

Declaration of Performance - 1404-CPR-2585 Chemfix PESF TOP (**Bonded anchor**)

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

Generic type	Bonded anchor for anchorage of threaded rod.				
Base material	Non-cracked M8 to M16 concrete C20/25 acc. to EN 206-1:2003				
Material	 a) Carbon galvanized steel class 5.8, 8.8 and 10.9 according to EN ISO 898-1 for dry internal conditions. b) Stainless steel 1.4401; 1.4404; 1.4578; 1.4571; 1.4439; 1.4362 according to EN 10088 according to EN 10088 for dry internal conditions, external atmospheric exposure (including industrial and marine environment) or exposure in permanently damp internal conditions if no particular aggressive conditions exist. c) High resistant corrosion stainless steel class 1.4529, 1.4565 according to EN 10088 for all conditions. 				
Durability	50 years				
Loading	static, quasi-static				
Service temperature range	The anchors may be used in the following temperature range: (a) Winter version: max short term temperature + 40 °C and max long term temperature + 24 °C; (b) Standard version: max short term temperature + 80 °C and max long term temperature + 50 °C.				
Jse category	Category 1: dry and wet concrete.				
Fire Resistance	Class A1				
Fire Reaction	Class A1				

Essential Characteristics			Performance					
			M8	M10	M12	M16		
Installation pa	arameters							
d	Diameter of anchor bolt or thread diameter	[mm]	8	10	12	16		
d ₀	Nominal diameter of drill bit	[mm]	10	12	14	18		
d _{fix}	Diameter of clearance hole in the fixture	[mm]	9	12	14	18		
L	Minimum effective anchorage depth	[mm]	60	60	70	80		
h _{eff}	Maximum effective anchorage depth	[mm]	160	200	240	320		
h ₁	Depth of the drilling hole	[mm]	80	90	110	125		
h _{min}	Minimum thickness of the concrete member	[mm]	hef + 30mm ≥ 100mm		hef + 2d	0		
T _{inst}	Nominal torque moment	[Nm]	8	10	15	25		
t _{fix}	Thickness to be fixed	[mm]						
S _{min}	Minimum spacing	[mm]	0.5 hef	0.5 hef	0.5 hef	0.5 hef		
for $c \ge$	Edge distance	[mm]						
C _{min}	Minimum edge distance	[mm]	0.5 hef	0.5 hef	0.5 hef	0.5 hef		
for s \geq	Anchor spacing	[mm]						
Pull-out failur	e mode							
	Characteristic bond resistance in un-cracked concrete class C20/25 temperature range a)	[MPa]	6.0	5.5	5.0	4.0		
τRk,ucr	Characteristic bond resistance in un-cracked concrete class C20/25 temperature range b)	[MPa]	4.5	4.0	3.5	3.0		
Ϋ2	Partial safety factor	[-]	2.1*	1.8**	1.8**	1.8**		
	Characteristic bond resistance in flooded holes concrete class C20/25 temperature range a)	[MPa]	5.0	4.0	4.0	3.5		
CRk, cr	Characteristic bond resistance in flooded holes concrete class C20/25 temperature range b)	[MPa]	3.5	3.0	3.0	3.0		
γ2	Partial safety factor	[-]	2.1*	2.1*	2.1*	2.1*		

* The partial safety factor γ inst=1.4 included

** The partial safety factor $\gamma inst=$ 1.2 included

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	Nos)			