

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

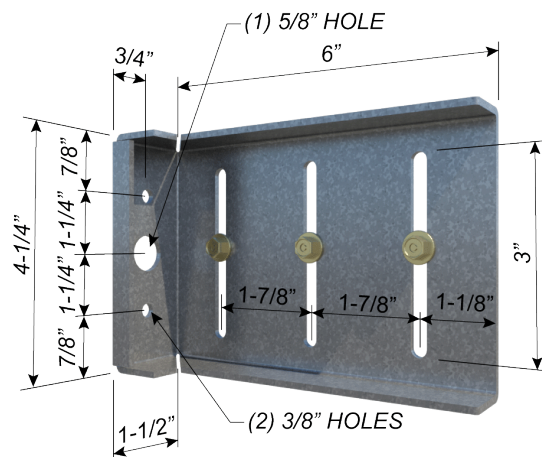
PRODUCT DIMENSIONS

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.



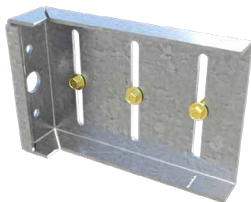
FCSC-HD Clips

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

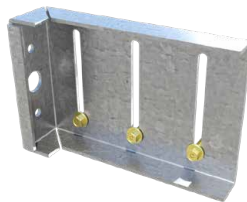
Includes (80) Proprietary Deflection Screws per carton.



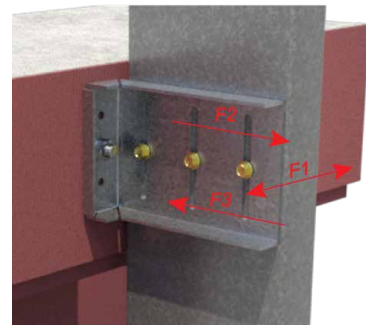
Proprietary Deflection Screw



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)										
	Stud Depth	Stud Thickness mils (ga)	Proprietary Deflection Screws	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
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)										
	Stud Depth	Stud Thickness mils (ga)	Proprietary Deflection Screws	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
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:

- Listed capacities are in accordance with provisions of AISI S100-16(R2020)/S2-20, and ICC-ES AC261.
- 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.
- 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.
- Nominal capacities are listed for use in blast/seismic designs and they do not assume a safety factor or resistance factor.
- The safety factor for ASD loads and resistance factor for LRFD loads are in accordance with Chapter K of AISI-S100.
- Proprietary 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 offset in FCSC-HD clip slots. For connection to structure, base anchors designed by others.
- The Proprietary Deflection Screws (0.25" dia) provide nominal shear capacity of 2400lbs and a nominal tension capacity of 4060lbs.
- It is the responsibility of the design professional to detail the project drawings for proper FCSC-HD installation.
- 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 Aktiengesellschaft 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											
	Stud Depth	Stud Thickness mils (gauge)	Proprietary Deflection Screws	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	
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 Aktiengesellschaft 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.