



UNIVERSAL BEARING PILES: 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				Elastic Modulus		Plastic Modulus		Buckling Parameter u	Torsional Index x	Warping Constant H	Torsional Constant J	Area of Section
								Flange b/2t	Web d/s	Axis x-x	Axis y-y	Axis x-x	Axis y-y	Axis x-x	Axis y-y							
										cm ⁴	cm ⁴	cm	cm	cm ³	cm ³	cm ³	cm ³					
356 x 368 x 174	173.9	361.4	378.5	20.3	20.4	15.2	290.2	9.28	14.3	51010	18460	15.2	9.13	2823	976	3186	1497	0.821	15.8	5.37	330	221
356 x 368 x 152	152.0	356.4	376.0	17.8	17.9	15.2	290.2	10.5	16.3	43970	15880	15.1	9.05	2468	845	2767	1293	0.821	17.8	4.55	223	194
356 x 368 x 133	133.0	352.0	373.8	15.6	15.7	15.2	290.2	11.9	18.6	37980	13680	15.0	8.99	2158	732	2406	1119	0.822	20.1	3.87	151	169
356 x 368 x 109	108.9	346.4	371.0	12.8	12.9	15.2	290.2	14.4	22.7	30630	10990	14.9	8.90	1769	592	1956	903	0.823	24.2	3.05	84.6	139
305 x 305 x 223	222.9	337.9	325.7	30.3	30.4	15.2	246.7	5.36	8.14	52700	17580	13.6	7.87	3119	1079	3653	1680	0.826	9.55	4.15	943	284
305 x 305 x 186	186.0	328.3	320.9	25.5	25.6	15.2	246.7	6.27	9.67	42610	14140	13.4	7.73	2596	881	3003	1366	0.827	11.1	3.24	560	237
305 x 305 x 149	149.1	318.5	316.0	20.6	20.7	15.2	246.7	7.63	12.0	33070	10910	13.2	7.58	2076	691	2370	1066	0.828	13.5	2.42	295	190
305 x 305 x 126	126.1	312.3	312.9	17.5	17.6	15.2	246.7	8.89	14.1	27410	9002	13.1	7.49	1755	575	1986	885	0.829	15.7	1.95	182	161
305 x 305 x 110	110.0	307.9	310.7	15.3	15.4	15.2	246.7	10.1	16.1	23560	7709	13.0	7.42	1531	496	1720	762	0.830	17.7	1.65	122	140
305 x 305 x 95	94.9	303.7	308.7	13.3	13.3	15.2	246.7	11.6	18.5	20040	6529	12.9	7.35	1320	423	1474	648	0.830	20.2	1.38	80.0	121
305 x 305 x 88	88.0	301.7	307.8	12.4	12.3	15.2	246.7	12.5	19.9	18420	5984	12.8	7.31	1221	389	1360	595	0.830	21.6	1.25	64.2	112
305 x 305 x 79	78.9	299.3	306.4	11.0	11.1	15.2	246.7	13.8	22.4	16440	5326	12.8	7.28	1099	348	1218	531	0.832	23.9	1.11	46.9	100
254 x 254 x 85	85.1	254.3	260.4	14.4	14.3	12.7	200.3	9.10	13.9	12280	4215	10.6	6.24	966	324	1092	498	0.825	15.6	0.607	81.8	108
254 x 254 x 71	71.0	249.7	258.0	12.0	12.0	12.7	200.3	10.8	16.7	10070	3439	10.6	6.17	807	267	904	409	0.826	18.4	0.486	48.4	90.4
254 x 254 x 63	63.0	247.1	256.6	10.6	10.7	12.7	200.3	12.0	18.9	8860	3016	10.5	6.13	717	235	799	360	0.827	20.5	0.421	34.3	80.2
203 x 203 x 54	53.9	204.0	207.7	11.3	11.4	10.2	160.8	9.11	14.2	5027	1705	8.55	4.98	493	164	557	252	0.827	15.8	0.158	32.7	68.7
203 x 203 x 45	44.9	200.2	205.9	9.5	9.5	10.2	160.8	10.8	16.9	4100	1384	8.46	4.92	410	134	459	206	0.827	18.6	0.126	19.2	57.2