FORCE STEELS
Manufacturing excellence
A Division of Shaurya Steel (Pty) Ltd

107, Johnson Road,
Pretoriusstad, Nigel
Gauteng

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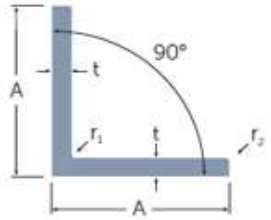
+27 11 814 1090

Equal Angle



[Download Data Sheet in pdf format]

Physical Properties as per EN 10056-2 (QC PR 04)

Serial Size	Mass per meter	Mass per meter Variance	Depth of the section	Depth of the section Variance	Width of the section	Width of the section Variance	Thickness	Thickness Variance	Typical Root Radius
A x A x t			h	h±	b	b±	t	t±	r1
mm x mm x mm	kg/m		mm	mm	mm	mm	mm	mm	mm
50 x 50 x 5	3.77	± 2.5%	50	± 1mm	50	± 1mm	5	± 0.50	7
50 x 50 x 6	4.47	± 2.5%	50	± 1mm	50	± 1mm	6	± 0.50	7
50 x 50 x 8	5.82	± 2.5%	50	± 1mm	50	± 1mm	8	± 0.50	7
60 x 60 x 4	3.7	± 2.5%	60	± 2mm	60	± 2mm	4	± 0.75	7
60 x 60 x 5	4.57	± 2.5%	60	± 2mm	60	± 2mm	5	± 0.75	7
60 x 60 x 6	5.42	± 2.5%	60	± 2mm	60	± 2mm	6	± 0.75	7
60 x 60 x 8	7.08	± 2.5%	60	± 2mm	60	± 2mm	8	± 0.75	7
60 x 60 x 10	8.69	± 2.5%	60	± 2mm	60	± 2mm	10	± 0.75	7
70 x 70 x 6	6.38	± 2.5%	70	± 2mm	70	± 2mm	6	± 0.75	9
70 x 70 x 8	8.35	± 2.5%	70	± 2mm	70	± 2mm	8	± 0.75	9
70 x 70 x 10	10.27	± 2.5%	70	± 2mm	70	± 2mm	10	± 0.75	9
80 X 80 X 6	7.33	± 2.5%	80	± 2mm	80	± 2mm	6	± 0.75	10
80 X 80 X 8	9.63	± 2.5%	80	± 2mm	80	± 2mm	8	± 0.75	10
80 X 80 X 10	11.86	± 2.5%	80	± 2mm	80	± 2mm	10	± 0.75	10

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A x A x t			h	h±	b	b±	t	t±	r1
mm x mm x mm	kg/m		mm	mm	mm	mm	mm	mm	mm
90 X 90 X 6	8.3	± 2.5%	90	± 2mm	90	± 2mm	6	± 0.75	11
90 X 90 X 8	10.9	± 2.5%	90	± 2mm	90	± 2mm	8	± 0.75	11
90 X 90 X 10	13.45	± 2.5%	90	± 2mm	90	± 2mm	10	± 0.75	11
100 X 100 X 8	12.18	± 2.5%	100	± 2mm	100	± 2mm	8	± 0.75	12
100 X 100 X 10	15.04	± 2.5%	100	± 2mm	100	± 2mm	10	± 0.75	12
100 X 100 X 12	17.83	± 2.5%	100	± 2mm	100	± 2mm	12	± 1.00	12
120 X 120 X 8	14.71	± 2.5%	120	± 3mm	120	± 3mm	8	± 0.75	13
120 X 120 X 10	18.2	± 2.5%	120	± 3mm	120	± 3mm	10	± 0.75	13
120 X 120 X 12	21.62	± 2.5%	120	± 3mm	120	± 3mm	12	± 1.00	13

Mechanical Properties (OC PR 04)

Particulars	CQ (Typical Values)	S355 JR
Yield Stress (MPA) MINIMUM	275	355
Ultimate Tensile Strength (MPA)	Not Specified	490-630
Elongation %	22	22

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Chemical Properties

Chemical Element	CQ (Typical Values)	S355 JR
Carbon (C) %	< 0.300	< 0.270
Silicon (Si) %	< 0.600	< 0.600
Manganese (Mn) %	< 1.70	< 1.70
Phosphorus (P)%	< 0.045	< 0.045
Sulpher (S) %	< 0.045	< 0.045
Chrome (Cr) %		< 0.350
Nickel (Ni) %	< 0.100	< 0.100
Copper (Cu) %		< 0.600
CEV	< 0.51	< 0.45

**CE %(m/m) = C + Mn/6 + (Cr + Mo + V)/5 + (Ni + Cu)/15*

** The Commercial Quality material has only been subjected to the chemical and mechanical properties and as such no assurance is given to any other testing procedures and properties.*

Grades:

The grade needs to be specified at the time of ordering the material. Acceptance of any orders for grades is at the discretion of Force Steels.

Length:

-Standard lengths:

Angles are produced is standard Lengths of 6mts, and 13 Mtrs.

Non Standard Lengths:

Lengths other than Standard Lengths can be produced on request in increments of 1M (Minimum 5.8 Mtrs).
Minimum order qty for non-standard lenghts is 15 tons.
There is length tolerance of -0 and +50mm.
Supllied order qty for non standard lenghts can be +-20%.

Tolerance: *The tolerances are as mentioned under EN 10056-2 standard.*

Minimum Order: *A minimum order quantity of 1 Bundle (link to bundle size data sheet) per item is applicable.*