

Fast Top™ Clip (FTC)

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, screws or powder-actuated fasteners. FastClip™ 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.

ALTERNATIVE PRODUCTS

MaxTrak® Slotted Deflection Track

MATERIAL SPECIFICATIONS

Gauge: 14 gauge (68mil)

Design Thickness: 0.0713 inches

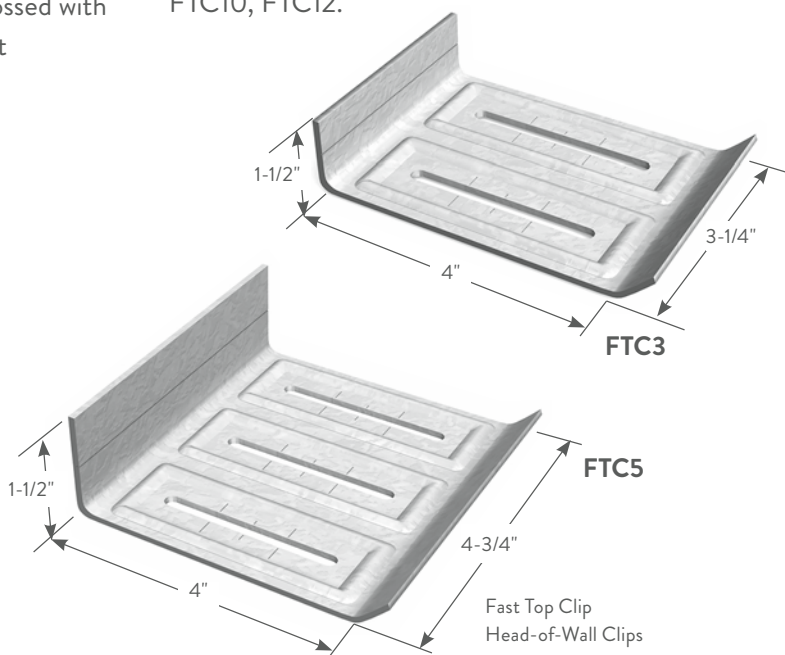
Coating: G90

Yield Strength: 50ksi

ASTM: A653/A653M

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. 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. FastClip 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 FastClip deflection screws are required with the FTC3, three FastClip deflection screws are required with the FTC5, and four FastClip deflection screws are required with the FTC8, FTC10, FTC12.



Fast Top™ CLIPS

Product code	Thickness			Size (in)	Packaging Pcs./Carton
	Gauge	Mils	Design thickness (in)		
FTC3	14	68	0.0713	1-1/2 x 4 x 3-1/4	25
FTC5	14	68	0.0713	1-1/2 x 4 x 4-3/4	30
FTC8	14	68	0.0713	1-1/2 x 4 x 7-3/4	25
FTC10	14	68	0.0713	1-1/2 x 4 x 9-3/4	25
FTC12	14	68	0.0713	1-1/2 x 4 x 11-3/4	25

FTC3 includes 55 FastClip deflection screws per carton.

FTC5 includes 110 FastClip deflection screws per carton.

FTC8 includes 110 FastClip deflection screws per carton.

FTC10 includes 110 FastClip deflection screws per carton.

FTC12 includes 110 FastClip deflection screws per carton.

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



FastClip
Deflection
Screw

FTC3 ALLOWABLE LOADS (LBS)

Stud thickness and yield strength	Slip allowance (in)	Welded direct to structural steel	Mechanically Anchored				
			Number of anchors	PAF in steel (FS=5)	PAF in steel (FS=10)	Buildex #12-24 screws in steel	Hilti 1/4" x 1-3/4" Kwik-Cons in concrete
20ga (33mil) 33ksi	0.75	259	2	259	252	259	241
		259	3	259	259	259	—
	1.25	259	2	259	219	259	206
		259	3	259	241	259	—
18ga (43mil) 33ksi	0.75	471	2	471	252	471	241
		471	3	471	286	471	—
	1.25	471	2	437	219	471	206
		471	3	471	241	471	—
16ga (54mil) 33ksi	0.75	551	2	504	252	551	241
		551	3	551	286	551	—
	1.25	551	2	437	219	551	206
		551	3	477	241	551	—



