4905	2210	1105	1660	5510	6835	2280	3415	7380	3440	1145	1720	
	68 (14)			850	425	640	4865	2210	1105	1660	5835	8000	2665	4000	7690	4025	1340	2015	
	97 (12)			850	425	640	5590	2210	1105	1660	6460	8000	2665	4000	7690	4025	1340	2015	
FUS6-118	33 (20)	8		420	140	225	3605	2210	1105	1660	3005	3565	1510	2260	3925	2050	685	1025	
	43 (18)			655	225	360	4055	2210	1105	1660	4685	5805	2245	3365	4350	3050	1015	1525	
	54 (16)			850	350	565	4905	2210	1105	1660	5510	8240	2835	4535	7380	6190	2065	3095	
	68 (14)			850	425	640	4865	2210	1105	1660	5835	9505	3270	5235	7690	7170	2415	3625	
	97 (12)			850	425	640	5590	2210	1105	1660	6460	14050	4835	7740	7690	7170	2415	3625	
FUS8-118	33 (20)	6		395	135	220	3740	2210	1105	1660	3445	3390	1130	1695	1750	1215	405	605	
	43 (18)			625	215	345	4035	2210	1105	1660	4985	5050	1685	2525	3910	1810	605	905	
	54 (16)			650	325	490	4890	2210	1105	1660	6845	8615	2965	4745	8075	3670	1225	1835	
	68 (14)			650	325	490	5320	2210	1105	1660	7480	9910	3410	5460	7370	4300	1435	2150	
	97 (12)			650	325	490	5550	2210	1105	1660	8985	12000	4000	6000	7370	4300	1435	2150	
FUS8-118	33 (20)	10		395	135	220	3740	2210	1105	1660	3445	4240	1885	2825	1750	1860	620	930	
	43 (18)			625	215	345	4035	2210	1105	1660	4985	6640	2805	4205	3910	2765	920	1385	
	54 (16)			650	325	490	4890	2210	1105	1660	6845	8615	2965	4745	8075	5620	1875	2810	
	68 (14)			650	325	490	5320	2210	1105	1660	7480	9910	3410	5460	7370	6225	2195	3290	
	97 (12)			650	325	490	5550	2210	1105	1660	8985	13720	4725	7555	7370	6225	2195	3290	

Notes:

1 Listed capacities are in accordance with provisions of AISI S100-16 (R2020)/S2-20, AISI D114, and ICC-ES AC261.

2 Tabulated load capacities are based on the following considerations:
- a Framing connection: #12 Screws
- b Connection to structure: (2) 1.5" long fillet weld along short leg of FUS to 3/16" thick ASTM A36 Steel (see illustration).
- c Listed capacities have not been increased for wind, seismic, or other factors.
- d E70XX (min) electrode Weld.
- e Tabulated loads are based on maximum stud standoff distance of 1" from base structure.

3 ASD and LRFD loads are based on nominal capacities only. Nominal capacities are listed for use in blast/seismic designs and they do not assume a safety factor or resistance factor.

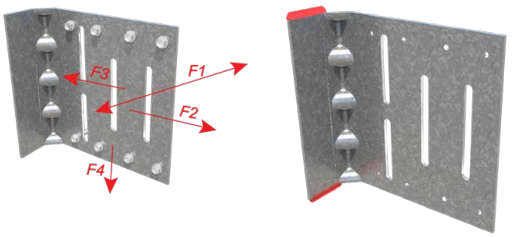
4 #12 Screws (0.216" dia) were used to attach clips to framing members through the provided clip holes.

5 The safety factor for ASD loads and resistance factor for LRFD loads are in accordance with Chapter K of AISI-S100.

6 The #12 screws provide nominal shear capacity of 2000lbs and a nominal tension capacity of 2778lbs.

7 Nominal capacities are listed for use in blast/seismic designs and they do not assume a safety factor or resistance factor.

8 It is the responsibility of the design professional to detail the project drawings for proper FUS installation.



ATTACHMENT TO STRUCTURE: #12 SCREWS TO 3/16" STEEL

Clip Designation	Framing Member Details		Mechanically Anchored to Structure	Load Capacities (lbs) / Clip															
				In-Plane (F1)			Tension (F2)				Compression (F3)				Shear (F4)				
	Thickness mils (ga)	No. of Screws to Framing		Nominal Load	ASD Load	LRFD Load	1/8" Service Load	Nominal Load	ASD Load	LRFD Load	1/8" Service Load	Nominal Load	ASD Load	LRFD Load	1/8" Service Load	Nominal Load	ASD Load	LRFD Load	
FUS6-97	33 (20)	4	2	420	140	225	2040	2260	755	1130	3005	2260	755	1130	3095	1140	380	570	
			3	420	140	225	2885	2260	755	1130	3005	2260	755	1130	3095	1140	380	570	
			4	420	140	225	3050	2260	755	1130	3005	2260	755	1130	3095	1140	380	570	
	43 (18)	4	2	625	215	345	2040	2630	875	1315	3385	3365	1120	1685	3625	1675	560	845	
			3	625	215	345	2885	3365	1120	1685	3385	3365	1120	1685	3625	1695	565	845	
			4	625	215	345	3530	3365	1120	1685	3385	3365	1120	1685	3625	1695	565	845	
	54 (16)	4	2	990	340	545	2040	2630	875	1315	4485	5555	1850	2780	4410	1675	560	895	
			3	990	340	545	2885	3950	1315	1975	4485	6265	2155	3415	4410	1920	640	1025	
			4	990	340	545	3530	5265	1755	2630	4485	6265	2155	3415	4410	3200	1065	1705	
	68 (14)	4	2	1265	420	630	2040	2630	875	1315	4870	5555	1850	2780	6635	1675	560	895	
			3	1315	445	710	2885	3950	1315	1975	4870	7600	2615	4000	6635	1920	640	1025	
			4	1315	445	710	3530	5265	1755	2630	4870	7600	2615	4000	6635	3200	1065	1705	
	97 (12)	4	2	1265	420	630	2040	2630	875	1315	5525	5555	1850	2780	7375	1675	560	895	
			3	1765	590	880	2885	3950	1315	1975	5525	8000	2665	4000	7375	1920	640	1025	
			4	2115	705	1055	3530	5265	1755	2630	5525	8000	2665	4000	7375	3200	1065	1705	
FUS6-97	33 (20)	8	2	420	140	225	2040	2630	875	1315	3005	3565	1510	2260	3095	1675	560	895	
			3	420	140	225	2885	3950	1315	1975	3005	3565	1510	2260	3095	1920	640	1025	
			4	420	140	225	3050	4525	1510	2260	3005	3565	1510	2260	3095	2050	685	1025	
	43 (18)	8	2	625	215	345	2040	2630	875	1315	3385	4380	1850	2780	3625	1675	560	895	
			3	625	215	345	2885	3950	1315	1975	3385	4380	2245	3365	3625	1920	640	1025	
			4	625	215	345	3530	5265	1755	2630	3385	4380	2245	3365	3625	3050	1015	1525	
	54 (16)	8	2	990	340	545	2040	2630	875	1315	4485	5555	1850	2780	4410	1675	560	895	
			3	990	340	545	2885	3950	1315	1975	4485	6265	2155	3450	4410	1920	640	1025	
			4	990	340	545	3530	5265	1755	2630	4485	6265	2155	3450	4410	3200	1065	1705	
	68 (14)	8	2	1265	420	630	2040	2630	875	1315	4870	5555	1850	2780	6635	1675	560	895	
			3	1315	445	710	2885	3950	1315	1975	4870	7600	2615	4165	6635	1920	640	1025	
			4	1315	445	710	3530	5265	1755	2630	4870	7600	2615	4185	6635	3200	1065	1705	
	97 (12)	8	2	1265	420	630	2040	2630	875	1315	5525	5555	1850	2780	7375	1675	560	895	
			3	1765	590	880	2885	3950	1315	1975	5525	8335	2780	4165	7375	1920	640	1025	
			4	2115	705	1055	3530	5265	1755	2630	5525	11110	3705	5555	7375	3200	1065	1705	
FUS8-97	33 (20)	6	2	395	135	220	2040	2785	930	1390	3445	3390	1130	1695	1490	1215	405	605	
			3	395	135	220	2885	3390	1130	1695	3445	3390	1130	1695	1490	1215	405	605	
			4	395	135	220	3265	3390	1130	1695	3445	3390	1130	1695	1490	1215	405	605	
	43 (18)	6	2	610	210	335	2040	2785	930	1390	3850	4840	1685	2525	2940	1410	470	755	
			3	610	210	335	2885	4175	1390	2090	3850	4840	1685	2525	2940	1585	530	845	
			4	610	210	335	3510	5050	1685	2525	3850	4840	1685	2525	2940	1810	605	905	
	54 (16)	6	2	1080	370	595	2040	2785	930	1390	5030	5555	1850	2780	3695	1410	470	755	
			3	1080	370	595	2885	4175	1390	2090	5030	6670	2295	3675	3695	1585	530	845	
			4	1080	370	595	3530	5570	1855	2785	5030	6670	2295	3675	3695	2715	905	1450	
	68 (14)	6	2	1265	420	630	2040	2785	930	1390	5415	5555	1850	2780	5970	1410	470	755	
			3	1395	470	750	2885	4175	1390	2090	5415	7700	2650	4165	5970	1585	530	845	
			4	1395	470	750	3530	5570	1855	2785	5415	7700	2650	4240	5970	2715	905	1450	
	97 (12)	6	2	1265	420	630	2040	2785	930	1390	6420	5555	1850	2780	6035	1410	470	755	
			3	1765	590	880	2885	4175	1390	2090	6420	8335	2780	4165	6035	1585	530	845	
			4	2115	705	1055	3530	5570	1855	2785	6420	11110	3705	5555	6035	2715	905	1450	
FUS8-97	33 (20)	10	2	395	135	220	2040	2785	930	1390	3445	4240	1850	2780	1490	1410	470	755	
			3	395	135	220	2885	4175	1390	2090	3445	4240	1885	2825	1490	1585	530	845	
			4	395	135	220	3265	5570	1855	2785	3445	4240	1885	2825	1490	1860	620	930	
	43 (18)	10	2	610	210	335	2040	2785	930	1390	3850	4840	1850	2780	2940	1410	470	755	
			3	610	210	335	2885	4175	1390	2090	3850	4840	2485	3980	2940	1585	530	845	
			4	610	210	335	3510	5570	1855	2785	3850	4840	2485	3980	2940	2715	905	1385	
	54 (16)	10	2	1080	370	595	2040	2785	930	1390	5030	5555	1850	2780	3695	1410	470	755	
			3	1080	370	595	2885	4175	1390	2090	5030	6670	2295	3675	3695	1585	530	845	
			4	1080	370	595	3530	5570	1855	2785	5030	6670	2295	3675	3695	2715	905	1450	
	68 (14)	10	2	1265	420	630	2040	2785	930	1390	5415	5555	1850	2780	5970	1410	470	755	
			3	1395	470	750	2885	4175	1390	2090	5415	7700	2650	4165	5970	1585	530	845	
			4	1395	470	750	3530	5570	1855	2785	5415	7700	2650	4240	5970	2715	905	1450	
	97 (12)	10	2	1265	420	630	2040	2785	930	1390	6420	5555	1850	2780	6035	1410	470	755	
			3	1765	590	880	2885	4175	1390	2090	6420	8335	2780	4165	6035	1585	530	845	
			4	2115	705	1055	3530	5570	1855	2785	6420	11110	3705	5555	6035	2715	905	1450	

The technical content of this literature is effective 04/09/26 and supersedes all previous information.

Pub. No. CD-ClipExpress 04/26

Fixed Universal Slip Clip

ATTACHMENT TO STRUCTURE: #12 SCREWS TO 3/16" STEEL

Clip Designation	Framing Member Details		Mechanically Anchored to Structure	Load Capacities (lbs) / Clip															
				In-Plane (F1)			Tension (F2)				Compression (F3)				Shear (F4)				
	Thickness mils (ga)	No. of Screws to Framing		Nominal Load	ASD Load	LRFD Load	1/8" Service Load	Nominal Load	ASD Load	LRFD Load	1/8" Service Load	Nominal Load	ASD Load	LRFD Load	1/8" Service Load	Nominal Load	ASD Load	LRFD Load	
FUS6-118	33 (20)	4	2	420	140	225	3360	2260	755	1130	3005	2260	755	1130	3925	1140	380	570	
			3	420	140	225	3605	2260	755	1130	3005	2260	755	1130	3925	1140	380	570	
			4	420	140	225	3605	2260	755	1130	3005	2260	755	1130	3925	1140	380	570	
	43 (18)	4	2	655	225	360	3360	2995	1000	1500	4685	3365	1120	1685	4350	1675	560	845	
			3	655	225	360	4055	3365	1120	1685	4685	3365	1120	1685	4350	1695	565	845	
			4	655	225	360	4055	3365	1120	1685	4685	3365	1120	1685	4350	1695	565	845	
	54 (16)	4	2	1025	350	565	3360	2995	1000	1500	5510	5555	1850	2780	7380	1675	560	895	
			3	1025	350	565	4750	4495	1500	2245	5510	6835	2280	3415	7380	1920	640	1025	
			4	1025	350	565	4905	5990	1995	2995	5510	6835	2280	3415	7380	3200	1065	1705	
	68 (14)	4	2	1265	420	630	3360	2995	1000	1500	5835	5555	1850	2780	7690	1675	560	895	
			3	1370	470	755	4750	4495	1500	2245	5835	8000	2665	4000	7690	1920	640	1025	
			4	1370	470	755	4865	5990	1995	2995	5835	8000	2665	4000	7690	3200	1065	1705	
	97 (12)	4	2	1265	420	630	3360	2995	1000	1500	6460	5555	1850	2780	7690	1675	560	895	
			3	1765	590	880	4750	4495	1500	2245	6460	8000	2665	4000	7690	1920	640	1025	
			4	2115	705	1055	5590	5990	1995	2995	6460	8000	2665	4000	7690	3200	1065	1705	
FUS6-118	33 (20)	8	2	420	140	225	3360	2995	1000	1500	3005	3565	1510	2260	3925	1675	560	895	
			3	420	140	225	3605	4495	1500	2245	3005	3565	1510	2260	3925	1920	640	1025	
			4	420	140	225	3605	4525	1510	2260	3005	3565	1510	2260	3925	2050	685	1025	
	43 (18)	8	2	655	225	360	3360	2995	1000	1500	4685	5555	1850	2780	4350	1675	560	895	
			3	655	225	360	4055	4495	1500	2245	4685	5805	2245	3365	4350	1920	640	1025	
			4	655	225	360	4055	5990	1995	2995	4685	5805	2245	3365	4350	3050	1015	1525	
	54 (16)	8	2	1025	350	565	3360	2995	1000	1500	5510	5555	1850	2780	7380	1675	560	895	
			3	1025	350	565	4750	4495	1500	2245	5510	8240	2780	4165	7380	1920	640	1025	
			4	1025	350	565	4905	5990	1995	2995	5510	8240	2835	4535	7380	3200	1065	1705	
	68 (14)	8	2	1265	420	630	3360	2995	1000	1500	5835	5555	1850	2780	7690	1675	560	895	
			3	1370	470	755	4750	4495	1500	2245	5835	8335	2780	4165	7690	1920	640	1025	
			4	1370	470	755	4865	5990	1995	2995	5835	9505	3270	5235	7690	3200	1065	1705	
	97 (12)	8	2	1265	420	630	3360	2995	1000	1500	6460	5555	1850	2780	7690	1675	560	895	
			3	1765	590	880	4750	4495	1500	2245	6460	8335	2780	4165	7690	1920	640	1025	
			4	2115	705	1055	5590	5990	1995	2995	6460	11110	3705	5555	7690	3200	1065	1705	
FUS8-118	33 (20)	6	2	395	135	220	3360	3195	1065	1600	3445	3390	1130	1695	1750	1215	405	605	
			3	395	135	220	3740	3390	1130	1695	3445	3390	1130	1695	1750	1215	405	605	
			4	395	135	220	3740	3390	1130	1695	3445	3390	1130	1695	1750	1215	405	605	
	43 (18)	6	2	625	215	345	3360	3195	1065	1600	4985	5050	1685	2525	3910	1410	470	755	
			3	625	215	345	4035	4795	1600	2395	4985	5050	1685	2525	3910	1585	530	845	
			4	625	215	345	4035	5050	1685	2525	4985	5050	1685	2525	3910	1810	605	905	
	54 (16)	6	2	1070	370	590	3360	3195	1065	1600	6845	5555	1850	2780	8075	1410	470	755	
			3	1070	370	590	4750	4795	1600	2395	6845	8335	2780	4165	8075	1585	530	845	
			4	1070	370	590	4890	6390	2130	3195	6845	8615	2965	4745	8075	2715	905	1450	
	68 (14)	6	2	1265	420	630	3360	3195	1065	1600	7480	5555	1850	2780	7370	1410	470	755	
			3	1455	500	800	4750	4795	1600	2395	7480	8335	2780	4165	7370	1585	530	845	
			4	1455	500	800	5320	6390	2130	3195	7480	9910	3410	5460	7370	2715	905	1450	
	97 (12)	6	2	1265	420	630	3360	3195	1065	1600	8985	5555	1850	2780	7370	1410	470	755	
			3	1765	590	880	4750	4795	1600	2395	8985	8335	2780	4165	7370	1585	530	845	
			4	2115	705	1055	5550	6390	2130	3195	8985	11110	3705	5555	7370	2715	905	1450	
FUS8-118	33 (20)	10	2	395	135	220	3360	3195	1065	1600	3445	4240	1850	2780	1750	1410	470	755	
			3	395	135	220	3740	4795	1600	2395	3445	4240	1885	2825	1750	1585	530	845	
			4	395	135	220	3740	5655	1885	2825	3445	4240	1885	2825	1750	1860	620	930	
	43 (18)	10	2	625	215	345	3360	3195	1065	1600	4985	5555	1850	2780	3910	1410	470	755	
			3	625	215	345	4035	4795	1600	2395	4985	6640	2780	4165	3910	1585	530	845	
			4	625	215	345	4035	6390	2130	3195	4985	6640	2805	4205	3910	2715	905	1385	
	54 (16)	10	2	1070	370	590	3360	3195	1065	1600	6845	5555	1850	2780	8075	1410	470	755	
			3	1070	370	590	4750	4795	1600	2395	6845	8335	2780	4165	8075	1585	530	845	
			4	1070	370	590	4890	6390	2130	3195	6845	8615	2965	4745	8075	2715	905	1450	
	68 (14)	10	2	1265	420	630	3360	3195	1065	1600	7480	5555	1850	2780	7370	1410	470	755	
			3	1455	500	800	4750	4795	1600	2395	7480	8335	2780	4165	7370	1585	530	845	
			4	1455	500	800	5320	6390	2130	3195	7480	9910	3410	5460	7370	2715	905	1450	
	97 (12)	10	2	1265	420	630	3360	3195	1065	1600	8985	5555	1850	2780	7370	1410	470	755	
			3	1765	590	880	4750	4795	1600	2395	8985	8335	2780	4165	7370	1585	530	845	
			4	2115	705	1055	5550	6390	2130	3195	8985	11110	3705	5555	7370	2715	905	1450	

Notes:

1 Listed capacities are in accordance with provisions of AISI S100-16 (R2020)/S2-20, AISI D114, and ICC-ES AC261.

2 Tabulated load capacities are based on the following considerations:

- a Framing connection:#12 Screws
- b Connection to structure: #12 HWH Fasteners connected to 3/16" thick ASTM A36 Steel (see illustrations for base fastener locations).
- c Other fasteners may be used to achieve full clip capacity but must be designed separately.
- d Listed capacities have not been increased for wind, seismic, or other factors.
- e Tabulated loads are based on maximum stud standoff distance of 1" from base structure.

3 ASD and LRFD loads are based on nominal capacities only. 1/8" service loads are listed in a separate column. Designer shall use governing loads based on 1/8" service and strength.

4 #12 Screws (0.216" dia) were used to attach clips to framing members through the provided clip holes.

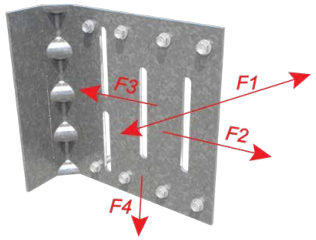
5 The safety factor for ASD loads and resistance factor for LRFD loads are in accordance with Chapter K of AISI-S100.

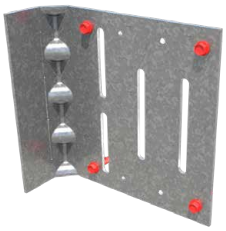
6 The #12 HWH Fasteners shall have a minimum nominal shear capacity of 2000lbs and minimum nominal tension capacity of 2778lbs according to ESR-1976 and Manufacturer Limits.

7 The #12 Framing screws provide nominal shear capacity of 2000lbs and a nominal tension capacity of 2778lbs.

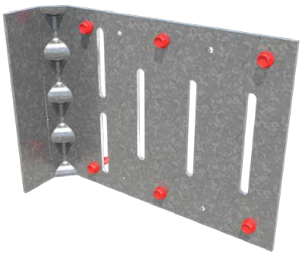
8 Nominal capacities are listed for use in blast/seismic designs and they do not assume a safety factor or resistance factor.

9 It is the responsibility of the design professional to detail the project drawings for proper FUS installation.

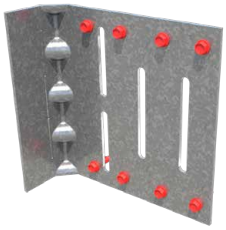




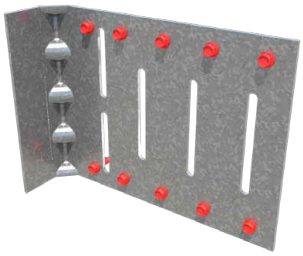
FUS6
(4) Screw Condition



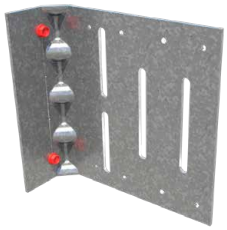
FUS8
(6) Screw Condition



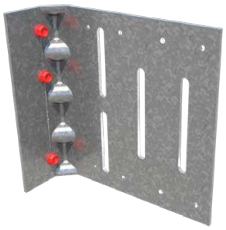
FUS6
(8) Screw Condition



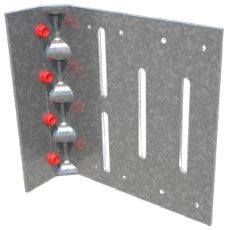
FUS8
(10) Screw Condition



FUS
(2) Anchor Condition



FUS
(3) Anchor Condition



FUS
(4) Anchor Condition

Fixed Universal Slip Clip

ATTACHMENT TO STRUCTURE: 0.157" HILTI X-U PINS TO 3/16" STEEL (FS = 5)

Clip Designation	Framing Member Details		Mechanically Anchored to Structure	Load Capacities (lbs) / Clip															
				In-Plane (F1)			Tension (F2)				Compression (F3)				Shear (F4)				
	Thickness mils (ga)	No. of Screws to Framing		Nominal Load	ASD Load	LRFD Load	1/8" Service Load	Nominal Load	ASD Load	LRFD Load	1/8" Service Load	Nominal Load	ASD Load	LRFD Load	1/8" Service Load	Nominal Load	ASD Load	LRFD Load	
FUS6-97	33 (20)	4	2	420	140	225	2040	2260	755	1130	3005	2260	755	1130	3095	1140	380	570	
			3	420	140	225	2885	2260	755	1130	3005	2260	755	1130	3095	1140	380	570	
			4	420	140	225	3050	2260	755	1130	3005	2260	755	1130	3095	1140	380	570	
	43 (18)	4	2	625	215	345	2040	2475	825	1320	3385	3365	1120	1685	3625	1630	520	690	
			3	625	215	345	2885	3365	1120	1685	3385	3365	1120	1685	3625	1695	565	790	
			4	625	215	345	3530	3365	1120	1685	3385	3365	1120	1685	3625	1695	565	845	
	54 (16)	4	2	990	280	445	2040	2475	825	1320	4485	5745	1150	1840	4410	1630	520	690	
			3	990	340	545	2885	3715	1240	1980	4485	6265	1725	2760	4410	1795	580	790	
			4	990	340	545	3530	4950	1650	2640	4485	6265	2155	3415	4410	3150	1005	1320	
	68 (14)	4	2	1315	280	445	2040	2475	825	1320	4870	5745	1150	1840	6635	1630	520	690	
			3	1315	385	615	2885	3715	1240	1980	4870	7600	1725	2760	6635	1795	580	790	
			4	1315	445	710	3530	4950	1650	2640	4870	7600	2300	3675	6635	3150	1005	1320	
	97 (12)	4	2	1395	280	445	2040	2475	825	1320	5525	5745	1150	1840	7375	1630	520	690	
			3	1920	385	615	2885	3715	1240	1980	5525	8000	1725	2760	7375	1795	580	790	
			4	2280	475	755	3530	4950	1650	2640	5525	8000	2300	3675	7375	3150	1005	1320	
FUS6-97	33 (20)	8	2	420	140	225	2040	2475	825	1320	3005	3565	1150	1840	3095	1630	520	690	
			3	420	140	225	2885	3715	1240	1980	3005	3565	1510	2260	3095	1795	580	790	
			4	420	140	225	3050	4525	1510	2260	3005	3565	1510	2260	3095	2050	685	1025	
	43 (18)	8	2	625	215	345	2040	2475	825	1320	3385	4380	1150	1840	3625	1630	520	690	
			3	625	215	345	2885	3715	1240	1980	3385	4380	1725	2760	3625	1795	580	790	
			4	625	215	345	3530	4950	1650	2640	3385	4380	2245	3365	3625	3050	1005	1320	
	54 (16)	8	2	990	280	445	2040	2475	825	1320	4485	5745	1150	1840	4410	1630	520	690	
			3	990	340	545	2885	3715	1240	1980	4485	6265	1725	2760	4410	1795	580	790	
			4	990	340	545	3530	4950	1650	2640	4485	6265	2155	3450	4410	3150	1005	1320	
	68 (14)	8	2	1315	280	445	2040	2475	825	1320	4870	5745	1150	1840	6635	1630	520	690	
			3	1315	385	615	2885	3715	1240	1980	4870	7600	1725	2760	6635	1795	580	790	
			4	1315	445	710	3530	4950	1650	2640	4870	7600	2300	3675	6635	3150	1005	1320	
	97 (12)	8	2	1395	280	445	2040	2475	825	1320	5525	5745	1150	1840	7375	1630	520	690	
			3	1920	385	615	2885	3715	1240	1980	5525	8615	1725	2760	7375	1795	580	790	
			4	2280	475	755	3530	4950	1650	2640	5525	11490	2300	3675	7375	3150	1005	1320	
FUS8-97	33 (20)	6	2	395	135	220	2040	2475	825	1320	3445	3390	1130	1695	1490	1215	405	580	
			3	395	135	220	2885	3390	1130	1695	3445	3390	1130	1695	1490	1215	405	605	
			4	395	135	220	3265	3390	1130	1695	3445	3390	1130	1695	1490	1215	405	605	
	43 (18)	6	2	610	210	335	2040	2475	825	1320	3850	4840	1150	1840	2940	1330	425	580	
			3	610	210	335	2885	3715	1240	1980	3850	4840	1685	2525	2940	1435	465	645	
			4	610	210	335	3510	4950	1650	2525	3850	4840	1685	2525	2940	1810	605	905	
	54 (16)	6	2	1080	280	445	2040	2475	825	1320	5030	5745	1150	1840	3695	1330	425	580	
			3	1080	370	595	2885	3715	1240	1980	5030	6670	1725	2755	3695	1435	465	645	
			4	1080	370	595	3530	4950	1650	2640	5030	6670	2295	3675	3695	2585	830	1115	
	68 (14)	6	2	1395	280	445	2040	2475	825	1320	5415	5745	1150	1840	5970	1330	425	580	
			3	1395	385	615	2885	3715	1240	1980	5415	7700	1725	2755	5970	1435	465	645	
			4	1395	470	750	3530	4950	1650	2640	5415	7700	2300	3675	5970	2585	830	1115	
	97 (12)	6	2	1395	280	445	2040	2475	825	1320	6420	5745	1150	1840	6035	1330	425	580	
			3	1920	385	615	2885	3715	1240	1980	6420	8615	1725	2755	6035	1435	465	645	
			4	2365	475	755	3530	4950	1650	2640	6420	11490	2300	3675	6035	2585	830	1115	
FUS8-97	33 (20)	10	2	395	135	220	2040	2475	825	1320	3445	4240	1150	1840	1490	1330	425	580	
			3	395	135	220	2885	3715	1240	1980	3445	4240	1725	2755	1490	1435	465	645	
			4	395	135	220	3265	4950	1650	2640	3445	4240	1885	2825	1490	1860	620	930	
	43 (18)	10	2	610	210	335	2040	2475	825	1320	3850	4840	1150	1840	2940	1330	425	580	
			3	610	210	335	2885	3715	1240	1980	3850	4840	1725	2755	2940	1435	465	645	
			4	610	210	335	3510	4950	1650	2640	3850	4840	2300	3675	2940	2585	830	1115	
	54 (16)	10	2	1080	280	445	2040	2475	825	1320	5030	5745	1150	1840	3695	1330	425	580	
			3	1080	370	595	2885	3715	1240	1980	5030	6670	1725	2755	3695	1435	465	645	
			4	1080	370	595	3530	4950	1650	2640	5030	6670	2295	3675	3695	2585	830	1115	
	68 (14)	10	2	1395	280	445	2040	2475	825	1320	5415	5745	1150	1840	5970	1330	425	580	
			3	1395	385	615	2885	3715	1240	1980	5415	7700	1725	2755	5970	1435	465	645	
			4	1395	470	750	3530	4950	1650	2640	5415	7700	2300	3675	5970	2585	830	1115	
	97 (12)	10	2	1395	280	445	2040	2475	825	1320	6420	5745	1150	1840	6035	1330	425	580	
			3	1920	385	615	2885	3715	1240	1980	6420	8615	1725	2755	6035	1435	465	645	
			4	2365	475	755	3530	4950	1650	2640	6420	11490	2300	3675	6035	2585	830	1115	

ATTACHMENT TO STRUCTURE: 0.157" HILTI X-U PINS TO 3/16" STEEL (FS = 5)

Clip Designation	Framing Member Details		Mechanically Anchored to Structure	Load Capacities (lbs) / Clip															
				In-Plane (F1)			Tension (F2)				Compression (F3)				Shear (F4)				
	Thickness mils (ga)	No. of Screws to Framing		Nominal Load	ASD Load	LRFD Load	1/8" Service Load	Nominal Load	ASD Load	LRFD Load	1/8" Service Load	Nominal Load	ASD Load	LRFD Load	1/8" Service Load	Nominal Load	ASD Load	LRFD Load	
FUS6-118	33 (20)	4	2	420	140	225	3360	2260	755	1130	3005	2260	755	1130	3925	1140	380	570	
			3	420	140	225	3605	2260	755	1130	3005	2260	755	1130	3925	1140	380	570	
			4	420	140	225	3605	2260	755	1130	3005	2260	755	1130	3925	1140	380	570	
	43 (18)	4	2	655	225	360	3360	2475	825	1320	4685	3365	1120	1685	4350	1695	545	745	
			3	655	225	360	4055	3365	1120	1685	4685	3365	1120	1685	4350	1695	565	845	
			4	655	225	360	4055	3365	1120	1685	4685	3365	1120	1685	4350	1695	565	845	
	54 (16)	4	2	1025	280	445	3360	2475	825	1320	5510	5745	1150	1840	7380	1860	545	745	
			3	1025	350	565	4750	3715	1240	1980	5510	6835	1725	2755	7380	2080	610	865	
			4	1025	350	565	4905	4950	1650	2640	5510	6835	2280	3415	7380	3440	1050	1425	
	68 (14)	4	2	1370	280	445	3360	2475	825	1320	5835	5745	1150	1840	7690	1860	545	745	
			3	1370	385	615	4750	3715	1240	1980	5835	8000	1725	2755	7690	2080	610	865	
			4	1370	470	755	4865	4950	1650	2640	5835	8000	2300	3675	7690	3575	1050	1425	
	97 (12)	4	2	1395	280	445	3360	2475	825	1320	6460	5745	1150	1840	7690	1860	545	745	
			3	1920	385	615	4750	3715	1240	1980	6460	8000	1725	2755	7690	2080	610	865	
			4	2285	475	755	5590	4950	1650	2640	6460	8000	2300	3675	7690	3575	1050	1425	
FUS6-118	33 (20)	8	2	420	140	225	3360	2475	825	1320	3005	3565	1150	1840	3925	1860	545	745	
			3	420	140	225	3605	3715	1240	1980	3005	3565	1510	2260	3925	2050	610	865	
			4	420	140	225	3605	4525	1510	2260	3005	3565	1510	2260	3925	2050	685	1025	
	43 (18)	8	2	655	225	360	3360	2475	825	1320	4685	5745	1150	1840	4350	1860	545	745	
			3	655	225	360	4055	3715	1240	1980	4685	5805	1725	2755	4350	2080	610	865	
			4	655	225	360	4055	4950	1650	2640	4685	5805	2245	3365	4350	3050	1015	1425	
	54 (16)	8	2	1025	280	445	3360	2475	825	1320	5510	5745	1150	1840	7380	1860	545	745	
			3	1025	350	565	4750	3715	1240	1980	5510	8240	1725	2755	7380	2080	610	865	
			4	1025	350	565	4905	4950	1650	2640	5510	8240	2300	3675	7380	3575	1050	1425	
	68 (14)	8	2	1370	280	445	3360	2475	825	1320	5835	5745	1150	1840	7690	1860	545	745	
			3	1370	385	615	4750	3715	1240	1980	5835	8615	1725	2755	7690	2080	610	865	
			4	1370	470	755	4865	4950	1650	2640	5835	9505	2300	3675	7690	3575	1050	1425	
	97 (12)	8	2	1395	280	445	3360	2475	825	1320	6460	5745	1150	1840	7690	1860	545	745	
			3	1920	385	615	4750	3715	1240	1980	6460	8615	1725	2755	7690	2080	610	865	
			4	2285	475	755	5590	4950	1650	2640	6460	11490	2300	3675	7690	3575	1050	1425	
FUS8-118	33 (20)	6	2	395	135	220	3360	2475	825	1320	3445	3390	1130	1695	1750	1215	405	605	
			3	395	135	220	3740	3390	1130	1695	3445	3390	1130	1695	1750	1215	405	605	
			4	395	135	220	3740	3390	1130	1695	3445	3390	1130	1695	1750	1215	405	605	
	43 (18)	6	2	625	215	345	3360	2475	825	1320	4985	5050	1150	1840	3910	1535	450	635	
			3	625	215	345	4035	3715	1240	1980	4985	5050	1685	2525	3910	1680	495	715	
			4	625	215	345	4035	4950	1650	2525	4985	5050	1685	2525	3910	1810	605	905	
	54 (16)	6	2	1070	280	445	3360	2475	825	1320	6845	5745	1150	1840	8075	1535	450	635	
			3	1070	370	590	4750	3715	1240	1980	6845	8615	1725	2755	8075	1680	495	715	
			4	1070	370	590	4890	4950	1650	2640	6845	8615	2300	3675	8075	2970	875	1215	
	68 (14)	6	2	1395	280	445	3360	2475	825	1320	7480	5745	1150	1840	7370	1535	450	635	
			3	1455	385	615	4750	3715	1240	1980	7480	8615	1725	2755	7370	1680	495	715	
			4	1455	475	755	5320	4950	1650	2640	7480	9910	2300	3675	7370	2970	875	1215	
	97 (12)	6	2	1395	280	445	3360	2475	825	1320	8985	5745	1150	1840	7370	1535	450	635	
			3	1920	385	615	4750	3715	1240	1980	8985	8615	1725	2755	7370	1680	495	715	
			4	2365	475	755	5550	4950	1650	2640	8985	11490	2300	3675	7370	2970	875	1215	
FUS8-118	33 (20)	10	2	395	135	220	3360	2475	825	1320	3445	4240	1150	1840	1750	1535	450	635	
			3	395	135	220	3740	3715	1240	1980	3445	4240	1725	2755	1750	1680	495	715	
			4	395	135	220	3740	4950	1650	2640	3445	4240	1885	2825	1750	1860	620	930	
	43 (18)	10	2	625	215	345	3360	2475	825	1320	4985	5745	1150	1840	3910	1535	450	635	
			3	625	215	345	4035	3715	1240	1980	4985	6640	1725	2755	3910	1680	495	715	
			4	625	215	345	4035	4950	1650	2640	4985	6640	2300	3675	3910	2765	875	1215	
	54 (16)	10	2	1070	280	445	3360	2475	825	1320	6845	5745	1150	1840	8075	1535	450	635	
			3	1070	370	590	4750	3715	1240	1980	6845	8615	1725	2755	8075	1680	495	715	
			4	1070	370	590	4890	4950	1650	2640	6845	8615	2300	3675	8075	2970	875	1215	
	68 (14)	10	2	1395	280	445	3360	2475	825	1320	7480	5745	1150	1840	7370	1535	450	635	
			3	1455	385	615	4750	3715	1240	1980	7480	8615	1725	2755	7370	1680	495	715	
			4	1455	475	755	5320	4950	1650	2640	7480	9910	2300	3675	7370	2970	875	1215	
	97 (12)	10	2	1395	280	445	3360	2475	825	1320	8985	5745	1150	1840	7370	1535	450	635	
			3	1920	385	615	4750	3715	1240	1980	8985	8615	1725	2755	7370	1680	495	715	
			4	2365	475	755	5550	4950	1650	2640	8985	11490	2300	3675	7370	2970	875	1215	

The technical content of this literature is effective 04/09/26 and supersedes all previous information.

Fixed Universal Slip Clip

Notes:

1 Listed capacities are in accordance with provisions of AISI S100-16 (R2020)/S2-20, AISI D114, ICC-ES AC261 and ESR 2269.

2 Tabulated load capacities are based on the following considerations:

- **a** Framing connection: #12 Screws
- **b** Connection to structure: 0.157" Hilti X-U Pins connected to 3/16" thick ASTM A36 Steel (see illustrations for base fastener locations).
- **c** Other fasteners may be used to achieve full clip capacity but must be designed separately.
- **d** Listed capacities have not been increased for wind, seismic, or other factors.
- **e** Tabulated loads are based on maximum stud standoff distance of 1" from base structure.

3 ASD and LRFD loads are based on nominal capacities only. 1/8" service loads are listed in a separate column. Designer shall use governing loads based on 1/8" service and strength.

4 #12 Screws (0.216" dia) were used to attach clips to framing members through the provided clip holes.

5 The safety factor for ASD loads and resistance factor for LRFD loads are in accordance with Chapter K of AISI-S100 and ESR2269.

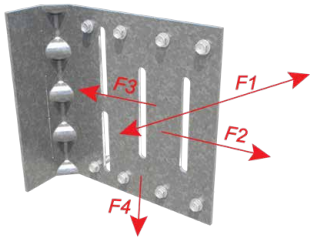
6 The #12 Framing screws provide nominal shear capacity of 2000lbs and a nominal tension capacity of 2778lbs.

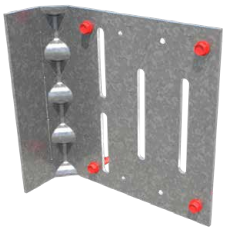
7 Nominal capacities are listed for use in blast/seismic designs and they do not assume a safety factor or resistance factor.

8 The Hilti X-U Pin shall have a minimum nominal shear capacity of 3939lbs and minimum nominal tension capacity of 2872lbs according to Hilti Fastening Technical Guide, Edition 2024.

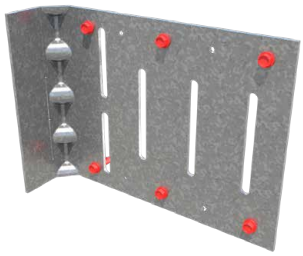
9 Hilti is a registered trademark of Hilti Aktiengeseilschaft Corporation.

