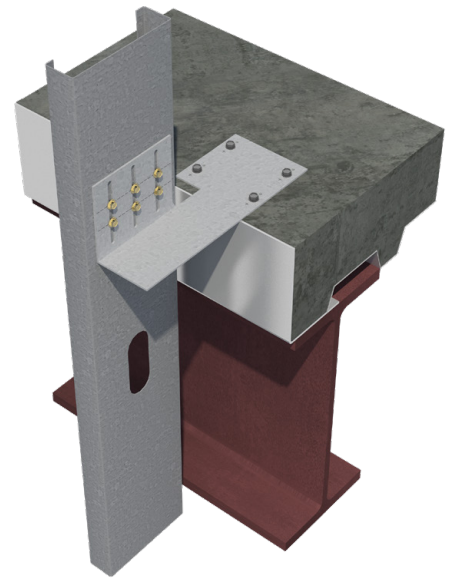


**FLAT TAIL SLIDE CLIP™ (FTSC)**

Curtain Wall/Bypass

Allows for vertical building movement and provides a horizontal standoff

ClarkDietrich Flat Tail™ Slide Clip is used to attach exterior curtain-wall studs to the building structure and provide for 2-1/4" vertical building movement independent of the cold-formed steel framing. A Flat Tail Slide Clip provides variable standoff and eliminates the need for shims or additional framing components. The clip easily fastens to the floor/ceiling beam and is secured to the stud with ClarkDietrich proprietary deflection screws. The clip restricts lateral movement, but enables vertical building movement.



**MATERIAL SPECIFICATIONS**

**Yield Strength:** 50ksi

**Coating:** G90

**ASTM:** A653 / A1003

**CLIP THICKNESS**

**Gauge:** 12ga (97mil)

**Design Thickness:** 0.1017"

**Min. Thickness:** 0.0966"

**Gauge:** 10ga (118mil)

**Design Thickness:** 0.1242"

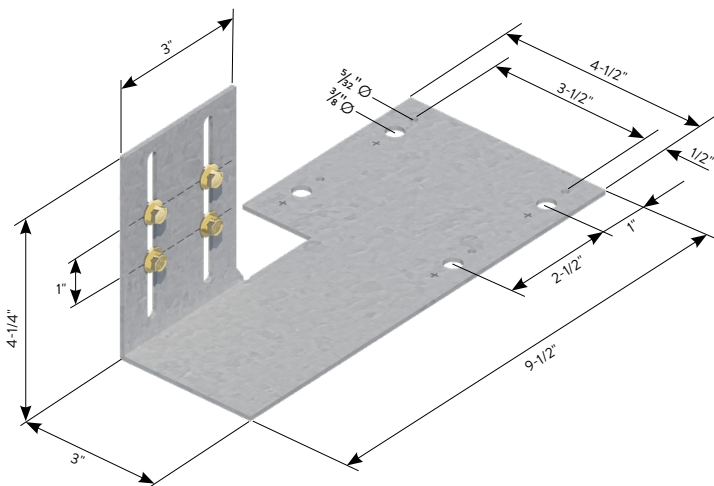
**Min. Thickness:** 0.1180"

**PACKAGING**

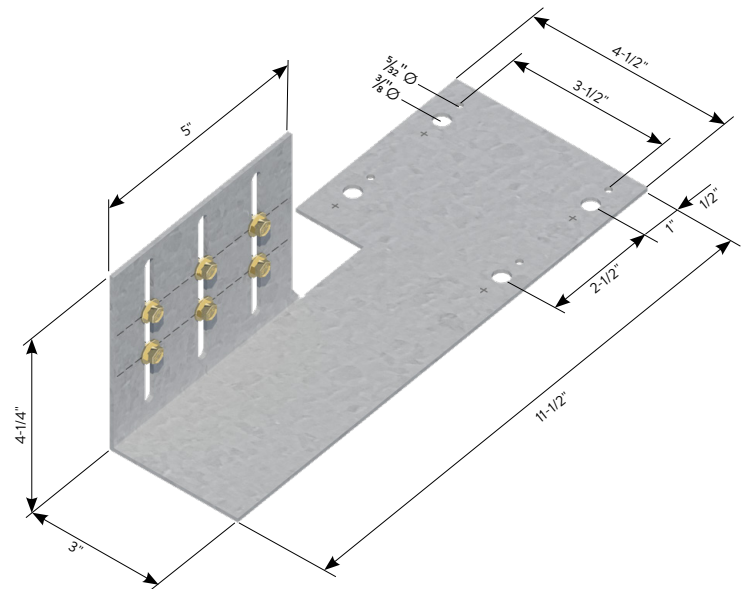
**Clips:** 25 Clips per bucket. (Includes 110 FastClip Deflection Screws for FTSC3 per bucket)  
 (Includes 160 FastClip Deflection Screws for FTSC6 per bucket)



