

Universal Beams And Columns

Depth x Width	Unit Weight	Standard Sectional Dimension(in)					Unit Weight
	Lbs/ft	H	B	t ₁	t ₂	r	Kg/m
W4 x 4	13	4.16	4.06	0.280	0.346	0.30	19.6
W5 x 5	16	5.01	5.00	0.240	0.358	0.30	23.8
	19	5.15	5.03	0.272	0.429	0.30	28.2
W6 x 4	8.5	5.83	3.94	0.169	0.193	0.30	12.8
	9	5.90	3.94	0.169	0.217	0.30	13.7
	12	6.03	4.00	0.228	0.280	0.30	18.1
	16	6.28	4.03	0.260	0.406	0.30	24.2
W6 x 6	15	5.99	5.99	0.228	0.260	0.30	22.5
	20	6.20	6.02	0.260	0.366	0.30	29.9
	25	6.38	6.08	0.319	0.457	0.30	37.3
W8 x 4	10	7.89	3.94	0.169	0.205	0.30	15.0
	13	7.99	4.00	0.228	0.256	0.30	19.4
	15	8.11	4.02	0.244	0.315	0.30	22.5
W8 x 5½	18	8.14	5.25	0.228	0.331	0.30	26.6
	21	8.28	5.27	0.252	0.402	0.30	31.4
W8 x 6½	24	7.93	6.50	0.244	0.402	0.40	35.9
	28	8.06	6.54	0.283	0.465	0.40	41.7
W8 x 8	31	8.00	8.00	0.283	0.433	0.40	46.0
	35	8.12	8.02	0.311	0.496	0.40	52.2
	40	8.25	8.07	0.358	0.559	0.40	59.4
	48	8.50	8.11	0.402	0.685	0.40	71.5
	58	8.75	8.22	0.512	0.811	0.40	86.7
	67	9.00	8.28	0.571	0.933	0.40	99.5
W10 x 4	12	9.87	3.96	0.189	0.209	0.30	17.8
	15	9.99	4.00	0.228	0.272	0.30	22.3
	17	10.11	4.01	0.240	0.331	0.30	25.3
	19	10.24	4.02	0.252	0.394	0.30	28.5
W10 x 5½	22	10.17	5.75	0.240	0.358	0.30	32.8
	26	10.33	5.77	0.260	0.441	0.30	38.6
	30	10.47	5.81	0.299	0.512	0.30	44.8
W10 x 8	33	9.73	7.96	0.29	0.43	0.50	49.1
	39	9.92	7.98	0.31	0.53	0.50	58.2
	45	10.10	8.02	0.35	0.62	0.50	67.0
W10 x 10	49	9.98	10.00	0.34	0.56	0.50	72.9
	54	10.09	10.03	0.37	0.61	0.50	80.1
	60	10.22	10.08	0.42	0.68	0.50	89.5
	68	10.40	10.13	0.47	0.77	0.50	101
	77	10.60	10.19	0.53	0.87	0.50	115
	88	10.84	10.26	0.61	0.99	0.50	131
	100	11.10	10.34	0.68	1.12	0.50	149
112	11.36	10.41	0.76	1.25	0.50	167	
W12 x 4	14	11.91	3.97	0.20	0.22	0.30	21.1
	16	11.99	3.99	0.22	0.26	0.30	23.8
	19	12.16	4.00	0.24	0.35	0.30	28.3
	22	12.31	4.03	0.26	0.43	0.30	32.8

