



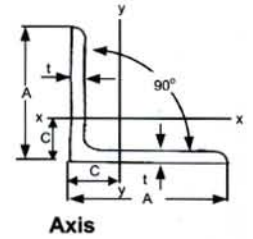
equal angle bars

Angle Bars are one of the most commonly used steel structures in the construction industry. The basic shape of the Angle Bar lends it many practical uses.

There are basically 2 types of Angle Bars, namely:

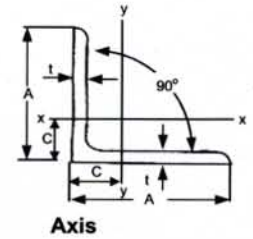
- Equal Angle Bars
- Unequal Angle Bars

EQUAL ANGLE BARS



Section Size	Thickness	Unit Weight	Radius of Fillet	Section Area	Centre of Gravity					
A x B	t	M	r	A	$C_x = C_y$	$I_x = I_y$	$i_x = i_y$	iv	$Z_x = Z_y$	
mm	mm	kg/m	mm	cm ²	cm	cm ⁴	cm	cm	cm ³	
25 x 25	3.0	1.12	4.0	1.427	0.72	0.797	0.747	0.483	0.448	
	4.0	1.45	4.0	1.840	0.76	1	0.74	0.479	0.57	
	5.0	1.12	4.0	2.246	0.79	1.18	0.72	0.48	0.69	
30 x 30	3.0	1.36	5.0	1.727	0.84	1.42	0.908	0.585	0.661	
	4.0	1.76	5.0	2.270	0.88	1.81	0.893	0.578	0.853	
	5.0	2.16	5.0	2.746	0.92	2.14	0.88	0.57	1.03	
38 x 38	3.0	1.72	6.0	2.24	1.03	2.99	1.15	0.748	1.08	
	4.0	2.36	6.0	2.930	1.07	3.85	1.15	0.741	1.41	
40 x 40	3.0	1.83	4.5	2.336	1.09	3.53	1.23	0.79	1.21	
	4.0	2.42	6.0	3.079	1.12	4.48	1.21	0.78	1.56	
	5.0	2.95	4.5	3.755	1.17	5.42	1.2	0.774	1.91	
	6.0	3.52	6.0	4.480	1.20	6.33	1.19	0.77	2.26	
50 x 50	3.0	2.33	7.0	2.960	1.31	6.86	1.52	0.99	1.86	
	4.0	3.06	6.5	3.892	1.37	9.06	1.53	0.983	2.49	
	5.0	3.77	6.5	4.802	1.41	11.1	1.52	0.976	3.08	
	6.0	4.43	6.5	5.644	1.44	12.6	1.50	0.963	3.55	
60 x 60	8.0	5.78	6.5	7.364	1.52	16.1	1.48	0.96	4.62	
	5.0	4.55	6.5	5.802	1.66	19.6	1.84	1.18	4.52	
	6.0	5.42	6.5	6.910	1.69	22.8	1.82	1.17	5.29	
65 x 65	7.0	6.21	6.5	7.914	1.73	25.9	1.81	1.16	6.06	
	5.0	5.00	8.5	6.367	1.77	25.3	1.99	1.28	5.35	
	6.0	5.91	8.5	7.527	1.81	29.4	1.98	1.27	6.26	
75 x 75	8.0	7.66	8.5	9.761	1.88	36.8	1.94	1.25	7.96	
	10.0	9.42	8.5	12.000	1.96	44.4	1.92	1.25	9.79	
	6.0	6.85	8.5	8.727	2.06	46.1	2.30	1.48	8.47	
	8.0	9.03	10.0	11.500	2.13	58.9	2.26	1.46	11.0	
80 x 80	9.0	9.96	8.5	12.690	2.17	64.4	2.25	1.45	12.1	
	12.0	13.0	8.5	16.560	2.29	81.9	2.22	1.44	15.7	
	6.0	7.32	8.5	9.327	2.18	56.4	2.46	1.58	9.70	
	7.0	8.49	10.0	10.800	2.21	64.2	2.44	1.57	11.1	
90 x 90	8.0	9.66	10.0	12.300	2.26	72.3	2.42	1.55	12.6	
	9.0	10.7	10.0	13.590	2.30	79.2	2.41	1.55	13.9	
	12.0	13.9	10.0	17.760	2.41	101	2.38	1.54	18.1	
	6.0	8.28	10.0	10.550	2.42	80.7	2.77	1.78	12.3	
	7.0	9.59	10.0	12.220	2.46	93	2.76	1.77	14.2	
90 x 90	8.0	10.9	11.0	13.900	2.50	104	2.74	1.76	16.1	
	9.0	12.2	11.0	15.500	2.54	116	2.74	1.76	18.0	
	10.0	13.3	10.0	17.000	2.57	125	2.71	1.74	19.5	
	12.0	15.9	11.0	20.300	2.70	148	2.70	1.75	23.3	
	13.0	17.0	10.0	21.710	2.69	156	2.68	1.73	24.8	