**FastClip™  
Deflection  
Screw**



**FTSC3**



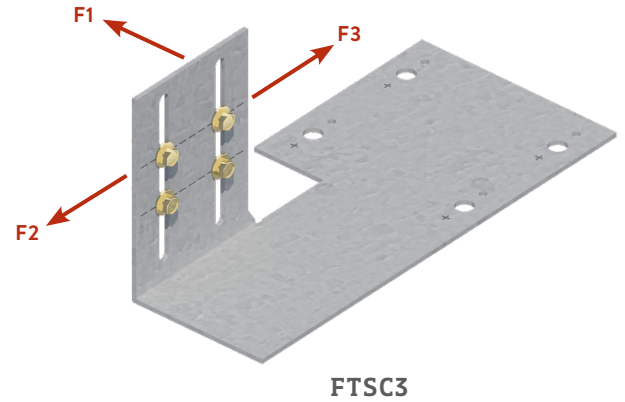
**FTSC6**

**FLAT TAIL SLIDE CLIP™ (FTSC) - DESIGN GUIDE**

ATTACHMENT TO STRUCTURE: **DESIGNED BY OTHERS**

**3-5/8" Flat Tail Slide Clip™ (FTSC3)**

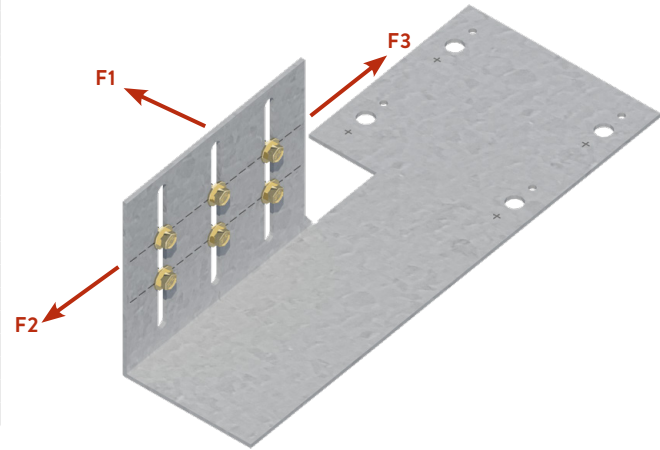
Clip designation	Thickness	Attachment to Structure	ASD Allowable Loads (lbs)		
			F1 Load	F2 Load	F3 Load
FTSC3-97 97mil (12ga)	33mil (20ga)	(2) Fasteners to be designed by others	110	416	388
	43mil (18ga)		144	548	397
	54mil (16ga)		261	759	596
	68mil (14ga)		268	766	673
	97mil (12ga)		468	909	699
	33mil (20ga)	(4) Fasteners to be designed by others	110	506	428
	43mil (18ga)		144	660	397
	54mil (16ga)		261	759	596
	68mil (14ga)		268	766	673
	97mil (12ga)		468	909	769
FTSC3-118 118mil (10ga)	33mil (20ga)	(2) Fasteners to be designed by others	110	607	406
	43mil (18ga)		144	816	603
	54mil (16ga)		261	816	774
	68mil (14ga)		328	924	834
	97mil (12ga)		468	924	924
	33mil (20ga)	(4) Fasteners to be designed by others	110	607	445
	43mil (18ga)		144	816	603
	54mil (16ga)		261	816	789
	68mil (14ga)		328	924	860
	97mil (12ga)		468	924	924



**FTSC3**

**6" Flat Tail Slide Clip™ (FTSC6)**

Clip designation	Thickness	Attachment to Structure	ASD Allowable Loads (lbs)		
			F1 Load	F2 Load	F3 Load
FTSC6-97 12ga (97mil)	33mil (20ga)	(2) Fasteners to be designed by others	165	845	551
	43mil (18ga)		216	946	724
	54mil (16ga)		316	1057	914
	68mil (14ga)		444	1163	962
	97mil (12ga)	444	1383	1063	
	33mil (20ga)	(4) Fasteners to be designed by others	165	869	594
	43mil (18ga)		216	959	755
	54mil (16ga)		392	1057	930
68mil (14ga)	476		1220	1055	
97mil (12ga)	650	1558	1314		
FTSC6-118 118mil (10ga)	33mil (20ga)	(2) Fasteners to be designed by others	165	861	594
	43mil (18ga)		216	1173	874
	54mil (16ga)		337	1515	1181
	68mil (14ga)		492	1682	1265
	97mil (12ga)		492	2026	1439
	33mil (20ga)	(4) Fasteners to be designed by others	165	953	594
	43mil (18ga)		216	1221	891
	54mil (16ga)		392	1515	1215
	68mil (14ga)		492	1682	1439
	97mil (12ga)		702	2026	1523



