

# SPECIFICATIONS

## FIGURE 7883 STRUT CHANNEL



### 1-5/8" x 1-5/8" 14 GA-HALF SLOT

#### FEATURES

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

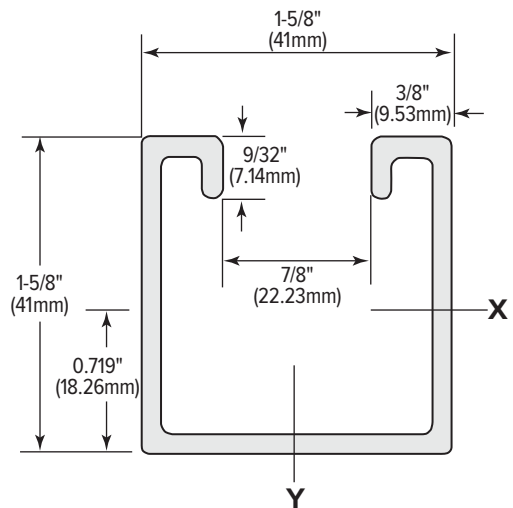


Item #	Finish	Size		Length		Gauge
		in.	mm	ft	m	
FNWST7883S14Z2S1	Pre-Galv.	1-5/8 x 1-5/8	41 x 41	10	3.048	14
FNWST7883S14Z2S2	Pre-Galv.	1-5/8 x 1-5/8	41 x 41	20	6.096	14
FNWST7883S14G2S1	Green	1-5/8 x 1-5/8	41 x 41	10	3.048	14
FNWST7883S14G2S2	Green	1-5/8 x 1-5/8	41 x 41	20	6.096	14

#### 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
1.26	0.389	0.139	0.154	0.599	0.169	0.208	0.660

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

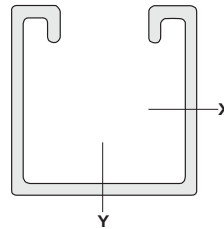


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**FIGURE 7883**  
STRUT CHANNEL



1-5/8" x 1-5/8" 14 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	2262	0.01	2262	2262	2262	3406	10718	10569	10252	9856	1.26
18	1511	0.03	1511	1511	1511	3335	10366	9856	9293	8738	1.88
24	1136	0.06	1136	1136	1136	3265	9671	9108	8386	7709	2.51
30	911	0.09	911	911	848	3203	9108	8386	7550	6758	3.13
36	768	0.13	768	768	591	3115	8474	7709	6758	5914	3.76
42	648	0.17	648	648	432	3027	7964	7075	6046	5148	4.39
48	568	0.23	568	496	336	2922	7392	6477	5386	4479	5.01
60	456	0.35	423	320	216	2684	6398	5386	4321	3599	6.27
72	376	0.51	296	223	152	2402	5509	4479	3599	2878	7.52
84	328	0.69	216	168	112	2182	4752	3872	2992	2323	8.78
96	280	0.9	168	128	88	1945	4162	3335	2490	1892	10.02
108	256	1.14	136	104	72	1725	3696	2878	2094	**	11.28
120	232	1.41	112	80	56	1522	3274	2490	**	**	12.54
144	192	2.03	80	56	40	1197	2578	1892	**	**	15.04
168	160	2.77	56	48	NR	**	2059	**	**	**	17.55
180	152	3.18	48	40	NR	**	1848	**	**	**	18.80
192	144	3.61	48	NR	NR	**	**	**	**	**	20.06
216	128	4.57	40	NR	NR	**	**	**	**	**	22.56
240	112	5.65	NR	NR	NR	**	**	**	**	**	25.07

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.