Kerabuild Epofill

Two-component, hyperfluid, epoxy, low-viscosity system for the structural consolidation of cracked concrete structures.

Kerabuild Epofill is compliant with the performance requirements of standard EN 1504-5 for injection products and standard EN 1504-6 for anchoring products.

CE EN 1504-5 CE EN 1504-6 ÉMISSIONS DANS L'AIR INTÉRIEUR A+ A+ A B C CO2eq Carbon Footprint CONTRIBUTES TO LEED POINTS

GREENBUILDING RATING®

eco zero

Product with none of the requisites of the GreenBuilding Rating®, must be used with care.
Kerakoll® undertakes to improve the ratings of Ecozero materials and products.

RATING SYSTEM ACCREDITED BY CERTIFICATION BODY SGS

PRODUCT STRENGTHS

- Low viscosity and excellent injection power
- Rapid hardening
- Ideal for grouting of reinforcing rods in horizontal concrete structures

AREAS OF USE

Use
Monolithic repair of cracked concrete elements, grouting of reinforcement rods in cement-based conglomerate structures, repair of peeling façade elements...

INSTRUCTIONS FOR USE

Preparation
Kerabuild Epofill is prepared by mixing component A with component B (preset ratio 2:1 in the bags) until a fluid mixture of uniform colour is obtained. Mix by hand or using a low-rev, mechanical stirring device.
Workability times may vary according to the density of the mixed paste and the temperature of the environment and substrate: the higher the temperature or the larger the mixture, the lower the time.

Application
When grouting steel rods in holes made in concrete elements, remove any residual dust using a jet of compressed air, then apply Kerabuild Epofill by pouring.
To strengthen cracked structures by first opening the crack using a flexible joint, removing any dust then injecting Kerabuild Epofill under pressure into previously drilled injection holes. Subsequently, the crack can be filled with GeoLite® Gel through injection tubes inserted into the same holes as before. Once GeoLite® Gel has hardened, blow compressed air into the system to check that the holes are in communication. Subsequently, inject Kerabuild Epofill using specific tools, starting from the lowest injection tube; when the resin comes out of the topmost tube, seal the one used for injection and repeat the procedure again starting from the control injection tube, until the crack is completely sealed.

Cleaning
Residual traces of Kerabuild Epofill can be removed from tools with solvents before the product hardens.

* ÉMISSION DANS L'AIR INTÉRIEUR Information sur le niveau d'émission de substances volatiles dans l'air intérieur, présentant un risque de toxicité par inhalation, sur une échelle de classe allant de A+ (très faibles émissions) à C (fortes émissions).

Kerabuild Epofill Code: E728 2018/12 GCC/EN

KERAKOLL
The GreenBuilding Company

ABSTRACT

Monolithic repair of cracked structural elements, grouting of reinforcement rods in concrete structures, repair of peeling façade elements using a two-component, hyperfluid, epoxy system such as Kerabuild Epofill by Kerakoll SpA, that is CE-marked and compliant with the performance requirements of standard EN 1504-5 for injection products and standard EN 1504-6 for anchoring products.

TECHNICAL DATA COMPLIANT WITH KERAKOLL QUALITY STANDARD

Appearance	part A transparent liquid, part B yellow-coloured liquid	
Volumetric mass	part A 1,100 kg/m^3 – part B 1,050 kg/m^3	
Shelf life	≈ 12 months in the original packaging	
Warning	protect from frost, avoid direct exposure to sunlight and sources of heat	
Pack	part A: 0.66 kg bucket / part B: 0.33 kg bottle	
Mixing ratio	part A : part B = 2 : 1	
Viscosity of the mixture	≈ 380 mPa · s (rotor 2 RPM 50)	Brookfield method
Density of the mixture	≈ 1100 kg/m^3	
Pot life (1 kg):	≥ 80 min (at +5 °C) / ≥ 30 min (at +21 °C) / ≥ 10 min (at +30 °C)	
Temperature range for application	from +5 °C to +30 °C	
Coverage	≈ 1.1 kg/dm^3 of cracks to be injected	

Values taken at +23 °C, 50% R.H. and no ventilation. Data may vary depending on specific conditions at the building site.

PERFORMANCE

HIGH-TECH

Performance characteristic	**Test Method**	**Requirements of standard EN 1504-5**			**Kerabuild Epofill performance**
Adhesion	EN 12618-2	tensile strength	cohesive failure in the substrate		cohesive failure in the substrate
Shear strength	EN 12618-3	shear strength	monolithic failure		monolithic failure
Volumetric shrinkage	EN 12617-2	percentage shrinkage	< 3%		< 3%
Glass transition temperature	EN 12614	≥ 40 °C			> 40 °C
Workability when injecting	EN 1771	injection time in 0.2 mm cracks	Dry	> 7 N/mm^2	> 7 N/mm^2
			Damp	> 7 N/mm^2	> 7 N/mm^2
Durability	EN 12618-2	resistance to frost-thaw cycles	cohesive failure in the substrate		cohesive failure in the substrate
Performance characteristic	**Test Method**	**Requirements of standard EN 1504-6**			**Kerabuild Epofill performance**
Pull-out strength of steel rebars (movement in mm in relation to a 75 kN load)	EN 1881	≤ 0.6			< 0.6
Creep under load (movement in mm under a continuous load of 50 kN after 3 months)	EN 1544	≤ 0.6			< 0.6
Reaction to fire	EN 13501-1	Euroclass			F

Kerabuild Epofill Code: E728 2018/12 GCC/EN

KERAKOLL
The GreenBuilding Company

WARNING

- Product for professional use
- abide by any standards and national regulations
- use at temperatures between +5 °C and +30 °C
- apply on dry substrates
- do not apply on dirty or loose surfaces
- protect surrounding surfaces from accidental smearing and staining, which would be difficult to remove
- clean tools immediately after use with solvents (ethyl alcohol, toluene, xylene)
- always use protective gloves and eyewear both during mixing and during application
- avoid any contact with the skin. use in a well-ventilated environment
- if necessary, ask for the safety data sheet
- for any other issues, contact the Kerakoll Worldwide Global Service - info@kerakoll.ae

Kerabuild Epofill Code: E728 2018/12 GCC/EN

KERAKOLL GULF DWC-LLC
Office 516, Building E - Business Park
Dubai World Central - Dubai UAE
info@kerakoll.ae www.kerakoll.com