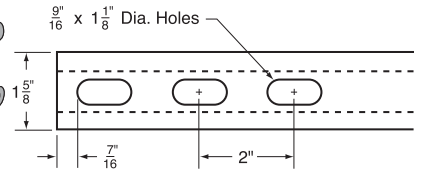
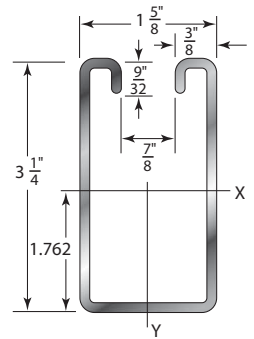
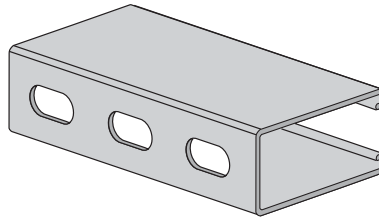
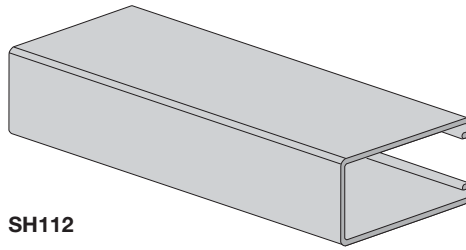




**SH112**

**Strut 3 1/4 x 1 5/8**  
12 Gauge

SH112OS 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.



**SECTION PROPERTIES**

For SH112OS, See Note 3

FIG. #	WT./FT., LBS.	AREA OF SECTION, SQ. IN.	X-X AXIS			Y-Y AXIS		
			I IN. <sup>4</sup>	S IN. <sup>3</sup>	r IN.	I IN. <sup>4</sup>	S IN. <sup>3</sup>	r IN.
SH112	3.13	0.887	1.100	0.633	1.114	0.431	0.530	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	10,610	0.01	10,610	10,610	10,610	3.1	6,170	19,600	19,060	18,210	17,240
18	7,070	0.02	7,070	7,070	7,070	4.7	5,950	18,320	17,240	15,630	13,920
24	5,300	0.03	5,300	5,300	5,300	6.3	5,650	16,720	15,070	12,770	10,560
30	4,240	0.05	4,240	4,240	4,240	7.8	5,270	14,920	12,770	10,030	7,640
36	3,540	0.07	3,540	3,540	3,540	9.4	4,840	13,060	10,560	7,640	5,650
42	3,030	0.09	3,030	3,030	3,030	11.0	4,360	11,230	8,560	5,910	4,450
48	2,650	0.12	2,650	2,650	2,650	12.5	3,860	9,530	6,850	4,790	3,660
60	2,120	0.18	2,120	2,120	1,920	15.7	3,100	6,680	4,790	3,450	2,710
72	1,770	0.26	1,770	1,770	1,340	18.8	2,570	4,980	3,660	2,710	2,170
84	1,520	0.36	1,520	1,470	980	21.9	2,200	3,950	2,960	2,240	1,820
96	1,330	0.47	1,330	1,130	750	25.0	1,930	3,270	2,500	1,920	1,580
108	1,180	0.60	1,180	890	590	28.2	1,730	2,800	2,170	1,690	1,390
120	1,060	0.74	960	720	480	31.3	1,560	2,450	1,920	1,510	**
144	880	1.06	670	500	330	37.6	1,320	1,980	1,580	**	**
168	760	1.44	490	370	250	43.8	1,150	1,670	1,340	**	**
180	710	1.65	430	320	210	47.0	**	1,550	**	**	**
192	660	1.88	380	280	190	50.1	**	1,450	**	**	**
216	590	2.38	300	220	150	56.3	**	**	**	**	**
240	530	2.94	240	180	120	62.6	**	**	**	**	**

# Bearing Load may limit load  
\*\* Not Recommended - kL/r exceeds 200

**Notes:**

- 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.
- 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%.
- The above chart shows beam capacities for strut without holes. For oblong slotted strut, multiply by 88%.
- Refer to page 41 for reduction factors for unbraced lengths.
- Refer to page 42 for additional information on allowable loads.