**FTSC6**

**Notes:**

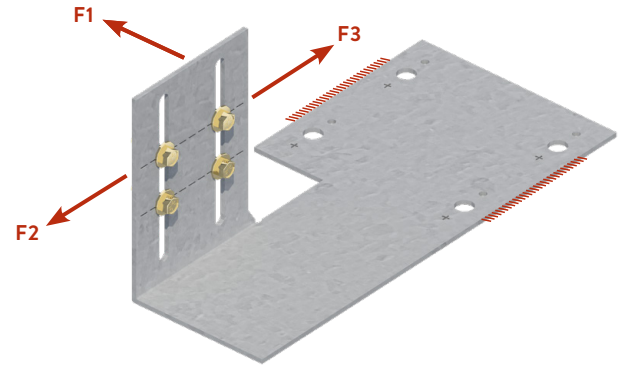
- Capacities represent the capacity of the clip and the stud connection.
- Allowable loads have not been increased for wind, seismic, or other factors.
- Stud connection is based on stud yield strength of: 33ksi for 20ga (33mil) and 18ga (43mil) studs. 50ksi for (16ga) 54mil and thicker.
- (2) #14 Shouldered screws (FastClip™ Deflection Screws) shall be used per slot, placed with 1-in center-to-center spacing.
  - (4) total screws for the FTSC3 (3-5/8" Clip)
  - (6) total screws for the FTSC6 (6" Clip)
  - #14 FastClip Deflection Screws are provided with each Flat Tail Slide Clip
- 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.

FLAT TAIL SLIDE CLIP™ (FTSC) - DESIGN GUIDE

ATTACHMENT TO STRUCTURE: **WELDED**

3-5/8" Flat Tail Slide Clip™ (FTSC3)

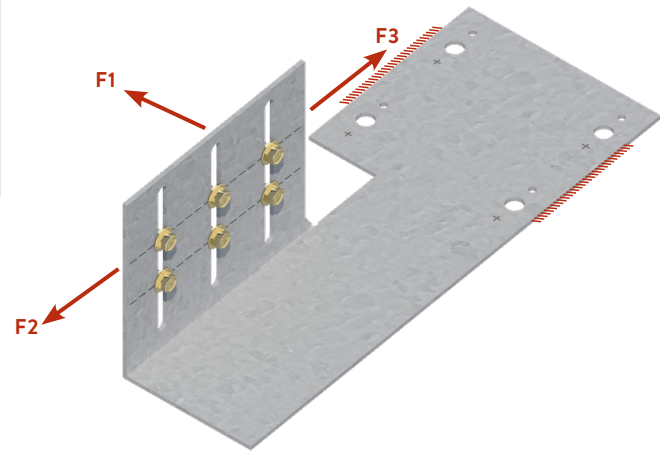
Clip designation	Thickness	Attachment to Structure	ASD Allowable Loads (lbs)		
			F1 Load	F2 Load	F3 Load
FTSC3-97 97mil (12ga)	33mil (20ga)	(2) Welds - min. 2" length each on either ends	110	506	428
	43mil (18ga)		144	660	397
	54mil (16ga)		261	759	596
	68mil (14ga)		268	766	673
	97mil (12ga)		468	909	769
FTSC3-118 118mil (10ga)	33mil (20ga)	(2) Welds - min. 2" length each on either ends	110	607	445
	43mil (18ga)		144	816	603
	54mil (16ga)		261	816	789
	68mil (14ga)		328	924	860
	97mil (12ga)		468	924	924



FTSC3

6" Flat Tail Slide Clip™ (FTSC6)

Clip designation	Thickness	Attachment to Structure	ASD Allowable Loads (lbs)		
			F1 Load	F2 Load	F3 Load
FTSC6-97 97mil (12ga)	33mil (20ga)	(2) Welds - min. 2-3/4" length each on either ends	165	869	594
	43mil (18ga)		216	959	755
	54mil (16ga)		392	1057	930
	68mil (14ga)		476	1220	1055
	97mil (12ga)		650	1558	1314
FTSC6-118 118mil (10ga)	33mil (20ga)	(2) Welds - min. 2-3/4" length each on either ends	165	953	594
	43mil (18ga)		216	1221	891
	54mil (16ga)		392	1515	1215
	68mil (14ga)		492	1682	1316
	97mil (12ga)		702	2026	1523



