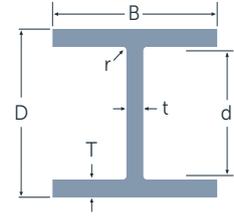
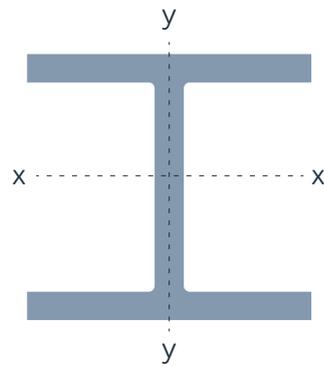


British Steel, the only UK manufacturer of structural sections, is BES 6001 certified, guaranteeing commitment to responsibly sourced materials. Our structural sections are CE and UKCA marked and tested to the highest standards, providing quality and assurance for the UK construction market.



## Universal columns (UC) sizes

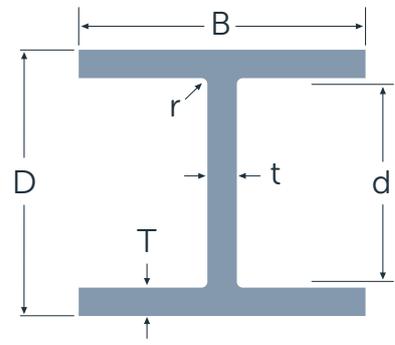
Designation  Serial size	Mass per metre  kg/m	Depth of section  D mm	Width of section  B mm	Thickness		Root radius  r mm	Depth between fillets  d mm	Ratios for local buckling		Second moment of area  I		Radius of gyration  i	
				of web  t mm	of flange  T mm			Flange  B/2T	Web  d/t	Axis  x-x cm <sup>4</sup>	Axis  y-y cm <sup>4</sup>	Axis  x-x cm	Axis  y-y cm
152 x 152 x 23	23.0	152.4	152.2	5.8	6.8	7.6	123.6	11.20	21.30	1250	400	6.54	3.70
152 x 152 x 30	30.0	157.6	152.9	6.5	9.4	7.6	123.6	8.13	19.00	1748	560	6.76	3.83
152 x 152 x 37	37.0	161.8	154.4	8.0	11.5	7.6	123.6	6.71	15.50	2210	706	6.85	3.87
152 x 152 x 44	44.0	166.0	155.9	9.5	13.6	7.6	123.6	5.73	13.00	2703	860	6.94	3.92
152 x 152 x 51	51.2	170.2	157.4	11.0	15.7	7.6	123.6	5.01	11.20	3227	1022	7.04	3.96
203 x 203 x 46	46.1	203.2	203.6	7.2	11.0	12.7	155.8	9.25	21.60	4605	1549	8.82	5.11
203 x 203 x 52	52.0	206.2	204.3	7.9	12.5	12.7	155.8	8.17	19.70	5296	1778	8.91	5.16
203 x 203 x 60	60.0	209.6	205.8	9.4	14.2	12.7	155.8	7.25	16.60	6162	2065	8.95	5.18
203 x 203 x 71	71.0	215.8	206.4	10.0	17.3	12.7	155.8	5.97	15.60	7655	2538	9.18	5.28
203 x 203 x 86	86.1	222.2	209.1	12.7	20.5	12.7	155.8	5.10	12.30	9486	3128	9.28	5.33
203 x 203 x 100	99.6	228.6	210.3	14.5	23.7	12.7	155.8	4.44	10.70	11335	3680	9.43	5.38
203 x 203 x 113	113.5	235.0	212.1	16.3	26.9	12.7	155.8	3.94	9.56	13338	4286	9.59	5.44
203 x 203 x 127	127.5	241.4	213.9	18.1	30.1	12.7	155.8	3.55	8.61	15474	4921	9.74	5.50
254 x 254 x 73	73.1	254.1	254.6	8.6	14.2	20.0	185.7	8.96	21.60	11643	3910	11.10	6.41
254 x 254 x 81	81.0	256.0	255.0	9.4	15.6	20.0	184.8	8.17	19.7	12801	4316	11.1	6.44
254 x 254 x 89	88.9	260.3	256.3	10.3	17.3	20.0	185.7	7.41	18.00	14504	4860	11.20	6.49
254 x 254 x 101	101.0	264.0	257.0	11.9	19.6	20.0	184.8	6.56	15.5	16603	5552	11.3	6.51
