

Estobond Acryl

Acrylic Emulsion Bonding Agent

Description

Estobond Acryl is a single component white, milky emulsion based upon modified acrylic type resins.

It is formulated for use with Estopatch concrete repair mortar system and as a bonding agent for concrete and mortar.

It is resistant to hydrolysis and therefore can be used in external or internal applications.

Estobond Acryl has been tested in accordance to BS 5350 - C15: 1990, on Determination of Bond Strength in Compressive Shear, and complied with the specification in this data sheet.

Uses

Estobond Acryl is a bonding agent for Estopatch concrete repair system. It may also use as bonding agent for concrete and cement/sand mortar. It acts as curing compound when sprayed onto freshly applied repair patches.

Advantages

- Single component.
- Long open times, designed for ease of use under site condition.
- Excellent bond strength between polymers modified mortars and concrete.
- Cost effective and economical in use
- Can be used as curing membranes for Estopatch material
- Water resistant, can be used internally and externally with complete safety.

Standards Compliance

- **BS 5350 - C15:1990**
- **BS 6319**

Physical Properties

Bond Strength In Compressive Shear, kN BS 5350 - C15:1990	> 10
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Application instructions

(A) As a bonding agent

Preparation

Successful repairs to reinforced concrete depend on correct surface preparation. Mechanically remove all loose or damaged concrete exposing the full circumference of any corroded reinforcing steel. It is recommended that all repair areas should be defined by a 10mm saw cut to avoid "feather edging" of the repair mortars. Finally pre-soak the repair zone with copious amounts of clean water preferably for a minimum of 1 hour prior to application of the **Estobond Acryl**. Remove excess surface water with a stiff brush.

Mixing

Estobond Acryl is supplied ready for use. Do not dilute with water or solvents of any kind. Pour milky liquid into suitable container ready for application onto previously prepared substrate.

Application

Estobond Acryl is simply applied by brush ensuring the complete surface is wetted out. Use of a "stippling" action rather than a "painting" action is recommended. The Estopatch repair mortars or concrete should be applied immediately.

Warning

Do not over apply **Estobond Acryl** as slippage of the repair mortar may occur in high build applications.

In vertical and overhead applications, whilst laboratory tests show that bond strengths are not greatly affected even after **Estobond Acryl** is allowed to dry for 24 hours, practical difficulties of maintaining compaction onto the dry primer layer will reduce the build which can be achieved with Estopatch material. It is recommended therefore that should **Estobond Acryl** dry longer than 8 hours at 20°C, a fresh coat be applied.

(B) As a cement modifier

Estobond Acryl is used as cement modifier to improve the properties of patching mortars and renders.

The recommended mix designs

OPC:	50 kg
Zone 2 sand:	150 kg
Estobond Acryl:	10 litres
Water:	add sufficiently to give required consistency

Typical results of above mixing mortar:

Compressive Strength (N/mm ²), BS 6319	
Control	35
Treated with Estobond Acryl	40
Tensile Strength (N/mm ²), ASTM C109	
Control	4.0
Treated with Estobond Acryl	4.5
Flexural Strength (N/mm ²), BS 6319	
Control	8.0
Treated with Estobond Acryl	11.0
Adhesion to Concrete (N/mm ²) - Slant Shear Bond, BS 6319	
Control	5.0
Treated with Estobond Acryl	20.0

Packing & Size

Estobond Acryl	20 litre pail 190 litre Drum
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Coverage

Estobond Acryl	4 – 6 m ² per litre depend on porosity of substrate
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Technical Support

Denka offers a technical support package to specifiers, end-users and contractors, as well as on-site technical assistance.

Storage

Store in dry & covered condition. **Estobond Acryl** has a shelf life of 12 months in an unopened container.

If stored in extreme heat condition, the shelf life may be reduced.

Precaution

Estobond Acryl is non-toxic. It is slightly alkaline; therefore, skin contact shall be avoided. Wear gloves and protective clothing.

Additional Information

Denka Construction Solutions Malaysia Sdn Bhd also offers a wide range of complementary products, which includes waterstops, waterproofing products, grouts, anchors, specialized flooring products. In addition, a wide range of products formulated for repair and refurbishment of spalled concrete are available.



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