Declaration of Performance - 1404-CPR-2586

Arc Chemical 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	Injection anchor for use in Masonry
Base material	Perforated ceramic blocks (LD) type HLz, 12/09 N+F, classe ≥ 15 (tested $f_b \geq 18$ N/mm²) density $q_m \geq 900$ kg/m³ EN 771-1
Material	Anchor rod Carbon steel class 5.8, EN ISO 898-1, zinc plated ≥ 5 µm, EN ISO 4042 Washer Carbon steel, zinc plated ≥ 5 µm, EN ISO 4042 Hexagonal nut Carbon steel class 5, EN 20898-2, zinc plated ≥ 5 µm, EN ISO 4042 Perforated sleeve 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 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]	$S_{min} \geq 100$
for c ≥	Edge distance	[mm]	-
c_{min}	Minimum edge distance	[mm]	$C_{min} \geq 100$
for s ≥	Anchor spacing	[mm]	-
Pull-out failure mode			
$\tau_{Rk,ucr}$	Characteristic bond resistance in un-cracked concrete class C20/25 temperature range a)	[MPa]	-
	Characteristic bond resistance in un-cracked concrete class C20/25 temperature range b)	[MPa]	-
$\tau_{Rk,cr}$	Characteristic bond resistance in cracked concrete class C20/25 temperature range a)	[MPa]	-
	Characteristic bond resistance in cracked concrete class C20/25 temperature range b)	[MPa]	-
γ_2	Partial safety factor	[-]	-
$\psi_{c,ucr}$ C30/37	Increasing factor for un-cracked concrete C30/37	[-]	-
$\psi_{c,ucr}$ C40/50	Increasing factor for un-cracked concrete C40/50	[-]	-
$\psi_{c,ucr}$ C50/60	Increasing factor for un-cracked concrete C50/60	[-]	-
$\psi_{c,cr}$ C30/37	Increasing factor for cracked concrete C30/37	[-]	-
$\psi_{c,cr}$ C40/50	Increasing factor for cracked concrete C40/50	[-]	-
$\psi_{c,cr}$ C50/60	Increasing factor for cracked concrete C50/60	[-]	-
Resistance for splitting failure			
$s_{cr,sp}$	Critical spacing (splitting)	[mm]	-
$c_{cr,sp}$	Critical edge distance(splitting)	[mm]	-
Displacement on Tension Load			
τ_{cr}	Service value of the bond stress in cracked concrete temp range a)	[kN]	-
$\delta_{0,cr}$	Short term displacement under tension load	[mm]	-
$\delta_{\infty,cr}$	Long term displacement under tension load	[mm]	-
τ_{ucr}	Service value of the bond stress in un-cracked concrete	[kN]	-
$\delta_{0,ucr}$	Short term displacement under tension load	[mm]	-
$\delta_{\infty,ucr}$	Long term displacement under tension load	[mm]	-
$V_{Rk,s}$	Shear Steel characteristic failure	[kN]	-
$M^0_{Rk,s}$	Bending Moment characteristic failure	[Nm]	-
$\gamma_{m,sV}$	Partial safety factor for shear steel failure	[-]	-
Shear Concrete Edge failure mode			
k	Factor for concrete edge failure	[-]	-
Displacement on Shear Load			
V	Service shear load in concrete	[kN]	-
δ_{V0}	Short term displacement under shear load	[mm]	-
$\delta_{V\infty}$	Long term displacement under shear load	[mm]	-
Fire Resistance			
$N_{Rk,s,fi,30}$	For fire resistance duration = 30 minutes	[kN]	-
$N_{Rk,s,fi,60}$	For fire resistance duration = 60 minutes	[kN]	-
$N_{Rk,s,fi,90}$	For fire resistance duration = 90 minutes	[kN]	-
$N_{Rk,s,fi,120}$	For fire resistance duration = 120 minutes	[kN]	-
Seismic Resistance – Performance Category CX			

$N_{Rk,s,seis}$	Characteristic steel tension resistance under seismic action	[kN]	-
$\tau_{Rk,seis}$	Characteristic bond resistance under seismic action	[kN]	-
$V_{Rk,s,seis}$	Characteristic steel shear resistance under seismic action	[kN]	-
Displacement on Seismic Load			
$\delta_{N,seis(DLS)}$	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	