# ECONOMY SCREWBOLT MASONRY ANCHOR







ZINC YELLOW Part No.	GALVANISED Part No.	Description	Drill Diameter (mm)	Embedment Depth (mm)	Clearance hole in fixture (mm)	Max. fixture Thickness (mm)	Head Size A/F (mm)	Impact Tool Torque (Nm)	qty	qty
ESB06030	ESB06030G	SCREWBOLT HEX 6 X 30MM	6	25	9	5	10	160	100	800
ESB06050	ESB06050G	SCREWBOLT HEX 6 X 50MM	6	30	9	20	10	160	100	800
ESB06075	ESB06075G	SCREWBOLT HEX 6 X 75MM	6	30	9	45	10	160	100	600
ESB06100	ESB06100G	SCREWBOLT HEX 6 X 100MM	6	30	9	70	10	160	100	600
ESB08050	ESB08050G	SCREWBOLT HEX 8 X 50MM	8	40	12	10	13	250	100	400
ESB08060	ESB08060G	SCREWBOLT HEX 8 X 60MM	8	40	12	20	13	250	100	400
ESB08075	ESB08075G	SCREWBOLT HEX 8 X 75MM	8	40	12	35	13	250	100	400
ESB08100	ESB08100G	SCREWBOLT HEX 8 X 100MM	8	40	12	60	13	250	100	400
ESB10060	ESB10060G	SCREWBOLT HEX 10 X 60MM	10	50	14	10	17	250	50	200
ESB10075	ESB10075G	SCREWBOLT HEX 10 X 75MM	10	50	14	25	17	250	50	200
ESB10100	ESB10100G	SCREWBOLT HEX 10 X 100MM	10	50	14	50	17	250	50	200
ESB10120	ESB10120G	SCREWBOLT HEX 10 X 120MM	10	50	14	70	17	250	50	200
ESB10150	ESB10150G	SCREWBOLT HEX 10 X 150MM	10	50	14	100	17	250	25	150
ESB12075	ESB12075G	SCREWBOLT HEX 12 X 75MM	12	60	16	15	19	600	50	150
ESB12100	ESB12100G	SCREWBOLT HEX 12 X 100MM	12	60	16	40	19	600	25	75
ESB12150	ESB12150G	SCREWBOLT HEX 12 X 150MM	12	60	16	90	19	600	25	75
ESB16100	ESB16100G	SCREWBOLT HEX 16 X 100MM	16	80	19	20	24	600	15	60
ESB16150	ESB16150G	SCREWBOLT HEX 16 X 150MM	16	80	19	70	24	600	15	60







GALVANISED Part No.	Description	Drill Diameter (mm)	Embedment Depth (mm)	Clearance hole in fixture (mm)	Max. fixture Thickness (mm)	Diameter of CSK Head d <sub>k</sub> (mm)	Diameter of CSK Drill Size d <sub>1</sub> (mm)	CSK Head Height (mm)	Drive Type	Impact Tool Torque (Nm)	qty	qty
ESBCS06050G	6 x 50mm	6	30	9	20	16.5	20	6.5	5mm Int. Hex	160	100	1200
ESBCS06075G	6 x 75mm	6	30	9	45	16.5	20	6.5	5mm Int. Hex	160	100	600
ESBCS06100G	6 x 100mm	6	30	9	70	16.5	20	6.5	5mm Int. Hex	160	100	600
ESBCS08075G	8 x 75mm	8	40	12	35	20.5	24	7.5	6mm Int. Hex	250	100	400
ESBCS08100G	8 x 100mm	8	40	12	60	20.5	24	7.5	6mm Int. Hex	250	100	400

## MATERIAL SPECIFICATIONS

Anchor Part	Zinc Plated (Yellow)	Mechanically Galvanised
Anchor body	Heat Treated Carbon Steel	Heat Treated Carbon Steel
Plating	Electroplated Zinc Coating thickness 3 microns (min.)	Galvanised Coating thickness ≥15 microns (min.)

Information contained in this technical document is based on testing by the manufacturer and based on a simplified design method not AS 5216. Information should be reviewed and approved by a design professional responsible for the given application. For safety critical fastening solutions designed in accordance with AS5216, please refer to the ICCONS® website for a complete suite of compliant post-installed chemical and mechanical anchoring products.

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### INSTALLATION



With the correct diameter drill

bit,drill a hole to the depth of

at leastone diameter of the

anchor deeper than the

required embedment.



Clean dust and other material from the hole



Install with either a socket or cordless impact driver. Apply pressure against the fixing and rotate to engage the first thread. Continue to tighten the anchor until flanged head is firmly seated against fixture.



Installation complete!







## PERFORMANCE DATA - 32 MPa CONCRETE

	Øø	\$₩	Recommended Working Load							
	<b>U</b>		TENSION (kN)	SHEA	R (kN)	SHEAR (kN)				
Anchor Size (mm)	Drill Size (mm)	Embed. Depth (mm)	N <sub>rec</sub>	V <sub>rec</sub>	Min. Edge Distance (mm)	V <sub>rec</sub>	Characteristic Edge Distance (mm)			
E	C	25	1.4	0.9	40	1.3	100			
O	O	30	1.8	1.4	60	1.9	100			
8	8	40	3.5	1.6	40	4.4	100			
10	10	50	5.2	2.6	50	7.5	120			
12	12	60	6.7	3.4	60	11.8	150			
16	16	80	9.8	5.2	80	20.3	200			

#### Note:

1) Recommended Working Loads may be converted to Design Capacities by multiplying the above capacities by 1.4.

- 2) The above information has been derived from laboratory testing using NATA calibrated equipment and all loads are representative of a single anchor installed in a hammer drilled hole.
- 3) Combined loading interaction must be considered for applications where anchors are loaded in both Tension and Shear.
- 4) For specific applications outside the scope of this document please contact ICCONS® Engineering Department, engineering@iccons.com.au

#### **Base Material Thickness**

#### **Combined Tension & Shear Loading**

Base material thickness should be 1.5 x hembed. or a minimum of 75mm, always use the greater of the two values.



For combined tension and shear load applications the following equations shall be satisfied;  $N_{applied} / N_{rec} \le 1$  $V_{applied} / V_{rec} \le 1$  $(N_{applied} / N_{rec}) + (V_{applied} / V_{rec}) \le 1.2$ 

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Napplied

N<sub>rec</sub>

Vrec

- Applied Tension Load =
- = Recommended Tension Load
  - Applied Shear Load =
- Vapplied = Recommended Shear Load

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