

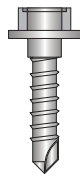
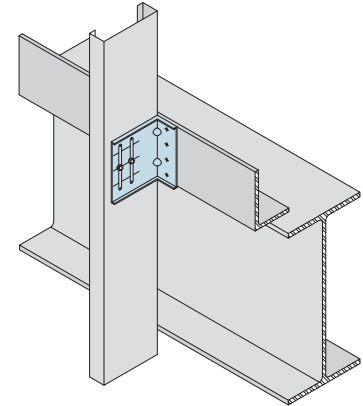
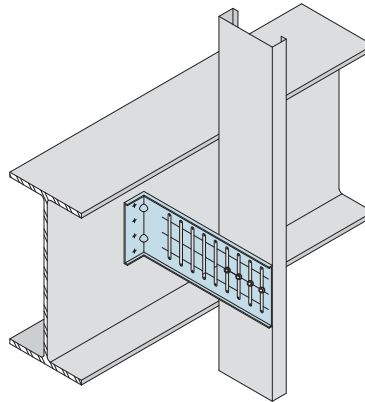
## WSC SLIDE CLIP

WSC Slide clips connect exterior curtainwall studs to the building structure and allow for vertical movement of the building independent of the studs. The new WSC series allows for 3" total deflection, 1-1/2" up and 1-1/2" down. WSC series 14 ga. clips come with extended leg lengths and shouldered screws are provided in each box of clips. 25 pieces per box.

**MATERIAL:** See Table

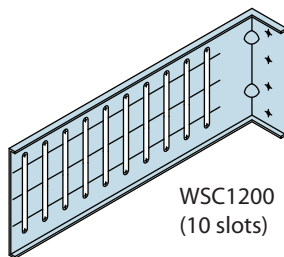
**FINISH:** Galvanized – G90

Part No.	Ga/Mil	Material	Finish	Size
WSC362	14ga (68)	50 KSI	G-90	4" x 1.5" x 3.5"
WSC600	14ga (68)	50 KSI	G-90	4" x 1.5" x 5.5"
WSC800	14ga (68)	50 KSI	G-90	4" x 1.5" x 7.5"
WSC1000	14ga (68)	50 KSI	G-90	4" x 1.5" x 9.5"
WSC1200	14ga (68)	50 KSI	G-90	4" x 1.5" x 11.5"

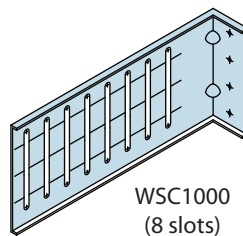


110 –#14 Shouldered screws included per box.

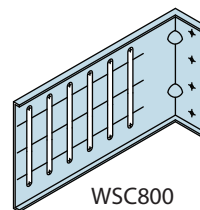
\*(Note: WSC362 includes 55 - #14 shouldered screws per box)



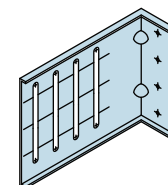
WSC1200  
(10 slots)



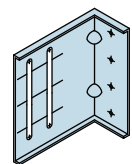
WSC1000  
(8 slots)



WSC800  
(6 slots)



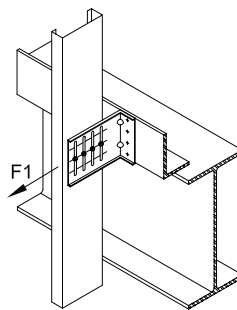
WSC600  
(4 slots)



WSC362\*  
(2 slots)

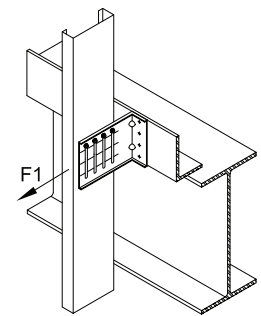
### CONCENTRIC TENSION (lbs.)

# Screws	CFS Member			
	33 mil	43 mil	54 mil	68 mil
2	376	560	652	652
3	564	840	978	978
4	752	1120	1304	1304
5	940	1400	1559	1559



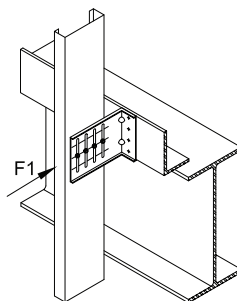
### ECCENTRIC TENSION (lbs.)

# Screws	CFS Member			
	33 mil	43 mil	54 mil	68 mil
2	376	560	652	652
3	564	840	978	978
4	752	1120	1304	1304
5	940	1315	1315	1315



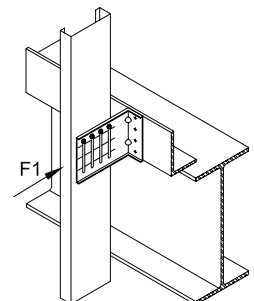
### CONCENTRIC COMPRESSION (lbs.)

# Screws	CFS Member			
	33 mil	43 mil	54 mil	68 mil
2	376	560	652	652
3	564	840	966	966
4	752	966	966	966
5	940	966	966	966



### ECCENTRIC COMPRESSION (lbs.)

# Screws	CFS Member			
	33 mil	43 mil	54 mil	68 mil
2	376	560	652	652
3	564	788	788	788
4	752	788	788	788
5	788	788	788	788



Deflection Connectors

**Notes:**

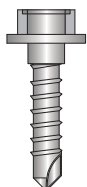
1. Allowable loads have not been increased for wind or seismic.
2. Attachment of WSC clip to main structure should be engineered by a design professional for steel or concrete base materials.
3. Allowable loads are based on attachment to main structure through pilot holes with #10-24 cap screws with a head diameter of 0.29".
4. Safety factor, Ω, determined in accordance with the provision of section F1.2 of the NASPEC with statistical data specified in AC208 and from test data.
5. The serviceability limit of 1/8" deflection between the stud and supporting structure did not govern in testing.
6. Eccentric tension and compression values represent clip capacity after structure deflects + 1-1/2" up or down from center of the clip.

