



# Product Specification and Submittal Form

## F - Member ( Hat Channel )

### MANUFACTURER

Steeler, Inc.  
10023 Martin Luther King Jr. Way S.  
Seattle, WA 98178  
Phone: (206) 725-2500  
Fax: (206) 725-1700

Steeler, Inc.  
6851 Smith Ave.  
Newark, CA 94560  
Phone: (510) 505-9595  
Fax: (510) 505-0200

### DESCRIPTION

**Hat Channel's** are fabricated in 1/2", 7/8", 1-1/2" depth, from 25 gauge to 14 gauge steel. The Web size is 1-1/4". Length - 12'-0" and 20'-0". Special lengths are available.

### COLOR CODE

18 mil - Clear  
24 mil - Brown  
27 mil - Black  
30 mil - Pink  
33 mil - White  
43 mil - Yellow  
54 mil - Green  
68 mil - Orange  
Painted on ends.

### MATERIALS

**Hat Channel** section is fabricated from **25 to 14 gauge** hot dipped galvanized steel conforming to ASTM A653 or equal.

### RECOGNITION

ICC-ES REPORT ESR-2054

### ASTM & Code Standards

- AISI, North American Specification for the Design of Cold-Formed Steel Structural Members 2001 Edition with 2004 Supplement
- ASTM A370, Standard Test Methods and Definitions for Mechanical Testing of Steel Products
- ASTM A1003, Standard Specification for Sheet Steel, Carbon, Metallic and Non-Metallic Coating for Cold-Formed Framing Members.
- Steeler's structural framing comply with 2006 International Building Code (IBC- 2006)
- ASTM C955, Standard Specification for Structural Steel Framing Members.
- ASTM C754, Standard Specification for Installation of Steel Framing Members to Receive Screw-Attached Gypsum Panel Products.
- ASTM C1513, Standard Specification for Steel Tapping Screws for Cold-Formed Steel Framing Connections.
- ASTM C645, Standard Specification for Nonstructural Steel Framing Members.

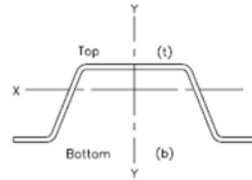
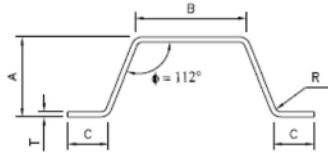