W12 x 6½	26	12.22	6.49	0.23	0.38	0.30	38.7
	30	12.34	6.52	0.26	0.44	0.30	44.6
	35	12.50	6.56	0.30	0.52	0.30	52.3
W12 x 8	40	11.94	8.00	0.30	0.52	0.60	59.7
	45	12.06	8.04	0.33	0.57	0.60	66.9
	50	12.19	8.08	0.37	0.64	0.60	74.5
W12 x 10	53	12.06	10.00	0.35	0.57	0.60	78.9
	58	12.19	10.01	0.36	0.64	0.60	86.4
W12 x 12	65	12.12	12.00	0.39	0.61	0.60	96.8
	72	12.25	12.04	0.43	0.67	0.60	107
	79	12.38	12.08	0.47	0.74	0.60	118
	87	12.53	12.13	0.52	0.81	0.60	130
	96	12.71	12.16	0.55	0.90	0.60	143
	106	12.89	12.22	0.61	0.99	0.60	158
	120	13.12	12.32	0.71	1.11	0.60	179
	136	13.41	12.40	0.79	1.25	0.60	203
	152	13.71	12.48	0.87	1.40	0.60	227
	161	13.88	12.54	0.91	1.48	0.60	240
	170	14.03	12.57	0.96	1.56	0.60	253
	190	14.38	12.67	1.06	1.74	0.60	283
	210	14.71	12.79	1.18	1.90	0.60	313
	230	15.05	12.89	1.28	2.07	0.60	343
	252	15.41	13.00	1.39	2.25	0.60	375
	279	15.85	13.14	1.53	2.47	0.60	415
305	16.32	13.24	1.63	2.70	0.60	454	
W14 x 5	22	13.74	5.00	0.23	0.33	0.40	32.8
	26	13.91	5.02	0.26	0.42	0.40	39.1
W14 x 6¾	30	13.84	6.73	0.27	0.39	0.40	45.0
	34	13.98	6.74	0.28	0.46	0.40	50.7
	38	14.10	6.77	0.31	0.52	0.40	56.7
W14 x 8	43	13.66	8.00	0.30	0.53	0.60	64.0
	48	13.79	8.03	0.34	0.59	0.60	71.5
	53	13.92	8.06	0.37	0.66	0.60	79.1
W14 x 10	61	13.89	10.00	0.37	0.65	0.60	90.8
	68	14.04	10.04	0.41	0.72	0.60	101
	74	14.17	10.07	0.45	0.78	0.60	110
	82	14.31	10.13	0.51	0.85	0.60	122
W14 x 14½	90	14.02	14.52	0.44	0.71	0.60	134
	99	14.16	14.57	0.48	0.78	0.60	148
	109	14.32	14.61	0.52	0.86	0.60	162
	120	14.48	14.67	0.59	0.94	0.60	179
	132	14.66	14.72	0.65	1.03	0.60	197
W14 x 16	145	14.78	15.50	0.68	1.09	0.60	216
	159	14.98	15.57	0.74	1.19	0.60	237
	176	15.22	15.65	0.83	1.31	0.60	262
	193	15.48	15.71	0.89	1.44	0.60	288
	211	15.72	15.80	0.98	1.56	0.60	314
	233	16.04	15.89	1.07	1.72	0.60	347
	257	16.38	16.00	1.17	1.89	0.60	383
	283	16.74	16.11	1.29	2.07	0.60	422
	311	17.12	16.23	1.41	2.26	0.60	463
342	17.54	16.36	1.54	2.47	0.60	509	

