



UNIVERSAL COLUMNS: Dimensions and Properties

Designation	Mass per Metre	Depth of Section h	Width of Section b	Thickness Web s	Thickness Flange t	Root Radius r	Depth between fillets d	Ratios for Local Buckling		Second Moment of Area		Radius of Gyration		Elastic Modulus		Plastic Modulus		Buckling Parameter u	Torsional Index x	Warping Constant H	Torsional Constant J	Area of Section
								Flange	Web	Axis x-x	Axis y-y	Axis x-x	Axis y-y	Axis x-x	Axis y-y	Axis x-x	Axis y-y					
								mm	mm	mm	mm	mm	mm	mm	mm	mm	mm					
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	5034	0.839	6.86	24.30	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	18.90	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	15.50	2343	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	12.30	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	2034	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
305 x 305 x 137	136.9	320.5	309.2	13.8	21.7	15.2	246.7	7.12	17.9	32810	10700	13.7	7.83	2048	692	2297	1053	0.851	14.2	2.39	249	174
305 x 305 x 118	117.9	314.5	307.4	12.0	18.7	15.2	246.7	8.22	20.6	27670	9059	13.6	7.77	1760	589	1958	895	0.850	16.2	1.98	161	150
305 x 305 x 97	96.9	307.9	305.3	9.9	15.4	15.2	246.7	9.91	24.9	22250	7308	13.4	7.69	1445	479	1592	726	0.850	19.3	1.56	91.2	123
254 x 254 x 167	167.1	289.1	265.2	19.2	31.7	12.7	200.3	4.18	10.4	30000	9870	11.9	6.81	2075	744	2424	1137	0.851	8.49	1.63	626	213
254 x 254 x 132	132.0	276.3	261.3	15.3	25.3	12.7	200.3	5.16	13.1	22530	7531	11.6	6.69	1631	576	1869	878	0.850	10.3	1.19	319	168
254 x 254 x 107	107.1	266.7	258.8	12.8	20.5	12.7	200.3	6.31	15.6	17510	5928	11.3	6.59	1313	458	1484	697	0.848	12.4	0.898	172	136
254 x 254 x 89	88.9	260.3	256.3	10.3	17.3	12.7	200.3	7.41	19.4	14270	4857	11.2	6.55	1096	379	1224	575	0.850	14.5	0.717	102	113
254 x 254 x 73	73.1	254.1	254.6	8.6	14.2	12.7	200.3	8.96	23.3	11410	3908	11.1	6.48	898	307	992	465	0.849	17.3	0.562	57.6	93.1
203 x 203 x 86	86.1	222.2	209.1	12.7	20.5	10.2	160.8	5.10	12.7	9449	3127	9.28	5.34	850	299	977	456	0.850	10.2	0.318	137	110
203 x 203 x 71	71.0	215.8	206.4	10.0	17.3	10.2	160.8	5.97	16.1	7618	2537	9.18	5.30	706	246	799	374	0.853	11.9	0.250	80.2	90.4
203 x 203 x 60	60.0	209.6	205.8	9.4	14.2	10.2	160.8	7.25	17.1	6125	2065	8.96	5.20	584	201	656	305	0.846	14.1	0.197	47.2	76.4
203 x 203 x 52	52.0	206.2	204.3	7.9	12.5	10.2	160.8	8.17	20.4	5259	1778	8.91	5.18	510	174	567	264	0.848	15.8	0.167	31.8	66.3
203 x 203 x 46	46.1	203.2	203.6	7.2	11.0	10.2	160.8	9.25	22.3	4568	1548	8.82	5.13	450	152	497	231	0.847	17.7	0.143	22.2	58.7
152 x 152 x 37	37.0	161.8	154.4	8.0	11.5	7.6	123.6	6.71	15.4	2210	706	6.85	3.87	273	91.5	309	140	0.848	13.3	0.0399	19.2	47.1
152 x 152 x 30	30.0	157.6	152.9	6.5	9.4	7.6	123.6	8.13	19.0	1748	560	6.76	3.83	222	73.3	248	112	0.849	16.0	0.0308	10.5	38.3
152 x 152 x 23	23.0	152.4	152.2	5.8	6.8	7.6	123.6	11.2	21.3	1250	400	6.54	3.70	164	52.6	182	80.2	0.840	20.7	0.0212	4.63	29.2