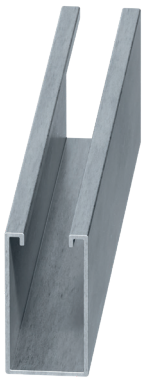
SPECIFICATIONS

FIGURE 7880
STRUT CHANNEL

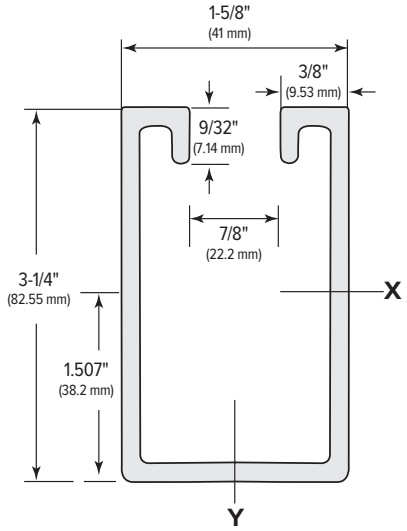
1-5/8" x 3-1/4" 12 GA–SOLID

FEATURES

- 1-5/8" x 3-1/4"
- 12-gauge channel
- Solid
- Load data calculated based on ANSI/AISC 360-2016
- Available lengths: 10 ft and 20 ft
- Material: Pre-galvanized steel (ASTM A653 SS Grade 33, G90)
- Standard length tolerance ±1/8"
- Available finishes:
  - Pre-galvanized steel (ASTM A653 SS Grade 33, G90)



Catalog Number	Finish	Size		Length		Gauge
		in.	mm	ft	m	
FNWST7880S12ZSD1	Pre-galv.	1-5/8 x 3-1/4	41 x 83	10	3.048	12
FNWST7880S12ZSD2	Pre-galv.	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
2.92	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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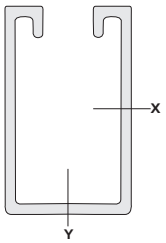

Span or Unbraced Height (in.)	Static Beam Load (X-X Axis)					Max Allowable Load at Slot Face (lbs)	Column Loading Data				Weight of Channel (lbs)
	Max Allowable Uniform Load (lbs)	Deflection at Uniform Load (in.)	Uniform Load at Deflection				Max Column Load				
			Span/180 Deflection (lbs)	Span/240 Deflection (lbs)	Span/360 Deflection (lbs)		k=.65 (lbs)	k=.80 (lbs)	k=1.0 (lbs)	k=1.2 (lbs)	
12	19849	0.01	19849	19849	19849	3930	12300	12180	11930	11650	2.92
18	13282	0.03	13282	13282	13282	3940	12010	11650	11100	10450	4.39
24	9962	0.06	9962	9962	9962	3900	11430	10880	10150	9440	5.84
30	7995	0.09	7995	7995	7402	3880	10770	10150	9240	8490	7.31
36	6687	0.13	6687	6687	5148	3820	10250	9440	8490	7520	8.76
42	5667	0.17	5667	5667	3784	3750	9630	8760	7680	6720	10.23
48	4990	0.23	4990	4341	2894	3670	9140	8120	6940	5990	11.69
60	3942	035	3701	2783	1855	3460	8040	6940	5710	4780	14.61
72	3283	0.51	2579	1929	1289	3210	7110	5990	4780	3940	17.53
84	2820	0.69	1892	1419	946	2860	6260	5090	4050	3230	20.45
96	2439	0.9	1447	1085	723	2610	5520	4480	3460	2710	23.37
108	2189	1.14	1150	863	575	2360	4860	3940	2960	2270	26.29
120	1976	1.41	928	696	464	2120	4400	3460	2540	**	29.21
144	1642	2.03	649	482	325	1720	3590	2710	**	**	35.06
168	1410	2.77	473	362	241	1400	2910	2140	**	**	40.90
180	1308	3.18	417	315	213	**	2640	**	**	**	43.82
192	1252	3.61	362	278	186	**	2410	**	**	**	46.74
216	1094	4.57	288	223	148	**	**	**	**	**	52.59
240	983	5.65	232	176	121	**	**	**	**	**	58.43

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%.