	370	17.92	16.48	1.65	2.66	0.60	551
W16 x 5½	26	15.69	5.50	0.25	0.35	0.40	39.1
	31	15.88	5.52	0.28	0.44	0.40	46.3
W16 x 7	36	15.86	6.98	0.30	0.43	0.40	53.5
	40	16.01	7.00	0.30	0.50	0.40	59.5
	45	16.13	7.04	0.35	0.57	0.40	67.4
	50	16.26	7.07	0.38	0.63	0.40	74.8
	57	16.43	7.12	0.43	0.72	0.40	84.9
W16 x 10¼	67	16.33	10.24	0.39	0.67	0.40	100
	77	16.52	10.30	0.46	0.76	0.40	115
	89	16.75	10.37	0.52	0.87	0.40	132
	100	16.97	10.43	0.59	0.98	0.40	149
W18 x 6	35	17.70	6.00	0.30	0.43	0.40	52.1
	40	17.90	6.02	0.31	0.52	0.40	59.5
	46	18.06	6.06	0.36	0.61	0.40	68.5
W18 x 7½	41	17.70	7.45	0.32	0.43	0.40	60
	45	17.86	7.48	0.33	0.50	0.40	67
	50	17.99	7.50	0.35	0.57	0.40	74.3
	55	18.11	7.53	0.39	0.63	0.40	82.0
	60	18.24	7.56	0.41	0.70	0.40	89.3
	65	18.35	7.59	0.45	0.75	0.40	96.8
	66	18.39	7.59	0.45	0.77	0.40	98
	71	18.47	7.63	0.50	0.81	0.40	106
w18 x 11	76	18.21	11.04	0.43	0.68	0.40	113
	86	18.39	11.09	0.48	0.77	0.40	128
	97	18.59	11.15	0.54	0.87	0.40	145
	106	18.73	11.20	0.59	0.94	0.40	158
	119	18.97	11.26	0.65	1.06	0.40	177
	130	19.25	11.16	0.67	1.20	0.40	194
	143	19.49	11.22	0.73	1.32	0.40	213
	158	19.72	11.30	0.81	1.44	0.40	235
	175	20.04	11.37	0.89	1.59	0.40	260
	192	20.35	11.46	0.96	1.75	0.40	286
	211	20.67	11.56	1.06	1.91	0.40	315
	234	21.06	11.65	1.16	2.11	0.40	349
	258	21.46	11.77	1.28	2.30	0.40	384
	283	21.85	11.89	1.40	2.50	0.40	421
	311	22.32	12.00	1.52	2.74	0.40	463
W21 x 6½	44	20.66	6.50	0.35	0.45	0.50	65.7
	50	20.83	6.53	0.38	0.54	0.50	74.7
	57	21.06	6.56	0.41	0.65	0.50	84.8
W21 x 8¼	48	20.60	8.14	0.35	0.43	0.50	71.5
	55	20.80	8.22	0.38	0.52	0.50	82.2
	62	20.99	8.24	0.40	0.61	0.50	92.6
	68	21.13	8.27	0.43	0.69	0.50	101
	73	21.24	8.30	0.46	0.74	0.50	109
	83	21.43	8.35	0.52	0.83	0.50	123
	93	21.62	8.42	0.58	0.93	0.50	138
	101	21.36	12.29	0.50	0.80	0.50	151
	111	21.51	12.34	0.55	0.87	0.50	165
	122	21.68	12.39	0.60	0.96	0.50	181
	132	21.83	12.44	0.65	1.04	0.50	197