254 x 254 x 107	107.1	266.7	258.8	12.8	20.5	20.0	185.7	6.31	14.50	17747	5931	11.30	6.55
254 x 254 x 115	115.0	269.0	259.0	13.5	22.1	20.0	184.8	5.86	13.7	19171	6409	11.4	6.57
254 x 254 x 132	132.0	276.3	261.3	15.3	25.3	20.0	185.7	5.16	12.10	22765	7535	11.60	6.65
254 x 254 x 149	149.0	282.0	263.0	17.3	28.4	20.0	185.2	4.63	10.7	26167	8627	11.7	6.71
254 x 254 x 167	167.1	289.1	265.2	19.2	31.7	20.0	185.7	4.18	9.67	30234	9875	11.90	6.78
305 x 305 x 97	96.9	307.9	305.3	9.9	15.4	20.0	237.1	9.91	23.90	22504	7310	13.40	7.65
305 x 305 x 107	107.0	311.0	306.0	10.9	17.0	20.0	237.0	9.00	21.7	25055	8125	13.5	7.68
305 x 305 x 118	117.9	314.5	307.4	12.0	18.7	20.0	237.1	8.22	19.80	27927	9061	13.60	7.73
305 x 305 x 129	129.0	318.0	308.0	13.1	20.6	20.0	236.8	7.48	18.1	31035	10041	13.6	7.76
305 x 305 x 137	136.9	320.5	309.2	13.8	21.7	20.0	237.1	7.12	17.20	33070	10702	13.70	7.80
305 x 305 x 143	143.0	323.0	309.0	14.0	22.9	20.0	237.2	6.75	16.9	35029	11272	13.8	7.83
305 x 305 x 158	158.1	327.1	311.2	15.8	25.0	20.0	237.1	6.22	15.00	39002	12572	13.90	7.87
305 x 305 x 179	179.0	333.0	313.0	18.0	28.1	20.0	236.8	5.57	13.2	44796	14381	14.0	7.92
305 x 305 x 198	198.1	339.9	314.5	19.1	31.4	20.0	237.1	5.01	12.40	51159	16303	14.20	8.01
305 x 305 x 202	202.0	341.0	315.0	20.1	31.8	20.0	237.4	4.95	11.8	52247	16592	14.2	8.00
305 x 305 x 226	226.0	348.0	317.0	22.1	35.6	20.0	236.8	4.45	10.7	59829	18934	14.4	8.08
305 x 305 x 240	240.0	352.5	318.4	23.0	37.7	20.0	237.1	4.22	10.30	64458	20319	14.50	8.13
305 x 305 x 253	253.0	356.0	319.0	24.4	39.6	20.0	236.8	4.03	9.70	68490	21468	14.5	8.14
305 x 305 x 283	282.9	365.3	322.2	26.8	44.1	20.0	237.1	3.65	8.85	79127	24641	14.80	8.25
356 x 368 x 129	129.0	355.6	368.6	10.4	17.5	20.0	280.6	10.50	27.00	40591	14613	15.60	9.39
356 x 368 x 134	134.0	356.0	369.0	11.2	18.0	20.0	280.0	10.3	25.0	41866	15081	15.6	9.36
356 x 368 x 147	147.0	360.0	370.0	12.3	19.8	20.0	280.4	9.34	22.8	46647	16725	15.7	9.40
356 x 368 x 153	152.9	362.0	370.5	12.3	20.7	20.0	280.6	8.95	22.80	48935	17556	15.80	9.46
356 x 368 x 162	162.0	364.0	371.0	13.3	21.8	20.0	280.4	8.51	21.1	51897	18565	15.8	9.45
356 x 368 x 177	177.0	368.2	372.6	14.4	23.8	20.0	280.6	7.83	19.50	57464	20532	15.90	9.51