FTSC6

**Notes:**

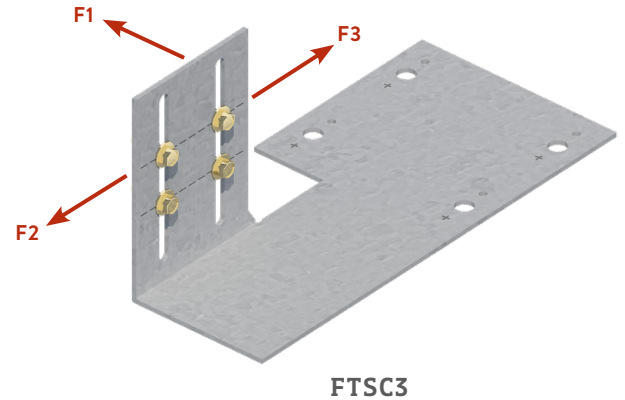
- 1 Allowable loads have not been increased for wind, seismic, or other factors.
- 2 Stud connection is based on stud yield strength of: 33ksi for 20ga (33mil) and 18ga (43mil) studs. 50ksi for (16ga) 54mil and thicker.
- 3 (2) #14 Shouldered screws (FastClip™ Deflection Screws) shall be used per slot - placed with 1-in center-to-center spacing.
  - (4) total screws for the FTSC3 (3-5/8" Clip)
  - (6) total screws for the FTSC6 (6" Clip)
  - #14 FastClip Deflection Screws are provided with each Flat Tail Slide Clip
- 4 The tabulated values for welds are based on the following weld lengths:
  - For FTSC3 (3-5/8" Clip) use (2) 2" of weld along parallel edges of the Flat Tail structural attachment leg. (As shown)
  - For FTSC6 (6" Clip) use (2) 2-3/4" of weld along parallel edges of the Flat Tail structural attachment leg. (As shown)
- 5 Use E70XX (min.) electrodes.
- 6 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.

**FLAT TAIL SLIDE CLIP™ (FTSC) - DESIGN GUIDE**

**ATTACHMENT TO STRUCTURE: 1/4-28 FASTENERS INTO STEEL**

**3-5/8" Flat Tail Slide Clip™ (FTSC3)**

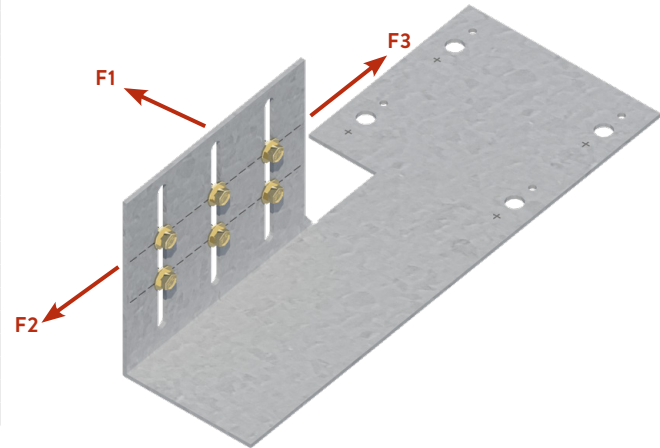
Clip designation	Thickness	Attachment to Structure	ASD Allowable Loads (lbs)		
			F1 Load	F2 Load	F3 Load
FTSC3-97 97mil (12ga)	33mil (20ga)	(2) 1/4-28 Fasteners to 3/16" Steel	110	416	388
	43mil (18ga)		144	548	397
	54mil (16ga)		261	759	596
	68mil (14ga)		268	766	673
	97mil (12ga)	305	847	699	
	33mil (20ga)	(4) 1/4-28 Fasteners to 3/16" Steel	110	506	428
	43mil (18ga)		144	660	397
	54mil (16ga)		261	759	596
	68mil (14ga)		268	766	673
97mil (12ga)	468		909	769	
FTSC3-118 118mil (10ga)	33mil (20ga)	(2) 1/4-28 Fasteners to 3/16" Steel	110	607	406
	43mil (18ga)		144	816	603
	54mil (16ga)		261	816	774
	68mil (14ga)		328	924	834
	97mil (12ga)	337	924	924	
	33mil (20ga)	(4) 1/4-28 Fasteners to 3/16" Steel	110	607	445
	43mil (18ga)		144	816	603
	54mil (16ga)		261	816	789
	68mil (14ga)		328	924	860
	97mil (12ga)		468	924	924



**FTSC3**

**6" Flat Tail Slide Clip™ (FTSC6)**

Clip designation	Thickness	Attachment to Structure	ASD Allowable Loads (lbs)		
			F1 Load	F2 Load	F3 Load
FTSC6-97 97mil (12ga)	33mil (20ga)	(2) 1/4-28 Fasteners to 3/16" Steel	165	845	551
	43mil (18ga)		216	847	724
	54mil (16ga)		283	847	847
	68mil (14ga)		283	847	847
	97mil (12ga)	283	847	847	
	33mil (20ga)	(4) 1/4-28 Fasteners to 3/16" Steel	165	869	594
	43mil (18ga)		216	959	755
	54mil (16ga)		392	1057	930
	68mil (14ga)		476	1220	1055
97mil (12ga)	639		1288	1288	
FTSC6-118 118mil (10ga)	33mil (20ga)	(2) 1/4-28 Fasteners to 3/16" Steel	165	861	594
	43mil (18ga)		216	931	874
	54mil (16ga)		314	931	931
	68mil (14ga)		314	931	931
	97mil (12ga)	314	931	931	
	33mil (20ga)	(4) 1/4-28 Fasteners to 3/16" Steel	165	953	594
	43mil (18ga)		216	1221	891
	54mil (16ga)		392	1375	1215
	68mil (14ga)		492	1375	1316
	97mil (12ga)		702	1375	1375



