The ICCONS® screw range is unique and innovative providing extensive solutions for steel and timber applications that can outlast the harshest Australian climate.

ICCONS® screws are manufactured using ISO 9001 accredited facilities and in accordance with the requirements set out in AS3566.1-2002 (Self Drilling screws for the building and construction industries – Part 1).

ICCONS® screws are designed to suit a wide range of applications and special care should be taken to ensure that the correct screw is selected for the given application. Information published in this document is based on testing conducted in accordance with AS 3566.1-2002 and an appropriate safety factor should be applied to the published ultimate loads.

ICCONS® screw technical data should also be reviewed and approved by a design professional responsible for the given application prior to product use.

GENERAL INFORMATION - Gauge Conversion

Gauge	6g	8g	10g	12g	14g
Dia. (mm)	3.5	4.2	4.8	5.5	6.3
Dia (inch)	9/64"	11/64"	3/16"	7/32"	1/4"

GUIDELINES FOR SELECTION OF FASTENERS BASED ON GALVANIC ACTION

BASE METAL	FASTENER MATERIAL		
	STAINLESS STEEL	GALVANISED STEEL	ZINC PLATED STEEL
AUSTENITIC STAINLESS STEEL (302/ 304/ 316)	A	ADE	ADE
FERRITIC STAINLESS STEEL (430)	A	ADE	ADE
ZINC & GALVANISED STEEL	C	A	A
STEEL & CAST IRON	B	AD	AD
LEAD-TIN PLATED STEEL SHEETS	B	ADE	ADE
BRASS, COPPER,BRONZE	B	ADE	ADE
ALUMINIUM & ALUMINIUM ALLOYS	B	A	A

WARNING: Corrosion potential may be increased by connecting dissimilar materials.

A = The corrosion of the base material is not increased by the fastener.
B = The corrosion of the base material is marginally increased by the fastener.
C = The corrosion of the base material may be markedly increased by the fastener.
D = The Plating on the fastener is rapidly consumed, leaving the bare fastener metal.
E = The corrosion of the fastener is increased by the base material.

Note: surface treatment and environment can change activity
The table above is meant as a guide only to aid in the selection of appropriate screw material / coating compatibility, if unsure seek professional advice.

Recommended Drill Speeds

Screw Type	RPM
Metal SDS	2500 rpm
Metal SDS - 5 Series	1800 rpm
Timber - Type 17	1500 rpm
Needle Point - Steel	2500 rpm
Needle Point - Timber	1000 rpm
Chipboard	1000 rpm

SCREW TECH GUIDE

GENERAL INFORMATION - SDS Screws

Gauge	6g	8g	10g		12g			13g	14g	
TPI	20	18	16	24	14	24	24 5 series	11	10	20
Max. Drill Capacity steel	2.3mm	2.5mm	3.5mm	3.5mm	4.5mm	4.5mm	12.0mm	1.9mm	5.0mm	5.0mm

	Material 1022	Gauge	TPI	Steel Grade G450 Thickness	Ultimate Average Pull Out Load	Torsional Strength	Axial Strength	Single Shear Strength
				(mm)	kN	Nm	kN	kN
6 GAUGE	 1022	6	20	1.5	3.1	4.0	5.1	3.4
8 GAUGE	 1022	8	18	1.5	3.6	6.7	9.5	5.3
10 GAUGE	 1022	10	16	1.5	3.3	9.7	11.3	6.4
	1022	10	24	3.0	8.7	9.8	11.3	6.4
12 GAUGE	 1022	12	14	1.5	3.7	15.2	15.8	9.1
	1022	12	14	3.0	8.6	15.2	15.8	9.1
	 1022	12	24	3.0	10.7	14.6	17.1	9.0
	* = Axial Strength of Screw							
	 (5 series) 1022	12	24	6.0	17.1*	14.6	17.1	9.0
13 GAUGE	 1022	13	11	0.55	1.6	14.7	15.3	8.3
14 GAUGE	 1022	14	10	1.5	4.7	19.9	19.6	11.9
	 1022	14	20	3.0	10.8	20.8	21.5	12.45

GENERAL INFORMATION - Type 17 (Pine - MGP10)

Gauge	6g		8g		10g		12g	14g
TPI	9	18	9	15	8	12	11	10
Min. Embedment	20mm	20mm	20mm	20mm	25mm	25mm	30mm	35mm

	Material	Gauge	TPI		MGP10 (Pine) Min Embedment	Ultimate Average Pull Out Load	Torsional Strength (Min)	Axial Strength	Single Shear Strength
					(mm)	kN	Nm	kN	kN
6 GAUGE	 1022	6	9	18	20	2.3	2.7	4.8	3.1
8 GAUGE	 1022	8	9	15	20	2.7	4.4	9.1	5.1
10 GAUGE	 1022	10	8	12	25	3.2	5.4	11	6.2
12 GAUGE	 1022	12	11		30	4.0	9.4	15.5	9.1
14 GAUGE	 1022	14	10		35	4.7	14.1	19.6	11.5
	302 / 316 Stainless Steel	14	10		35	4.7	13.0	8.8	7.0

NOTE: Ultimate average pull-out loads for SDS and Type 17 Screws must be divided by an appropriate safety factor in order to determine either design or recommended loads.