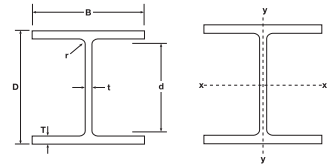


# Universal Columns

Dimensions and properties to BS 4: Part 1: 1993

356 x 406 x 634 – 152 x 152 x 23



Designation Serial Size	Mass per metre kg/m	Depth of Section D mm	Width of Section B mm	Thick- ness of Web t mm	Thick- ness of Flange T mm	Root Radius r mm	Depth between fillets d mm	Ratios for Local Buckling		Second Moment of Area		Radius of Gyration		Elastic Modulus		Plastic Modulus		Buckling Para- meter u	Torsional Index x	Warping Constant H dm <sup>6</sup>	Torsional Constant J cm <sup>4</sup>	Area of Section cm <sup>2</sup>
								Flange B/2T	Web d/t	Axis x-x cm <sup>4</sup>	Axis x-x cm <sup>4</sup>	Axis x-x cm	Axis y-y cm	Axis x-x cm <sup>3</sup>	Axis y-y cm <sup>3</sup>	Axis x-x cm <sup>3</sup>	Axis y-y cm <sup>3</sup>					
356 x 406 x 634	633.9	474.6	424.0	47.6	77.0	15.2	290.2	2.75	6.10	274800	98130	18.4	11.0	11580	4629	14240	7108	0.843	5.46	38.8	13720	808
356 x 406 x 551	551.0	455.6	418.5	42.1	67.5	15.2	290.2	3.10	6.89	226900	82670	18.0	10.9	9962	3951	12080	6058	0.841	6.05	31.1	9240	702
356 x 406 x 467	467.0	436.6	412.2	35.8	58.0	15.2	290.2	3.55	8.11	183000	67830	17.5	10.7	8383	3291	10000	50.34	0.839	6.86	24.3	5809	595
356 x 406 x 393	393.0	419.0	407.0	30.6	49.2	15.2	290.2	4.14	9.48	146600	55370	17.1	10.5	6998	2721	8222	4154	0.837	7.86	18.9	3545	501
356 x 406 x 340	339.9	406.4	403.0	26.6	42.9	15.2	290.2	4.70	10.9	122500	46850	16.8	10.4	6031	2325	6999	3544	0.836	8.85	15.5	23243	433
356 x 406 x 287	287.1	393.6	399.0	22.6	36.5	15.2	290.2	5.47	12.8	99880	38680	16.5	10.3	5075	1939	5812	2949	0.835	10.2	12.3	1441	366
356 x 406 x 235	235.1	381.0	394.8	18.4	30.2	15.2	290.2	6.54	15.8	79080	30990	16.3	10.2	4151	1570	4687	2383	0.834	12.1	9.54	812	299
356 x 368 x 202	201.9	374.6	374.7	16.5	27.0	15.2	290.2	6.94	17.6	66260	23690	16.1	9.60	3538	1264	3972	1920	0.844	13.4	7.16	558	257
356 x 368 x 177	177.0	368.2	372.6	14.4	23.8	15.2	290.2	7.83	20.2	57120	20530	15.9	9.54	3103	1102	3455	1671	0.844	15.0	6.09	381	226
356 x 368 x 153	152.9	362.0	370.5	12.3	20.7	15.2	290.2	8.95	23.6	48590	17550	15.8	9.49	2684	948	2965	1435	0.844	17.0	5.11	251	195
356 x 368 x 129	129.0	355.6	368.6	10.4	17.5	15.2	290.2	10.5	27.9	40250	14610	15.6	9.43	2264	793	2479	1199	0.844	19.9	4.18	153	164
305 x 305 x 283	282.9	365.3	322.2	26.8	44.1	15.2	246.7	3.65	9.21	78870	24630	14.8	8.27	4318	1529	5105	2342	0.855	7.65	6.35	2023	360
305 x 305 x 240	240.0	352.5	318.4	23.0	37.7	15.2	246.7	4.22	10.7	64200	20310	14.5	8.15	3643	1276	4247	1951	0.854	8.74	5.03	1271	306
305 x 305 x 198	198.1	339.9	314.5	19.1	31.4	15.2	246.7	5.01	12.9	50900	16300	14.2	8.04	2995	1037	3440	1581	0.854	10.2	3.88	734	252
305 x 305 x 158	158.1	327.1	311.2	15.8	25.0	15.2	246.7	6.22	15.6	38750	12570	13.9	7.90	2369	808	2680	1230	0.851	12.5	2.87	378	201

