

# NCC COMPLIANT AS5216 CONFORMING

## THROUGH BOLT NUT & WASHER

Range M8 - M16

**Stainless Steel**  
External & marine applications

### FEATURES & BENEFITS

- Ideal for safety critical & fire-rated applications.
- Intended working life of 50 years.
- Comprehensive range from M8 to M16.
- ETA rating - Seismic C1 for all anchor sizes
- Fire rating to 120 minutes for all anchor sizes.

### APPLICATIONS/TRADES

- Structural steel connections to concrete.
- Safety barriers.
- Formwork restraint.
- Bottom plate fixing.
- Racking.

### COMPLIANCE



**AS5216**



Chamfered impact face prevents thread damage during installation



Thread size = hole size, optimising capacity per hole



Long thread accommodates a wide range of fixture thicknesses



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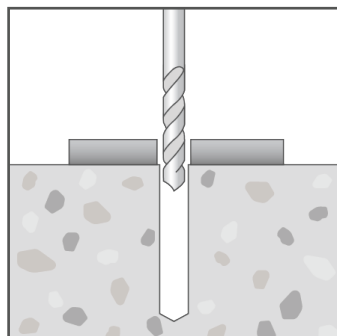
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## RANGE

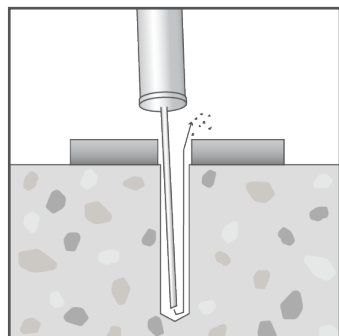
Product Code	Pack Qty	Thread size	Anchor length (mm)	Drill hole Ø (mm)	Drill hole depth (mm) @ t <sub>fix, max</sub>	Minimum concrete thickness (mm)	Maximum fixture thickness (mm)	Fixture clearance hole Ø (mm)
			$l_t$	$d_o$	$h_1$	$h_{min}$	$t_{fix, max}$	$d_f$
ATBM608070ETA	100	M8	70	8	65	110	5	9
ATBM608080ETA	100	M8	80				10	9
ATBM608095ETA	100	M8	95				25	9
ATBM608115ETA	100	M8	115				45	9
ATBM608165ETA	50	M8	165				95	9
ATBM610095ETA	50	M10	95	10	80	120	15	12
ATBM610110ETA	50	M10	110				30	12
ATBM610125ETA	50	M10	125				45	12
ATBM610140ETA	50	M10	140				60	12
ATBM610160ETA	50	M10	160				80	12
ATBM610180ETA	25	M10	180	100	12			
ATBM612110ETA	50	M12	110	12	90	140	15	14
ATBM612125ETA	50	M12	125				30	14
ATBM612145ETA	25	M12	145				50	14
ATBM612165ETA	25	M12	165				70	14
ATBM612185ETA	25	M12	185				90	14
ATBM616130ETA	20	M16	130	16	110	160	15	18
ATBM616145ETA	20	M16	145				30	18
ATBM616180ETA	20	M16	180				60	18

Note: For a fixture thickness ( $t_{fix}$ ) that is less than the ( $t_{fix, max}$ ) value tabled above:  
 - increase both the drill hole depth ( $h_1$ ) & concrete thickness ( $h_{min}$ ) by ( $t_{fix, max} - t_{fix}$  actual)

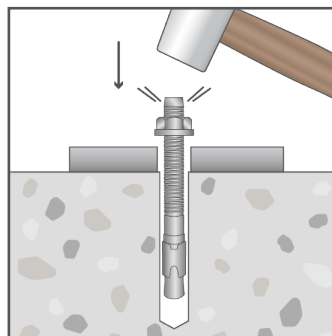
## INSTALLATION



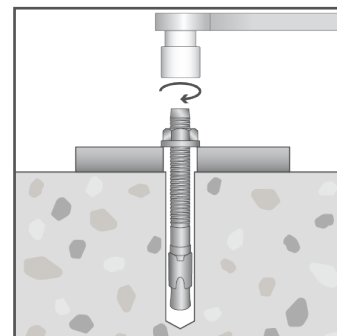
Drill hole through fixture into substrate to the specified diameter and depth.



Clear hole of drilling debris.



Insert anchor into hole and drive until anchor is flush with the surface of the fixture.



Using a wrench, expand anchor by tightening to the specified installation torque.

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### PRODUCT INSTALL & PERFORMANCE INFORMATION

Product Code	Anchor length (mm)	Maximum fixture thickness (mm)	Drill hole depth @ t <sub>fix, max</sub> (mm)	Minimum concrete thickness (mm)	Socket size AF (mm)	Installation torque (Nm)	Design Capacities	
							Uncracked concrete - tension (kN)	Uncracked concrete - shear (kN)
							N <sub>Rd</sub>	V <sub>Rd</sub>
	l <sub>t</sub>	t <sub>fix, max</sub>	h <sub>1</sub>	h <sub>min</sub>	SW	T <sub>inst</sub>		
ATBM608070ETA	70	5	65	110	13	20	8.0	6.1
ATBM608080ETA	80	10						
ATBM608095ETA	95	25						
ATBM608115ETA	115	45						
ATBM608165ETA	165	95						
ATBM610095ETA	95	15	80	120	17	45	13.3	9.7
ATBM610110ETA	110	30						
ATBM610125ETA	125	45						
ATBM610140ETA	140	60						
ATBM610160ETA	160	80						
ATBM610180ETA	180	100	90	140	19	60	16.0	14.1
ATBM612110ETA	110	15						
ATBM612125ETA	125	30						
ATBM612145ETA	145	50						
ATBM612165ETA	165	70						
ATBM612185ETA	185	90	110	160	24	80	17.3	26.2
ATBM616130ETA	130	15						
ATBM616145ETA	145	30						
ATBM616180ETA	180	60						

Note: Concrete cylinder compressive strength = 32MPa.  
 Single anchor capacity - no nearby edge, minimum recommended concrete thickness.  
 For combined load cases (tension & shear) - must also comply with  $(N^* / N_{Rd}) + (V^* / V_{Rd}) \leq 1.2$ .

**Important Disclaimer:** Product performance information contained herein is based on ETA certificate data and AS5216:2021 inputs as appropriate. Capacity information is limited to very simple load case configurations and is provided to enable a relative comparison within and across product ranges. The design of an anchoring solution for a particular application should be conducted by an appropriately qualified design professional.