BUILDING TRUST

PRODUCT DATA SHEET

EVERBUILD® 503 Premium SBR Bond

LATEX BASED WATER RESISTANT BONDING AGENT, PRIMER AND ADMIXTURE

PRODUCT DESCRIPTION

EVERBUILD® 503 Premium SBR Bond is a latex based, water resistant bonding agent and admixture for use in areas subject to humidity, dampness and water contact. Improves water resistance of cement mixtures by forming a reinforcing polymer that increases long term durability and flexibility of the mix on renderings and floor screeds. It contains anti-foam to control the density of cementitious mixes.

USES

- As an admixture for mortar/screeds/renders.
- As a bonding agent for screeds/renders.
- As a primer/sealer in tiling applications.
- To increase flexibility for cementicious based tile adhesive when tiling on wooden/asphalt floors.
- In addition, SBR Bond has the advantage over PVA bonding aids in that it is not adversely affected in wet conditions and is therefore recommended for exterior use.

CHARACTERISTICS / ADVANTAGES

- Greatly improved adhesion to a wide range of substrates including dense concrete, steel, tiles etc.
- Mixes may be applied in much thinner sections
- Excellent resistance to water and water vapour
- A high level of resistance to salt permeation
- Much improved toughness and flexibility
- Reduced surface dusting of concrete
- Greatly improved resistance to many chemicals
- Reduced water: cement ratio for equivalent workability
- Improved frost resistance
- SBR Bond is also freeze thaw stable.

pH	ca. 9.0
Viscosity	100 cP (RVT 1/10rpm)
M.F.F.T	0°C
Freeze Thaw resistance	Passes 5 cycles at -10°C – excellent
Calcium Ions	Compatible
Aluminium III Ions	Compatible
Antioxidant	Added
Bactericide	Added

PRODUCT INFORMATION

Packaging	500ml, 2.5ltr, 5ltr and 25ltr plastic containers
Colour	White
Shelf Life	12 months from date of manufacture in original unopened containers.
Storage Conditions	EVERBUILD® 503 Premium SBR Bond is best stored at 5 to 25 ºC. However if frozen, the latex should be thawed slowly. EVERBUILD® 503 Premium SBR Bond should preferably be stirred before use.
Density	ca. 1.02kg/ltr
Solid content by weight	38-42%
Consistency	Liquid

APPLICATION INFORMATION

Yield	As a rough guide, 1.2 litres of EVERBUILD® 503 Premium SBR Bond will cover 1m² of 12mm thickness using the below mixes.

APPLICATION INSTRUCTIONS

SUBSTRATE PREPARATION

All surfaces must be clean, dry and free from dust, grease and other contaminants.
The background must be capable of withstanding all stresses which will be put onto it and contain the appropriate joints. If it is to receive a topping the background should have a compressive strength greater than 30N/mm² and/or a tensile strength greater than 1N/mm².
Floors should be mechanically prepared, eg scabbled or shot blasted, to give an aggregate exposed surface. Dust should be removed by vacuum, not compressed air. All contaminants such as oil, grease, or any surface laitence must be removed to ensure adequate development of bond when the topping is applied. A water drop test is the simplest method to determine whether water repellent contamination is present.

MIXING

Mixing procedures for topping and screeds containing EVERBUILD® 503 Premium SBR Bond are similar to those used to conventional compositions, with gauging water partly replaced by EVERBUILD® 503 Premium SBR Bond. However, mixing time should be minimised to limit air entrainment.
Mixing should be carried out in a forced action mixer. The usual procedure is to pre-mix sand and cement in the mixer, pour in the EVERBUILD® 503 Premium SBR Bond, mix for 1 - 3 mins, then slowly add water to the required consistency.
NB. Over addition of water causes rapid thinning of latex modified mortars owing to the plasticising effect of the latex.
The mix design depends upon thickness and intended use. However, typically mixes for a 12mm topping or screed are as follows:

	Screed	Topping
O.P.C	1	1
Moist sand	3.5	1.75
3mm Washed Granite	0	1.75
SBR Bond	0.2	0.2 (ie. 10 lites per 50kg of cement)
Water	As required	As required

All parts are by volume of uncompacted material.