**FTSC6**

**Notes:**

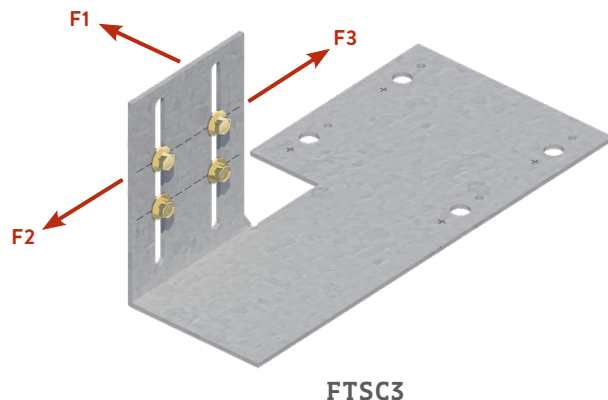
- 1 Allowable loads have not been increased for wind, seismic, or other factors.
- 2 Stud connection is based on stud yield strength of: 33ksi for 20ga (33mil) and 18ga (43mil) studs. 50ksi for (16ga) 54mil and thicker.
- 3 (2) #14 Shouldered screws (FastClip™ Deflection Screws) shall be used per slot - placed with 1-in center-to-center spacing.
  - (4) total screws for the FTSC3 (3-5/8" Clip)
  - (6) total screws for the FTSC6 (6" Clip)
  - #14 FastClip Deflection Screws are provided with each Flat Tail Slide Clip
- 4 1/4-28 Fasteners shall be used for attachment to steel structure. (2) Fastener condition shall be used when a larger offset is required between the structure and the stud. In all other conditions (4) Fastener condition shall be used. Screws to be placed through 5/32" pilot holes in FTSC.
- 5 The minimum edge distance for each fastener type shall comply with the fastener manufacturer's recommendation.
- 6 Capacities listed for 1/4-28 Fasteners are based on screw strengths listed in ICC ESR-1976.
- 7 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.

FLAT TAIL SLIDE CLIP™ (FTSC) - DESIGN GUIDE

ATTACHMENT TO STRUCTURE: 12-24 FASTENERS INTO STEEL

3-5/8" Flat Tail Slide Clip™ (FTSC3)

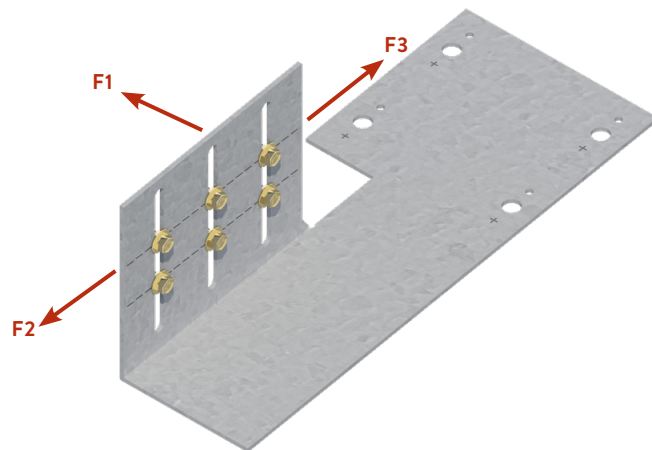
Clip designation	Thickness	Attachment to Structure	ASD Allowable Loads (lbs)		
			F1 Load	F2 Load	F3 Load
FTSC3-97 97mil (12ga)	33mil (20ga)	(2) 12-24 Fasteners to 3/16" Steel	110	416	388
	43mil (18ga)		144	548	397
	54mil (16ga)		258	716	596
	68mil (14ga)		258	716	673
	97mil (12ga)	(4) 12-24 Fasteners to 3/16" Steel	258	716	699
	33mil (20ga)		110	506	428
	43mil (18ga)		144	660	397
	54mil (16ga)		261	759	596
	68mil (14ga)		268	766	673
97mil (12ga)	468	909	769		
FTSC3-118 118mil (10ga)	33mil (20ga)	(2) 12-24 Fasteners to 3/16" Steel	110	607	406
	43mil (18ga)		144	763	603
	54mil (16ga)		261	763	763
	68mil (14ga)		276	763	763
	97mil (12ga)	(4) 12-24 Fasteners to 3/16" Steel	276	763	763
	33mil (20ga)		110	607	445
	43mil (18ga)		144	816	603
	54mil (16ga)		261	816	789
	68mil (14ga)		328	924	860
	97mil (12ga)		468	924	924