## OUTRIGGER

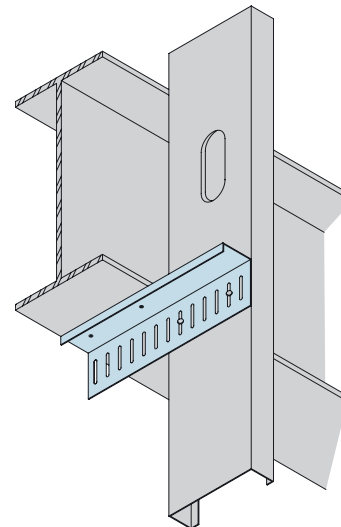
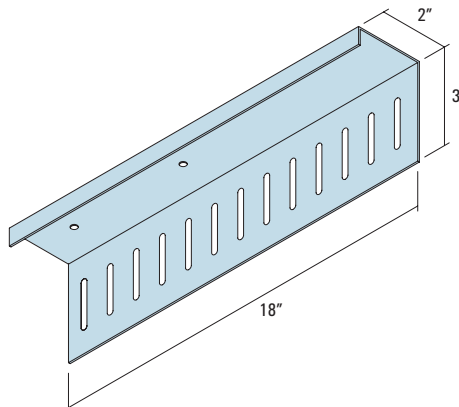
Outrigger Slide Clip is used for horizontal surface applications and offers the highest capacity of any horizontal surface connection clip. The outrigger comes in lengths of 18", can be field cut to shorter lengths if needed. Simple and fast to install which saves time and money. One clip fits all stud sizes, no right or left hand clips.

**MATERIAL:** 16 ga (54 mil) 50ksi.

**FINISH:** Galvanized – G90



55 - #10 Shouldered screws provided per box



Model No.	Gauge (Mil) Yield	Box Quantity
Outrigger	16 (54) 50ksi	25

### Allowable Strength of RCC with HDW (Washer) in Moment (M1)

Connection to Structure Hilti 0.145" X-EDNI Powder Actuated Fastener in 3/16" Steel				Connection to Structure #12-14 Hilti kwik Pro Self Drilling Screws to 3/16" Steel			
Thickness (mil/ga)	No. of Screws	No. of Anchors	Allowable Load (lbs.)	Thickness (mils/ga)	No. of Screws	No. of Anchors	Allowable Load (lbs.)
20ga. (33 mil) 33ksi	2	2	278	20ga. (33 mil) 33ksi	2	2	278
		3	278			3	278
		4	278			4	278
20ga. (33 mil) 33ksi	4	2	484	20ga. (33 mil) 33ksi	4	2	557
		3	557			3	557
		4	557			4	557
18ga. (43 mil) 33ksi	2	2	413	18ga. (43 mil) 33ksi	2	2	413
		3	413			3	413
		4	413			4	413
18ga (43 mil) 33ksi	4	2	483	18ga (43 mil) 33ksi	4	2	590
		3	775			3	827
		4	827			4	827
16ga. (54 mil) 33ksi	2	2	483	16ga. (54 mil) 33ksi	2	2	580
		3	580			3	580
		4	580			4	580
16ga. (54 mil) 33ksi	4	2	483	16ga. (54 mil) 33ksi	4	2	590
		3	775			3	595
		4	910			4	1075
16ga. (54 mil) 50ksi	2	2	483	16ga. (54 mil) 50ksi	2	2	590
		3	740			3	742
		4	740			4	742
16ga. (54 mil) 50ksi	4	2	483	16ga. (54 mil) 50ksi	4	2	590
		3	775			3	985
		4	910			4	1075
14ga. (68 mil) 50ksi	2	2	483	14ga. (68 mil) 50ksi	2	2	590
		3	740			3	742
		4	740			4	742
14ga. (68 mil) 50ksi	4	2	783	14ga. (68 mil) 50ksi	4	2	590
		3	783			3	985
		4	910			4	1075

**Notes:**

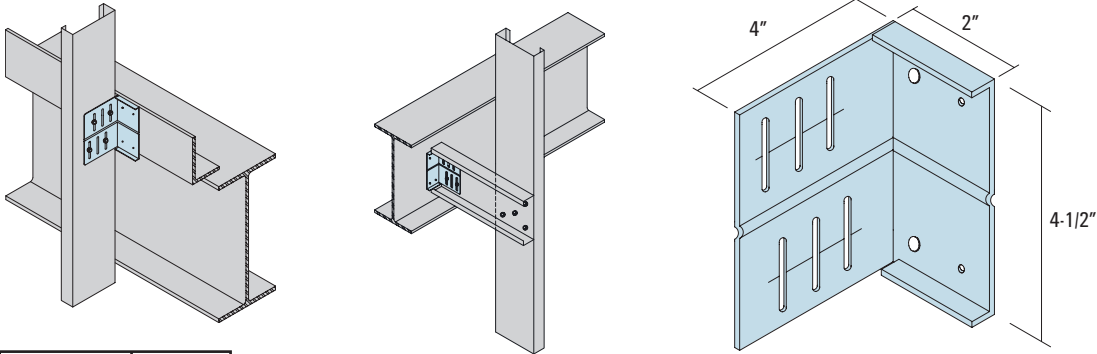
1. All anchors must be attached in a single file line down the center of the clip.
2. All anchor data is from the Hilti 2006 Product Technical Guide.
3. All anchors must be attached to structure per manufacturer's instructions.
4. Anchor Spacing for 2 and 3 anchors to be min. 2".
5. Anchor Spacing for 4 anchors to be 1" min.
6. Anchor edge distance to be 1/2" min.