## Universal columns (UC) sizes

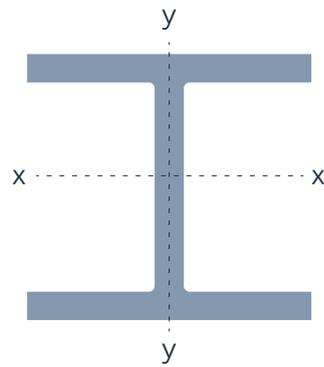
Elastic modulus		Plastic modulus		Buckling parameter	Torsional index	Warping constant	Torsional constant	Area of section	Designation
Axis	Axis	Axis	Axis						
x-x	y-y	x-x	y-y	u	x	H	J	cm <sup>2</sup>	Serial size
cm <sup>3</sup>	cm <sup>3</sup>	cm <sup>3</sup>	cm <sup>3</sup>			dm <sup>6</sup>	cm <sup>4</sup>		
164	53	182	80	0.840	20.70	0.0212	4.63	29.2	152 x 152 x 23
222	73	248	112	0.849	16.00	0.0308	10.50	38.3	152 x 152 x 30
273	91	309	140	0.848	13.30	0.0399	19.20	47.1	152 x 152 x 37
326	110	372	169	0.848	11.50	0.0499	31.70	56.1	152 x 152 x 44
379	130	438	199	0.848	10.10	0.0610	48.80	65.2	152 x 152 x 51
453	152	502	231	0.848	17.30	0.1430	23.30	59.2	203 x 203 x 46
514	174	572	265	0.849	15.50	0.1670	33.20	66.8	203 x 203 x 52
588	201	660	306	0.847	13.80	0.1970	49.10	76.9	203 x 203 x 60
709	246	803	374	0.853	11.80	0.2500	82.70	90.9	203 x 203 x 71
854	299	981	457	0.850	10.10	0.3180	140.00	110.0	203 x 203 x 86
992	350	1153	535	0.852	8.94	0.3860	214.00	127.0	203 x 203 x 100
1135	404	1333	619	0.853	8.04	0.4640	311.00	145.0	203 x 203 x 113
1282	460	1521	705	0.854	7.32	0.5490	435.00	163.0	203 x 203 x 127
916	307	1014	467	0.851	16.30	0.5630	66.10	95.2	254 x 254 x 73
1000	339	1112	515	0.851	15.0	0.624	85.4	104	254 x 254 x 81
1114	379	1246	577	0.851	13.90	0.7170	114.00	115.0	254 x 254 x 89
1258	432	1419	658	0.851	12.4	0.829	163	131	254 x 254 x 101
1331	458	1507	699	0.849	12.00	0.8990	188.00	138.0	254 x 254 x 107
1425	495	1621	755	0.850	11.2	0.977	231	148	254 x 254 x 115
1648	577	1892	881	0.851	10.00	1.1900	341.00	170.0	254 x 254 x 132
1856	656	2151	1003	0.851	9.08	1.39	479	192	254 x 254 x 149
2092	745	2446	1140	0.852	8.30	1.6400	661.00	215.0	254 x 254 x 167
1462	479	1612	727	0.851	18.70	1.5600	98.40	125.0	305 x 305 x 97
1611	531	1785	807	0.851	17.1	1.76	130	138	305 x 305 x 107
1776	590	1977	897	0.851	15.80	1.9800	171.00	152.0	305 x 305 x 118
1952	652	2184	992	0.852	14.5	2.22	224	167	305 x 305 x 129
2064	692	2316	1054	0.851	13.90	2.3900	261.00	176.0	305 x 305 x 137
2169	730	2439	1110	0.853	13.3	2.54	300	184	305 x 305 x 143
2385	808	2700	1232	0.852	12.30	2.8700	394.00	203.0	305 x 305 x 158
2690	919	3073	1403	0.851	11.1	3.34	558	229	305 x 305 x 179
3010	1037	3460	1583	0.854	10.10	3.8800	758.00	254.0	305 x 305 x 198
3064	1053	3530	1610	0.853	9.97	3.97	800	260	305 x 305 x 202
3438	1195	3995	1827	0.853	9.05	4.62	1109	290	305 x 305 x 226
3657	1276	4267	1953	0.854	8.64	5.0300	1307.00	307.0	305 x 305 x 240
3848	1346	4511	2061	0.854	8.27	5.37	1517	324	305 x 305 x 253
4332	1530	5125	2345	0.855	7.58	6.3600	2084.00	362.0	305 x 305 x 283
2283	793	2502	1200	0.845	19.40	4.1800	161.00	166.0	356 x 368 x 129
2352	817	2585	1239	0.843	18.8	4.31	177	172	356 x 368 x 134
2591	904	2862	1371	0.844	17.3	4.84	233	189	356 x 368 x 147
2704	948	2987	1436	0.845	16.70	5.1100	261.00	196.0	356 x 368 x 153
2851	1001	3163	1518	0.844	15.9	5.43	307	208	356 x 368 x 162
3121	1102	3478	1672	0.845	14.80	6.0900	396.00	227.0	356 x 368 x 177

