

SPECIFICATIONS

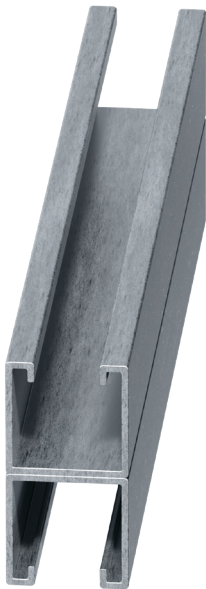
FIGURE 7882
STRUT CHANNEL



1-5/8" x 1-5/8" 12 GA–BACK-TO-BACK SOLID

FEATURES

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



Item #	Finish	Size		Length		Gauge
		in.	mm	ft	m	
FNWST7882B12ZSD1	Pre-Galv.	1-5/8 x 1-5/8	41 x 41	10	3.048	12
FNWST7882B12ZSD2	Pre-Galv.	1-5/8 x 1-5/8	41 x 41	20	6.096	12
FNWST7882B12YSD2	Yellow	1-5/8 x 1-5/8	41 x 41	20	6.096	12
FNWST7882B12GSD2	Green	1-5/8 x 1-5/8	41 x 41	20	6.096	12
FNWST7882B124SD2	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 ⁴	S in ³	r in	I in ⁴	S in ³	r in
3.64	1.070	0.939	0.578	0.937	0.456	0.561	0.623

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

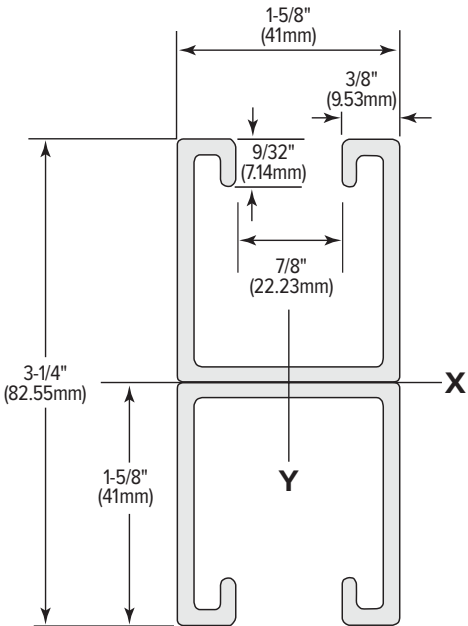
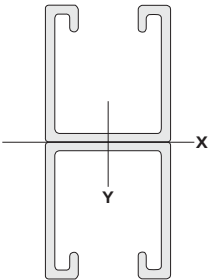


FIGURE 7882
STRUT CHANNEL



1-5/8" x 1-5/8" 12 GA-BACK-TO-BACK 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	17336	0.01	17336	17336	17336	3910	12300	12130	11870	11430	3.64
18	11607	0.03	11607	11607	11607	3870	11930	11430	10880	10250	5.46
24	8701	0.06	8701	8701	8701	3820	11320	10660	9930	9140	7.28
30	6987	0.09	6987	6987	6465	3800	10660	9930	8950	8120	9.10
36	5841	0.13	5841	5841	4490	3700	10030	9140	8120	7180	10.92
42	4956	0.17	4956	4956	3307	3630	9440	8490	7360	6340	12.74
48	4360	0.23	4360	3791	2534	3550	8860	7860	6640	5580	14.56
60	3447	0.35	3232	2431	1621	3310	7770	6640	5330	4480	18.20
72	2869	0.51	2245	1686	1127	2990	6790	5580	4480	3650	21.84
84	2459	0.69	1658	1239	829	2690	5910	4780	3750	2980	25.48
96	2133	0.9	1267	950	633	2440	5140	4200	3180	2470	29.12
108	1919	1.14	1006	755	503	2190	4600	3650	2710	2040	32.77
120	1723	1.41	810	615	410	1940	4130	3180	2300	**	36.41
144	1435	2.03	568	429	289	1570	3300	2470	**	**	43.69
168	1230	2.77	419	317	214	**	2660	**	**	**	50.97
180	1146	3.18	363	270	186	**	2410	**	**	**	54.61
192	1090	3.61	317	242	158	**	2180	**	**	**	58.25
216	950	4.57	252	196	130	**	**	**	**	**	65.53
240	857	5.65	205	158	102	**	**	**	**	**	72.81

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%.