FTSC3

6" Flat Tail Slide Clip™ (FTSC6)

Clip designation	Thickness	Attachment to Structure	ASD Allowable Loads (lbs)		
			F1 Load	F2 Load	F3 Load
FTSC6-97 97mil (12ga)	33mil (20ga)	(2) 12-24 Fasteners to 3/16" Steel	165	716	551
	43mil (18ga)		216	716	716
	54mil (16ga)		239	716	716
	68mil (14ga)		239	716	716
	97mil (12ga)	(4) 12-24 Fasteners to 3/16" Steel	239	716	716
	33mil (20ga)		165	869	594
	43mil (18ga)		216	959	755
54mil (16ga)	392	1057	930		
68mil (14ga)	476	1096	1055		
97mil (12ga)	541	1096	1096		
FTSC6-118 118mil (10ga)	33mil (20ga)	(2) 12-24 Fasteners to 3/16" Steel	165	763	594
	43mil (18ga)		216	763	763
	54mil (16ga)		256	763	763
	68mil (14ga)		256	763	763
	97mil (12ga)	(4) 12-24 Fasteners to 3/16" Steel	256	763	763
	33mil (20ga)		165	953	594
	43mil (18ga)		216	1145	891
	54mil (16ga)		392	1145	1145
	68mil (14ga)		492	1145	1145
	97mil (12ga)		576	1145	1145



FTSC6

Notes:

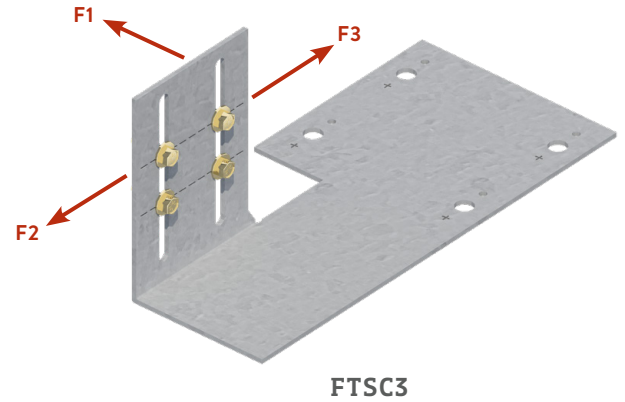
- 1 Allowable loads have not been increased for wind, seismic, or other factors.
- 2 Stud connection is based on stud yield strength of: 33ksi for 20ga (33mil) and 18ga (43mil) studs, 50ksi for (16ga) 54mil and thicker.
- 3 (2) #14 Shouldered screws (FastClip™ Deflection Screws) shall be used per slot - placed with 1-in center-to-center spacing.
  - (4) total screws for the FTSC3 (3-5/8" Clip)
  - (6) total screws for the FTSC6 (6" Clip)
  - #14 FastClip Deflection Screws are provided with each Flat Tail Slide Clip
- 4 #12-24 Fasteners shall be used for attachment to steel structure. (2) Fastener condition shall be used when a larger offset is required between the structure and the stud. In all other conditions (4) Fastener condition shall be used. Screws to be placed through 5/16" pilot holes in FTSC.
- 5 The minimum edge distance for each fastener type shall comply with the fastener manufacturer's recommendation.
- 6 Capacities listed for 12-24 Fasteners are based on screw strengths listed in ICC ESR-1976.
- 7 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.

FLAT TAIL SLIDE CLIP™ (FTSC) - DESIGN GUIDE

ATTACHMENT TO STRUCTURE: PAF's INTO STEEL

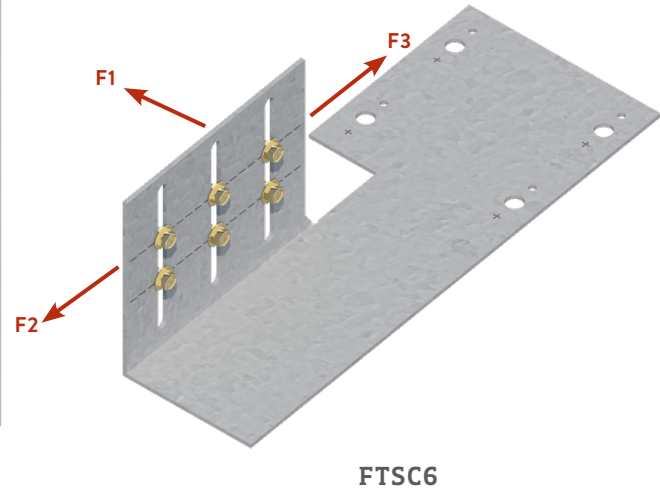
3-5/8" Flat Tail Slide Clip™ (FTSC3)