Dimensions and properties to BS EN 10365:2017



### Universal columns (UC) sizes

Designation  Serial size	Mass per metre  kg/m	Depth of section  D mm	Width of section  B mm	Thickness		Root radius  r mm	Depth between fillets  d mm	Ratios for local buckling		Second moment of area I		Radius of gyration i	
				of web  t mm	of flange  T mm			Flange	Web	Axis	Axis	Axis	Axis
				B/2T	d/t			x-x cm <sup>4</sup>	y-y cm <sup>4</sup>	x-x cm	y-y cm		
356 x 368 x 179	179.0	368.0	374.0	15.0	23.9	20.0	280.2	7.82	18.7	57940	20853	15.9	9.52
356 x 368 x 196	196.0	372.0	374.0	16.4	26.2	20.0	279.6	7.14	17.0	63988	22861	15.9	9.53
356 x 368 x 202	201.9	374.6	374.7	16.5	27.0	20.0	280.6	6.94	17.00	66607	23692	16.00	9.57
356 x 406 x 216	216.0	375.0	394.0	17.3	27.7	20.0	279.6	7.11	16.2	71495	28257	16.1	10.1
356 x 406 x 235	235.1	381.0	394.8	18.4	30.2	20.0	280.6	6.54	15.30	79431	30997	16.20	10.10
356 x 406 x 237	237.0	380.0	395.0	18.9	30.2	20.0	279.6	6.54	14.80	79134	31045	16.2	10.10
356 x 406 x 262	262.0	387.0	398.0	21.1	33.3	20.0	280.4	5.98	13.3	89764	35023	16.3	10.2
356 x 406 x 287	287.1	393.6	399.0	22.6	36.5	20.0	280.6	5.47	12.40	100221	38682	16.50	10.30
356 x 406 x 314	314.0	399.0	401.0	24.9	39.6	20.0	279.8	5.06	11.2	110589	42609	16.6	10.3
356 x 406 x 340	339.9	406.4	403.0	26.6	42.9	20.0	280.6	4.70	10.50	122889	46859	16.80	10.40
356 x 406 x 347	347.0	407.0	404.0	27.2	43.7	20.0	279.6	4.62	10.3	125301	48091	16.8	10.4
356 x 406 x 382	382.0	416.0	406.0	29.8	48.0	20.0	280.0	4.23	9.40	141674	53623	17.0	10.5
356 x 406 x 393	393.0	419.0	407.0	30.6	49.2	20.0	280.6	4.14	9.17	146964	55374	17.10	10.50
356 x 406 x 421	421.0	425.0	409.0	32.8	52.6	20.0	279.8	3.89	8.53	159938	60089	17.2	10.6
356 x 406 x 463	463.0	435.0	412.0	35.8	57.4	20.0	280.2	3.59	7.83	180519	67044	17.5	10.70
356 x 406 x 467	467.0	436.6	412.2	35.8	58.0	20.0	280.6	3.55	7.84	183349	67842	17.50	10.70
356 x 406 x 509	509.0	446.0	416.0	39.1	62.7	20.0	280.6	3.32	7.18	204886	75411	17.7	10.8
356 x 406 x 551	551.0	455.6	418.5	42.1	67.5	20.0	280.6	3.10	6.67	227284	82681	18.00	10.80
356 x 406 x 592	592.0	465.0	421.0	45.0	72.3	20.0	280.4	2.91	6.23	250519	90184	18.2	10.9
356 x 406 x 634	633.9	474.6	424.0	47.6	77.0	20.0	280.6	2.75	5.89	275191	98138	18.40	11.00



## Universal columns (UC) sizes

Elastic modulus		Plastic modulus		Buckling parameter	Torsional index	Warping constant	Torsional constant	Area of section	Designation
Axis	Axis	Axis	Axis						
x-x	y-y	x-x	y-y	u	x	H	J	cm <sup>2</sup>	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>		
3149	1115	3514	1693	0.842	14.6	6.17	407	230	356 x 368 x 179
3440	1223	3861	1858	0.843	13.5	6.83	531	252	356 x 368 x 196
3556	1265	3994	1921	0.845	13.20	7.1600	576.00	259.0	356 x 368 x 202
3813	1434	4286	2178	0.832	12.8	8.52	652	277	356 x 406 x 216
4170	1570	4709	2385	0.835	11.90	9.5400	834.00	301.0	356 x 406 x 235
4165	1572	4709	2389	0.833	11.90	9.50	842	302	356 x 406 x 237
4639	1760	5283	2678	0.833	10.9	11.0	1134	336	356 x 406 x 262
5093	1939	5835	2951	0.835	10.10	12.3000	1474.00	367.0	356 x 406 x 287
5543	2125	6397	3239	0.835	9.36	13.8	1891	401	356 x 406 x 314
6048	2326	7022	3546	0.836	8.77	15.5000	2391.00	434.0	356 x 406 x 340
6157	2381	7162	3631	0.835	8.60	15.9	2532	443	356 x 406 x 347
6811	2642	7988	4033	0.837	7.96	18.2	3348	489	356 x 406 x 382
7015	2721	8245	4156	0.837	7.80	18.9000	3611.00	502.0	356 x 406 x 393
7526	2938	8904	4492	0.838	7.36	20.8	4417	539	356 x 406 x 421
8300	3255	9901	4982	0.839	6.85	23.9	5747	591	356 x 406 x 463
8399	3292	10025	5037	0.840	6.81	24.3000	5905.00	596.0	356 x 406 x 467
9188	3626	11056	5556	0.840	6.38	27.7	7514	650	356 x 406 x 509
9977	3951	12099	6062	0.841	6.01	31.1000	9381.00	703.0	356 x 406 x 551
10775	4284	13162	6578	0.842	5.69	34.8	11530	756	356 x 406 x 592
11597	4629	14258	7112	0.843	5.43	38.8000	13920.00	809.0	356 x 406 x 634

Dimensions and properties to BS EN 10365:2017

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CUCD:ENG:072023

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