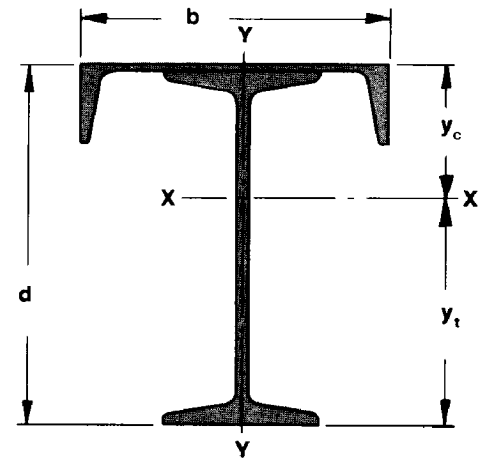


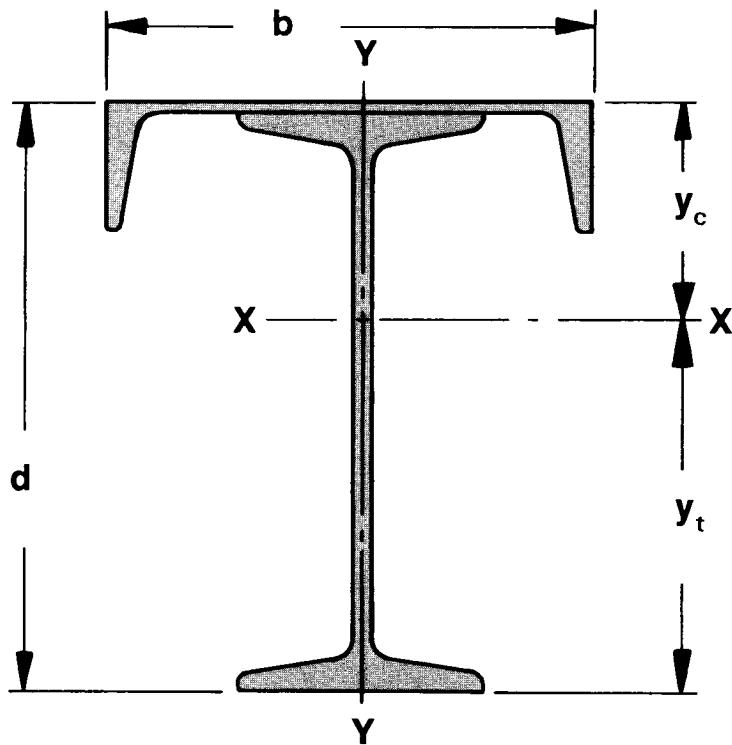
AMERICAN STANDARD SHAPES

(S SHAPES WITH CAPPING CHANNEL)



