Data Sheet and Declaration of Performance (DoP)

Zetacartridge No.4 Epoxy Acrylate Styrene Free with ETA Approval and CE

Description

Zetacartridge No 4 is a high performance, Fast curing two-part resin anchor system based on a modified Epoxy acrylate styrene free 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 & 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 25n/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	7	80	160
M10	14	90	30.2	15.1	12	90	200
M12	14	110	43.1	21.55	16	110	240
M16	18	125	62.4	31.2	31	125	320
M20	22	140	96.1	48.05	48	140	400
M24	28	170	122	61	70	170	480
M30	35	280	167.5	83.75	114	280	520

Performance data at standard embedment depth in 25N/mm2 concrete using Rebar BSt500 to DIN488. Safety factor of 2 for Rec. Load KN. None cracked concrete.

Stud size	Hole size (mm)	Hole depth (mm)	Failure load (KN)	Rec. Load (KN)	Rec. Shear (KN)	Edge (mm)	Space (mm)
8	10	80	20.6	10.3	7	80	160
10	12	90	27.9	13.95	12	90	200
12	14	110	36	18	16	110	240
16	18	125	50.6	25.3	31	125	320
20	22	170	69	34.5	48	170	400
25	28	210	94	47	64	210	480
32	35	280	182	91	114	320	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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