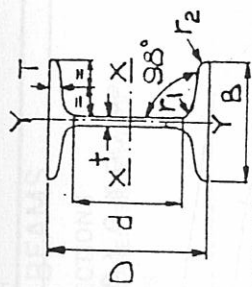
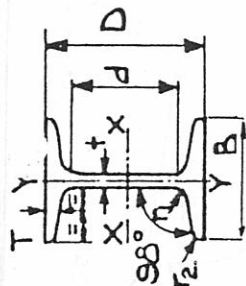


TAPER FLANGE BEAMS DIMENSIONS AND PROPERTIES



DESIGNATION	NOMINAL SIZE	WEIGHT PER FT.	DEPTH OF SECTION D	WIDTH OF SECTION B	THICKNESS				RADIUS		DEPTH BETWEEN FILLETS d	AREA OF SECTION
					WEB t	FLANGE T	ROOT r ₁	TOE r ₂				
in.		lb.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in. ²
24 x 7½		100	24	7.56	0.63	1.011	0.73	0.36			20.25	29.44
24 x 7½		95	24	7.5	0.57	1.011	0.73	0.36			20.25	27.94
22 x 7		75	22	7	0.50	0.834	0.69	0.34			18.68	22.06
20 x 6½		65	20	6.5	0.45	0.820	0.65	0.32			16.80	19.12
18 x 6		55	18	6	0.42	0.757	0.61	0.30			15.03	16.18
16 x 6		50	16	6	0.40	0.726	0.61	0.30			13.09	14.71
15 x 6		45	15	6	0.38	0.655	0.61	0.30			12.25	13.24
14 x 5½		40	14	5.5	0.37	0.627	0.57	0.28			11.39	11.77
13 x 5		35	13	5	0.35	0.604	0.53	0.26			10.53	10.30
12 x 8		65	12	8	0.43	0.904	0.77	0.38			8.30	19.12
12 x 5		30	12	5	0.33	0.507	0.53	0.26			9.74	8.83
10 x 8		70	10	8	0.60	0.970	0.70	0.35			6.33	20.58
10 x 8		55	10	8	0.40	0.783	0.77	0.38			6.50	16.18
10 x 6		40	10	6	0.36	0.709	0.61	0.30			7.09	11.77
10 x 4½		25	10	4.5	0.30	0.505	0.49	0.24			7.84	7.35
9 x 7		50	9	7	0.40	0.825	0.69	0.34			5.61	14.71
9 x 4		21	9	4	0.30	0.457	0.45	0.22			7.03	6.18
8 x 6		35	8	6	0.35	0.648	0.61	0.30			5.36	10.30
8 x 4		18	8	4	0.28	0.398	0.45	0.22			6.15	5.30
7 x 3½		15	7	3.5	0.25	0.398	0.41	0.20			5.25	4.42
6 x 5		25	6	5	0.33	0.561	0.53	0.26			3.71	7.35
6 x 3		12	6	3	0.23	0.377	0.37	0.18			4.40	3.53
5 x 2½		9	5	2.5	0.20	0.347	0.33	0.16			3.60	2.65
4 x 3		10	4	3	0.24	0.347	0.37	0.18			2.50	2.94
4 x 1½		5	4	1.75	0.17	0.239	0.27	0.13			2.86	1.47

TAPER FLANGE BEAMS DIMENSIONS AND PROPERTIES



MOMENT OF INERTIA	RADIUS OF GYRATION	ELASTIC MODULUS		Torsion Constant J	RATIO D/T	PLASTIC MODULUS		RATIO D-2T/t	RATIO B/T
About X-X	About Y-Y	About X-X	About Y-Y			About X-X	About Y-Y		
in. ⁴	in. ⁴	in. ³	in. ³	in. ⁴	—	in. ³	in. ³	—	—
2605.04	64.30	9.41	1.48	17.00	23.74	254.6	29.01	34.89	7.4
2533.04	62.54	9.52	1.50	16.68	23.74	245.6	28.11	38.56	7.4
1676.80	41.07	8.72	1.36	11.73	26.38	177.2	19.96	40.66	8.3
1226.17	32.56	8.01	1.31	10.02	24.39	141.8	16.84	40.80	7.9
841.76	23.63	7.21	1.21	9.53	23.78	108.1	13.24	39.25	7.9
618.09	22.47	6.48	1.24	7.26	22.04	88.79	12.44	36.37	8.2
491.91	19.87	6.10	1.23	6.59	22.90	75.20	11.15	36.03	9.1
377.06	14.79	5.66	1.12	5.38	22.33	61.95	9.02	34.45	8.7
283.51	10.81	5.25	1.03	4.33	21.52	50.28	7.26	33.59	8.2
487.77	65.18	5.05	1.85	16.30	13.27	92.46	26.63	23.70	8.8
206.93	8.77	4.84	1.00	3.51	23.67	39.68	6.01	33.29	9.8
345.04	71.61	4.09	1.87	17.90	10.31	80.46	28.97	19.43	8.2
288.69	54.74	4.22	1.84	13.69	12.77	65.65	22.59	21.09	10.2
204.80	21.76	4.17	1.36	7.39	14.10	46.74	11.89	23.84	8.4
122.34	6.49	4.08	0.94	2.88	19.80	28.07	4.84	29.97	8.5
208.13	40.17	3.76	1.65	11.48	10.91	53.18	18.67	18.38	8.4
81.13	4.16	3.62	0.82	2.07	19.69	20.85	3.51	26.95	8.7
115.06	19.54	3.34	1.38	6.51	12.35	32.94	10.71	19.15	9.2
55.63	3.51	3.24	0.81	1.75	20.10	16.02	2.99	25.73	10.0
35.90	2.41	2.85	0.74	1.38	17.59	11.79	2.30	24.82	8.7
45.16	9.88	2.48	1.16	3.95	10.70	17.50	6.48	14.78	8.5
20.99	1.46	2.44	0.64	0.97	15.92	8.08	1.63	22.81	7.5
10.91	0.79	2.03	0.55	0.63	14.41	5.06	1.03	21.53	7.4
7.79	1.33	1.63	0.67	0.88	11.53	4.54	1.47	13.78	8.6
2.66	0.19	1.58	0.36	0.21	16.74	2.15	0.37	20.72	7.5