10 It is the responsibility of the design professional to detail the project drawings for proper FUS installation.

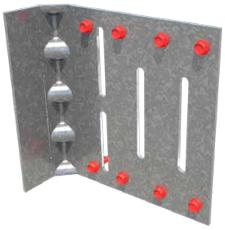




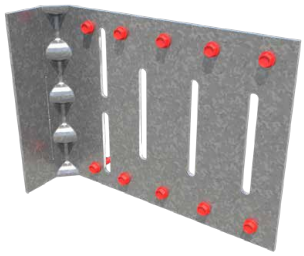
FUS6
(4) Screw Condition



FUS8
(6) Screw Condition



FUS6
(8) Screw Condition



FUS8
(10) Screw Condition

ATTACHMENT TO STRUCTURE: 0.157" HILTI X-U PINS TO 3/16" STEEL (FS = 10)

Clip Designation	Framing Member Details		Mechanically Anchored to Structure	Load Capacities (lbs) / Clip															
				In-Plane (F1)			Tension (F2)				Compression (F3)				Shear (F4)				
	Thickness mils (ga)	No. of Screws to Framing		Nominal Load	ASD Load	LRFD Load	1/8" Service Load	Nominal Load	ASD Load	LRFD Load	1/8" Service Load	Nominal Load	ASD Load	LRFD Load	1/8" Service Load	Nominal Load	ASD Load	LRFD Load	
FUS6-97	33 (20)	4	2	420	140	225	2040	2260	460	740	3005	2260	575	920	3095	1140	275	375	
			3	420	140	225	2885	2260	695	1110	3005	2260	755	1130	3095	1140	305	430	
			4	420	140	225	3050	2260	755	1130	3005	2260	755	1130	3095	1140	380	570	
	43 (18)	4	2	625	140	225	2040	2475	460	740	3385	3365	575	920	3625	1630	275	375	
			3	625	190	305	2885	3365	695	1110	3385	3365	860	1380	3625	1695	305	430	
			4	625	215	345	3530	3365	925	1480	3385	3365	1120	1685	3625	1695	525	710	
	54 (16)	4	2	990	140	225	2040	2475	460	740	4485	5745	575	920	4410	1630	275	375	
			3	990	190	305	2885	3715	695	1110	4485	6265	860	1380	4410	1795	305	430	
			4	990	235	380	3530	4950	925	1480	4485	6265	1150	1840	4410	3150	525	710	
	68 (14)	4	2	1315	140	225	2040	2475	460	740	4870	5745	575	920	6635	1630	275	375	
			3	1315	190	305	2885	3715	695	1110	4870	7600	860	1380	6635	1795	305	430	
			4	1315	235	380	3530	4950	925	1480	4870	7600	1150	1840	6635	3150	525	710	
	97 (12)	4	2	1395	140	225	2040	2475	460	740	5525	5745	575	920	7375	1630	275	375	
			3	1920	190	305	2885	3715	695	1110	5525	8000	860	1380	7375	1795	305	430	
			4	2280	235	380	3530	4950	925	1480	5525	8000	1150	1840	7375	3150	525	710	
FUS6-97	33 (20)	8	2	420	140	225	2040	2475	460	740	3005	3565	575	920	3095	1630	275	375	
			3	420	140	225	2885	3715	695	1110	3005	3565	860	1380	3095	1795	305	430	
			4	420	140	225	3050	4525	925	1480	3005	3565	1150	1840	3095	2050	525	710	
	43 (18)	8	2	625	140	225	2040	2475	460	740	3385	4380	575	920	3625	1630	275	375	
			3	625	190	305	2885	3715	695	1110	3385	4380	860	1380	3625	1795	305	430	
			4	625	215	345	3530	4950	925	1480	3385	4380	1150	1840	3625	3050	525	710	
	54 (16)	8	2	990	140	225	2040	2475	460	740	4485	5745	575	920	4410	1630	275	375	
			3	990	190	305	2885	3715	695	1110	4485	6265	860	1380	4410	1795	305	430	
			4	990	235	380	3530	4950	925	1480	4485	6265	1150	1840	4410	3150	525	710	
	68 (14)	8	2	1315	140	225	2040	2475	460	740	4870	5745	575	920	6635	1630	275	375	
			3	1315	190	305	2885	3715	695	1110	4870	7600	860	1380	6635	1795	305	430	
			4	1315	235	380	3530	4950	925	1480	4870	7600	1150	1840	6635	3150	525	710	
	97 (12)	8	2	1395	140	225	2040	2475	460	740	5525	5745	575	920	7375	1630	275	375	
			3	1920	190	305	2885	3715	695	1110	5525	8615	860	1380	7375	1795	305	430	
			4	2280	235	380	3530	4950	925	1480	5525	11490	1150	1840	7375	3150	525	710	
FUS8-97	33 (20)	6	2	395	135	220	2040	2475	485	775	3445	3390	575	920	1490	1215	225	315	
			3	395	135	220	2885	3390	730	1165	3445	3390	860	1380	1490	1215	245	355	
			4	395	135	220	3265	3390	970	1555	3445	3390	1130	1695	1490	1215	405	605	
	43 (18)	6	2	610	140	225	2040	2475	485	775	3850	4840	575	920	2940	1330	225	315	
			3	610	190	305	2885	3715	730	1165	3850	4840	860	1380	2940	1435	245	355	
			4	610	210	335	3510	4950	970	1555	3850	4840	1150	1840	2940	1810	435	605	
	54 (16)	6	2	1080	140	225	2040	2475	485	775	5030	5745	575	920	3695	1330	225	315	
			3	1080	190	305	2885	3715	730	1165	5030	6670	860	1380	3695	1435	245	355	
			4	1080	235	380	3530	4950	970	1555	5030	6670	1150	1840	3695	2585	435	605	
	68 (14)	6	2	1395	140	225	2040	2475	485	775	5415	5745	575	920	5970	1330	225	315	
			3	1395	190	305	2885	3715	730	1165	5415	7700	860	1380	5970	1435	245	355	
			4	1395	235	380	3530	4950	970	1555	5415	7700	1150	1840	5970	2585	435	605	
	97 (12)	6	2	1395	140	225	2040	2475	485	775	6420	5745	575	920	6035	1330	225	315	
			3	1920	190	305	2885	3715	730	1165	6420	8615	860	1380	6035	1435	245	355	
			4	2365	235	380	3530	4950	970	1555	6420	11490	1150	1840	6035	2585	435	605	
FUS8-97	33 (20)	10	2	395	135	220	2040	2475	485	775	3445	4240	575	920	1490	1330	225	315	
			3	395	135	220	2885	3715	730	1165	3445	4240	860	1380	1490	1435	245	355	
			4	395	135	220	3265	4950	970	1555	3445	4240	1150	1840	1490	1860	435	605	
	43 (18)	10	2	610	140	225	2040	2475	485	775	3850	4840	575	920	2940	1330	225	315	
			3	610	190	305	2885	3715	730	1165	3850	4840	860	1380	2940	1435	245	355	
			4	610	210	335	3510	4950	970	1555	3850	4840	1150	1840	2940	2585	435	605	
	54 (16)	10	2	1080	140	225	2040	2475	485	775	5030	5745	575	920	3695	1330	225	315	
			3	1080	190	305	2885	3715	730	1165	5030	6670	860	1380	3695	1435	245	355	
			4	1080	235	380	3530	4950	970	1555	5030	6670	1150	1840	3695	2585	435	605	
	68 (14)	10	2	1395	140	225	2040	2475	485	775	5415	5745	575	920	5970	1330	225	315	
			3	1395	190	305	2885	3715	730	1165	5415	7700	860	1380	5970	1435	245	355	
			4	1395	235	380	3530	4950	970	1555	5415	7700	1150	1840	5970	2585	435	605	
	97 (12)	10	2	1395	140	225	2040	2475	485	775	6420	5745	575	920	6035	1330	225	315	
			3	1920	190	305	2885	3715	730	1165	6420	8615	860	1380	6035	1435	245	355	
			4	2365	235	380	3530	4950	970	1555	6420	11490	1150	1840	6035	2585	435	605	

The technical content of this literature is effective 04/09/26 and supersedes all previous information.

Fixed Universal Slip Clip

ATTACHMENT TO STRUCTURE: 0.157" HILTI X-U PINS TO 3/16" STEEL (FS = 10)

Clip Designation	Framing Member Details		Mechanically Anchored to Structure	Load Capacities (lbs) / Clip															
				In-Plane (F1)			Tension (F2)				Compression (F3)				Shear (F4)				
	Thickness mils (ga)	No. of Screws to Framing		Nominal Load	ASD Load	LRFD Load	1/8" Service Load	Nominal Load	ASD Load	LRFD Load	1/8" Service Load	Nominal Load	ASD Load	LRFD Load	1/8" Service Load	Nominal Load	ASD Load	LRFD Load	
FUS6-118	33 (20)	4	2	420	140	225	3360	2260	460	740	3005	2260	575	920	3925	1140	275	375	
			3	420	140	225	3605	2260	695	1110	3005	2260	755	1130	3925	1140	305	430	
			4	420	140	225	3605	2260	755	1130	3005	2260	755	1130	3925	1140	380	570	
	43 (18)	4	2	655	140	225	3360	2475	460	740	4685	3365	575	920	4350	1695	275	375	
			3	655	190	305	4055	3365	695	1110	4685	3365	860	1380	4350	1695	305	430	
			4	655	225	360	4055	3365	925	1480	4685	3365	1120	1685	4350	1695	525	710	
	54 (16)	4	2	1025	140	225	3360	2475	460	740	5510	5745	575	920	7380	1860	275	375	
			3	1025	190	305	4750	3715	695	1110	5510	6835	860	1380	7380	2080	305	430	
			4	1025	235	380	4905	4950	925	1480	5510	6835	1150	1840	7380	3440	525	710	
	68 (14)	4	2	1370	140	225	3360	2475	460	740	5835	5745	575	920	7690	1860	275	375	
			3	1370	190	305	4750	3715	695	1110	5835	8000	860	1380	7690	2080	305	430	
			4	1370	235	380	4865	4950	925	1480	5835	8000	1150	1840	7690	3575	525	710	
	97 (12)	4	2	1395	140	225	3360	2475	460	740	6460	5745	575	920	7690	1860	275	375	
			3	1920	190	305	4750	3715	695	1110	6460	8000	860	1380	7690	2080	305	430	
			4	2285	235	380	5590	4950	925	1480	6460	8000	1150	1840	7690	3575	525	710	
FUS6-118	33 (20)	8	2	420	140	225	3360	2475	460	740	3005	3565	575	920	3925	1860	275	375	
			3	420	140	225	3605	3715	695	1110	3005	3565	860	1380	3925	2050	305	430	
			4	420	140	225	3605	4525	925	1480	3005	3565	1150	1840	3925	2050	525	710	
	43 (18)	8	2	655	140	225	3360	2475	460	740	4685	5745	575	920	4350	1860	275	375	
			3	655	190	305	4055	3715	695	1110	4685	5805	860	1380	4350	2080	305	430	
			4	655	225	360	4055	4950	925	1480	4685	5805	1150	1840	4350	3050	525	710	
	54 (16)	8	2	1025	140	225	3360	2475	460	740	5510	5745	575	920	7380	1860	275	375	
			3	1025	190	305	4750	3715	695	1110	5510	8240	860	1380	7380	2080	305	430	
			4	1025	235	380	4905	4950	925	1480	5510	8240	1150	1840	7380	3575	525	710	
	68 (14)	8	2	1370	140	225	3360	2475	460	740	5835	5745	575	920	7690	1860	275	375	
			3	1370	190	305	4750	3715	695	1110	5835	8615	860	1380	7690	2080	305	430	
			4	1370	235	380	4865	4950	925	1480	5835	9505	1150	1840	7690	3575	525	710	
	97 (12)	8	2	1395	140	225	3360	2475	460	740	6460	5745	575	920	7690	1860	275	375	
			3	1920	190	305	4750	3715	695	1110	6460	8615	860	1380	7690	2080	305	430	
			4	2285	235	380	5590	4950	925	1480	6460	11490	1150	1840	7690	3575	525	710	
FUS8-118	33 (20)	6	2	395	135	220	3360	2475	485	775	3445	3390	575	920	1750	1215	225	315	
			3	395	135	220	3740	3390	730	1165	3445	3390	860	1380	1750	1215	245	355	
			4	395	135	220	3740	3390	970	1555	3445	3390	1130	1695	1750	1215	405	605	
	43 (18)	6	2	625	140	225	3360	2475	485	775	4985	5050	575	920	3910	1535	225	315	
			3	625	190	305	4035	3715	730	1165	4985	5050	860	1380	3910	1680	245	355	
			4	625	215	345	4035	4950	970	1555	4985	5050	1150	1840	3910	1810	435	605	
	54 (16)	6	2	1070	140	225	3360	2475	485	775	6845	5745	575	920	8075	1535	225	315	
			3	1070	190	305	4750	3715	730	1165	6845	8615	860	1380	8075	1680	245	355	
			4	1070	235	380	4890	4950	970	1555	6845	8615	1150	1840	8075	2970	435	605	
	68 (14)	6	2	1395	140	225	3360	2475	485	775	7480	5745	575	920	7370	1535	225	315	
			3	1455	190	305	4750	3715	730	1165	7480	8615	860	1380	7370	1680	245	355	
			4	1455	235	380	5320	4950	970	1555	7480	9910	1150	1840	7370	2970	435	605	
	97 (12)	6	2	1395	140	225	3360	2475	485	775	8985	5745	575	920	7370	1535	225	315	
			3	1920	190	305	4750	3715	730	1165	8985	8615	860	1380	7370	1680	245	355	
			4	2365	235	380	5550	4950	970	1555	8985	11490	1150	1840	7370	2970	435	605	
FUS8-118	33 (20)	10	2	395	135	220	3360	2475	485	775	3445	4240	575	920	1750	1535	225	315	
			3	395	135	220	3740	3715	730	1165	3445	4240	860	1380	1750	1680	245	355	
			4	395	135	220	3740	4950	970	1555	3445	4240	1150	1840	1750	1860	435	605	
	43 (18)	10	2	625	140	225	3360	2475	485	775	4985	5745	575	920	3910	1535	225	315	
			3	625	190	305	4035	3715	730	1165	4985	6640	860	1380	3910	1680	245	355	
			4	625	215	345	4035	4950	970	1555	4985	6640	1150	1840	3910	2765	435	605	
	54 (16)	10	2	1070	140	225	3360	2475	485	775	6845	5745	575	920	8075	1535	225	315	
			3	1070	190	305	4750	3715	730	1165	6845	8615	860	1380	8075	1680	245	355	
			4	1070	235	380	4890	4950	970	1555	6845	8615	1150	1840	8075	2970	435	605	
	68 (14)	10	2	1395	140	225	3360	2475	485	775	7480	5745	575	920	7370	1535	225	315	
			3	1455	190	305	4750	3715	730	1165	7480	8615	860	1380	7370	1680	245	355	
			4	1455	235	380	5320	4950	970	1555	7480	9910	1150	1840	7370	2970	435	605	
	97 (12)	10	2	1395	140	225	3360	2475	485	775	8985	5745	575	920	7370	1535	225	315	
			3	1920	190	305	4750	3715	730	1165	8985	8615	860	1380	7370	1680	245	355	
			4	2365	235	380	5550	4950	970	1555	8985	11490	1150	1840	7370	2970	435	605	

Notes:

1 Listed capacities are in accordance with provisions of AISI S100-16 (R2020)/S2-20, AISI D114, ICC-ES AC261 and ESR 2269.

2 Tabulated load capacities are based on the following considerations:

- a Framing connection:#12 Screws
- b Connection to structure: 0.157" Hilti X-U Pins connected to 3/16" thick ASTM A36 Steel (see illustrations for base fastener locations).
- c Other fasteners may be used to achieve full clip capacity but must be designed separately.
- d Listed capacities have not been increased for wind, seismic, or other factors.
- e Tabulated loads are based on maximum stud standoff distance of 1" from base structure.

3 ASD and LRFD loads are based on nominal capacities only. 1/8" service loads are listed in a separate column. Designer shall use governing loads based on 1/8" serivce and strength.

4 #12 Screws (0.216" dia) were used to attach clips to framing members through the provided clip holes.

5 The safety factor for ASD loads and resistance factor for LRFD loads are in accordance with Chapter K of AISI-S100 and ESR2269.

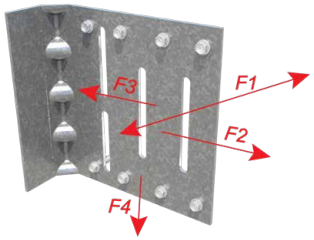
6 The #12 Framing screws provide nominal shear capacity of 2000lbs and a nominal tension capacity of 2778lbs.

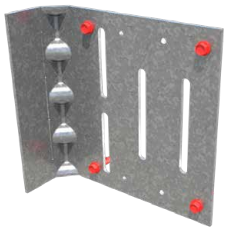
7 Nominal capacities are listed for use in blast/seismic designs and they do not assume a safety factor or resistance factor.

8 The Hilti X-U Pin shall have a minimum nominal shear capacity of 3939lbs and minimum nominal tension capacity of 2872lbs according to Hilti Fastening Technical Guide, Edition 2024.

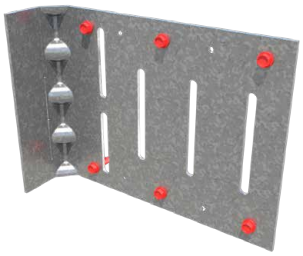
9 Hilti is a registered trademark of Hilti Aktiengeseilschaft Corporation.

10 It is the responsibility of the design professional to detail the project drawings for proper FUS installation.

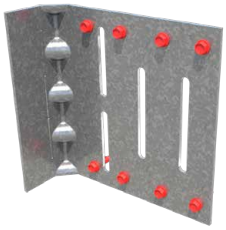




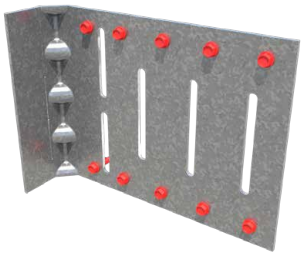
FUS6
(4) Screw Condition



FUS8
(6) Screw Condition

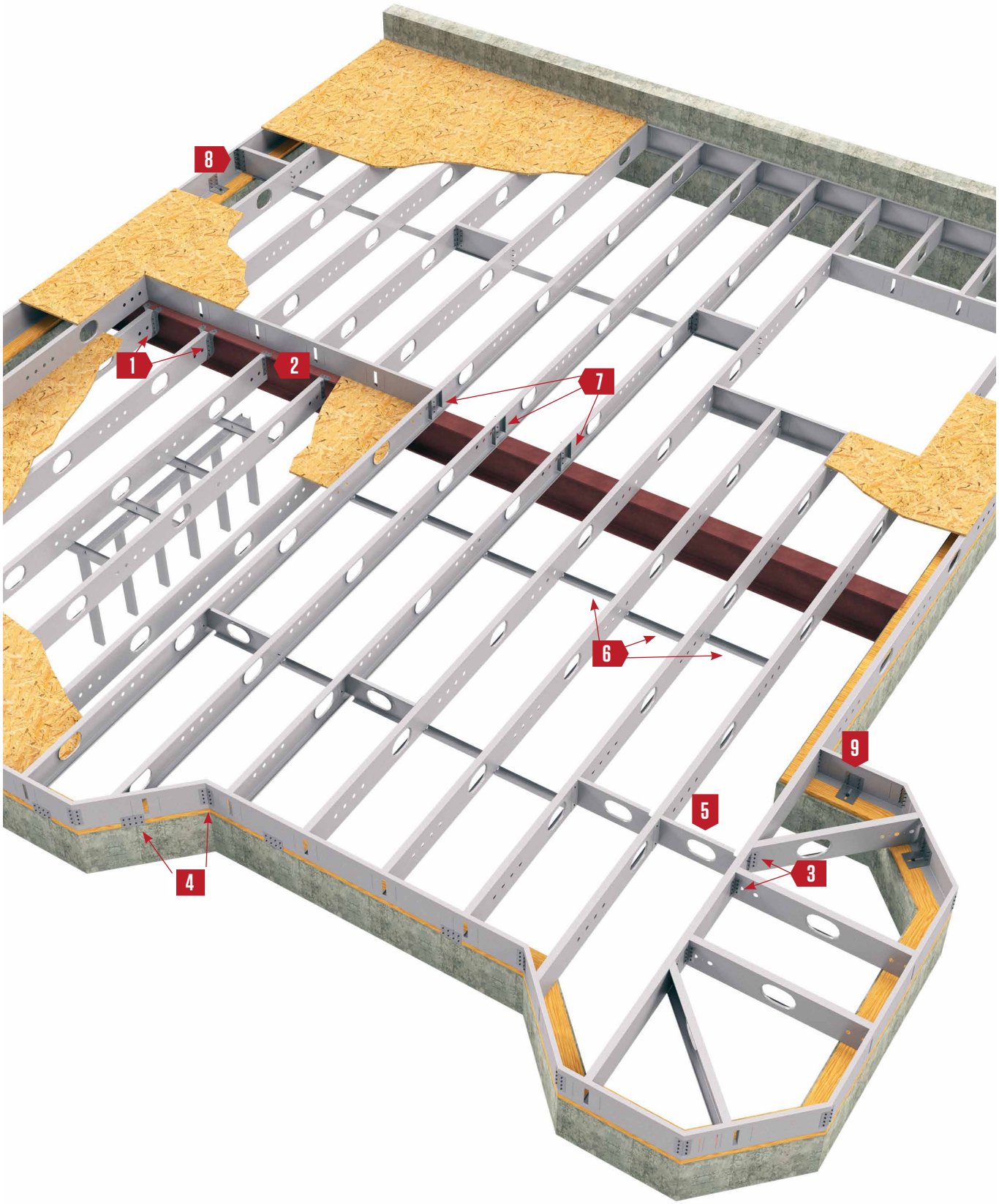


FUS6
(8) Screw Condition



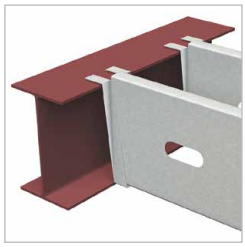
FUS8
(10) Screw Condition

Product Detail



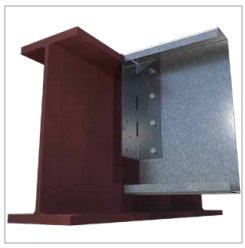
1 Bridle Hanger
pages 180-181





2 Universal Joist Hanger
pages 182–184





3 Skewable Angle
page 186-187





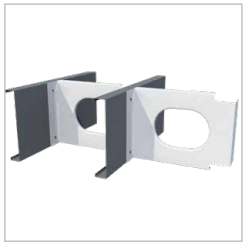
4 TradeReady® Rim Track Splice Plate
pages 188–189





5 TradeReady® Floor Joist Blocking
page 190





6 TradeReady® Structural Bridging
page 191





7 EasyClip™ QuickTwist™ Web Stiffener
pages 192-193





8 EasyClip E-Series™ Support Clip
pages 194–195





9 Custom Fabricated Clips & Connections
pages 2–3



The technical content of this literature is effective 04/09/26 and supersedes all previous information. Pub. No. CD-ClipExpress 04/26

Bridle Hanger

Attach floor joists to structural steel beams or wood ledgers

Bridle hangers are commonly used to attach light-gauge C-joists to structural steel beams or wood ledgers. Connections can be made with screws, powder-actuated fasteners, drill-in concrete anchors or welding. Single- and double-wide bridle hangers are available.

PRODUCT DIMENSIONS

Widths: 2-1/16" or 4-1/8"
Heights: 6", 8", 10" or 12"

MATERIAL SPECIFICATIONS

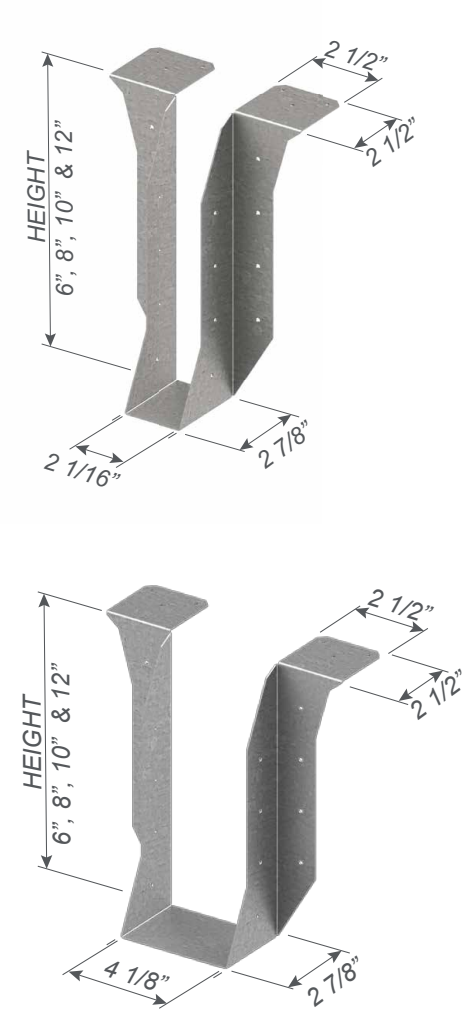
Gauge: 14 gauge (68mils)
Design Thickness: 0.0713 inches

Gauge: 12 gauge (97mils)
Design Thickness: 0.1017 inches

Coating: G90
ASTM: A653/A653M

INSTALLATION

Attach bridle hanger to the primary frame as specified. When welding the hanger to the primary frame, a minimum of 2" fillet weld on each top flange is required. Distribute the weld equally on both top flanges. Uplift loads do not apply to weld-on applications. Special considerations must be taken when welding galvanized steel. Place joist into hanger and secure with fasteners. If bridle hanger is less than beam depth, provide back blocking.

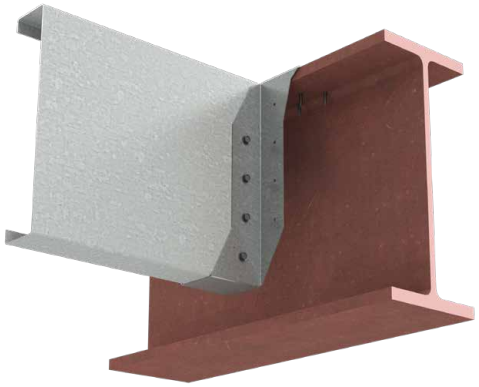


Bridle Hangers (CDBV, CDMB)

Product Code	Thickness		Depth (H) (in)	Width (W) (in)	Packaging Pcs./Carton
	mils (ga)	Design Thickness (in)			
CDBV 1-5/8 x 6	68 (14)	0.0713	6	1-5/8	20
CDBV 1-5/8 x 8			8		20
CDBV 1-5/8 x 10			10		15
CDBV 1-5/8 x 12			12		15
CDBV 2 x 6	68 (14)	0.0713	6	2-1/16	20
CDBV 2 x 8			8		20
CDBV 2 x 10			10		15
CDBV 2 x 12			12		15
CDBV 4 x 6	68 (14)	0.0713	6	4-1/8	15
CDBV 4 x 8			8		15
CDBV 4 x 10			10		15
CDBV 4 x 12			12		15
CDMB 1-5/8 x 6	97 (12)	0.1017	6	1-5/8	20
CDMB 1-5/8 x 8			8		20
CDMB 1-5/8 x 10			10		15
CDMB 1-5/8 x 12			12		15
CDMB 2 x 6	97 (12)	0.1017	6	2-1/16	20
CDMB 2 x 8			8		20
CDMB 2 x 10			10		15
CDMB 2 x 12			12		15
CDMB 4 x 6	97 (12)	0.1017	6	4-1/8	15
CDMB 4 x 8			8		15
CDMB 4 x 10			10		15
CDMB 4 x 12			12		15

Bridle Hangers (CDBV, CDMB)

Product Code	Member Designation (in)		Screw Configuration / Hanger			ASD Loads (lb)	
	Width (in)	Height (in)	Header		Joist	Uplift	Down
			Flange	Web	Web		
CDBV 68mils (14ga)	1-11/16	6	(6) #10	(4) #12	(2) #12	1146	1443
		8	(6) #10	(6) #12	(3) #12	1929	2193
		10	(6) #10	(8) #12	(4) #12	2314	2620
		12	(6) #10	(10) #12	(5) #12	2873	3319
		6	(4) x 2" fillet weld [each side of top flange]		(2) #12	–	1554
		8			(3) #12	–	2089
		10			(4) #12	–	2089
		12			(5) #12	–	2089
	2-1/16	6	(6) #10	(4) #12	(2) #12	1146	1443
		8	(6) #10	(6) #12	(3) #12	1929	2193
		10	(6) #10	(8) #12	(4) #12	2314	2620
		12	(6) #10	(10) #12	(5) #12	2873	3319
		6	(4) x 2" fillet weld [each side of top flange]		(2) #12	–	1554
		8			(3) #12	–	2089
		10			(4) #12	–	2089
		12			(5) #12	–	2089
	4-1/8	6	(6) #10	(4) #12	(4) #12	2293	2886
		8	(6) #10	(6) #12	(6) #12	3699	4197
		10	(6) #10	(8) #12	(8) #12	4629	5239
		12	(6) #10	(10) #12	(10) #12	5025	6054
		6	(4) x 2" fillet weld [each side of top flange]		(4) #12	–	3108
		8			(6) #12	–	3771
		10			(8) #12	–	5055
		12			(10) #12	–	5104
CDMB 97mils (12ga)	1-11/16	6	(6) #10	(4) #14	(2) #14	1545	2032
		8	(6) #10	(6) #14	(3) #14	2370	2687
		10	(6) #10	(8) #14	(4) #14	3166	3474
		12	(6) #10	(10) #14	(5) #14	3927	4950
		6	(4) x 2" fillet weld [each side of top flange]		(2) #14	–	2032
		8			(3) #14	–	2462
		10			(4) #14	–	2993
		12			(5) #14	–	2993
	2-1/16	6	(6) #10	(4) #14	(2) #14	1545	2032
		8	(6) #10	(6) #14	(3) #14	2370	2687
		10	(6) #10	(8) #14	(4) #14	3166	3474
		12	(6) #10	(10) #14	(5) #14	3927	4950
		6	(4) x 2" fillet weld [each side of top flange]		(2) #14	–	2032
		8			(3) #14	–	2462
		10			(4) #14	–	2993
		12			(5) #14	–	2993
	4-1/8	6	(6) #10	(4) #14	(4) #14	3090	4064
		8	(6) #10	(6) #14	(6) #14	4332	5558
		10	(6) #10	(8) #14	(8) #14	6332	6949
		12	(6) #10	(10) #14	(10) #14	7771	8948
		6	(4) x 2" fillet weld [each side of top flange]		(4) #14	–	4064
		8			(6) #14	–	4789
		10			(8) #14	–	6078
		12			(10) #14	–	6489





Notes:

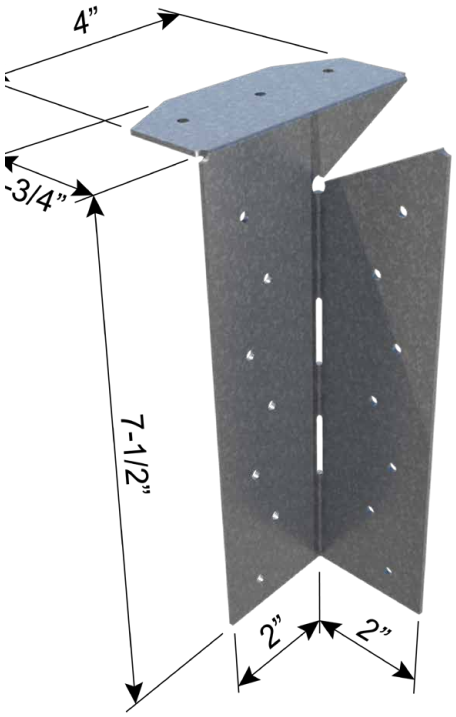
1 Screws shall be installed through the pre-drilled holes in the hanger or as detailed by the designer.
2 CFS joist shall be laterally braced per designer specification.
3 An 1/8" gap shall be maintained between end of the joist and the supporting header.
4 CFS header must be braced to prevent web crippling/buckling per designer specification.
5 CFS header must have full bearing of 2-1/2" flange-depth.
6 The ultimate screw shear strength for #12 screws shall be at least 2330 lbs.
7 The ultimate screw shear strength for #14 screws shall be at least 3048 lbs.
8 The screw shear strength capacities are based on CFSEI Tech Note (F701-12).
9 Allowable loads have not been increased for seismic or wind.
10 Contact ClarkDietrich Engineering Services for technical assistance.

The technical content of this literature is effective 04/09/26 and supersedes all previous information.

Universal Joist Hanger

Floor joist connection to structural steel beams or CFS headers

The Universal Joist Hangers (UJH) 68mils (14ga) are used to connect joists to CFS headers (with screws, welds or PAF fasteners) and steel I-beams (with welds or PAF fasteners). The UJH is sized to fit joist sizes from 8" to 14" deep. Also available in 97mils (12ga).



PRODUCT DIMENSIONS

Dimensions: 4" x 7-1/2" long
Packaging: (25) pieces per bucket

MATERIAL SPECIFICATIONS

Gauge: 14 gauge (68mils)
Design Thickness: 0.0713 inches
Yield Strength: Structural Grade 50 Type H (ST50H), 50ksi
Coating: G90
ASTM: A1003, ASTM A653

Gauge: 12 gauge (97mils)
Design Thickness: 0.1017 inches
Yield Strength: Structural Grade 50 Type H (ST50H), 50ksi
Coating: G90
ASTM: A1003, ASTM A653

INSTALLATION

Clip to Joist Attachment:

- The joist flange must rest on top of the Universal Joist Hanger as shown in the image to the right. Attach the UJH hanger with specified number of #10 or #14 screws as listed in the table below under the Joist column.



Clip attachment to CFS Header:

- Attach the UJH hanger to the top and side (face) of the CFS Header with specified number of #10 screws as listed in the table below.

Clip attachment to Structural/Steel Beam

- **Welded Connection:**
  The minimum required weld to the top flange is 2" fillet weld to each side of top flange. Special considerations must be taken when welding galvanized steel.

- **PAF (Powder Actuated Fasteners):**
  For powder actuated fasteners attachment (PAF, 0.157"), steel beam shall have minimum 3/16" thickness and minimum yield strength of 36ksi.



Universal Joist Hanger (UJH)

Product Code	Thickness		Packaging Pcs./Bucket
	mils (ga)	Design Thickness (in)	
UJH-68	68 (14)	0.0713"	50
UJH-97	97 (12)	0.1017"	50

UJH-68 Mils (14ga)

ALLOWABLE HANGER LOADS

Product Code	Joist (Gauge)	Header (Gauge)	Fasteners			Allowable ASD Loads (lbs)	
			Top	Face	Joist	Uplift	Down
UJH-68	ATTACHMENT TO CFS HEADER						
	18	16	2 - #10	2 - #10	2 - #10	430	473
			3 - #10	4 - #10	4 - #10	860	946
			3 - #10	7 - #10	7 - #10	860	1021
	16	16	2 - #10	2 - #10	2 - #10	789	789
			3 - #10	4 - #10	4 - #10	1548	1548
			3 - #10	7 - #10	7 - #10	1548	1705
	14	14	2 - #10	2 - #10	2 - #10	852	935
			3 - #10	4 - #10	4 - #10	1639	1798
			3 - #10	7 - #10	7 - #10	2077	2115
	12	12	2 - #10	2 - #10	2 - #10	906	1035
			3 - #10	4 - #10	4 - #10	1710	1953
			3 - #10	7 - #10	7 - #10	2536	3026

UJH-68	ATTACHMENT TO STEEL HEADER				
	18	2" long fillet [Weld to each side of top flange]	2 - #10	132	788
			4 - #10	263	975
			7 - #10	298	975
	16		2 - #10	132	997
			4 - #10	263	1148
			7 - #10	334	1148
	14		2 - #10	132	997
			4 - #10	263	1148
			7 - #10	334	1148
	12		2 - #10	132	1035
			4 - #10	263	1285
			7 - #10	334	1285
	18	2 x 0.157" PAF	2 - #10	126	784
		3 x 0.157" PAF	4 - #10	136	869
			7 - #10	136	869
	16	2 x 0.157" PAF	2 - #10	132	965
		3 x 0.157" PAF	4 - #10	171	1117
			7 - #10	171	1117
	14	2 x 0.157" PAF	2 - #10	132	965
		3 x 0.157" PAF	4 - #10	171	1117
			7 - #10	171	1117
	12	2 x 0.157" PAF	2 - #10	132	1035
		3 x 0.157" PAF	4 - #10	241	1279
			7 - #10	241	1304

Notes:

1 Screws shall be installed through the pre-drilled holes in the hanger or as detailed by the designer.
2 CFS joist shall be laterally braced per designer specification.
3 For a gap between the end of the joist and the face of the hanger ranging between 0" - 1/2", no adjustment factor is required. When the gap is between 1/2" and 7/8", an adjustment factor of 0.95 shall be used to the load capacities listed.
4 For skew condition up to 45°, an adjustment factor of 0.95 for 7-screw condition and 0.80 for 4-screw condition shall be used. No skew is allowed for 2-screw connection.
5 If the clip is installed hard side (exterior web) of CFS joist, an adjustment factor of 0.95 shall be used to the load capacities listed. In addition, if the clip has to be skewed up to 45°, an additional adjustment factor of 0.95 for 7-screw condition and 0.80 for 4-screw condition shall be used to the load capacities listed.
6 CFS header must be braced to prevent web crippling/buckling per designer specification.
7 CFS header must provide full bearing of 1-5/8" flange-depth.
8 Backing of the steel beam cavity is not required behind the hanger for the load listed.
9 The ultimate screw shear strength for #10 screws shall be at least 1644 lbs.
10 The screw shear strength capacities are based on CFSEI Tech Note (F701-12).
11 Allowable loads have not been increased for seismic or wind.
12 Contact ClarkDietrich Engineering Services for technical assistance.

Universal Joist Hanger

UJH-97 Mils (12ga)

ALLOWABLE HANGER LOADS

Product Code	Joist (Ga)	Header (Ga)	Fasteners			Allowable ASD Loads (lbs)	
			Top	Face	Joist	Uplift	Down
UJH-97	ATTACHMENT TO CFS HEADER						
	18	16	2 - #10	2 - #10	2 - #14	439	489
			3 - #10	4 - #10	4 - #14	860	959
			3 - #10	7 - #14	7 - #14	958	1021
	16	16	2 - #10	2 - #10	2 - #14	940	940
			3 - #10	4 - #10	4 - #14	1773	1773
			3 - #10	7 - #14	7 - #14	1773	1931
	14	14	2 - #10	2 - #10	2 - #14	1123	1327
			3 - #10	4 - #10	4 - #14	2041	2413
			3 - #10	7 - #14	7 - #14	2388	2445
	12	12	2 - #10	2 - #10	2 - #14	1238	1898
			3 - #10	4 - #10	4 - #14	2135	3273
			3 - #10	7 - #14	7 - #14	4092	4350

UJH-97	ATTACHMENT TO STEEL HEADER				
	18	2" long fillet [Weld to each side of top flange]	2 - #14	201	837
			4 - #14	401	975
			7 - #14	431	975
	16		2 - #14	201	1472
			4 - #14	401	1570
			7 - #14	577	1696
	14		2 - #14	201	1472
			4 - #14	401	1570
			7 - #14	577	1696
	12		2 - #14	201	1651
			4 - #14	401	1738
			7 - #14	598	1761
	18	2 x 0.157" PAF	2 - #14	201	890
		3 x 0.157" PAF	4 - #14	252	890
			7 - #14	252	890
	16	2 x 0.157" PAF	2 - #14	201	1380
		3 x 0.157" PAF	4 - #14	332	1626
			7 - #14	332	1626
	14	2 x 0.157" PAF	2 - #14	201	1380
		3 x 0.157" PAF	4 - #14	332	1626
			7 - #14	332	1626
	12	2 x 0.157" PAF	2 - #14	201	1644
		3 x 0.157" PAF	4 - #14	367	1730
			7 - #14	367	1812

Notes:

1 Screws shall be installed through the pre-drilled holes in the hanger or as detailed by the designer.
2 CFS joist shall be laterally braced per designer specification.
3 For a gap between the end of the joist and the face of the hanger ranging between 0" - 7/8", no adjustment factor is required.
4 For skew condition up to 45°, an adjustment factor of 0.85 for 7-screw condition and 0.90 for 4-screw condition shall be used. No skew is allowed for 2-screw connection.
5 If the clip is installed hard side (exterior web) of CFS joist, no adjustment factor is required.
6 CFS header must be braced to prevent web crippling/buckling per designer specification.
7 CFS header must provide full bearing of 1-5/8" flange-depth.
8 Backing of the steel beam cavity is not required behind the hanger for the load listed.
9 The ultimate screw shear strength for #14 screws shall be at least 3048 lbs.
10 The screw shear strength capacities are based on CFSEI Tech Note (F701-12).
11 Allowable loads have not been increased for seismic or wind.
12 Contact ClarkDietrich Engineering Services for technical assistance.

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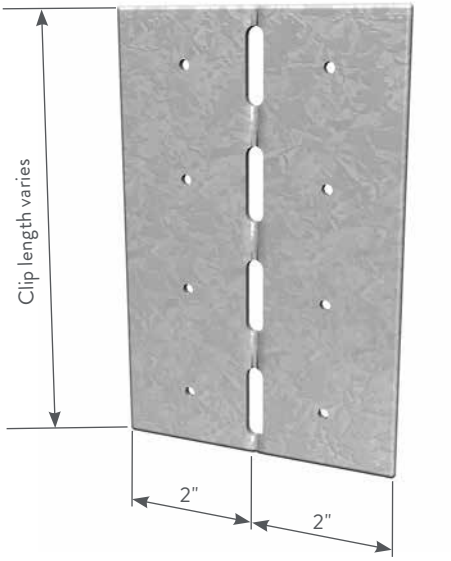
Pub. No. CD-ClipExpress 04/26

Skewable Angle

For rigid and off-angle attachments of joist-to-joist, joist-to-hip beam, or to other structural steel members

ClarkDietrich skewable angles are used to make rigid attachments of joist-to-joist or joist-to-other miscellaneous framing. This clip is ideal for making off-angle attachments. It is easily field bent from 0° to 90°.