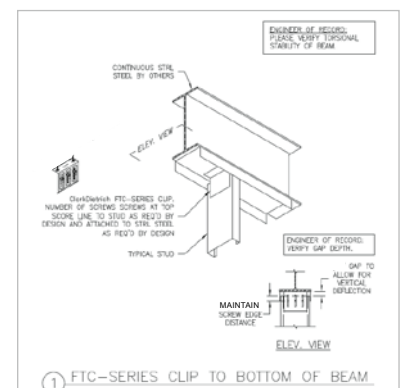
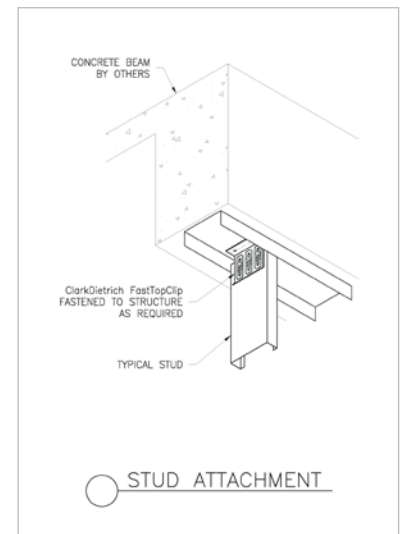
FTC5 ALLOWABLE LOADS (LBS)

Stud thickness and yield strength	Slip allowance (in)	Welded direct to structural steel	Mechanically Anchored				
			Number of anchors	PAF in steel (FS=5)	PAF in steel (FS=10)	Buildex #12-24 screws in steel	Hilti 1/4" x 1-3/4" Kwik-Cons in concrete
20ga (33mil) 33ksi	0.75	386	2	386	317	386	386
		386	3	386	386	386	386
		386	4	386	386	386	—
	1.25	386	2	386	286	386	386
		386	3	386	338	386	386
		386	4	386	371	386	—
18ga (43mil) 33ksi	0.75	505	2	505	317	505	469
		505	3	505	389	505	466
		505	4	505	440	505	—
	1.25	505	2	505	286	505	411
		505	3	505	338	505	399
		505	4	505	371	505	—
16ga (54mil) 33ksi	0.75	638	2	634	317	638	469
		638	3	638	389	638	466
		638	4	638	440	638	—
	1.25	638	2	571	286	638	411
		638	3	638	338	638	399
		638	4	638	371	638	—
16ga (54mil) 50ksi	0.75	1061	2	634	317	852	469
		1061	3	779	389	1061	466
		1061	4	879	440	1061	—
	1.25	1061	2	571	286	789	411
		1061	3	676	338	922	399
		1061	4	738	371	922	—

Notes:

- For the FTC3, tabulated values for welds are based on 3-1/4" of weld along each edge of the 1-1/2" clip leg.
- For the FTC3, tabulated values for the PAFs and Buildex screws are based on the following: the outermost anchors are placed 1/2" (min.) away from the clip edge and/or bearing edge, anchors are spaced at 2-1/4" (min.) when using two anchors, and 1-1/8" (min.) when using three anchors.
- For the FTC3, tabulated values for Hilti Kwik-Cons are based on the following: anchors are spaced at 2-1/4" o.c. (min.); anchors are placed 3/4" (min.) away from edge of building structure, and 1/2" (min.) away from edge of the Fast Top Clip. The tabulated values are based on 3000psi normal weight concrete.
- For the FTC5, tabulated values for welds are based on 4-1/2" of weld along each edge of the 1-1/2" clip leg.
- For the FTC5, tabulated values for the PAFs and Buildex screws are based on the following: the outermost anchors are placed 1/2" (min.) away from the clip edge and/or bearing edge; anchors are spaced at 3-3/4" (min.) when using two anchors, 1-7/8" (min.) when using three anchors, and 1-1/4" when using four anchors.
- For the FTC5, tabulated values for Hilti Kwik-Cons are based on the following: anchors are spaced at 3-3/4" (min.) when using two anchors, and 1-7/8" when using three anchors; anchors are placed 3/4" (min.) away from edge of building structure and 1/2" (min.) away from edge of the Fast Top Clip. The tabulated values are based on 3000psi normal weight concrete.
- Capacities listed for PAFs are based on minimum PAF requirements listed in General Note #6 on page 9.
- #12-24 screws shall have ultimate shear and tension capacities equal to or greater than those listed on page 6.
- It is the responsibility of the design professional to detail the project drawings for proper clip attachment.
- Contact ClarkDietrich at 888-437-3244 for technical assistance.
- Hilti is a registered trademark of Hilti Aktiengesellschaft Corporation.
- Buildex is a registered trademark of Illinois Tool Works, Inc.

