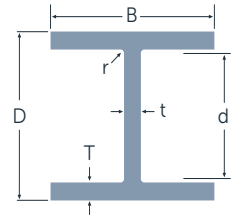
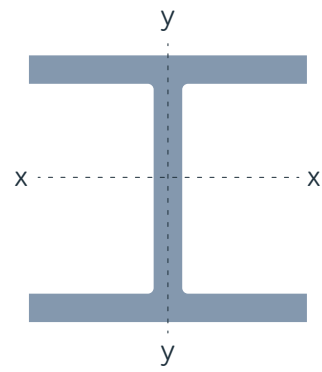


British Steel, the only UK manufacturer of structural sections, is BES 6001 certified, guaranteeing commitment to responsibly sourced materials. Our structural sections are CE marked and tested to the highest standards, providing quality and assurance for the UK construction market.



#### Universal Bearing Piles (UBP) sizes

Designation	Mass per metre	Depth of section	Width of section	Thickness		Root radius	Depth between fillets	Ratios for local buckling		Second moment of area I		Radius of gyration i	
				of web	of flange			Flange	Web	Axis	Axis	Axis	Axis
				t	T			Cf/tf	Cw/tw	x-x	y-y	x-x	y-y
Serial size	Kg/m	D	B	t	T	r	d			cm <sup>4</sup>	cm <sup>4</sup>	cm	cm
356x368x174	173.9	361.4	378.5	20.3	20.4	15.2	290.2	8.03	14.3	51,009	18,463	15.2	9.13
356x368x152	152.0	356.4	376.0	17.8	17.9	15.2	290.2	9.16	16.3	43,972	15,877	15.1	9.05
356x368x133	133.0	352.0	373.8	15.6	15.7	15.2	290.2	10.44	18.6	37,983	13,680	15.0	8.99
356x368x109	108.9	346.4	371.0	12.8	12.9	15.2	290.2	12.71	22.7	30,632	10,987	14.9	8.90
305x305x223	222.9	337.9	325.7	30.3	30.4	15.2	246.7	4.36	8.14	52,699	17,577	13.6	7.87
305x305x186	186.0	328.3	320.9	25.5	25.6	15.2	246.7	5.18	9.67	42,610	14,143	13.4	7.73
305x305x149	149.1	318.5	316.0	20.6	20.7	15.2	246.7	6.40	12.0	33,067	10,910	13.2	7.58
305x305x126	126.1	312.3	312.9	17.5	17.6	15.2	246.7	7.53	14.1	27,408	9,002	13.1	7.49
305x305x110	110.0	307.9	310.7	15.3	15.4	15.2	246.7	8.60	16.1	23,563	7,709	13.0	7.42
305x305x95	94.9	303.7	308.7	13.3	13.3	15.2	246.7	9.96	18.5	20,045	6,529	12.9	7.35
305x305x88	88.0	301.7	307.8	12.4	12.3	15.2	246.7	10.77	19.9	18,425	5,984	12.8	7.31
305x305x79	78.9	299.3	306.4	11.0	11.1	15.2	246.7	11.94	22.4	16,444	5,326	12.8	7.28
254x254x85	85.1	254.3	260.4	14.4	14.3	12.7	200.3	7.71	13.9	12,284	4,215	10.6	6.24
254x254x71	71.0	249.7	258.0	12.0	12.0	12.7	200.3	9.19	16.7	10,071	3,439	10.6	6.17
254x254x63	63.0	247.1	256.6	10.6	10.7	12.7	200.3	10.31	18.9	8,860	3,016	10.5	6.13
203x203x54	53.9	204.0	207.7	11.3	11.4	10.2	160.8	7.72	14.2	5,027	1,705	8.55	4.98
203x203x45	44.9	200.2	205.9	9.5	9.5	10.2	160.8	9.26	16.9	4,100	1,384	8.46	4.92



## Universal Bearing Piles (UBP) sizes

Elastic modulus		Plastic modulus		Buckling parameter	Torsional index	Warping constant	Torsional constant	Area of section	Indicative Nb.z.Rd* values for S355 steel for lcr = 3.5m	Designation
Axis	Axis	Axis	Axis							
x-x	y-y	x-x	y-y	u	x	H	J	cm <sup>2</sup>	kN	Serial size
cm <sup>3</sup>	cm <sup>3</sup>	cm <sup>3</sup>	cm <sup>3</sup>			dm <sup>6</sup>	cm <sup>4</sup>			
2,823	976	3,186	1,497	0.821	15.8	5.37	330	221	6,450	356x368x174
2,468	845	2,767	1,293	0.821	17.8	4.55	223	194	5,650	356x368x152
2,158	732	2,406	1,118	0.822	20.1	3.87	151	169	5,030	356x368x133
1,769	592	1,956	903	0.823	24.2	3.05	84.6	139	<i>4,120</i>	356x368x109
3,119	1079	3,653	1,680	0.826	9.55	4.15	943	284	7,850	305x305x223
2,596	881	3,003	1,366	0.827	11.1	3.24	560	237	6,500	305x305x186
2,076	691	2,370	1,065	0.828	13.5	2.42	295	190	5,160	305x305x149
1,755	575	1,986	885	0.829	15.7	1.95	182	161	4,350	305x305x126
1,531	496	1,720	762	0.830	17.7	1.65	122	140	3,850	305x305x110
1,320	423	1,475	648	0.830	20.2	1.38	80.0	121	3,310	305x305x95
1,221	389	1,361	595	0.830	21.6	1.25	64.2	112	3,060	305x305x88
1,099	348	1,218	531	0.832	23.9	1.11	46.9	100	<i>2,730</i>	305x305x79
966	324	1,092	498	0.825	15.6	0.607	81.8	108	2,700	254x254x85
807	267	904	409	0.826	18.4	0.486	48.4	90.4	2,240	254x254x71
717	235	799	360	0.827	20.5	0.421	34.3	80.2	1,980	254x254x63
493	164	557	252	0.827	15.8	0.158	32.7	68.7	1,430	203x203x54
410	134	459	206	0.827	18.6	0.126	19.2	57.2	1,180	203x203x45

Dimensions and properties to BS4-1

\* Values in italics indicate the section is Class 4 in pure compression and allowance has been made in calculating the resistance

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