

aplicaTec

Reparación R4 PCC

Thixotropic mortar for structural concrete repairs.
CE mark R4 class for PCC in accordance with EN-1504-3 (Products for the protection and repair of concrete structures)



GlobalEPD
A VERIFIED ENVIRONMENTAL DECLARATION



Reparation of structural concrete



Fiber reinforced



Thixotropic

DESCRIPTION

Fibre-reinforced single-component mortar made of cement, siliceous aggregate and synthetic resins.

APPLICATION SURFACES

Repairing reinforced concrete structures. Filling gaps, cracks, chips, corners of pillars... Levelling out concrete or mortar surfaces. Grouting prefabricated pieces. Suitable for repair work according to principle 3, method 3.1 and 3.3 of the standard UNE-EN 1504-9 and structural reinforcement work according to principle 4, method 4.4 of the UNE-EN 1504-9.

APPLICATION SURFACES

The application surface must be prepared before application using manual or mechanical means to remove all the deteriorated concrete. The surfaces on which the product is applied must be clean, sound and free from oils, grease, paint, dust, cement grouts, etc. Metal elements such as reinforcement bars must be free from rust.

INSTRUCTIONS FOR USE

1. Gradually mix the mortar with water (3,5 - 4 litres per 25 kg sack).
2. Mix mechanically with clean water at low rpm until you obtain a smooth, lump-free paste.



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WARNINGS AND RECOMMENDATIONS

- Do not apply the product at temperatures below 5°C or above 35°C.
- Do not apply when frost or rain are forecasted.
- Absorbent surfaces should be saturated with water before the product is applied. Make sure that no puddles form on the surface.
- This product is ready to mix with water. Do not add any kind of additional substance which may alter its properties.
- In unfavourable conditions, the surface must be cured for at least 24 hours after the product has been applied.
- We recommend wearing rubber gloves when handling this cement-like product.
- All tools must be washed immediately after use. If the product is allowed to dry, it will only be possible to remove it by mechanical means.
- Storage: up to 12 months after manufacturing date in suitable temperature and humidity conditions.

AVAILABLE FORMATS

aplicaTec Reparación R4 PCC is available in 25 kg paper sacks with moisture-proof plastic lining, dispatched on shrink-wrapped pallets weighing a total of 1,000 kg (40 sacks).

TECHNICAL FEATURES

FEATURES	VALUES	TEST METHOD
Mixing water	14,5% (3,625 l x sack)	
Colour	Grey mortar	
Compressive strength 28 days after application	55,00 N/mm ²	UNE-EN 12.190:1999
Flexural strength 28 days after application	12,00 N/mm ²	UNE-EN 12.190:1999
Chloride content	0,02%	UNE-EN 1015:2000
Adhesion	>2,00 N/mm ²	UNE-EN 1542:1999
Shrinkage	>2,00 N/mm ²	UNE-EN 12617-4:2002
Expansion	>2,00 N/mm ²	UNE-EN 12617-4:2002
Freeze-thaw cycling with de-icing salt immersion	>2,00 N/mm ²	UNE-EN 13687-1:2002
Carbonation resistance	< MC control concrete (0,45)	UNE-EN 13295:2005
Elastic modulus	26,0 Gpa	UNE-EN 13412:2002
Capillary absorption	<0,5 Kg / (m ² h ^{0,5})	UNE-EN 13057:2002
Density when fresh (kg/l)	2,1 Approx.	
Grain size	0-2 mm	
Coat thickness	5-40 mm	
Consumption (dry mortar)	Approx. 1,8 Kg/m ² and mm thickness	
Mixture life *	30 minutes	
Fire resistance	Euroclass A1 and A1fl	UNE-EN ISO 1182 and 1716

*This time may vary depending on environmental and weather conditions (21°C and 60% H).

aplicaTec® SYSTEM STRUCTURE

aplicaTec Reparación R4 PCC is part of a repair system comprising:

- aplicaTec Armaduras : Anti-corrosion primer
- aplicaTec Reparación R4 PCC / aplicaTec Reparación Fluido R4 PCC : Structural repair mortar
- aplicaTec Reparación Fino R3 PCC / aplicaTec Cosmético Claro R2 PCC : Levelling mortars and pore sealant

NOTE

The recommendations for use are based on our own knowledge and experience. The technical data provided have been obtained under normal laboratory conditions, and may therefore vary according to the environmental conditions in the place where the product is used. As the application conditions are beyond our control, the information provided here does not imply that the company accepts responsibility for any variations.