CAUTION: This clip can only be bent one time.



PRODUCT DIMENSIONS

Legs: 2" x 2"
Clip Lengths: 3", 4-3/8", 5", 6-3/8", 7", 9"

MATERIAL SPECIFICATIONS

Gauge: 18 gauge (43mils)
Design Thickness: 0.0451 inches
Coating: G90
ASTM: A653/A1003

INSTALLATION

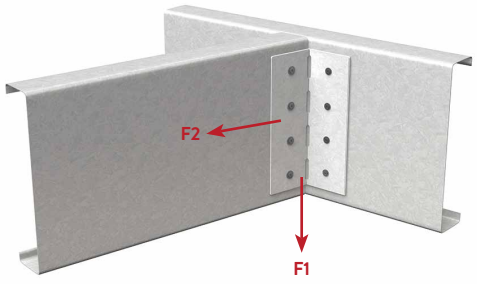
Use specified fasteners. For off-angle connections, field bend (ONE TIME ONLY) to the required degree so the Skewable Angle fits securely over the two adjoining members. Secure the Skewable Angle by filling all prepunched screw holes with #10 screws or as required by design. Joist must be constrained against rotation when using a single Skewable Angle per connection.

Skewable Angles (SA)

Product Code	Product Thickness		Height (in)	Packaging Pcs./Carton
	mils (ga)	Design Thickness (in)		
SA3	43 (18)	0.0451	3	100
SA4	43 (18)	0.0451	4-3/8	100
SA5	43 (18)	0.0451	5	100
SA6	43 (18)	0.0451	6-3/8	100
SA7	43 (18)	0.0451	7	100
SA9	43 (18)	0.0451	9	100

Skewable Angle Allowable Loads

Product Code	Stud Thickness mils (ga)	Length (in)	Fasteners	Allowable Loads (lbs)	
				Shear (F1)	Tension (F2)
SA3	33 (20)	3.000	6 - #10	339	251
	43 (18)			372	328
	54 (16)			372	594
	68 (14)			372	677
	97 (12)			372	677
SA4	33 (20)	4.375	6 - #10	339	251
	43 (18)			505	328
	54 (16)			512	594
	68 (14)			512	748
	97 (12)			512	930
SA5	33 (20)	5.000	8 - #10	510	335
	43 (18)			744	437
	54 (16)			744	792
	68 (14)			744	998
	97 (12)			744	1353
SA6	33 (20)	6.375	10 - #10	690	419
	43 (18)			884	546
	54 (16)			884	990
	68 (14)			884	1247
	97 (12)			884	1607
SA7	33 (20)	7.000	10 - #10	690	419
	43 (18)			1027	546
	54 (16)			1116	990
	68 (14)			1116	1247
	97 (12)			1116	1779
SA9	33 (20)	9.000	14 - #10	1061	587
	43 (18)			1116	765
	54 (16)			1116	1386
	68 (14)			1116	1746
	97 (12)			1116	2030



Notes:

1 Screws shall be attached through the pre-drilled holes provided.

2 The allowable values for F1 and F2 are to be used only when the clip leg is attached to cold-formed steel framing. The capacity of the attachment to other materials and structures must be checked separately.

3 This table is intended for use by a qualified design professional. It is the responsibility of the engineer to verify that the tabulated values apply to a specific connection application. The 1/8-in deflection service load limit is not included in the listed tension (F2) capacities.

4 Values for 18ga (43 mils) skewable angles were based on using 33 ksi calculations for worst case. These angles are manufactured using 50 ksi.

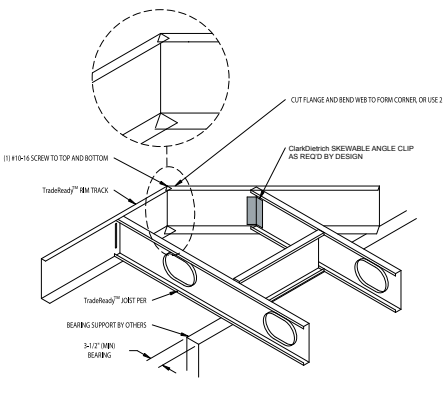
5 The ultimate screw shear strength and tensile strength for #10 screws should be at least 1644 lbs and 1158 lbs respectively. These shear and tensile capacities of #10 screws are based on CFSEI Tech Note (F701-12).

6 Allowable loads have not been increased for seismic or wind.

7 Contact ClarkDietrich Engineering Services for technical assistance.

Typical Construction Details

Visit our CAD Library at itools.clarkdietrich.com to view or download construction details in .dwg, .dxf, and .pdf formats.



Field Skewable TradeReady® Rim Track Splice Plate

Ideal for splicing rim joist and is easily field skewable for off-angle rim joist connections

The ClarkDietrich field skewable TradeReady® rim track splice plate provides an easy and efficient method for splicing TradeReady rim. This prepunched plate is also ideal for connecting and reinforcing the rim at bay or bow window details. The center of the plate allows for easy one-time field bending from 0° to 135°.

CAUTION: This plate can only be bent one time.

MATERIAL SPECIFICATIONS

Gauge: 16 gauge (54mils)
Design Thickness: 0.0566 inches
Yield Strength: 50ksi

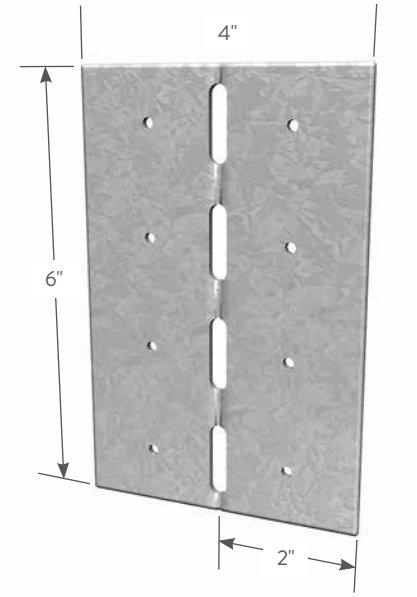
Coating: G90
ASTM: A653/A653M

INSTALLATION

For splicing connections, align center slots in splice plate over the joint of the rim joists. Secure splice plate by filling all prepunched screw holes with #10 screws.

For off-angle connections, field bend (ONE TIME ONLY) to the required degree so the plate fits securely over the two adjoining members. Secure field skewable plate by filling all prepunched screw holes with #10 screws.

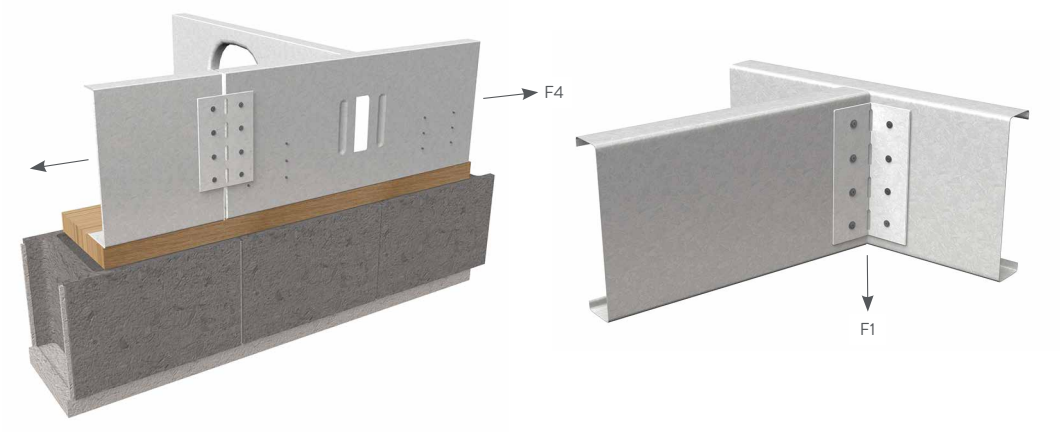




Field Skewable TradeReady Rim Track Splice Plate

Field Skewable TradeReady® Rim Track Splice Plates (TDSP)

Product Code	Thickness		Size (in)	Packaging Pcs./Bucket
	mils (ga)	Design Thickness (in)		
TDSP	54 (16)	0.0566	4 x 6	100



Field Skewable TradeReady® Rim Track Splice Plates (TDSP)

ALLOWABLE LOADS

Product Code	TDSP Gauge	Framing Material Gauge	Framing Material Yield (ksi)	Tension F4 (lbs)	Shear F1 (lbs)
TDSP	18	20	33	560	437
		18 or thicker	33	832	650
TDSP	16	20	33	560	437
		18	33	832	650
		16 or thicker	33	1172	915
			50	1680	1312

Notes:

1 Screws shall be attached in the pre-drilled holes provided.

2 The allowable values for F1 and F4 are to be used only when the clip leg is attached to the CFS framing. The screw pattern must be as shown above. The capacity of the attachment to other materials and structures must be checked separately.

3 This table is intended for use by qualified engineers only. It is the responsibility of the engineer to verify that the tabulated values apply to a specific connection application.

4 The screw diameter must be 0.19" (min.) for #10 screws.

5 The ultimate screw shear strength must be a minimum of 1400 lbs for #10 screws.

6 Screws must be long enough so that at least three exposed threads are visible after installation.

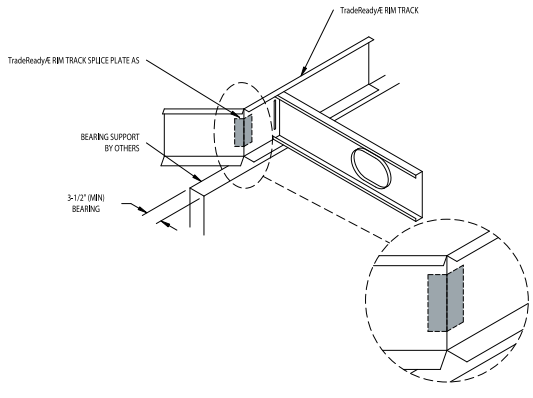
7 Allowable loads have not been increased 33% for wind or seismic.

8 For connections made to 14 gauge (68mils), and 12 gauge (97mils), use the tabulated values for 16 gauge (54mils), 50ksi, when using TDSP (16 gauge). Similsarly when TDSP (18 gauge) is used with thicker base materials, the values for 18 gauge x 33ksi are to be used.

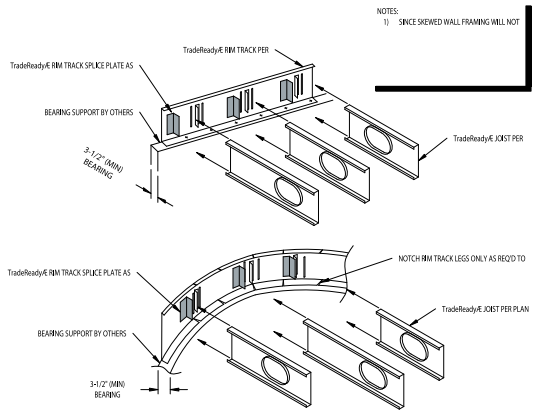
9 It is the responsibility of the design professional to detail the drawings for proper clip attachment.

10 Contact ClarkDietrich at 888-437-3244 for technical assistance.

TYPICAL CONSTRUCTION DETAILS



1 TradeReady RIM TRACK SPLICE PLATE



1 TradeReady RIM TRACK SPLICE PLATE

Visit our CAD Library at clarkdietrich.com to view or download construction details in .dwg, .dxf, and .pdf formats.

TradeReady® Floor Joist Blocking

Quick and efficient system that prevents joist rotation and accommodates mechanical passing

TradeReady Floor Joist Blocking is one of the primary components that make up the TradeReady floor bracing system. TradeReady Blocking features a large extruded hole to accommodate HVAC, mechanical, plumbing and sprinkler runs.

TradeReady Blocking is pre-cut and formed to fit securely between the floor joists to prevent joist rotation. Designed to be used with joist up to 3" legs. Pre-punched holes in the connection legs are added for quick attachment to each floor joist. Structural blocking is an economical alternative to Tension Bracing (CDTB) or Diagonal Tension Strapping.

Floor Joist Blocking is typically used in conjunction with a continuous row of TradeReady Structural Bridging (TDSB) that ties the floor system to the structure allowing bracing against lateral movement.

ALTERNATIVE PRODUCTS

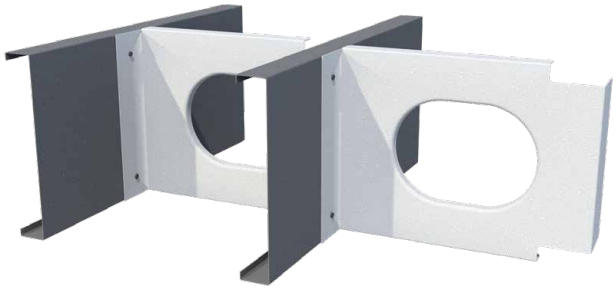
Tension Bracing
Diagonal Tension Strapping

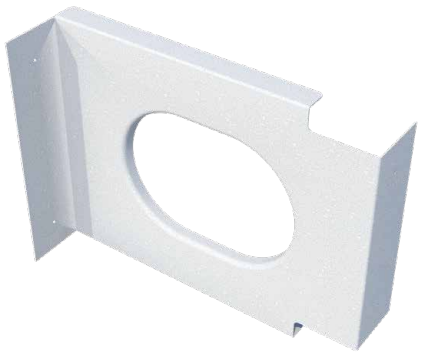
MATERIAL SPECIFICATIONS

Gauge: 16 gauge (54mils)
Design Thickness: 0.0566 inches
Coating: G90
ASTM: A1003

INSTALLATION

Place the notched end of the TradeReady Blocking inside the open side of one floor joist. Attached each end of the TradeReady Blocking to each floor joist with (2) #10-16 screws in pre-punched holes.





Floor Joist Blocking (JB)

Product Code	Thickness		Joist Size (in)	Hole Size (in)	Packaging Pcs./Ctn
	mils (ga)	Design Thickness (in)			
725JB12	54 (16)	0.0566	7-1/4	4-1/2 x 7	10
800JB12			8	4-1/2 x 7	
925JB12			9-1/4	6-1/2 x 9	
1000JB12			10	6-1/2 x 9	
1125JB12			11-1/4	6-1/2 x 9	
1200JB12			12	6-1/2 x 9	
1400JB12			14	6-1/2 x 9	
725JB16			7-1/4	4-1/2 x 7	
800JB16			8	4-1/2 x 7	
925JB16			9-1/4	6-1/2 x 9	
1000JB16			10	6-1/2 x 9	
1125JB16			11-1/4	6-1/2 x 9	
1200JB16			12	6-1/2 x 9	
1400JB16			14	6-1/2 x 9	
725JB24			7-1/4	4-1/2 x 7	
800JB24			8	4-1/2 x 7	
925JB24			9-1/4	6-1/2 x 9	
1000JB24			10	6-1/2 x 9	
1125JB24			11-1/4	6-1/2 x 9	
1200JB24			12	6-1/2 x 9	
1400JB24			14	6-1/2 x 9	

TradeReady® Structural Bridging

Pre-cut structural blocking that installs easily to the underside of the joists to prevent joist rotation

TradeReady® structural bridging is the third component of the TradeReady steel floor system. Prepunched for quick attachment, structural blocking is pre-cut to fit securely between the underside of the floor joists to prevent joist rotation. Structural blocking is an economical alternative to cross bracing, X-bracing or strapping.

CAUTION: In order to prevent joist rolling, the TDSB blocking must be tied into the structure or otherwise braced against lateral movement.

NOTE: TDSB blocking is not required if sheathing is applied to the joists top and bottom.

PRODUCT DIMENSIONS

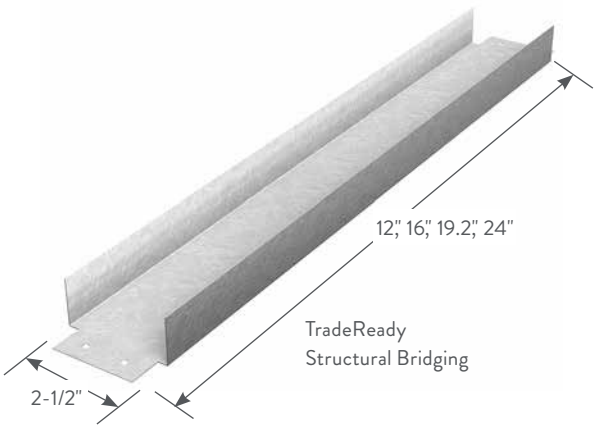
2-1/2" x 12"
2-1/2" x 16"
2-1/2" x 19.2"
2-1/2" x 24"

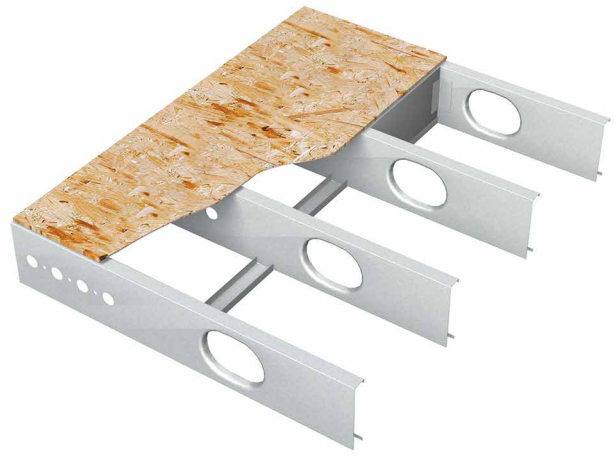
MATERIAL SPECIFICATIONS

Gauge: 18 gauge (43mils)
Design Thickness: 0.0451 inches
Coating: CP60
ASTM: A653/A653M, C955

INSTALLATION

A continuous row of TradeReady structural blocking should be installed every 8' o.c. maximum and staggered for easy attachment. Blocking is secured to each joist flange using two #10 screws at each end.





TradeReady® Structural Bridging (TDSB)

Product Code	Thickness		Size (in)	Packaging Pcs./Bundle
	mils (ga)	Design Thickness (in)		
TDSB12	43 (18)	0.0451	2-1/2 x 12	10
TDSB16	43 (18)	0.0451	2-1/2 x 16	10
TDSB19	43 (18)	0.0451	2-1/2 x 19.2	10
TDSB24	43 (18)	0.0451	2-1/2 x 24	10

The technical content of this literature is effective 04/09/26 and supersedes all previous information. Pub. No. CD-ClipExpress 04/26

EasyClip™ QuickTwist™ Web Stiffener

Excellent reinforcement at critical load points to prevent web crippling

ClarkDietrich EasyClip™ QuickTwist™ web stiffeners are used to provide reinforcement of joist webs to prevent crippling. Web reinforcement is often required by design to enhance the load capacity of joists. The unique design of QTWS allows the installer to easily insert the stiffener on the inside of the joist *after* the joist is installed. This stiffener eliminates the need to pre-insert traditional web stiffeners prior to joist installation. The one-piece assembly is easily rotated in-place for a tight fit.

PRODUCT DIMENSIONS

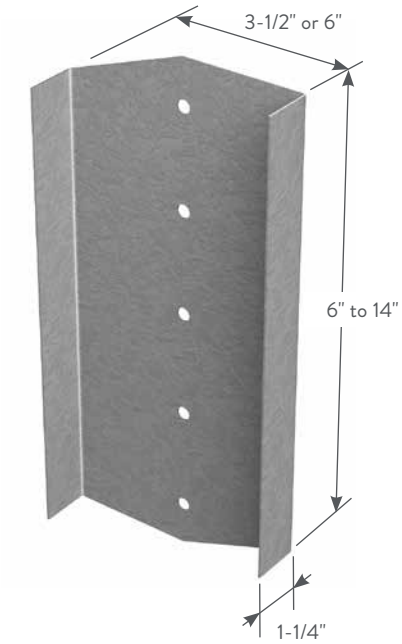
3-1/2" x 6"–14" x 1-1/4"
6" x 6"–14" x 1-1/4"

MATERIAL SPECIFICATIONS

Gauge: 12 gauge (97mils)
Design Thickness: 0.1017 inches
Coating: G90
Yield Strength: 50ksi
ASTM: A653/A653M

INSTALLATION

The unique design of the EasyClip QuickTwist web stiffener allows it to be easily rotated in-place for a tight fit between flanges. The web stiffener shall be secured to the web of the joist with (3) #10-16 screws. Screws shall be driven through the top, bottom and middle prepunched holes as shown in the illustrations.

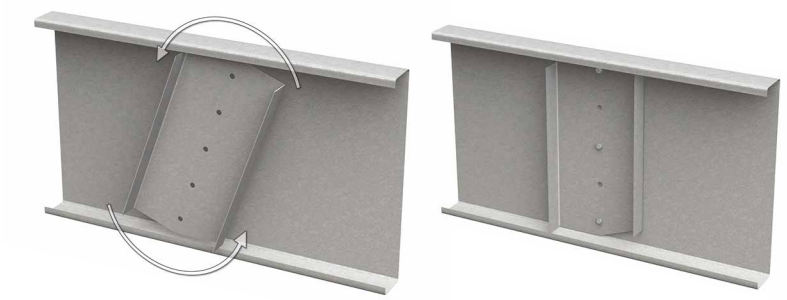


EasyClip™ QuickTwist™ Web Stiffeners (QTWS)

Product Code	Size (W) (in)	Thickness		Size* (L) (in)	Packaging
		mils (ga)	Design Thickness (in)		
QTWS	3-1/2	97 (12)	0.1017	6**	Dependent on order quantity
				7-1/4	
				8	
				9-1/4	
				10	
				11-1/4	
				12	
				14	
QTWS	6	97 (12)	0.1017	6**	Dependent on order quantity
				7-1/4	
				8	
				9-1/4	
				10	
				11-1/4	
				12	
				14	

*Dimension is nominal size. Actual product is shorter to fit inside joist.
**Load data is not available for 6" length.

Note: The QTWS is designed to work with all floor joist flanges but the length of the QTWS clip shall match the depth of the supporting floor joist.

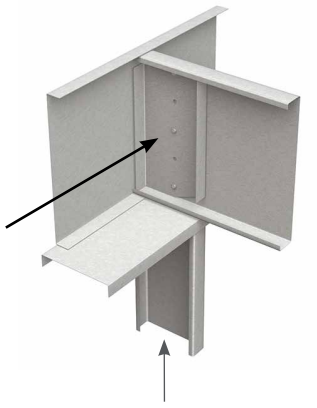


QTWS Allowable Web Crippling Loads (lbs)

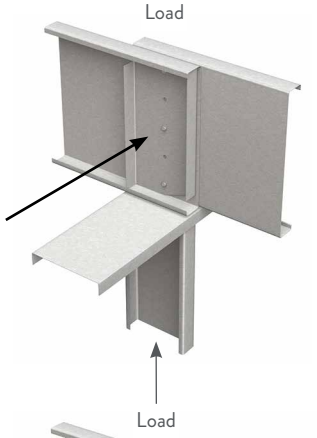
Joist Size (in)	Joist mils (ga)	Fy (ksi)	3-1/2" Web Stiffener			6" Web Stiffener		
			Cond. 1	Cond. 2	Cond. 3	Cond. 1	Cond. 2	Cond. 3
7.25	43 (18)	33	5,360	5,781	5,659	5,932	6,403	6,265
	54 (16)	33	5,457	6,155	5,924	6,042	6,817	6,558
		50	5,574	6,632	6,282	6,177	7,351	6,959
	68 (14)	33	5,615	6,761	6,346	6,220	7,482	7,021
		50	5,813	7,550	6,921	6,447	8,359	7,660
	97 (12)	33	6,074	8,524	7,559	6,733	9,401	8,340
		50	6,509	10,222	8,759	7,224	11,267	9,659
8	43 (18)	33	5,350	5,752	5,645	5,920	6,370	6,249
	54 (16)	33	5,443	6,116	5,905	6,027	6,773	6,537
		50	5,553	6,573	6,253	6,153	7,285	6,926
	68 (14)	33	5,596	6,708	6,320	6,200	7,424	6,992
		50	5,786	7,470	6,882	6,416	8,270	7,617
	97 (12)	33	6,045	8,438	7,516	6,700	9,307	8,293
		50	6,465	10,092	8,694	7,174	11,124	9,588
9.25	43 (18)	33	5,334	5,707	5,623	5,902	6,320	6,224
	54 (16)	33	5,422	6,056	5,875	6,002	6,706	6,503
		50	5,521	6,481	6,208	6,116	7,182	6,876
	68 (14)	33	5,568	6,626	6,279	6,167	7,332	6,947
		50	5,742	7,345	6,820	6,366	8,132	7,548
	97 (12)	33	5,999	8,304	7,450	6,649	9,159	8,220
		50	6,396	9,888	8,594	7,096	10,900	9,477
10	54 (16)	33	5,410	6,021	5,858	5,988	6,667	6,484
		50	5,503	6,429	6,182	6,095	7,124	6,847
	68 (14)	33	5,552	6,579	6,256	6,148	7,280	6,922
		50	5,718	7,275	6,785	6,338	8,053	7,510
	97 (12)	33	5,973	8,228	7,412	6,619	9,076	8,179
		50	6,356	9,773	8,537	7,052	10,773	9,415
11.25	54 (16)	33	5,391	5,967	5,831	5,966	6,606	6,454
		50	5,474	6,347	6,141	6,062	7,032	6,802
	68 (14)	33	5,526	6,505	6,220	6,119	7,198	6,881
		50	5,679	7,163	6,730	6,294	7,929	7,448
	97 (12)	33	5,932	8,108	7,353	6,573	8,943	8,114
		50	6,294	9,590	8,447	6,981	10,573	9,316
12	54 (16)	33	5,380	5,936	5,816	5,954	6,571	6,437
		50	5,457	6,300	6,118	6,043	6,979	6,775
	68 (14)	33	5,511	6,463	6,199	6,102	7,151	6,858
		50	5,657	7,099	6,699	6,268	7,858	7,413
	97 (12)	33	5,908	8,039	7,319	6,547	8,867	8,076
		50	6,258	9,486	8,395	6,941	10,458	9,259
14	68 (14)	33	5,474	6,356	6,146	6,060	7,033	6,800
		50	5,601	6,937	6,619	6,204	7,678	7,325
	97 (12)	33	5,849	7,865	7,233	6,480	8,677	7,982
		50	6,169	9,223	8,265	6,840	10,169	9,116

*Load data is not available for 6" length.

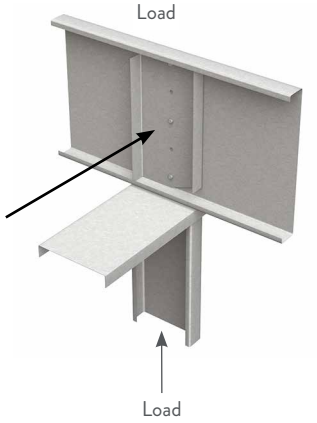
CONDITION 1
(3) #10-16 screws, top, bottom, and middle holes



CONDITION 2
(3) #10-16 screws, top, bottom, and middle holes



CONDITION 3
(3) #10-16 screws, top, bottom, and middle holes



Notes:

1 The tabulated values indicate the total allowable web crippling capacities of a ClarkDietrich joist of the listed size, stiffened with the QuickTwist web stiffener.

2 The joist flanges must be fastened to the support at the bearing location.

3 The 3-1/2" web stiffeners are to be used with bearing widths of 3-1/2" to 5-1/2" in the direction of the joist. The 6" web stiffeners are to be used with bearing widths 6" and greater, in the direction of the joist. A minimum-bearing dimension of 3" in the direction perpendicular to the joist is assumed.

4 Use (3) #10 screws to attach the QuickTwist web stiffener to the joist. Drive screws through the top, bottom, and middle prepunched holes.

5 This table is intended for use by qualified engineers only. It is the responsibility of the engineer to verify that the QuickTwist web stiffener configuration and tabulated values apply to a specific web crippling application.

6 Contact ClarkDietrich at 888-437-3244 for technical assistance.

The technical content of this literature is effective 04/09/26 and supersedes all previous information.

EasyClip™ E-Series™ Support Clip

Long leg accommodates greater standoff for rigid connections

ClarkDietrich EasyClip™ E-Series™ support clips are primarily used for rigid standoff connections. The 4" wide leg provides extra length to achieve standoff connections up to 2-7/8". The EasyClip E-Series support clips are also commonly used in bypass wall conditions, a variety of floor framing applications including solid and ladder blocking attachments and joist-to-joist connections, and to secure rafter framing to the primary structure. Available in a variety of lengths and gauges, these clips are prepunched for faster and more accurate fastener placement.

ALTERNATIVE PRODUCTS

Uni-Clip™
EasyClip™ D-Series™ Anchor Clip
EasyClip T-Series™ Tall Anchor Clip
SwiftClip™ LE-Series™ Support Clip

PRODUCT DIMENSIONS

1-1/2" x 4" x 3"
1-1/2" x 4" x 5"
1-1/2" x 4" x 7"
1-1/2" x 4" x 9"
1-1/2" x 4" x 11"

MATERIAL SPECIFICATIONS

Gauge: 16 gauge (54mils)
Design Thickness: 0.0566 inches

Gauge: 14 gauge (68mils)
Design Thickness: 0.0713 inches

Gauge: 12 gauge (97mils)
Design Thickness: 0.1017 inches

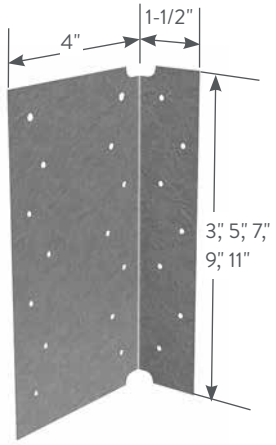
Coating: G90
Yield Strength: 50ksi
ASTM: A653/A653M

CODE APPROVALS & PERFORMANCE STANDARDS

IAPMO ER-731

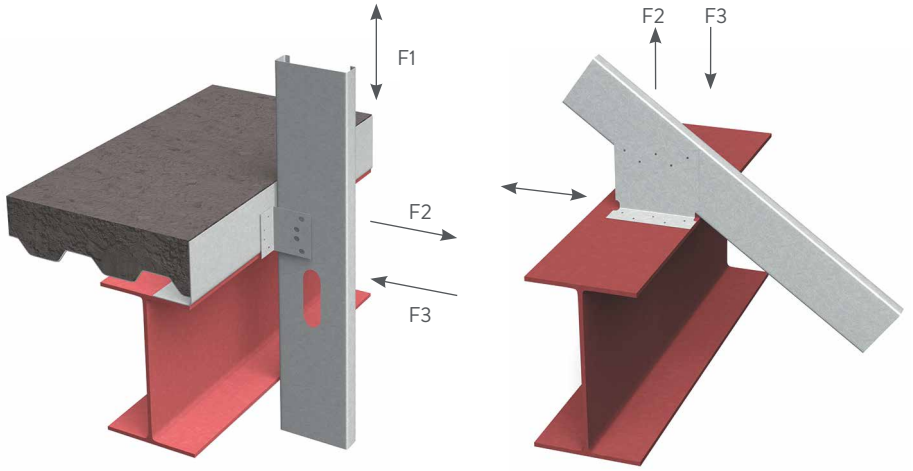
INSTALLATION

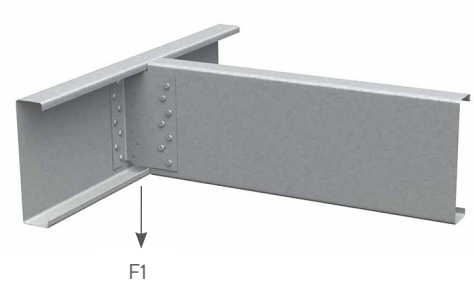
EasyClip E-Series support clips are attached to the cold-formed steel (CFS) framing members using #10 minimum self-drilling screws driven through the clip holes into the steel framing. When not filling all holes, install fasteners symmetrically starting at the top and bottom edges and move toward the center of the clip. Clip can also be welded to the CFS framing. Connections to the building frame can be made with powder-actuated fasteners, drill-in concrete anchors or welding. When using the tabular values for a welded clip, provide a full weld to the structure, top to bottom, along the outside of the clip. A 3/4" minimum weld on the outside edge of the 1-1/2" leg is also required to control warping or to hold the clip in place before final welding.



EasyClip™ E-Series™ Support Clips

Clip Designation	Thickness		Size (in)	Packaging Pcs./Bucket
	mils (ga)	Design Thickness (in)		
E543	54 (16)	0.0566	4 x 1-1/2 x 3	100
E545	54 (16)	0.0566	4 x 1-1/2 x 5	100
E547	54 (16)	0.0566	4 x 1-1/2 x 7	100
E549	54 (16)	0.0566	4 x 1-1/2 x 9	50
E541	54 (16)	0.0566	4 x 1-1/2 x 11	50
E683	68 (14)	0.0713	4 x 1-1/2 x 3	100
E685	68 (14)	0.0713	4 x 1-1/2 x 5	100
E687	68 (14)	0.0713	4 x 1-1/2 x 7	80
E689	68 (14)	0.0713	4 x 1-1/2 x 9	50
E681	68 (14)	0.0713	4 x 1-1/2 x 11	50
E973	97 (12)	0.1017	4 x 1-1/2 x 3	50
E975	97 (12)	0.1017	4 x 1-1/2 x 5	50
E977	97 (12)	0.1017	4 x 1-1/2 x 7	50
E979	97 (12)	0.1017	4 x 1-1/2 x 9	50
E971	97 (12)	0.1017	4 x 1-1/2 x 11	40





The table values are valid only when screws are used along the outside line of the prepunched holes as shown.

E-Series™ Support Clips Allowable Clip Capacities (lbs)

USING #10-16 SELF-DRILLING SCREWS

Clip Designation	No. of Screws to Steel Framing	Stud Thickness and Yield Strength								
		20ga (33mils) 33ksi			18ga (43mils) 33ksi			16ga (54mils) 50ksi		
		F1	F2	F3	F1	F2	F3	F1	F2	F3
E543	3	101 (101)	210 (531)	507	150 (150)	210 (788)	507	266 (155)	210 (1195)	507
E545	2	176 (176)	354 (354)	354	261 (261)	371 (525)	525	463 (453)	371 (933)	811
	5	251 (251)	371 (885)	885	372 (372)	371 (1313)	912	625 (479)	371 (2105)	912
E547	4	380 (380)	531 (708)	708	564 (564)	531 (1050)	1050	1002 (970)	531 (1867)	1347
	7	455 (455)	531 (1239)	1239	675 (675)	531 (1838)	1318	1169 (960)	531 (3015)	1318
E549	4	477 (477)	692 (708)	708	707 (707)	692 (1050)	1050	1257 (1257)	692 (1867)	1753
	9	706 (706)	692 (1593)	1593	1048 (1048)	692 (2363)	1724	1862 (1576)	692 (3925)	1724
E541	6	727 (727)	852 (1062)	1062	1079 (1079)	852 (1576)	1576	1918 (1918)	852 (2800)	2053
	11	995 (995)	852 (1947)	1947	1476 (1476)	852 (2889)	2130	2623 (2301)	852 (4835)	2130
E683	3	101 (101)	333 (531)	531	150 (150)	333 (788)	788	266 (196)	333 (1400)	1011
E685	2	176 (176)	354 (354)	354	261 (261)	525 (525)	525	463 (463)	587 (933)	933
	5	251 (251)	587 (885)	885	372 (372)	587 (1313)	1313	661 (602)	587 (2333)	1817
E687	4	380 (380)	708 (708)	708	564 (564)	841 (1050)	1050	1002 (1002)	841 (1867)	1867
	7	455 (455)	841 (1239)	1239	675 (675)	841 (1838)	1838	1200 (1200)	841 (3267)	2625
E689	4	477 (477)	708 (708)	708	707 (707)	1050 (1050)	1050	1257 (1257)	1095 (1867)	1867
	9	706 (706)	1095 (1593)	1593	1048 (1048)	1095 (2363)	2363	1862 (1862)	1095 (4200)	3434
E681	6	727 (727)	1062 (1062)	1062	1079 (1079)	1349 (1576)	1576	1918 (1918)	1349 (2800)	2800
	11	995 (995)	1349 (1947)	1947	1476 (1476)	1349 (2889)	2889	2623 (2623)	1349 (5133)	4244
E973	3	101 (101)	531 (531)	531	150 (150)	679 (788)	788	266 (266)	679 (1400)	1400
E975	2	176 (176)	354 (354)	354	261 (261)	525 (525)	525	463 (463)	933 (933)	933
	5	251 (251)	885 (885)	885	372 (372)	1196 (1313)	1313	661 (661)	1196 (2333)	2333
E977	4	380 (380)	708 (708)	708	564 (564)	1050 (1050)	1050	1002 (1002)	1713 (1867)	1867
	7	455 (455)	1239 (1239)	1239	675 (675)	1713 (1838)	1838	1200 (1200)	1713 (3267)	3267
E979	4	477 (477)	708 (708)	708	707 (707)	1050 (1050)	1050	1257 (1257)	1867 (1867)	1867
	9	706 (706)	1593 (1593)	1593	1048 (1048)	2229 (2363)	2363	1862 (1862)	2229 (4200)	4200
E971	6	727 (727)	1062 (1062)	1062	1079 (1079)	1576 (1576)	1576	1918 (1918)	2746 (2800)	2800
	11	995 (995)	1947 (1947)	1947	1476 (1476)	2746 (2889)	2889	2623 (2623)	2746 (5133)	5133

Notes:

Screw Capacity Notes:

1 The tabulated value indicates the number of screws in a single clip leg attached to the cold-formed steel (CFS) framing.

2 Screws shall be attached in a symmetric manner, starting at the outside holes. See screw options on opposite page and above for examples.

3 The allowable values for F1 are based only on the shear capacity of the 4" clip leg attached to the CFS framing. The capacity of the attachment to other materials and structures must be checked separately.

4 The allowable values for F2 assume mechanical fasteners are attached to the structure using the 1-1/2" leg, and are along the vertical centerline of the clip leg. Mechanical fasteners to other materials and structures must be checked separately.

5 This table is intended for use by qualified engineers only. It is the responsibility of the engineer to verify that the tabulated values apply to a specific connection application.

6 When clips have combinations of F1, F2, and F3, use a linear interaction for combinations of F1 and F3, and a squared interaction for combinations of F1 and F2.

7 The screw diameter must be 0.19" (min) for #10 screws.

8 The ultimate screw shear strength must be a minimum of 1400 lbs for #10 screws.

9 Screws must be long enough so at least three exposed threads are visible after installation.

10 Allowable loads have not been increased 33% for wind or seismic.

11 For connections made to 14ga (68mils) and 12ga (97mils), use the tabulated values for 16ga (54mils), 50ksi.

12 Contact ClarkDietrich Technical Services at 888-437-3244 for assistance.

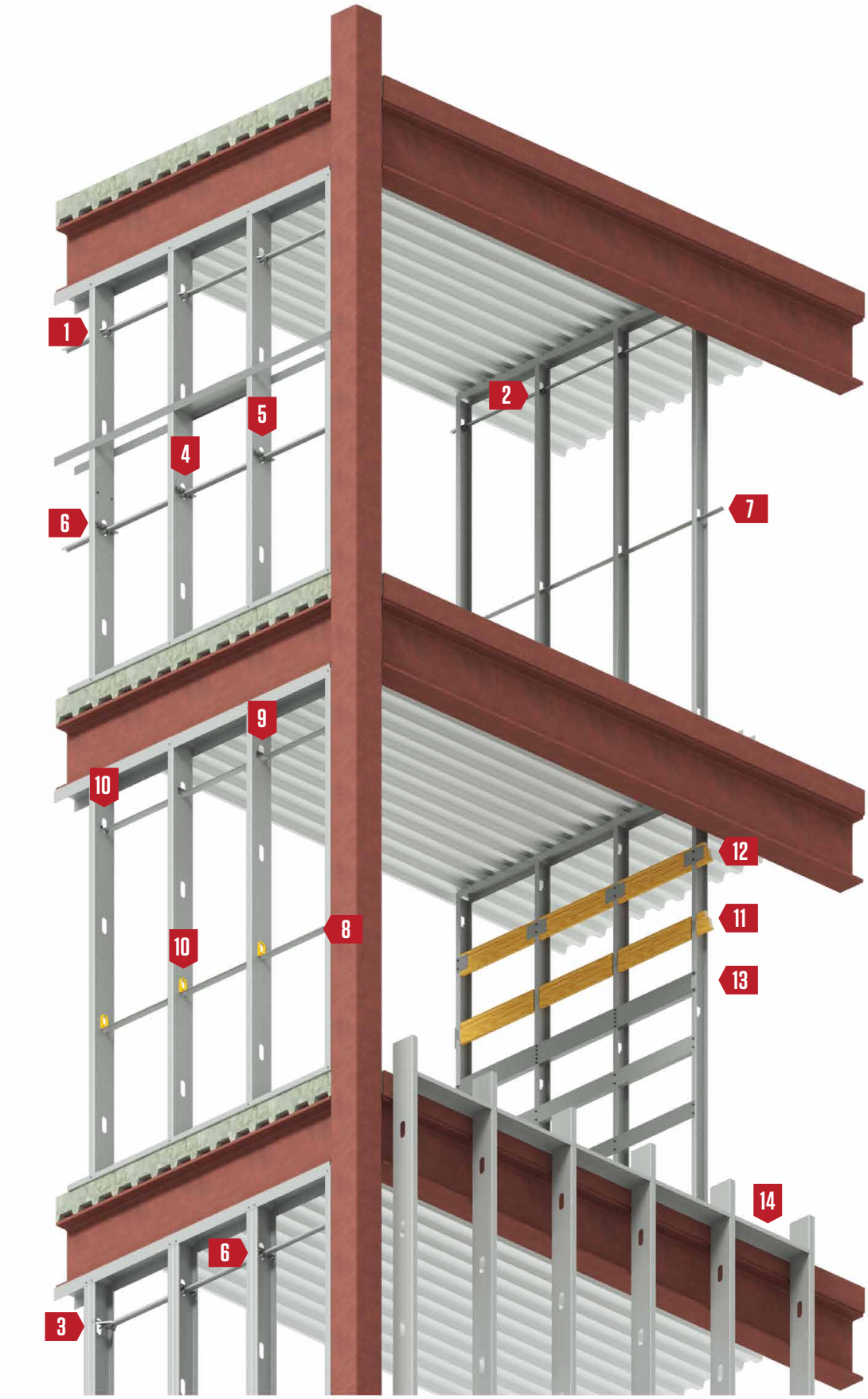
Weld Capacity Notes:

1 F1 and F2 values in parentheses are maximum shear and tension capacities when the clips are welded to the base structure (min 3/16" – 36ksi).

