

SLEEVE ANCHOR



Dogpoint tip that prevent thread damage during installation.

Serrated flange nut that help prevent loosening.

Three corrosion resistance options:



Expansion claws that prevent rotation during tightening.

Cold formed cone for efficient expansion



Hobson Tygabolts® are pre-assembled single unit wedge type anchors that are used in solid concrete applications. Fixing is achieved by controlled torquing of the nut which draws the cone section up into the sleeve, thereby expanding it outward and forcing the Tygabolt™ against the sidewall of the pre-drilled hole.

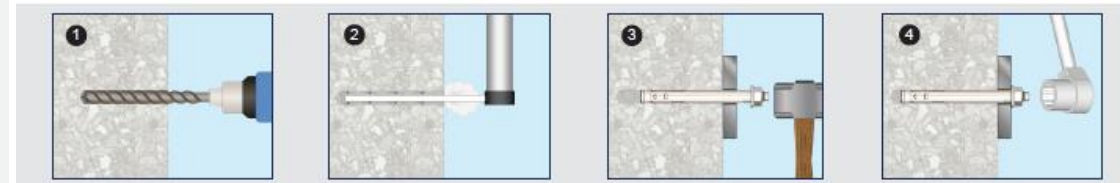
- ✓ Suitable for light to medium duty loads
- ✓ Quick and easy to install
- ✓ Immediate loading is possible

Because of the Tygabolt's unique features, it can be used for many fastening applications, including but not limited to the following:

- Hand rail fastening
- Formwork support fastening
- Mechanical, electrical and pipe bracket fastening



For further technical information please contact Southeast Fasteners direct

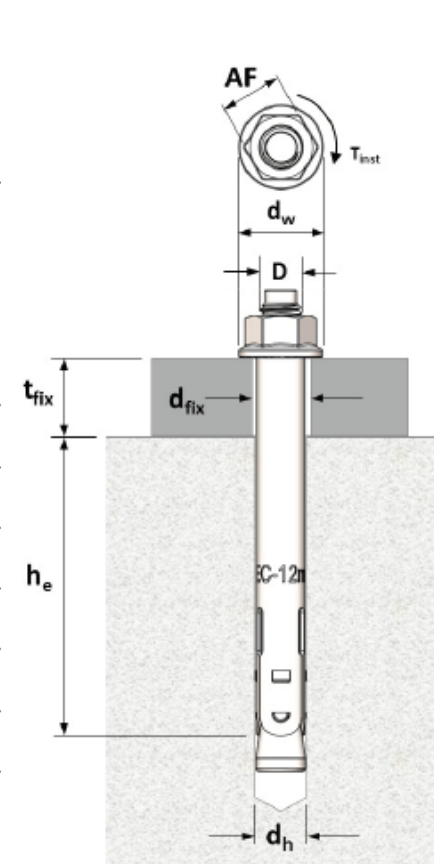


Southeast Fastener	ABN 30117890114	
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Eagle Farm Branch:	109A Links Avenue South, EAGLE FARM QLD 4009	TEL: 07 3268 77 88 FAX: 07 3268 5689

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Installation Guide

Tygabolt Size	Thread Size	Hole \varnothing	Minimum depth	Hole \varnothing on fixture	Torque Guide	Wrench size	Flange Head Diameter	Minimum concrete thickness	Minimum spacing	Minimum edge distance
	D	d_h (mm)	$h_{e,min}$ (mm)	d_{fix} (mm)	T_{inst} (N-m)	AF (mm)	d_w (mm)	h_{min} (mm)	S_{min} (mm)	c_{min} (mm)
Ø6.5	M5	6.5	25	8	5	8	10.9	75	50	50
Ø8	M6	8	40	10	8	10	12.8	100	50	50
Ø10	M8	10	50	12	25	13	16.8	100	60	60
Ø12	M10	12	60	14	40	15	20.3	100	75	75
Ø16	M12	16	70	18	50	18	24.3	125	100	100
Ø20	M16	20	80	22	80	24	32.9	150	120	120



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Basic Load Performance in 32 MPa non-cracked concrete

¹ Design Resistance is the governing minimum load resistance obtained by comparing relevant concrete and steel resistances. Capacity reduction factors of $\phi = 0.60$ for concrete and $\phi = 0.80$ for steel are already included.

² Working Load is the governing minimum allowable load obtained by comparing relevant concrete and steel working loads. Factor of safety FOS = 2.5 for steel and FOS = 3.0 for concrete are already included.

Tygabolt Size	Embedment Depth h_e (mm)	Design Tensile Resistance ¹ ϕN_d (kN)	Working Load in Tension ² N_{wll} (kN)
Ø6.5 (M5)	25	3.6	2.0
	30	4.5	2.2
	40	4.5	2.2
Ø8 (M6)	40	6.4	3.2
	60	6.4	3.2
	80	6.4	3.2
Ø10 (M8)	60	11.7	5.8
	80	11.7	5.8
	100	11.7	5.8
Ø12 (M10)	70	17.5	9.2
	90	18.5	9.2
	120	18.5	9.2
Ø16 (M12)	80	21.9	12.2
	100	26.9	13.4
	120	26.9	13.4
Ø20 (M16)	90	26.5	14.7
	100	31.6	17.6
	125	45.8	25.1

Tygabolt Size	Embedment Depth h_e (mm)	Edge Distance c_1 (mm)	Design Shear Resistance ¹ ϕV_d (kN)	Working Load in Shear ² V_{wll} (kN)
Ø6.5 (M5)	40	50	2.2	1.1
		60	2.2	1.1
		70	2.2	1.1
Ø8 (M6)	50	50	3.2	1.6
		60	3.2	1.6
		80	3.2	1.6
Ø10 (M8)	60	60	5.8	2.9
		80	5.8	2.9
		100	5.8	2.9
Ø12 (M10)	70	75	9.2	4.6
		90	9.2	4.6
		120	9.2	4.6
Ø16 (M12)	80	100	13.4	6.7
		120	13.4	6.7
		150	13.4	6.7
Ø20 (M16)	100	120	20.2	10.2
		150	25.1	12.5
		175	25.1	12.5



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