

SPECIFICATIONS

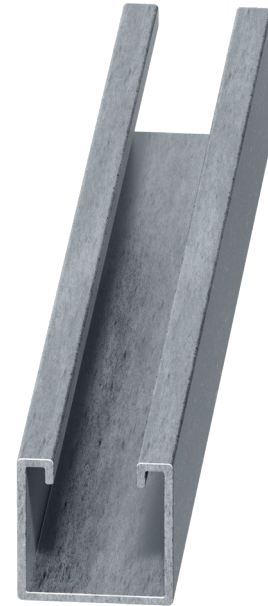
FIGURE 7882 STRUT CHANNEL



1-5/8" x 1-5/8" 12 GA-SOLID

FEATURES

- 1-5/8" x 1-5/8"
- 12-gauge channel
- Solid
- Available in 10-ft. and 20-ft. lengths
- Materials:
 - Pre-galvanized steel (ASTM A653 SS Grade 33, G90)
 - Plain Steel (ASTM A1011 SS Grade 33)
- 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

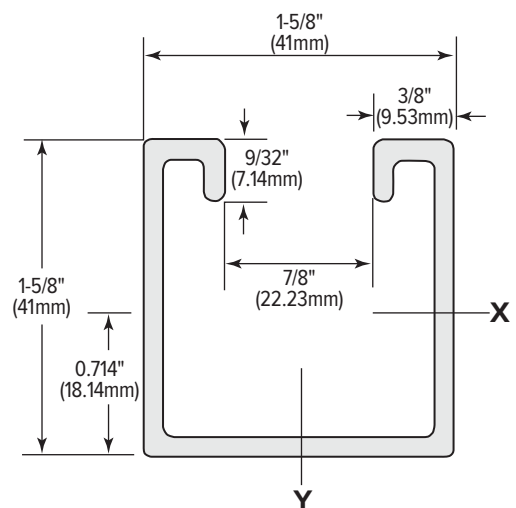


Item #	Finish	Size		Length		Gauge
		in.	mm	ft	m	
FNWST7882S12ZSD1	Pre-Galv.	1-5/8 x 1-5/8	41 x 41	10	3.048	12
FNWST7882S12ZSD2	Pre-Galv.	1-5/8 x 1-5/8	41 x 41	20	6.096	12
FNWST7882S12YSD2	Yellow	1-5/8 x 1-5/8	41 x 41	20	6.096	12
FNWST7882S12P4S2	Plain	1-5/8 x 1-5/8	41 x 41	20	6.096	12
FNWST7882S12GSD1	Green	1-5/8 x 1-5/8	41 x 41	10	3.048	12
FNWST7882S12GSD2	Green	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 ⁴	S in ³	r in	I in ⁴	S in ³	r in
1.82	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

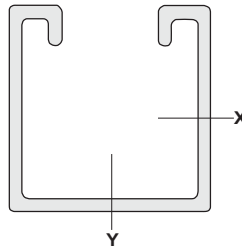


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FIGURE 7882
STRUT CHANNEL



1-5/8" x 1-5/8" 12 GA-SOLID



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	3440	0.01	3440	3440	3440	3870	12180	12010	11650	11200	1.82
18	2299	0.03	2299	2299	2299	3790	11780	11200	10560	9930	2.74
24	1729	0.06	1729	1729	1729	3710	10990	10350	9530	8680	3.64
30	1383	0.09	1383	1383	1383	3640	10250	9530	8490	7610	4.56
36	1159	0.13	1159	1159	897	3510	9630	8680	7610	6640	5.46
42	981	0.17	981	981	654	3400	8950	7950	6790	5770	6.38
48	869	0.23	869	757	505	3280	8300	7270	6050	4990	7.28
60	682	0.35	645	486	327	3020	7180	6050	4820	4010	9.10
72	570	0.51	449	336	224	2670	6190	4990	4010	3180	10.92
84	495	0.69	327	252	168	2430	5270	4320	3300	2570	12.74
96	430	0.9	252	196	131	2160	4640	3720	2760	2090	14.56
108	383	1.14	206	150	103	1910	4130	3180	2320	**	16.38
120	346	1.41	168	122	84	1690	3650	2760	**	**	18.20
144	290	2.03	112	84	56	1330	2860	2090	**	**	21.84
168	243	2.77	84	65	47	**	2270	**	**	**	25.48
180	234	3.18	75	56	40	**	2040	**	**	**	27.30
192	224	3.61	65	56	40	**	**	**	**	**	29.12
216	196	4.57	56	40	NR	**	**	**	**	**	32.77
240	178	5.65	47	NR	NR	**	**	**	**	**	36.41

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

NOTE: 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%.