W21 x 12¼	147	22.06	12.51	0.72	1.15	0.50	219
	166	22.48	12.42	0.75	1.36	0.50	247
	182	22.72	12.50	0.83	1.48	0.50	272
	201	23.03	12.57	0.91	1.63	0.50	300
	223	23.35	12.67	1.00	1.79	0.50	331
	248	23.74	12.78	1.11	1.99	0.50	370
	275	24.13	12.89	1.22	2.19	0.50	409
	300	24.53	12.99	1.32	2.38	0.50	447
	333	25.00	13.13	1.46	2.62	0.50	495
W24 x 7	55	23.57	7.00	0.39	0.50	0.50	81.8
	62	23.74	7.04	0.43	0.59	0.50	92.2
W24 x 9	68	23.73	8.96	0.41	0.59	0.50	102
	76	23.92	8.99	0.44	0.68	0.50	114
	84	24.10	9.02	0.47	0.77	0.50	125
	94	24.31	9.07	0.52	0.87	0.50	140
	103	24.53	9.00	0.55	0.98	0.50	153
W24 x 12¾	104	24.06	12.75	0.50	0.75	0.65	156
	117	24.26	12.80	0.55	0.85	0.65	175
	131	24.48	12.85	0.61	0.96	0.65	196
	146	24.74	12.90	0.65	1.09	0.65	219
	162	25.00	12.96	0.70	1.22	0.65	242
	176	25.24	12.89	0.75	1.34	0.65	263
	192	25.47	12.95	0.81	1.46	0.65	286
	207	25.71	13.01	0.87	1.57	0.65	308
	229	26.02	13.11	0.96	1.73	0.65	341
	250	26.34	13.19	1.04	1.89	0.65	373
	279	26.73	13.31	1.16	2.09	0.65	416
	306	27.13	13.41	1.26	2.28	0.65	455
	335	27.52	13.52	1.38	2.48	0.65	499
370	27.99	13.66	1.52	2.72	0.65	552	
W27 x 10	84	26.71	9.96	0.46	0.64	0.60	126
	94	26.92	9.99	0.49	0.74	0.60	140
	102	27.09	10.02	0.52	0.83	0.60	152
	114	27.29	10.07	0.57	0.93	0.60	170
	129	27.63	10.01	0.61	1.10	0.60	192
W30 x 10½	90	29.53	10.40	0.47	0.61	1.10	137
	99	29.65	10.45	0.52	0.67	1.10	151
	108	29.83	10.48	0.54	0.76	1.10	164
	116	30.01	10.50	0.56	0.85	1.10	177
	124	30.17	10.52	0.59	0.93	1.10	188
	132	30.31	10.54	0.61	1.00	1.10	200
	148	30.67	10.48	0.65	1.18	1.10	224
W33 x 11½	118	32.86	11.48	0.55	0.74	1.18	180
	130	33.09	11.51	0.58	0.86	1.18	198
	141	33.30	11.54	0.61	0.96	1.18	214
	152	33.49	11.57	0.64	1.06	1.18	231
	169	33.82	11.50	0.67	1.22	1.18	255
W36 x 12	135	35.55	11.95	0.60	0.79	1.18	205
	150	35.85	11.98	0.63	0.94	1.18	228
	160	36.01	12.00	0.65	1.02	1.18	242
	170	36.17	12.03	0.68	1.10	1.18	257
	182	36.33	12.07	0.73	1.18	1.18	275

194	36.49	12.11	0.76	1.26	1.18	292
210	36.69	12.18	0.8299	1.36	1.18	317
232	37.12	12.12	0.87	1.57	1.18	349

HC

Standard Sectional Dimension(mm)

H	B	t ₁	t ₂	r
105.7	103.1	7.1	8.8	7.6
127.3	127.0	6.1	9.1	7.6
130.8	127.8	6.9	10.9	7.6
148.0	100.1	4.3	4.9	7.6
149.9	100.1	4.3	5.5	7.6
153.2	101.6	5.8	7.1	7.6
159.5	102.4	6.6	10.3	7.6
152.1	152.1	5.8	6.6	7.6
157.5	152.9	6.6	9.3	7.6
162.1	154.4	8.1	11.6	7.6
200.4	100.1	4.3	5.2	7.6
202.9	101.6	5.8	6.5	7.6
206.0	102.0	6.2	8.0	7.6
206.8	133.4	5.8	8.4	7.6
210.3	133.9	6.4	10.2	7.6
201.4	165.0	6.2	10.2	10.2
204.7	166.0	7.2	11.8	10.2
203.2	203.1	7.2	11.0	10.2
206.2	203.7	7.9	12.6	10.2
209.6	205.0	9.1	14.2	10.2
215.9	206.0	10.2	17.4	10.2
222.3	208.8	13.0	20.6	10.2
228.6	210.3	14.5	23.7	10.2
250.7	100.6	4.8	5.3	7.6
253.7	101.6	5.8	6.9	7.6
256.8	101.9	6.1	8.4	7.6
260.1	102.1	6.4	10.0	7.6
258.3	146.1	6.1	9.1	7.6
262.4	146.6	6.6	11.2	7.6
265.9	147.6	7.6	13.0	7.6
247.1	202.2	7.4	11.0	12.7
252.0	202.8	8.0	13.5	12.7
256.5	203.7	8.9	15.7	12.7
253.5	254.0	8.6	14.2	12.7
256.3	254.8	9.4	15.6	12.7
259.6	256.0	10.7	17.3	12.7
264.2	257.3	11.9	19.6	12.7
269.2	258.8	13.5	22.1	12.7
275.3	260.7	15.4	25.1	12.7
281.9	262.6	17.3	28.4	12.7
288.5	264.5	19.2	31.8	12.7
302.5	100.8	5.1	5.7	7.6
304.5	101.3	5.6	6.7	7.6
308.9	101.7	6.0	8.9	7.6
312.7	102.4	6.6	10.8	7.6