APPLICATION METHOD / TOOLS

PRIMING

Application of a primer coat is necessary to obtain maximum adhesion of the topping or screed.

SBR BOND - FLOORING APPLICATIONS

This concerns the use of EVERBUILD® 503 Premium SBR Bond in screeds and toppings over background concrete. Adding EVERBUILD® 503 Premium SBR Bond to a floor screed or topping gives the following advantages:

- A low water:cement ratio allows a minimum of delay when overcoating is required.
- Reduced permeability to liquids.
- Improved chemical, abrasion and impact resistance.
- Resistance to dusting.
- Thinner screeds, achieving reduction in weight and savings in materials.
- Excellent slip resistance.
- Goods underlay for epoxy surfacing.
- EVERBUILD® 503 Premium SBR Bond has a long and successful track record of use in the construction industry.

SELECTION OF MATERIALS

To obtain maximum performance from mixes modified with EVERBUILD® 503 Premium SBR Bond it is important that attention is paid to the quality of the other materials used.

- **Sand** should be well washed and sharp. The grade of sand will depend upon the mix design.
- **Cement** Portland, High Alumina and sulphate resisting cements are compatible with SBR Bond. Portland cement should be fresh but cool. Cement containing air set lumps should not be used.
- **Coarse aggregate** e.g. Granite chippings. These should be dust free.
- **Air entraining agents** These should not be used.

POT LIFE

The mix has a pot life of approximately 30 minutes and batch size should be calculated accordingly.

APPLICATION

1. Apply topping or screed onto wet or tacky primer.
2. Compact and level with screed bar.
3. Finish with steel float. It is essential that the topping or screed is finished as the work proceeds.
4. The topping or screed would be cured for 1 - 2 days using conventional techniques. Curing should be started quickly after application.

Notes:
Joints in the screed or topping should coincide with the joints in the background.
It is easier to lay the mix if the ambient temperature is below 25°C.
If overcoating the screed, oleoresinous floor finishes should be avoided.
It the water drop test indicates the presence of water repellants, it may be more suitable to use and epoxy primer in place of the latex/cement primer.

CLEANING OF TOOLS

All tools should be cleaned immediately after use with water because hardened EVERBUILD® 503 Premium SBR Bond modified toppings and screeds have excellent adhesion and are therefore difficult to remove. Solvents such as white spirit used with coarse wire

wool help to remove partially hardened mortar.

LIMITATIONS

In common with other SBR products, SBR BOND is not suitable for coloured exterior decorative renders which will not be subsequently overpainted. Its poor UV resistance may cause discolouration

VALUE BASE

All technical data stated in this Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.

LOCAL RESTRICTIONS

Note that as a result of specific local regulations the declared data and recommended uses for this product may vary from country to country. Consult the local Product Data Sheet for the exact product data and uses.

ECOLOGY, HEALTH AND SAFETY

Local safety regulations must be observed and it advisable to wear PPI when working with this product with particular attention paid to cutting and handling. Transportation Class: The product is not classified as hazardous good for transport. Disposal: The material is recyclable. Disposal must be according to local regulations. Please contact your local Sika sales organisation for more information.

LEGAL NOTES

The information, and, in particular, the recommendations relating to the application and end-use of Sika products, are given in good faith based on Sika's current knowledge and experience of the products when properly stored, handled and applied under normal conditions in accordance with Sika's recommendations. In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability or of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any written recommendations, or from any other advice offered. The user of the product must test the product's suitability for the intended application and purpose. Sika reserves the right to change the properties of its products. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users must always refer to the most recent issue of the local Product Data Sheet for the product concerned, copies of which will be supplied on request.

SIKA IRELAND LIMITED
Ballymun Industrial Estate
Ballymun
Dublin 11, Ireland
Tel: +353 1 862 0709
Web: www.sika.ie
Twitter: @SikaIreland