S Shape	Channel	Total Weight per Foot lb.	Total Area in. ²	Width b in.	Depth d in.	Yc in.	Yt in.	I in. ⁴	Elastic Properties			
									Axis X-X		Axis Y-Y	
									S _x Upper in. ³	S _x Lower in. ³	I in. ⁴	S in. ³
8x18.4	7x9.8	28.2	8.28	7.0	8.210	2.938	5.272	83.81	28.53	15.90	25.03	7.15
8x18.4	8x11.5	29.9	8.79	8.0	8.220	2.817	5.403	86.62	30.75	16.03	36.33	9.08
8x23	7x9.8	32.8	9.64	7.0	8.210	3.118	5.092	93.00	29.83	18.26	25.61	7.32
8x23	8x11.5	34.5	10.15	8.0	8.220	3.005	5.215	96.24	32.02	18.45	36.91	9.23
10x25.4	8x11.5	36.9	10.84	8.0	10.220	3.770	6.450	175.6	46.58	27.22	39.39	9.85
10x25.4	9x13.4	38.8	11.40	9.0	10.233	3.632	6.601	181.1	49.86	27.43	54.69	12.15
10x25.4	10x15.3	40.7	11.95	10.0	10.240	3.509	6.731	185.7	52.93	27.60	74.19	14.84
10x35	8x11.5	46.5	13.68	8.0	10.220	4.071	6.149	203.3	49.94	33.07	40.96	10.24
10x35	9x13.4	48.4	14.24	9.0	10.233	3.951	6.282	209.9	53.13	33.41	56.26	12.50
10x35	10x15.3	50.3	14.79	10.0	10.240	3.842	6.398	215.6	56.12	33.70	75.76	15.15
12x31.8	8x11.5	43.3	12.73	8.0	12.220	4.720	7.500	298.5	63.25	39.80	41.96	10.49
12x31.8	9x13.4	45.2	13.29	9.0	12.233	4.563	7.670	307.7	67.43	40.11	57.26	12.72
12x31.8	10x15.3	47.1	13.84	10.0	12.240	4.421	7.819	315.6	71.39	40.36	76.76	15.35
12x40.8	8x11.5	52.3	15.38	8.0	12.220	4.979	7.241	357.5	71.80	49.37	46.2	11.55
12x40.8	9x13.4	54.2	15.94	9.0	12.233	4.841	7.392	367.8	75.98	49.76	61.5	13.67
12x40.8	10x15.3	56.1	16.49	10.0	12.240	4.714	7.526	378.3	80.25	50.26	81.0	16.20
15x42.9	8x11.5	54.4	15.98	8.0	15.220	6.208	9.012	584.5	94.16	64.86	47.0	11.75
15x42.9	9x13.4	56.3	16.54	9.0	15.233	6.034	9.199	601.4	99.67	65.38	62.3	13.84
15x42.9	10x15.3	58.2	17.09	10.0	15.240	5.873	9.367	616.4	104.9	65.81	81.8	16.36
15x42.9	12x20.7	63.6	18.69	12.0	15.282	5.474	9.808	656.9	120.0	66.98	143.4	23.90
15x50	8x11.5	61.5	18.08	8.0	15.220	6.384	8.836	627.8	98.33	71.05	48.3	12.08
15x50	9x13.4	63.4	18.64	9.0	15.233	6.225	9.008	645.8	103.7	71.69	63.6	14.13
15x50	10x15.3	65.3	19.19	10.0	15.240	6.077	9.163	662.0	108.9	72.24	83.1	16.62
15x50	12x20.7	70.7	20.79	12.0	15.282	5.707	9.575	706.0	123.7	73.73	144.7	24.12
18x54.7	8x11.5	66.2	19.48	8.0	18.220	7.719	10.501	1014	131.4	96.59	53.4	13.35
18x54.7	9x13.4	68.1	20.04	9.0	18.233	7.536	10.697	1042	138.2	97.37	68.7	15.27
18x54.7	10x15.3	70.0	20.59	10.0	18.240	7.363	10.877	1066	144.8	98.03	88.2	17.64
18x54.7	12x20.7	75.4	22.19	12.0	18.282	6.926	11.356	1133	163.6	99.81	149.8	24.97
18x70	9x13.4	83.4	24.54	9.0	18.233	7.847	10.386	1174	149.6	113.1	72.0	16.00
18x70	10x15.3	85.3	25.09	10.0	18.240	7.700	10.540	1201	156.0	114.0	91.5	18.30
18x70	12x20.7	90.7	26.69	12.0	18.282	7.324	10.958	1276	174.2	116.5	153.1	25.52
20x66	10x15.3	81.3	23.89	10.0	20.240	8.435	11.805	1529	181.2	129.5	95.1	19.02
20x66	12x20.7	86.7	25.49	12.0	20.282	7.992	12.290	1620	202.6	131.8	156.7	26.12
20x66	15x33.9	99.9	29.36	15.0	20.400	7.139	13.261	1806	253.0	136.2	342.7	45.69
20x86	10x15.3	101.3	29.79	10.0	20.540	8.920	11.620	1945	218.1	167.4	114.2	22.84
20x86	12x20.7	106.7	31.39	12.0	20.582	8.544	12.038	2049	239.8	170.2	175.8	29.30
20x86	15x33.9	119.9	35.26	15.0	20.700	7.792	12.908	2269	291.2	175.8	361.8	48.24
24x80	10x15.3	95.3	27.99	10.0	24.240	10.378	13.862	2610	251.5	188.3	109.6	21.92
24x80	12x20.7	100.7	29.59	12.0	24.282	9.898	14.384	2753	278.1	191.4	171.2	28.53
24x80	15x33.9	113.9	33.46	15.0	24.400	8.943	15.457	3051	341.2	197.4	357.2	47.62
24x106	10x15.3	121.3	35.69	10.0	24.740	10.998	13.742	3494	317.7	254.3	144.5	28.90
24x106	12x20.7	126.7	37.29	12.0	24.782	10.599	14.183	3657	345.1	257.9	206.1	34.35
24x106	15x33.9	139.9	41.16	15.0	24.900	9.779	15.121	4011	410.1	265.2	392.1	52.28
24x121	10x15.3	136.3	40.09	10.0	24.740	11.162	13.578	3723	333.5	274.2	150.7	30.14
24x121	12x20.7	141.7	41.69	12.0	24.782	10.803	13.979	3892	360.3	278.4	212.3	35.38
24x121	15x33.9	154.9	45.56	15.0	24.900	10.057	14.843	4263	423.9	287.2	398.3	53.11