TABLE 4-F-MEMBER (HAT CHANNEL) SECTION PROPERTIES<sup>1</sup>

MEMBER ID DESIGNATION	Dimensions in			Full Properties						Torsional			33 ksi Effective Properties					50 ksi Effective Properties					
	A	B	C	Area in <sup>2</sup>	Wt. lb/ft	Ix in <sup>4</sup>	rx in	Iy in <sup>4</sup>	ry in	J 10 <sup>-3</sup> in <sup>4</sup>	Cw in <sup>6</sup>	r <sub>o</sub> in	Ma(+) k-in	Ma(-) in <sup>4</sup>	Ixe(+) in <sup>4</sup>	Sxe(t) in <sup>3</sup>	Sxe(b) in <sup>3</sup>	Ma(+) k-in	Ma(-) in <sup>4</sup>	Ixe(+) in <sup>4</sup>	Sxe(t) in <sup>3</sup>	Sxe(b) in <sup>3</sup>	
125 F050-030	0.50	1.25	0.45	0.095	0.324	0.004	0.205	0.049	0.717	0.031	0.000	0.833	0.314	0.314	0.004	0.018	0.014						
125 F050-033	0.50	1.25	0.45	0.105	0.358	0.004	0.204	0.054	0.715	0.042	0.504	0.830	0.346	0.346	0.004	0.020	0.016						
125 F050-043	0.50	1.25	0.45	0.136	0.461	0.005	0.199	0.068	0.708	0.092	0.001	0.820	0.437	0.437	0.005	0.024	0.020						
125 F050-054	0.50	1.25	0.45	0.167	0.569	0.006	0.195	0.082	0.701	0.178	0.001	0.808	0.526	0.526	0.006	0.028	0.023	0.782	0.782	0.006	0.028	0.023	
125 F087-018	0.875	1.25	0.45	0.074	0.250	0.009	0.352	0.048	0.809	0.009	0.001	1.114	0.367	0.325	0.008	0.020	0.016						
125 F087-024	0.875	1.25	0.45	0.096	0.327	0.012	0.350	0.062	0.805	0.020	0.001	1.108	0.486	0.462	0.012	0.029	0.025	0.724	0.654	0.011	0.026	0.022	
125 F087-027	0.875	1.25	0.45	0.110	0.373	0.013	0.348	0.071	0.803	0.029	0.002	1.104	0.604	0.545	0.013	0.033	0.028						
125 F087-030	0.875	1.25	0.45	0.121	0.410	0.015	0.347	0.077	0.801	0.039	0.002	1.101	0.664	0.664	0.015	0.036	0.031						
125 F087-033	0.875	1.25	0.45	0.133	0.454	0.016	0.346	0.085	0.799	0.053	0.002	1.097	0.734	0.734	0.016	0.040	0.034						
125 F087-043	0.875	1.25	0.45	0.172	0.586	0.020	0.342	0.108	0.793	0.117	0.002	1.086	0.946	0.946	0.020	0.050	0.042						
125 F087-054	0.875	1.25	0.45	0.213	0.725	0.024	0.337	0.132	0.786	0.228	0.003	1.074	1.168	1.168	0.024	0.061	0.051	1.736	1.736	0.024	0.061	0.051	
125 F087-068	0.875	1.25	0.45	0.263	0.896	0.029	0.331	0.159	0.777	0.446	0.003	1.057	1.435	1.435	0.029	0.072	0.061	2.125	2.125	0.029	0.072	0.061	
125 F150-024	1.50	1.25	0.45	0.130	0.441	0.042	0.567	0.116	0.946	0.026	0.005	1.591	1.022	0.983	0.041	0.058	0.052	1.518	1.412	0.039	0.054	0.047	
125 F150-027	1.50	1.25	0.45	0.148	0.503	0.047	0.565	0.132	0.944	0.039	0.005	1.587	1.276	1.154	0.047	0.067	0.058						
125 F150-030	1.50	1.25	0.45	0.163	0.553	0.052	0.564	0.144	0.942	0.053	0.006	1.584	1.408	1.408	0.052	0.074	0.065						
125 F150-033	1.50	1.25	0.45	0.180	0.612	0.057	0.563	0.159	0.940	0.072	0.007	1.580	1.563	1.563	0.057	0.081	0.071						
125 F150-043	1.50	1.25	0.45	0.233	0.792	0.073	0.559	0.203	0.934	0.158	0.008	1.569	2.036	2.036	0.073	0.104	0.091						
125 F150-054	1.50	1.25	0.45	0.289	0.984	0.089	0.554	0.249	0.927	0.309	0.010	1.556	2.550	2.550	0.089	0.127	0.111	3.789	3.789	0.089	0.127	0.111	
125 F150-068	1.50	1.25	0.45	0.360	1.223	0.108	0.547	0.303	0.918	0.609	0.011	1.540	3.193	3.193	0.108	0.154	0.135	4.727	4.727	0.108	0.154	0.135	

For SI: 1 inch = 25.4 mm, 1 in<sup>2</sup> = 645 mm<sup>2</sup>, 1 in<sup>3</sup> = 1.64x10<sup>4</sup> mm<sup>3</sup>, 1 in<sup>4</sup> = 4.16x10<sup>5</sup> mm<sup>4</sup>, 1 in<sup>6</sup> = 2.69x10<sup>8</sup> mm<sup>6</sup>, 1 kip-in = 113.3 N-m, 1 lb/ft = 14.6 N/m, 1 kip = 4.4 kN