

Universal Strut Connector

The Universal Strut Connector (USC) is a single connector for long stand-off curtain wall connections

The Universal Strut Connector (USC) is a high-performance curtain-wall connection system that combines long-reach stand-off capability with a rigid, high-strength clip — all in a single, universal connector. It is designed to support either rigid or deflection connections, giving engineers and contractors maximum flexibility for medium to large stand-off curtain-wall conditions.

The connector comes with proprietary deflection screws for when vertical movement is required, allowing the stud to slide freely while maintaining lateral and axial load transfer. When deflection is not required, the same connector can be installed as a rigid attachment using standard fasteners. With strut lengths up to 24", the Universal Strut Connector eliminates the need for built-up framing or stacked clips — simplifying details while improving performance.

ALTERNATIVE PRODUCTS

FastStrut™
Extended SwiftClip™ LE-Series

MATERIAL SPECIFICATIONS

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

CODE APPROVALS & PERFORMANCE STANDARDS

AISI S100
IAPMO ER-731 (USC20 & USC22 not included in report)



Universal Strut Connector (USC)				
Clip Designation	Thickness		Clip Dimensions (in)	Packaging Pcs./Box
	mils (ga)	Design Thickness (in)		
USC12-68	68 (14)	0.0713	4 x 1-1/2 x 12	10
USC16-68	68 (14)	0.0713	4 x 1-1/2 x 16	10
USC18-68	68 (14)	0.0713	4 x 1-1/2 x 18	10
USC20-68	68 (14)	0.0713	4 x 1-1/2 x 20	10
USC22-68	68 (14)	0.0713	4 x 1-1/2 x 22	10
USC24-68	68 (14)	0.0713	4 x 1-1/2 x 24	10

INSTALLATION

For a Rigid Connection:

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 1-1/2" flange. The strut must engage the building structure a minimum of 4". When using tabulated allowable loads, connections to the building structure must be made according to the table notes. Connection to cold-formed steel framing members using #10-16 HWH minimum self-drilling screws through the provided clip holes, with the number of fasteners in accordance with the load tables.

Clip Designation	Framing Member Details		Maximum Stand Off (in)	Framing Screws	Load Capacities (lbs) / Clip										
	Stud Depth (in)	Thickness mils (ga)			In-Plane (F1)		Tension (F2)			Compression (F3)			Shear (F4)		
					Nominal Load	ASD Load	1/8" Service Load	Nominal Load	ASD Load	1/8" Service Load	Nominal Load	ASD Load	1/8" Service Load	Nominal Load	ASD Load
USC12-68	3-5/8	33 (20)	4-3/4	(4) #10 - 16 Screws	405	140	1630	2120	705	2210	2120	705	380	1105	380
		43 (18)			525	180	1765	3155	1030	2425	3155	1050	425	1355	400
		54 (16)			955	330	2560	3155	1030	3200	4380	1505	535	1385	400
		68 (14)			1260	435	2560	3250	1120	3200	4380	1505	585	1385	400
		97 (12)			2120	710	2645	3285	1130	3200	4380	1505	680	1630	560
USC12-68	6	33 (20)	2-3/8	(6) #10 - 16 Screws	480	165	1835	3180	1060	2990	3180	1060	515	1700	580
		43 (18)			605	210	2195	4420	1520	3480	4735	1580	655	2025	695
		54 (16)			1010	345	2385	4625	1590	4280	6165	2120	760	2485	855
		68 (14)			1275	440	2385	5120	1760	4280	6165	2120	765	2680	920
		97 (12)			2135	710	3070	5240	1805	4280	6165	2120	855	2680	925
USC16-68	6	33 (20)	6-3/8	(6) #10 - 16 Screws	505	170	1895	3180	1060	3335	3180	1060	300	1310	435
		43 (18)			655	220	2255	4735	1580	4135	4735	1580	380	1630	470
		54 (16)			1055	365	2760	5040	1735	5095	6715	2310	380	1700	470
		68 (14)			1340	460	2815	5435	1870	5095	6715	2310	550	1705	470
		97 (12)			2075	710	2905	5670	1950	5095	6715	2310	625	1710	470
USC18-68	6	33 (20)	8-3/8	(6) #10 - 16 Screws	365	125	1945	3180	1060	3305	3180	1060	245	1145	380
		43 (18)			575	195	2140	4735	1580	3695	4735	1580	310	1360	470
		54 (16)			945	325	2700	5125	1765	4720	7125	2450	370	1515	520
		68 (14)			1385	475	3110	5860	2015	4720	7125	2450	465	1525	525
		97 (12)			1775	610	3470	6555	2255	4720	7125	2450	465	1625	530
USC24-68	6	33 (20)	14-3/8	(6) #10 - 16 Screws	355	125	2435	3180	1060	3435	3180	1060	120	805	275
		43 (18)			450	155	2885	4735	1580	4205	4735	1580	180	1000	340
		54 (16)			930	320	2990	6270	1980	5030	7355	2530	205	1040	340
		68 (14)			1155	395	3135	6675	2295	5030	7355	2530	205	1080	340
		97 (12)			1265	435	3490	6745	2320	5030	7355	2530	270	1095	375

Notes:

- For rigid connection, #10-16 HWH screws (0.190-in dia.) with shear/tension capacities of 1400lbs and 1936lbs shall be used to fasten 54mil (16ga) and 68mil (14ga) clips to framing through provided clip holes.