2 Listed weld capacities are computed assuming an E70XX welding rod or wire.

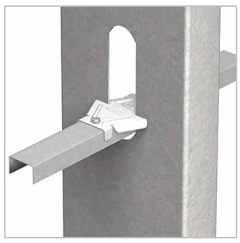
3 The clips are to be welded to the structure along the back corner along the complete length of the clip. When secondary welds are used to hold the clip in place, they are not used in capacity calculations.

Product Detail

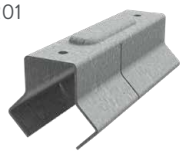


1 FastBridge™ Clip
pages 198–199



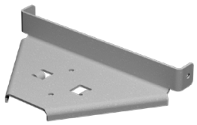


2 CC33 3/4" Channel Clip
page 200-201





3 Bridging Termination Clip
page 202-203





4 EasyClip X-Series™ Clip Angle
pages 204–205



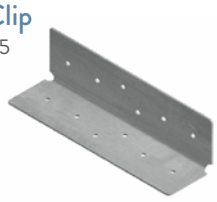


5 EasyClip™ U-Series™ Clip Angle
page 137





6 SwiftClip™ L-Series™ Support Clip
pages 134–135





7 Spazzer® 9200 Spacer Bar
page 206





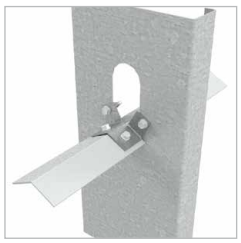
8 Spazzer® 5400 Spacer Bar
page 207-211





9 Spazzer® Bar Fly Clip
page 212





10 Spazzer® Bar Guard and Snap-in Grommet
page 207



11 FastBack™ Backing System
page 213



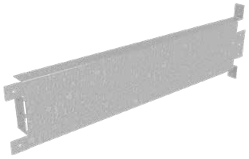


12 Danback® Flexible Wood Backing Plate
pages 214–215





13 Backer Bar
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14 BlazeFrame® Shield
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The technical content of this literature is effective 04/09/26 and supersedes all previous information. Pub. No. CD-ClipExpress 04/26

FastBridge™ Clip

Secures U-channel (cold-rolled channel) framing members for load-bearing or curtain wall applications

The ClarkDietrich FastBridge clip is used to secure U-Channel or Cold-Rolled Channel (CRC) to structural or non-structural wall studs when used in load-bearing, curtain wall or drywall framing applications. The wall stud friction fit design allows for as little as one screw for the connection to the U-channel.

The FastBridge clip is a stiffened, G90 galvanized steel clip that's tested and designed to facilitate the rapid, efficient installation of 1-1/2" U-channel lateral bracing for exterior curtain wall framing, load-bearing walls or interior partitions constructed of structural or non-structural studs.

- FB33 for use with 20ga-16ga structural studs or ProSTUD® Drywall Studs
- FB43 for use with 20ga-16ga structural studs
- FB68 for use with 16ga-12ga structural studs

MATERIAL SPECIFICATIONS

Gauge: 20 gauge STR (33mils)
Design Thickness: 0.0346 inches

Gauge: 18 gauge (43mils)
Design Thickness: 0.0451 inches

Gauge: 14 gauge (68mils)
Design Thickness: 0.0713 inches

Coating: G90

CODE APPROVALS & PERFORMANCE STANDARDS

ASTM: S100, S220, S240

ALTERNATIVE PRODUCTS

- Spazzer® 5400 and 9200 Bridging Bar
- U-Channel with SwiftClip™ LS-Series™ Support Clip
- EasyClip™ U-Series™ Clips

INSTALLATION

U-Channel is inserted into the stud punchout (spacing as specified by design) and rotated into place (leg down). Place the FastBridge Clip inside the punchout (stiffened wings down) and twist allowing the friction fit design to hold the clip into place. The clip must be firmly seated over the top web of the U-channel. FastBridge clips are fastened using #10 self-drilling screws driven through the clip hole into the U-channel. More than one screw may be need depending on design. The FastBridge clip should not be used in studs over 8" wide.





FastBridge™ Clip Angles (FB)

Product Code	Thickness				Knockout Size	Packaging Pcs/Bucket
	mils (ga)	Yield Strength (ksi)	Design Thickness (in)	Min. Thickness (in)		
FB33	33 (20 STR)	33	0.0346	0.0329	1-1/2"	200
FB43	43 (18)	50	0.0451	0.0428	1-1/2"	200
FB68	68 (14)	50	0.0713	0.0677	1-1/2"	200

U.S. Patent No. D692,746 and Canadian Patent No. 152,547

FastBridge™ Clip Angles (FB43) Allowable Clip Capacities (lbs)

Product Code	No. of Screws to Steel Framing	Stud Depth (in)	Allowable Connector Capacity	Stud Thickness and Yield Strength		
				33mils (20ga)	43mils (18ga)	54mils (16ga)
FB43	1	3.625	Axial Brace Stiffness (lbs/in)	1140	1330	2270
	2			1220	1480	2270
	1		Axial Brace Strength (lbs)	178	210	273
	2			275	318	424
	1		Torsional Moment (in-lbs)	148	182	208
	2			331	430	556
FB43	1	4.00	Axial Brace Stiffness (lbs/in)	1030	1460	2170
	2			1190	1520	3030
	1		Axial Brace Strength (lbs)	191	213	263
	2			283	321	426
	1		Torsional Moment (in-lbs)	137	182	234
	2			403	403	498
FB43	1	6.00	Axial Brace Stiffness (lbs/in)	790	990	1730
	2			990	1160	1930
	1		Axial Brace Strength (lbs)	107	214	290
	2			263	324	450
	1		Torsional Moment (in-lbs)	166	170	172
	2			296	406	567
FB43	1	8.00	Axial Brace Stiffness (lbs/in)	—	750	1910
	2			—	750	1960
	1		Axial Brace Strength (lbs)	—	212	272
	2			—	302	438
	1		Torsional Moment (in-lbs)	—	152	343
	2			—	461	526

FastBridge™ Clip Angles (FB68) Allowable Clip Capacities (lbs)

Product Code	No. of Screws to Steel Framing	Stud Depth (in)	Allowable Connector Capacity	Stud Thickness and Yield Strength		
				54mils (16ga)	68mils (14ga)	97mils (12ga)
FB68	1	3.625	Axial Brace Stiffness (lbs/in)	3410	4410	6270
	2			4010	6880	7585
	1		Axial Brace Strength (lbs)	465	520	573
	2			665	732	823
	1		Torsional Moment (in-lbs)	332	440	435
	2			735	894	1150
FB68	1	4.00	Axial Brace Stiffness (lbs/in)	3060	3440	6740
	2			3710	4670	8960
	1		Axial Brace Strength (lbs)	475	505	505
	2			676	752	878
	1		Torsional Moment (in-lbs)	382	462	564
	2			724	802	938
FB68	1	6.00	Axial Brace Stiffness (lbs/in)	2270	3240	3200
	2			2710	3870	3530
	1		Axial Brace Strength (lbs)	468	506	515
	2			682	788	885
	1		Torsional Moment (in-lbs)	294	412	670
	2			686	758	1004
FB68	1	8.00	Axial Brace Stiffness (lbs/in)	1940	2500	2530
	2			1960	2810	3015
	1		Axial Brace Strength (lbs)	463	510	517
	2			637	747	898
	1		Torsional Moment (in-lbs)	310	512	674
	2			682	788	963

Notes:

1 Allowable loads are based on the use of cold-formed steel studs with a minimum yield strength of Fy=33ksi and tensile strength of Fu=45ksi for 43mils (18ga) or thinner; and a minimum yield strength Fy=50ksi and tensile strength Fu=65ksi for 54mils (16ga) or thicker.

2 Allowable loads are based on 54mils (16ga) u-channel bridging with a minimum yield strength Fy=33ksi and tensile strength Fu=45ksi.

3 Allowable loads are for the bridging connection only. The strength and serviceability of the framing members is the responsibility of the designer.

4 Allowable loads are based on #10 self-drilling screws with a nominal diameter of 0.190 in. and a washer diameter of 0.375 in. Fasteners must have a minimum nominal shear strength of Pss=1718 lbs and a nominal tensile strength of Pts=2654 lbs.

5 Allowable loads may not be increased for wind or seismic load.

6 Allowable loads are for use when using ASD design methodology. For LRFD loads, multiply ASD allowable loads by 1.6.

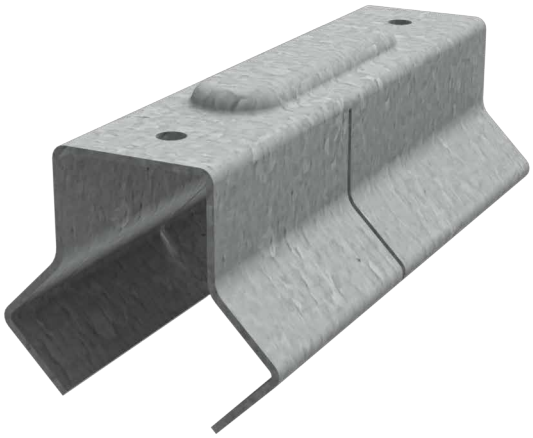
7 Allowable brace loads are based on ultimate test loads divided by a safety factor. Serviceability limits are not considered. Brace stiffness requirements are detailed in AISI S100 Section D3.3.

8 Axial brace stiffness values apply to both ASD and LRFD designs.

CC33 3/4" Channel Clip

33mils (20 gauge) lateral bracing clip used to secure 3/4" U-channel (cold-rolled channel) to drywall studs

The ClarkDietrich CC33 clip is used to secure U-Channel or Cold-Rolled Channel (CRC) to non-structural wall studs. The wall stud friction fit design allows for as few as one screw for the connection to the U-Channel.



The CC33 clip is a stiffened, G90 galvanized steel clip that's tested and designed to facilitate the rapid, efficient installation of 3/4" U-Channel lateral bracing for non-structural interior wall framing constructed of ProSTUD® Drywall Framing or non-structural studs. The CC33 clip should not be used in studs over 6" wide.

PRODUCT DIMENSIONS

Made to fit over ¾" U-Channel and inside a drywall punchout.
Packaging: (200) pieces per bucket
Product weight: 0.12 lb/piece

MATERIAL SPECIFICATIONS

Gauge: 20gauge (33mils)
Design Thickness: 0.0346 inches
Coating: G90
Yield Strength: 33ksi
ASTM: C645, A1003

ALTERNATIVE PRODUCTS

- U-Channel with SwiftClip™ LS-Series™ Support Clip
- Spazzer® 9200 Bridging Bar

INSTALLATION

CC33 clips are fastened using #8 self-drilling screws driven through the clip hole into the U-Channel. More than one screw may be needed depending on design. Design loads and tables can be found at clarkdietrich.com.



CC33 3/4" Channel Clip (CC33)

Clip Designation	Thickness		Packaging Pcs./Bucket
	mils (ga)	Design Thickness (in)	
CC33	33 (20)	0.0346	200

U.S. Patent No. D822,455

CC33 3/4" Channel Clip

DRYWALL BRIDGING CONNECTOR W/ PROSTUD DRYWALL STUDS

Clip Designation	Stud Member	Stud Thickness (mils)	Allowable Torsional Moment (in-lbs)	
			1 - #8 Screw	2 - #8 Screw
CC33	362PDS125	PDS125-15	50	70
		PDS125-19	70	90
		PDS125-22	85	100
		PDS125-30	90	125
		PDS125-33	90	135
	600PDS125	PDS125-15	70	85
		PDS125-19	95	100
		PDS125-22	95	100
		PDS125-30	100	125
		PDS125-33	100	140

Notes:

1 Allowable loads are based on cold-formed steel studs with a minimum yield strength specified for ProSTUD Members.
2 Allowable loads are based on 54 mils (16ga) u-channel bridging with a minimum yield strength, Fy=33ksi and tensile strength, Fu=45ksi.
3 Allowable loads consider the bridging connection only. It is the responsibility of the designer to verify the strength and serviceability of the framing members.
4 Allowable loads are based on #8 self-drilling screws with a nominal diameter of 0.164-in and a head diameter of 0.272-in. Fasteners must have a minimum nominal shear strength, Pss=1278-lbs and a nominal tensile strength, Pts=586-lbs.
5 Screw shear strength is the average value, and tension strength is the lowest value listed on CFSEI Tech Note (F701-23).
6 Allowable loads may not be increased for wind or seismic load.
7 Allowable loads are for use when utilizing ASD (Allowable Stress Design) methodology. For LRFD loads multiply the ASD tabulated values by 1.6.

CC33 Maximum Bridging Distance (ft.)

Stud Spacing (in)	Stud Member	Stud Thickness (mils)	Lateral Stud Pressure (psf)			
			5psf	10psf	5psf	10psf
			1 - #8 Screw	1 - #8 Screw	2 - #8 Screw	2 - #8 Screw
12	362PDS125	PDS125-15	8	4	8	5
		PDS125-19	8	5	8	7
		PDS125-22	8	7	8	8
		PDS125-30	8	7	8	8
		PDS125-33	8	7	8	8
	600PDS125	PDS125-15	8	6	8	8
		PDS125-19	8	8	8	8
		PDS125-22	8	8	8	8
		PDS125-30	8	8	8	8
		PDS125-33	8	8	8	8
16	362PDS125	PDS125-15	6	3	8	4
		PDS125-19	8	4	8	5
		PDS125-22	8	5	8	6
		PDS125-30	8	5	8	7
		PDS125-33	8	5	8	8
	600PDS125	PDS125-15	8	5	8	6
		PDS125-19	8	6	8	6
		PDS125-22	8	7	8	7
		PDS125-30	8	7	8	8
		PDS125-33	8	7	8	8
24	362PDS125	PDS125-15	4	2	5	3
		PDS125-19	5	3	7	3
		PDS125-22	7	3	8	4
		PDS125-30	7	4	8	5
		PDS125-33	7	4	8	5
	600PDS125	PDS125-15	6	3	8	4
		PDS125-19	8	4	8	4
		PDS125-22	8	4	8	5
		PDS125-30	8	5	8	6
		PDS125-33	8	5	8	7

Notes:

1 Tabulated maximum bridging distances are for ASD lateral pressures.
2 Tabulated maximum bridging distances are based on the CC33 tested connection strength.
3 Studs must be checked for unbraced length separately.
4 Lateral pressures shall be determined based on the load combinations of the applicable building code.

Bridging Termination Clip

U-Channel lateral bracing clip

The ClarkDietrich Bridging Termination clip is used to secure U-Channel or Cold Rolled Channel (CRC) to structural wall studs when used in load-bearing or curtain wall applications. (loads for structural stud gauges of 20, 18, 16, 14 & 12). The BTC's unique design allows for quicker installation in end-of-wall conditions.

The BTC is a stiffened, G90 galvanized steel clip that's tested and designed to facilitate rapid, efficient installation of 1-1/2" U-Channel lateral bracing for exterior curtain wall framing, load-bearing walls or high interior partitions constructed of structural studs.

BTC clips are fastened using #8 self-drilling screws; 2 screws between clip and U-channel and 2 screws between clip and stud flanges. The BTC clips are designed to be used with 3-5/8", 4" or 6" structural studs only.

U.S. Patent No. 10,851,539 B2
U.S. Patent No. D820,664 S1

MATERIAL SPECIFICATIONS

Gauge: 18 gauge (43mils)
Design Thickness: 0.0451 inches

Gauge: 16 gauge (54mils)
Design Thickness: 0.0566 inches

Gauge: 14 gauge (68mils)
Design Thickness: 0.0713 inches

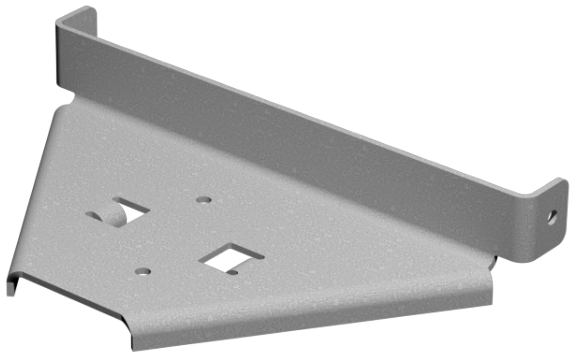
Coating: G90
ASTM: A653/A653M, A1003/A1003M

ALTERNATIVE PRODUCTS

- FastBridge™ Clip (FB33, FB43 & FB68)
- U-Channel with SwiftClip™ LS-Series™ Support Clip

INSTALLATION

Install the BTC by sliding the flanges of the clip over the open side of the stud and positioning the clip over the CRC using the guides on the underside of the clip. Once in place, fasten to the CRC using #8 screws. Finally, fasten the flanges of the clip to the stud flange by using #8 screws.



BTC for 3-5/8" studs

Clip Designation	Thickness				Packaging Pcs./Bucket
	mils (ga)	Yield Strength (ksi)	Design Thickness (in)	Min. Thickness (in)	
BTC3-43	43 (18)	50	0.0451	0.0428	100
BTC3-54	54 (16)		0.0566	0.0538	100
BTC3-68	68 (14)		0.0713	0.0677	100

BTC for 4" studs

Clip Designation	Thickness				Packaging Pcs./Bucket
	mils (ga)	Yield Strength (ksi)	Design Thickness (in)	Min. Thickness (in)	
BTC4-43	43 (18)	50	0.0451	0.0428	100
BTC4-54	54 (16)		0.0566	0.0538	100
BTC4-68	68 (14)		0.0713	0.0677	100

BTC for 6" studs

Clip Designation	Thickness				Packaging Pcs./Bucket
	mils (ga)	Yield Strength (ksi)	Design Thickness (in)	Min. Thickness (in)	
BTC6-43	43 (18)	50	0.0451	0.0428	50
BTC6-54	54 (16)		0.0566	0.0538	50
BTC6-68	68 (14)		0.0713	0.0677	50



Bridging Termination Clip Load Tables

Clip Designation	Stud Depth (in)	Clip mils (ga)	Allowable Capacities	Stud Thickness, mils (ga)				
				33mils (20ga)	43mils (18ga)	54mils (16ga)	68mils (14ga)	97mils (12ga)
BTC3	3-5/8	43 (18)	Axial Brace Stiffness (lbs/in)	2120	2120	2120	2190	2190
BTC4	4		Axial Brace Strength (lbs)	215	235	240	280	280
BTC6	6		Torsional Moment (in-lbs)	310	310	320	325	325
BTC3	3-5/8	54 (16)	Axial Brace Stiffness (lbs/in)	2965	3135	3175	3345	3345
BTC4	4		Axial Brace Strength (lbs)	320	350	375	410	410
BTC6	6		Torsional Moment (in-lbs)	510	515	520	525	525
BTC3	3-5/8	68 (14)	Axial Brace Stiffness (lbs/in)	3915	4325	4525	4825	4825
BTC4	4		Axial Brace Strength (lbs)	460	500	555	570	570
BTC6	6		Torsional Moment (in-lbs)	760	775	775	790	790

Notes:

1 Allowable loads are based on the use of cold-formed steel studs with a minimum yield strength, Fy=33 ksi and tensile strength, Fu=45 ksi for 43mils (18ga) or thinner and a minimum yield strength, Fy=50 ksi and tensile strength, Fu=65 ksi for 54 mils (16ga) or thicker.

2 Allowable loads are based on 54mils (16ga) U-Channel bridging with a minimum yield strength, Fy=33 ksi and tensile strength, Fu=45 ksi.

3 Allowable loads are for the termination bridging connection only. The strength and serviceability of the framing members is the responsibility of the designer.

4 Allowable loads are based on minimum #8 self drilling with a minimum nominal diameter of 0.163-in and a minimum head diameter of 0.437-in. Fasteners must have a minimum nominal shear strength of, Pss=1452-lbs and a nominal tensile strength of, Pts = 2089 lbs. (See ICC-ESR 1271 for fastener information.)

5 Allowable loads are based on the use of 2 screws between clip and U-Channel and 2 screws between clip and stud flanges.

6 Allowable loads may not be increased for wind or seismic load.

7 Allowable loads are for use when using ASD design methodology. For LRFD loads, multiply ASD allowable loads by 1.6.

8 Allowable brace loads were derived from nominal loads obtained from tests, divided by a safety factor. Serviceability limits are not considered. Brace stiffness requirements are detailed in AISI S100 Section C2.2.2.

9 Axial brace stiffness values apply to both ASD and LRFD designs.

The technical content of this literature is effective 04/09/26 and supersedes all previous information. Pub. No. CD-ClipExpress 04/26

EasyClip™ X-Series™ Clip Angle

Secures U-channel (cold-rolled channel) framing members for lateral bridging, or secures one framing member to another for rigid connections.

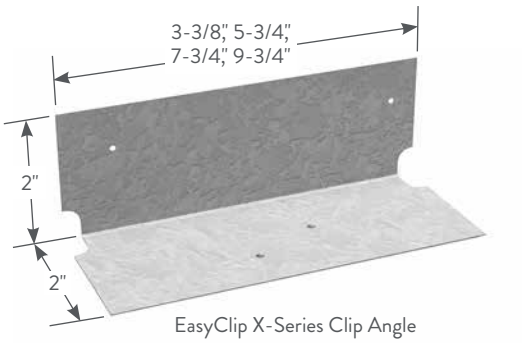
ClarkDietrich EasyClip™ X-Series™ clip angles are used to secure U-channel to wall studs for lateral bridging. U-Channel is passed through the stud knockout and an EasyClip X-Series clip is screw attached or welded to provide a rigid connection. X-Series clip angles and U-channel should not be used in lateral bridging when stud width exceeds 6."

ALTERNATIVE PRODUCTS

FastBridge™ Clip
EasyClip™ U-Series™ Clip Angle
EasyClip S-Series™ Support Clip
SwiftClip™ LS-Series™ Support Clip
Spazzer® 5400 and Spazzer® 9200 Spacer Bars

PRODUCT DIMENSIONS

2" x 2" x 3-3/8"
2" x 2" x 5-3/4"
2" x 2" x 7-3/4"
2" x 2" x 9-3/4"



EasyClip X-Series Clip Angle

MATERIAL SPECIFICATIONS

Gauge: 16 gauge (54mils)
Design Thickness: 0.0566 inches

Gauge: 14 gauge (68mils)
Design Thickness: 0.0713 inches

Gauge: 12 gauge (97mils)
Design Thickness: 0.1017 inches

Coating: G90
Yield Strength: 50ksi
ASTM: A653/A653M

INSTALLATION

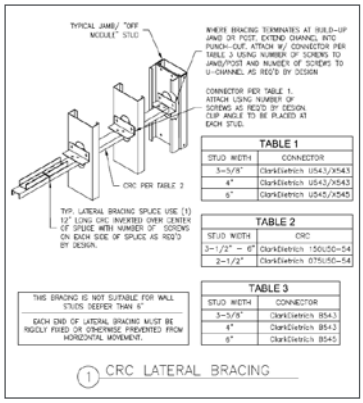
EasyClip X-Series Clip Angles are attached to cold-formed steel (CFS) framing members using #10 minimum self-drilling screws driven through the clip holes into the steel framing. Four pilot clip holes are provided and should be filled when this clip is used in a bridging application. This clip should not be more than 1/4" less in width than the cold-formed framing member.



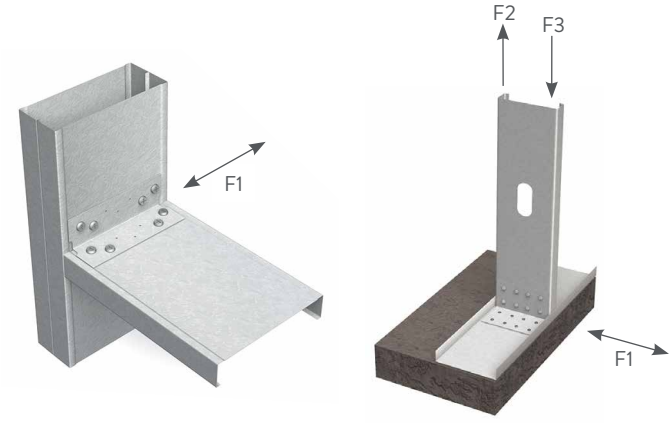
EasyClip™ X-Series™ Clip Angles

Clip Designation	Thickness		Size (in)	Packaging Pcs./Bucket
	mils (ga)	Design Thickness (in)		
X543	54 (16)	0.0566	2 x 2 x 3-3/8	200
X545	54 (16)	0.0566	2 x 2 x 5-3/4	170
X547	54 (16)	0.0566	2 x 2 x 7-3/4	100
X549	54 (16)	0.0566	2 x 2 x 9-3/4	100
X683	68 (14)	0.0713	2 x 2 x 3-3/8	200
X685	68 (14)	0.0713	2 x 2 x 5-3/4	100
X687	68 (14)	0.0713	2 x 2 x 7-3/4	100
X689	68 (14)	0.0713	2 x 2 x 9-3/4	80
X973	97 (12)	0.1017	2 x 2 x 3-3/8	100
X975	97 (12)	0.1017	2 x 2 x 5-3/4	100
X977	97 (12)	0.1017	2 x 2 x 7-3/4	60
X979	97 (12)	0.1017	2 x 2 x 9-3/4	60

TYPICAL CONSTRUCTION DETAILS



Visit our CAD Library at clarkdietrich.com to view or download construction details in .dwg, .dxf, and .pdf formats.



EasyClip™ X-Series™ Clip Angles Allowable Clip Capacities (lbs)

USING #10-16 SELF-DRILLING SCREWS

Clip Designation	No. of Screws to Steel Framing	Stud Thickness and Yield Strength								
		20ga (33mils) 33ksi			18ga (43mils) 33ksi			16ga (54mils) 50ksi		
		F1	F2	F3	F1	F2	F3	F1	F2	F3
X543	4	390 (390)	150 (531)	531	578 (578)	150 (788)	788	1028 (904)	150 (1400)	1400
X545	3	449 (449)	231 (531)	531	666 (666)	231 (788)	788	1184 (1184)	231 (1400)	1400
	5	677 (677)	231 (885)	885	1004 (1004)	231 (1313)	1313	1785 (1785)	231 (2333)	2333
	7	974 (974)	231 (1239)	1239	1445 (1445)	231 (1838)	1838	2568 (1810)	231 (2617)	3267
X547	5	761 (761)	311 (885)	885	1130 (1130)	311 (1313)	1313	2007 (2007)	311 (2333)	2333
	7	1031 (1031)	311 (1239)	1239	1529 (1529)	311 (1838)	1838	2718 (2718)	311 (3267)	3267
	9	1298 (1298)	311 (1593)	1593	1926 (1926)	311 (2363)	2363	3423 (2789)	311 (3527)	4200
X549	7	1102 (1102)	391 (1239)	1239	1635 (1635)	391 (1838)	1838	2905 (2905)	391 (3267)	3267
	9	1397 (1397)	391 (1593)	1593	2072 (2072)	391 (2363)	2363	3682 (3682)	391 (4200)	4200
	11	1690 (1690)	391 (1947)	1947	2508 (2508)	391 (2889)	2889	4457 (3779)	391 (4437)	5133
X683	4	390 (390)	238 (531)	531	578 (578)	238 (788)	788	1028 (1028)	238 (1400)	1400
X685	3	449 (449)	365 (531)	531	666 (666)	365 (788)	788	1184 (1184)	365 (1400)	1400
	5	677 (677)	365 (885)	885	1004 (1004)	365 (1313)	1313	1785 (1785)	365 (2333)	2333
	7	974 (974)	365 (1239)	1239	1445 (1445)	365 (1838)	1838	2568 (2278)	365 (3267)	3267
X687	5	761 (761)	492 (885)	885	1130 (1130)	492 (1313)	1313	2007 (2007)	492 (2333)	2333
	7	1031 (1031)	492 (1239)	1239	1529 (1529)	492 (1838)	1838	2718 (2718)	492 (3267)	3267
	9	1298 (1298)	492 (1593)	1593	1926 (1926)	492 (2363)	2363	3423 (3423)	492 (4200)	4200
X689	7	1102 (1102)	619 (1239)	1239	1635 (1635)	619 (1838)	1838	2905 (2905)	619 (3267)	3267
	9	1397 (1397)	619 (1593)	1593	2072 (2072)	619 (2363)	2363	3682 (3682)	619 (4200)	4200
	11	1690 (1690)	619 (1947)	1947	2508 (2508)	619 (2889)	2889	4457 (4457)	619 (5133)	5133
X973	4	390 (390)	485 (531)	531	578 (578)	485 (788)	788	1028 (1028)	485 (1400)	1400
X975	3	449 (449)	531 (531)	531	666 (666)	743 (788)	788	1184 (1184)	743 (1400)	1400
	5	677 (677)	743 (885)	885	1004 (1004)	743 (1313)	1313	1785 (1785)	743 (2333)	2333
	7	974 (974)	743 (1239)	1239	1445 (1445)	743 (1838)	1838	2568 (2568)	743 (3267)	3267
X977	5	761 (761)	885 (885)	885	1130 (1130)	1002 (1313)	1313	2007 (2007)	1002 (2333)	2333
	7	1031 (1031)	1002 (1239)	1239	1529 (1529)	1002 (1838)	1838	2718 (2718)	1002 (3267)	3267
	9	1298 (1298)	1002 (1593)	1593	1926 (1926)	1002 (2363)	2363	3423 (3423)	1002 (4200)	4200
X979	7	1102 (1102)	1239 (1239)	1239	1635 (1635)	1260 (1838)	1838	2905 (2905)	1260 (3267)	3267
	9	1397 (1397)	1260 (1593)	1593	2072 (2072)	1260 (2363)	2363	3682 (3682)	1260 (4200)	4200
	11	1690 (1690)	1260 (1947)	1947	2508 (2508)	1260 (2889)	2889	4457 (4457)	1260 (5133)	5133

Notes:

Screw Capacity Notes:

1 The tabulated value indicates the number of screws in a single clip leg attached to the cold-formed steel (CFS) framing.

2 Screws shall be attached in a symmetric manner starting at the top and bottom and moving toward the center.

3 The allowable values for F1 are based only on the shear capacity of the clip leg attached to the CFS framing. The capacity of the attachment to other materials and structures must be checked separately.

4 The allowable values for F2 assume mechanical fasteners are attached to the structure, and are located no more than 1" away from the angle bend. Mechanical fasteners to other materials and structures must be checked separately.

5 This table is intended for use by qualified engineers only. It is the responsibility of the engineer to verify that the tabulated values apply to a specific connection application.

6 When clips have combinations of F1, F2 and F3, use a linear interaction for combinations of F1 and F3, and a squared interaction for combinations of F1 and F2.

7 Allowable loads have not been increased 33% for wind or seismic.

8 For connections made to 14ga (68mils) and 12ga (97mils), use the tabulated values for 16ga (54mils), 50ksi.

9 It is the responsibility of the design professional to detail the drawings for proper clip attachment.

10 Contact ClarkDietrich Technical Services at 888-437-3244 for assistance.

Weld Capacity Notes:

1 F1 and F2 values in parentheses are maximum shear and tension capacities when the clips are welded to the base structure (min 3/16" – 36ksi steel).

2 Listed weld capacities are computed assuming an E70XX welding rod or wire.

3 The clips are to be welded to the structure along the back corner along the complete length of the clip. When secondary welds are used to hold the clip in place, they are not used in capacity calculations.

Spazzer® 9200 Spacer Bar

Facilitates the rapid erection of interior, nonload-bearing, nonstructural studs into a rigid, accurately laid out gridwork

The TradeReady® Spazzer® 9200 spacer bar is a prenotched, 20 gauge, galvanized steel spacer and bridging bar. The Spazzer 9200 bar facilitates rapid erection of studs into a rigid, accurately laid out gridwork that has excellent resistance to stud rotation and displacement. Hanging drywall is also faster and easier because the Spazzer 9200 bar eliminates the bow that often occurs in tall interior studs. TradeReady Spazzer 9200 bar is a 20 gauge bar that is 50" long and prenotched to hold studs rigidly on 16" or 24" centers. The slots have been pre-engineered to hold studs in place by utilizing "shear" to bridge studs into a rigid gridwork. Eliminates clip angles and installs up to 80% faster than traditional bridging methods.

ALTERNATIVE PRODUCTS

U-Channel with EasyClip™ U-Series™ Clip Angle
U-Channel with SwiftClip™ LS-Series™ Support Clip
Spazzer® 5400 Spacer Bar

PRODUCT DIMENSIONS

7/8" x 7/8" x 50"

MATERIAL SPECIFICATIONS

Gauge: 20 gauge (33mils)
Design Thickness: 0.0346 inches
Coating: G40
Yield Strength: 33ksi

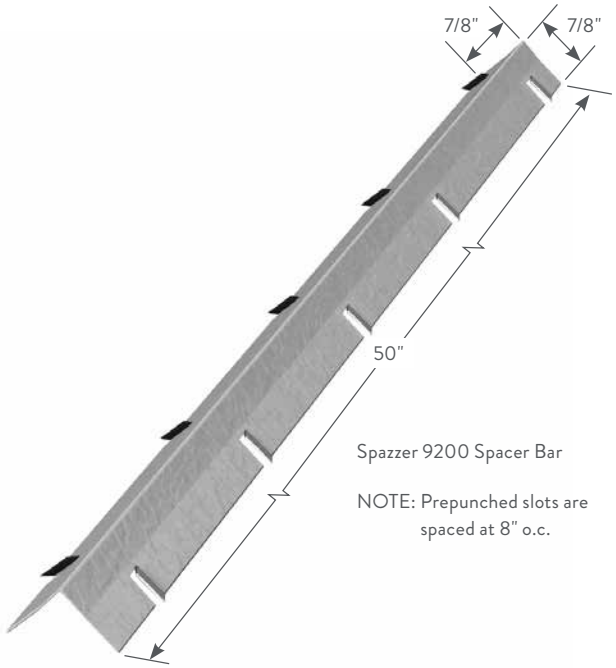
CODE APPROVALS & PERFORMANCE STANDARDS

AISI: S100, S220

INSTALLATION

Insert the prenotched, 50" Spazzer bar through the appropriate stud punchouts and rotate the bridging bar to engage or grip the stud. Use the prenotched slots to automatically lay out studs on 16" or 24" centers. Press the Spazzer bar firmly into place. Overlap the last slot with the next piece of Spazzer and continue to repeat the process.





Spazzer 9200 Spacer Bar

NOTE: Prepunched slots are spaced at 8" o.c.

Spazzer® 9200 Spacer Bar (SPZD)

Product Code	Thickness		Size (in)	Packaging	
	mils (ga)	Design Thickness (in)		Pcs./ Carton	Pcs./ Skid
SPZD	33 (20)	0.0346	7/8 x 7/8 x 50	25	1350

Spazzer® 5400 Spacer Bar, Bar Guard™ & Grommet

Engineered to facilitate the rapid erection of exterior curtain wall framing

ClarkDietrich TradeReady® Spazzer® 5400 (16ga and 18ga) spacer bar is a pre-notched, galvanized steel spacer and bridging bar, engineered to facilitate the rapid, efficient erection of exterior curtain wall framing, load-bearing walls and high interior partitions constructed of structural studs. Until now, most bridging in steel studs was accomplished with cold-rolled channel that required bridging clips or welding. The Spazzer bridging bar features proprietary prepunched slots that enable faster installation by eliminating the need for a separate clip angle, while providing excellent torsional and lateral stud restraint. Up to 90% faster installation when used in non-loadbearing application. The Spazzer Bar Guard™ retainer clip or the Spazzer snap-in grommet should be used to secure the Spazzer bar when used in load-bearing applications.

ALTERNATIVE PRODUCTS

U-Channel with EasyClip™ U-Series™, U-Channel with SwiftClip™ LS-Series™ Support Clip, U-Channel with FastBridge Clip, Block and Strap

PRODUCT DIMENSIONS

1-1/4" x 1-1/4" x 50"

MATERIAL SPECIFICATIONS

Gauge: 16 gauge (54mils)
Design Thickness: 0.0566 inches

Gauge: 18 gauge (43mils)
Design Thickness: 0.0451 inches

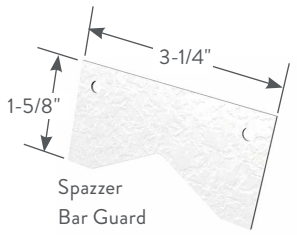
Coating: CP60
Yield Strength: 50ksi
ASTM: A653/A653M, C955

LOAD-BEARING WALL INSTALLATION

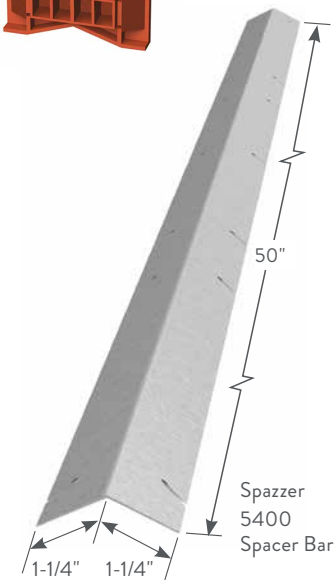
The TradeReady Spazzer bar is passed through the stud knockouts and rotated 90° into position, engaging each side of the knockout. For load-bearing studs, the Spazzer bar guard bar retainer clip and the Spazzer snap-in grommet both require screws to keep the bar in place. The TradeReady Spazzer bar should be installed at a maximum 4' o.c. vertically or per specification The Spazzer 5400 is not designed for use with 12ga and heavier structural studs and should not be used in studs over 8" wide.

NONLOAD-BEARING WALL INSTALLATION

The TradeReady Spazzer bar is passed through the stud knockouts and rotated 90° into position, engaging each side of the knockout. For 20 gauge studs, the Spazzer bar guard retainer clip and the Spazzer snap-in grommet both require screws to keep the bar in place. The TradeReady Spazzer bar should be installed at maximum 5' o.c. vertically or per specification. The Spazzer 5400 is not designed for use with 12ga and heavier structural studs and should not be used in studs over 8" wide.







Spazzer® 5400 Spacer Bar (SPZS)

Product Code	Thickness		Size (in)	Packaging	
	mils (ga)	Design Thickness (in)		Pcs./Carton	Pcs./Skid
SPZS-54	54 (16)	0.0566	1-1/4 x 1-1/4 x 50	20	680
SPZS-43	43 (18)	0.0451	1-1/4 x 1-1/4 x 50	20	680

Spazzer® Bar Guard™ (SPBG) and Spazzer® Grommet (SPGR)

Product Code	Size (in)	Packaging Pcs./Carton
SPBG	3-1/4 x 1-5/8	100
SPGR	1-1/2 x 4	100

The technical content of this literature is effective 04/09/26 and supersedes all previous information.
Pub. No. CD-ClipExpress 04/26

Spazzer® 5400 Spacer Bar (16ga)

Spazzer® 5400 Spacer Bar Connection Strength and Stiffness

Product Code	Stud Depth (in)	Allowable Capacities	Stud Thickness mils (ga)			
			33mils (20ga)	43mils (18ga)	54mils (16ga)	68mils (14ga)
SPZS54	3-5/8	Brace stiffness (lbs/in)	1320	1984	2792	3120
		Brace strength (lbs)	310	420	570	570
		Torsional Moment (in-lbs)	325	400	535	630
	6	Brace stiffness (lbs/in)	920	1680	2240	2400
		Brace strength (lbs)	300	400	555	555
		Torsional Moment (in-lbs)	265	365	610	705
	8	Brace stiffness (lbs/in)	–	1080	1440	2176
		Brace strength (lbs)	–	395	525	525
		Torsional Moment (in-lbs)	–	405	560	680

Notes:

1 Allowable loads are based on the use of cold-formed steel studs with a minimum yield strength, Fy=33 ksi and tensile strength, Fu=45 ksi for 43mils (18ga) or thinner and a minimum yield strength, Fy=50 ksi and tensile strength, Fu=65 ksi for 54mils (16ga) or thicker.

