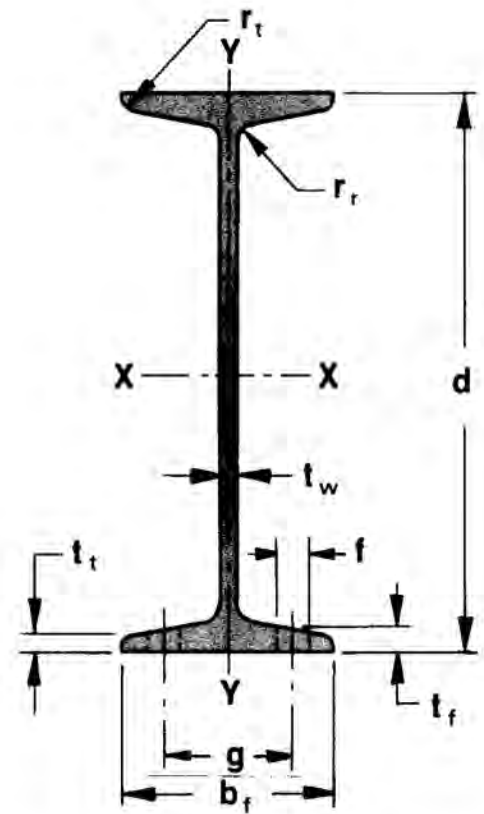
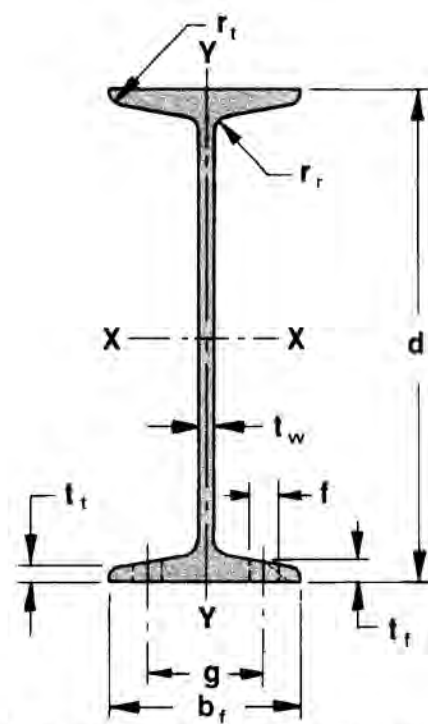


AMERICAN STANDARD SHAPES (S SHAPES)