310.4	164.8	5.8	9.7	7.6
313.4	165.6	6.6	11.2	7.6
317.5	166.6	7.6	13.2	7.6
303.3	203.3	7.5	13.1	15.2
306.3	204.3	8.5	14.6	15.2
309.6	205.2	9.4	16.3	15.2
306.3	253.9	8.8	14.6	15.2
309.6	254.3	9.1	16.3	15.2
307.8	304.8	9.9	15.4	15.2
311.2	305.8	10.9	17.0	15.2
314.5	306.8	11.9	18.7	15.2
318.3	308.0	13.1	20.6	15.2
322.8	308.9	14.0	22.9	15.2
327.4	310.4	15.5	25.1	15.2
333.2	312.9	18.0	28.1	15.2
340.6	315.0	20.1	31.8	15.2
348.2	317.0	22.1	35.6	15.2
352.5	318.4	23.0	37.7	15.2
356.4	319.3	24.4	39.6	15.2
365.3	321.8	26.9	44.1	15.2
373.6	324.9	30.0	48.3	15.2
382.3	327.5	32.6	52.6	15.2
391.4	330.3	35.4	57.2	15.2
402.6	333.8	38.9	62.7	15.2
414.5	336.2	41.3	68.7	15.2
349.0	127.0	5.8	8.5	10.2
353.3	127.6	6.5	10.7	10.2
351.5	170.9	6.9	9.8	10.2
355.1	171.3	7.2	11.6	10.2
358.1	172.0	7.9	13.1	10.2
347.0	203.1	7.7	13.5	15.2
350.3	204.0	8.6	15.1	15.2
353.6	204.7	9.4	16.8	15.2
352.8	253.9	9.5	16.4	15.2
356.6	254.9	10.5	18.3	15.2
359.9	255.8	11.4	19.9	15.2
363.5	257.3	13.0	21.7	15.2
356.1	368.8	11.2	18.0	15.2
359.7	370.0	12.3	19.8	15.2
363.7	371.0	13.3	21.8	15.2
367.8	372.6	15.0	23.9	15.2
372.4	374.0	16.4	26.2	15.2
375.4	393.7	17.3	27.7	15.2
380.5	395.4	18.9	30.2	15.2
386.6	397.5	21.1	33.3	15.2
393.2	399.0	22.6	36.6	15.2
399.3	401.3	24.9	39.6	15.2
407.4	403.6	27.2	43.7	15.2
416.1	406.3	29.8	48.0	15.2
425.2	409.2	32.8	52.6	15.2
434.8	412.2	35.8	57.4	15.2
445.5	415.5	39.1	62.7	15.2



