

Declaration of Performance - 1488-CPD-0195/W

Chemfix PESF (**Bonded anchor**)

Chemfix Products Ltd

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Intended use or uses of the construction product according to ETAG 029	
Generic type	Injection anchor for use in Masonry
Base material	Perforated ceramic blocks (LD) type HLz, 12/09 N+F, classe ≥ 15 (tested $f_b \geq 18 \text{ N/mm}^2$) density $q_m \geq 900 \text{ kg/m}^3$ EN 771-1
Material	<u>Anchor rod</u> Carbon steel class 5.8, EN ISO 898-1, zinc plated $\geq 5 \mu\text{m}$, EN ISO 4042 <u>Washer</u> Carbon steel, zinc plated $\geq 5 \mu\text{m}$, EN ISO 4042 <u>Hexagonal nut</u> Carbon steel class 5, EN 20898-2, zinc plated $\geq 5 \mu\text{m}$, EN ISO 4042 <u>Perforated sleeve</u> Polyethylene 16 X 85
Durability	internal dry conditions
Loading	Static and quasi static in perforated masonry
Service temperature range	<i>The anchor may be used in the following service temperature range: -40°C to $+80^\circ\text{C}$(max long term temperature $+50^\circ\text{C}$ and max short term temperature $+80^\circ\text{C}$).and max short term temperature $+80^\circ\text{C}$)</i>
Use category	in wet substrate (installation), in structures subject to dry, internal conditions – category w/d (use)
Fire Resistance	N/A
Fire Reaction	N/A
ETA - 11/0032 issued by	ITB POLAND
On the basis of	ETAG 029
Certificate of Conformity 1488-CPD-0195/W issued by	ITB POLAND
Under System	1

Declared performances according to ETAG 029			
Essential Characteristics			Performance
			M10
Installation parameters			
d	Diameter of anchor bolt or thread diameter	[mm]	10
d ₀	Nominal diameter of drill bit	[mm]	16
d _{fix}	Diameter of clearance hole in the fixture	[mm]	-
h _{eff}	Minimum effective anchorage depth	[mm]	85
	Maximum effective anchorage depth	[mm]	85
h ₁	Depth of the drilling hole	[mm]	90
h _{min}	Minimum thickness of the concrete member	[mm]	-
T _{inst}	Nominal torque moment	[Nm]	-
t _{fix}	Thickness to be fixed	[mm]	-
S _{min}	Minimum spacing	[mm]	S _{min} ≥ 100
for c ≥	Edge distance	[mm]	-
C _{min}	Minimum edge distance	[mm]	C _{min} ≥ 100
for s ≥	Anchor spacing	[mm]	-

Table C1: Characteristic tension load and shear load values

Brick parameters: Density q [kg/m ³] Compressive strength f _b [N/mm ²]	Sleeve	Anchor size	Effective anchorage depth h _{ef} [mm]	Characteristic resistance N _{Rk} [kN] ¹⁾	Characteristic resistance V _{Rk} [kN] ^{2), 3)}
q ≥ 900	16 x 85	M10	85	3,0	1,25
f _b ≥ 12					
Partial safety factor $\gamma_M = 2,5$ ⁴⁾					

¹⁾ For design according to ETAG 029, Annex C

$$N_{Rk} = N_{Rk,p} = N_{Rk,b} = N_{R,pb} = N_{Rk,s}$$

²⁾ For design according to ETAG 029, Annex C

$$V_{Rk} = V_{Rk,b} = V_{Rk,c} = V_{Rk,s}$$

³⁾ V_{Rk} calculated according to ETAG 029 (Edition April 2013), Annex C, Section C.5.2.2.5

⁴⁾ In absence of other national regulations

Table C2: Characteristic bending moment

Characteristic bending moment	M _{Rk,s} [Nm]	37,38
Partial safety factor	γ _{Ms}	1,25 ¹⁾

¹⁾ if no other national regulations exist

Table C3: Displacements under tension and shear load

N [kN]	δ_{N0} [mm]	$\delta_{N_{ult}}$ [mm]	V [kN]	δ_{V0} [mm]	$\delta_{V_{ult}}$ [mm]
1,3	0,09	0,15	2,5	0,8	2,5

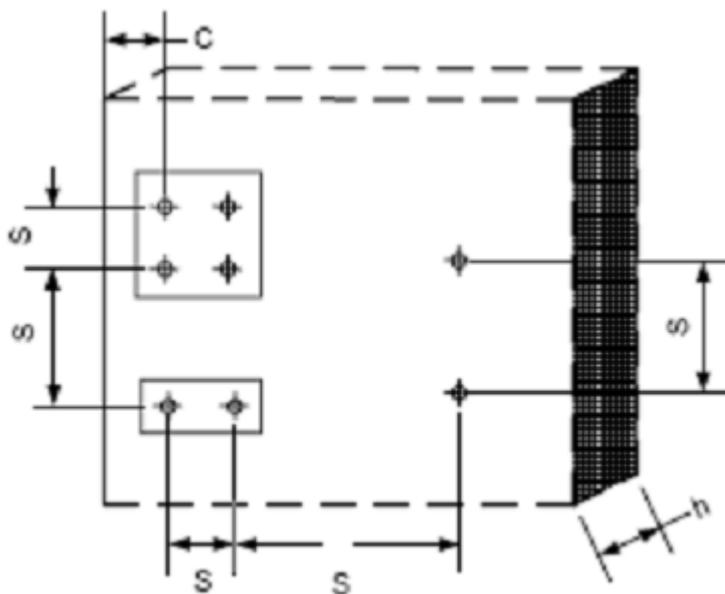
Table C4: β -factor for job site tests according to ETAG 029, Annex B

Temperature	β -factor
-40°C to 80°C	$0,95 \times 0,91 = 0,86$

Table C5: Edge distances and spacings

Size $d_{nom} + \Phi d \times L$ [mm]	s_{cr} [mm]	s_{min} [mm]	c_{min} [mm]
10 + $\Phi 16 \times 85$	$l_{unit, max}$	$l_{unit, max}$	≥ 100

$l_{unit, max}$ – maximal length of masonry unit



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 MANAGING DIRECTOR	DEWSBURY 28.06.13	