## WSC 950 & WSC 1500

WSC 950 and 1500 Slide Clips provide lateral support for steel studs and allow for vertical movement of the building structure. They allow for 1-3/4" edge of slab tolerance from the existing supporting structure. The WSC Clips accommodate up to 3/4" vertical movement at intermediate floors and 1-1/2" vertical movement at roof levels. They are used in a vertical surface application. Simple and fast to install which saves time and money. One clip fits all stud sizes, no right or left hand clips. Screws must be backed out 1/4 turn once installed.

**MATERIAL:** See Table

**FINISH:** Galvanized – G90



Model No.	Gauge (Mil) Yield	Box Quantity
WSC950	16 (54) 50ksi	25
WSC1500	12 (97) 40ksi	25

Screws not included for WSC1500 or WSC950

Connection to Structure Hilti 0.145" X-EDNI Powder Actuated Fastener in 3/16" Steel					Connection to Structure Hilti #12-14 Hilti Kwik Pro Self Drilling Screws to 3/16" Steel				
Stud Thickness	# of Screws to Stud	# of Anchors to Structure	WSC 950	WSC 1500	Stud Thickness	Number of Screws	Number of Anchors	WSC 950	WSC 1500
			Allowable Load (lbs.)	Allowable Load (lbs.)				Allowable Load (lbs.)	Allowable Load (lbs.)
20ga. (33 mil) 33ksi	4	2	220	220	20ga. (33 mil) 33ksi	4	2	500	555
		3	335	335			3	557	555
		4	445	445			4	557	555
20ga. (33 mil) 33ksi	6	2	220	220	20ga. (33 mil) 33ksi	6	2	500	770
		3	335	335			3	750	835
		4	445	445			4	835	835
18ga. (43 mil) 33ksi	4	2	220	220	18ga. (43 mil) 33ksi	4	2	500	770
		3	335	335			3	750	824
		4	445	445			4	827	824
18ga. (43 mil) 33ksi	6	2	220	220	18ga. (43 mil) 33ksi	6	2	500	770
		3	335	335			3	750	1150
		4	445	445			4	945	1240
16ga. (54 mil) 33ksi	4	2	220	220	16ga. (54 mil) 33ksi	4	2	500	770
		3	335	335			3	750	1150
		4	445	445			4	945	1480
16ga. (54 mil) 33ksi	6	2	220	220	16ga. (54 mil) 33ksi	6	2	500	770
		3	335	335			3	750	1150
		4	445	445			4	945	1480
16ga. (54 mil) 50ksi	4	2	220	220	16ga. (54 mil) 50ksi	4	2	500	770
		3	335	335			3	750	1150
		4	445	445			4	945	1480
16ga. (54 mil) 50ksi	6	2	220	220	16ga. (54 mil) 50ksi	6	2	500	770
		3	335	335			3	750	1150
		4	445	445			4	945	1495
14ga. (68 mil) 50ksi	4	2	220	220	14ga. (68 mil) 50ksi	4	2	500	770
		3	335	335			3	750	1150
		4	445	445			4	945	1480
14ga. (68 mil) 50ksi	6	2	220	220	14ga. (68 mil) 50ksi	6	2	500	770
		3	335	335			3	750	1150
		4	445	445			4	945	1495

**Notes:**

1. All anchors must be attached in a single file line down the center of the clip, do not use predrilled holes if attaching with PAF.
2. All anchor data is from the Hilti 2006 Product Technical Guide.
3. All anchors must be attached to structure per manufacturer's instructions.
4. All manufacturer's guidelines must be followed for anchor spacing and edge distance.

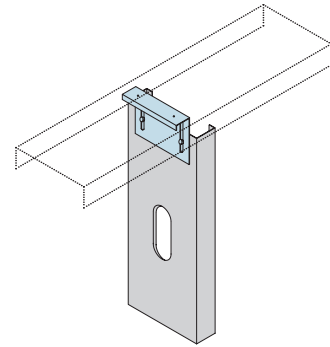
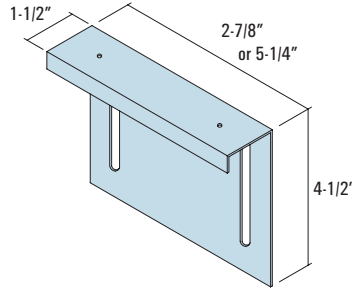
## DEFLEX CLIP

The Deflex Slide Clips allow for up to 1-1/2" vertical floor or roof deflection without the use of laborious slip tracks it can be installed with or without standard leg tracks. Simple and fast to install which saves time and money. Two sizes available for 3-5/8", 4", 6" and 8" studs.