2 Allowable loads are based on 54mils (16ga) 5400 Spazzer Bar with a minimum yield strength, Fy=50 ksi and tensile strength, Fu=65 ksi.

3 Allowable loads are for the bridging connection only. The strength and serviceability of the framing members is the responsibility of the designer.

4 Allowable loads may not be increased for wind or seismic load.

5 Allowable loads are for use when using ASD design methodology. For LRFD loads, multiply ASD allowable loads by 1.6.

6 Allowable brace loads are based on ultimate test loads divided by a safety factor. Serviceability limits are not considered. Brace stiffness requirements are detailed in AISI S100 Section D3.3.

7 Axial brace stiffness values apply to both ASD and LRFD designs.

8 Listed Spazzer Bar capacities are based on Spazzer Bar fully seated in the bottom of the stud knockout as shown in Figure-1.

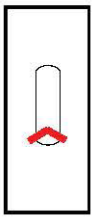


Figure-1

Spazzer® 5400 Spacer Bar Maximum Bridging Distance (ft.)

Product Code	Stud Spacing (in)	Stud Section (in)	Stud Thickness mils (ga)	Lateral Stud Pressure (psf)									
				5	10	15	20	25	30	35	40	45	50
SPZS54	12	362S162	33 (20)	8	8	8	8	7	5	5	4	4	–
			43 (18)	8	8	8	8	8	7	6	5	5	4
			54 (16)	8	8	8	8	8	8	8	7	6	6
			68 (14)	8	8	8	8	8	8	8	8	7	7
		362S200	33 (20)	8	8	8	6	5	4	4	–	–	–
			43 (18)	8	8	8	8	6	5	4	4	–	–
			54 (16)	8	8	8	8	8	7	6	5	5	4
			68 (14)	8	8	8	8	8	8	7	6	6	5
		600S162	33 (20)	8	8	8	8	6	5	4	4	–	–
			43 (18)	8	8	8	8	8	7	6	5	5	4
			54 (16)	8	8	8	8	8	8	8	8	8	7
			68 (14)	8	8	8	8	8	8	8	8	8	8
		600S200	33 (20)	8	8	8	6	5	4	–	–	–	–
			43 (18)	8	8	8	8	7	5	5	4	4	–
			54 (16)	8	8	8	8	8	8	8	7	6	6
			68 (14)	8	8	8	8	8	8	8	8	7	6
		800S162	43 (18)	8	8	8	8	8	8	8	7	6	5
			54 (16)	8	8	8	8	8	8	8	8	8	8
			68 (14)	8	8	8	8	8	8	8	8	8	8
		800S200	43 (18)	8	8	8	8	8	7	6	5	4	4
			54 (16)	8	8	8	8	8	8	8	7	6	6
			68 (14)	8	8	8	8	8	8	8	8	8	7
	16	362S162	33 (20)	8	8	8	6	5	4	4	–	–	–
			43 (18)	8	8	8	8	6	5	4	4	–	–
			54 (16)	8	8	8	8	8	7	6	5	5	4
			68 (14)	8	8	8	8	8	8	7	6	5	5
		362S200	33 (20)	8	8	6	5	4	–	–	–	–	–
			43 (18)	8	8	8	6	5	4	–	–	–	–
			54 (16)	8	8	8	8	6	5	5	4	4	–
			68 (14)	8	8	8	8	8	6	5	5	4	4
		600S162	33 (20)	8	8	8	6	5	4	–	–	–	–
			43 (18)	8	8	8	8	7	5	5	4	4	–
			54 (16)	8	8	8	8	8	8	8	7	6	6
			68 (14)	8	8	8	8	8	8	8	8	7	6
		600S200	33 (20)	8	8	6	4	4	–	–	–	–	–
			43 (18)	8	8	8	6	5	4	–	–	–	–
			54 (16)	8	8	8	8	8	7	6	5	5	4
			68 (14)	8	8	8	8	8	8	7	6	5	5
		800S162	43 (18)	8	8	8	8	8	7	6	5	4	4
			54 (16)	8	8	8	8	8	8	8	7	6	6
			68 (14)	8	8	8	8	8	8	8	8	8	7
		800S200	43 (18)	8	8	8	7	6	5	4	4	–	–
			54 (16)	8	8	8	8	8	7	6	5	5	4
			68 (14)	8	8	8	8	8	8	7	6	6	5
	24	362S162	33 (20)	8	8	5	4	–	–	–	–	–	–
			43 (18)	8	8	7	5	4	–	–	–	–	–
			54 (16)	8	8	8	7	6	5	4	–	–	–
			68 (14)	8	8	8	8	7	5	5	4	4	–
		362S200	33 (20)	8	6	4	–	–	–	–	–	–	–
			43 (18)	8	8	5	4	–	–	–	–	–	–
			54 (16)	8	8	7	5	4	4	–	–	–	–
			68 (14)	8	8	8	6	5	4	4	–	–	–
		600S162	33 (20)	8	8	5	4	–	–	–	–	–	–
			43 (18)	8	8	7	5	4	4	–	–	–	–
			54 (16)	8	8	8	8	7	6	5	5	4	4
			68 (14)	8	8	8	8	8	7	6	5	5	4
		600S200	33 (20)	8	6	4	–	–	–	–	–	–	–
			43 (18)	8	8	5	4	–	–	–	–	–	–
			54 (16)	8	8	8	7	6	5	4	–	–	–
			68 (14)	8	8	8	8	6	5	5	4	4	–
		800S162	43 (18)	8	8	8	7	5	4	4	–	–	–
			54 (16)	8	8	8	8	8	6	5	5	4	4
			68 (14)	8	8	8	8	8	8	7	6	5	5
		800S200	43 (18)	8	8	7	5	4	–	–	–	–	–
			54 (16)	8	8	8	7	6	5	4	–	–	–
			68 (14)	8	8	8	8	7	6	5	4	4	–

Notes:

1 Tabulated maximum bridging distances are for ASD lateral pressures.

2 Tabulated maximum bridging distances are based on the tested connection strength.

3 Studs must be checked for unbraced length seperately.

4 Lateral pressures shall be determined based on the load combinations of the applicable building code.

5 For designs using 2009 IBC and earlier, wind pressures are at the working stress level and may be used directly.

6 For designs using 2012 IBC and 2015 IBC, wind pressures are at the strength level and must be multiplies by 0.6 for ASD load combinations.

The technical content of this literature is effective 04/09/26 and supersedes all previous information.

Pub. No. CD-ClipExpress 04/26

Spazzer® 5400 Spacer Bar (18ga)

Spazzer® 5400 Spacer Bar Connection Strength and Stiffness

Product Code	Stud Depth (in)	Allowable Capacities	Stud Thickness mils (ga)			
			33mils (20ga)	43mils (18ga)	54mils (16ga)	68mils (14ga)
SPZS43	3-5/8	Brace stiffness (lbs/in)	525	735	1160	1380
		Brace strength (lbs)	310	360	360	360
		Torsional Moment (in-lbs)	150	240	300	300
	6	Brace stiffness (lbs/in)	290	420	520	890
		Brace strength (lbs)	300	340	340	340
		Torsional Moment (in-lbs)	210	250	290	290
	8	Brace stiffness (lbs/in)	–	240	430	650
		Brace strength (lbs)	–	290	320	320
		Torsional Moment (in-lbs)	–	230	250	280

Notes:

1 Allowable loads are based on the use of cold-formed steel studs with a minimum yield strength, Fy=33 ksi and tensile strength, Fu=45 ksi for 43mils (18ga) or thinner and a minimum yield strength, Fy=50 ksi and tensile strength, Fu=65 ksi for 54mils (16ga) or thicker.

2 Allowable loads are based on 43mils (18ga) 4300 Spazzer Bar with a minimum yield strength, Fy=33 ksi and tensile strength, Fu=45 ksi.

3 Allowable loads are for the bridging connection only. The strength and serviceability of the framing members is the responsibility of the designer.

4 Allowable loads may not be increased for wind or seismic load.

5 Allowable loads are for use when using ASD design methodology. For LRFD loads, multiply ASD allowable loads by 1.6.

6 Allowable brace loads are based on ultimate test loads divided by a safety factor. Serviceability limits are not considered. Brace stiffness requirements are detailed in AISI S100 Section D3.3.

7 Axial brace stiffness values apply to both ASD and LRFD designs.

8 Listed Spazzer Bar capacities are based on Spazzer Bar fully seated in the bottom of the stud knockout as shown in Figure-1.

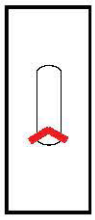


Figure-1

Spazzer® 5400 Spacer Bar Maximum Bridging Distance (ft.)

Product Code	Stud Spacing (in)	Stud Section (in)	Stud Thickness mils (ga)	Lateral Stud Pressure (psf)									
				5	10	15	20	25	30	35	40	45	50
SPZS43	12	362S162	33 (20)	8	8	5	4	–	–	–	–	–	–
			43 (18)	8	8	8	6	5	4	4	–	–	–
			54 (16)	8	8	8	8	6	5	4	4	–	–
			68 (14)	8	8	8	8	6	5	4	4	–	–
		362S200	33 (20)	8	6	4	–	–	–	–	–	–	–
			43 (18)	8	8	6	5	4	–	–	–	–	–
			54 (16)	8	8	8	6	5	4	–	–	–	–
			68 (14)	8	8	8	6	5	4	–	–	–	–
		600S162	33 (20)	8	8	8	6	5	4	4	–	–	–
			43 (18)	8	8	8	7	6	5	4	4	–	–
			54 (16)	8	8	8	8	7	6	5	4	4	–
			68 (14)	8	8	8	8	7	6	5	4	4	4
		600S200	33 (20)	8	8	6	5	4	–	–	–	–	–
			43 (18)	8	8	7	6	4	4	–	–	–	–
			54 (16)	8	8	8	7	5	4	4	–	–	–
			68 (14)	8	8	8	7	5	4	4	–	–	–
		800S162	43 (18)	8	8	8	8	6	5	4	4	–	–
			54 (16)	8	8	8	8	7	6	5	4	4	–
			68 (14)	8	8	8	8	8	6	5	5	4	4
		800S200	43 (18)	8	8	8	6	5	4	–	–	–	–
			54 (16)	8	8	8	6	5	4	4	–	–	–
			68 (14)	8	8	8	7	6	5	4	4	–	–
	16	362S162	33 (20)	8	6	4	–	–	–	–	–	–	–
			43 (18)	8	8	6	5	4	–	–	–	–	–
			54 (16)	8	8	8	6	5	4	–	–	–	–
			68 (14)	8	8	8	6	5	4	–	–	–	–
		362S200	33 (20)	8	4	–	–	–	–	–	–	–	–
			43 (18)	8	7	5	4	–	–	–	–	–	–
			54 (16)	8	8	6	4	4	–	–	–	–	–
			68 (14)	8	8	6	4	4	–	–	–	–	–
		600S162	33 (20)	8	8	6	5	4	–	–	–	–	–
			43 (18)	8	8	7	6	4	4	–	–	–	–
			54 (16)	8	8	8	7	5	4	4	–	–	–
			68 (14)	8	8	8	7	5	4	4	–	–	–
		600S200	33 (20)	8	7	5	–	–	–	–	–	–	–
			43 (18)	8	8	6	4	–	–	–	–	–	–
			54 (16)	8	8	7	5	4	–	–	–	–	–
			68 (14)	8	8	7	5	4	–	–	–	–	–
		800S162	43 (18)	8	8	8	6	5	4	–	–	–	–
			54 (16)	8	8	8	6	5	4	4	–	–	–
			68 (14)	8	8	8	7	6	5	4	4	–	–
		800S200	43 (18)	8	8	6	4	–	–	–	–	–	–
			54 (16)	8	8	6	5	4	–	–	–	–	–
			68 (14)	8	8	7	5	4	4	–	–	–	–
	24	362S162	33 (20)	8	4	–	–	–	–	–	–	–	–
			43 (18)	8	6	4	–	–	–	–	–	–	–
			54 (16)	8	8	5	4	–	–	–	–	–	–
			68 (14)	8	8	5	4	–	–	–	–	–	–
		362S200	33 (20)	6	–	–	–	–	–	–	–	–	–
			43 (18)	8	5	–	–	–	–	–	–	–	–
			54 (16)	8	6	4	–	–	–	–	–	–	–
			68 (14)	8	6	4	–	–	–	–	–	–	–
		600S162	33 (20)	8	6	4	–	–	–	–	–	–	–
			43 (18)	8	7	5	4	–	–	–	–	–	–
			54 (16)	8	8	6	4	–	–	–	–	–	–
			68 (14)	8	8	6	4	4	–	–	–	–	–
		600S200	33 (20)	8	5	–	–	–	–	–	–	–	–
			43 (18)	8	6	4	–	–	–	–	–	–	–
			54 (16)	8	7	4	–	–	–	–	–	–	–
			68 (14)	8	7	4	–	–	–	–	–	–	–
		800S162	43 (18)	8	8	5	4	–	–	–	–	–	–
			54 (16)	8	8	6	4	–	–	–	–	–	–
			68 (14)	8	8	6	5	4	–	–	–	–	–
		800S200	43 (18)	8	6	4	–	–	–	–	–	–	–
			54 (16)	8	6	4	–	–	–	–	–	–	–
			68 (14)	8	7	5	4	–	–	–	–	–	–

Notes:

1 Tabulated maximum bridging distances are for ASD lateral pressures.

2 Tabulated maximum bridging distances are based on the tested connection strength.

3 Studs must be checked for unbraced length seperately.

4 Lateral pressures shall be determined based on the load combinations of the applicable building code.

5 For designs using 2009 IBC and earlier, wind pressures are at the working stress level and may be used directly.

6 For designs using 2012 IBC and 2015 IBC, wind pressures are at the strength level and must be multiplies by 0.6 for ASD load combinations.

The technical content of this literature is effective 04/09/26 and supersedes all previous information.

Pub. No. CD-ClipExpress 04/26

Spazzer® Bar Fly Clip

A prepunched clip that eliminates the need for cutting and bending when using the Spazzer® 5400 Spacer Bar to facilitate rapid installation of exterior curtain wall framing

The Spazzer bar fly clip is a secure, fast and efficient way to finish a wall section when using the TradeReady® Spazzer 5400 spacer bar to facilitate the rapid erection of curtain wall or load-bearing framing. Traditionally, at the end of a section, the Spazzer bar would need to be cut and bent to keep the bar in place. With the new Spazzer bar fly clip, installation is as easy as fastening the prepunched clip to the stud and the Spazzer bar. The excess Spazzer bar is cut and installation is complete.

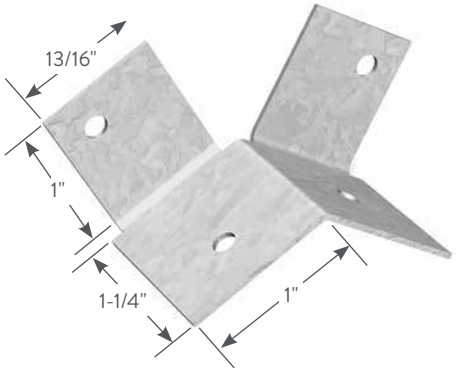
The Spazzer fly clip is the perfect solution for installing off-module studs with the 5400 series Spazzer bar. Simply cut the Spazzer bar just short of the stud web, and use the Spazzer fly clip to quickly connect the Spazzer bar to the face of the stud with self-drilling framing screws.

ALTERNATIVE PRODUCTS

Traditional cutting and bending

PRODUCT DIMENSIONS

1" x 1-1/4" x 1"



Spazzer Bar Fly Clip

MATERIAL SPECIFICATIONS

Gauge: 18 gauge (43mils)
Design Thickness: 0.0451 inches
Coating: G90
Yield Strength: 50ksi

CODE APPROVALS & PERFORMANCE STANDARDS

AISI: S100

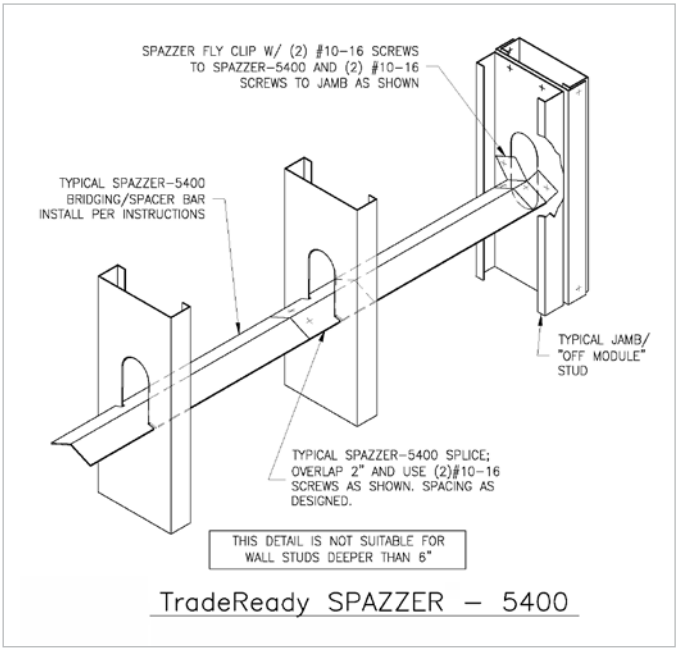
LOAD-BEARING WALL INSTALLATION

The TradeReady Spazzer 5400 spacer bar is passed through the stud knockouts and rotated 90° into position, engaging each side of the knockout. In load-bearing applications, some type of attachment is required to keep the bar in place—the Spazzer bar fly clip is an optimum solution. The TradeReady Spazzer 5400 bar should be installed at a maximum 4' o.c. vertically or per specifications. The Spazzer bar should not be used in studs over 6" wide.

Spazzer® Bar Fly Clip (SFLY)

Product Code	Size (in)	Packaging Pcs./Carton
SFLY	1 x 1-1/4 x 1	100

TYPICAL CONSTRUCTION DETAILS



Visit our CAD Library at clarkdietrich.com to view or download construction details in .dwg, .dxf, and .pdf formats.

FastBack™ Backing System

Reduces finishing time with no exposed fasteners on the face of the product

The FastBack™ backing system features a universal design that works with studs in either direction—concealing fasteners on the face of the product. The system creates an interlocked design between the stud and track for baseboard backing installations; and a cutaway design allows backing and bracing to be installed all the way to the floor. Optional pre-cut and fire-rated D-Blaze® or FlamePRO® Wood Backing is sized to fit 12," 16" and 24" o.c. spacing and can be used with the FBBC5 or FBBC10 clip. Available for overnight delivery. FBBC5-2X, 162-FBBC5-2X and 200-FBBC5-2X are designed to support traditional 2X lumber.

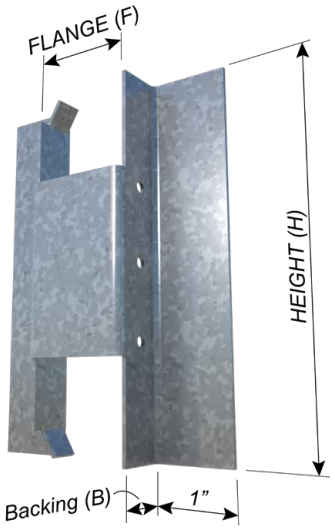
INSTALLATION

Rotate the FastBack clip over the flange of the stud until it sits flush. Fasten into place using drywall screws in the pre-drilled holes. Place wood onto tabs and fasten into place using standard drywall screws.



FastBack™ Backing System

Product Code	Stud Flange (F) (in)	Height (H) (in)	Backing (B) (in)	Packaging Pcs./Carton
FBBC5	1-1/4	5-1/8	3/4" (5 ply)	100
FBBC10	1-1/4	10-1/4	3/4" (5 ply)	100
FBBC5-2X	1-1/4	5-1/8	3/4" (5 ply)	100
162-FBBC-2X	1-5/8	5-1/8	1-1/2" (2X lumber)	100
200-FBBC5-2X	2	5-1/8	1-1/2" (2X lumber)	100



Wood Backing

Product Code	Height (in)	Length (in)	Packaging Pcs./Skid
5FBW12	5-1/8	10-1/2	720
5FBW16	5-1/8	14-1/2	540
5FBW24	5-1/8	22-1/2	360
10FBW12	10-1/4	10-1/2	720
10FBW16	10-1/4	14-1/2	540
10FBW24	10-1/4	22-1/2	360

U.S. Patent No. 7,882,676 of Jeffrey Thomas Ellis
D-Blaze® is a registered trademark of Viance, LLC
FlamePRO® is a registered trademark of Koppers Performance Chemicals, Inc.

FlamePRO® Fire Retardant complies with or has been granted the following:
- UL GREENGUARD Gold Certification – UL 2818
- ICC ESR-4244
- 2021 IBC

(All are subject to revision, re-examination)

D-Blaze® Fire Retardant or D-Blaze® FRT Wood complies with or has been granted the following:
- GREENGUARD Gold Certified
- ICC-ES ESR-2645
- 2021 IBC

(All are subject to revision, re-examination)

Danback® Flexible Wood Backing Plate

Reduces steel stud backing labor costs by up to 75%

Danback® Flexible Wood Backing System, featuring D-Blaze® or FlamePRO® fire-retardant treated wood (FRT), has made wood backing installation easy and economical-eliminating cutting, notching, ripping and routing.

Danback provides superior connection shear and pullout strength to support and meet even some of the heaviest loading conditions. Simply snap, flex and screw Danback into place. The hinge design actually flexes around the stud and snaps into place for a perfect fit-every time.

- Provides extra screw pullout strength for heavy-duty backing applications
- Available in 48" sections, for either 16" or 24" o.c. framing
- Meets all specifications for commercial and residential applications

Perfect backing system for baseboards, door jams and wood trim, cabinets and vanities and ceiling and crown moldings.

The Evaluation Report Service found that the wood backing material complies with the requirements for fire retardant treated wood described in the International Building Codes (IBC & IRC).

Danback flexible wood backing is available with FSC®-certified lumber and may contribute LEED® points to your project.

MATERIAL SPECIFICATIONS

Material: 3/4" CDX Doug Fir fire-retardant treated wood
Dimensions: 5-1/8" x 48" (130mm x 1219mm)
Packaging: (250) pieces per skid
Product weight: 5.114 lbs/piece



Danback® Flexible Wood Backing Plates (D16, D24)

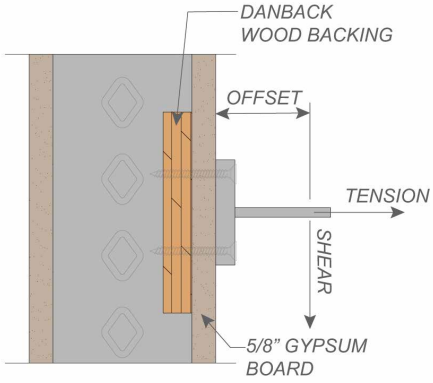
Product Code	Width (in)	Length (in)	Spacing	Packaging Pcs./Skid
D16F*	5-1/8	48	16" o.c.	250
D24F*	5-1/8	48	24" o.c.	250
D16C**	5-1/8	48	16" o.c.	250
D24C**	5-1/8	48	24" o.c.	250

*F = fire-treated plywood.
Trimmables available for off-module spacing in bulk quantity.
**FSC-certified lumber available on request, which can contribute to LEED® points on your project.
Contact ClarkDietrich LEED professionals at 888-437-3244 for more information.
FSC chain-of-custody # BV-COC-008121

Load Tables

Installation Condition	Nominal (lbs)
Shear / 0" Offset	2440
Shear / 1" Offset	825
Shear / 3" Offset	310
Tension	635

D-Blaze® is a registered trademark of Viance, LLC
FlamePRO® is a registered trademark of Koppers Performance Chemicals, Inc.



Notes:

1 Listed load values are nominal test load values, appropriate safety factors/resistance factors should be applied by the designer for calculating loads for intended use.
2 Shear / Offset (moment-rotation) Load refers to load directed in the plane of the wall.
3 Tension Load refers to load directed perpendicular to wall or plywood surface.
4 Tabulated loads include the contribution of 5/8" gypsum board.
5 Test loads were applied to the gypsum board and backing system through a 1/2" thick, 2-3/4" diameter steel plate secured with (4) #12 hex head screws
6 Loads were applied directly through the steel plate or to a steel rod that cantilevered from the plate.
7 Typical failure mode in backing testing was the gypsum board failure.
8 24-in o.c. stud spacing test results were similar/identical to 16-in o.c. test results.
9 Listed nominal capacities are based on using 33mils (20ga) non-structural framing members/studs.
10 Anchor to the stud flange using (3) #8 wafer head/pan head screws.

Easy installation.



Snap starter edge into the open side of the stud flange.



HINT: Start with the first full bay. Use Danback trimmables for off-module bays.



Flex Danback flexible wood backing around stud flange using the flexible connector plate.



Repeat the process.

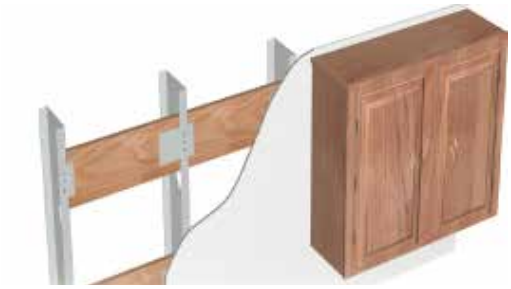


Overlap connector plates when using in long backing runs.



Secure each plate to the stud flange using three small pan or wafer-head screws.

Commonly used in: hospitals, medical centers, schools, hotels/motels, assisted living, condominiums, and others. The perfect backing solution for: cabinets, shelves, counters, sinks, handrails, chalkboards, towel and shower bars, or other wall-mounted fixtures that require heavy-duty backing.



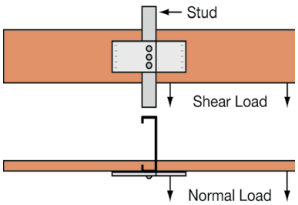
Use Danback trimmables for off-module bays:



Danback trimmables for off-module backing.

Connector plates included with trimmables.

Cut to required length. Secure connector plate to the trimmed edge. Leave 1-1/4" extended over the trimmed edge. Fasten the plate to Danback using three small pan or wafer-head screws.



FlamePRO® Fire Retardant complies with or has been granted the following:
- UL GREENGUARD Gold Certification – UL 2818
- ICC ESR-4244
- 2021 IBC

(All are subject to revision, re-examination)

D-Blaze® Fire Retardant or D-Blaze® FRT Wood complies with or has been granted the following:
- GREENGUARD Gold Certified
- ICC-ES ESR-2645
- 2021 IBC

(All are subject to revision, re-examination)

Backer Bar

Provides superior connection shear and pullout strength for handrails, shelves and other wall fixtures

The Backer Bar was specifically designed to meet the demand for the attachment of multiple items and heavier items to interior partitions.

Today's building professionals require solutions to allow the attachment of such products and accessories to the interior partition walls. Traditionally, backing systems have been costly, time-consuming and not necessarily performing to the required code specified load requirements. Backer Bar is designed for use on non-structural and structural studs.

TYPICAL APPLICATIONS:

- Wall-Mounted Televisions
- Hospital Handrails
- Towel and Shower Bars
- Cabinets and Shelves

FEATURES AND BENEFITS:

- Installs quickly and easily
- Available in 12", 16" and 24" spacing
- For use on non-structural and structural studs

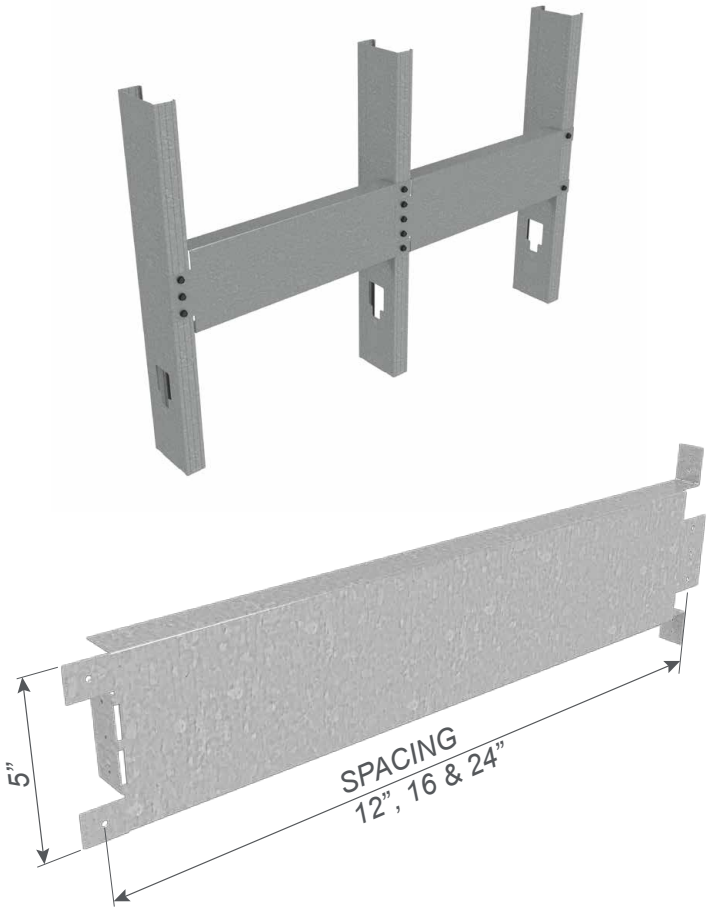
Canada Patent Pending – 2,811,362
USA Patent – 9,062,455

PRODUCT DIMENSIONS

Leg: 1-1/4"
Width: 5"
Lengths: For 12", 16" and 24" o.c. stud spacing

MATERIAL SPECIFICATIONS

Gauge: 20 gauge STR (33mils)
Design Thickness: 0.0346 inches
Coating: G90
Material: Grade 50ksi min. yield strength



Backer Bar (BB12, BB16,BB24)

Product Code	Thickness		Size (in)	Packaging
	mils (ga)	Design Thickness (in)		
BB12	33 (20)	0.0346	1-1/4" x 5" x 12"	Individual
BB16	33 (20)	0.0346	1-1/4" x 5" x 16"	
BB24	33 (20)	0.0346	1-1/4" x 5" x 24"	

BlazeFrame® Shield

33mils, 43mils or 54mils fire shield system

ClarkDietrich's BlazeFrame Shield is specifically designed for use in conjunction with approved fireblocking materials per section 718 of the IBC. BlazeFrame Shield simply installs by twisting into stud flanges and screwing into stud webs. The one piece preformed assembly eliminates cutting, notching and attaching clips.

- Installs quickly and easily without clips
- Available for 16" and 24" stud spacing
- Three available widths
- Available in 33mils (20ga), 43mils (18ga) or 54mils (16ga)
- Pre-notched for use on structural studs (1-5/8" flange only)

MATERIAL SPECIFICATIONS

Gauge: 20 gauge STR (33mils)
Design Thickness: 0.0346 inches

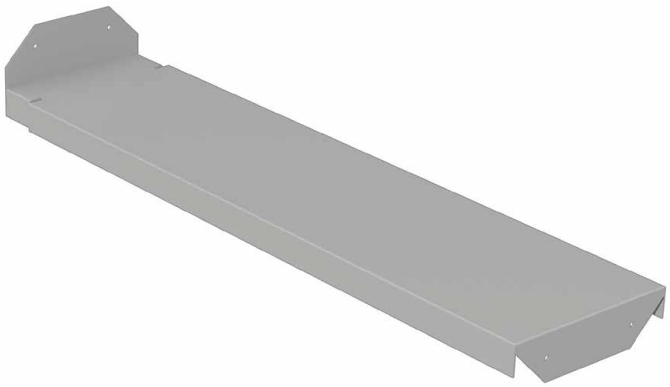
Gauge: 18 gauge (43mils)
Design Thickness: 0.0451 inches

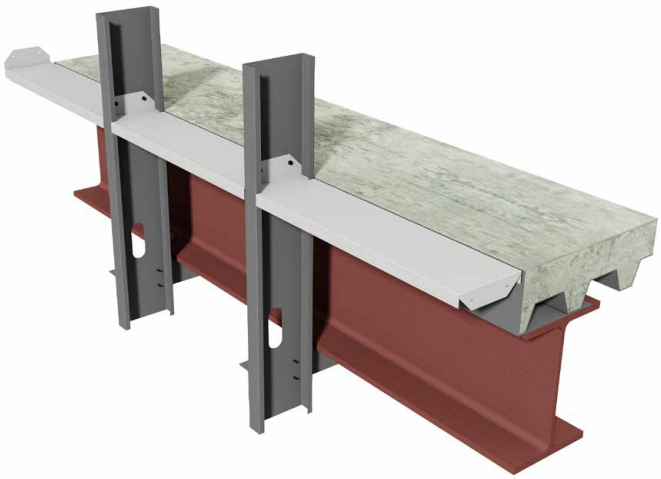
Gauge: 16 gauge (54mils)
Design Thickness: 0.0566 inches

Coating: CP60
Yield Strength: 33ksi for 33mils & 43mils
50ksi for 54mils
ASTM: C955, A1003

PRODUCT DIMENSIONS

Horizontal leg: 1"
Connection Tabs: Top: 2", Bottom: 1-1/2"
Width: 3-5/8", 4" or 6"
Lengths: For 16" and 24" o.c. stud spacing





BlazeFrame® Shield

Product Code	Thickness		Size (in)
	mils (ga)	DesignThickness (in)	
FS316-33	33 (20)	0.0346	3-5/8" web 16" o.c.
FS316-43	43 (18)	0.0451	3-5/8" web 16" o.c.
FS316-54	54 (16)	0.0566	3-5/8" web 16" o.c.
FS324-33	33 (20)	0.0346	3-5/8" web 24" o.c.
FS324-43	43 (18)	0.0451	3-5/8" web 24" o.c.
FS324-54	54 (16)	0.0566	3-5/8" web 24" o.c.
FS416-33	33 (20)	0.0346	4" web 16" o.c.
FS416-43	43 (18)	0.0451	4" web 16" o.c.
FS416-54	54 (16)	0.0566	4" web 16" o.c.
FS424-33	33 (20)	0.0346	4" web 24" o.c.
FS424-43	43 (18)	0.0451	4" web 24" o.c.
FS424-54	54 (16)	0.0566	4" web 24" o.c.
FS616-33	33 (20)	0.0346	6" web 16" o.c.
FS616-43	43 (18)	0.0451	6" web 16" o.c.
FS616-54	54 (16)	0.0566	6" web 16" o.c.
FS624-33	33 (20)	0.0346	6" web 24" o.c.
FS624-43	43 (18)	0.0451	6" web 24" o.c.
FS624-54	54 (16)	0.0566	6" web 24" o.c.

2x6 FR Blocking

Fire-retardant treated wood blocking for non-structural steel framing



2x6 fire-retardant treated wood blocking for non-structural steel framing with dado groove to latch on to flanges and span between wall partitions to provide attachment surface for wall mounted fixtures.

2x6 FR Blocking is fire-retardant, pressure-treated wood that is chemically treated to reduce flamespread and smoke development. Fire-retardant wood complies with national building codes, including the International Building Code (IBC) and the International Residential Code (IRC).



D-Blaze® is a registered trademark of Viance, LLC.

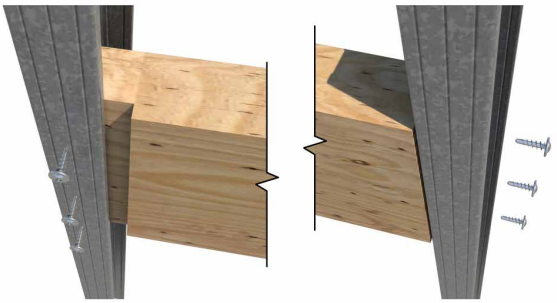
PRODUCT DIMENSIONS

Size: 1-1/2" x 5-1/2" x 15-3/4"

FEATURES AND BENEFITS:

- D-Blaze® Fire-Retardant Treatment
- Constructed from Southern Yellow Pine (SYP)
- Dado groove provides secure and flush mounting surface
- Pre-cut for 16” o.c. spacing
- Provides reinforcement to the structural integrity of the walls for stability of wall-mounted fixtures
- 50 year warranty

INSTALLATION

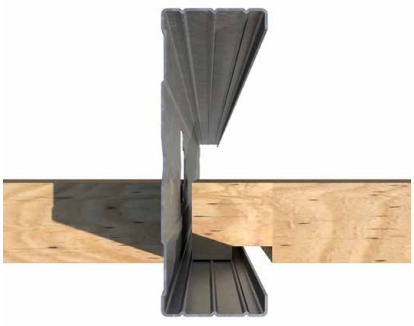


Secure wood blocking into place using stainless steel or hot-dip galvanized fasteners. On one side, insert fasteners through the stud flange and into the face of the blocking and for the other side insert fasteners through the stud web and into the butt end of the blocking.

D-Blaze® Fire Retardant or D-Blaze® FRT Wood complies with or has been granted the following:

- GREENGUARD Gold Certified
- ICC-ES ESR-2645
- 2021 IBC

(All are subject to revision, re-examination)



2x6 FR Blocking (FRB26-16)

Product Code	Thickness (in)	Height (in)	Length (in)	Pcs./Skid
FRB26-16	1-1/2	5-1/2	15-3/4	288

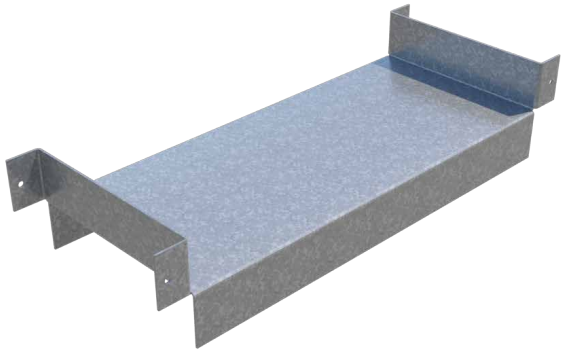
Material: Southern Yellow Pine (SYP) treated with D-Blaze® fire-retardant treatment

Product weight: 2.35 lbs. / piece

Solid Track Blocking

Bracing solution; quick, easy installation

Solid Track Blocking (CDSB) provides a bracing solution designed to stabilize cold-formed steel framing by locking studs into a secure horizontal plane. It's a smarter alternative to field-fabricating blocking. This one-piece system creates continuous load transfer between stud webs, helping maintain wall integrity and improve performance in shear and axial applications.



- Available in a range of web sizes to fit standard stud dimensions
- Offered in standard spacing for 16" and 24" o.c. layouts
- Designed to fit 1-5/8" flange
- Pre-punched holes for fast and easy attachment
- 1-5/8" standard leg size
- Single-piece design
- Custom lengths available upon request



PRODUCT DIMENSIONS

Width: 3-5/8", 4", 6", or 8"

MATERIAL SPECIFICATIONS

Gauge: 16 gauge (54mils)
Design Thickness: 0.0566 inches
Coating: CP60
Yield Strength: 50ksi

CODE APPROVALS & PERFORMANCE STANDARDS

AISI: S100
ASTM: A1003

INSTALLATION

Place the Solid Track Blocking between studs with the flange oriented to seat tightly between webs. Ensure horizontal alignment. Attach using approved fasteners (min. #10) through the pre-punched guide holes. Engage fasteners on the flanges on both sides for proper restraint and load transfer.

