

# BP-FitBond SBR

## Styrene Butadiene Rubber Based Bonding & Water-proofing Agent

### Description

**BP - FitBond SBR** is a modified styrene butadiene rubber based bonding aid and additive for mortars, renders and concrete. It is designed to improve the qualities of site-batched cementitious mortars and slurries. Being resistant to hydrolysis, it is ideal for internal and external applications in conjunction with cement. When used with cement, concrete and plaster, it reduces the mixing time through high dispersion of the polymer and improves waterproofing, new to old concrete/plaster bonding and strength characteristics and reduces shrinkage and cracking of the mix.

### Standards

ASTM C1059 Type II, ASTM C932

### Application Area

**BP-FitBond 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.

### 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

### Typical Properties

Property	Test Method	Value
Component		Single
Form		Powder
Colour		Milky White
Specific Gravity	ASTM D1475	1.02 kg/ltr +/-0.5
Fresh Wet Density	BSEN 12350-6	2.23 kg/ltr +/- 0.05
Compressive Strength	BS 6319-2	10-15% increase over control
Tensile Bond Strength	ASTM C932	> 1 N/mm <sup>2</sup> at 28 days
Flexural Strength	BS 6319-3	5-10% increase over control
Tensile Strength	BS 6319-7	5-10% increase over control
Pullout Strength	ASTM D4541	> 1 N/mm <sup>2</sup> at 28 days
Slan Shear Bond Strength	ASTM C1042	> 8.9 N/mm <sup>2</sup> at 28 days

### 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.

### Application Guidelines

The application parameters for mortars modified by the use of **BP - FitBond SBR** will differ depending on the actual mix design used. Typical designs are detailed below:

Usage	Mixing Ratio	Consistency
Bond Coat	BP - FitBond SBR 1 Part + Cement 1.5 Part	Slurry
Water Proofing Slurry Coat	CP - FitBond SBR 1 Part Water 4 Part + Cement 7 Part	Slurry
Repair Mortar	BP - FitBond SBR 1 Part + Water 1 Part + Cement 5 Part + Sand 15 Part	Thixotropic
Floor screeds / Top	BP - FitBond SBR 1 Part + Water 1 Part + Cement 5 Part + Sand 7.5 Part + Coarse Aggregate 7.5 Part	Thixotropic

**As a Neat Bonding Agent:** Stir **BP-FitBond SBR** well and apply using brush, roller or spray on the prepared surface. Ensure that the material is spread evenly on the entire surface. Subsequent material to be bonded should be placed while **BP-FitBond SBR** is still tacky.

**As a Bonding Slurry Coat:** Apply slurry bonding coat made up of **BP-FitBond SBR** and cement by weight using brush or roller.

**As Repair / Screed/ Topping Mortar:** **BP-FitBond 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. **BP-FitBond 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 built-up, the surface of the intermediate layers should be keyed and primed.

For Bonding Coat and Water-proofing Slurry Coat, Manual mixing is not recommended. Small quantities may be mixed with a drill and "jiffy" mixer. Use a paddle type mortar mixer for large jobs. Conpacmix demonstration team shall assist in these procedures upon request.

### Curing

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

# BP-FitBond SBR

## Packaging

4 kg, 10 kg , 20 kg.

## Coverage

As a neat bonding agent 4-4.5 m<sup>2</sup>/1tr/coat and as Water-proofing Slurry, 2m<sup>2</sup> in 2(two) coats . 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.

## Storage & Shelf-life

12 months from date of manufacture when stored under warehouse conditions in original unopened packing. Extreme temperature / humidity may reduce shelf life.

## Limitations

At temperatures above 35°C, it is recommended that measures are taken to reduce material placing temperatures. These include, storing materials and equipments under cool shade and away from direct sunlight. Avoid installation during the hottest part of the day. Ensure that water temperature is kept below 20°C. Should not be used in unrestrained area.

## Cleaning

Clean all equipments and tools with water immediately after use. Hardened material can be removed mechanically.

## Health and Safety

This product contains cement powders which, when mixed with water or upon becoming damp, release alkalis that can be harmful to skin. During use, avoid inhalation of the dust and contact with the skin or eyes. Gloves, goggles and suitable mask must be worn. Contact with skin, eyes, etc. must be avoided. If swallowed seek medical attention immediately. Regarded as non-hazardous for transportation. Do not reuse containers. To be disposed off as per local rules and regulations.

## Quality & Care

Conpacmix (BD) Ltd acquired German technology for an updated production facility and set up a state of the art laboratory facility for conducting regular quality assessments on raw materials procured and finished products. Process from procurement of raw materials to finished products, are managed by qualified and experienced engineers, chemists and technicians.

**Note:** Field service where provided does not constitute supervisory responsibility. Suggestions made by **Conpacmix (BD) Ltd.** either orally or in writing may be followed, modified or rejected by the owner, engineer or contractor since they, and not **Conpacmix (BD) Ltd.**, are responsible for carrying out procedures appropriate to a specific application.

Manufacture:

