

# 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, 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.

### 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. 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.

### ALTERNATIVE PRODUCTS

MaxTrak® Slotted Deflection Track

### MATERIAL SPECIFICATIONS

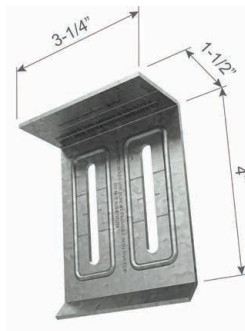
Gauge: 14 gauge (68mil)

Design Thickness: 0.0713 inches

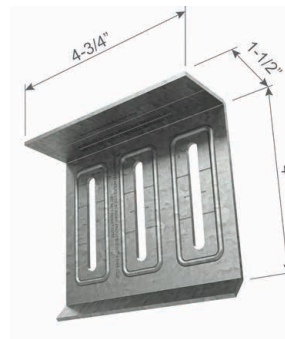
Coating: G90

Yield Strength: 50ksi

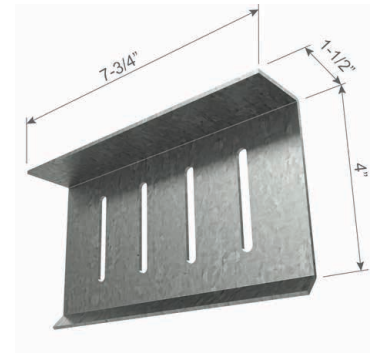
ASTM: A653/A653M



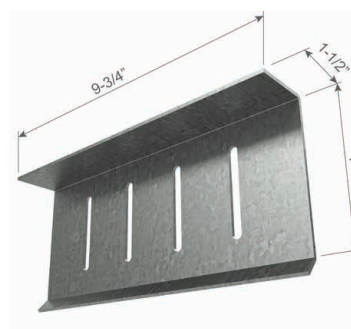
FTC3



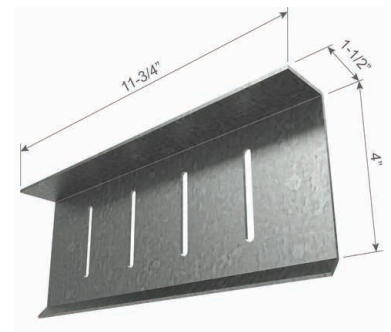
FTC5



FTC8



FTC10



FTC12

### Fast Top™ Clip (FTC)

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

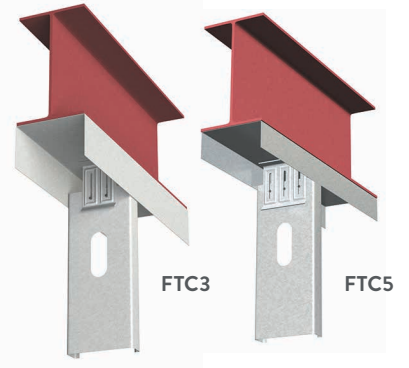
FTC3 includes 55 deflection screws per carton.  
 FTC5 includes 110 deflection screws per carton.  
 FTC8 includes 110 deflection screws per carton.  
 FTC10 includes 110 deflection screws per carton.  
 FTC12 includes 110 deflection screws per carton.



Proprietary 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)<br>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)<br>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)<br>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                            | —   |



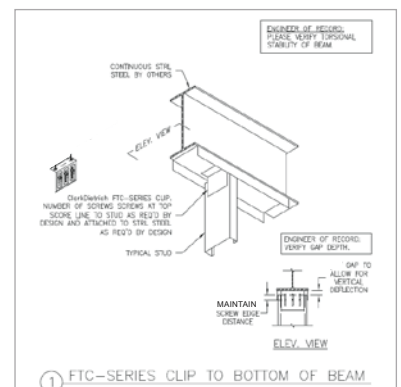
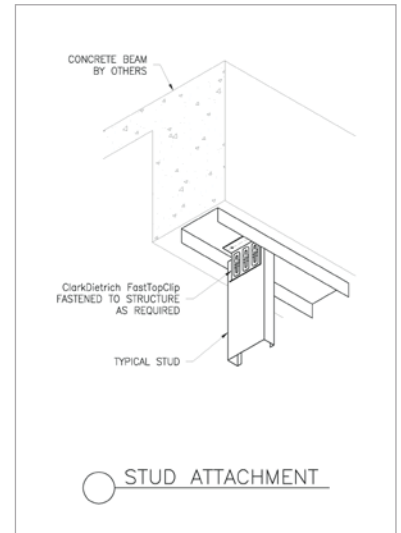
**FTC5 Allowable Loads (lbs)**

| 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)<br>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)<br>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)<br>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)<br>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](http://cad.clarkdietrich.com) to view or download construction details in .dwg, .dxf, and .pdf formats.

Fast Top™ Clip

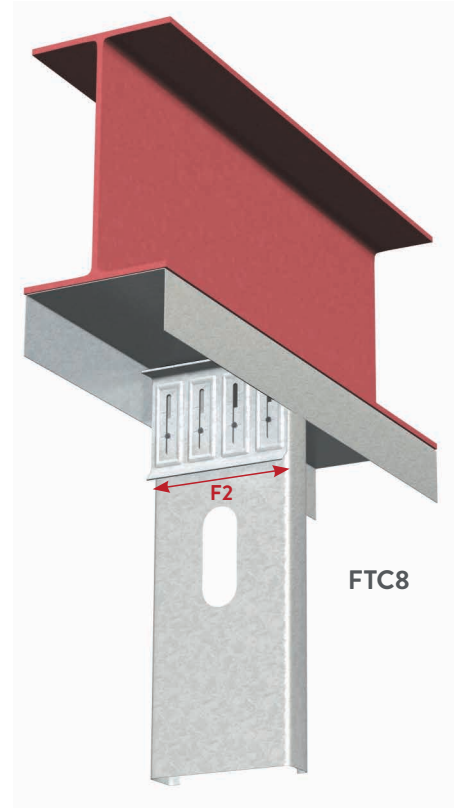
Head-of-wall connection

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 |
| 33mil (20ga) 33ksi            | 4                               | 450                               | 3                     | 450                            | 320                              | 450                         |
|                               |                                 |                                   | 4                     | 450                            | 410                              | 450                         |
|                               |                                 |                                   | 5                     | 450                            | 450                              | 450                         |
| 43mil (18ga) 33ksi            | 4                               | 890                               | 3                     | 850                            | 320                              | 890                         |
|                               |                                 |                                   | 4                     | 890                            | 410                              | 890                         |
|                               |                                 |                                   | 5                     | 890                            | 490                              | 890                         |
| 54mil (16ga) 50ksi            | 4                               | 1300                              | 3                     | 850                            | 320                              | 1300                        |
|                               |                                 |                                   | 4                     | 1070                           | 410                              | 1300                        |
|                               |                                 |                                   | 5                     | 1290                           | 490                              | 1300                        |
| 68mil (14ga) 50ksi            | 4                               | 1670                              | 3                     | 850                            | 320                              | 1380                        |
|                               |                                 |                                   | 4                     | 1070                           | 410                              | 1670                        |
|                               |                                 |                                   | 5                     | 1290                           | 490                              | 1670                        |
| 97mil (12ga) 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.



FTC8

