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FASTENING SYSTEMS SYSTEMES DE FIXATION BEFESTIGUNGSSYSTEME SISTEMAS DE FIJACIÒN

DECLARATION OF PERFORMANCE According to Construction Product Regulation n° 305/2011

DoP N°1305-CPR-1015

1. Unique identification code of the product-type:

COL MIX EPOX

2. Type, batch or serial number or any other element allowing identification of the construction product as required pursuant to Article 11(4):

CODE **ITEM**

747820 BCR 5K COL MIX EPOX

747822 BCR 5K COL MIX EPOX RAL 1015 747827 BCR 7,1K COL MIX EPOX RAL 1015

3. Intended use or uses of the construction product, in accordance with the applicable harmonized technical specification, as foreseen by the manufacturer:

Two-component epoxy adhesive fluid for the repair and protection of concrete through structural bonding. SS Principle 4 Structural Strengthening by: Generic type and use

- Reinforcement plate member (bonding reinforcing plate method, 4.3);

- Bonding hardened concrete to hardened concrete and bonding to existing concrete with fresh concrete (Adding mortar or concrete, method 4.4)

4. Name, registered trade name or registered trade mark and contact address of the manufacturer as required pursuant to Article

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5. Where applicable, name and contact address of the authorized representative whose mandate covers the tasks specified in **Article 12(2):**

Not applicable

6. System or systems of assessment and verification of constancy of performance of the construction product as set out in Annex V:

System 2+

7. In case of the declaration of performance concerning a construction product covered by a harmonized standard:

ICMQ (n°1305), the notified body for the production control certification, issued the certificate of conformity 1305-CPR-1015 of the factory production control on the basis of:

(i) initial inspection of the manufacturing plant and of factory production control;

(ii) continuous surveillance, assessment and evaluation of factory production control.

8. In case of the declaration of performance concerning a construction product for which a European Technical Assessment has been issued:

Not applicable

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assorestauro Associazione italiana per il restauro architettori







Deutsche Bank S.p.A.

Sede Bergamo Via Camozzi,82

ABI 3104 CAB 11100 C/C13030



9. Declared performance:

HARMONIZED TECHNICAL SPECIFICATION: EN 1504-4:2004

PERFORMANCE FOR PLATE BONDING METHOD 4.3

ESSENTIAL CHARACTERISTICS	U.M.	PERFORMANCE	REQUIRED VALUES
Flexural modulus of elasticity EN ISO 178	MPa	> 6000	≥ 2000
Shear strength EN 12188	MPa	> 18	≥ 12
Open time EN 12189 a 20°C			
(The open time is defined as the maximum time that elapses between the completion of	minutos	> 90	Declared value ±20%
the mixing of the constituents of the product of bonding and the tightening of the joint,	minutes	7 90	Decidied value ±20%
between two parts, which allows to obtain a surface of rupture within the concrete)			
at 5°C	minutes	50	
Workability time EN ISO 9514 at 20°C	minutes	40	Declared value
at 35°C	minutes	30	
Compressive modulus of elasticity EN 13412	MPa	> 7000	≥ 2000
Glass transition temperature EN 12614	C°	62	≥ 40
Thermal expansion coefficient EN 1770	1/C°	< 50x10 ⁻⁶	≤ 100x10 ⁻⁶
Shrinkage EN 12617-1 and EN 12617-3	%	0,00	≤ 0,1
Suitability for application on vertical surfaces and soffits EN 1799	-	NPD the product is fluid	Note 1
Suitability for application on horizontal surfaces extradoses EN 1799	-	and suitable for application in Note 2 horizontal surfaces	
Suitability for injection EN 12618-2	-	Concrete failure	Test in dry condition, concrete failure
Suitability for the application and curing in particular environmental conditions EN 12188	-	NPD	50° > 50 MPa 60° > 60 MPa 70° > 70 MPa
Bond strength EN 12188		50° > 100 MPa	50° > 50 MPa
(Bonding of steel plate on steel plate and steel plate on concrete. Values reported refer	MPa	60° > 120 MPa	60° > 60 MPa
to tests in which the prisms subjected to compression-shear test were glued to different	IVII a	70° > 120 MPa	70° > 70 MPa
angles: 50 °, 60 ° and 70 °)		70 > 120 IVII a	70 - 70 WII a
Bond strength – pull out EN 12188			
(Tensile stress created in the bonded system, plate-adhesive-plate, in a direct tensile	MPa	> 18	> 14
test according to EN 1542)			
Durability EN 13733	Thermal	No failure	No failure
(The test applied steel on steel must not break after exposure to thermal cycling and hot	cycles	i No idilule	ino ialiule
wet environment as well as the cutting load-compression must be greater than the tensile strength of the concrete)	Wet cycles	No failure	No failure

Note 1: The material must not drop by more than 1 mm when applied in thicknesses less than 3 mm; Note 2: The area of the surface of the adhesive agent at the end of the crushing test shall not be less than 3000 mm² (60 mm diameter).