Typical Construction Details



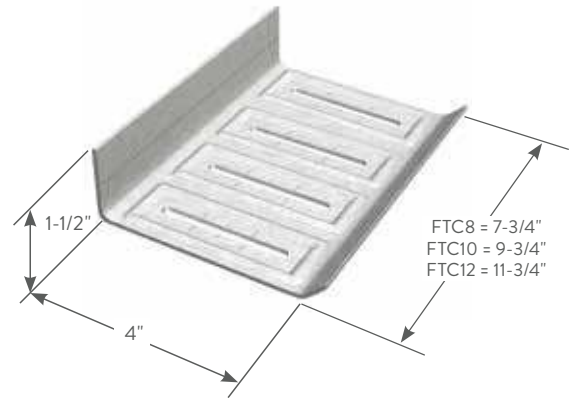
Visit our CAD Library at cad.clarkdietrich.com to view or download construction details in .dwg, .dxf, and .pdf formats.

Fast Top™ Clip (FTC)

Head-of-wall connection

FTC8/FTC10/FTC12 ALLOWABLE LOADS (LBS)

Stud gauge and yield strength	Number of screws to CFS framing	Weld capacity (5-in weld) F2 Load	Mechanically Anchored			
			Number of anchors	(0.157" XU) PAFs (3/16") steel	(0.145" XU15) PAFs (3/16") steel	#12-24 screws (3/16") steel
20ga (33mil) 33ksi	4	450	3	450	320	450
			4	450	410	450
			5	450	450	450
18ga (43mil) 33ksi	4	890	3	850	320	890
			4	890	410	890
			5	890	490	890
16ga (54mil) 50ksi	4	1300	3	850	320	1300
			4	1070	410	1300
			5	1290	490	1300
14ga (68mil) 50ksi	4	1670	3	850	320	1380
			4	1070	410	1670
			5	1290	490	1670
12ga (97mil) 50ksi	4	2230	3	850	320	1380
			4	1070	410	1750
			5	1290	490	2100

**Notes:**

- 1 Tabulated capacities are for end reaction load directed parallel with the axis of the clip bend, F2 as shown in right image.
- 2 The tabulated values for weld capacities are based on a minimum weld length of 5" centered along the clip bend. E70xx weld assumed to a minimum 3/16" thick A36 structural steel component.
- 3 The tabulated values for #12-24 screws and Hilti PAFs assume a connection centered on a minimum 3/16" thick x 6" wide ASTM A36 structural steel component. These fasteners are to be placed in a single line 3/4" from the 90° bend in the clip.
- 4 Minimum fastener spacing assumed to vary with the number of mechanical fasteners used:
 - a) Three anchors assumed to be spaced 2.5" on-center;
 - b) Four anchors assumed to be spaced 1.67" on-center;
 - c) Five anchors assumed to be spaced 1.25" on-center.
- 5 The minimum edge distance for each fastener type shall comply with the fastener manufacturer's recommendation.
- 6 Capacities listed for #12-24 screws are based on screw strengths listed in CFSEI Tech Note F701-12.
- 7 Capacities listed for Hilti PAFs are based on fastener strengths listed in ICC ESR-2269.
- 8 The FTC shall be connected to the steel framing using ClarkDietrich Proprietary screws (included) installed in all slots of the FTC clip leg; Listed capacities are for the ClarkDietrich Proprietary screws centered in the slotted openings.
- 9 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.

