Declaration of Performance

Chemfix PE (**Bonded anchor)**

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Intended use or uses of the construction product according to ETAG 029 Edition April 2013	
Generic type	Injection anchor for use in Masonry
Base material	Solid masonry (use category b) or hollow or perforated masonry (use category c) according to Annex B9. The mortar strength class of the masonry has to be M 2,5 according to EN 998-2:2010 at minimum. Dimensions [mm]: 120 x 250 x 60 fb class ≥ 18 N/mm2 density ρm ≥ 1666,7 kg/m3 (e.g. type "Mattone Pieno") Dimensions [mm]: 200 x 560 x 274 fb class ≥ 11,5 N/mm2 density ρm ≥ 600 kg/m3 (e.g. type "French brick") (e.g. type "French br)
Material	Threaded rods made of zinc coated steel Threaded rod M8 – M12 Strength class 4.6, 5.8, 6.8 EN ISO 898-1 Steel galvanized ≥ 5µm EN ISO 4042 Hot dipped galvanized ≥ 45µm EN ISO 10684 Washer ISO 7089 Steel galvanized EN ISO 4042; hot dipped galvanized EN ISO 10684 Nut EN ISO 4032 Strength class 8 EN ISO 898-2 Steel galvanized ≥ 5µm EN ISO 4042 Hot dipped galvanized ≥ 45µm EN ISO 10684 Threaded rods made of stainless steel Threaded rod M8 – M12 Strength class A4-70 and A4-80 EN ISO 3506-1; Washer ISO 7089 Strength class A4-70 and A4-80 EN ISO 3506-1; Nut EN ISO 4032 Strength class A4-70 and A4-80 EN ISO 3506-1; Perforated sleeve Polyethylene 16 X 85
Durability	internal dry conditions
Loading	Static and quasi static in solid/hollow/perforated masonry
Service temperature range	*The anchor may be used in the following service temperature range:* *a) -40°C to +40°C (max. short term temperature +40°C and max. long term temperature +24°C),* *b) -40°C to +80°C (max short term temperature + 80 °C and max long term temperature + 50 °C).*
Use category	in structures subject to dry, internal conditions – category w/d (use)
Fire Resistance	N/A
Fire Reaction	N/A
ETA - 16/0907 issued by	ETA DANMARK
On the basis of	ETAG 029 Edition April 2013
Certificate of Conformity issued by	ZAG
Under System	1

Table B1 Installation data for solid masonry (brick n°1)*

Size		M8	M10	M12
Nominal drilling diameter	d_0 [mm]	10	12	14
Maximum diameter hole in the fixture	d_{fix} [mm]	9	12	14
Embedment depth	h_{ef} [mm]	85	85	85
Depth of the drilling hole	h_1 [mm]	h_{ef} + 5 mm		
Torque moment	T_{inst} [Nm]	2	2	2
Thickness to be fixed	$t_{fix,min}$ [mm]	> 0		
	$t_{fix,max}$ [mm]	< 1500		
Minimum spacing	S_{min} [mm]	255	255	255
Minimum edge distance	C_{min} [mm]	127,5	127,5	127,5

* Type of bricks are detailed in the Annex B9

Table B2: Installation data for hollow/perforated masonry (brick n° 2)*

Size		M8	M10	M12
Plastic sleeve		**16x85**		
Nominal drilling diameter	d_0 [mm]	16	16	16
Maximum diameter hole in the fixture	d_{fix} [mm]	9	12	14
Embedment depth	h_{ef} [mm]	85	85	85
Depth of the drilling hole	h_1 [mm]	h_{ef} + 5 mm		
Torque moment	T_{inst} [Nm]	2	2	2
Thickness to be fixed	$t_{fix,min}$ [mm]	> 0		
	$t_{fix,max}$ [mm]	< 1500		
Minimum spacing	$S_{min,\parallel}$ [mm]	560	560	560
	$S_{min,\perp}$ [mm]	200	200	200
Minimum edge distance	C_{min} [mm]	100	100	100

* Type of bricks are detailed in the Annex B9

Table B3: Brush diameter

			Use in solid masonry			Use in hollow/perforated masonry		
Type of threaded rod			**M8**	**M10**	**M12**	**M8**	**M10**	**M12**
d_0	Nominal drill hole	[mm]	10	12	14	16	16	16
d_b	Brush diameter	[mm]	10	13	13	18	18	18

Table C1: Essential Characteristics

ESSENTIAL CHARACTERISTICS		PERFORMANCE		
Installation parameters		**M8**	**M10**	**M12**
d [mm]		8	10	12
d_0 [mm] category b (solid masonry)		10	12	14
d_0 [mm] category c (hollow or perforated masonry)		16	16	16
Type of plastic sleeve for use in category c		16x85	16x85	16x85
d_{fix} [mm]		9	12	14
h_1 [mm]		h_{ef} + 5 mm		
t_{fix} [mm]	Min	> 0		
	Max	≤ 1500 mm		
T_{inst} [Nm] category b (solid masonry)		2	2	2
T_{inst} [Nm] category c (hollow or perforated masonry)		2	2	2
S_{min} [mm] category b (solid masonry)		255	255	255
C_{min} [mm] category b (solid masonry)		127,5	127,5	127,5
S_{min} [mm] category c (hollow masonry) $S_{min,\parallel}$		560	560	560
S_{min} [mm] category c (hollow) $S_{min,\perp}$		200	200	200
C_{min} [mm] category c (hollow masonry)		100	100	100
*** Resistance for tensile and shear load Temperature range -40°C/+40°C (T_{mlp} = 24°C)**		**M8**	**M10**	**M12**
Brick n°1 (solid)	N_{Rk} [kN]	2,5		
	V_{Rk} [kN]	6,0		
Brick n°2 (hollow)	N_{Rk} [kN]	0,75		
	V_{Rk} [kN]		3,5	
*** Resistance for tensile and shear load Temperature range -40°C to +80°C (T_{mlp} = 50°C)**		**M8**	**M10**	**M12**
Brick n°1 (solid)	N_{Rk} [kN]	2,0		
	V_{Rk} [kN]	6,0		
Brick n°2 (hollow)	N_{Rk} [kN]	0,6		
	V_{Rk} [kN]	3,5		

* For design according to ETAG 029 Annex C: $N_{Rk} = N_{Rk,p} = N_{Rk,b} = N_{Rk,pb}$ – steel failure is not decisive
* For design according to ETAG 029: $V_{Rk} = V_{Rk,b}$ – steel failure without lever arm is not decisive – $V_{Rk,c}$ according to ETAG 029 Annex C section C.5.2.2.5

The performances of the product identified by the above identification code are in conformity with the declared performance. This declaration of performance is issued under the sole responsibility of Chemfix Products Ltd.

Signed for and behalf of the manufacturer by:

Name and functions	Place and date of issue	Signature
URS JOOS - COMMERCIAL AND MARKETING DIRECTOR	DEWSBURY 27.01.2017