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 (33mil)
Design Thickness: 0.0346 inches

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

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

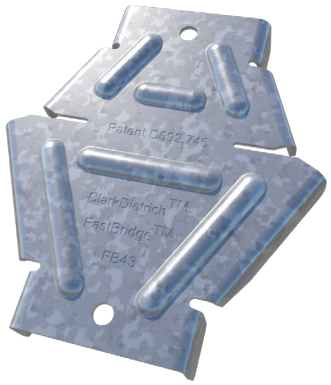
Coating: G90
ASTM: A653

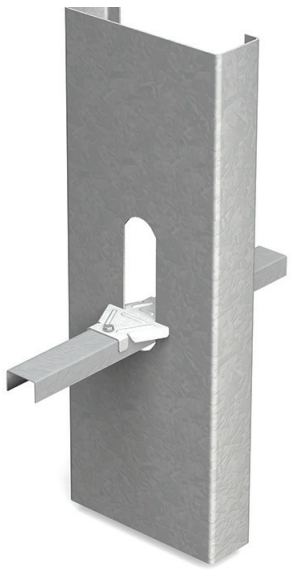
ALTERNATIVE PRODUCTS

- 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 (Gauge)	Yield strength	Design thickness (in)	Min. thickness (in)		
FB33	33mil (20ga STR)	33ksi	0.0346	0.0329	1-1/2"	200
FB43	43mil (18ga)	50ksi	0.0451	0.0428	1-1/2"	200
FB68	68mil (14ga)	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)

Product code	No. of screws to steel framing	Stud depth (in)	Allowable connector capacity	Stud Thickness and Yield Strength		
				20ga (33mil)	18ga (43mil)	16ga (54mil)
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		
				16ga (54mil)	14ga (68mil)	12ga (97mil)
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 43mil (18ga) or thinner; and a minimum yield strength Fy=50ksi and tensile strength Fu=65ksi for 54mil (16ga) or thicker.

2 Allowable loads are based on 54mil (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.