**MATERIAL:** 16 ga (54 mil) 50ksi.

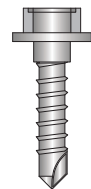
**FINISH:** Galvanized – G90

- 3T1000 accommodates 3-5/8" and 4" stud widths
- 6T1000 accommodates 6" and 8" stud widths



Model No.	Gauge (Mil) Yield	Box Quantity
3T1000	16 (54) 50 ksi	25
6T1000	16 (54) 50 ksi	25

Connection to Structure Hilti 0.145" X-EDNI Powder Actuated Fastener in 3/16" Steel					Connectin to Structure #12-14 Hilti Kwik Pro Self Drilling Screws to 3/16" Steel				
Stud Thickness	# of Screws to Stud	# of Anchors to Structure	Deflex 3T1000	Deflex 6T1000	Stud Thickness	Number of Screws	Number of Anchors	Deflex 3T1000	Deflex 6T1000
			Allowable Load (lbs.)	Allowable Load (lbs.)				Allowable Load (lbs.)	Allowable Load (lbs.)
20ga. (33 mil) 33ksi	2	2	224	276	20ga. (33 mil) 33ksi	2	2	278	278
		3	228	276				278	278
18ga. (43 mil) 33ksi	2	2	224	413	18ga. (43 mil) 33ksi	2	2	410	413
		3	228	413				410	413
16ga. (54 mil) 33ksi	2	2	224	413	16ga. (54 mil) 33ksi	2	2	455	580
		3	228	440				495	580
16ga. (54 mil) 50ksi	2	2	224	413	16ga. (54 mil) 50ksi	2	2	455	685
		3	228	440				495	742
14ga. (68 mil) 50ksi	2	2	224	413	14ga. (68 mil) 50ksi	2	2	455	685
		3	228	440				495	742



55 - #10 Shouldered screws included

**Notes:**

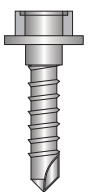
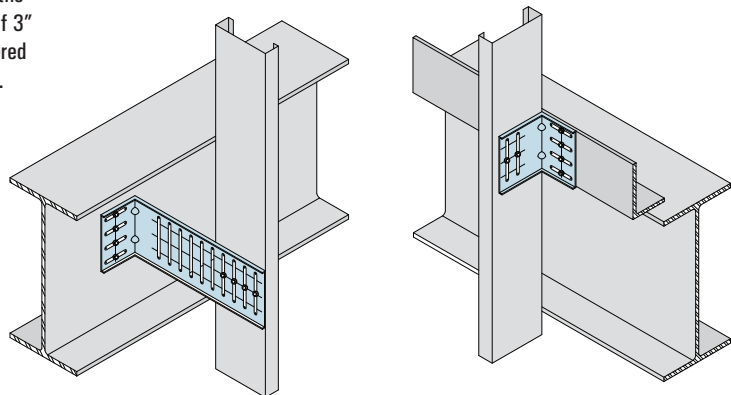
1. All anchors must be attached in a single file line down the center of the clip.
2. All anchor data is from the Hilti 2006 Product Technical Guide.
3. All anchors must be attached to structure per manufacturer's instructions.
4. Anchor edge distance to be 1/2" min.

## DWSC SEISMIC CLIP

**NEW**

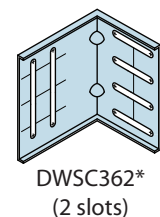
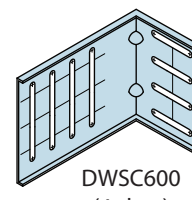
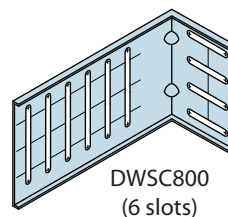
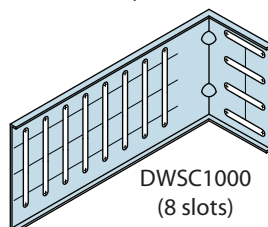
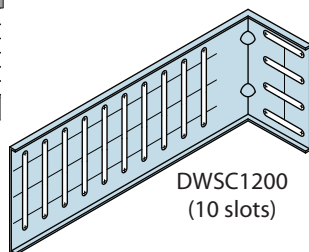
The DWSC series of clips allow for vertical and lateral movement of the building structure independent of the studs. The DWSC has a total of 3" vertical deflection and total of 2" lateral movement and uses shouldered screws which are included for ease of installation. 25 pieces per box.

Part No.	Ga/Mil	Material	Finish	Size
DWSC362	14ga (68)	50 KSI	G-90	4" x 2.5" x 3.5"
DWSC600	14ga (68)	50 KSI	G-90	4" x 2.5" x 5.5"
DWSC800	14ga (68)	50 KSI	G-90	4" x 2.5" x 7.5"
DWSC1000	14ga (68)	50 KSI	G-90	4" x 2.5" x 9.5"
DWSC1200	14ga (68)	50 KSI	G-90	4" x 2.5" x 11.5"



110 - #14 Shouldered screws included per box.

