

SPECIFICATIONS

FIGURE 7880
STRUT CHANNEL



1-5/8" x 3-1/4" 12 GA-BACK TO BACK SOLID

FEATURES

- 1-5/8" x 6-1/2"
- 12 Gauge channel
- Solid back to back
- Material: Pre-galvanized steel
- Load data calculated based on ANSI/AISC 360-2016
- Available in 10 ft and 20 ft lengths
- Available finish: Pre-galvanized

Catalog Number	Finish	Size		Length		Gauge
		in.	mm	ft	m	
FNWST7880B12ZSD1	Pre-Galv.	1-5/8 x 6-1/2	41 x 165	10	3.048	12
FNWST7880B12ZSD2	Pre-Galv.	1-5/8 x 6-1/2	41 x 165	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
6.26	1.775	6.251	1.923	1.877	0.862	1.060	0.697

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

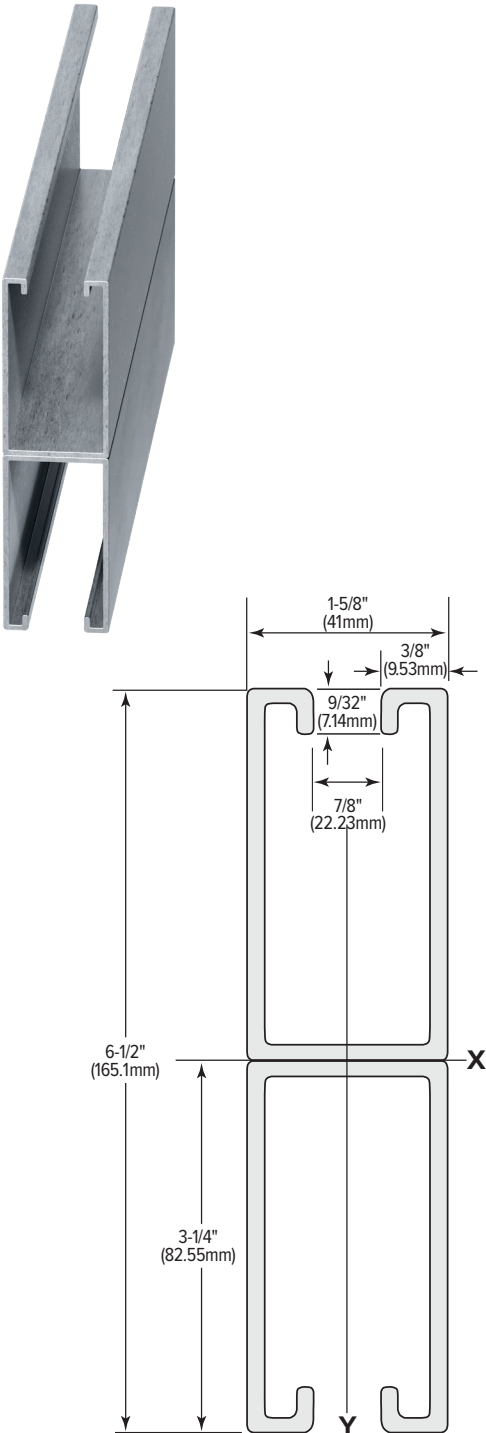
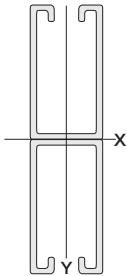


FIGURE 7880
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Span or Unbraced Height (in.)	Static Beam Load (X-X Axis)					Max Allowable Load at Slot Face (lbs)	Column Loading Data				Weight of Channel (lbs)
	Max Allowable Uniform Load (lbs)	Deflection at Uniform Load (in.)	Uniform Load at Deflection				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	6890*	0.00	6890*	6890*	6890*	10910	41100	40940	40680	40360	6.3
18	6890*	0.01	6890*	6890*	6890*	10860	40720	40360	39780	39080	9.4
24	6890*	0.02	6890*	6890*	6890*	10780	40180	39560	38550	37360	12.5
30	6890*	0.02	6890*	6890*	6890*	10690	39500	38550	37030	35250	15.7
36	6890*	0.04	6890*	6890*	6890*	10570	38690	37360	35250	32840	18.8
42	6890*	0.05	6890*	6890*	6890*	10440	37750	35990	33260	30200	21.9
48	6890*	0.06	6890*	6890*	6890*	10280	36700	34480	31100	27420	25.0
60	6450	0.10	6450	6450	6450	9900	34280	31100	26470	21740	31.3
72	5370	0.14	5370	5370	5370	9440	31540	27420	21740	16370	37.6
84	4610	0.19	4610	4610	4610	8890	28590	23620	16370	12030	43.8
96	4030	0.25	4030	4030	4030	8260	25520	19890	12030	9210	50.1
108	3580	0.32	3580	3580	3370	7550	22440	16370	9210	7280	56.3
120	3220	0.39	3220	3220	2730	6790	19440	13270	7280	**	62.6
144	2690	0.57	2690	2690	1900	5510	13960	9210	**	**	75.1
168	2300	0.77	2300	2090	1390	4520	10250	6770	**	**	87.6
180	2150	0.89	2150	1820	1210	**	8930	**	**	**	93.9
192	2020	1.01	2020	1600	1070	**	7850	**	**	**	100.2
216	1790	1.27	1690	1260	840	**	**	**	**	**	112.7
240	1610	1.57	1370	1020	680	**	**	**	**	**	125.2

NR = Not Recommended
* Load limited by spot weld shear ** 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.