

JSPL Parallel Flange Equivalents for ISMB sections

Beam Designation	H-Beam Section (with relevant Inch size x lbs/ft)	Designation (with BS41:1993/ASTM A6 /BIS:12778 *applicable spec.)	Sectional Wt. (in Kg/m)	Beam Depth (H) in mm	Flange Width (W) in mm	Web Thk. (t _w) in mm	Flange Thk. (t _f) in mm	Fillet Radius (R) in mm	Sectional Area (A) in cm ²	Geo. Moment of Inertia		Radius of Gyration		Modulus of Section	
										I _{xx}	I _{yy}	r _{xx}	r _{yy}	Z _{xx}	Z _{yy}
BEAM-200x150	200x100x5.7	ISMB-200	25.4	200	100	5.7	10	11/5.5		137	2120	2.11	8.29	27.4	212
	203.2x133.2x25.1	UB203	25.1	203.2	133.2	5.7	7.8	7.6	31.97	307.6	2340	3.1	8.56	46.19	230.3
	206.8x133.9x30.0	UB203	30.0	206.8	133.9	6.4	9.6	7.6	38.21	384.7	2896	3.17	8.71	57.45	280
BEAM-250x150	250x125x6.9	ISMB-250	37.3	250	125	6.9	12.5	13/6.5		335	5130	2.65	10.4	53.5	410
	251.4x146.1x31.1	UB 254	31.1	251.4	146.1	6	8.6	7.6	39.68	447.5	4413	3.36	10.55	61.26	351.1
	256x146.4x37.0	UB 254	37.0	256	146.4	6.3	10.9	7.6	47.17	570.6	5537	3.48	10.83	77.96	432.6
	259.6x147.3x43.0	UB 254	43.0	259.6	147.3	7.2	12.7	7.6	54.77	677.4	6544	3.52	10.93	91.97	504.1
BEAM-300x150	300x140x7.7	ISMB-300	46.0	300	140	7.7	13.1	14/7		486	8990	2.86	12.4	69.5	599
	303.4x165x40.3	UB-305	40.3	303.4	165	6	10.2	8.9	51.32	764.4	8503	3.86	12.87	92.65	560.5
	306.6x165.7x46.1	UB-305	46.1	306.6	165.7	6.7	11.8	8.9	58.75	895.7	9899	3.9	12.98	108.1	645.7
	310.4x166.9x54.0	UB-305	54.0	310.4	166.9	7.9	13.7	8.9	68.77	1063	11700	3.93	13.04	127.4	753.6
BEAM-350x170	350x140x8.1	ISMB-350	52.4	350	140	8.1	14.2	14/7		538	13600	2.84	14.3	76.8	779
	351.4x171.1x45	UB 356	45.0	351.4	171.1	7	9.7	10.2	57.33	811.1	12070	3.76	14.51	94.81	686.7
	355x171.5x51.0	UB 356	51.0	355	171.5	7.4	11.5	10.2	64.91	968.3	14140	3.86	14.76	112.9	796.4
	358x172x57.0	UB 356	57.0	358	172	8.1	13	10.2	72.56	1108	16040	3.91	14.87	128.7	896.0
	363.4x173.2x67.1	UB 356	67.1	363.4	173.2	9.1	15.7	10.2	85.49	1362	19460	3.99	15.09	157.3	1071
BEAM-400x180	400x140x8.9	ISMB-400	61.5	400	140	8.9	16	14/7		622	20500	2.82	16.2	88.9	1020
	402.6x177.7x54.1	UB 406	54.1	402.6	177.7	7.7	10.9	10.2	68.95	1021	18720	3.85	16.48	114.9	930
	406.4x177.9x60.1	UB 406	60.1	406.4	177.9	7.9	12.8	10.2	76.52	1203	21600	3.97	16.8	135.3	1063
	409.4x178.8x67.1	UB 406	67.1	409.4	178.8	8.8	14.3	10.2	85.54	1365	24330	3.99	16.87	152.7	1189
	412.8x179.5x74.2	UB 406	74.2	412.8	179.5	9.5	16	10.2	94.51	1545	27310	4.04	17	172.2	1323
	397 x 180 x 57.4	IPEA / NPB 400	57.4	397	180	7	12	21	73.1	1171	20290	4	16.55	130.1	1022
	400 x 180 x 66.3	IPE / NPB 400	66.3	400	180	8.6	13.5	21	84.5	1318	23130	3.95	16.66	146.4	1156
	404 x 182 x 75.7	IPEO / NPB 400	75.7	404	182	9.7	15.5	21	96.4	1564	26750	4.03	16.66	171.9	1324
BEAM-450x150	450x150x9.4	ISMB-450	72.4	450	150	9.4	17.4	15/7.5		834	30400	3.01	18.2	111.0	1350