\*(Note: DWSC362 includes 55 - #14 shouldered screws per box)



# DEFLECTION CONNECTORS

## SLOTTED SLIP TRACK (SLT)



Steel Framing and Metal Lath

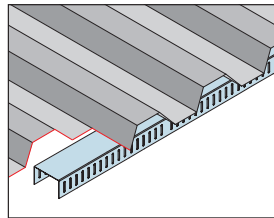
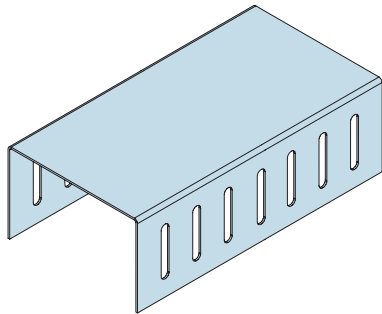
Slotted Track manufactured by CEMCO and distributed by Marino\WARE is used at the head of wall and can absorb up to 1" of total vertical movement while providing a positive attachment for wall framing. The positive attachment allows for greater load resistance with thinner gauges of material. Slotted track is formed from only prime steel conforming to applicable ASTM requirements

**MATERIAL:** 20ga (33 mil-33ksi), 18ga (43 mil-33ksi), 16ga (54 mil- 50ksi), 14ga (68 mil - 50ksi)

**WEB SIZES:** 2-1/2", 3-5/8", 4", 6", 8"

**FINISH:** G60-18ga & 16ga, G40-20ga

- One-piece design
- Positive attachment to framing
- Absorbs vertical deflection
- Simple Installation and Reduced Labor Time



Model No.	Section Designation	Mil/Ga	Track Member Width	Flange
212SLT1410	250CST250-68	68 (14 ga)	2-1/2"	2-1/2"
212SLT2010	250CST250-30	33 (20 ga)	2-1/2"	2-1/2"
358SLT1410	362CST250-68	68 (14 ga)	3-5/8"	2-1/2"
358SLT1610	362CST250-54	54 (16 ga)	3-5/8"	2-1/2"
358SLT1810	362CST250-43	43 (18 ga)	3-5/8"	2-1/2"
358SLT2010	362CST250-30	33 (20 ga)	3-5/8"	2-1/2"
400SLT1410	400CST250-68	68 (14 ga)	4"	2-1/2"
400SLT1610	400CST250-54	54 (16 ga)	4"	2-1/2"
400SLT1810	400CST250-43	43 (18 ga)	4"	2-1/2"
400SLT2010	400CST250-30	33 (20 ga)	4"	2-1/2"
600SLT1410	600CST250-68	68 (14 ga)	6"	2-1/2"
600SLT1610	600CST250-54	54 (16 ga)	6"	2-1/2"
600SLT1810	600CST250-43	43 (18 ga)	6"	2-1/2"
600SLT2010	600CST250-33	33 (20 ga)	6"	2-1/2"
800SLT1410	800CST250-68	68 (14 ga)	8"	2-1/2"
800SLT1610	800CST250-54	54 (16 ga)	8"	2-1/2"
800SLT1810	800CST250-43	43 (18 ga)	8"	2-1/2"
800SLT2010	800CST250-33	33 (20 ga)	8"	2-1/2"

Model No.	Design Thickness (in.)	Gross Section Properties							Effective Section Properties					
		F <sub>y</sub> (ksi)	Weight (lbs/ft)	Area (in <sup>2</sup> )	I <sub>x</sub> (in <sup>4</sup> )	r <sub>x</sub> (in)	I <sub>y</sub> (in <sup>4</sup> )	r <sub>y</sub> (in <sup>4</sup> )	I <sub>x</sub> (in <sup>4</sup> )	S <sub>x</sub> (t) (in <sup>3</sup> )	S <sub>x</sub> (b) (in <sup>3</sup> )	I <sub>y</sub> (in <sup>4</sup> )	S <sub>y</sub> (l) (in <sup>3</sup> )	S <sub>y</sub> (r) (in <sup>3</sup> )
250CST250-30	0.0312	33	0.444	0.131	0.112	0.925	0.133	1.011	0.098	0.126	0.056	0.099	0.096	0.063
250CST250-43	0.0451	33	0.64	0.188	0.16	0.923	0.193	1.012	0.148	0.212	0.082	0.147	0.136	0.096
250CST250-54	0.0566	50	0.802	0.236	0.2	0.922	0.243	1.015	0.186	0.266	0.103	0.186	0.169	0.121
350CST250-30	0.0312	33	0.549	0.162	0.12	0.861	0.293	1.346	0.105	0.156	0.057	0.214	0.15	0.099
350CST250-43	0.0451	33	0.793	0.233	0.172	0.859	0.424	1.348	0.160	0.271	0.084	0.334	0.216	0.161
350CST250-54	0.0566	50	0.994	0.292	0.215	0.857	0.533	1.351	0.201	0.340	0.105	0.421	0.269	0.202
362CST250-30	0.0312	33	0.562	0.165	0.121	0.853	0.318	1.387	0.105	0.158	0.057	0.232	0.158	0.103
362CST250-43	0.0451	33	0.812	0.239	0.173	0.851	0.461	1.389	0.161	0.279	0.084	0.362	0.226	0.168
362CST250-54	0.0566	50	1.018	0.300	0.216	0.85	0.58	1.391	0.202	0.349	0.105	0.456	0.283	0.212
362CST250-68	0.0713	50	1.2826	0.3773	0.2762	0.8556	0.7265	1.3875	0.2648	0.4717	0.1366	0.5879	0.3536	0.2789
400CST250-30	0.0312	33	0.602	0.177	0.123	0.832	0.403	1.508	0.106	0.162	0.058	0.334	0.182	0.148
400CST250-43	0.0451	33	0.87	0.256	0.176	0.83	0.584	1.511	0.165	0.300	0.084	0.483	0.262	0.212
400CST250-54	0.0566	50	1.090	0.321	0.22	0.829	0.734	1.512	0.206	0.375	0.106	0.607	0.327	0.265
400CST250-68	0.0713	50	1.3737	0.4041	0.2815	0.8346	0.92	1.5089	0.2697	0.5061	0.1371	0.7508	0.4079	0.3258
600CST250-33	0.0346	33	0.903	0.266	0.145	0.738	1.212	2.136	0.123	0.209	0.064	0.973	0.364	0.284
600CST250-43	0.0451	33	1.176	0.346	0.188	0.737	1.581	2.137	0.170	0.342	0.085	1.365	0.481	0.416
600CST250-54	0.0566	50	1.475	0.434	0.235	0.735	1.985	2.139	0.213	0.431	0.106	1.713	0.601	0.52
600CST250-68	0.0713	50	1.8584	0.5467	0.301	0.742	2.4937	2.1358	0.2856	0.6473	0.1387	2.1377	0.7524	0.6469
800CST250-33	0.0346	33	1.138	0.335	0.15	0.669	2.521	2.744	0.124	0.215	0.065	1.792	0.557	0.367
800CST250-43	0.0451	33	1.483	0.436	0.195	0.668	3.286	2.745	0.172	0.362	0.085	2.688	0.742	0.597
800CST250-54	0.0566	50	1.860	0.547	0.243	0.666	4.124	2.746	0.216	0.457	0.107	3.415	0.931	0.763
800CST250-68	0.0713	50	2.3238	0.6836	0.304	0.6667	5.095	2.73	0.2839	0.7125	0.1351	4.5031	1.1714	1.047