**AMERICAN
CRANE & HOIST**



NOTE: For underhung cranes operating on the lower flanges of the runway beam, check lower flange loading limits

S Shape	Channel	Span in feet			
		10	12	14	16
8x18.4	7x9.8	9186 T	7071 D	5103 D	3814 D
8x18.4	8x11.5	9254 T	7302 D	5268 D	3934 D
8x23	7x9.8	10547 T	7835 D	5650 D	4217 D
8x23	8x11.5	10650 T	8103 D	5842 D	4359 D
10x25.4	8x11.5	15783 T	13085 D	10886 D	8213 D
10x25.4	9x13.4	15896 T	13176 D	11220 T D	8462 D
10x25.4	10x15.3	15987 T	13248 D	11279 D	8671 D
10x35	8x11.5	19166 T	15887 D	12572 D	9472 D
10x35	9x13.4	19356 T	16041 D	12976 D	9775 D
10x35	10x15.3	19517 T	16172 D	13324 D	10035 D
12x31.8	8x11.5	23130 T	19196 D	16373 D	14158 D
12x31.8	9x13.4	23302 T	19336 D	16490 D	14344 D
12x31.8	10x15.3	23440 T	19447 D	16581 D	14420 D
12x40.8	8x11.5	28699 T	23820 D	20320 D	16949 D
12x40.8	9x13.4	28918 T	23999 D	20470 D	17436 D
12x40.8	10x15.3	29202 T	24232 D	20666 D	17928 D
15x42.9	8x11.5	37775 T	31379 D	26795 D	23344 D
15x42.9	9x13.4	38070 T	31622 D	27000 D	23519 D
15x42.9	10x15.3	38313 T	31821 D	27167 D	23662 D
15x42.9	12x20.7	38972 T	32360 D	27619 D	24048 D
15x50	8x11.5	41370 T	34362 D	29339 D	25557 D
15x50	9x13.4	41736 T	34664 D	29594 D	25776 D
15x50	10x15.3	42049 T	34921 D	29811 D	25962 D
15x50	12x20.7	42896 T	35617 D	30398 D	26466 D
18x54.7	8x11.5	56328 T	46819 D	40008 D	34883 D
18x54.7	9x13.4	56777 T	47189 D	40321 D	35153 D
18x54.7	10x15.3	57154 T	47500 D	40584 D	35380 D
18x54.7	12x20.7	58171 T	48338 D	41292 D	35989 D
18x70	9x13.4	65904 T	54767 D	46788 D	40783 D
18x70	10x15.3	66434 T	55205 D	47160 D	41105 D
18x70	12x20.7	67862 T	56385 D	48162 D	41971 D
20x66	10x15.3	75558 T	62816 D	53691 D	46827 D
20x66	12x20.7	76868 T	63898 D	54609 D	47620 D
20x66	15x33.9	79401 T	65984 D	56372 D	49139 D
20x86	10x15.3	97690 T	81223 D	69431 D	60562 D
20x86	12x20.7	99311 T	82564 D	70571 D	61549 D
20x86	15x33.9	-	85222 D	72825 D	63497 D
24x80	10x15.3	-	91470 D	78226 D	68269 D
24x80	12x20.7	-	92948 D	79483 D	69359 D
24x80	15x33.9	-	95822 D	81921 D	71468 D
24x106	10x15.3	-	-	-	92248 D
24x106	12x20.7	-	-	-	93531 D
24x106	15x33.9	-	-	-	96124 D
24x121	10x15.3	-	-	-	-
24x121	12x20.7	-	-	-	-
24x121	15x33.9	-	-	-	-