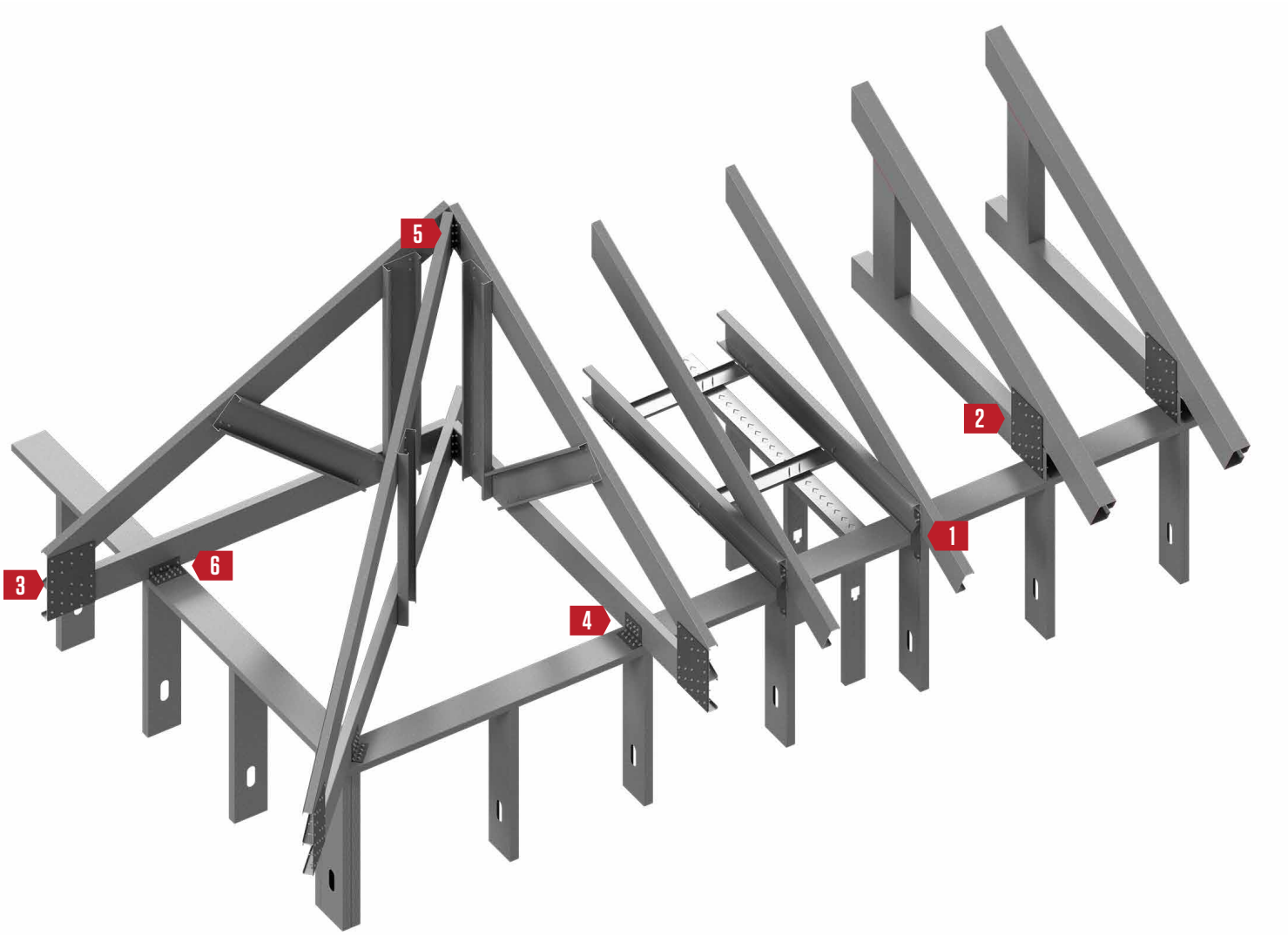
Solid Track Blocking (CDSB)

Product Code	Part Description	Width (in)	Stud Flange (in)	Spacing
CDSB362-S16-54	3-5/8" web, 16" o.c. Solid Track Blocking	3-5/8	1-5/8	16"
CDSB362-S24-54	3-5/8" web, 24" o.c. Solid Track Blocking	3-5/8	1-5/8	24"
CDSB400-S16-54	4" web, 16" o.c. Solid Track Blocking	4	1-5/8	16"
CDSB400-S24-54	4" web, 24" o.c. Solid Track Blocking	4	1-5/8	24"
CDSB600-S16-54	6" web, 16" o.c. Solid Track Blocking	6	1-5/8	16"
CDSB600-S24-54	6" web, 24" o.c. Solid Track Blocking	6	1-5/8	24"
CDSB800-S16-54	8" web, 16" o.c. Solid Track Blocking	8	1-5/8	16"
CDSB800-S24-54	8" web, 24" o.c. Solid Track Blocking	8	1-5/8	24"

Packaging: Sold individually.

The technical content of this literature is effective 04/09/26 and supersedes all previous information.
Pub. No. CD-ClipExpress 04/26

Product Detail



1 ClarkDietrich Seismic and Hurricane Clips

pages 222-223



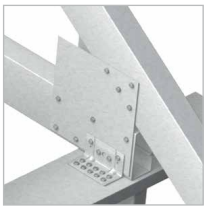




2 GP-Series™ Unpunched Gusset Plate

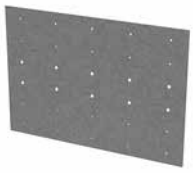
pages 224–225

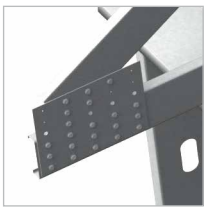




3 G-Series™ Punched Gusset Plate

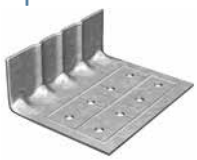
pages 226–227

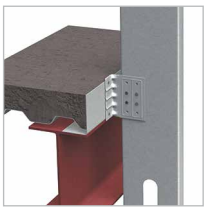




4 Uni-Clip End Clip

pages 118–119





5 Skewable Angle

page 186-187





6 EasyClip D&T-Series™ Anchor Clips

pages 142–143









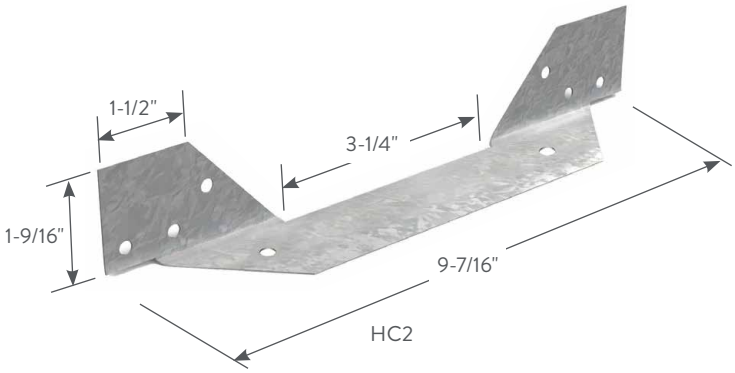
The technical content of this literature is effective 04/09/26 and supersedes all previous information.

Pub. No. CD-ClipExpress 04/26

Seismic and Hurricane Ties

Attach and secures trusses and rafters to the building structure

ClarkDietrich seismic and hurricane ties are designed to provide wind and seismic resistance for trusses and rafters. Quick and efficient, these versatile connectors can also be used for general tie-down purposes, strong back attachments and as all-purpose ties where one member crosses another. The HC2 and HC2A seismic and hurricane ties are formed from a flat plate into an A-shaped section. The plate has a right-angle bend along its longitudinal axis to permit straddling a top plate. The HC2.5 and HC3 are twisted strap ties that are used to attach a rafter to the side of the top plate.

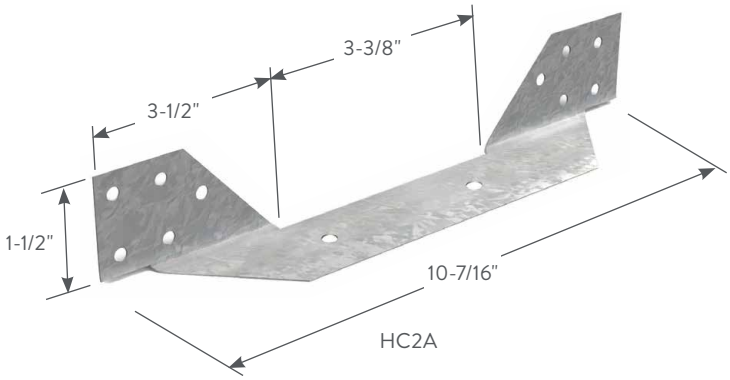


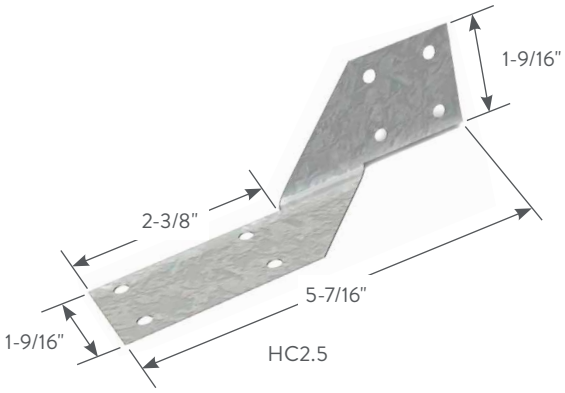
ALTERNATIVE PRODUCTS

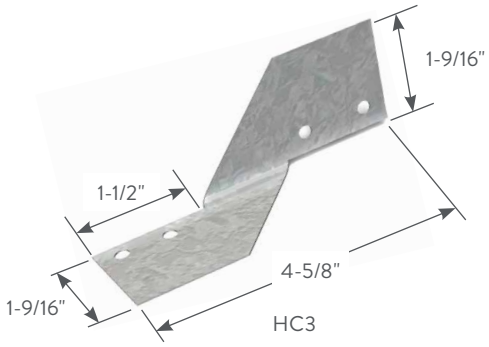
EasyClip™ T-Series™ Tall Anchor Clip
EasyClip E-Series™ Support Clip

MATERIAL SPECIFICATIONS

Gauge: 18 gauge (43mils)
Design Thickness: 0.0451 inches
Coating: G90
Yield Strength: 50ksi
ASTM: A653/A653M







ClarkDietrich Seismic and Hurricane Ties

Product Code	Thickness		Size (in)	Packaging Pcs./Carton
	mils (ga)	Design Thickness (in)		
HC2	43 (18)	0.0451	1-9/16 x 9-7/16 x 1-9/16	100
HC2A	43 (18)	0.0451	1-1/2 x 10-7/16 x 1-1/2	100
HC2.5	43 (18)	0.0451	1-9/16 x 5-7/16 x 1-9/16	100
HC3	43 (18)	0.0451	1-9/16 x 4-5/8 x 1-9/16	100

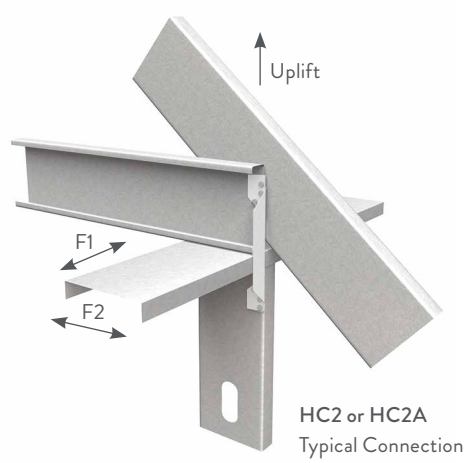
HC2 OR HC2A INSTALLATION

Place the tie so one end fits flush against the roof framing member and the other fits flush against the web of the wall stud. Attach the tie to the side of the rafter at the top and to the sides of the stud immediately below the top plate at the bottom. Fill all prepunched holes with a minimum of #10 self-drilling screws.

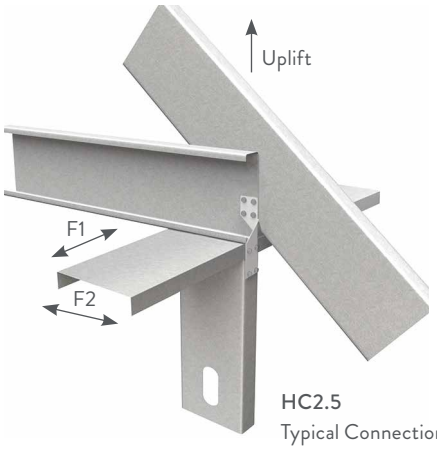
HC2.5 OR HC3 INSTALLATION

Place the tie so the top fits securely against the roof framing member and the bottom fits securely against the top plate and flange of the wall stud. Attach the tie to the rafter at the top and to the sides of the top plate and stud immediately below. Fill all prepunched holes with a minimum #10 self-drilling screws.

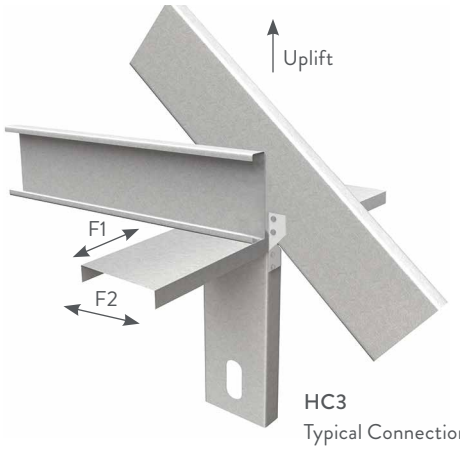
Reference section R 603.8.3.2 of the International Residential Code (IRC) or the engineer of records specification.



HC2 or HC2A
Typical Connection
(HC2A similsar)



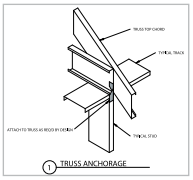
HC2.5
Typical Connection



HC3
Typical Connection

Typical Construction Details

Visit our CAD Library at clarkdietrich.com to view or download construction details in .dwg, .dxf, and .pdf formats.



ClarkDietrich Seismic and Hurricane Ties

Product Code	Fasteners			Stud Thickness mils (ga)	Yield Stregth (ksi)	Max. Allowable Loads		
	To Rafters/Truss	To Top Track	To Stud			Uplift	Lateral F1	Lateral F2
HC2	3 – #10	–	3 – #10	33 (20)	33	405	–	–
				43 (18)	33	445	–	–
				54 (16)	50	465	–	–
	3 – #10	1 – #10	3 – #10	33 (20)	33	405	90	120
				43 (18)	33	445	110	170
				54 (16)	50	465	110	225
HC2A	3 – #10	1 – #10	3 – #10	33 (20)	33	405	90	120
				43 (18)	33	445	110	170
				54 (16)	50	465	110	225
HC2.5	4 – #10	–	4 – #10	33 (20)	33	410	90	120
				43 (18)	33	475	140	170
				54 (16)	50	475	140	225
HC3	2 – #10	2 – #10*	–	33 (20)	33	340	80	80
				43 (18)	33	465	110	140
				54 (16)	50	475	110	195

Notes:

1 Loads have been increased for wind or earthquake loading.

* Fasteners to top track must also penetrate.

The technical content of this literature is effective 04/09/26 and supersedes all previous information. Pub. No. CD-ClipExpress 04/26

GP-Series™ Unpunched Gusset Plate

Use in conjunction with X-bracing in load-bearing shearwall assemblies to resist racking under wind and seismic loads

Gusset plates and diagonal tension strapping components are used in combination to provide shearwall (racking restraint) for light-gauge, load-bearing framing under wind and seismic loads. Resisting uplift and shear forces, they are normally installed on both sides of the wall directly over the framing members.

CAUTION: Racking loads are first transferred to the roof or floor decking and then to the shearwalls (X-bracing). The X-bracing then relies on a proper anchorage to the foundation to resist uplift and shear forces. In order for the system to function properly, the load path from the roof or floor deck to the shearwalls to the foundation must be complete. This normally requires additional bracing, blocking, track and rim splices, drag struts, uplift anchors and heavy-duty foundations.

PRODUCT DIMENSIONS

6" x 6"
6" x 12"
12" x 12"
Custom sizes, shapes, and gauges available.

MATERIAL SPECIFICATIONS

Gauge: 16 gauge (54mils)
Design Thickness: 0.0566 inches

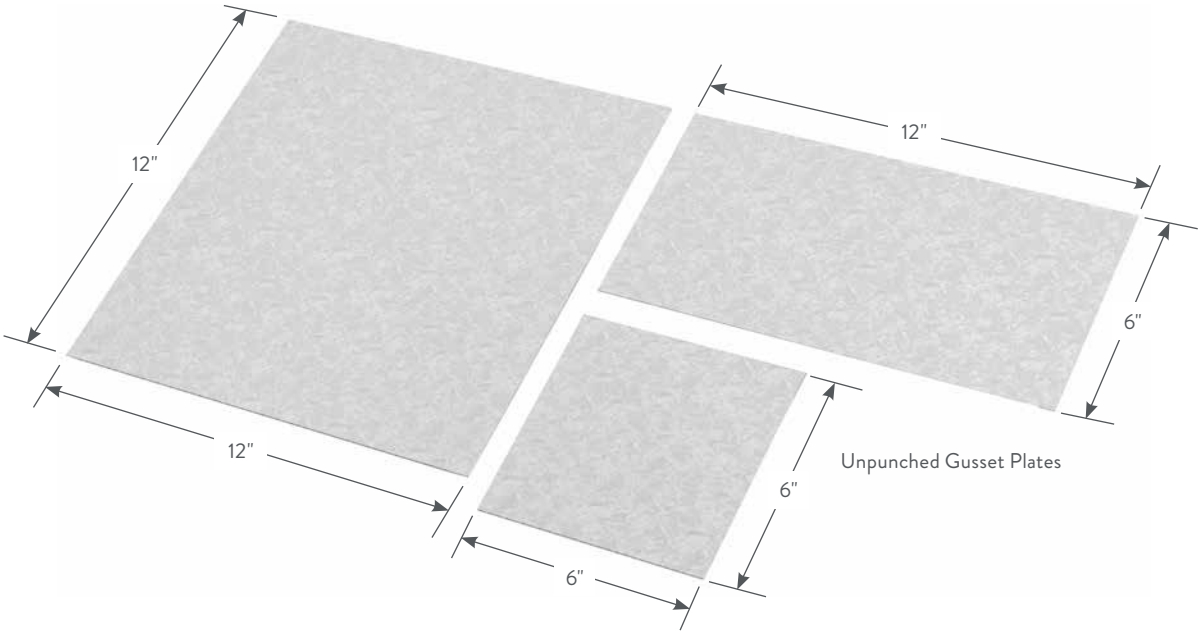
Gauge: 14 gauge (68mils)
Design Thickness: 0.0713 inches

Gauge: 12 gauge (97mils)
Design Thickness: 0.1017 inches

Coating: G90
Yield Strength: 50ksi
ASTM: A653/A653M

INSTALLATION

Straps are positioned diagonally from the bottom track to the top track. In order to resist load in each direction, an X-configuration should be used. At a minimum, double studs are positioned at ends of the X-brace to serve as compression studs. Straps are either attached directly to the compression studs or are attached via gusset plates. Compression studs must be anchored to the foundation, normally with uplift anchors. For multi-story construction, the uplift loads can be extremely high. It is recommended that the services of a qualified professional engineer be used to verify the applicability of the system selected.



Unpunched Gusset Plates

Unpunched Gusset Plates for ShearWall Bracing

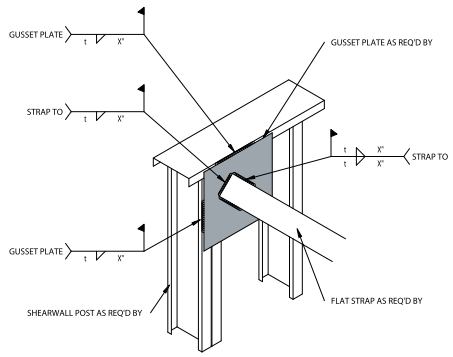
Product code	Thickness		Plate Size (in)	Packaging Pcs.
	mils (ga)	Design Thickness (in)		
GP	54 (16)	0.0566	6 x 6	25
			6 x 12	25
			12 x 12	25
	97 (12)	0.1017	6 x 6	25
			6 x 12	25
			12 x 12	25



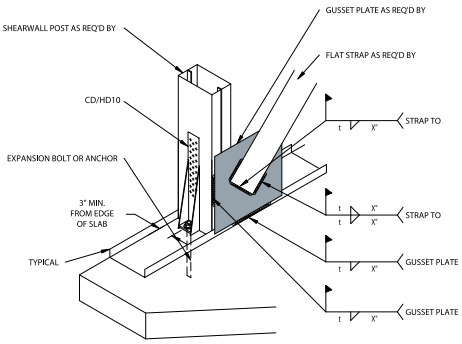


GP-Series unpunched gusset plates are also used to facilitate connections between chord members for in-plane framing.

TYPICAL CONSTRUCTION DETAILS



1 SHEARWALL TOP CONNECTION



1 SHEARWALL BASE CONNECTION

Visit our CAD Library at clarkdietrich.com to view or download construction details in .dwg, .dxf, and .pdf formats.

The technical content of this literature is effective 04/09/26 and supersedes all previous information. Pub. No. CD-ClipExpress 04/26

G-Series™ Punched Gusset Plate

A multipurpose connector used for a variety of framing connections

G-Series™ punched gusset plates come with multi-hole shapes for proper fastening to achieve desired performance. Used in a variety of framing connections—including roof framing, header framing and shearwall applications—the gusset plates eliminate angled cutting. Prepunched for easier, faster attachments, the gusset plates adapt to multiple configurations and varying construction tolerances.

CAUTION: Racking loads are first transferred to the roof or floor decking and then to the shearwalls (X-bracing). The X-bracing then relies on a proper anchorage to the foundation to resist uplift and shear forces. In order for the system to function properly, the load path from the roof or floor deck to the shearwalls to the foundation must be complete. This normally requires additional bracing, blocking, track and rim splices, drag struts, uplift anchors and heavy-duty foundations.

PRODUCT DIMENSIONS

6" x 8-1/2"

MATERIAL SPECIFICATIONS

Gauge: 18 gauge (43mils)
Design Thickness: 0.0451 inches

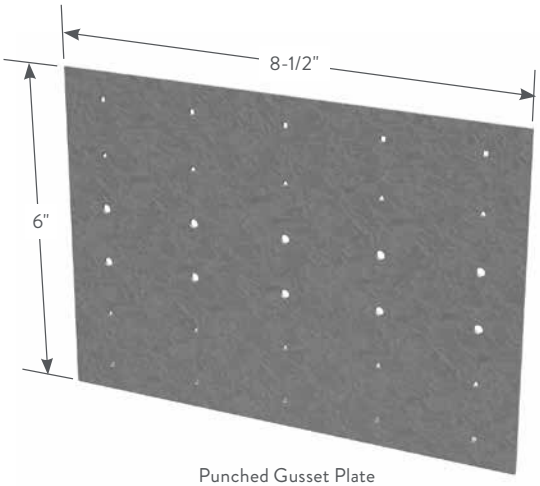
Gauge: 16 gauge (54mils)
Design Thickness: 0.0566 inches

Gauge: 14 gauge (68mils)
Design Thickness: 0.0713 inches

Coating: G90
Yield Strength: 33ksi for 18 gauge
50ksi for 14 & 16 gauge
ASTM: A653/A653M

INSTALLATION

Straps are positioned diagonally from the bottom track to the top track. In order to resist load in each direction, an X-configuration should be used. At a minimum, double studs are positioned at ends of the X-brace to serve as compression studs. Straps are either attached directly to the compression studs or are attached via gusset plates. Compression studs must be anchored to the foundation, normally with ClarkDietrich holdowns. For multi-story construction, the uplift loads can be extremely high. It is recommended that the services of a qualified professional engineer be used to verify the applicability of the system selected.



Punched Gusset Plate

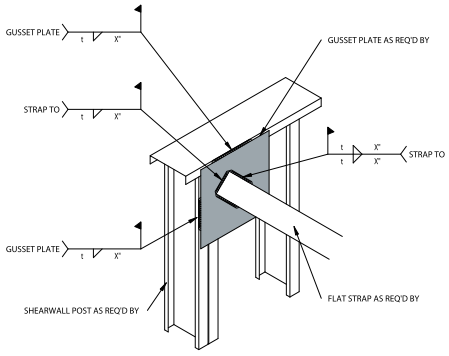
G-Series™ Punched Gusset Plates

Product Code	Thickness		Size (in)	Packaging Pcs./Bucket
	mils (ga)	Design Thickness (in)		
G436	43 (18)	0.0451	6 x 8-1/2	50
G546	54 (16)	0.0566	6 x 8-1/2	50
G686	68 (14)	0.0713	6 x 8-1/2	50

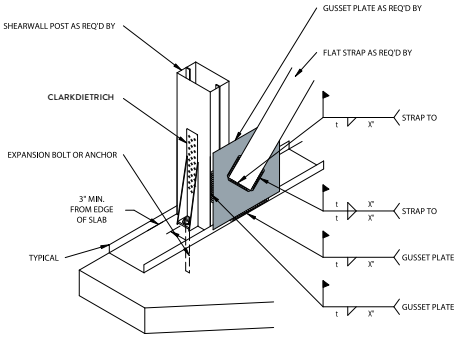




TYPICAL CONSTRUCTION DETAILS



1 SHEARWALL TOP CONNECTION

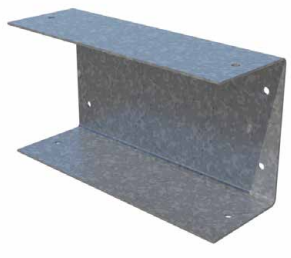
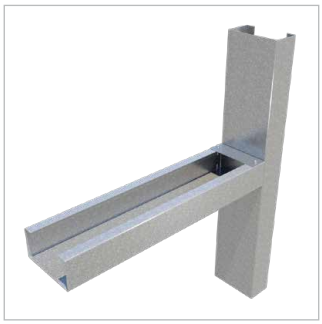


1 SHEARWALL BASE CONNECTION

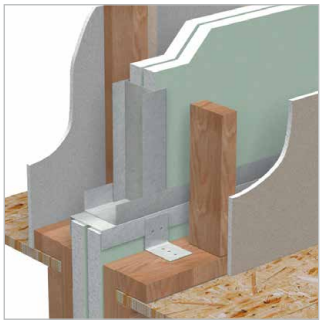
Visit our CAD Library at clarkdietrich.com to view or download construction details in .dwg, .dxf, and .pdf formats.

Product Detail

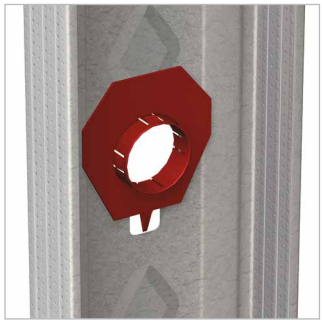
1 HDSC Header Bracket for RedHeader PRO™
pages 230–233

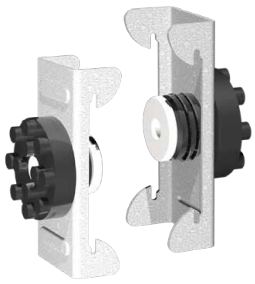
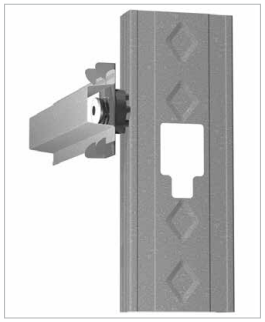
2 Aluminum Burn Clip
page 234

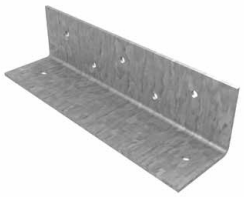
3 Grommets for Stud Knockouts
page 235

4 ClarkDietrich Sound Clip
page 236-241

5 Header Cripple Stud Clip
page 242



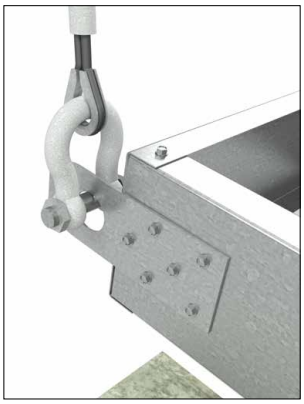

6 Metal Furring Channel Clip
page 243




7 Panel Lift Clip

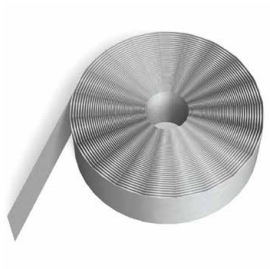
pages 244-245





8 Commercial Strapping

pages 246-247





9 Box Header Clip

pages 248-249





10 MEP Gusset Plate

page 250





11 MEP Flange Repair

page 251-252

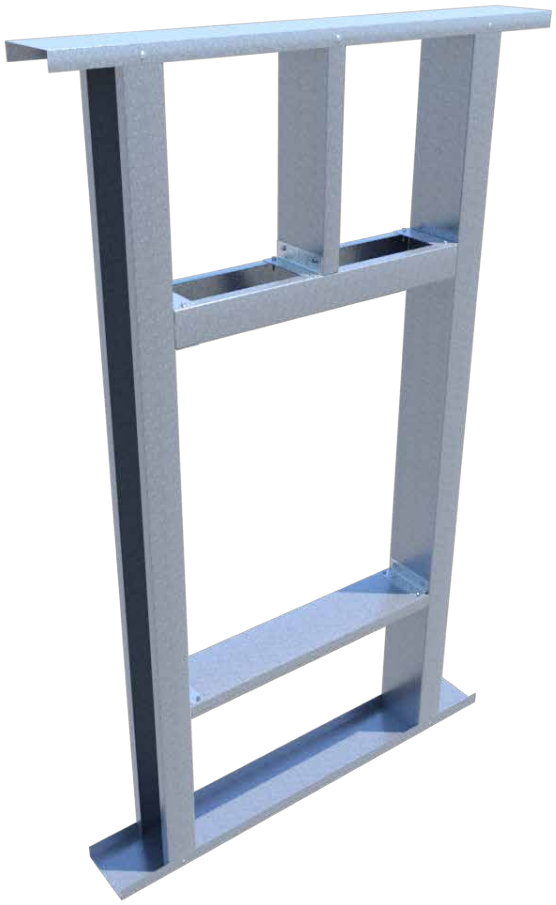




HDSC Header Bracket

For use with the RedHeader PRO™ and HDS® Rough Opening Systems

The HDSC Header Bracket is the perfect complement to the RedHeader PRO™ Framing system and HDS® Framing System. This simple, yet innovative header bracket turns curtain-wall header installation from a two-person job into a one-person job. This unique, pre-punched clip also eliminates surface head fastener buildup that can create finishing challenges. The HDSC is sized to be used with either 3" or 3-1/2" flanged member.



PRODUCT DIMENSIONS

3-1/2" x 3-1/16" x 2"	3-1/2" x 3-9/16" x 2"
3-7/8" x 3-1/16" x 2"	3-7/8" x 3-9/16" x 2"
5-7/8" x 3-1/16" x 2"	5-7/8" x 3-9/16" x 2"
7-7/8" x 3-1/16" x 2"	7-7/8" x 3-9/16" x 2"

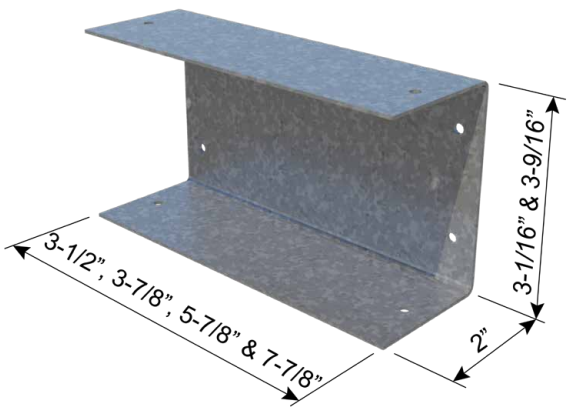
MATERIAL SPECIFICATIONS

Gauge: 20 gauge (33mils)
Design Thickness: 0.0346 inches
Yield Strength: 33ksi

Gauge: 14 gauge (68mils)
Design Thickness: 0.0713 inches
Yield Strength: 50ksi

Gauge: 12 gauge (97mils)
Design Thickness: 0.1017 inches
Yield Strength: 50ksi

Coating: G90
ASTM: A653/A653M, A1003/A1003M



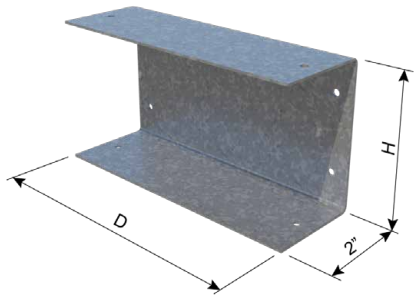


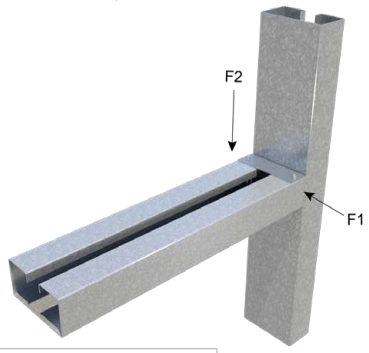
CLIP EXPRESS

HDSC 33mils (20ga) Header Brackets (3" & 3-1/2" Flange)

Product Code	Bracket Specs		Framing Member Specs		Designed to Support
	Depth (D) (in)	Height (H) (in)	Thickness mils (ga)	Yield Strength, Fy (ksi)	
350HDSC300-33	3-1/2	3	33 (20)	33	3-5/8" RedHeader or HDS with 3" Flange
350HDSC350-33		3-1/2			3-5/8" RedHeader with 3-1/2" Flange
387HDSC300-33	3-7/8	3	33 (20)	33	4" RedHeader or HDS with 3" Flange
387HDSC350-33		3-1/2			4" RedHeader with 3-1/2" Flange
587HDSC300-33	5-7/8	3	33 (20)	33	6" RedHeader or HDS with 3" Flange
587HDSC350-33		3-1/2			6" RedHeader with 3-1/2" Flange
787HDSC300-33	7-7/8	3	33 (20)	33	8" RedHeader or HDS with 3" Flange
787HDSC350-33		3-1/2			8" RedHeader with 3-1/2" Flange

All material G90. Sold in pairs.





Allowable Loads (lbs) for 3" & 3-1/2" Flange Header Systems

Product Code	Bracket Specs		Framing Member Specs		Fasteners		Capacities (lbs)					
							F1 Load (Lateral)			F2 Load (Vertical)		
	Depth (D) (in)	Height (H) (in)	Thickness mils (ga)	Yield Strength, Fy (ksi)	Jamb	Header	Nominal (lbs)	ASD Load (lbs)	LRFD Load (lbs)	Nominal (lbs)	ASD Load (lbs)	LRFD Load (lbs)
350HDSC300-33	3-1/2	3	33 (20)	33	4 x #10	4 x #10	1200	615	985	895	190	190
			43 (18)	33			1435	735	1180	1555	245	245
			54 (16)	50			2000	1025	1595	2540	300	300
			68 (14)	50			2290	1060	1595	1435	425	425
			97 (12)	50			2875	1060	1595	1750	450	450
350HDSC350-33	3-1/2	3-1/2	54 (16)	50	4 x #10	4 x #10	2095	1060	1595	1020	380	380
			68 (14)	50			2460	1060	1595	1280	395	395
			97 (12)	50			2675	1060	1595	1765	460	460
387HDSC300-33	3-7/8	3	33 (20)	33	4 x #10	4 x #10	1090	560	895	1110	220	220
			43 (18)	33			1420	730	1165	1585	280	280
			54 (16)	50			2085	1060	1595	2130	310	310
			68 (14)	50			2290	1060	1595	1435	425	425
			97 (12)	50			2875	1060	1595	1750	450	450
387HDSC350-33	3-7/8	3-1/2	54 (16)	50	4 x #10	4 x #10	2095	1060	1595	1020	380	380
			68 (14)	50			2460	1060	1595	1280	395	395
			97 (12)	50			2560	1060	1595	1935	455	455
587HDSC300-33	5-7/8	3	33 (20)	33	4 x #10	4 x #10	1150	590	945	1050	205	205
			43 (18)	33			1410	720	1155	1765	320	320
			54 (16)	50			2085	1060	1595	2130	320	320
			68 (14)	50			2290	1060	1595	1435	425	425
			97 (12)	50			2875	1060	1595	1750	450	450
587HDSC350-33	5-7/8	3-1/2	54 (16)	50	4 x #10	4 x #10	2095	1060	1595	1020	380	380
			68 (14)	50			2460	1060	1595	1280	395	395
			97 (12)	50			2560	1060	1595	1935	455	455
787HDSC300-33	7-7/8	3	33 (20)	33	4 x #10	4 x #10	1210	620	995	990	190	190
			43 (18)	33			1540	790	1265	1630	270	270
			54 (16)	50			2045	1050	1595	2130	310	310
			68 (14)	50			2195	1060	1595	1395	385	385
			97 (12)	50			2875	1060	1595	1750	450	450
787HDSC350-33	7-7/8	3-1/2	54 (16)	50	4 x #10	4 x #10	2030	1040	1595	1075	320	320
			68 (14)	50			2460	1060	1595	1280	395	395
			97 (12)	50			2450	1060	1595	2105	455	455

Notes:

1 Listed Capacities were derived from calculations and structural tests in accordance with provisions of AISI S100 and ICC-ES AC261.

2 The safety factor for ASD loads and resistance factor for LRFD loads are calculated in accordance with Chapter K.

3 The capacity of a given HDSC connection is the minimum of the corresponding jamb and the header values. For example, for a 3-1/2" HDSC-33 bracket (3" Flange) used with a 54mils (16ga) 50 ksi jamb and a 97mils (12ga) 50 ksi header, the F2 allowable design load shall be the capacity corresponding to framing member with lesser thickness i.e, 16ga member. Thus, the ASD capacity is 300 lbs.

4 #10-16 HWH Screws by ITW Buildex were used to attach Brackets to Jamb and Header. The screws shall have a minimum shear capacity of 1400 lbs and minimum tension capacity of 1158 lbs. Evidence shall be provided to the building official for approval that defines the fasteners meet the performance requirements of this report, ASTM C1513 and are for use with cold-formed steel.

5 For simultaneous F1 and F2 loading, use the following interaction equation: $(f1/F1)^2+(f2/F2)^2 \leq 1.0$ Where f1 and f2 are the applied loads and F1 and F2 are the appropriate allowable loads.

6 It is the responsibility of the design professional to detail the project drawings for proper HDSC bracket installation.

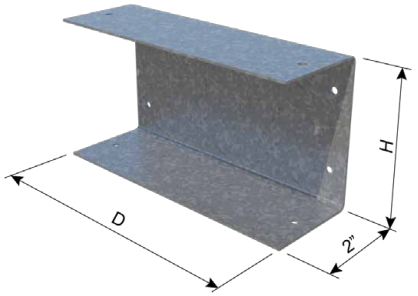
HDSC Header Bracket

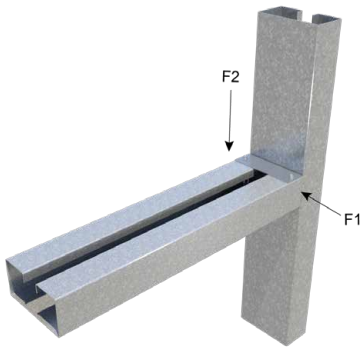
CLIP EXPRESS

HDSC 68mils (14ga) Header Brackets (3" & 3-1/2" Flange)

Product Code	Bracket Specs		Framing Member Specs		Designed to Support
	Depth (D) (in)	Height (H) (in)	Thickness mils (ga)	Yield Strength, Fy (ksi)	
350HDSC300-68	3-1/2	3	68 (14)	50	3-5/8" RedHeader or HDS with 3" Flange
350HDSC350-68		3-1/2			3-5/8" RedHeader with 3-1/2" Flange
387HDSC300-68	3-7/8	3	68 (14)	50	4" RedHeader or HDS with 3" Flange
387HDSC350-68		3-1/2			4" RedHeader with 3-1/2" Flange
587HDSC300-68	5-7/8	3	68 (14)	50	6" RedHeader or HDS with 3" Flange
587HDSC350-68		3-1/2			6" RedHeader with 3-1/2" Flange
787HDSC300-68	7-7/8	3	68 (14)	50	8" RedHeader or HDS with 3" Flange
787HDSC350-68		3-1/2			8" RedHeader with 3-1/2" Flange

All material G90. Sold in pairs.