Shape Designation Number	Depth of Section	Weight per Foot	Area of Section	Web Thickness	Flange Width	Flange Average Thickness	Area of Flange	$\frac{d}{A_r}$	Elastic Properties Axis X-X			Flange Nominal Thickness at Toe	Radius at Toe	Radius at Fillet	Usual Flange Gage	Maximum Flange Fastener
	d		A	t _w	b _r	t _r	A _r		I	S	r	t _t	r _t	r _r	g	f
	in.	lb.	in. ²	in.	in.	in.	in. ²		in. ⁴	in. ³	in.	in.	in.	in.	in.	in.
S6x12.5	6.0	12.5	3.67	0.232	3.332	0.359	1.196	5.02	22.1	7.37	2.45	1/4	.14	.33	2	5/8
S6x17.25	6.0	17.25	5.07	0.465	3.565	0.359	1.280	4.69	26.3	8.77	2.28	1/4	.14	.33	2	5/8
S7x15.3	7.0	15.3	4.50	0.252	3.662	0.392	1.435	4.88	36.7	10.5	2.86	1/4	.15	.35	2 1/4	5/8
S8x18.4	8.0	18.4	5.41	0.271	4.001	0.425	1.700	4.70	57.6	14.4	3.26	1/4	.16	.37	2 1/4	3/4
S8x23	8.0	23.0	6.77	0.441	4.171	0.425	1.773	4.51	64.9	16.2	3.10	1/4	.16	.37	2 1/4	3/4
S10x25.4	10.0	25.4	7.46	0.311	4.661	0.491	2.288	4.37	124	24.7	4.07	5/16	.19	.41	2 3/4	3/4
S10x35	10.0	35.0	10.3	0.594	4.944	0.491	2.428	4.12	147	29.4	3.78	5/16	.19	.41	2 3/4	3/4
S12x31.8	12.0	31.8	9.35	0.350	5.000	0.544	2.720	4.41	218	36.4	4.83	3/8	.21	.45	3	3/4
S12x35	12.0	35.0	10.3	0.428	5.078	0.544	2.762	4.34	229	38.2	4.72	3/8	.21	.45	3	3/4
S12x40.8	12.0	40.8	12.0	0.462	5.252	0.659	3.461	3.46	272	45.4	4.77	7/16	.28	.56	3	3/4
S12x50	12.0	50.0	14.7	0.687	5.477	0.659	3.609	3.32	305	50.8	4.55	7/16	.28	.56	3	3/4
S15x42.9	15.0	42.9	12.6	0.411	5.501	0.622	3.422	4.38	447	59.6	5.95	7/16	.25	.51	3 1/2	3/4
S15x50	15.0	50.0	14.7	0.550	5.640	0.622	3.508	4.28	486	64.8	5.75	7/16	.25	.51	3 1/2	3/4
S18x54.7	18.0	54.7	16.1	0.461	6.001	0.691	4.147	4.34	804	89.4	7.07	7/16	.28	.56	3 1/2	7/8
S18x70	18.0	70.0	20.6	0.711	6.251	0.691	4.319	4.17	926	103	6.71	7/16	.28	.56	3 1/2	7/8
S20x66	20.0	66.0	19.4	0.505	6.255	0.795	4.972	4.02	1190	119	7.83	9/16	.30	.60	3 1/2	7/8
S20x75	20.0	75.0	22.0	0.635	6.385	0.795	5.076	3.94	1280	128	7.62	9/16	.30	.60	3 1/2	7/8
S20x86	20.3	86.0	25.3	0.660	7.060	0.920	6.495	3.13	1580	155	7.89	5/8	.36	.70	4	1
S20x96	20.3	96.0	28.2	0.800	7.200	0.920	6.624	3.06	1670	165	7.71	5/8	.36	.70	4	1
S24x80	24.0	80.0	23.5	0.500	7.000	0.870	6.090	3.94	2100	175	9.47	5/8	.30	.60	4	1
S24x90	24.0	90.0	26.5	0.625	7.125	0.870	6.199	3.87	2250	187	9.21	5/8	.30	.60	4	1
S24x100	24.0	100.0	29.3	0.745	7.245	0.870	6.303	3.81	2390	199	9.02	5/8	.30	.60	4	1
S24x106	24.5	106.0	31.2	0.620	7.870	1.090	8.578	2.86	2940	240	9.71	13/16	.30	.60	4	1
S24x121	24.5	121.0	35.6	0.800	8.050	1.090	8.774	2.79	3160	258	9.43	13/16	.30	.60	4	1

AMERICAN STANDARD SHAPES (S SHAPES)



Lower flange loadings tabulated below are based on static load and do not consider service. Spacing between wheel centers must be equal to or greater than total flange width. All loading figures shown are in pounds.

