



Product Information

The Epoxy Acrylate 2 Part Injection Resin is suitable for use in solid concrete, solid brickwork and natural stone as well as hollow base material using suitable sleeves. It can be used for installing studs, rebar and Internal Threaded Sockets in both wet and dry conditions.

Features

- 1 Expansion free
- 2 High Loads
- 3 Close Spacing and Edge Distance
- 4 Suitable for use in wet and dry conditions

Installation Data

Thread Diameter mm	Drill Hole Diameter mm	Hole Depth mm	Maximum Fixture Thickness mm	Fixture Clearance Hole mm	Minimum Structure Thickness mm	Tightening Torque mm
8	10	80	18	10	100	7
10	12	90	25	12	120	11
12	14	110	34	14	140	25
16	18	125	45	18	160	50
20	25	170	55	22	220	115
24	28	210	55	26	260	140

Setting Times

Base Material Temp °C	Gel Time Mins	Load Time Mins
0	25	90
5	14	70
10	11	50
15	7	35
20	6	32
25	3	30

Recommended Loads for Brick and Block

Thread Diameter mm	Brick		Block	
	20 N/mm ² Solid Brick		7 N/mm ² Solid Block	
	Rec Load kN	Rec Torque Nm	Rec Load kN	Rec Torque Nm
8	1.5	4	0.9	3
10	3.0	7	1.4	6
12	4.2	11	2.5	10
16	5.1	25	4.0	23

Resin Fixing per Cartridge

Thread Diameter mm	Hole Diameter mm	Hole Depth mm	380 mm
8	10	80	110
10	12	90	60
12	14	110	40
16	18	125	20
20	25	170	9
24	28	210	5

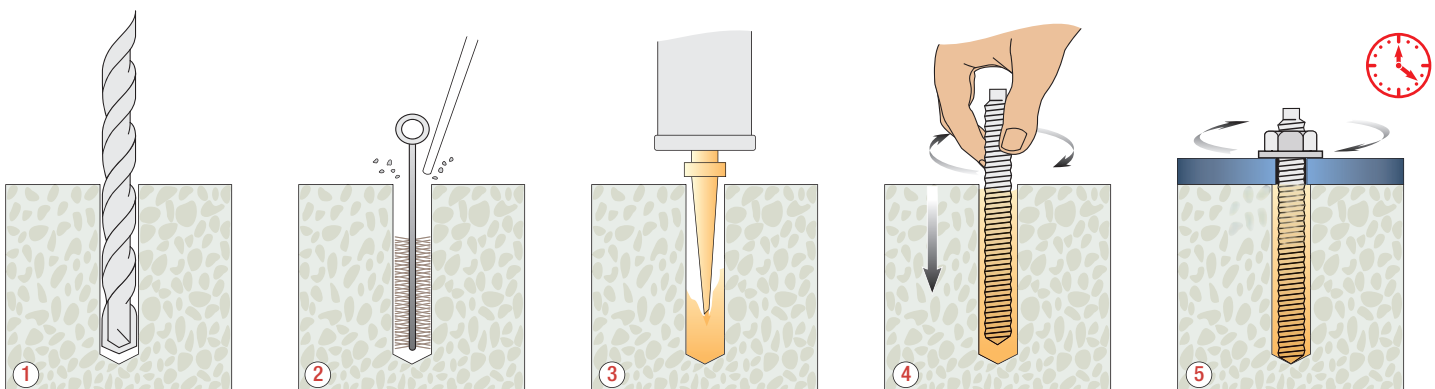
Loads are for any direction

Maintain Spacing as per Concrete Loads but only 1 fixing per brick is recommended

Do not fix closer than 1 brick away from a free edge

Due to the variable nature of Brickwork and Blockwork these figures are for guidance only. For critical applications a site test is recommended

Installation Instructions Solid Materials



1 Drill correct diameter hole to correct depth

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

3 Attach nozzle following instructions on tube

4 Insert stud rotating by hand to ensure an even distribution of the resin

5 Allow to cure. Attach fixture and tighten to Recommended Torque

Performance Data (20/25 Concrete)									
Thread Diameter mm	Characteristic Resistance kN		Design Resistance kN		Recommended Load kN		Spacing mm	Edge Distance mm	
	Tensile	Shear	Tensile	Shear	Tensile	Shear		Tensile & Shear	Tensile
8	22.2	9.0	10.2	7.2	7.3	5.1	100	80	90
10	36.6	14.0	18.1	11.2	13.0	8.0	130	90	125
12	50.5	21.0	24.7	16.8	17.7	12.0	150	110	160
16	79.0	39.0	38.8	31.2	27.8	22.3	170	130	270
20	101.3	61.0	49.7	48.8	35.5	34.9	210	150	300
24	136.6	88.0	64.3	70.4	46.0	50.3	240	190	360

