

ULTRABOND SBR

High Performance Styrene Butadiene (SBR) Bonding Agent

Description

ULTRABOND SBR is an aqueous dispersion of Styrene Butadiene Co-polymer Latex specifically designed for use with Portland cement mixes giving high bonding performance and water penetration. **ULTRABOND SBR** is used as admixture to cement mortars and concrete to improve acid resistance, compressive, flexural strength, abrasion resistance and durability.

Features & Benefits

- Improves adhesion and cohesion.
- Suitable for use in damp conditions, reduce permeability.
- Improves workability, strength and abrasion resistance
- Reduces shrinkage, cracking and improves flexibility
- Reduces bleeding.
- Good freeze/thaw resistance.
- Long term corrosion protection
- Improves chemical and mineral oils.
- Allows reduction in water absorption.

Uses

ULTRABOND SBR is used specially to:

- Increase the adhesion power of cementitious products such as; repairing mortars, screeds, renders, cement mixtures, grouts...etc.
- Corrosion protection as a bonding slurry or steel primer in concrete repairs.
- For repairing cement and mortar.
- Tiles fixing with the traditional method
- produce plaster with higher water and chemical resistance.
- Bonding slurry during concrete casting on old concrete.
- Floor screeds and floor hardener.
- produce high characteristics concrete
- admixture to key coats in cementitious rendering.
- Waterproof admixture with cementitious slurries.

Technical Properties

Appearance	Milky White Liquid
Density	1,020 Kg/m ³ approx.
pH @ 25 °C	8.5 - 9
Resistance to Ageing	Excellent
Resistance to Damp	Excellent
Application temperature	+5 °C to +35 °C
Service Temperature	-5 °C to +80 °C
Below results are based on 1:3 mix Cement/Sand with ULTRABOND SBR (20% of dry mortar)	
Flexural Strength	7.0 N/mm ²
Slant shear bond strength	9 N/mm ²
Freeze/thaw resistance	Excellent
Tensile Strength	2.0 N/mm ²
Water vapor permeability	Less than 4gm/m ² /24hr
Resistance to water under 3 bar pressure	Excellent (15mm thick sample)

All values are subject to 5-10% tolerance

Standards Compliance

- ASTM C190, C1059 type 2

Application Procedures

Surface preparation:

All surfaces should be sound, free from laitance, oil, grease and surface water. Before the application of a bonding slurry surfaces of high suction should be thoroughly dampened. Preparation of the surface can be achieved using mechanical scrubbling or grit blasting to give a clean fresh exposed surface.

Application Instructions:

Method of use as Primer & Bonding Agent:

Prepare bonding slurry as in Table-1 . Following preparation of the substrate as detailed the bonding slurry should be brushed vigorously into the surface giving an approximate 1mm thickness. Subsequent coatings must be applied while the bonding slurry is still wet. Should the slurry dry then a further coat must be applied.

Vertical Rendering:

Prepare the render mix in line with table-1. Apply the modified render in a thickness of 5-10mm per coat. If higher thickness is required, Scratch the first coat and allow drying for a minimum of 24 hours before applying the second coat.

Concrete Repair Patching:

Using stiff brush apply the bonding slurry to the prepared substrate and exposed reinforcing steel. Apply the repair mortar (mixed as in table-1) into the wet slurry using steel trowel. High thickness can be achieved in multi layers application. Score the base layer with trowel and apply the second layer when the first one has reached initial set.

Floor Screed or Topping:

Floor screed modified with ULTRABOND SBR can be laid to thickness form 10-50mm. it should be placed over the still wet bonding slurry, compacted well and levelled. Trowel the screed to the required finish using wooden float or steel trowel.

Waterproof Render:

ULTRABOND SBR is ideal for creating an initial waterproof render for new or existing basements, lift pits or water tanks. Ensure all substrates were prepared properly. At junctions between walls and floors apply 30-50mm triangular fillet using mortar mix similar to vertical render (as in table-1). Allow to dry for 24 hrs. pre-soak the surface with water then apply 2-3 coats of bonding slurry modified with SBR. Ensure each coat is fully dry before apply subsequent layer. While the last coat is still wet apply SBR modified vertical render or floor screed (as in table-1) whether it is a wall or floor.

Table -1: Typical Mix designs (by weight)

Use	ULTRABOND SBR	OPC	Sand/Aggregate	Water
Bonding Slurry	1	2	n/a	1
Primer	1	3	n/a	1
Vertical Render	1	5	20	4
Concrete Repair	1	5	15	1
Floor Screed (up to 50mm)	1	5	17	1

Packaging

ULTRABOND SBR is available in 5 Lt., 20 Lt J. Can and 200Ltr Drum.

Storage

Keep the product in dry and sheltered place at temperature between +5°C to +35°C. In these conditions and in closed original containers, the product will have a shelf life of at least 12 months.

Health and Safety

Wear gloves, goggles to avoid any contact with eyes and skin. In case of splashes in the eyes wash abundantly with warm water and consult a doctor.

For further information or particular use, contact SBI Technical Department.

Quality & Care

All products produced in SBI facilities are manufactured under a management system certified to conform to the requirements of the quality and environmental health & safety standards ISO 9001 & ISO 14001.



SBI products are guaranteed against defective materials and manufacture and are sold subject to its standard Conditions for the Supply of Goods and Service. All SBI datasheets are updated on a regular basis. It is the user's responsibility to obtain the recent version.

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