All loading figures shown are in pounds.

Span in Feet																
18	20	22	24	26	28	30	32	34	36	38	40	42	44	46	48	50
2919 D	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3008 D	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3222 D	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3328 D	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6366 D	5031 D	4032 D	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6556 D	5179 D	4147 D	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6715 D	5301 D	4242 D	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7328 D	5779 D	4617 D	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7561 D	5961 D	4761 D	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7761 D	6116 D	4882 D	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11042 D	8797 D	7122 D	5835 D	4822 D	-	-	-	-	-	-	-	-	-	-	-	-
11373 D	9059 D	7332 D	6005 D	4960 D	-	-	-	-	-	-	-	-	-	-	-	-
11658 D	9283 D	7511 D	6149 D	5076 D	-	-	-	-	-	-	-	-	-	-	-	-
13216 D	10528 D	8522 D	6981 D	5766 D	-	-	-	-	-	-	-	-	-	-	-	-
13595 D	10828 D	8764 D	7177 D	5927 D	-	-	-	-	-	-	-	-	-	-	-	-
13978 D	11132 D	9008 D	7376 D	6090 D	-	-	-	-	-	-	-	-	-	-	-	-
20647 T	17604 D	14363 D	11881 D	9935 D	8376 D	7106 D	6054 D	-	-	-	-	-	-	-	-	-
20800 T	18109 D	14773 D	12220 D	10217 D	8613 D	7305 D	6222 D	-	-	-	-	-	-	-	-	-
20923 T	18555 D	15135 D	12517 D	10464 D	8819 D	7478 D	6368 D	-	-	-	-	-	-	-	-	-
21255 T	19009 D	16107 D	13315 D	11125 D	9371 D	7940 D	6754 D	-	-	-	-	-	-	-	-	-
22601 T	18868 D	15383 D	12714 D	10620 D	8942 D	7574 D	6440 D	-	-	-	-	-	-	-	-	-
22792 T	19408 D	15823 D	13077 D	10923 D	9197 D	7789 D	6623 D	-	-	-	-	-	-	-	-	-
22954 T	19890 D	16214 D	13400 D	11191 D	9421 D	7978 D	6782 D	-	-	-	-	-	-	-	-	-
23391 T	20918 D	17278 D	14275 D	11918 D	10029 D	8489 D	7212 D	-	-	-	-	-	-	-	-	-
30882 T	27668 T	25026 T	21039 D	17697 D	15028 D	12859 D	11069 D	9571 D	8303 D	7216 D	-	-	-	-	-	-
31119 T	27877 T	25213 T	21605 D	18172 D	15431 D	13204 D	11365 D	9827 D	8524 D	7408 D	-	-	-	-	-	-
31317 T	28052 T	25368 T	22112 D	18598 D	15792 D	13511 D	11629 D	10053 D	8719 D	7577 D	-	-	-	-	-	-
31848 T	28520 T	25783 T	23490 D	19754 D	16770 D	14344 D	12341 D	10666 D	9246 D	8030 D	-	-	-	-	-	-
