

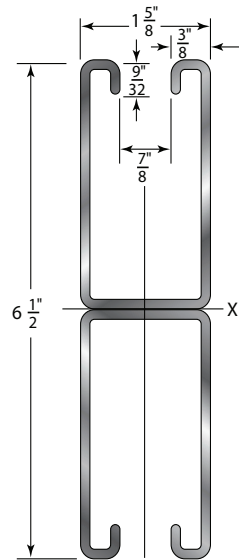
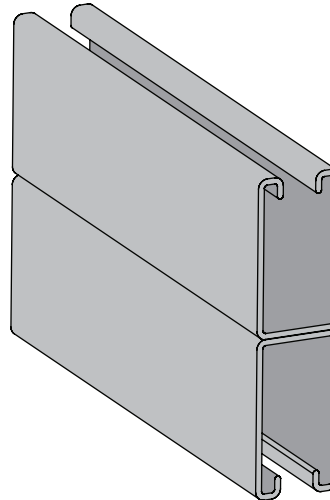


SH112A

Back-to-Back Strut 6½ x 1½

12 Gauge

SH112OSA Back-to-Back Oblong Slotted Strut is available in pre-galvanized in 10 ft. and 20 ft. lengths. Solid Strut and other materials, finishes and lengths are available upon request.



SECTION PROPERTIES

For SH112OSA, See Note 3

FIG. #	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.
SH112A	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

SPAN, OR UNBRACED HEIGHT, IN.	STATIC BEAM LOAD (X-X AXIS)						MAX. ALLOWABLE LOAD AT SLOT FACE, LBS.	COLUMN LOADING DATA			
	MAX. ALLOWABLE UNIFORM LOAD, LBS.	DEFLECTION AT UNIFORM LOAD, IN.	UNIFORM LOAD AT DEFLECTION			WEIGHT OF STRUT, LBS.		MAX. COLUMN LOAD APPLIED AT C.G.			
			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	6,890*	0.00	6,890*	6,890*	6,890*	6.3	10,910	41,100	40,940	40,680	40,360
18	6,890*	0.01	6,890*	6,890*	6,890*	9.4	10,860	40,720	40,360	39,780	39,080
24	6,890*	0.02	6,890*	6,890*	6,890*	12.5	10,780	40,180	39,560	38,550	37,360
30	6,890*	0.02	6,890*	6,890*	6,890*	15.7	10,690	39,500	38,550	37,030	35,250
36	6,890*	0.04	6,890*	6,890*	6,890*	18.8	10,570	38,690	37,360	35,250	32,840
42	6,890*	0.05	6,890*	6,890*	6,890*	21.9	10,440	37,750	35,990	33,260	30,200
48	6,890*	0.06	6,890*	6,890*	6,890*	25.0	10,280	36,700	34,480	31,100	27,420
60	6,450	0.10	6,450	6,450	6,450	31.3	9,900	34,280	31,100	26,470	21,740
72	5,370	0.14	5,370	5,370	5,370	37.6	9,440	31,540	27,420	21,740	16,370
84	4,610	0.19	4,610	4,610	4,610	43.8	8,890	28,590	23,620	17,230	12,030
96	4,030	0.25	4,030	4,030	4,030	50.1	8,260	25,520	19,890	13,270	9,210
108	3,580	0.32	3,580	3,580	3,370	56.3	7,550	22,440	16,370	10,480	7,280
120	3,220	0.39	3,220	3,220	2,730	62.6	6,790	19,440	13,270	8,490	**
144	2,690	0.57	2,690	2,690	1,900	75.1	5,510	13,960	9,210	**	**
168	2,300	0.77	2,300	2,090	1,390	87.6	4,520	10,250	6,770	**	**
180	2,150	0.89	2,150	1,820	1,210	93.9	**	8,930	**	**	**
192	2,020	1.01	2,020	1,600	1,070	100.2	**	7,850	**	**	**
216	1,790	1.27	1,690	1,260	840	112.7	**	**	**	**	**
240	1,610	1.57	1,370	1,020	680	125.2	**	**	**	**	**

Bearing Load may limit load

** Not Recommended - kL/r exceeds 200

* Load limited by spot weld shear

Notes:

1. The beam capacities shown above include the weight of the strut beam. The beam weight must be subtracted from these capacities to arrive at the net beam capacity.

2. 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%.

3. The above chart shows beam capacities for strut without holes. For oblong slotted strut, multiply by 88%.

4. Refer to page 41 for reduction factors for unbraced lengths.

5. Refer to page 42 for additional information on allowable loads.