

SPECIFICATIONS

**FIGURE 7882**  
STRUT CHANNEL



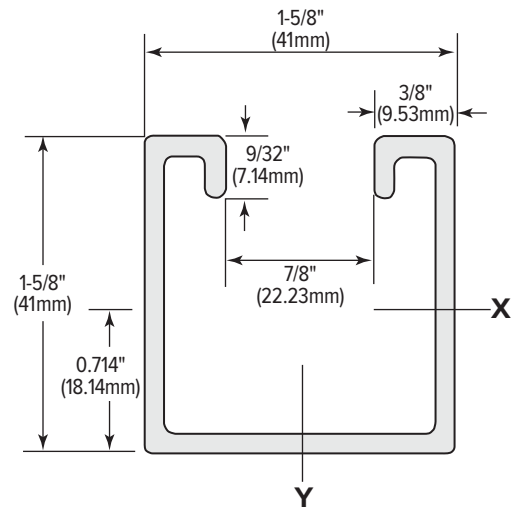
1-5/8" x 1-5/8" 12 GA-HALF SLOT

FEATURES

- 1-5/8" x 1-5/8"
- 12-gauge channel
- Half slot
- Available in 10-ft. and 20-ft. lengths
- Materials:
  - Pre-galvanized steel (ASTM A653 SS Grade 33, G90)
  - Stainless steel - Type 304 or 316/316L (ASTM A240)
  - Aluminum - Type 6063-T6 (ASTM B221)
- Available finishes:
  - Pre-galvanized steel (ASTM A653 SS Grade 33, G90)
  - Yellow "gold" zinc (Zinc Trivalent Chromium (ASTM B633))
  - Green powder-coated
- Standard length tolerance  $\pm 1/8"$
- Load data calculated based on ANSI/AISC 360-2016



Item #	Finish	Size		Length		Gauge
		in.	mm	ft	m	
FNWST7882S12Z2S1	Pre-Galv.	1-5/8 x 1-5/8	41 x 41	10	3.048	12
FNWST7882S12Z2S2	Pre-Galv.	1-5/8 x 1-5/8	41 x 41	20	6.096	12
FNWST7882S12Y2S1	Yellow	1-5/8 x 1-5/8	41 x 41	10	3.048	12
FNWST7882S12Y2S2	Yellow	1-5/8 x 1-5/8	41 x 41	20	6.096	12
FNWST7882S12G2S1	Green	1-5/8 x 1-5/8	41 x 41	10	3.048	12
FNWST7882S12G2S2	Green	1-5/8 x 1-5/8	41 x 41	20	6.096	12
FNWST7882S12A2S1	Aluminum	1-5/8 x 1-5/8	41 x 41	10	3.048	12
FNWST7882S12A2S2	Aluminum	1-5/8 x 1-5/8	41 x 41	20	6.096	12
FNWST7882S1262S2	316 SS	1-5/8 x 1-5/8	41 x 41	20	6.096	12
FNWST7882S1242S1	304 SS	1-5/8 x 1-5/8	41 x 41	10	3.048	12
FNWST7882S1242S2	304 SS	1-5/8 x 1-5/8	41 x 41	20	6.096	12



SECTION PROPERTIES

Wt/Ft (lbs)	Area of Section Sq. In.	X-X Axis			Y-Y Axis		
		I in <sup>4</sup>	S in <sup>3</sup>	r in	I in <sup>4</sup>	S in <sup>3</sup>	r in
1.73	0.535	0.186	0.204	0.590	0.228	0.280	0.653

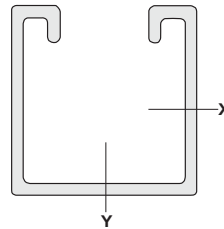
I = Moment of Inertia S = Section Modulus r = Radius of Gyration

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**FIGURE 7882**  
STRUT CHANNEL



1-5/8" x 1-5/8" 12 GA-HALF SLOT



Span or Unbraced Height (in.)	Static Beam Load (X-X Axis)					Max Allowable Load at Slot Face (lbs)	Column Loading Data				Weight of Channel (lbs)
	Max Allowable Uniform Load (lbs)	Deflection at Uniform Load (in.)	Uniform Load at Deflection				Max Column Load				
			Span/180 Deflection (lbs)	Span/240 Deflection (lbs)	Span/360 Deflection (lbs)		k=.65 (lbs)	k=.80 (lbs)	k=1.0 (lbs)	k=1.2 (lbs)	
12	3026	0.01	3026	3026	3026	3406	10718	10569	10252	9856	1.73
18	2024	0.03	2024	2024	2024	3335	10366	9856	9293	8738	2.60
24	1522	0.06	1522	1522	1522	3265	9671	9108	8386	7638	3.46
30	1217	0.09	1217	1217	1217	3203	9020	8386	7471	6697	4.32
36	1020	0.13	1020	1020	790	3089	8474	7638	6697	5843	5.18
42	864	0.17	864	864	576	2992	7876	6996	5975	5078	6.05
48	765	0.23	765	666	444	2886	7304	6398	5324	4391	6.91
60	600	0.35	567	428	288	2658	6318	5324	4242	3529	8.64
72	502	0.51	394	296	197	2350	5447	4391	3529	2798	10.37
84	436	0.69	288	222	148	2138	4638	3802	2904	2262	12.10
96	379	0.9	222	173	115	1901	4083	3274	2429	1839	13.82
108	337	1.14	181	132	91	1681	3634	2798	2042	**	15.55
120	305	1.41	148	107	74	1487	3212	2429	**	**	17.28
144	255	2.03	99	74	50	1170	2517	1839	**	**	20.73
168	214	2.77	74	58	40	**	1998	**	**	**	24.18
180	206	3.18	65	50	40	**	1795	**	**	**	25.91
192	197	3.61	58	50	NR	**	**	**	**	**	27.64
216	173	4.57	50	NR	NR	**	**	**	**	**	31.09
240	156	5.65	41	NR	NR	**	**	**	**	**	34.55

NR = Not Recommended  
\*\* Not recommended - KL/r exceeds 200

NOTE: 1. Allowable beam loads are based on a uniformly loaded, simply supported beam. For capacities of a beam loaded at midspan at a single point, multiply the beam capacity by 50% and deflection by 80%. 2. The section properties (excluding quality) are in the absence of holes.