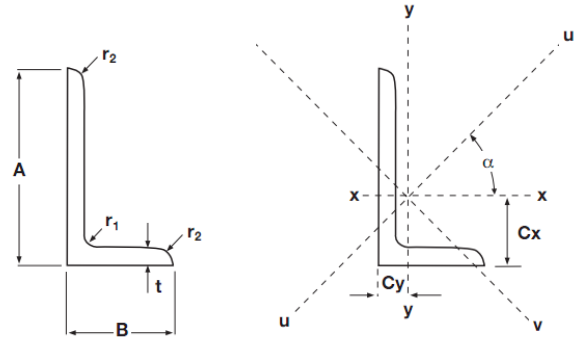


RAINHAM STEEL

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Unequal Angles

Dimensions and properties to BS EN 10056-1: 1999



Designation Serial Size	Mass per metre kg/m	Root Radius r_1 mm	Toe Radius r_2 mm	Area of Section cm ²	Distance of centre of gravity		Axis x-x cm ⁴	Axis y-y cm ⁴	Axis u-u cm ⁴	Axis v-v cm ⁴
					C_x cm	C_y cm				
200x150x18	47.1	15	7.5	60.0	6.33	3.85	2376	1146	2920	623
200x150x15	39.6	15	7.5	50.5	6.21	3.73	2023	979	2480	526
200x150x12	32.0	15	7.5	40.8	6.08	3.61	1653	803	2030	430
200x100x15	33.7	15	7.5	43.0	7.16	2.22	1759	299	1860	193
200x100x12	27.3	15	7.5	34.8	7.03	2.10	1441	247	1530	159
200x100x10	23.0	15	7.5	29.2	6.93	2.01	1219	210	1290	135
150x90x15	26.6	12	6.0	33.9	5.21	2.23	761	205	841	126
150x90x12	21.6	12	6.0	27.5	5.08	2.12	627	171	694	104
150x90x10	18.2	12	6.0	23.2	5.00	2.04	533	146	591	88.3
150x75x15	24.8	12	6.0	31.7	5.52	1.81	713	119	753	78.6
150x75x12	20.2	12	6.0	25.7	5.40	1.69	589	99.6	623	64.7
150x75x10	17.0	12	6.0	21.7	5.31	1.61	501	85.4	531	55.1
125x75x12	17.8	11	5.5	22.7	4.31	1.84	354	95.5	391	58.5
125x75x10	15.0	11	5.5	19.1	4.23	1.76	302	82.1	334	49.9
125x75x8	12.2	11	5.5	15.5	4.14	1.68	247	67.6	274	40.9
100x75x12	15.4	10	5.0	19.7	3.27	2.03	189	90.2	230	49.5
100x75x10	13.0	10	5.0	16.6	3.19	1.95	162	77.6	197	42.2
100x75x8	10.6	10	5.0	13.5	3.10	1.87	133	64.1	162	34.6
100x65x10	12.3	10	5.0	15.6	3.36	1.63	154	51.0	175	30.1
100x65x8	9.9	10	5.0	12.7	3.27	1.55	127	42.2	144	24.8
100x65x7	8.8	10	5.0	11.2	3.23	1.51	113	37.6	128	22

Designation	Serial Size	Radius of Gyration				Elastic Modulus		Angle Axis x-x to Axis y-y Tan α	Torsional Constant J cm ⁴	Equivalent Slenderness Coefficient		Mono-Symmetry Index Ψ_a
		Axis x-x cm	Axis y-y cm	Axis u-u cm	Axis v-v cm	Axis x-x cm ³	Axis y-y cm ³			Min. Φ_a	Max. Φ_a	
A x B x t mm x mm x mm	Mass per metre kg/m											
200x150x18	47.1	6.29	4.37	6.97	3.22	174	103	0.549	67.9	2.93	3.72	4.60
200x150x15	39.6	6.33	4.40	7.00	3.23	147	86.9	0.551	39.9	3.53	4.50	5.55
200x150x12	32.0	6.36	4.44	7.04	3.25	119	70.5	0.552	20.9	4.43	5.70	6.97
200x100x15	33.7	6.40	2.64	6.59	2.12	137	38.4	0.260	34.3	3.54	5.17	9.19
200x100x12	27.3	6.43	2.67	6.63	2.14	111	31.3	0.262	18.0	4.42	6.57	11.5
200x100x10	23.0	6.46	2.68	6.65	2.15	93.3	26.3	0.263	10.66	5.26	7.92	13.9
150x90x15	26.6	4.74	2.46	4.98	1.93	77.7	30.4	0.354	26.8	2.58	3.59	5.96
150x90x12	21.6	4.78	2.49	5.02	1.94	63.3	24.8	0.358	14.1	3.24	4.58	7.50
150x90x10	18.2	4.80	2.51	5.05	1.95	53.3	21.0	0.360	8.30	3.89	5.56	9.03
150x75x15	24.8	4.75	1.94	4.88	1.58	75.2	21.0	0.253	25.1	2.62	3.74	6.84
150x75x12	20.2	4.78	1.97	4.92	1.59	61.3	17.1	0.258	13.2	3.30	4.79	8.60
150x75x10	17.0	4.81	1.99	4.95	1.60	51.7	14.5	0.261	7.8	3.95	5.83	10.4
125x75x12	17.8	3.95	2.05	4.15	1.61	43.2	16.9	0.354	11.6	2.66	3.73	6.23
125x75x10	15.0	3.97	2.07	4.18	1.61	36.5	14.3	0.357	6.87	3.21	4.55	7.50
125x75x8	12.2	4.00	2.09	4.21	1.63	29.6	11.6	0.360	3.62	4.00	5.75	9.43
100x75x12	15.4	3.10	2.14	3.42	1.59	28.1	16.5	0.540	10.05	2.10	2.64	3.46
100x75x10	13.0	3.12	2.16	3.45	1.59	23.8	14.0	0.544	5.95	2.54	3.22	4.17
100x75x8	10.6	3.14	2.18	3.47	1.60	19.3	11.4	0.547	3.13	3.18	4.08	5.24
100x65x10	12.3	3.14	1.81	3.35	1.39	23.2	10.5	0.410	5.61	2.52	3.43	5.45
100x65x8	9.9	3.16	1.83	3.37	1.40	18.9	8.54	0.413	2.96	3.14	4.35	6.86
100x65x7	8.8	3.17	1.83	3.39	1.40	16.6	7.53	0.415	2.02	3.58	5.00	7.85