Deflection Connectors

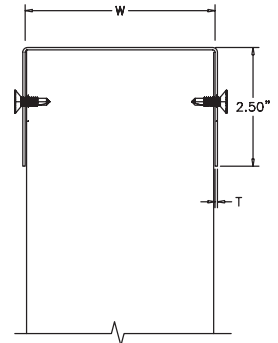
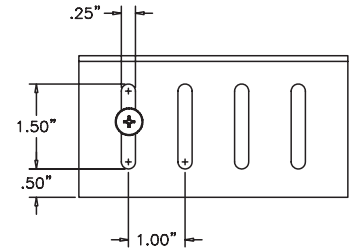
**SLOTTED SLIP TRACK (SLT) CONTINUED**



Steel Framing and Metal Lath

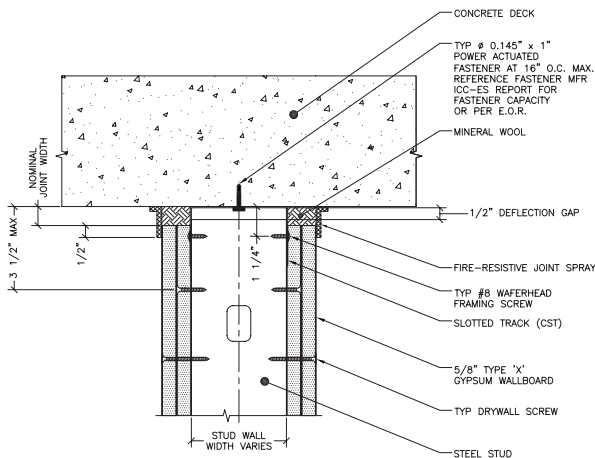
**APPROVALS**

- **ICC-ES Approval**  
ESR-2012 – 1 and 2 hour designs – UL 2079 Standard Compliant
- **UL Approval**  
UL Approved Systems – Fire Stop Manufacturer and Design Number  
UL Control (US) – R25033 – 1 and 2 hour designs – UL 2079 standard compliant  
UL Control (CD) – R25033 – 1 and 2 hour designs – UL 2079 standard compliant
- **FireStik**  
HW-D-0420 HW-D-0421 HW-D-0453 HW-D-0455 HW-D-0461 HW-D-0462 HW-D-0463 HW-D-0475  
HW-D-0476 HW-D-0475 HW-D-0476 HW-D-0477 HW-D-0480 – 1" deflection shaft wall
- **Rectorseal**  
HW-D-0032 HW-D-0033 HW-D-0058 HW-D-0059 HW-D-0104 HW-D-0105 HW-D-0127 HW-D-0128 HW-D-0129  
HW-D-0130 HW-D-0179 HW-D-0180 HW-D-0221 HW-D-0222 HW-D-0297 HW-D-0298 HW-D-0380 HW-D-0381
- **Specified Technologies Inc. (STI)**  
HW-D-0003 HW-D-0034 HW-D-0043 HW-D-0044 HW-D-0054 HW-D-0079 HW-D-0088 HW-D-0099 HW-D-0102  
HW-D-0103 HW-D-0136 HW-D-0137 HW-D-0152 HW-D-0153 HW-D-0194 HW-D-0210 HW-D-0241 HW-D-0242  
HW-D-0243 HW-D-0252 HW-D-0260 HW-D-0363 HW-D-0365 HW-D-0371 HW-D-0377 HW-D-0456 HW-D-0457
- **HILTI**  
HW-D-0042 HW-D-0045 HW-D-0046 HW-D-0049 HW-D-0076 HW-D-0077 HW-D-0082 HW-D-0083 HW-D-0084  
HW-D-0085 HW-D-0087 HW-D-0089 HW-D-0106 HW-D-0154 HW-D-0184 HW-D-0190 HW-D-0209 HW-D-0218  
HW-D-0259 HW-D-0264 HW-D-0292 HW-D-0295 HW-D-0313 HW-D-0321 HW-D-0322 HW-D-0324 HW-D-0342  
HW-D-0388 HW-D-0396
- **Passive Fire Protection Partners (PFPP)**  
HW-D-0036
- **EGS Nelson Firestop**  
HW-D-0223 HW-D-0224 HW-D-0227 HW-D-0228 HW-D-0238 HW-D-0239 HW-D-0283 HW-D-0288 HW-D-0304  
HW-D-0305 HW-D-0309 HW-D-0310 HW-D-0393
- **A/D Systems**  
HW-D-0247 HW-D-0249 HW-D-0314 HW-D-0315 HW-D-0316 HW-D-0317 HW-D-0320
- **Intertek/Warlock Hersey Approved Systems**  
DESIGN NO. CEM/PV 120-01 – FIRESTIK  
DESIGN NO. CEM/PV 120-02 – FIRESTIK  
DESIGN NO. CEM/PV 120-03 – MONOKOTE, ISOLATEK, CAFCO 300  
DESIGN NO. CEM/PV 120-04 – MONOKOTE, ISOLATEK, CAFCO 300



