

MC-TechniBond SBR (Formerly known as FitBond SBR)

Styrene Butadiene Rubber Based Bonding Agent

Description

MC-TechniBond SBR is a styrene butadiene rubber based bonding aid and additive for mortars, renders and concrete.

Standards

ASTM C1059 Type II, ASTM C932

Advantages

- Improves tensile and flexural strength of cementitious mixes
- Helps in reducing attack of aggressive elements by reducing porosity
- Compatible with all types of cements
- Prolonged corrosion protection and abrasion resistance
- Reduces shrinkage
- Suitable for internal and external applications in conjunction with cement
- Non toxic

Application

Areas of application

MC-TechniBond SBR is used as a bonding agent between old concrete and new concrete, cementitious plasters, renders etc. It is used to increase water tightness of renders to be applied on internal and external walls, basements, swimming pools, water tanks, tunnels, underpasses, sludge tanks etc. It is also used as an additive in mortars for repair of damaged concrete elements, bonding rush coat for plaster etc.

Surface Preparation

Surfaces should be clean, sound, free of dust, loose particles, grease, oil, etc. Residual primers from previous membrane systems and bitumen should be removed by suitable mechanical means. Absorbent surfaces should be saturated thoroughly with water. Avoid ponding. Exposed rebar should be cleaned to a bright condition by grit or sandblasting.

Mixing

As a Bonding Slurry Coat: As per recommended dosage, add MC-TechniBond SBR to premeasured quantity of water in a suitable container and stir well. Add cement slowly and mix well using a slow speed drill machine fitted with a paddle.

As an Additive: Manual mixing is not

General Guidelines

Repair Mortars - Mix Proportions

Thickness 6-40 mm

10 ltr of MC-TechniBond SBR

8-12 ltrs of clean water (as per the required consistency)

50 kgs of Ordinary Portland Cement

150 kgs of sand

Floor Screeds - Mix Proportions

Thickness: 30 mm-70 mm

10 ltrs of MC-TechniBond SBR

6-10 ltrs of clean water

50 kgs of Ordinary Portland Cement

100 kgs of fine aggregate

50 kgs of 10 mm down aggregate

The screed should be of earth moist consistency

Renderers - Mix Proportions

Thickness: 6 mm-15 mm

10 ltrs of MC-TechniBond SBR

6-10 ltrs of clean water

50 kgs of Ordinary Portland Cement

150 kgs of fine sand

The render should be cohesive and of earth moist consistency

*Above proportions can vary as per site mix design requirements.

Application

As a Neat Bonding Agent: Stir MC-TechniBond SBR well and apply using brush, roller or spray on the prepared surface. Ensure that the material is spread evenly on the

recommended. Preferably, a forced action mixer or slow speed drill fitted with a paddle should be used. Weigh the cement (and sand where required) into the mixer and dry blend together for one minute. With the machine in operation, add the pre-mixed **MC-TechniBond SBR** and clean water. Continue mixing for 3 minutes to ensure complete dispersal into the sand-cement mix. Make only small adjustments to the quantity of clean water but do not significantly exceed the dosage shown below. Mix until homogenous material is obtained.

Coverage

As a neat bonding agent: 5-7 m²/1tr/coat . Actual coverage depends on texture and porosity of substrate. As an additive for tile adhesives, bedding mortars, sand-cement renders, plasters and screeds, the dosage may vary from 10 to 20% by weight of cement

entire surface. Subsequent material to be bonded should be placed while **MC-TechniBond SBR** is still tacky.

As a Bonding Slurry Coat: Apply slurry bonding coat made up of **MC-TechniBond SBR**, water and cement in the ratio of 1:1:1 by weight using brush or roller.

As an Additive: **MC-TechniBond SBR** modified mortars, toppings and renders must be well compacted on the prepared substrate by trowel. Exposed steel reinforcement should be completely encapsulated by the mortar.

MC-TechniBond SBR modified mortars can be applied at a thickness of 6 mm to 40 mm. Where thick sections in excess of 40 mm are to be builtup, the surface of the intermediate layers should be keyed and primed.

Curing

MC-TechniBond SBR modified cementitious systems should be cured just after initial setting with water or with a suitable curing agent from **JetCure** range of curing compounds.

Typical Properties at 25°C

Property	Test Method	Value
Component	-	Single
Form	-	Liquid
Colour	-	Milky White
Specific Gravity	ASTM D1475	1.02 kg/ltr +/- 0.05
Compressive Strength	BS 6319-2	10-15% increase over control
Flexural Strength	BS 6319-3	5-10% increase over control
Tensile Strength	BS 6319-7	5-10% increase over control
Tensile Bond Strength	ASTM C932	> 1 N/mm ² at 28 Days
Pullout Strength	ASTM D 4541	> 1 N/mm ² at 28 Days
Slant Shear Bond Strength	ASTM C1042	> 8.6 N/mm ² at 28 Days

General Information

Package Size	5 ltr, 15 ltr and 150 ltr
Shelf Life	12 months from date of manufacture when stored under warehouse conditions in original unopened packing. Extreme temperature/humidity may reduce shelf life.
Cleaning	Clean all equipments and tools with water immediately after use. Hardened material can be removed mechanically.

Health and Safety

PPE's	Gloves, goggles and suitable mask must be worn.
Precaution	Contact with skin, eyes, etc. must be avoided. If swallowed seek medical attention immediately.
Hazard	Regarded as non-hazardous for transportation.
Disposal	Do not reuse containers. To be disposed off as per local rules and regulations.
Additional Information	Refer MSDS. (Available on request.)

Technical Support

MC Technical Services are available on request for on site support to assist in the correct use of its products.

NOTE:

It is the customer's responsibility to satisfy themselves by checking with the company whether information is still current at the time of use. The customer must be satisfied that the product is suitable for the use intended. All products comply with the properties shown on current data sheets. However, MC-Bauchemie does not warrant or guarantee the installation of the products as it does not have any control over installation or end use of the product. All information and particularly the recommendations relating to application and end use are given in good faith. The products are guaranteed against any manufacturing defects and are sold subject to MC- Bauchemie's standard terms and conditions of sale.