HARMONIZED TECHNICAL SPECIFICATION: EN 1504-4:2004

PERFORMANCE FOR ADDING MORTAR OR CONCRETE METHOD 4.4

ESSENTIAL CHARACTERISTICS	U.M.	PERFORMANCE	REQUIRED VALUES
Flexural modulus of elasticity EN ISO 178	MPa	> 6000	≥ 2000
Compression strength EN 12190	MPa	> 100	≥ 30
Shear strength EN 12615	MPa	> 10	≥6
Open time EN 12189 a 20°C			
(The open time is defined as the maximum time that elapses between the completion of	minutes	> 90	Declared value ±20%
the mixing of the constituents of the product of bonding and the tightening of the joint,	minutes		
between two parts, which allows to obtain a surface of rupture within the concrete)			
at 5°C	minutes	50	
Workability time EN ISO 9514 at 20°C	minutes	40	Declared value
at 35°C	minutes	30	
Compressive modulus of elasticity EN 13412	MPa	> 7000	≥ 2000
Glass transition temperature EN 12614	C°	62	≥ 40
Thermal expansion coefficient EN 1770	1/C°	< 50x10 ⁻⁶	≤ 100x10 ⁻⁶
Shrinkage EN 12617-1 and EN 12617-3	%	0,00	≤ 0,1
Suitability for application on vertical surfaces and soffits EN 1799	-	NPD the product is fluid	Note 1
Suitability for application on horizontal surfaces extradoses EN 1799	-	and suitable for application in horizontal surfaces	Note 2
Suitability for injection EN 12618-2	-	Concrete failure	Test in dry condition, concrete failure
Suitability for the application and curing in particular environmental conditions EN 12636	-	NPD	Concrete failure
Suitability for the application and curing in particular environmental conditions (wet substrate) EN 12615	-	Concrete failure	Concrete failure
Adherence EN 12636 e EN 12615			
(Bonding hardened concrete to hardened concrete and Bonding of fresh concrete to	_	Concrete failure	Concrete failure
hardened concrete)		Concrete failure	Concrete failure
Durability EN 13733	Thermal	N 6 "	N. C.
(The test applied steel on steel must not break after exposure to thermal cycling and hot	cycles	No failure	No failure
wet environment as well as the cutting load-compression must be greater than the tensile strength of the concrete)	Wet cycles	No failure	No failure

Note 1: The material must not drop by more than 1 mm when applied in thicknesses less than 3 mm; Note 2: The area of the surface of the adhesive agent at the end of the crushing test shall not be less than 3000 mm² (60 mm diameter).

HARMONIZED TECHNICAL SPECIFICATION: EN 1504-4:2	2004	
PERFORMANCE FOR PLATE BONDING METHOD 4.3 and PERFORMANCE FOR ADDING MORTAR OR CONCRETE METHOD 4.4		
ESSENTIAL CHARACTERISTICS	PERFORMANCE PERFORMANCE	
Substances contained	Dangerous substances according to point 5.4 of the harmonized technical specification.	



HARMONIZED TECHNICAL SPECIFICATION: EN 13501-1		
ESSENTIAL CHARACTERISTICS	PERFORMANCE	
Resistance to fire	NPD	

TERM	MINOLOGY AND SYMBOLS
I LIXIN	WINOLOGI AND STWIBOLS
NPD	No declared performance

Regolamento REACH n°1907/2006

Estimate customer,

We inform you that in the REACH supply chain our company is classified as DU: Downstream-user.

About the product detailed in the point 1 we confirm you that we don't use in our production substances classified as SVHC according to the Candidate List published on ECHA site web:

http://echa.europa.eu/chem data/candidate list table en.asp.

You can require the safety data sheet of the product to our technical department: <u>tek@bossong.com</u> or you can download the document from our web site <u>www.bossong.com</u>.

10. The performance of the product identified in points 1 and 2 is in conformity with the declared performance in point 9. This declaration of performance is issued under the sole responsibility of the manufacturer identified in point 4. Signed for and on behalf of the manufacturer by:

Name and function	Place and date of issue	Signature
Andrea Taddei General Manager	Grassobbio (Bg) - Italy 25.02.2015	Andrew .

Note: this DoP replace the previous version dated 18.06.2013.