

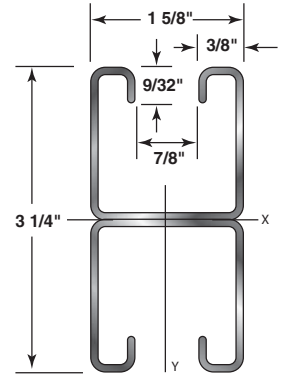
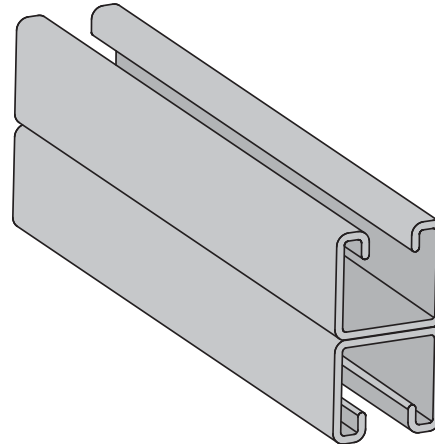


SH132A

Back-to-Back Strut 3 1/4 x 1 5/8

12 Gauge

SH132OSA Back-to-Back Oblong Slotted Strut is stocked in pre-galvanized in 10 ft. and 20 ft. lengths. Solid Strut and other materials, finishes and lengths are available upon request.



For SH132OSA, See Note 3

SECTION PROPERTIES

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.
SH132A	3.88	1.104	0.947	0.583	0.926	0.473	0.582	0.655

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	3,500*	0.01	3,500*	3,500*	3,500*	3.9	6,640	25,540	25,430	25,240	25,020
18	3,500*	0.02	3,500*	3,500*	3,500*	5.8	6,580	25,270	25,020	24,610	24,120
24	3,500*	0.03	3,500*	3,500*	3,500*	7.8	6,510	24,890	24,460	23,750	22,920
30	3,500*	0.05	3,500*	3,500*	3,500*	9.7	6,410	24,420	23,750	22,690	21,460
36	3,260	0.07	3,260	3,260	3,260	11.6	6,300	23,850	22,920	21,460	19,800
42	2,790	0.10	2,790	2,790	2,790	13.6	6,170	23,190	21,970	20,090	18,010
48	2,440	0.13	2,440	2,440	2,440	15.5	6,030	22,460	20,930	18,620	16,140
60	1,950	0.20	1,950	1,950	1,660	19.4	5,690	20,790	18,620	15,510	12,410
72	1,630	0.28	1,630	1,630	1,150	23.3	5,310	18,920	16,140	12,410	8,990
84	1,400	0.39	1,400	1,270	840	27.2	4,890	16,920	13,630	9,510	6,600
96	1,220	0.50	1,220	970	650	31.0	4,450	14,880	11,220	7,280	5,060
108	1,090	0.64	1,020	770	510	34.9	3,980	12,860	8,990	5,750	3,990
120	980	0.79	830	620	410	38.8	3,560	10,930	7,280	4,660	**
144	810	1.13	570	430	290	46.6	2,870	7,660	5,060	**	**
168	700	1.54	420	320	210	54.3	**	5,630	**	**	**
180	650	1.77	370	280	180	58.2	**	4,900	**	**	**
192	610	2.01	320	240	160	62.1	**	4,310	**	**	**
216	540	2.55	260	190	130	69.8	**	**	**	**	**
240	490	3.15	210	160	100	77.6	**	**	**	**	**

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.

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

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%.

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

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