**UNENCUMBERED ASSEMBLIES** (See the Slotted Slip Track technical data sheet at [www.MarinoWARE.com](http://www.MarinoWARE.com) for more assemblies.)

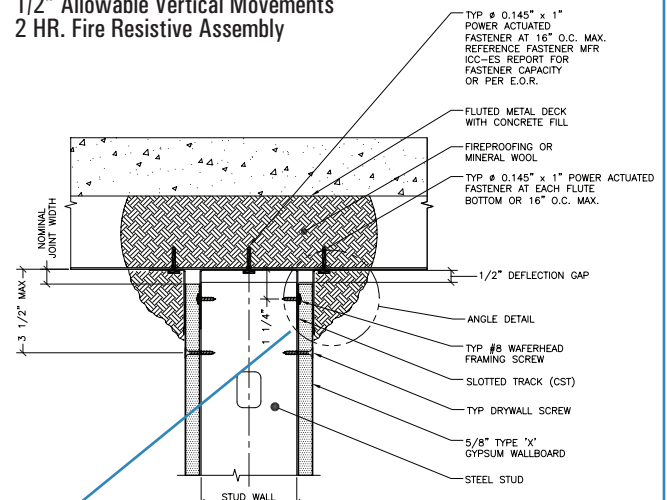
**Head of Wall System 4**  
1/2" Allowable Vertical Movements  
2 HR. Fire Resistive Assembly



**Notes:**

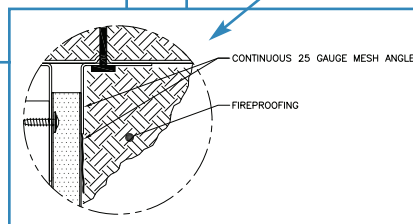
1. Cyclical Design – UL 2079 Test Standard
2. Do not screw drywall to slotted track
3. Reference ITS/Warlock Hersey directory for specific information
4. Reference UL Fire Resistance Directory for specific information

**Head of Wall System 4 Perpendicular to Flute Detail**  
1/2" Allowable Vertical Movements  
2 HR. Fire Resistive Assembly



**Notes:**

1. Cyclical Design – UL 2079 Test Standard
2. Do not screw drywall to slotted track
3. Reference ITS/Warlock Hersey directory for specific information
4. Reference UL Fire Resistance Directory for specific information



## EXTERIOR SLOTTED TRACK (EXT)

**NEW**



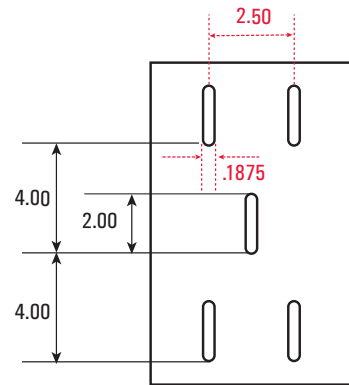
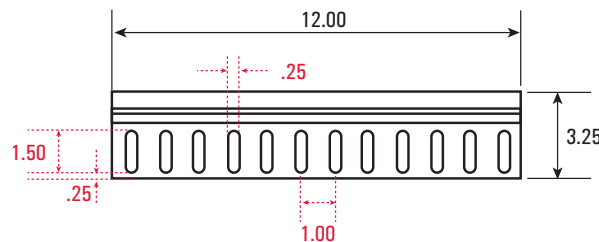
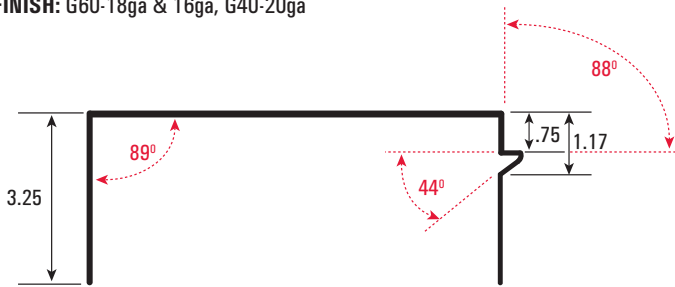
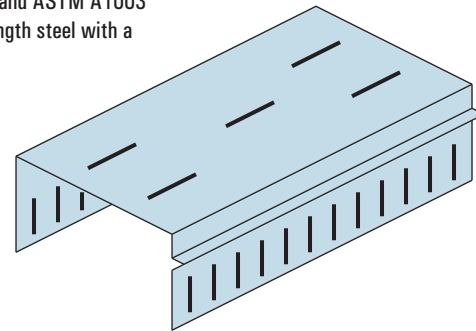
Steel Framing and Metal Lath

CEMCO Exterior Slotted Track (EXT) is a vertical deflection track member. The external groove provides a resting point for sheathing, transferring the weight of the sheathing to the framing member, and the 2" web slots provide drift movement capabilities. The section is fabricated from hot-dipped galvanized steel complying with ASTM A653, and ASTM A1003 Structural Grade 50 Type H for 50 ksi yield strength steel and Grade 33 Type H for 33 ksi yield strength steel with a minimum G40 coating.