	447 x 190 x 67.2	IPEA / NPB 450	67.2	447	190	7.6	13.1	21	85.6	1502	29760	4.19	18.65	158.1	1331
	450 x 190 x 77.6	IPE / NPB 450	77.6	450	190	9.4	14.6	21	98.8	1676	33740	4.12	18.48	176.4	1500
	456 x 192 x 92.4	IPEO / NPB 450	92.4	456	192	11	17.6	21	118	2085	40920	4.21	18.65	217.2	1795
	457 x 191 x 67	UB 450	67.1	453.4	189.9	8.5	12.7	10.2	85.51	1452	29380	4.12	18.54	152.9	1296
	457 x 191 x 74	UB 450	74.3	457	190.4	9	14.5	10.2	94.63	1671	33320	4.2	18.76	175.5	1458
	457 x 191 x 82	UB 450	82.0	460	191.3	9.9	16	10.2	104.5	1871	37050	4.23	18.83	195.6	1611
	457 x 191 x 89	UB 450	89.3	463.4	191.9	10.5	17.7	10.2	113.8	2089	41020	4.29	18.99	217.8	1770
	457 x 191 x 98	UB 450	98.3	467.2	192.8	11.4	19.6	10.2	125.3	2347	45730	4.33	19.11	243.5	1957
BEAM-500x200	500x180x10.2	ISMB-500	86.9	500	180	10.2	17.2	17/8.5		1370	45200	3.52	20.2	152	1810
	497 x 200 x 79.4	IPEA / NPB 500	79.4	497	200	8.4	14.5	21	101	1939	42930	4.38	20.61	193.9	1728
	500 x 200 x 90.7	IPE / NPB 500	90.7	500	200	10.2	16	21	116	2142	48200	4.31	20.43	241.2	1928
	506 x 202 x 107	IPEO / NPB 500	107	506	202	12	19	21	137	2620	57780	4.38	20.56	259.6	2284
ISMB-550x190	550x190x10.4	ISMB-550	104	550	190	11.2	19.3	18	132	1830	64900	3.73	22.2	193	2360
	533 x 210 x 82	UB 533	82	528.3	208.8	9.6	13.2	12.7	104.7	2007	47540	4.38	21.31	192.3	1800
	533 x 210 x 92	UB 533	92	533.1	209.3	10.1	15.6	12.7	117.4	2389	55230	4.51	21.69	228.3	2072
	533 x 210 x 101	UB 533	101	536.7	210	10.8	17.4	12.7	128.7	2692	61520	4.57	21.87	256.4	2292
	533 x 210 x 109	UB 533	109	539.5	210.8	11.6	18.8	12.7	138.9	2943	68820	4.6	21.94	279.2	2477
	533 x 210 x 122	UB 533	122	544.5	211.9	12.7	21.3	12.7	155.4	2793	76040	4.67	22.12	319.7	2793
BEAM-600x220	600x210x12	ISMB-600	123.0	600	210	12	20.3	20/10		2650	91800	4.12	24.2	252	3060
	602.6x227.6x101.2	UB 610	101.2	602.6	227.6	10.5	14.8	12.7	128.9	2915	75780	4.75	24.24	256.1	2515
	597 x 220 x 108.0	IPE A / NPB 600	108.0	597	220	9.8	17.5	24	137	3116	82920	4.77	24.6	283.3	2778
	607.6x228.2x113.0	UB 610	113.0	607.6	228.2	11.1	17.3	12.7	143.9	3434	87320	4.88	24.63	301	2874
	600 x 220 x 122.4	IPE / NPB 600	122.4	600	220	12	19	24	156	3387	92080	4.66	24.3	307.9	3069
	612.2x229x125.1	UB 610	125.1	612.2	229	11.9	19.6	12.7	159.3	3932	98610	4.97	24.88	343.4	3221
	617.2x230.2x139.9	UB 610	139.9	617.2	230.2	13.1	22.1	12.7	178.2	4505	111800	5.03	25.05	391.4	3622
	610 x 224 x 154.0	IPE O / NPB 600	154.0	610	224	15	24	24	197	4521	118300	4.79	24.52	403.6	3879

UC - British Universal Columns
 UB - British Universal Beams
 NPB - Narrow Parallel Flange Beams IS Code 12778 -2004
 WPB - Wide Parallel Flange Beams IS Code 12778 - 2004
 HE - European Wide Flange Beams
 IPE - European Narrow flange Parallel beams

Material can be supplied in grades: E 250/300/350/410: A/BR/B0/C & International equivalents