

Datasheet

Sleeve Anchor Hex Nut

ENGLISH

Features

A zinc plated, yellow passivated, torque controlled, sleeve anchor. Suitable for use in non-cracked concrete, dense concrete blocks, solid bricks and some natural stone.



- Through Fixing
- Light to medium duty loads
- Torque controlled expansion
- Collapse feature to allow a positive clamping force
- Supplied pre-assembled for rapid installation

RANGE DATA

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RS Stock No	Outside/ Drill Diam	Anchor Length	Thread Diameter	Maximum Fixture Thickness	Fixture Clearance Hole	Embedment Depth	Minimum Hole Depth	Structure Thickness	Installation Torque
	mm	mm	mm	mm	mm	mm	mm	mm	Nm
1777035	8	40	6	5	9	30	35	100	10
1777070		65		30					
1777072		80		45					
1777046	10	45	8	5	12	40	45	100	20
1777084		70		30					
1777083		95		55					
1777081		120		80					
1777080	12	60	10	15	14	45	50	100	35
1777079		70		20					
1777078		95		50		50	60		
1777077		120		65					
1777075	16	50	12	50	18	55	65	100	45
1777074		90		90					
1777073	20	100	16	45	22	60	70	100	70

Mechanical Properties

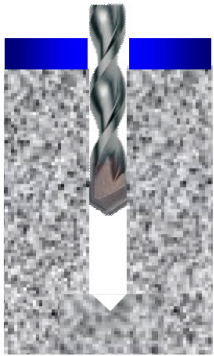
Outside Diameter	mm	8	10	12	16	20
Ultimate Tensile Strength	N/mm ²	400	400	400	400	400
Yield Strength	N/mm ²	280	280	280	280	280
Nut A/F	mm	10	13	17	19	24
Washer Diameter	mm	12	17	21	24	30



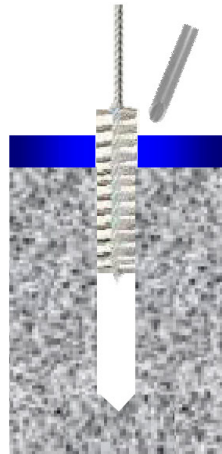
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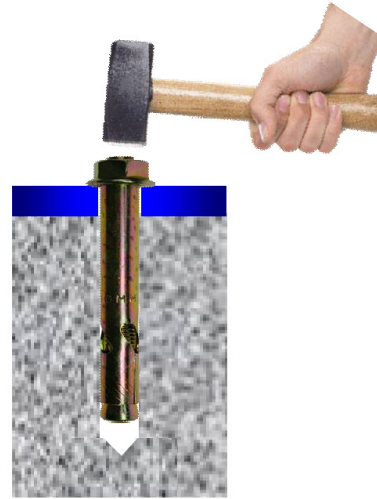
INSTALLATION INSTRUCTIONS



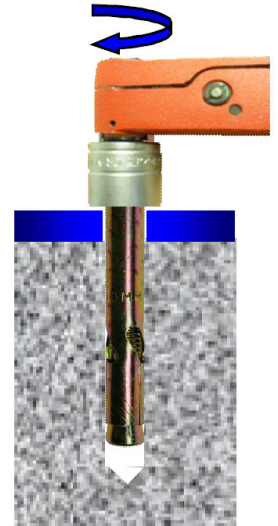
-Position fixture and drill correct diameter hole to corresponding depth



-Clean hole by blowing to remove drilling debris and dust



-Insert assembled anchor through fixture into base material



-Tighten with torque wrench to recommended torque

Non-Cracked concrete

Performance Data (20/25 Concrete)									
Outside Diam mm	Characteristic Resistance kN		Design Resistance kN		Recommended kN		Design Spacing mm	Design Edge Distance mm	
	Tensile	Shear	Tensile	Shear	Tensile	Shear	Tensile & Shear	Tensile	Shear
8	6.6	4	3.6	3.1	2.5	2.2	55	45	40
10	10.2	8.3	5.6	5.5	4	3.9	100	70	60
12	12.6	12.7	6.9	8.4	5	6	115	80	85
16	15	15.2	8.3	10.1	5.9	7.2	130	90	100
20	17.7	17.8	9.8	11.8	7	8.4	200	100	115

Shear Loads towards a free edge are for single anchors where Spacing $\geq 3 \times$ Edge Distance
(Loads are not applicable to anchors with reduced embedment depth)



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Solid Brickwork

Performance Data (20 N/mm ²)										
Outside Diam	Characteristic Resistance		Design Resistance		Recommended		Design Spacing	Design Edge Distance		Tightening Torque
mm	kN		kN		kN		mm	mm		Nm
	Tensile	Shear	Tensile	Shear	Tensile	Shear	Tensile & Shear	Tensile	Shear	
8	2.3	3.6	1.1	2.4	0.8	1.7	90	45	60	8
10	3.1	7.4	1.5	4.9	1.1	3.5	110	55	70	16
12	4.4	11.4	2.1	7.6	1.5	5.4	Only 1 fixing per brick is recommended			
16	6.3	13.6	3	9	2.2	6.4				
20	7.3	16	3.5	10.6	2.5	7.5				

(Loads are not applicable to anchors with reduced embedment depth)

Solid Concrete Blocks

Performance Data (7 N/mm ²)										
Outside Diam	Characteristic Resistance		Design Resistance		Recommended		Design Spacing	Design Edge Distance		Tightening Torque
mm	kN		kN		kN		mm	mm		Nm
	Tensile	Shear	Tensile	Shear	Tensile	Shear	Tensile & Shear	Tensile	Shear	
8	1.5	2.1	0.7	1.4	0.5	1.0	90	45	60	6
10	2.3	4.4	1.1	2.9	0.8	2.0	110	55	70	12
12	2.9	6.7	1.4	4.4	1.0	3.1	120	60	80	20
16	4.0	8.0	1.9	5.3	1.4	3.7	140	70	95	30
20	5.6	9.4	2.6	6.2	1.9	4.4	150	75	100	40

(Loads are not applicable to anchors with reduced embedment depth)

Due to the variable nature of bricks and concrete blocks these figures are for guidance only