**MATERIAL:** 20ga (33 mil-33ksi), 18ga (43 mil-33ksi), 16ga (54 mil- 50ksi), 14ga (68 mil - 50ksi)

**WEB SIZES:** 3-5/8", 4", 6", and 8"

**FINISH:** G60-18ga & 16ga, G40-20ga



Model No.	Design Thickness (in.)	Full Section Properties							Effective Section Properties					
		F <sub>y</sub> (ksi)	Weight (lbs/ft)	Area (in <sup>2</sup> )	I <sub>x</sub> (in <sup>4</sup> )	r <sub>x</sub> (in)	I <sub>y</sub> (in <sup>4</sup> )	r <sub>y</sub> (in <sup>4</sup> )	I <sub>x</sub> (in <sup>4</sup> )	S <sub>x(t)</sub> (in <sup>3</sup> )	S <sub>x(b)</sub> (in <sup>3</sup> )	I <sub>y</sub> (in <sup>4</sup> )	S <sub>y(l)</sub> (in <sup>3</sup> )	S <sub>y(r)</sub> (in <sup>3</sup> )
362EXT325-33	0.0346	33	1.2266	0.3608	0.3986	1.0512	0.9569	1.6286	0.1616	0.2584	0.0615	0.542	0.2924	0.2486
362EXT325-43	0.0451	33	1.5866	0.4666	0.5128	1.0483	1.2241	1.6197	0.2155	0.3708	0.0808	0.6938	0.3733	0.3226
362EXT325-54	0.0566	33	1.9743	0.5807	0.6345	1.0453	1.5048	1.6098	0.2665	0.4582	0.0999	0.8545	0.4587	0.403
362EXT325-54	0.0566	50	1.9743	0.5807	0.6345	1.0453	1.5048	1.6098	0.2665	0.4582	0.0999	0.8453	0.4596	0.3944
362EXT325-68	0.0713	50	2.4599	0.7235	0.7847	1.0414	1.8458	1.5972	0.3296	0.5659	0.1235	1.0364	0.5641	0.4911
400EXT325-33	0.0346	33	1.2678	0.3729	0.4108	1.0496	1.1616	1.765	0.1607	0.2547	0.0614	0.6688	0.2837	0.2837
400EXT325-43	0.0451	33	1.6403	0.4824	0.5285	1.0467	1.4875	1.7559	0.2171	0.3792	0.0811	0.8597	0.4217	0.3705
400EXT325-54	0.0566	33	2.0417	0.6005	0.654	1.0436	1.8306	1.746	0.2723	0.4907	0.101	1.0586	0.5189	0.4618
400EXT325-54	0.0566	50	2.0417	0.6005	0.654	1.0436	1.8306	1.746	0.2684	0.4685	0.1003	1.0493	0.5198	0.4535
400EXT325-68	0.0713	50	2.5448	0.7485	0.8091	1.0397	2.2487	1.7333	0.3367	0.606	0.1249	1.2868	0.6388	0.5636
600EXT325-33	0.0346	33	1.5093	0.4439	0.4686	1.0274	2.845	2.5316	0.1532	0.2235	0.0598	1.693	0.573	0.4862
600EXT325-43	0.0451	33	1.955	0.575	0.6032	1.0242	3.6572	2.522	0.2127	0.3559	0.0808	2.2388	0.7376	0.663
600EXT325-54	0.0566	33	2.4367	0.7167	0.7467	1.0207	4.5201	2.5114	0.2784	0.5284	0.1022	2.7978	0.9138	0.8418
600EXT325-54	0.0566	50	2.4367	0.7167	0.7467	1.0207	4.5201	2.5114	0.2651	0.4507	0.0996	2.7559	0.9128	0.8188
600EXT325-68	0.0713	50	3.0424	0.8948	0.924	1.0164	5.583	2.4978	0.3468	0.6707	0.1269	3.4291	1.1306	1.0337
800EXT325-33	0.0346	33	1.7473	0.5139	0.5099	0.9961	5.4182	3.2471	0.1546	0.2289	0.06	3.1772	0.8539	0.6704
800EXT325-43	0.0451	33	2.2652	0.6663	0.6565	0.9926	6.9799	3.2367	0.2155	0.3704	0.0807	4.2347	1.1025	0.9218
800EXT325-54	0.0566	33	2.826	0.9312	0.813	0.9889	8.647	3.2254	0.2835	0.5638	0.1032	5.4137	1.3712	1.2139
800EXT325-54	0.0566	50	2.826	0.9312	0.813	0.9889	8.647	3.2254	0.2687	0.4702	0.1003	5.2263	1.3664	1.1403
800EXT325-68	0.0713	50	3.5328	1.0391	1.006	0.9841	10.712	3.2108	0.3535	0.7184	0.1282	6.6816	1.7007	1.5032

Notes:

Full section properties analysis based on shapes without holes. Effective section properties analysis based on shapes with holes in each leg and top web.