EQUAL ANGLE BARS



Section Size	Thickness	Unit Weight	Reduce of Fillet	Section Area	Centre of Gravity					
A x B	t	M	r	A	C _x = C _y	I _x =I _y	i _x =i _y	iv	Z _x =Z _y	
mm	mm	kg/m	mm	cm ²	cm	cm ⁴	cm	cm	cm ³	
100 x 100	6.0	9.2	8.5	11.670	2.67	111.3	3.09	1.95	15.2	
	7.0	10.7	10.0	13.620	2.71	129	3.08	1.98	17.7	
	8.0	12.2	12.0	15.500	2.74	145	3.06	1.96	19.9	
	10.0	15.0	10.0	19.000	2.82	175	3.04	1.95	24.4	
	12.0	17.8	12.0	22.700	3.02	207	3.10	1.94	29.1	
	13.0	19.1	10.0	24.310	2.94	220	3.00	1.94	31.1	
	15.0	21.9	12.0	27.900	2.98	249	3.05	1.93	35.6	
125 x 125	8.0	14.7	13.0	18.700	3.69	255	3.96	2.37	29.1	
	10.0	18.2	13.0	23.200	3.67	313	3.94	2.36	36.0	
	12.0	21.6	13.0	27.500	3.65	368	3.91	2.35	42.7	
	15.0	26.6	13.0	33.900	3.62	445	3.86	2.33	52.4	
130 x 130	8.0	15.9	13.0	20.420	3.49	331.75	4.03	2.59	34.88	
	9.0	17.9	12.0	22.740	3.53	366	4.01	2.57	38.7	
	10.0	19.7	13.0	25.260	3.57	406.04	4.01	2.57	43.08	
	12.0	23.5	12.0	29.760	3.64	467	3.96	2.54	49.9	
	15.0	28.8	12.0	36.750	3.76	568	3.93	2.53	61.5	
	16.0	30.7	13.0	39.380	3.81	669.86	3.90	2.51	66.31	
150 x 150	10.0	23.0	16.0	29.300	4.62	624	4.76	2.97	56.9	
	12.0	27.3	14.0	34.770	4.14	740	4.61	2.96	68.1	
	15.0	33.6	14.0	42.740	4.24	888	4.56	2.92	82.6	
	18.0	40.1	14.0	51.000	4.54	1050	4.65	2.92	88.7	
	19.0	41.9	14.0	53.380	4.40	1090	4.52	2.91	103	
200 x 200	15.0	45.3	17.0	57.750	5.47	2180	6.14	3.93	150	
	16.0	48.5	18.0	61.800	6.16	2340	6.30	3.94	162	
	18.0	54.2	18.0	69.100	6.13	2600	6.27	3.93	181	
	20.0	59.9	17.0	76.300	5.67	2820	6.09	3.90	197	
	24.0	71.1	18.0	90.600	6.06	3333	6.22	3.90	235	
	25.0	73.6	17.0	93.750	5.87	3420	6.04	3.88	242	

Spec: ASTM A36, BS 4360 GR 43A, GB700-88 Q235A, JIS G3101 SS400.....