

## Declaration of Performance - 1404-CPR-2586 Chemfix PESF (**Bonded anchor**)

Chemfix Products Ltd Mill Street East, Dewsbury, West Yorkshire, WF12 9BQ, UK

Intended use or uses of the construction product according to ETAG 029 Edition April 2013				
Generic type	type Injection anchor for use in Masonry			
Base material	Perforated ceramic blocks (LD) type HLz, 12/09 N+F, classe $\ge$ 15 (tested f <sub>b</sub> $\ge$ 18 N/mm <sup>2</sup> ) density q <sub>m</sub> $\ge$ 900 kg/m <sup>3</sup> EN 771-1			
Material	Anchor rod Carbon steel class 5.8, EN ISO 898-1, zinc plated ≥ 5 μm, EN ISO 4042 <u>Washer</u> Carbon steel, zinc plated ≥ 5 μm, EN ISO 4042 <u>Hexagonal nut</u> Carbon steel class 5, EN 20898-2, zinc plated ≥ 5 μm, 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	The anchor may be used in the following service temperature range: -40°C to +80°C(max long term temperature +50°C and max short term temperature +80°C).and max short term temperature +80°C)			
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 Edition April 2013			
Certificate of Conformity1488-CPD-0195/W issued by	ITB POLAND			
Under System	1			

Declared perf	formances according to ETAG 029		
Essential Chai	sential Characteristics		Performance
			M10
nstallation pa			
ł	Diameter of anchor bolt or thread diameter	[mm]	10
o	Nominal diameter of drill bit	[mm]	16
l <sub>fix</sub>	Diameter of clearance hole in the fixture	[mm]	-
0 <sub>eff</sub>	Minimum effective anchorage depth	[mm]	85
·en	Maximum effective anchorage depth	[mm]	85
۱ <sub>1</sub>	Depth of the drilling hole	[mm]	90
າ <sub>min</sub>	Minimum thickness of the concrete member	[mm]	-
inst	Nominal torque moment	[Nm]	-
fix	Thickness to be fixed	[mm]	-
min	Minimum spacing	[mm]	S <sub>min</sub> ≥ 100
for c $\geq$	Edge distance	[mm]	-
min	Minimum edge distance	[mm]	C <sub>min</sub> ≥ 100
for s $\geq$	Anchor spacing	[mm]	-
Pull-out failur	re mode		
	Characteristic bond resistance in un-cracked concrete class C20/25 temperature range a)	[MPa]	-
Rk,ucr	Characteristic bond resistance in un-cracked concrete class C20/25 temperature range b)	[MPa]	-
	Characteristic bond resistance in cracked concrete class C20/25 temperature range a)	[MPa]	-
TRk, cr	Characteristic bond resistance in cracked concrete class C20/25 temperature range b)	[MPa]	-
2	Partial safety factor	[-]	-
2 ν <sub>c,ucr</sub> C30/37	Increasing factor for un-cracked concrete C30/37	[-]	-
ν <sub>c,ucr</sub> C40/50	Increasing factor for un-cracked concrete C40/50	[-]	
μ <sub>c,ucr</sub> C50/60	Increasing factor for un-cracked concrete C50/60	[-]	
μ <sub>c,cr</sub> C30/37	Increasing factor for cracked concrete C30/37	[-]	
ν <sub>c,cr</sub> C40/50	Increasing factor for cracked concrete C40/50	[-]	-
	Increasing factor for cracked concrete C50/60	[-]	-
	r splitting failure	[]	-
		[mm]	
cr,sp	Critical spacing (splitting)	[mm]	-
cr,sp	Critical edge distance(splitting)	[mm]	-
	Displacement on Te	1	
cr	Service value of the bond stress in cracked concrete temp range a)	[kN]	-
0,cr	Short term displacement under tension load	[mm]	-
∞,cr	Long term displacement under tension load	[mm]	-
ucr	Service value of the bond stress in un-cracked concrete	[kN]	-
0,ucr	Short term displacement under tension load	[mm]	-
o∞,ucr	Long term displacement under tension load	[mm]	-
/ <sub>Rk,s</sub>	Shear Steel characteristic failure	[kN]	-
∕I <sup>0</sup> <sub>Rk,s</sub>	Bending Moment characteristic failure	[Nm]	-
m,sV	Partial safety factor for shear steel failure	[-]	-
	Shear Concrete Edge	failure mo	ode
	Factor for concrete edge failure	[-]	-
	Displacement on S		
/	Service shear load in concrete	[kN]	-
Vo	Short term displacement under shear load	[mm]	-
V∞	Long term displacement under shear load	[mm]	-
•	Fire Resista		
I <sub>Rk,s,fi,30</sub>	For fire resistance duration = 30 minutes	[kN]	-
Rk,s,fi,60	For fire resistance duration = 60 minutes	[kN]	-
NRK, s, fi, 90	For fire resistance duration = 90 minutes	[kN]	-
NRk,s,fi,90 NRk,s,fi,120	For fire resistance duration = 120 minutes	[kN]	

$N_{Rk,s,seis}$	Characteristic steel tension resistance under seismic action	[kN]	-			
τ <sub>Rk,seis</sub>	Characteristic bond resistance under seismic action	[kN]	-			
V <sub>Rk,s,seis</sub>	Characteristic steel shear resistance under seismic action	[kN]	-			
Displacement on Seismic Load						
$\delta_{\text{N,seis(DLS)}}$	Displacement of the anchor under tension loading at DLS	[mm]	-			
$\delta_{N,seis(ULS)}$	Displacement of the anchor under tension loading at ULS	[mm]	-			
$\delta_{V,seis(DLS)}$	Displacement of the anchor under shear loading at DLS	[mm]	-			
$\delta_{V,seis(ULS)}$	Displacement of the anchor under shear loading at ULS	[mm]	_			

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 16.09.2015	Mes-