S Shape	Lower* Flange Loading	Span in feet																				
		10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40	42	44	46	48	50
6x12.5	2,540	2687 D	1826 D	1301 D	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6x17.25	2,540	3183 D	2156 D	1528 D	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7x15.3	3,040	4496 D	3074 D	2209 D	1641 D	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8x18.4	3,600	7092 D	4867 D	3516 D	2631 D	2017 D	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8x23	3,600	7977 D	5467 D	3942 D	2942 D	2248 D	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10x25.4	4,830	14362 T	10584 D	7694 D	5807 D	4503 D	3561 D	2856 D	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10x35	4,830	17071 T	12510 D	9078 D	6835 D	5283 D	4161 D	3319 D	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12x31.8	5,810	21193 T	16266 L	11951 L	9150 L	7229 L	5856 L	4840 L	4067 L	3465 L	-	-	-	-	-	-	-	-	-	-	-	-
12x35	5,810	22233 T	17153 L	12602 L	9648 L	7623 L	6175 L	5103 L	4288 L	3654 L	-	-	-	-	-	-	-	-	-	-	-	-
12x40.8	7,870	26428 T	21948 L	17007 L	12886 D	10045 D	7998 D	6471 D	5296 D	4371 D	-	-	-	-	-	-	-	-	-	-	-	-
12x50	7,870	29549 T	24533 T	19033 D	14407 D	11216 D	8915 D	7197 D	5875 D	4833 D	-	-	-	-	-	-	-	-	-	-	-	-
15x42.9	7,420	34747 T	25025 L	18386 L	14077 L	11122 L	9009 L	7445 L	6256 L	5331 L	4596 L	4004 L	3519 L	-	-	-	-	-	-	-	-	-
15x50	7,420	37762 T	27284 L	20046 L	15347 L	12126 L	9822 L	8118 L	6821 L	5812 L	5011 L	4365 L	3837 L	-	-	-	-	-	-	-	-	-
18x54.7	9,060	52052 L	36147 L	26557 L	20333 L	16065 L	13013 L	10755 L	9037 L	7700 L	6639 L	5784 L	5083 L	4503 L	4016 L	3605 L	-	-	-	-	-	-
18x70	9,060	60070 T	41882 L	30771 L	23559 L	18614 L	15078 L	12461 L	10471 L	8922 L	7693 L	6701 L	5890 L	5217 L	4654 L	4177 L	-	-	-	-	-	-
20x66	11,290	69319 L	48138 L	35367 L	27078 L	21395 L	17330 L	14322 L	12035 L	10254 L	8842 L	7702 L	6769 L	5996 L	5348 L	4800 L	4332 L	3929 L	-	-	-	-
20x75	11,290	74574 T	51788 L	38048 L	29131 L	23017 L	18644 L	15408 L	12947 L	11031 L	9512 L	8286 L	7282 L	6451 L	5754 L	5164 L	4661 L	4227 L	-	-	-	-
20x86	14,920	90493 T	75253 L	59754 L	45749 L	36147 L	29279 L	24198 L	20333 L	17325 L	14938 L	13013 L	11437 L	10131 L	9036 L	8110 L	7319 L	6639 L	-	-	-	-
20x96	14,920	96309 T	80081 T	64095 L	49072 L	38773 L	31406 L	25956 L	21810 L	18583 L	16023 L	13958 L	12268 L	10867 L	9693 L	8699 L	7851 L	7121 L	-	-	-	-
24x80	13,900	-	73337 L	53880 L	41252 L	32594 L	26401 L	21819 L	18334 L	15622 L	13470 L	11733 L	10313 L	9135 L	8148 L	7313 L	6600 L	5986 L	5454 L	4990 L	4504 C	3920 C
24x90	13,900	-	78029 L	57328 L	43892 L	34680 L	28091 L	23215 L	19507 L	16622 L	14332 L	12485 L	10973 L	9720 L	8670 L	7781 L	7023 L	6370 L	5804 L	5310 L	4828 C	4190 C
24x100	13,900	-	82895 L	60903 L	46629 L	36842 L	29842 L	24663 L	20724 L	17658 L	15225 L	13263 L	11657 L	10326 L	9210 L	8266 L	7460 L	6767 L	6166 L	5641 L	5161 C	4468 C
24x106	21,020	-	-	98440 L	75368 L	59550 L	48236 L	39864 L	33479 L	28542 L	24610 L	21438 L	18842 L	16690 L	14887 L	13362 L	12059 L	10938 L	9966 L	9118 L	8374 L	7717 L
24x121	21,020	-	-	-	81429 L	64339 L	52115 L	43070 L	36191 L	30837 L	26589 L	23162 L	20357 L	18032 L	16084 L	14436 L	13028 L	11817 L	10767 L	9851 L	9047 L	8338 L

Limits T = Tension C = Compression D = Vertical Deflection L = Lateral Deflection

* Recommended Lower Flange Loading per pair of wheels.