Allowable Loads (lbs) for 3" & 3-1/2" Flange Header Systems

Product Code	Bracket Specs		Framing Member Specs		Fasteners		Capacities (lbs)					
							F1 Load (Lateral)			F2 Load (Vertical)		
	Depth (D) (in)	Height (H) (in)	Thickness mils (ga)	Yield Strength, Fy (ksi)	Jamb	Header	Nominal (lbs)	ASD Load (lbs)	LRFD Load (lbs)	Nominal (lbs)	ASD Load (lbs)	LRFD Load (lbs)
350HDSC300-68	3-1/2	3	33 (20)	33	4 x #10	4 x #10	1435	705	1060	880	300	480
			43 (18)	33			2365	1050	1575	1130	390	620
			54 (16)	50			3185	1095	1755	2380	820	940
			68 (14)	50			3415	1175	1880	2920	1005	1385
			97 (12)	50			3940	1355	2170	3645	1255	1875
350HDSC350-68	3-1/2	3-1/2	54 (16)	50	4 x #10	4 x #10	2975	1025	1640	2150	740	1145
			68 (14)	50			3375	1160	1855	2925	1005	1555
			97 (12)	50			3810	1310	2100	3555	1225	1730
387HDSC300-68	3-7/8	3	33 (20)	33	4 x #10	4 x #10	1405	705	1060	885	305	485
			43 (18)	33			2210	1050	1575	1225	420	670
			54 (16)	50			3185	1095	1755	2380	820	940
			68 (14)	50			3475	1195	1910	3130	1075	1450
			97 (12)	50			4000	1375	2200	3815	1310	1700
387HDSC350-68	3-7/8	3-1/2	54 (16)	50	4 x #10	4 x #10	3070	1055	1690	2300	790	1145
			68 (14)	50			3395	1165	1870	3065	1055	1490
			97 (12)	50			4365	1500	2400	3825	1315	1850
587HDSC300-68	5-7/8	3	33 (20)	33	4 x #10	4 x #10	1370	700	1060	895	305	490
			43 (18)	33			2055	1050	1575	1315	450	725
			54 (16)	50			3265	1120	1795	2460	845	1045
			68 (14)	50			3535	1215	1945	3345	1150	1515
			97 (12)	50			4000	1375	2200	3815	1310	1700
587HDSC350-68	5-7/8	3-1/2	54 (16)	50	4 x #10	4 x #10	3070	1055	1690	2300	790	1145
			68 (14)	50			3415	1175	1880	3210	1105	1430
			97 (12)	50			4110	1415	2265	3955	1360	1820
787HDSC300-68	7-7/8	3	33 (20)	33	4 x #10	4 x #10	1370	700	1060	895	305	490
			43 (18)	33			2115	1050	1575	1245	425	670
			54 (16)	50			3340	1150	1840	2535	870	1145
			68 (14)	50			3440	1180	1895	3425	1180	1575
			97 (12)	50			4060	1395	2235	3985	1370	1525
787HDSC350-68	7-7/8	3-1/2	54 (16)	50	4 x #10	4 x #10	3165	1090	1745	2455	845	1145
			68 (14)	50			3420	1175	1880	3360	1155	1370
			97 (12)	50			3860	1330	2125	4090	1405	1785

Notes:

1 Listed Capacities were derived from calculations and structural tests in accordance with provisions of AISI S100 and ICC-ES AC261.

2 The safety factor for ASD loads and resistance factor for LRFD loads are calculated in accordance with Chapter K.

3 The capacity of a given HDSC connection is the minimum of the corresponding jamb and the header values. For example, for a 3-1/2" HDSC-68 bracket (3" Flange) used with a 54mils (16ga) 50 ksi jamb and a 97mils (12ga) 50 ksi header, the F2 allowable design load shall be the capacity corresponding to framing member with lesser thickness i.e, 16ga member. Thus, the ASD capacity is 820 lbs.

4 #10-16 HWH Screws by ITW Buildex were used to attach Brackets to Jamb and Header. The screws shall have a minimum shear capacity of 1400 lbs and minimum tension capacity of 1158 lbs. Evidence shall be provided to the building official for approval that defines the fasteners meet the performance requirements of this report, ASTM C1513 and are for use with cold-formed steel.

5 For simultaneous F1 and F2 loading, use the following interaction equation: $(f1/F1)^2 + (f2/F2)^2 \leq 1.0$ Where f1 and f2 are the applied loads and F1 and F2 are the appropriate allowable loads.

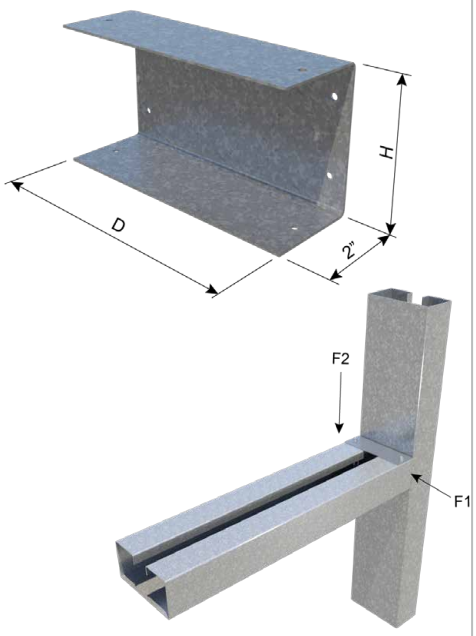
6 It is the responsibility of the design professional to detail the project drawings for proper HDSC bracket installation.

CLIP EXPRESS

HDSC 97mils (12ga) Header Brackets (3" & 3-1/2" Flange)

Product Code	Bracket Specs		Framing Member Specs		Designed to Support
	Depth (D) (in)	Height (H) (in)	Thickness mils (ga)	Yield Strength, Fy (ksi)	
350HDSC300-97	3-1/2	3	97 (12)	50	3-5/8" RedHeader or HDS with 3" Flange
350HDSC350-97		3-1/2			3-5/8" RedHeader with 3-1/2" Flange
387HDSC300-97	3-7/8	3	97 (12)	50	4" RedHeader or HDS with 3" Flange
387HDSC350-97		3-1/2			4" RedHeader with 3-1/2" Flange
587HDSC300-97	5-7/8	3	97 (12)	50	6" RedHeader or HDS with 3" Flange
587HDSC350-97		3-1/2			6" RedHeader with 3-1/2" Flange
787HDSC300-97	7-7/8	3	97 (12)	50	8" RedHeader or HDS with 3" Flange
787HDSC350-97		3-1/2			8" RedHeader with 3-1/2" Flange

All material G90. Sold in pairs.



Allowable Loads (lbs) for 3" & 3-1/2" Flange Header Systems

Product Code	Bracket Specs		Framing Member Specs		Fasteners		Capacities (lbs)					
							F1 Load (Lateral)			F2 Load (Vertical)		
	Depth (D) (in)	Height (H) (in)	Thickness mils (ga)	Yield Strength, Fy (ksi)	Jamb	Header	Nominal (lbs)	ASD Load (lbs)	LRFD Load (lbs)	Nominal (lbs)	ASD Load (lbs)	LRFD Load (lbs)
350HDSC300-97	3-1/2	3	33 (20)	33	4 x #12	4 x #12	1435	735	1130	880	300	495
			43 (18)	33			2490	1120	1680	1375	470	865
			54 (16)	50			4025	1385	2215	2195	755	1410
			68 (14)	50			4340	1490	2390	3465	1190	2000
			97 (12)	50			6075	2090	3345	5610	1930	2380
350HDSC350-97	3-1/2	3-1/2	54 (16)	50	4 x #12	4 x #12	4080	1400	2245	2145	735	1545
			68 (14)	50			4265	1465	2350	3575	1230	2090
			97 (12)	50			6005	2065	3305	5385	1850	2405
387HDSC300-97	3-7/8	3	33 (20)	33	4 x #12	4 x #12	1405	720	1130	885	305	550
			43 (18)	33			2490	1120	1680	1375	470	865
			54 (16)	50			4105	1410	2260	2405	825	1455
			68 (14)	50			4105	1410	2260	3360	1155	1530
			97 (12)	50			6000	2065	3305	5840	2010	2560
387HDSC350-97	3-7/8	3-1/2	54 (16)	50	4 x #12	4 x #12	3975	1365	2185	2230	765	1620
			68 (14)	50			4195	1445	2310	3630	1250	2080
			97 (12)	50			6185	2130	3405	5500	1890	2455
587HDSC300-97	5-7/8	3	33 (20)	33	4 x #12	4 x #12	1370	700	1125	895	305	610
			43 (18)	33			2345	1120	1680	1400	480	820
			54 (16)	50			4340	1475	2390	2615	900	1500
			68 (14)	50			4340	1490	2390	3465	1190	2000
			97 (12)	50			5930	2040	3265	6065	2085	2740
587HDSC350-97	5-7/8	3-1/2	54 (16)	50	4 x #12	4 x #12	3870	1330	2130	2310	795	1690
			68 (14)	50			4195	1445	2310	3630	1250	2080
			97 (12)	50			6060	2085	3335	5840	2010	2400
787HDSC300-97	7-7/8	3	33 (20)	33	4 x #12	4 x #12	1370	700	1125	895	305	610
			43 (18)	33			2200	1120	1680	1420	485	770
			54 (16)	50			4125	1420	2270	2945	1015	1485
			68 (14)	50			4125	1420	2270	3685	1265	2070
			97 (12)	50			5770	1985	3175	6085	2090	2710
787HDSC350-97	7-7/8	3-1/2	54 (16)	50	4 x #12	4 x #12	4070	1400	2240	2625	905	1505
			68 (14)	50			4125	1420	2270	3685	1265	2070
			97 (12)	50			5935	2040	3265	6180	2125	2350

Notes:

1 Listed Capacities were derived from calculations and structural tests in accordance with provisions of AISI S100 and ICC-ES AC261.

2 The safety factor for ASD loads and resistance factor for LRFD loads are calculated in accordance with Chapter K.

3 The capacity of a given HDSC connection is the minimum of the corresponding jamb and the header values. For example, for a 3-1/2" HDSC-97 bracket (3" Flange) used with a 54mils (16ga) 50 ksi jamb and a 97mils (12ga) 50 ksi header, the F2 allowable design load shall be the capacity corresponding to framing member with lesser thickness i.e, 16ga member. Thus, the ASD capacity is 755 lbs.

4 #12-14 HWH Screws by ITW Buildex were used to attach Brackets to Jamb and Header. The screws shall have a minimum shear capacity of 2000 lbs and minimum tension capacity of 2325 lbs. Evidence shall be provided to the building official for approval that defines the fasteners meet the performance requirements of this report, ASTM C1513 and are for use with cold-formed steel.

5 For simultaneous F1 and F2 loading, use the following interaction equation: $(f1/F1)^2+(f2/F2)^2 \leq 1.0$ Where f1 and f2 are the applied loads and F1 and F2 are the appropriate allowable loads.

6 It is the responsibility of the design professional to detail the project drawings for proper HDSC bracket installation.

Aluminum Burn Clip

Melting away under intense heat, clips allow a fire-damaged structure to collapse while keeping the firewall barrier in place, protecting adjacent units

ClarkDietrich aluminum burn clips are used as part of the H-stud area separation wall assembly and are designed to melt and break away when exposed to fire. The clips are used to hold the area separation wall assembly in place at the floor roof and truss line between adjacent units.

Should a fire break out in one unit, the aluminum burn clips on the fire-ridden side of the area separation wall will melt, allowing the wall structure for that side to collapse. Without pulling the area separation wall down, the burn clips on the non-fire side will remain intact, and hold the area separation wall in place as a barrier to contain the fire within the unit of origin.

PRODUCT DIMENSIONS

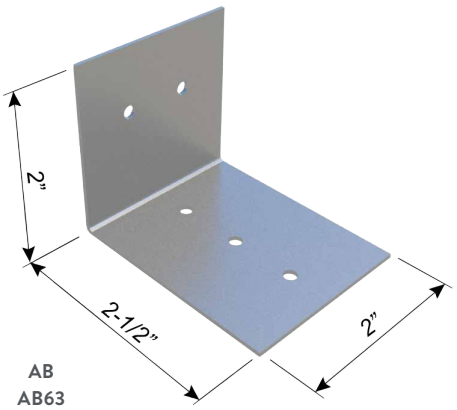
2" x 2" x 2-1/2"
2" x 2" x 3"
2" x 2" x 3-1/2"
2" x 2" x 4"
2" x 2" x 4-1/2"

MATERIAL SPECIFICATIONS

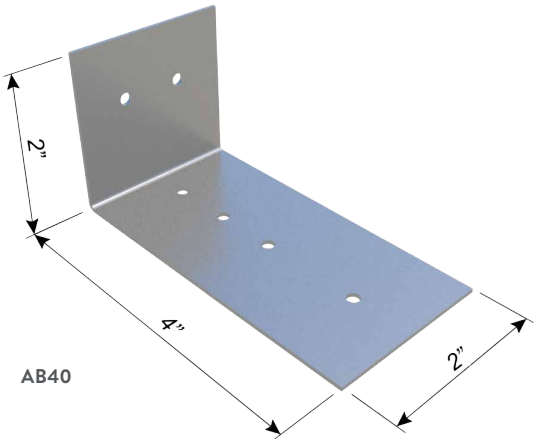
All burn clips are manufactured using 5052 H32 aluminum. Standard product manufactured with .050 material. Extra-heavy duty product (AB63) manufactured with .063 material is available on request.

INSTALLATION

Attach an aluminum burn clip to the completed area separation wall assembly. One clip should be located at each H-stud on both sides of the wall. Attach the aluminum burn clip to the H-stud with screws, not nails. Attach to the adjacent framing with Type-W or Type-S screws.



AB
AB63

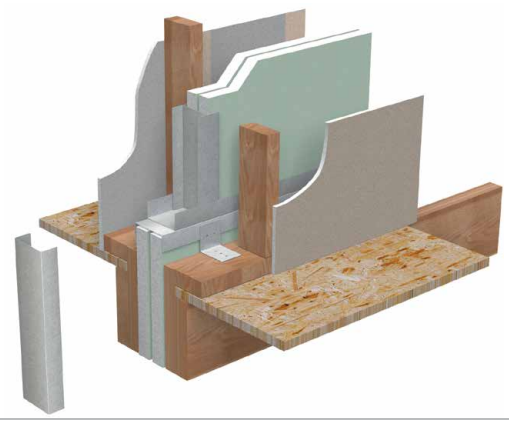


AB40

Aluminum Burn Clips (AB)

Product Code	Thickness (in)	Size (in)	Packaging Pcs./Bucket
AB	0.050	2 x 2 x 2-1/2	500
AB63	0.063	2 x 2 x 2-1/2	500
AB30	0.063	2 x 2 x 3	250
AB35	0.063	2 x 2 x 3-1/2	250
AB40*	0.063	2 x 2 x 4	250
AB45	0.063	2 x 2 x 4-1/2	250

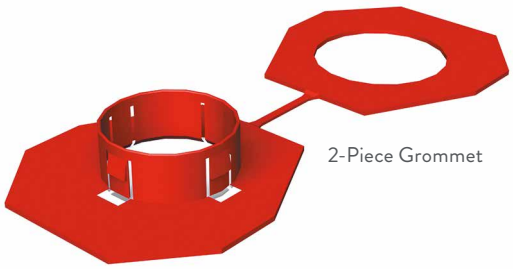
*AB40-For use with 3-hour Design Assembly based on GA file No. ASW 2600.



Grommet for Stud Knockouts

Protect and isolate electrical wiring and plumbing from contacting metal

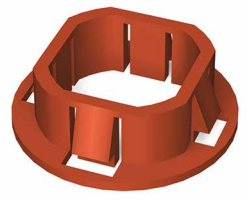
Grommets snap easily into stud knockouts and are used to protect electrical wiring and plumbing lines from contacting metal. They also help to prevent and eliminate pipe rattle. Grommets are commonly used in residential construction when metal conduit is not required by building code.



2-Piece Grommet

INSTALLATION

Install grommets in all stud knockouts where wiring and plumbing lines will be inserted. Use the snap-in bushing grommet for 1-5/8" and 2-1/2" wall studs and the standard grommet for all wall studs 3-1/2" and wider.



Snap-In Bushing

Install the snap-in bushing by pressing the bushing into the stud knockout. Make sure to engage the bushing lips to secure into place.

Install the standard grommet by first opening the grommet as illustrated above. Insert one side of the grommet through the knockout. Snap the grommet together so it engages with the metal sandwiched between the two plastic sides.



Grommet for 3-1/2" and Wider Studs

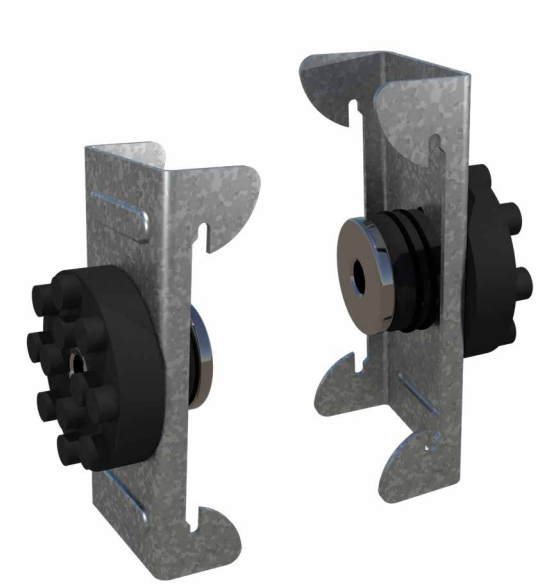
Grommet (GROM)

Product Code	Size (in)	Description	Pcs./Carton
GROM	3/4	For 1-5/8" and 2-1/2" studs	100
	1-1/2	For 3-1/2" and wider studs	100

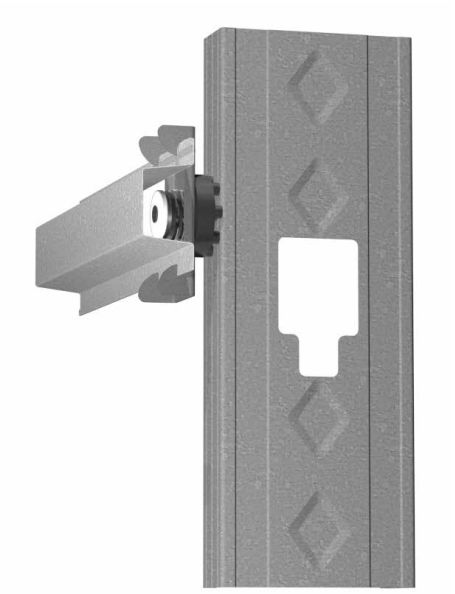
ClarkDietrich Sound Clip®

Sound isolation and dampening clip.

The ClarkDietrich Sound Clip® is used in conjunction with 18mils (25ga) 7/8" deep drywall furring channel. It is used to fasten gypsum wallboard in various wall and floor-ceiling applications, while simultaneously providing acoustical separation. This significantly reduces the amount of airborne sound filtering from room to room. The ClarkDietrich Sound Clip adds notable STC points to most assemblies while reducing sound transfer.



- Ideal for use in multi-familsy dwelling, hotels, theaters and hospitals
- Used in conjunction with 7/8" 25 ga Furring Channel with a total standoff from stud of 1-5/8"
- UL fire rated for most common assemblies
- Complies to UL 263 test standards.
- Max. spacing 48" o.c. (laterally) x 24" o.c. (vertically)
- Maximum acoustical design load is 36 lbs.
- Sound testing for Type X & Type C Boards



PRODUCT DIMENSIONS

3" x 1-1/4" (Clip only)

MATERIAL SPECIFICATIONS

Gauge: 18 gauge (43mils)
Design Thickness: 0.0451 inches
Yield Strength: 33ksi
Coating: CP60

ClarkDietrich Sound Clip (CDSC)

Product code	mils (ga)	Size (in)	Pcs./Bucket
CDSC	43 (18)	3 x 1-1/4	100

SOUND AND UL DESIGN:

- Complies to UL 263 test standards. See full list of UL® design assemblies in UL R19331.
- Wall Sound Assemblies are certified by Western Electro-Acoustical Laboratories.
- Floor Sound Assemblies are certified by Intertek Building & Construction (B&C).
- NVLAP Accredited for ASTM E90 & E413, ISO Certified

CDSC STC SOUND ASSEMBLIES ON METAL STUD FRAMING

Fire Rating	UL Assembly	Wall Framing	Stud Spacing	Wall Board (Side1/Side2)	Insulation	STC Rating	OITC Rating	Test Report
		3-5/8" ProSTUD 20 33mils	24" o.c.	(1) layer / (1) layer 5/8" Type C	R-19	60		TL18-291
		3-5/8" ProSTUD 20 33mils	24" o.c.	(1) layer / (2) layers 5/8" Type C	R-19	62		TL18-292
		3-5/8" ProSTUD 20 33mils	24" o.c.	(2) layers / (2) layers 5/8" Type C	R-19	63		TL18-293
		3-5/8" ProSTUD 25 15mils	16" o.c.	(1) layer / (1) layer 5/8" Type X	R-11	56		TL18-199
		3-5/8" ProSTUD 25 15mils	16" o.c.	(1) layer / (2) layers 5/8" Type X	R-11	60		TL18-197
		3-5/8" ProSTUD 25 15mils	16" o.c.	(2) layers / (2) layers 5/8" Type X	R-11	62		TL18-194
2 Hr	U411	2-1/2" ProSTUD 25 15mils	24" o.c.	(2) layers / (2) layers 5/8" Type X	R-13	62	48	L3173.08-113-11-R0
3/4 Hr	U423	3-1/2" Structural Stud 33mils	24" o.c.	(1) layer / (1) layer 1/2" Type C	R-19	53	37	L3173.10-113-11-R0
1 Hr	U423	3-1/2" Structural Stud 33mils	24" o.c.	(1) layer / (1) layer 1/2" Type X	R-19	55	38	L3173.12-113-11-R0
1-1/2 Hr	U423	3-1/2" Structural Stud 33mils	24" o.c.	(2) layers / (2) layers 1/2" Type C	R-19	62	48	L3173.11-113-11-R0
2 Hr	U423	3-1/2" Structural Stud 33mils	24" o.c.	(2) layers / (2) layers 5/8" Type X	R-19	63	50	L3173.13-113-11-R0
1 Hr	U465	3-5/8" ProSTUD 20 18mils	24" o.c.	(1) layer / (1) layer 5/8" Type X	None	45	29	L3173.03-113-11-R0
1 Hr	U465	3-5/8" ProSTUD 20 18mils	24" o.c.	(1) layer / (1) layer 5/8" Type X	Mineral Wool	53	36	L3173.04-113-11-R0
1 Hr	U465	3-5/8" ProSTUD 20 18mils	24" o.c.	(1) layer / (1) layer 5/8" Type X	R-13	53	37	L3173.05-113-11-R0
1 Hr	U493	(2) 2-1/2" ProSTUD 25 15 mils - ChaseWall	24" o.c.	(1) layer / (1) layer 5/8" Type X	R-13 Both Sides	60	44	L3173.06-113-11-R0
2 Hr	U493	(2) 2-1/2" ProSTUD 25 15 mils - ChaseWall	24" o.c.	(2) layers / (2) layers 5/8" Type X	R-13 Both Sides	67	53	L3173.07-113-11-R0
1 Hr	V438	2-1/2" ProSTUD 25 15 mils	24" o.c.	(1) layer / (1) layer 1/2" Type C	R-13	49	34	L3173.09-113-11-R0
2 Hr	V438	1-5/8" ProSTUD 25 15 mils	24" o.c.	(2) layers / (2) layers 1/2" Type C	2-3/4" Fiberglass	59	42	L3173.14-113-11-R0
3 Hr	V438	1-5/8" ProSTUD 25 15 mils	24" o.c.	(3) layers / (3) layers 1/2" Type C	2-3/4" Fiberglass	63	49	L3173.15-113-11-R0
4 Hr	V438	1-5/8" ProSTUD 25 15 mils	24" o.c.	(4) layers / (4) layers 1/2" Type C	2-3/4" Fiberglass	66	53	L3173.16-113-11-R0

Wall Tests: The test was performed in accordance with ASTM E 90-09 (2016), Standard Test Method for Laboratory Measurement of Airborne Sound Transmission Loss of Building Partitions and ASTM E2235-04 (2012), Standard Test Method for Determination of Decay Rates for Use in Sound Insulation Test Methods.

Floor/Ceiling Tests: Available from ClarkDietrich Technical Services.

ClarkDietrich Sound Clip®

CDSC STC SOUND ASSEMBLIES ON 2x4 WOOD STUDS

Fire Rating	UL Assembly	Wall Framing	Stud Spacing	Wall Board (Side1/Side2)	Insulation	STC Rating	OITC Rating	Test Report
		2x4 Wood Studs	16" o.c.	(1) layer / (1) layer 5/8" Type X	R-19	53		TL18-201
		2x4 Wood Studs	16" o.c.	(1) layer / (1) layer 5/8" Type C	R-19	60		TL18-288
		2x4 Wood Studs	16" o.c.	(1) layer / (2) layers 5/8" Type X	R-19	57		TL18-204
		2x4 Wood Studs	16" o.c.	(1) layer / (2) layers 5/8" Type C	R-19	61		TL18-289
		2x4 Wood Studs	16" o.c.	(2) layers / (2) layers 5/8" Type X	R-19	61		TL18-205
		2x4 Wood Studs	16" o.c.	(2) layers / (2) layers 5/8" Type C	R-19	62		TL18-290
2 Hr	U301	2x4 Wood Studs	16" o.c.	(2) layers / (2) layers 5/8" Type X	R-13	60	47	L3173.01-113-11-R0
1 Hr	U309	2x4 Wood Studs	24" o.c.	(1) layer / (1) layer 5/8" Type X	R-19	53	37	L3173.17-113-11-R0
1 Hr	U311	2x4 Wood Studs	24" o.c.	(1) layer / (1) layer 5/8" Type C	R-19	55	39	L3173.18-113-11-R0
1 Hr	U340	2x4 Wood Studs - Chase Wall	12" o.c. Staggered	(1) layer / (1) layer 5/8" Type X	R-19	57	43	L3173.21-113-11-R0
1 Hr	U341	2x4 Wood Studs - Chase Wall	24" o.c.	(1) layer / (1) layer 5/8" Type X	R-19	60	45	L3173.20-113-11-R0
1 Hr	U344	2x4 Wood Studs	24" o.c.	(1) layer 5/8" Type X / (1) layer 5/8" Plywood + 5/8" Type X	R-19	57	41	L3173.19-113-11-R0
1 Hr	U356	2x4 Wood Studs	16" o.c.	7/16" Plywood / (1) layer 5/8" Type X	R-13	51	34	L3173.02-113-11-R0

Wall Tests: The test was performed in accordance with ASTM E 90-09 (2016), Standard Test Method for Laboratory Measurement of Airborne Sound Transmission Loss of Building Partitions and ASTM E2235-04 (2012), Standard Test Method for Determination of Decay Rates for Use in Sound Insulation Test Methods.

Floor/Ceiling Tests: Available from ClarkDietrich Technical Services.

10" TradeReady® STEEL JOISTS W/LEVELROCK (UL DESIGN NO. G551)

Material Description	STC	IIC	Test Report
Carpet w/ Pad	55	80	J4775.02
Ceramic w/ NobleSeal®	57	50	J4775.06
Shaw Engineered Wood	54	50	J4775.03
Shaw Como Vinyl 12mm	55	48	J4775.04
Shaw Expo Vinyl 6mm	54	47	J4775.05
Baseline System UL Design No. G551 Ceiling: (1) layer 5/8" Type C	54	43	J4775.01
+(1) Gypsum C-Core Layer with: Shaw Expo Vinyl 6mm on top of the floor UL Design No. G551	58	51	J4775.07

16" WOOD OPEN WEB TRUSS (OWT) W/LEVELROCK (UL DESIGN NO. UL-L521)

With (1) layer 5/8" Type C attached to hat channel.

Material Description	STC	IIC	Test Report
Carpet w/ Pad	59	79	J4777.02
Ceramic w/ NobleSeal®	59	53	J4777.06
Shaw Engineered Wood	58	53	J4777.03
Shaw Como Vinyl 12mm	58	51	J4777.04
Shaw Expo Vinyl 6mm	58	51	J4777.05
Baseline System (Nothing on top of LevelRock) UL Design No. UL-L521 Ceiling: (1) layer 5/8" Type C	58	50	J4777.01

16" WOOD OPEN WEB TRUSS (OWT) W/LEVELROCK (UL DESIGN NO. UL-M510)

With (1) layer 5/8" Type C on the bottom of the josit + (2) layers 5/8" Type C attached to hat channel.

Material Description	STC	IIC	Test Report
Carpet w/ Pad	58	75	J4778.02
Ceramic w/ NobleSeal®	57	51	J4778.06
Shaw Engineered Wood	58	50	J4778.03
Shaw Como Vinyl 12mm	58	49	J4778.04
Shaw Expo Vinyl 6mm	58	50	J4778.05
Baseline System (Nothing on top of LevelRock) UL Design No. UL-M510 Ceiling: (1) layer 5/8" Type C + (2) layers 5/8" Type C	58	50	J4778.01

12" WOOD TRUSS JOINT (TJI) W/LEVELROCK (UL DESIGN NO. UL-L518)

With (2) layers 1/2" Type C attached to hat channel.

Material Description	STC	IIC	Test Report
Carpet w/ Pad	62	84	J4776.03
Ceramic w/ NobleSeal®	63	56	J4776.07
Shaw Engineered Wood	62	56	J4776.04
Shaw Como Vinyl 12mm	62	54	J4776.05
Shaw Expo Vinyl 6mm	61	53	J4776.06
Baseline System (Nothing on top of LevelRock) UL Design No. UL-L518 Ceiling: (2) layers 1/2" Type C	62	50	J4776.02

8" CONCRETE SLAB W/ (1) LAYER GYPSUM CEILING

With (1) layer 5/8" Type X attached to hat channel.

Material Description	STC / Test Report	IIC / Test Report
Carpet Tiles	62 RAL-TL21-030	61 RAL-IN21-009
Vinyl Planks 7mm	63 RAL-TL21-031	61 RAL-IN21-010
Baseline System (Nothing on top of 8" Concrete) Ceiling: R-6.7 unfaced fiberglass insulation + (1) layer 5/8" Type X	62 RAL-TL21-032	60 RAL-IN21-011

8" CONCRETE SLAB W/ (1) LAYER GYPSUM CEILING

With (2) layers 5/8" Type X attached to hat channel.

Material Description	STC / Test Report	IIC / Test Report
Carpet Tiles	63 RAL-TL21-029	61 RAL-IN21-008
Vinyl Planks 7mm	63 RAL-TL21-020	64 RAL-IN21-003
Baseline System (Nothing on top of 8" Concrete) Ceiling: R-6.7 unfaced fiberglass insulation + (2) layers 5/8" Type X	63 RAL-TL21-027	64 RAL-IN21-006

Wall Tests: The test was performed in accordance with ASTM E 90-09 (2016), Standard Test Method for Laboratory Measurement of Airborne Sound Transmission Loss of Building Partitions and ASTM E2235-04 (2012), Standard Test Method for Determination of Decay Rates for Use in Sound Insulation Test Methods.

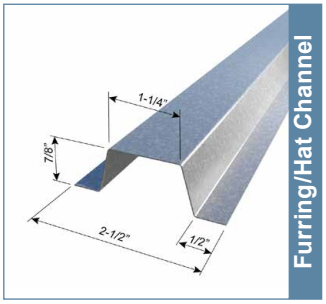
Floor/Ceiling Tests: Available from ClarkDietrich Technical Services.

ClarkDietrich Sound Clip® Installation Guide

FURRING CHANNEL:

7/8" 25-gauge hemmed furring channel (7/8" fur, 1-¼" top & 2-½" bottom)

- When splicing, drywall furring channel should have 6 inch overlap in mid span (between two clips) secure with 18ga tie wire, or two 7/16" framing screws. If using in a fire-rated UL application; use only tie wire and no screws.

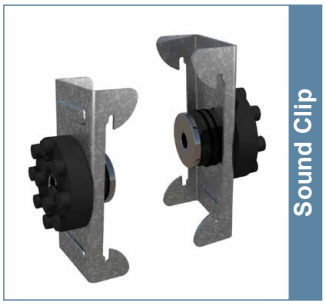


CLARKDIETRICH SOUND CLIP:

3" x 1-¼" (clip only) maximum spacing 48" o.c. and maximum design load is 36 lbs.

FASTENERS:

- CDSC to Wood: 64mm (2-½") # 8 minimum size coarse thread screw. (Recommended #12 or #10 x 2-½" hex head)
- CDSC to Steel: 38 mm (1-½") # 8 minimum size fine thread screw. (Recommended #12 or #10 x 1-⅝" hex head)
- CDSC to Concrete or CMU: 1/4" drop-in anchor, 1/4" drive spike, 3/16" x tapcon, shoot in pin with washer, or product with equal load capabilities (Minimum 120 lbs Ultimate, Sheer and Pullout). Length of fastener determined by the concrete type, strength, and fastener minimum embed requirements.
- DO NOT attach CDSC to framing members with nails; use only approved screws.



WALLS: ONE AND TWO LAYERS OF 5/8" GYPSUM BOARD

- ClarkDietrich Sound Clip (CDSC) shall be 48" maximum o.c. (horizontal).
- Fasten the CDSC to the substrate with a fastener approved for a minimum pull-out and shear of 120lbs.
- Locate the first row of CDSC within 3-6 inches from the floor and within 3-6 inches from the top track, making sure the clip is attached to the studs and not the track.
- Snap in the drywall furring channel into the CDSC clips (horizontal for walls).
- Place 1/4" (minimum) shim on floor to fully support the gypsum board.
- Install the gypsum board from the bottom up leaving a 1/4" minimum gap around the perimeter of the wall.
- ONLY remove the shims after ALL the gypsum board is completely screwed to ALL the drywall furring channels. Make sure every screw (floor-to-ceiling and wall-to-wall) is installed as required by the assembly design, in every layer of gypsum board before removing the shims at the floor. The shims are critical to ensure best results.
- Caulk around the entire perimeter of the gypsum board. Use fire and smoke rated acoustical sealant where required.

CEILINGS: ONE AND TWO LAYERS OF 5/8" GYPSUM BOARD

- CDSC shall be 48" maximum o.c.
- Fasten the CDSC to the substrate with a fastener approved for a minimum pull-out and shear of 120lbs.
- Locate the first row CDSC clips within 8" of the wall at each end of a run.
- Snap in the drywall furring channel into the CDSC clips. Channel max spacing at 24" o.c.
- Install the gypsum board from leaving a 1/4" min. gap around the perimeter of the ceiling.
- Caulk around the entire perimeter of the gypsum board. Use fire and smoke rated acoustical sealant where required.

GENERAL INFORMATION:

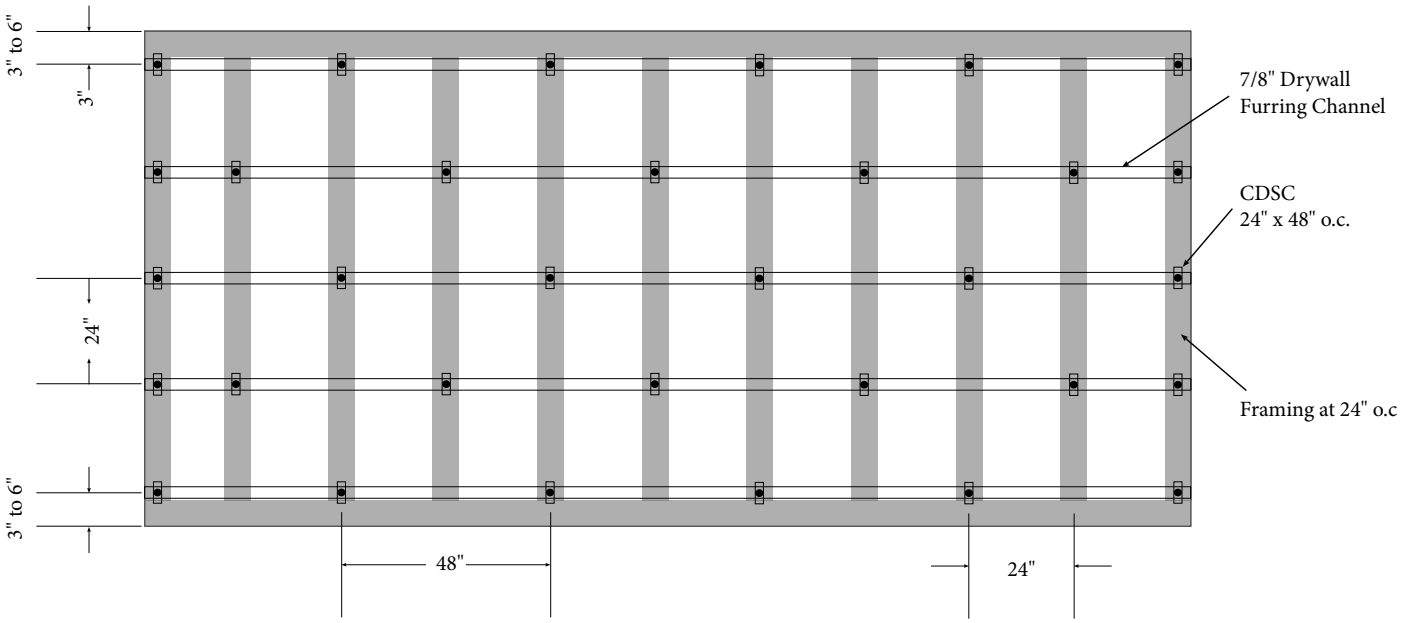
- Refer to www.UL.com, or www.clarkdietrich.com for complete installation details on all fire resistive assembly designs.
- ClarkDietrich Sound Clips, furring channel and gypsum board shall not carry heavy loads such as cabinets or bookshelves.
- Seal all potential air leaks with non-hardening acoustical caulking to achieve best noise control results. Use fire rated sealant where required.

FIRE TEST INFORMATION:

Visit clarkdietrich.com for the latest fire testing approvals and updates.

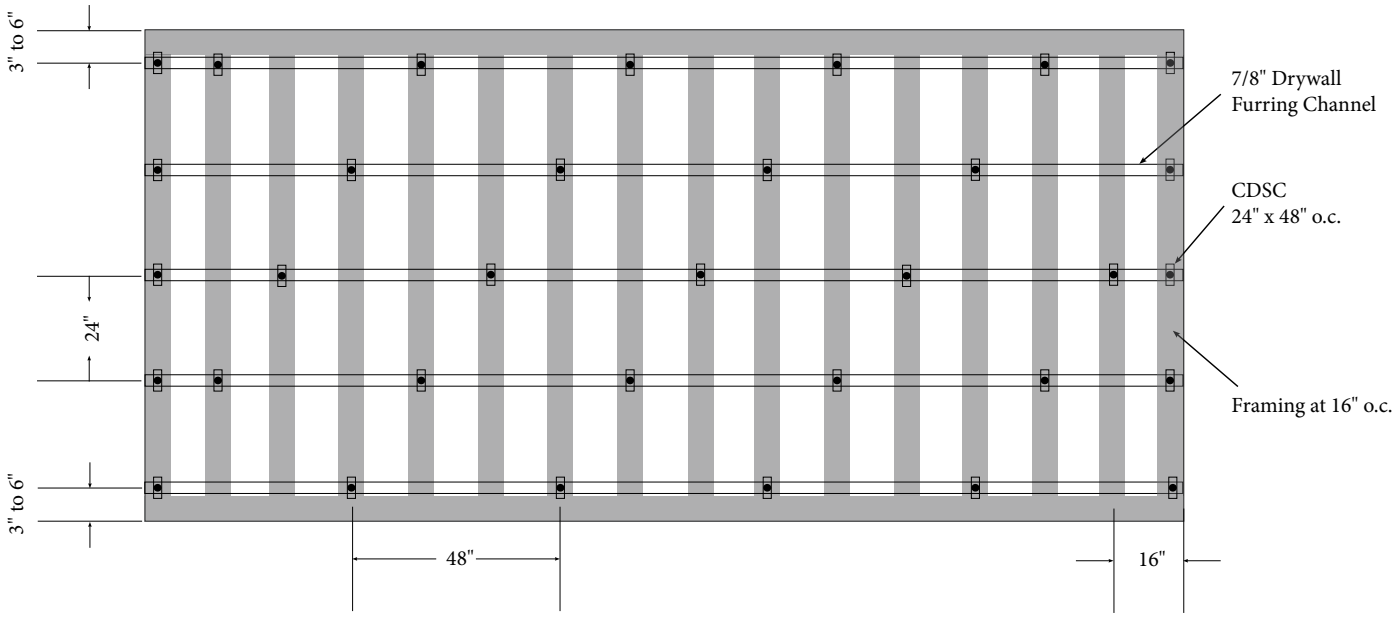
WALL AND CEILING INSTALLATION GUIDE
FOR WOOD OR STEEL FRAMING WITH FURRING ON 24" CENTERS

Wall or Ceiling framing at 24" o.c.,
CDSC at 48" o.c., furring at 24" o.c., 1 or 2 layers of 5/8" gypsum board



NOTE: DRAWING NOT TO SCALE

Wall or Ceiling framing at 16" o.c.,
CDSC at 48" o.c., furring at 24" o.c., 1 or 2 layers of 5/8" gypsum board



NOTE: DRAWING NOT TO SCALE

Header Cripple Stud Clip

Eliminates the header track material and is a economical alternative

Header Cripple Stud Clips are used with RedHeader PRO™ and HDS® Framing System and remove the need for a header track. The L-shaped clips install on the back side of the cripple stud, therefore shorter length clips do not need to be ordered. These labor time-savers include prepunched holes for quicker screw attachments, and are punched for RedHeader PRO and HDS connections.