Clip designation	Thickness	Attachment to Structure	ASD Allowable Loads (lbs)		
			F1 Load	F2 Load	F3 Load
FTSC3-97 97mil (12ga)	33mil (20ga)	(2) 0.157" PAFs in 3/16" Steel	110	416	388
	43mil (18ga)		144	548	397
	54mil (16ga)		230	641	596
	68mil (14ga)		230	641	641
	97mil (12ga)	230	641	641	
	33mil (20ga)	(4) 0.157" PAFs in 3/16" Steel	110	506	428
	43mil (18ga)		144	660	397
	54mil (16ga)		261	759	596
	68mil (14ga)		268	766	673
97mil (12ga)	468		909	769	
FTSC3-118 118mil (10ga)	33mil (20ga)	(2) 0.157" PAFs in 3/16" Steel	110	607	406
	43mil (18ga)		144	641	603
	54mil (16ga)		230	641	641
	68mil (14ga)		230	641	641
	97mil (12ga)	230	641	641	
	33mil (20ga)	(4) 0.157" PAFs in 3/16" Steel	110	607	445
	43mil (18ga)		144	816	603
	54mil (16ga)		261	816	789
	68mil (14ga)		328	924	860
	97mil (12ga)		468	924	924



6" Flat Tail Slide Clip™ (FTSC6)

Clip designation	Thickness	Attachment to Structure	ASD Allowable Loads (lbs)		
			F1 Load	F2 Load	F3 Load
FTSC6-97 97mil (12ga)	33mil (20ga)	(2) 0.157" PAFs in 3/16" Steel	165	641	551
	43mil (18ga)		211	641	641
	54mil (16ga)		211	641	641
	68mil (14ga)		211	641	641
	97mil (12ga)	211	641	641	
	33mil (20ga)	(4) 0.157" PAFs in 3/16" Steel	165	869	594
43mil (18ga)	216		959	755	
54mil (16ga)	392		1025	930	
68mil (14ga)	476		1025	1025	
97mil (12ga)	484		1025	1025	
FTSC6-118 118mil (10ga)	33mil (20ga)		(2) 0.157" PAFs in 3/16" Steel	165	641
	43mil (18ga)	211		641	641
	54mil (16ga)	211		641	641
	68mil (14ga)	211		641	641
	97mil (12ga)	211	641	641	
	33mil (20ga)	(4) 0.157" PAFs in 3/16" Steel	165	953	594
	43mil (18ga)		216	1025	891
	54mil (16ga)		392	1025	1025
	68mil (14ga)		484	1025	1025
	97mil (12ga)		484	1025	1025



Notes:

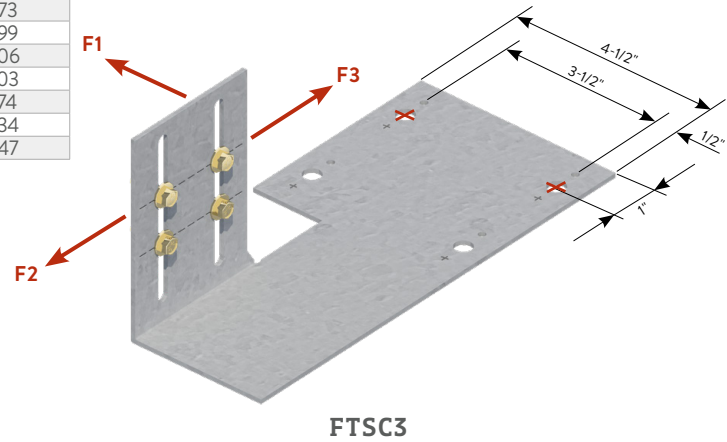
- 1 Allowable loads have not been increased for wind, seismic, or other factors.
- 2 Stud connection is based on stud yield strength of: 33ksi for 20ga (33mil) and 18ga (43mil) studs. 50ksi for (16ga) 54mil and thicker.
- 3 (2) #14 Shouldered screws (FastClip™ Deflection Screws) shall be used per slot - placed with 1-in center-to-center spacing.
  - (4) total screws for the FTSC3 (3-5/8" Clip)
  - (6) total screws for the FTSC6 (6" Clip)
  - #14 FastClip Deflection Screws are provided with each Flat Tail Slide Clip
- 4 0.157" Hilti XU PAF's shall be used for attachment to steel structure. (2) Fastener condition shall be used when a larger offset is required between the structure and the stud. In all other conditions (4) Fastener condition shall be used. PAF's should be located at cross intersections scribed on the FTSC clip.
- 5 The minimum edge distance for each fastener type shall comply with the fastener manufacturer's recommendation.
- 6 Capacities listed for Hilti PAFs are based on fastener strengths listed in ICC ESR-2269.
- 7 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.