36094 T	32326 T	29208 D	24255 D	20378 D	17280 D	14760 D	12679 D	10936 D	9459 D	8193 D	-	-	-	-	-	-
36377 T	32577 T	29452 T	24815 D	20849 D	17679 D	15101 D	12972 D	11190 D	9678 D	8383 D	-	-	-	-	-	-
37136 T	33250 T	30055 T	26362 D	22147 D	18780 D	16042 D	13780 D	11886 D	10280 D	8904 D	-	-	-	-	-	-
41471 T	37169 T	33635 T	30676 T	26974 D	22974 D	19728 D	17053 D	14818 D	12929 D	11315 D	9922 D	8709 D	-	-	-	-
42165 T	37784 T	34183 T	31169 T	28568 D	24330 D	20890 D	18055 D	15687 D	13685 D	11974 D	10498 D	9212 D	-	-	-	-
43490 T	38951 T	35219 T	32093 T	29432 D	27079 D	23238 D	20072 D	17427 D	15191 D	13278 D	11628 D	10189 D	-	-	-	-
53642 T	48085 T	43520 T	39700 T	34357 D	29271 D	25143 D	21742 D	18901 D	16500 D	14449 D	12679 D	11138 D	-	-	-	-
54509 T	48855 T	44210 T	40322 T	36190 D	30832 D	26484 D	22901 D	19909 D	17380 D	15219 D	13355 D	11732 D	-	-	-	-
56215 T	50366 T	45558 T	41532 T	38106 D	34118 D	29300 D	25330 D	22014 D	19211 D	16815 D	14748 D	12949 D	-	-	-	-
60504 T	54272 T	49156 T	44877 T	40573 D	34984 D	30475 D	26784 D	23726 D	21163 D	18994 D	17142 D	15548 D	14167 D	12693 D	11315 D	10084 D
61462 T	55125 T	49921 T	45568 T	41869 D	38684 D	35910 D	31623 D	27656 D	24311 D	21462 D	19010 D	16883 D	15022 D	13383 D	11929 D	10631 D
63312 T	56764 T	51386 T	46886 T	43060 D	39765 D	36893 D	34367 D	30608 D	26897 D	23735 D	21015 D	18654 D	16589 D	14769 D	13154 D	11713 D
81769 T	73361 T	66460 T	60690 T	53493 D	46124 D	40179 D	35313 D	31281 D	27902 D	25042 D	22600 D	20499 D	18678 D	17089 D	15335 D	13696 D
82900 T	74369 T	67366 T	61510 T	56534 D	52252 D	48471 D	42155 D	36894 D	32459 D	28682 D	25434 D	22616 D	20153 D	17984 D	16061 D	14345 D
85179 T	76396 T	69183 T	63150 T	58023 D	53609 D	49765 D	46207 D	40436 D	35572 D	31428 D	27865 D	24775 D	22072 D	19693 D	17583 D	15700 D
88122 T	79051 T	71604 T	65376 T	55788 D	48103 D	41903 D	36829 D	32623 D	29099 D	26117 D	23570 D	21379 D	19479 D	17822 D	16127 D	14372 D
89462 T	80246 T	72681 T	66352 T	60976 D	56347 D	51453 D	44723 D	39116 D	34388 D	30359 D	26894 D	23887 D	21257 D	18940 D	16885 D	15051 D
92211 T	82695 T	74882 T	68345 T	62790 D	58006 D	53839 D	48995 D	42853 D	37675 D	33262 D	29467 D	26174 D	23293 D	20756 D	18505 D	16496 D

Limits T = Tension C = Compression D = Vertical Defl. L = Lateral Defl.