Technical Datasheet

Epibond

Epoxy Gap Filling Adhesive

Description

A two component, solvent free epoxide bonding paste, for use where high bond strengths are required. Ideal for bonding cementitious materials, stone and brick-slips as well as non-porous materials such as granite and metal. Epibond may be used for bonding paving elements in pedestrian and vehicular trafficked areas. Also suitable for crack repairs and as a general gap filler. Epibond has been designed to comply with the requirements of EN1504 Part 4.

Advantages

- Colour coded mixing
- 1:1 by volume mix ratio
- No special tools or equipment required
- High bond strength
- Excellent resistant to a wide range of chemicals
- Grey in colour to match concrete
- Durable and long lasting
- Non-shrink
- Suitable for horizontal and vertical applications
- No priming required
- Complies with requirements of EN1504 Part 4

Applications

- Bonding precast units
- Repairs to cracks and pipe fractures
- Bonding brick slips
- Bonding aggregates to precast panels
- Fixing paving elements

Technical Information

Pot Life	1-3 hours @ 20°C	
	2-4 hours @ 10°C	
Initial Cure	4-5 hours @ 20°C	
	12 hours @ 10°C	
Full Cure	7 Days @ 20°C	



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0086-CPD-594215			
EN 1504-4			
Structural bonding			
Compressive strength	≥30 MPa		
Modulus of elasticity,	≥2000 MPa		
in compression			
Shear strength	≥12 MPa		

Surface preparation

All surfaces should be clean, free from laitance ,oil, grease and chemical contamination. Oil and grease should be removed using *Desolve*. New concrete should be at least 28 days old.

Mixing

Equal volumes of each component should be taken and mixed on a clean, non-absorbent surface until a smooth, uniform coloured, even consistency is obtained. This may be carried out by hand using a trowel. When mixing full packs, use a variable speed drill and paddle. In either case, the material should be mixed for at least 2-3 minutes till homogeneous, leaving no material in the corners of the mixing vessel.

In cold conditions the materials should be stored between 10°C and 20°C in order to aid mixing



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Technical properties of Epibond.

Properties	Standard	Performance Requirement	Declared Value
Appearance			Grey Resinous Paste
Aggregate size			<0.1mm
Layer thickness			1-5 mm
Working time @ 23°C			2 Hours
Density			1400 kg/m ³
Temperature for application			Between +5°C & +35°C
Compressive Strength	EN12190	≥30 N/mm ²	>40 N/mm ² @ 24 Hours
			>70 N/mm ² @ 7 Days
Modulus of Elasticity,	EN13412	≥2 kN/mm ²	≥10 kN/mm ²
In Compression			
Tensile bending Strength			≥6.0 N/mm ² @24 Hours
Flexural Strength	BS6319-3		17.6 N/mm ²
			No failure, flexibility exceeded test.
Modulus of Elasticity,	BS6319-3	≥2 kN/mm ²	≥10 kN/mm ²
In Flexure			
Slant Shear Bond Strength	BS6319-4		32 N/mm ²
Adhesion - concrete	EN1542		≥ 2.0 N/mm ²
			(Concrete Failure)
Adhesion after freeze/thaw	EN13687-1		≥ 2.0 N/mm ²
(50 cycles with salt)			
Adhesion after thunder showers (30 cycles)	EN13687-2		≥ 2.0 N/mm ²
Adhesion after dry cycling	EN13687-4		≥ 2.0 N/mm ²
(30 cycles)			
Minimum Cure Prior to			24 Hours @ >15°C
Vehicular Trafficking			3 Days @ >5°C
Carbonation resistance	EN13295	d _k ≤ ref. concrete	d _k < ref. concrete
Capillary absorption	EN13057	≤ 0.5 kg/m ² /h ^{-0.5}	≤ 0.5 kg/m ² /h ^{-0.5}
Cracking tendency	Coutinho Ring Test		No cracking after 180 days

Technical data shown are statistical results and do not correspond to guaranteed minima.

Tolerances are those described in appropriate performance standards.



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Application Instructions

The mixed Epibond should be applied with a float, spatula or spreader and where possible should be applied firmly onto both surfaces. In cold conditions it may be necessary to aid curing by the use of tenting and warm air blowers. Clean all tools and equipment after use with *Nuwash*.

Packaging

Epibond is available in 10 kg units (7.1 litres).

Storage

The shelf life is 12 months when stored unopened in dry, normal conditions and away from direct sunlight. Protect from frost.

If stored at temperatures of 10°C or below the containers should be warmed prior to use as this will greatly aid the mixing procedure.

Health & Safety

Product Safety Data Sheets (SDS) are available from Nufins. SDS sheets are provided to help customers satisfy their safe handling, use and disposal needs as well as assist with any conformance requirements made locally by health and safety regulations.

SDS are continually updated to provide the latest information to our customers. We therefore recommend contacting our head office to obtain the most recent and accurate SDS before handling and using any product.

Limitations

Do not apply below 5°C.

Disclaimer

The information contained herein is to the best of our knowledge true and accurate and is given in good faith but without warranty. The user will be deemed to have satisfied themselves independently as to the suitability of our products for their own particular purpose. In no event shall Nufins be liable for consequential or incidental damages.

Users must always refer to the most recent issue of the Technical Datasheets, copies of which will be supplied on request.

Technical Support

Through our technical department and laboratories we can offer a comprehensive service to specifiers and contractors. Technical contacts are available to provide further information and arrange demonstrations.