Shear Loads towards a free edge are for single anchors where Spacing $\geq 3 \times$ Edge Distance

Loads are for JCP Grade 5.8 Studs and Grade 70 Stainless Steel Studs *M8, M20 & M24 Studs are not part of ETA

Reduced Design Resistance (kN) • Divide Loads by 1.4 for Approved Loads

Edge mm	Edge Distance (C20/25 Concrete) for single anchors												Spacing (C20/25 Concrete)						
	Tensile Resistance						Shear Resistance						Spacing mm	Tensile Resistance per Pair of Anchors					
	M8	M10	M12	M16	M20	M24	M8	M10	M12	M16	M20	M24		M8	M10	M12	M16	M20	M24
40	6.6												40	14.3					
45	7.1	11.8											45	14.8	24.4				
50	7.5	12.5					4.0						50	15.3	25.1				
55	8.0	13.2	16.1				4.4						55	15.8	25.8	33.8			
60	8.4	13.9	16.8				4.8						60	16.3	26.5	34.6			
65	8.9	14.6	17.6	25.2			5.2	5.8					65	16.8	27.2	35.4	53.6		
70	9.3	15.3	18.4	26.3	33.3		5.6	6.3					70	17.3	27.8	36.2	54.8		
80	10.2	16.7	20.0	28.4	35.4		6.4	7.2	8.4				80	18.4	29.2	37.9	57.1		
90		18.1	21.6	30.4	37.4	40.6	7.2	8.1	9.5				90	19.4	30.6	39.5	59.3	71.0	
100			23.1	32.5	40.5	43.0		9.0	10.5				100	20.4	32.0	41.2	61.6	73.4	
110			24.7	34.6	41.5	45.3		9.9	11.6				110		33.4	42.8	63.9	75.7	
125				37.8	45.6	48.9		11.2	13.1	14.4			120		34.8	44.5	66.2	78.1	96.5
130				38.8	47.7	50.1			13.7	15.0			130		36.2	46.1	68.5	80.5	99.1
150					49.7	54.8			15.8	17.3	24.4		140			47.8	70.8	82.8	101.8
160						57.2			16.8	18.5	26.0		150			49.4	73.0	85.2	104.5
170						59.6				19.6	27.7		160				75.3	87.6	107.2
190						64.3				22.0	30.9	37.2	170				77.6	89.9	109.8
210										24.3	34.2	41.1	180					92.3	112.5
230										26.6	37.4	45.0	190					94.7	115.2
270										31.2	43.9	52.8	210					99.4	120.6
300											48.8	58.7	220						123.2
330												64.5	230						125.9
360												70.4	240						128.6

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		1.00	1.10	1.22	1.41	1.48	1.55

When using concrete factors check all other information to ensure Steel Strength and Pull out Resistance is not exceeded

Steel Design Resistance for single anchor

		M8	M10	M12	M16	M20	M24	
Tension	kN	12.0	19.3	28.0	52.0	82.0	118.0	Grade 5.8
	kN	13.9	21.4	31.5	58.8	92.0	132.0	Stainless Steel Grade 70
Shear	kN	7.2	11.2	16.8	31.2	48.8	70.4	Grade 5.8
	kN	8.3	12.8	18.5	35.2	55.1	79.4	Stainless Steel Grade 70

Anchor Mechanical Properties

		M8	M10	M12	M16	M20	M24	
Nominal Tensile Strength	N/mm ²	500	500	500	500	500	500	Zinc plated & H.D.G
		700	700	700	700	700	700	Stainless Steel Grade 70
Yield Strength	N/mm ²	400	400	400	400	400	400	Zinc plated & H.D.G
		450	450	450	450	450	450	Stainless Steel Grade 70
Nut A/F	mm	13	17	19	24	30	36	
Washer Diameter	mm	16	21	24	30	37	44	