**FLAT TAIL SLIDE CLIP™ (FTSC) - DESIGN GUIDE**

ATTACHMENT TO STRUCTURE **HILTI KWIK IN CONCRETE**

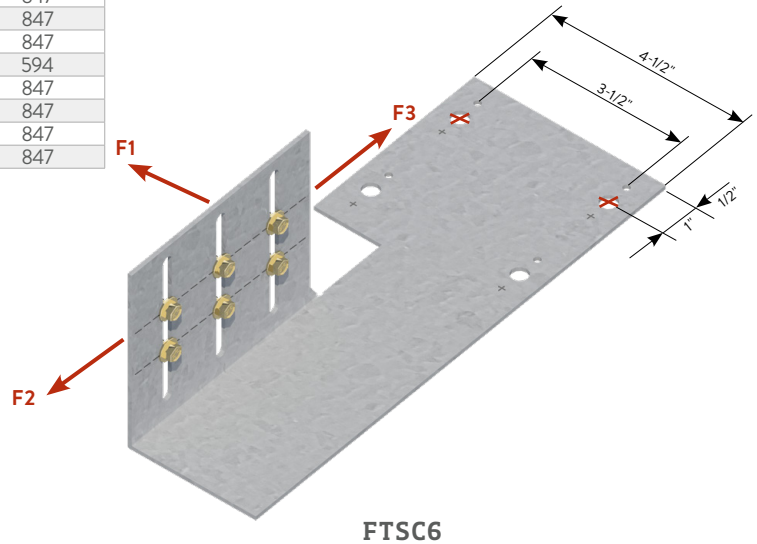
**3-5/8" Flat Tail Slide Clip™ (FTSC3)**

Clip designation	Thickness	Attachment to Structure	ASD Allowable Loads (lbs)		
			F1 Load	F2 Load	F3 Load
FTSC3-97 12ga (97mil)	33mil (20ga)	(2) 1/4" Hilti KWIK	110	416	388
	43mil (18ga)	HUS-EZ	144	548	397
	54mil (16ga)	(2-1/2" Embedment	261	759	596
	68mil (14ga)	into 3000 psi	268	766	673
FTSC3-118 10ga (118mil)	97mil (12ga)	uncracked concrete)	303	847	699
	33mil (20ga)	(2) 1/4" Hilti KWIK	110	607	406
	43mil (18ga)	HUS-EZ	144	816	603
	54mil (16ga)	(2-1/2" Embedment	261	816	774
	68mil (14ga)	into 3000 psi	303	847	834
	97mil (12ga)	uncracked concrete)	303	847	847



**6" Flat Tail Slide Clip™ (FTSC6)**

Clip designation	Thickness	Attachment to Structure	ASD Allowable Loads (lbs)		
			F1 Load	F2 Load	F3 Load
FTSC6-97 12ga (97mil)	33mil (20ga)	(2) 1/4" Hilti KWIK	165	845	551
	43mil (18ga)	HUS-EZ	216	847	724
	54mil (16ga)	(2-1/2" Embedment	277	847	847
	68mil (14ga)	into 3000 psi	277	847	847
FTSC6-118 10ga (118mil)	97mil (12ga)	uncracked concrete)	277	847	847
	33mil (20ga)	(2) 1/4" Hilti KWIK	165	847	594
	43mil (18ga)	HUS-EZ	216	847	847
	54mil (16ga)	(2-1/2" Embedment	277	847	847
	68mil (14ga)	into 3000 psi	277	847	847
	97mil (12ga)	uncracked concrete)	277	847	847



**Notes:**

- Allowable loads have not been increased for wind, seismic, or other factors.
- Stud connection is based on stud yield strength of: 33ksi for 20ga (33mil) and 18ga (43mil) studs. 50ksi for (16ga) 54mil and thicker.
- (2) #14 Shouldered screws (FastClip™ Deflection Screws) shall be used per slot - placed with 1-in center-to-center spacing.
  - (4) total screws for the FTSC3 (3-5/8" Clip)
  - (6) total screws for the FTSC6 (6" Clip)
  - #14 FastClip Deflection Screws are provided with each Flat Tail Slide Clip
- 1/4" Hilti KWIK HUS-EZ Anchors shall be used for attachment to concrete structure. Anchors shall only be placed in 3/8" diameter holes.
- Capacities listed in the table/notes consider a 3" minimum edge distance for 1/4" Hilti KWIK HUS-EZ anchors embedded 2-1/2" deep into 3000 psi cracked or uncracked concrete.
- The load adjustment for 3-1/2" spacing between concrete anchors has been accounted in the tabulated values.
- The minimum concrete thickness (7" thick for 2-1/2" embedment) shall comply with the fastener manufacturer's recommendation.
- 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.