

StrongPatch FSR

Polymer Modified Structural and Floor Slab Repair Mortar

Description

StrongPatch FSR is a pre-pack, single component structural repair material and leveling mortar, which needs only the addition of water on site.

StrongPatch FSR has low permeability property for interior and exterior restoration of deteriorated concrete elements and slabs. It may be placed into forms or used in horizontal applications. **StrongPatch** may be used as an expose industrial wear surface or as an underlayment for resilient, carpet, laminate, ceramic tile, and wood flooring.

StrongPatch FSR formulation plus StrongBond AR/SBR/VA or StrongPrime DLV bonding agent ensure good adhesion with existing concrete.

Its shrinkage compensated property enables it to be used for large and small area application.

Uses

StrongPatch FSR is supplied as a grey powder to which water is added on site. It contains blended non-shrink cements, graded sands and chemical additives which provide a mortar with the superior qualities required for structural and floor repair.

Advantages

- Provides a compatible bonding surface for tile and carpet adhesives
- Low water permeability, resistant to water after cure
- Low shrinkage — reduce cracking after cure
- Excellent abrasion and impact resistance
- Resists freeze/thaw damage
- Thermally compatible with concrete
- Excellent adhesion and increased flexural strength Structural patch repair.
- Hard and abrasive resistant surfaces

Physical Properties

Water powder ratio at 0.16 (28°C)

Test Method	Typical Result
Compressive Strength BS 1881, part 116	22 N/mm2 @ 1 days 38 N/mm2 @ 7 days 48 N/mm2 @ 28 days
Slant Shear Bond Strength BS 6319	21 N/mm2 @ 28 days
Flexural Strength	9 N/mm2 @ 28 days
Setting time	5 hours – initial 6 hours - final
Fresh wet density	2,150 kg / m3

Application instructions

Preparation

Surface should be clean and remove any dust, unsound materials, oil, paint, grease, corrosion deposits from the surfaces. Remove oil and grease deposits by steam cleaning, detergent or stain degreaser.

Use compressed air to clean all deposits or dust on the surface if necessary. All surface areas should be sprayed or soaked with water prior to the application **StrongPatch FSR** to make better bonding
Edges of the areas for repair must be saw cut to 5mm and blow out all loose dust with dry, oil free compressed air.

Priming

All surfaces must be primed prior repair. Reinforcing steel must be primed with galvanized protective coating or epoxy system which will prevent further corrosion. All concrete surfaces should be thoroughly soaked or coated with primer, but no water leaving on the surfaces.

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Concrete surface must be primed with StrongBond AR/SBR/VA bonding agent which is scrubbed onto the surface of the concrete. It will dry in approximately one hour. **StrongPatch FSR** should be applied when the StrongBond AR/SBR/VA is still tacky. For heavy traffics, It is recommend to use StrongPrime DLV for better result.

Mixing

Ensure that **StrongPatch FSR** is thoroughly mixed prior to use. It is essential that quantities of one bag or more are mixed in a forced action pan mixer or with a slow speed drill (500rpm) fitted with a spiral paddle. For normal applications 4.00 – 4.50 litres of water should be added to 25 kg bag.

Application

For application to all surfaces, **StrongPatch FSR** is applied with wood float to ensure positive contact with the primed substrate and initial application should be with tamping or compacting action.

Finishing can be done after 2 hours after placing by wood or steel trowel to achieve smooth surface or rough surface as required.

The minimum layer thickness of **StrongPatch FSR** is 5mm and it can build up to 20mm - 25mm.

Curing

StrongPatch FSR is a cementitious repair mortar. It must be cured immediately after finishing in accordance with good concrete practice. StrongCure curing compound is recommended for this usage

Cleaning

StrongPatch FSR should be removed from tools with clean water immediately after use. Cured material can only be removed mechanically.

Packaging

StrongPatch FSR: 25 kg /bag

Yield

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25 kg bag yield → 15 ltr or 74 bags → yield 1 m³.

Technical Support

Estrong offers a technical support package to specification engineers, end-users and contractors, as well as on-site technical assistance.

Storage

StrongPatch FSR should be stored in dry and covered condition. The product has a shelf life of 6 months in an unopened container.

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

Precaution

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

Additional Information

Estrong manufactures and 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.