PRODUCT DIMENSIONS

1-1/2" x 1-1/2" x 3-3/8"
1-1/2" x 1-1/2" x 3-3/4"
1-1/2" x 1-1/2" x 5-3/4"
1-1/2" x 1-1/2" x 7-3/4"

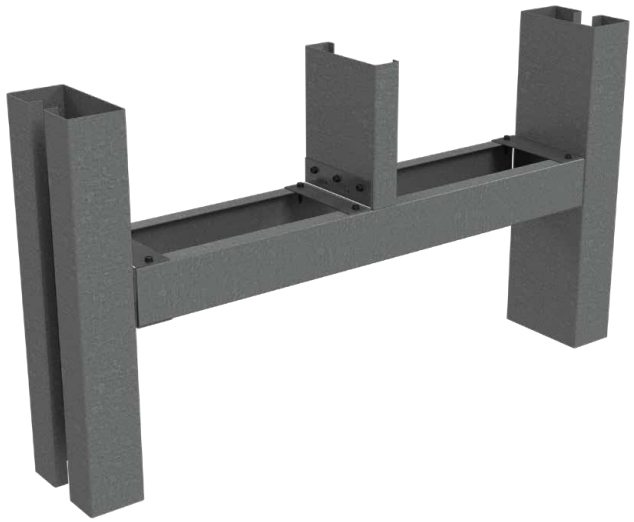
MATERIAL SPECIFICATIONS

Gauge: 16 gauge (54mils)
Design Thickness: 0.0451 inches
Coating: G90

Gauge: 14 gauge (68mils)
Design Thickness: 0.0713 inches
Coating: G90

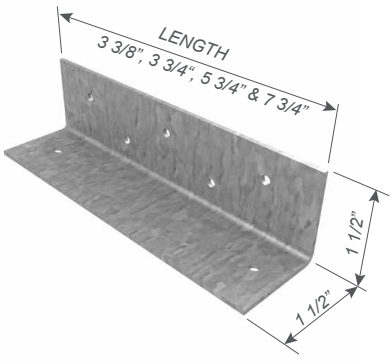
INSTALLATION

Header Cripple Stud Clips are attached to the cold-formed steel (CFS) framing members using #10 minimum self-drilling screws driven through the clip holes into the steel framing. It is the responsibility of the design engineer to detail the attachment of clips and verify their capacity meets the application. Place the first two screws in each leg in the outermost screw holes. The next screws (if needed) are placed moving from the outermost holes toward the center, symmetrically.



Header Cripple Stud Clip

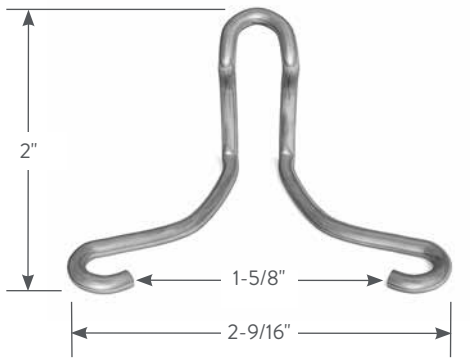
Clip Designation	mils (ga)	Design Thickness	Size (in)	For Header Size	Pcs./Bucket
RCSC3-54	54 (16)	0.0566"	1-1/2" x 1-1/2" x 3-3/8	3-5/8" web	400
RCSC4-54			1-1/2" x 1-1/2" x 3-3/4	4" web	200
RCSC6-54			1-1/2" x 1-1/2" x 5-3/4	6" web	100
RCSC8-54			1-1/2" x 1-1/2" x 7-3/4	8" web	100
RCSC3-68	68 (14)	0.0713"	1-1/2" x 1-1/2" x 3-3/8	3-5/8" web	200
RCSC4-68			1-1/2" x 1-1/2" x 3-3/4	4" web	200
RCSC6-68			1-1/2" x 1-1/2" x 5-3/4	6" web	100
RCSC8-68			1-1/2" x 1-1/2" x 7-3/4	8" web	100



Metal Furring Channel Clip

Quickly facilitates the attachment of metal furring channel to 1-1/2" U-channel in ceiling assemblies.

ClarkDietrich metal furring channel clips are made of galvanized wire and used to attach metal furring channels to 1-1/2" U-channels in ceiling gridwork. Clips must be installed on alternating sides of the 1-1/2" channels. Use tie wire when clips cannot be alternated. Clips should only be used when single-layer gypsum or single-layer veneer plaster base is used.



Metal Furring Channel Clip

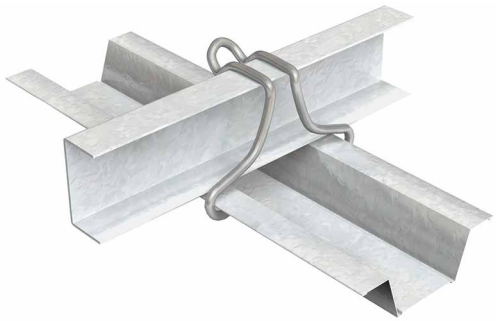
MATERIAL SPECIFICATIONS

MFCCs, made of corrosion-resistant galvanized wire, are used in attaching metal channels to 1-1/2" cold-rolled channel ceiling gridwork. For use with gypsum panels or with single-layer veneer gypsum plaster base. See illustrations.

INSTALLATION

MFCCs must be attached on alternate sides of the 1-1/2" U-channels. Use tie wire when clips cannot be alternated.





Metal Furring Channel Clip (MFCC)

Product code	Pcs./Carton
MFCC	500

Panel Lift Clip

Provides lifting points for prefabricated panels.

The Panel Lift Clip is load rated and is used to safely lift wall panels at assembly warehouses or on job-sites. The clip comes pre-punched for screw attachment to the panel as well as a larger hole for the clamp. The rounded design of the top of the panel clip allows for the clamp to slide freely without getting stuck on the corners. The Panel Lift Clip comes in 12ga and is offered in two sizes, 8" and 12".

PRODUCT DIMENSIONS

PLC8-97: 3" wide x 8" long plate
PLC12-97: 3" wide x 12" long plate

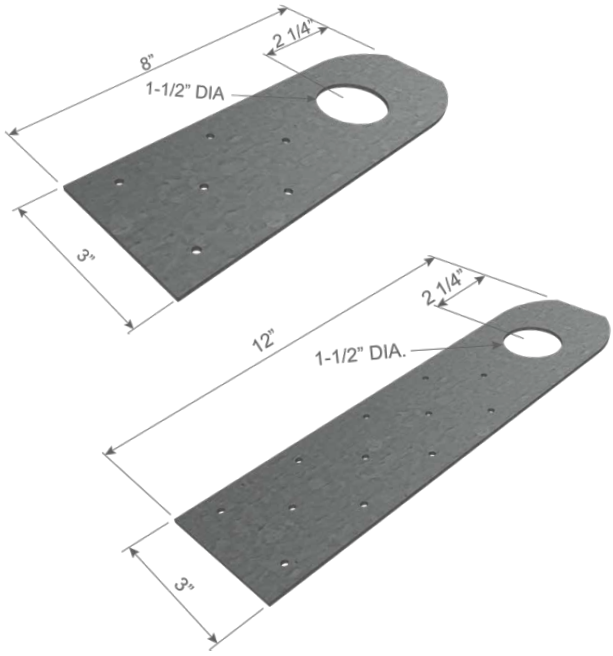
MATERIAL SPECIFICATIONS

Material: ASTM A 1003 Structural Grade 50
Gauge: 12 gauge (97mils)
Design Thickness: 0.1017 inches
ASTM: A1003, A653

Galvanized coating meets or exceeds requirements of ASTM A653.

INSTALLATION

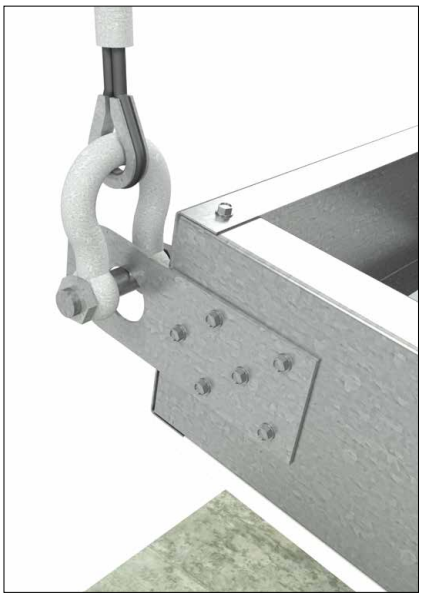
Install the Panel Lift Clips to each side and intermediate points of the panel. For intermediate clip installation, cut a groove large enough to insert the clip through the top track. Quantity, location and anchoring of clips to panel as designed by EOR. Panel Lift Clip is for single use only, and cannot be reused or reattached.

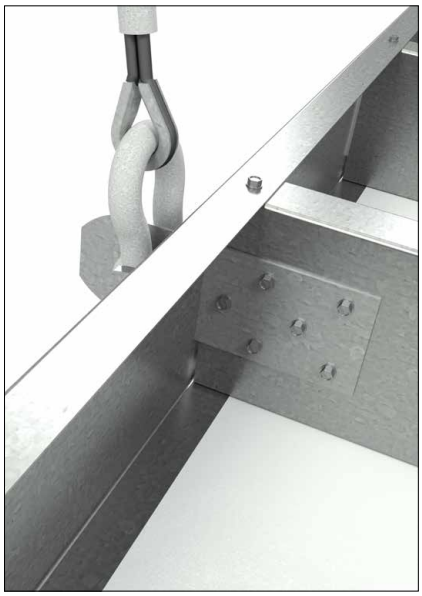


Panel Lift Clip (PLC)

Clip Designation	Overall Length (in)	Pcs./Bucket
PLC8-97	8	100
PLC12-97	12	50







Panel Lift Clip (PLC8, PLC12)

Allowable Loads – Connection to Steel Framing, per Clip (lbs)

Clip Designation	Stud Thickness		F3 (Panel Lifted from a Vertical Orientation)			F2 (Panel Lifted from a Horizontal Orientation)		
	mils (ga)	Fy (ksi)	97mils (12ga) PLC			97mils (12ga) PLC		
			w/3 #10 screws	w/5 #10 screws	w/6 #10 screws	w/3 #10 screws	w/5 #10 screws	w/6 #10 screws
PLC8-97	33 (20)	33	530	884	1060	89	205	260
	33 (20)	50	766	1276	1532	129	297	375
	43 (18)	33	789	1315	1578	133	306	387
	43 (18)	50	1140	1900	2279	192	442	559
	54 (16)	33	1109	1849	2219	187	430	544
	54 (16)	50	1602	2671	2775	270	621	786
	68 (14)	50	1644	2740	2775	277	637	806
	97 (12)	50	1644	2740	2775	277	637	806

Clip Designation	Stud Thickness		F3 (Panel Lifted from a Vertical Orientation)			F2 (Panel Lifted from a Horizontal Orientation)		
	mils (ga)	Fy (ksi)	97mils (12ga) PLC			97mils (12ga) PLC		
			w/5 #10 screws	w/8 #10 screws	w/12 #10 screws	w/5 #10 screws	w/8 #10 screws	w/12 #10 screws
PLC12-97	33 (20)	33	884	1414	2121	113	231	491
	33 (20)	50	1276	2042	2775	163	333	710
	43 (18)	33	1315	2104	2775	168	343	731
	43 (18)	50	1900	2775	2775	243	496	1056
	54 (16)	33	1849	2775	2775	237	483	1028
	54 (16)	50	2671	2775	2775	342	697	1085
	68 (14)	50	2740	2775	2775	351	715	1085
	97 (12)	50	2740	2775	2775	351	715	1085

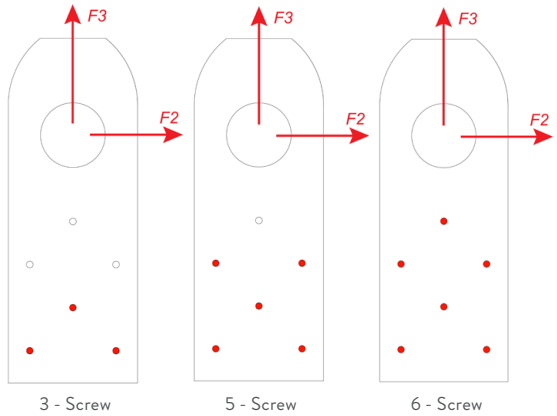
Notes:

1 Attachment to steel framing using #10 screws with a minimum shear capacity of 1644 lbs.

2 The use of load distribution spreader bar is assumed for multiple lift points.

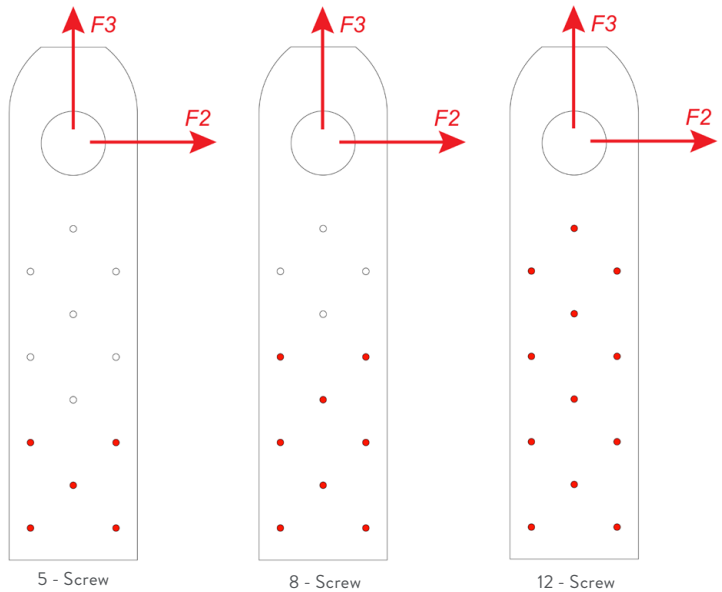
3 Panel Lift Clip is for single use only, and cannot be reused or reattached.

PLC8-97



3 - Screw 5 - Screw 6 - Screw

PLC12-97

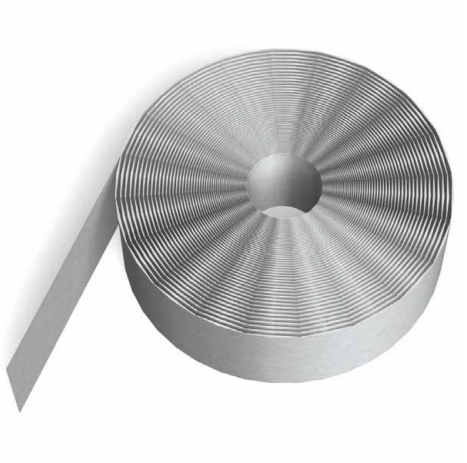


5 - Screw 8 - Screw 12 - Screw

Commercial Strapping

Multipurpose pre-punched commercial coil stock used for bracing, bridging or tension strapping

Coil Strapping is made in a variety of widths, each with a unique layout of pre-punched holes for a variety of fastening options to meet different application requirements.



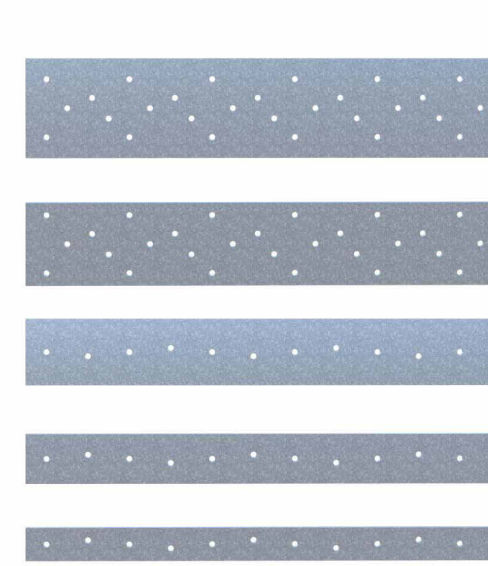
PRODUCT DIMENSIONS

1" x 250'
1-1/2" x 200'
2" x 150'
2-1/2" x 150'
2-1/2" x 100'
3" x 100'

MATERIAL SPECIFICATIONS

Material: 50ksi, G60
Gauge: 20 gauge (33mils)
Design Thickness: 0.0346 inches
ASTM: A1003, A653

Material: 50ksi, G90 (Z275) hot-dipped galvanized
Gauge: 18 gauge (43mils)
Design Thickness: 0.0451 inches
ASTM: A1003, A653



TYPICAL APPLICATIONS:

- Horizontal strap lateral bracing for wall studs
- Strap bridging for bottom of floor joists
- Tension strapping for shear wall x-bracing

FEATURES AND BENEFITS:

- Packaged for easy grab and go on jobsite
- Various LF lengths to aid in quicker installation
- Pre-punched holes to speed up installation and improve overall installation costs (see EOR for all connections)
- Tension Load Values available

Commercial Strapping (CS)

Product Code	Thickness mils (ga)	Width (in)	Coil Length (ft)
CS1-250-33	33 (20)	1	250
CS1-250-43	43 (18)	1	250
CS1.5-200-33	33 (20)	1.5	200
CS1.5-200-43	43 (18)	1.5	200
CS2-150-33	33 (20)	2	150
CS2-150-43	43 (18)	2	150
CS2.5-150-33	33 (20)	2.5	150
CS2.5-100-43	43 (18)	2.5	100
CS3-100-33	33 (20)	3	100
CS3-100-43	43 (18)	3	100

INSTALLATION

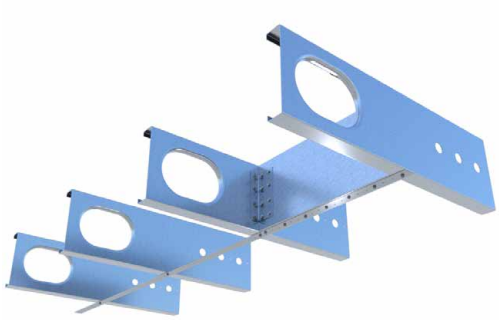
Horizontal strap lateral bracing for wall studs

Lateral bracing consists of a field-cut stud or track for solid blocking and steel strap bracing on both flanges of the studs. Solid blocking is placed at each end of the wall, adjacent to wall openings and 8' o.c. maximum. The blocking is attached to each adjacent stud via EasyClip™ E- or S- Series™ clips, or when a track is used, the flanges are cut, the web bent and a minimum 4" overlap is used to secure the track block to the studs. Strap bracing, 2" wide and 20ga (33 mils) minimum, is fastened to each solid block and stud flange.



Strap bridging for bottom of floor joists

Spacing of bridging must be calculated based on the required strength. In general, bridging is installed at a maximum of 8' o.c. spacing pendicular to the joists. For example, an 18' joist span would require two bridging runs at 6' o.c. spacing. Where the sub-floor or decking does not provide lateral support, strap must also be installed on the top flange of the joist. Install immediately after joists are erected and before construction loads are applied. Solid blocking is field cut from track or joist sections.



Tension strapping for shear wall x-bracing

Straps are either attached directly to the compression studs or are attached via Gusset Plates. Compression studs must be anchored to the foundation, normally with ClarkDietrich Holdowns. For multi-story construction, the uplift loads are extremely high. It is not uncommon to require 20,000 to 40,000 pounds of uplift force at these connections. Since ClarkDietrich Holdowns are not designed to resist this magnitude of force, it is recommended that embedded plates be installed prior to pouring the concrete foundation. A heavy steel assembly is then welded to the embedded plate and to the compression studs.



Caution: Racking loads are first transferred to the roof or floor decking and then to the shearwalls (X-bracing). The X-bracing then relies on a proper foundation to resist uplift and shear forces. In order for the system to function properly, the load path from the roof or floor deck to the shearwalls to the foundation must be complete. This normally requires additional bracing, blocking, track and rim splices, drag struts, uplift anchors and heavy-duty foundations.

Box Header Clip

Pre-punched clip for box header framing.

The Box Header Clip (BHC) is designed to eliminate field cutting metal track into sections. The BHC clip is pre-punched to promote a quick and accurate installation. It is available in a variety of sizes and thicknesses to accommodate different application requirements.

MATERIAL SPECIFICATIONS

Gauge: 18 gauge (43mils)
Design Thickness: 0.0451 inches

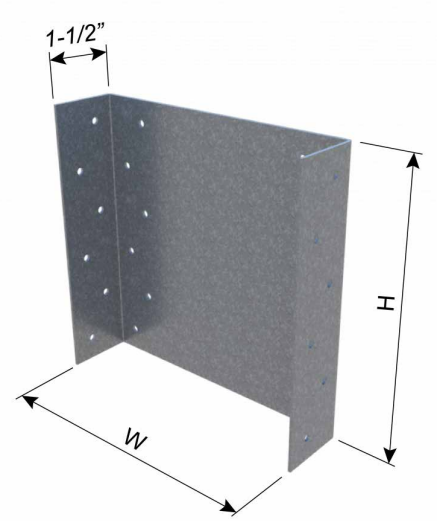
Gauge: 16 gauge (54mils)
Design Thickness: 0.0566 inches

Gauge: 14 gauge (68mils)
Design Thickness: 0.0713 inches

Material: 50ksi, G90 (Z275) hot-dipped galvanized
ASTM: A1003, A653

INSTALLATION

Refer to load tables for appropriate box header clip. All pre-punched holes must be filled by placing #10-16 screws to achieve noted capacities.



Box Header Clip (BHC)

Product Code	Width (W) (in)	Height (H) (in)
362BHC2	3-5/8	2
362BHC4		4
362BHC6		6
362BHC8		8
362BHC10		10
600BHC2	6	2
600BHC4		4
600BHC6		6
600BHC8		8
600BHC10		10
800BHC2	8	2
800BHC4		4
800BHC6		6
800BHC8		8
800BHC10		10







Box Header Clip (BHC)

Product code	Head gauge (ga)	F2 (lbs.) Jamb Gauge 20	18	16	14	12
XXXBHC2-43	20	353	353	353	353	353
	18	353	526	526	526	526
	16	353	526	839	839	839
	14	353	526	839	839	839
	12	353	526	839	839	839
XXXBHC2-54	20	353	353	353	353	353
	18	353	526	526	526	526
	16	353	526	933	933	933
	14	353	526	933	933	933
	12	353	526	933	933	933
XXXBHC2-68	20	353	353	353	353	353
	18	353	526	526	526	526
	16	353	526	933	933	933
	14	353	526	933	933	933
	12	353	526	933	933	933

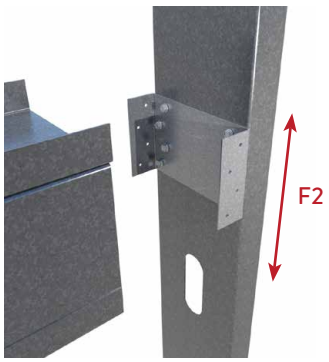
Product code	Head gauge (ga)	F2 (lbs.) Jamb Gauge 20	18	16	14	12
XXXBHC4-43	20	990	990	990	990	990
	18	990	1473	1473	1473	1473
	16	990	1473	2076	2076	2076
	14	990	1473	2076	2076	2076
	12	990	1473	2076	2076	2076
XXXBHC4-54	20	990	990	990	990	990
	18	990	1473	1473	1473	1473
	16	990	1473	2613	2613	2613
	14	990	1473	2613	2613	2613
	12	990	1473	2613	2613	2613
XXXBHC4-68	20	990	990	990	990	990
	18	990	1473	1473	1473	1473
	16	990	1473	2613	2613	2613
	14	990	1473	2613	2613	2613
	12	990	1473	2613	2613	2613

Product code	Head gauge (ga)	F2 (lbs.) Jamb Gauge 20	18	16	14	12
XXXBHC6-43	20	1717	1717	1717	1717	1717
	18	1717	2555	2555	2555	2555
	16	1717	2555	3206	3206	3206
	14	1717	2555	3206	3206	3206
	12	1717	2555	3206	3206	3206
XXXBHC6-54	20	1717	1717	1717	1717	1717
	18	1717	2555	2555	2555	2555
	16	1717	2555	4533	4533	4533
	14	1717	2555	4533	4533	4533
	12	1717	2555	4533	4533	4533
XXXBHC6-68	20	1717	1717	1717	1717	1717
	18	1717	2555	2555	2555	2555
	16	1717	2555	4533	4533	4533
	14	1717	2555	4533	4533	4533
	12	1717	2555	4533	4533	4533

Product code	Head gauge (ga)	F2 (lbs.) Jamb Gauge 20	18	16	14	12
XXXBHC8-43	20	2465	2465	2465	2465	2465
	18	2465	3668	3668	3668	3668
	16	2465	3668	4274	4274	4274
	14	2465	3668	4274	4274	4274
	12	2465	3668	4274	4274	4274
XXXBHC8-54	20	2465	2465	2465	2465	2465
	18	2465	3668	3668	3668	3668
	16	2465	3668	6509	6509	6509
	14	2465	3668	6509	6509	6509
	12	2465	3668	6509	6509	6509
XXXBHC8-68	20	2465	2465	2465	2465	2465
	18	2465	3668	3668	3668	3668
	16	2465	3668	6509	6509	6509
	14	2465	3668	6509	6509	6509
	12	2465	3668	6509	6509	6509

Product code	Head gauge (ga)	F2 (lbs.) Jamb Gauge 20	18	16	14	12
XXXBHC10-43	20	2914	2914	2914	2914	2914
	18	2914	4336	4336	4336	4336
	16	2914	4336	5343	5343	5343
	14	2914	4336	5343	5343	5343
	12	2914	4336	5343	5343	5343
XXXBHC10-54	20	2914	2914	2914	2914	2914
	18	2914	4336	4336	4336	4336
	16	2914	4336	7694	7694	7694
	14	2914	4336	7694	7694	7694
	12	2914	4336	7694	7694	7694
XXXBHC10-68	20	2914	2914	2914	2914	2914
	18	2914	4336	4336	4336	4336
	16	2914	4336	7694	7694	7694
	14	2914	4336	7694	7694	7694
	12	2914	4336	7694	7694	7694





Notes:

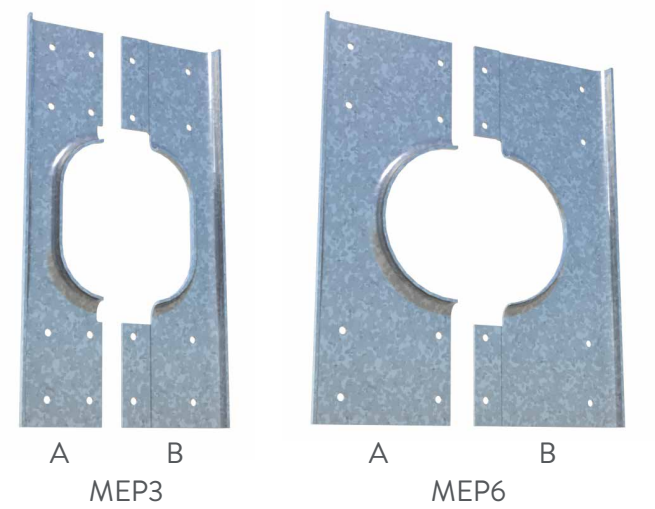
1. Listed capacities are based on AISI S100-16 (2020) w/S2-20, North American Specification for Cold-Formed Steel Structural Members, AISI D114-21, Cold-Formed Steel Clip Angle Design Guide, and AISI Research Report RP18-4.
2. Capacities are based on #10-16 screws with an ultimate shear capacity of at least 1400 lbs.
3. Capacities are based on #10-16 screws through all of the pre-punched holes in the connector to each side of the box header and #10-16 screws through all of the pre-punched holes in the connector to the jamb.
4. Capacities are based on 20ga. and 18ga. 33ksi material and 16ga. and heavier 50ksi material.
5. "XXX" = 362 for a 3-5/8" wall, 600 for a 6" wall, and 800 for an 8" wall.

MEP Gusset Plate

Restores structural integrity of steel framing with field modified openings.

The MEP Gusset Plate is designed to provide strength and stiffness to framing members that are modified or field cut at the job site with oversized cutouts on the web of the member. The two-piece design allows the plate to be attached after MEP components have been installed.

- For use with 15mil to 97mil framing members.
- Not for use when flange is cut out.



PRODUCT DIMENSIONS

MEP3 = 3-1/2" x 8" assembled
MEP6 = 5-3/4" x 8" assembled

MATERIAL SPECIFICATIONS

Gauge: 16 gauge (54mil)
Design Thickness: 0.0566 inches
Material: 50ksi, G90 (Z275) hot-dipped galvanized

INSTALLATION

Installing the ClarkDietrich MEP Gusset Plate in accordance with the following guidelines will return the stud member to its original flexural strength, shear strength, and stiffness.

- The dimensions of the field cut hole shall be no greater than 3" wide by 3" tall for 6" framing members and 2" wide by 3" tall for 3-5/8" members.
- Field cut holes shall be made with a plasma cutter or saw. Torch-cut holes are not permitted.
- The steel around the hole shall not be damaged or distorted.
- A total of (12) #10-16 screws shall be used at each hole repair location as shown in the figure.
- This product cannot be used when framing member's flange is notched.
- Can be installed as close as 2-1/2" from an existing knockout (15mil-54mil framing only). For 68mil-97 mil, minimum stud web hole spacing shall be maintained for compliance with AISI S100, S220 & S240 standards.
- The axial capacity and web crippling capacity of the stud member shall be considered separately. It is the responsibility of the design professional to verify that the capacity meets the requirements of the intended application.





MEP Gusset Plate (MEP)

Product Code	Dimensions (Assembled) (in)	Packaging
MEP3	3-1/2 x 8	25 Sets (A&B)
MEP6	5-3/4 x 8	25 Sets (A&B)

MEP Flange Repair

Restores structural integrity of steel framing with field modified openings.



The MEP Flange Repair is a one-piece component designed to restore strength and stiffness to cold-formed steel framing members that have been field modified at the job site. It repairs damaged or cut flanges and reinforces oversized web openings, helping return the framing member to its intended structural performance.

The single-piece design allows for efficient installation around installed MEP components, making it ideal for corrective field conditions. The MEP Flange Repair restores structural integrity and improves load transfer in steel framing members with oversized or improperly located openings.

Multiple Sizes for Common Stud Depths

- Available for use with 3-5/8" framing and 6" framing to match typical wall assemblies.

Drywall and Structural Stud Applications

- Offered in two steel thicknesses to accommodate both drywall studs and structural studs.



MATERIAL SPECIFICATIONS

Gauge: 18 gauge (43mil)
Design Thickness: 0.0451 inches

Gauge: 14 gauge (68mil)
Design Thickness: 0.0713 inches

Yield Strength: 50ksi
Coating: G90

CODE APPROVALS AND PERFORMANCE STANDARDS

AISI S100

MEP Flange Repair

Product Code	Thickness mils (ga)	Design Thickness (in)	Clip Width (in)	Clip Length (in)	Packaging Clips/Bucket
MEP3-F-43	43 (18)	0.0451	1-13/16	12	25
MEP3-F-68	68 (14)	0.0713	1-13/16	12	25
MEP6-F-43	43 (18)	0.0451	3	12	25
MEP6-F-68	68 (14)	0.0713	3	12	25



MEP Flange Repair

INSTALLATION

Field cut holes shall not exceed 4" in height and must have 1/2" minimum web remaining. Place the MEP Flange Repair on the inside web of the framing member, aligning the part over the field-modified opening and damaged flange area. Ensure the repair is centered on the stud. Secure the MEP Flange Repair using eight (8) #10 self-drilling fasteners to the web and four (4) #10 self-drilling fasteners to the flange. All fasteners shall be located ½" from the cut edges of the repair component (both web and flanges). Fasteners shall be centered to the stud flanges to ensure proper load transfer. Installation shall not interfere with installed MEP components.



NON-STRUCTURAL STUD APPLICATIONS

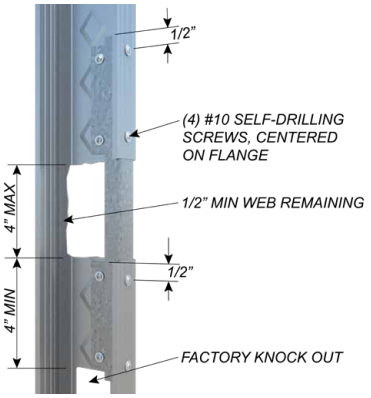
Product Code	Framing Depth (in)	Part Thickness mils (ga)	Stud Type	Compatible Stud Thickness	Performance Notes
MEP3-F-43	3-5/8	43 (18)	Drywall	15mil - 33mil	Designed for non-structural drywall framing
MEP6-F-43	6	43 (18)	Drywall	15mil - 33mil	Designed for non-structural drywall framing

STRUCTURAL STUD APPLICATIONS

Product Code	Framing Depth (in)	Part Thickness mils (ga)	Stud Type	Compatible Stud Thickness	Performance Notes
MEP3-F-68	3-5/8	68 (14)	Structural	33mil - 97mil	May be used on 68mil (slight flexural stiffness reduction) and 97mil (reduced flexural strength and stiffness)
MEP6-F-68	6	68 (14)	Structural	33mil - 97mil	May be used on 68mil (slight flexural stiffness reduction) and 97mil (reduced flexural strength and stiffness)

FLANGE REPAIR CLIP: FLEXURAL STIFFNESS/STRENGTH ADJUSTMENT FACTORS

Framing Member mil (ga)	Thickness (in)	Yield Strength Fy, ksi	Flange Repair Clip (WRU)	Adjustment Factor	
				Flexural Stiffness	Flexural Strength
15 (25 EQ)	0.0158	50	18ga	1.00	1.00
18 (20 EQ)	0.0190	70		1.00	1.00
30 (20)	0.0312	33		1.00	1.00
33 (20)	0.0346	33		1.00	1.00
33 (20) STR	0.0346	33	14ga	1.00	1.00
43 (18)	0.0451	33		1.00	1.00
54 (16)	0.0566	50		1.00	1.00
68 (14)	0.0713	50		1.00	0.85
97 (12)	0.1017	50		0.85	0.50



Notes:

1 Fasteners attached to the MEP Flange Repair Clips shall be located at 1/2" from the cut edges of the clip (for both flanges & web) and centered to the stud flange.

2 MEP Flange Repair Clip attached to stiffen the framing member (field-cut opening) using eight (8) #10 self-drilling fasteners to the web and four (4) #10 self-drilling fasteners to the flange.

3 These adjustment factors are applicable when the oversized holes are at least 4" away from the edge of the standard punchout.

4 18ga MEP Flange Repair Clip adjustment factors apply to ClarkDietrich ProSTUD® products.

5 14ga MEP Flange Repair Clip adjustment factors apply to structural studs with 1-5/8" flanges.

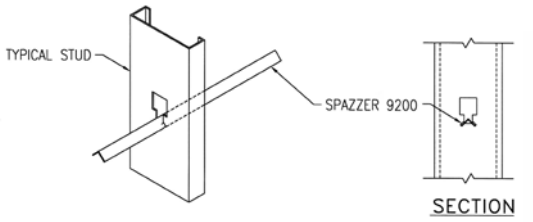
6 Strength adjustment factors apply to flexural and shear capacities. If axial or web crippling capacities are a concern, they need to be checked separately.

Product Detail

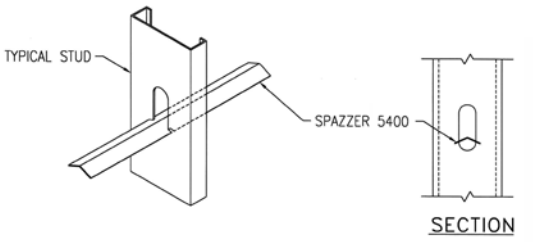
Visit our CAD Library at clarkdietrich.com to view or download construction details in .dwg, .dxf, and .pdf formats.

BRIDGING DETAILS

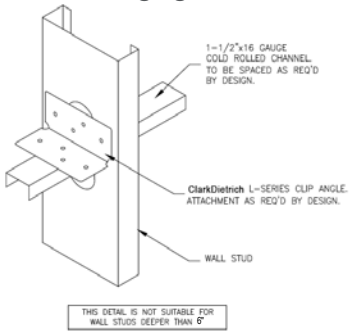
Spazzer® 9200 Bridging



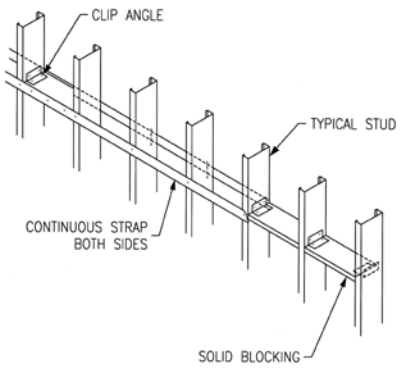
Spazzer 5400 Bridging



U-Channel Bridging Connection

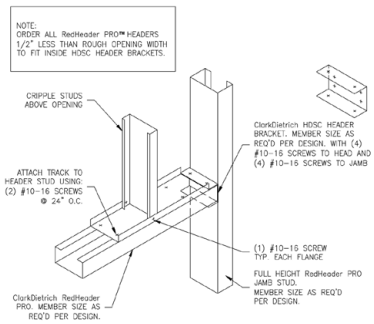


Block and Strap Bridging

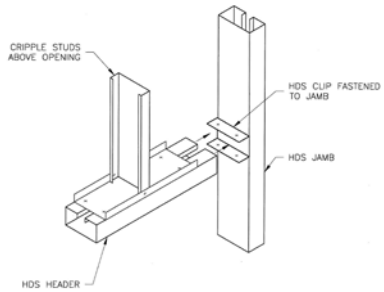


HEADER DETAILS

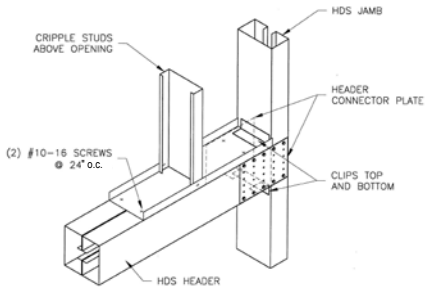
Curtain Wall RedHeader PRO™ Header & Jamb



Curtain Wall HDS® Header & Jamb

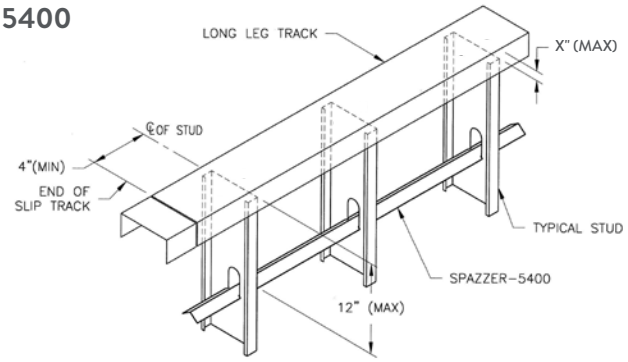


Load-Bearing HDS Header & Jamb

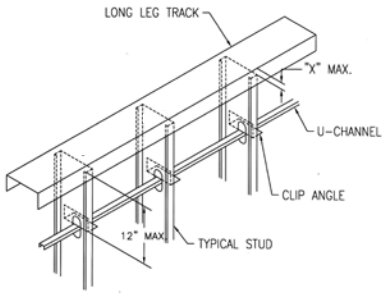


HEAD-OF-WALL DEFLECTION DETAILS

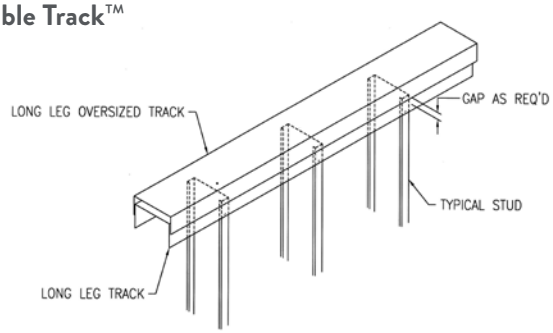
Long Leg Track with Spazzer 5400



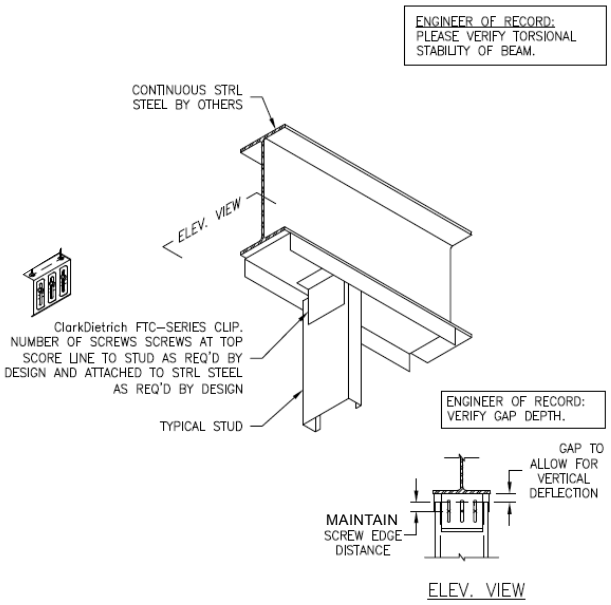
Long Leg Track with U-Channel



Double Track™



Long Leg Track with Fast Top™ Clip



Details shown in this brochure are for example only. The engineer of record on the project is responsible for the design of the connection to the structure. Additional connection details can be found at clarkdietrich.com.

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