

SPECIFICATIONS

FIGURE 7880 STRUT CHANNEL



1-5/8" x 3-1/4" 12 GA-HALF SLOT

FEATURES

- 1-5/8" x 3-1/4"
- 12-gauge channel
- Half slot
- Load data calculated based on ANSI/AISC 360-2016
- Available in 10-ft and 20-ft lengths
- Material: pre-galvanized steel (ASTM A653 SS Grade 33, G90)
- Standard length tolerance $\pm 1/8"$
- Available finishes:
 - Pre-galvanized steel (ASTM A653 SS Grade 33, G90)
 - Green powder coat

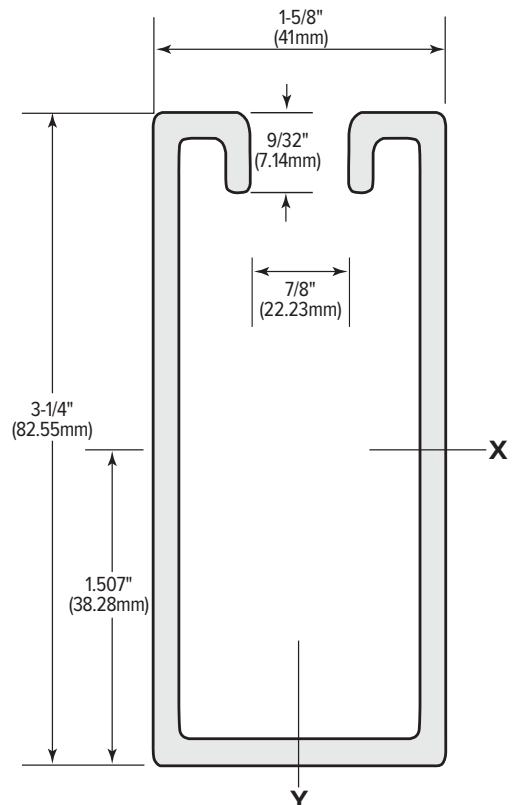
REFERENCE CHART

Item #	Finish	Size		Length		Gauge
		in.	mm	ft	m	
FNWST7880S12Z2S1	Pre-galv.	1-5/8 x 3-1/4	41 x 83	10	3.048	12
FNWST7880S12Z2S2	Pre-galv.	1-5/8 x 3-1/4	41 x 83	20	6.096	12
FNWST7880S12G2S2	Green	1-5/8 x 3-1/4	41 x 83	20	6.096	12

SECTION PROPERTIES

Wt/Ft Lbs	Area of Section Sq. In.	X-X Axis			Y-Y Axis		
		I in ⁴	S in ³	r in	I in ⁴	S in ³	r in
2.82	0.858	1.075	0.618	1.119	0.416	0.512	0.697

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

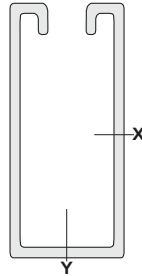


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FIGURE 7880
STRUT CHANNEL



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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	17467	0.01	17467	17467	17467	3458	10824	10718	10498	10252	2.82
18	11689	0.03	11689	11689	11689	3467	10569	10252	9768	9196	4.24
24	8766	0.06	8766	8766	8766	3432	10058	9574	8932	8307	5.64
30	7036	0.09	7036	7036	6513	3414	9478	8932	8131	7471	7.06
36	5885	0.13	5885	5885	4530	3362	9020	8307	7471	6618	8.47
42	4987	0.17	4987	4987	3330	3300	8474	7709	6758	5914	9.88
48	4391	0.23	4391	3820	2547	3230	8043	7146	6107	5271	11.29
60	3469	0.35	3257	2449	1632	3045	7075	6107	5025	4206	14.11
72	2889	0.51	2269	1697	1134	2825	6257	5271	4206	3467	16.93
84	2481	0.69	1665	1248	833	2517	5509	4479	3564	2842	19.76
96	2146	0.9	1273	955	636	2297	4858	3942	3045	2385	22.58
108	1926	1.14	1012	759	506	2077	4277	3467	2605	1998	25.40
120	1738	1.41	816	612	408	1866	3872	3045	2235	**	28.22
144	1445	2.03	571	425	286	1514	3159	2385	**	**	33.87
168	1241	2.77	416	318	212	1232	2561	1883	**	**	39.51
180	1151	3.18	367	277	187	**	2323	**	**	**	42.33
192	1102	3.61	318	245	163	**	2121	**	**	**	45.16
216	963	4.57	253	196	131	**	**	**	**	**	50.80
240	865	5.65	204	155	106	**	**	**	**	**	56.44

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.