Throughbolt AWA

Specification

ETA 08/0169

Option 7 Non-Cracked Concrete

Product Information

A zinc plated (min 5µm), torque controlled through fixing suitable for use in non-cracked concrete range between C20/25 & C50/60.

Features

Through Fixing
Medium to heavy duty loads
Torque controlled expansion
Supplied pre-assembled for rapid installation

Range Data

				Standard Embedment			Reduced Embedment		
Part Number	Anchor Diam & Length	Hole Diam	Fixture Clearance Hole	Maximum Fixture Thickness	Minimum Embedment Depth	Minimum Hole Depth	Maximum Fixture Thickness	Minimum Embedment Depth	Minimum Hole Depth
mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
AWA06060	6x60	6	7	2	50	55	21*		35
AWA06080	6x80			22			41*		
AWA08050	8x50	8	9	-	60	65	5*		40
AWA08065	8x65			-			8	47	50
AWA08075	8x75			5			18		
AWA08090	8x90			20			33		
AWA08100	8x100			30			43		
AWA08115	8x115			45			58		
AWA08130	8x130			60			73		
AWA10065	10x65	10	12	-	67	75	3*		50
AWA10075	10x75			-			8	54	60
AWA10090	10x90			10			23		
AWA10100	10x100			20			33		
AWA10120	10x120			40			53		
AWA10150	10x150			70			83		
AWA12080	12x80	12	14	-	77	85	3	62	70
AWA12090	12x90			-			13		
AWA12100	12x100			8			23		
AWA12110	12x110			18			33		
AWA12120	12x120			28			43		
AWA12140	12x140			48			63		
AWA12160	12x160			68			83		
AWA12180	12x180			88			103		
AWA16105	16x105	16	18	-	91	110	3*	84	90
AWA16125	16x125			3			23*		
AWA16145	16x145			23			43*		
AWA16170	16x170			48			68*		
AWA16220	16x220			98			118*		
AWA20130	20x130	20	22	-	125	135	23*	105	105
AWA20170	20x170			23			63*		
AWA20215	20x215			68			108*		
AWA24180	24x180	24	26	4*	150	160	49*	115	115
AWA24260	24x260			84*			129*		

* Not part of ETA

Throughbolt AWA

Standard Embedment

Performance Data (20/25 Non-Cracked Concrete)											
Thread Diam	Minimum Structure Thickness	Characteristic Resistance		Design Resistance		Recommended Resistance		Design Spacing	Design Edge Distance		Tight. Torque
mm	mm	kN		kN		kN		mm	mm		Nm
		Tensile	Shear	Tensile	Shear	Tensile	Shear	Tensile & Shear	Tensile	Shear	
6	100	7.7	5.1	5.5	4.0	3.9	2.8	50	50	50	7
8	100	12.0	9.3	7.9	7.4	5.6	5.3	65	65	75	20
10	110	16.0	14.7	8.8	11.7	6.3	8.3	120	80	115	35
12	130	25.0	20.6	13.8	16.4	9.8	11.7	230	120	145	60
16	168	35.0	38.4	19.4	30.7	13.8	21.9	270	150	240	120
20	206	50.0	56.3	27.7	45.0	19.8	32.1	370	195	310	240
24	To be confirmed when product available										

Shear Loads towards a free edge are for single anchors where Spacing ≥ 3 x Edge Distance

Reduced Embedment

Performance Data (20/25 Non-Cracked Concrete)											
Thread Diam	Minimum Structure Thickness	Characteristic Resistance		Design Resistance		Recommended Resistance		Design Spacing	Design Edge Distance		Tight. Torque
mm	mm	kN		kN		kN		mm	mm		Nm
		Tensile	Shear	Tensile	Shear	Tensile	Shear	Tensile & Shear	Tensile	Shear	
8(1)	100	9.0	10.4	5.9	6.9	4.2	4.9	75	65	75	20
10	100	13.7	13.7	7.6	9.1	5.4	6.5	125	85	95	35
12	110	17.8	20.6	9.9	16.4	7.0	7.0	150	95	165	60
16	130	21.6	38.4	11.9	30.7	8.5	21.9	170	110	290	120
20	135	26.4	52.9	14.6	35.2	10.5	25.1	195	135	320	240

Shear Loads towards a free edge are for single anchors where Spacing ≥ 3 x Edge Distance

(1) use restricted to anchorages of indeterminate structural components

For variations in structure thickness, reduced spacing and edge calculations download the free Anchor Calculation Program from www.jcpfixings.co.uk

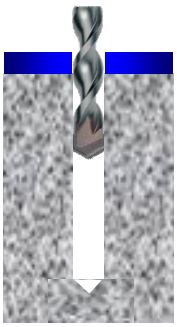
JCP Construction Products, Unit 14 Teddington Business Park, Station Rd, Teddington, Middlesex TW11 9BQ

Tel:- 020 8943 1800 Web:- www.jcpfixings.co.uk

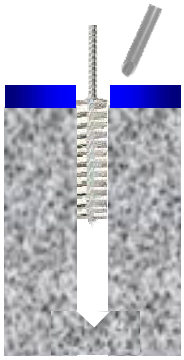
Influence of concrete strength

Concrete strength		C20/25	C25/30	C30/37	C40/50	C45/55	C50/60
Cylinder	N/mm^2	20	25	30	40	45	50
Cube	N/mm^2	25	30	37	50	55	60
Factor		1.0	1.1	1.22	1.41	1.48	1.55

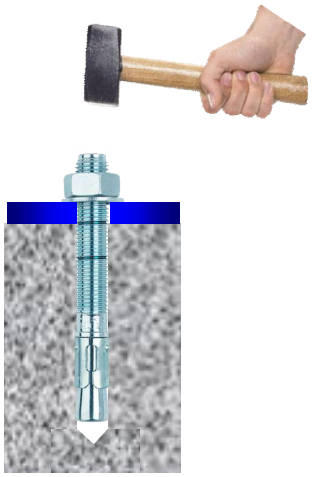
Installation Instructions



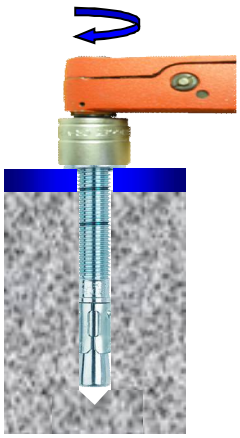
Position fixture and drill correct diameter hole to correct depth



Clean hole by brushing and blowing to remove all dust and drilling debris



Insert assembled anchor through fixture into concrete



Tighten with torque wrench to recommended torque