455.2	418.5	42.0	67.6	15.2
398.5	139.7	6.4	8.8	10.2
403.4	140.3	7.0	11.2	10.2
402.8	177.4	7.5	10.9	10.2
406.7	177.7	7.7	12.8	10.2
409.7	178.7	8.8	14.4	10.2
413.0	179.6	9.7	16.0	10.2
417.3	180.8	10.9	18.2	10.2
414.8	260.0	10.0	16.9	10.2
419.6	261.5	11.6	19.3	10.2
425.4	263.3	13.3	22.2	10.2
431.0	264.8	14.9	25.0	10.2
449.6	152.4	7.6	10.8	10.2
454.7	152.8	8.0	13.3	10.2
458.7	153.9	9.1	15.4	10.2
449.6	189.2	8.1	10.8	10.2
453.6	189.9	8.5	12.7	10.2
456.9	190.4	9.0	14.5	10.2
460.0	191.3	9.9	16.0	10.2
463.3	191.9	10.5	17.7	10.2
466.1	192.8	11.4	19.1	10.2
467.2	192.8	11.4	19.6	10.2
469.1	193.9	12.6	20.6	10.2
462.5	280.3	10.8	17.3	10.2
467.1	281.7	12.2	19.6	10.2
472.2	283.1	13.6	22.1	10.2
475.5	284.5	15.0	23.9	10.2
481.8	286.1	16.6	26.9	10.2
489.0	283.5	17.0	30.5	10.2
495.0	285.0	18.5	33.5	10.2
500.9	287.0	20.6	36.6	10.2
509.0	288.9	22.6	40.4	10.2
516.9	291.0	24.4	44.4	10.2
525.0	293.5	26.9	48.5	10.2
534.9	295.9	29.5	53.6	10.2
545.1	299.0	32.5	58.4	10.2
555.0	302.0	35.6	63.5	10.2
566.9	304.9	38.6	69.6	10.2
524.8	165.1	8.9	11.4	12.7
529.1	165.9	9.7	13.6	12.7
534.9	166.5	10.3	16.5	12.7
523.2	206.8	8.9	10.9	12.7
528.3	208.8	9.6	13.2	12.7
533.1	209.3	10.2	15.6	12.7
536.7	210.1	10.9	17.4	12.7
539.5	210.7	11.6	18.8	12.7
544.3	212.2	13.1	21.2	12.7
549.1	213.9	14.7	23.6	12.7
542.5	312.2	12.7	20.3	12.7
546.4	313.4	14.0	22.2	12.7
550.7	314.7	15.2	24.4	12.7
554.5	316.0	16.5	26.3	12.7



560.3	317.8	18.3	29.2	12.7
571.0	315.5	19.1	34.5	12.7
577.1	317.5	21.1	37.6	12.7
585.0	319.4	23.1	41.0	12.7
593.1	321.9	25.4	45.5	12.7
603.0	324.5	28.3	50.5	12.7
612.9	327.4	31.0	55.6	12.7
623.1	329.9	33.5	60.5	12.7
635.0	333.5	37.1	66.5	12.7
598.7	177.9	10.0	12.8	12.7
603.0	178.8	10.9	15.0	12.7
602.7	227.7	10.5	14.9	12.7
607.6	228.3	11.2	17.3	12.7
612.1	229.1	11.9	19.6	12.7
617.5	230.3	13.1	22.2	12.7
623.1	228.6	14.0	24.9	12.7
611.1	323.9	12.7	19.1	16.5
616.2	325.1	14.0	21.6	16.5
621.8	326.5	15.4	24.4	16.5
628.4	327.7	16.5	27.7	16.5
635.0	329.1	17.9	31.0	16.5
641.1	327.4	19.1	34.0	16.5
646.9	328.9	20.6	37.1	16.5
653.0	330.5	22.1	39.9	16.5
660.9	333.0	24.4	43.9	16.5
669.0	334.9	26.4	48.0	16.5
678.9	337.9	29.5	53.1	16.5
689.1	340.5	32.0	57.9	16.5
699.0	343.4	35.1	63.0	16.5
710.9	347.0	38.6	69.1	16.5
678.4	253.0	11.7	16.3	15.2
683.8	253.7	12.4	18.9	15.2
688.1	254.4	13.1	21.1	15.2
693.2	255.8	14.5	23.6	15.2
701.8	254.3	15.5	27.9	15.2
750.1	264.2	11.94	15.49	28
753.1	265.4	13.21	17.02	28
757.7	266.1	13.84	19.3	28
762.3	266.6	14.35	21.59	28
766.3	267.1	14.86	23.62	28
769.9	267.8	15.62	25.4	28
779.0	266.2	16.51	29.97	28
834.6	291.6	13.97	18.8	30
840.5	292.4	14.73	21.72	30
845.8	293.0	15.37	24.38	30
850.6	293.8	16.13	26.8	30
859.0	292.1	17.02	30.99	30
903.0	303.5	15.24	20.07	30
910.6	304.2	15.88	23.88	30
914.7	304.8	16.51	25.91	30
918.7	305.6	17.27	27.94	30
922.8	306.7	18.42	29.97	30



926.8	307.7	19.43	32.00	30
931.9	309.4	21.08	34.54	30
942.8	307.8	22.1	39.88	30

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