



Data Sheet and Declaration of Performance (DoP)

Twistfix Polyester Injection Resin - Styrene Free with ETA Approval and CE

Description

Twistfix PE is a high performance, Fast curing two-part resin anchoring System based on Polyester Resin
Pre-packed in a 10:1 ratio cartridge for ease of use.

Applications

Suitable for use in concrete, brickwork and stone
Suitable for fixing wall ties, starter bars, studs & bolts
Suitable for close edge fixings
Chemically resistant, Waterproof & vibration proof.
Crack and gap filling repairs. Damp and wet holes.

How to use

Unscrew the cap from the cartridge and screw on the static mixer nozzle. Fit the cartridge into the applicator gun and gradually apply pressure to the trigger until the material exudes from the end of the nozzle. You should always waste the first 10cm or so of resin until you get an even colour. Insert the nozzle into the hole & gun the material out, removing the nozzle slowly as the hole fills up. Once sufficient resin is in the hole, release the pressure from the gun and place the stud to be fixed into the hole with a twisting action to ensure full contact between hole, resin & stud. Allow resin to cure fully before loading. Please see label on cartridge for full installation instructions.

Specification Data

Performance data at standard embedment depth in C25n/mm² concrete using grade 8.8 steel
Safety factor of 2 for Rec Load KN. Non cracked concrete.

Stud size	Hole size (mm)	Hole depth (mm)	Failure load (kn)	Rec Load (kn)	Rec Shear (kn)	Edge (mm)	Space (mm)
M8	10	80	19	9.5	5	80	160
M10	12	90	26.2	13.1	8.5	90	200
M12	14	110	36.2	18.1	12	110	240
M16	18	125	52.1	26.05	22	125	320
M20	22	170	82.2	41.1	34.8	170	400
M24	28	210	102.9	51.45	50.2	280	520
M30	35	280	142.5	71.25	81.4	280	520

Performance data at standard embedment depth in C25n/mm² concrete using Re-bar bst500 to DIN488. Safety factor of 2 for Rec. Load KN. Non cracked concrete.

Re-bar size	Hole size mm	Hole Depth mm	Failure load KN	Rec. Load KN	Rec Shear KN	Edge mm	Space mm
8	10	80	17	8.5	7	80	160
10	12	90	23	11.5	12	90	200
12	14	110	31	15.5	16	110	240
16	18	125	43	21.5	31	125	320
20	22	170	60	30	48	170	400
25	28	210	81	40.5	64	210	470
32	35	320	135	67.5	114	280	520

Gel & cure times

Temp. Degrees C	Gel Time (Mins)	Min. Load Time (Mins)
30	3 – 5	25
20	5 – 7	45
10	12 – 15	80
5	20 – 25	120
-5	40 – 45	200
-10	50 - 55	260

Resin temperature must be at least 20 degrees c for -5 and lower.
Load time for wet concrete is x2.

Pack Sizes

400ml, 300ml Cartridge.

Storage Life

At least twelve month from date of manufacture if stored between 5-20 deg. C in manufactures unopened cartridges.

Reduction Factors for Edge Spacing Distances

The full characteristic edge and spacing distances shown in the table above are the minimum allowable for the quoted information. Where these dimensions are not achievable then the appropriate reduction factor / factors from the following tables must be applied.

Edge Distance in Concrete

Tensile Edge Reduction Factors							Shear Edge Reduction Factors					
Edge mm.	M8	M10	M12	M16	M20	M24	M8	M10	M12	M16	M20	M24
50	0.77						0.50					
60	0.85	0.80					0.60	0.50				
70	0.92	0.87	0.78				0.70	0.58	0.50			
80	1.00	0.93	0.84				0.80	0.66	0.57			
90		1.00	0.89	0.82			0.90	0.75	0.64	0.56		
100			0.95	0.86	0.80		1.00	0.83	0.71	0.62	0.54	
110			1.00	0.91	0.84	0.77		0.92	0.78	0.69	0.61	0.50
130				1.00	0.92	0.83		1.00	0.92	0.81	0.69	0.59
150					1.00	0.90			1.00	0.94	0.81	0.68
170						0.97				1.00	0.94	0.77
190						1.00					1.00	0.86
210												0.95
240												1.00

Spacing in Concrete

Tensile & Shear Reduction Factors						
Spacing (mm)	M8	M10	M12	M16	M20	M24
50	0.80					
60	0.84	0.80				
70	0.88	0.83	0.80			
80	0.92	0.87	0.83			
90	0.96	0.91	0.86	0.81		
100	1.00	0.93	0.88	0.84	0.80	

110		0.97	0.91	0.87	0.82	0.79
130		1.00	0.96	0.91	0.86	0.82
150			1.00	0.95	0.90	0.85
170				1.00	0.94	0.88
190					0.98	0.92
210					1.00	0.95
240						1.00

Important

Whilst every effort is made to ensure that the information given in this data sheet is reliable, no warranty as to the fitness or suitability of the products is given or implied.

We advise customers in their own interests to ensure that this data sheet has not been superceded by a more up to date publication and to determine the suitability of use themselves.

All products are sold subject to our standard conditions of sale which are available on request.

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