Tek-Bond SBR

SBR polymer bonding agent

Spraytek Coatings

Technical Data Sheet

Description

Tek-Bond SBR is a milky white, latex polymer, based on styrene butadiene rubber that is designed to improve the physical properties and integrity of cementitious mortars, screeds or renders, and act as a bonding agent / sealer to concrete, plaster or other porous substrates. **Tek-Bond SBR** improves durability, compressive, tensile and flexural properties of modified mixes whilst reducing permeability, making it suitable for horizontal or vertical applications both internally and externally. , including areas subject to wet/dry cycling or permanent immersion.

Advantages

- Multi-purpose, primer, bonding agent and curing compound
- Resistance to abrasion & Freeze/thaw
- Can be used as sealer

Uses

- Industrial floors and screeds
- Bonding new to old concrete
- Refurbishment of concrete floors
- Concrete repairs
- Chemical resistance floor screeds
- Water resistant renders & screeds
- Water resistance adhesives for ceramic tiles, natural stones, kerbs and copings

Physical Properties*

PROPERTY	TYPICAL RESULTS
Compressive strength	>35 MPa
Tensile strength	>5 MPa
Flexural strength	>10 MPa
Bond strength to concrete	Greater then cohesive strength of concrete
*The above properties are average laboratory values	

Packing

Tek-Bond SBR is available in 20 and 200 lt. drums.

Dosage

For admixture or integral bonding agent the dosage is typically 6 to 10 lt. of **Tek-Bond SBR** per 50 kg cement.

Shelf Life

24 months when stored in cool dry environment in factory packed unopened containers between 5°C – 25°C.

Installation Guidelines

Spraytek provides detailed method statements on all its products for use in various applications. These must be referred to prior to starting the work. The information below is a summary intended for guidance only.

Surface Preparation

Substrates must be structurally sound. Loose or unsound substrate should be removed. Surfaces must be entirely free of oil, grease, paint, corrosion deposits, dust, laitance or other surface deposits. The substrate must be prepared to create a 'key' for bonding by shot blasting or water blasting, if necessary.

Priming

Apply a bonding coat comprising 3 parts OPC, 1 part water and 1 part **Tek-Bond SBR** to the pre-soaked concrete surface. Apply the subsequent modified screed or mortar 'wet on wet' to the bonding coat.
DO NOT LET THE BONDING COAT DRY.
Work the primer well into the concrete surface using a stiff brush to give an even, continuous, unbroken coating.

If the primer coat has dried, simply Re-prime.

Mixing guide

As per the mix design below, dry blend the sand, cement and aggregates in the mixer

Application	OPC (Kg)	Sand (Kg)	4-6mm aggregate (Kg)	Tek-Bond SBR (lt.)	Mix with clean water	Approx. Yield (lt.)
Bonding slurry	50	0	0	10	14	40
Patch repair 5-40mm	50	125	0	10	6	79
Render 5-12mm	50	150	0	10	5	87
Heavy duty floor screed 10-25mm	50	75	75	10	6	88

The above guide is as per theoretical calculations and may vary dependent upon cement, moisture content and grading of sand & aggregates used at site. We recommend trial mixes should be done on site to establish the required yield, consistency, workability and mechanical properties.

Ensure accurate measurement of **Tek-Bond SBR** & Clean water, and add & mix continuously for 4 to 5 minutes until the required consistency is achived.

Application

Apply the mixed material onto the prepared surface using a steel trowel, plastic or wooden float. Spread out and tamp or compact onto the primed surface to a minimum thickness of 5mm.

Finish with a plastic or wooden float or steel trowel depending on the surface texture required.

Subsequent layers can be applied to the first layer approximately after 12 hours. The first layer should be prepared to create a 'key' to assist bonding. No further pre-soaking or priming is required between layers. It is recommended to do on site trials to assess the actual coverage rates that can be achieved prior to commencement of the works.

Expansion joints must be reflected through the repair or screed and preferably sealed with a sealant from the **Tek-Seal** range.

We recommend construction joints be introduced at thresholds or perimeters, and joints induced to give a maximum bay size of 40 m^2 in accordance with BS 8204 – Screed bases & in-situ flooring.

Curing

Curing is essential for all cementitious surfaces to prevent possible shrinkage cracks and ensure the performance characteristics of the product are achieved. The duration for curing will depend on the applied thickness and ambient conditions. Typically for thickness of 10 – 25 mm, allow at least 4 to 7 days curing using one of the **Tek-Cure** range, applied immediately after initial hardening of the product or removal of any formwork.

Thicker sections may need up to 28 days curing depending on the ambient conditions, however subsequent floor finishes should only be applied when the residual relative humidity (RH) has reached 75% or less.

Precautions

Do not add any thinner or solvent.
Do not apply in wet conditions or at temperature below 3°C of the dew point.
Do not dispose into water drains.

Technical Support

Spraytek offers full technical support package to specifiers, contractors and end users, as well as technical assistance on site and after sales consultations.

Health & Safety

As with all chemical products, caution should always be exercised. Protective clothing, such as gloves and goggles, should be worn. See packaging/MSDS for specific instructions.

Treat any splashes to the skin or eyes with fresh water immediately. Should any of the products be accidentally swallowed, do not induce vomiting, but call for medical assistance immediately.

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