

# SikaTite-BE

## Acrylic based bitumen waterproofing membrane

Construction

**Description** SikaTite-BE is a water based bitumen emulsion modified with acrylic latex polymers. It can be applied as a waterproof membrane, sealant, protective coating or adhesive. It is designed for use underground, internal and immersed areas.

**Uses** SikaTite-BE is suitable for use in commercial, residential, industrial, rural and automotive applications. Waterproofing applications include:

- Retaining walls.
- Cellars and basements.
- Planter boxes.
- Ponds, tanks and water features.
- Gutter repairs.
- Roofing.
- Silos.
- Repair of existing bitumen surfaces and membranes.

SikaTite-BE can also be mixed with sand and cement to create waterproof screeds, renders, fillets and fillers.

SikaTite-BE is suitable for application to common building substrates including concrete, render, masonry, fibre cement, sheet, timber, clay brick, concrete block, aerated concrete, asphalt, treated metal and existing bitumen.

**Advantages**

- **Water based**, free of solvents and toxins.
- Excellent waterproofing properties.
- Can be used in varying thicknesses.
- Excellent bonding capabilities.
- Can be applied to damp surfaces.
- Can be mixed with sand/cement to improve adhesion, tensile strength, flexibility, sound dampening and to create falls.
- **Approved for use in potable water (AS4020:1999)**
- Can be painted or coated over.
- Easy to apply and work with.
- Can be applied to a wide range of substrates.

**Storage and Shelf Life** Stored in original sealed packaging, in dry conditions away from direct sunlight, this product will keep for at least twelve (12) months.

### Instructions for Use

**Surface Preparation** Remove dirt, dust, oil, grease and all other contaminants from the surface. Any surface irregularities should be filled using SikaMonoTop repair mortars, Sikadur-41 epoxy repair mortar, or a repair mortar incorporating SikaTite-BE.

**Priming** A priming coat must be used on all substrates as part of the surface preparation. On concrete and masonry substrates the prime coat can be formed using the acrylic based SikaTite Primer, or by diluting 1 part SikaTite-BE with 3 parts water. On asphalt, bitumen, treated metal, plastic or smooth substrates, the prime coat should consist of 1 part SikaTite-BE and 1 part water.

**Application** SikaTite-BE can be applied by brush, roller, airless spray or trowel. It can be applied to horizontal or vertical surfaces.

For general waterproofing work, SikaTite-BE should be applied at a minimum of 2 coats. It is recommended that 2 coats be applied at a total minimum of 1.5 litres per m<sup>2</sup> to give a wet film thickness of approximately 1.2 mm. Apply subsequent coats at different directions to the previous. Coverage is dependant on the condition of the surface and will vary accordingly.

**Application (continued)**

**Reinforcement**

Reinforcement can be provided using Sika Fabric embedded in between coats of SikaTite-BE. The fabric should be used over cracks (up to 2mm), and joints. The fabric should be applied into the first coat of SikaTite-BE whilst it is wet, and it should not be visible after the final coat.

**Mixing**

**One component:** When SikaTite-BE is applied as a one component system, it is recommended that the material be lightly stirred before application.

**Two component:** SikaTite-BE can be mixed with a sand and cement mix, or a pre-bagged mortar such as SikaTite Filler, to form a mortar, screed, or render, with waterproofing properties. To create a mortar, add SikaTite-BE to a pre-formed sand/cement mix. 3 parts sand to 1 part cement should be mixed with water to form a working mortar before SikaTite-BE is added. The greater the amount of SikaTite-BE added will result in a more waterproof and flexible finish (use 3 parts mortar to 1 part SikaTite-BE as a starting point). This application is ideal when forming fillets at junctions, levelling floors and walls, filling voids or forming low build waterproof screeds.

**Cleaning**

All tools and equipment can be cleaned with water immediately after use. Hardened material can only be removed mechanically.

**Technical and Physical Data**

<b>Colour</b>	Charcoal brown when wet Charcoal black when dry			
<b>Volume of solids</b>	40%			
<b>Curing times</b>	Tack free:	1-2 hours approx.		
	Recoat time:	2-4 hours approx.		
	Trafficable:	4-24 hours approx.		
<b>Application Temperature</b>	10°C to 35°C			
<b>Service Temperature</b>	10°C to 60°C			
<b>Specific Gravity</b>	1.2 kg / litre (without mortar added)			
<b>Shore A</b>	52 approx.			
<b>Tensile strength (AS1145)</b>	0.3 MPa			
<b>Elongation (AS1145)</b>	824%			
<b>Water vapour transmission (ASTM E96-95)</b>	1.2g every 24 hours per m <sup>2</sup>			
<b>Crack bridging (ASTM C876:95)</b>	Cracks up to 2mm			
<b>Water absorption (ASTM E96-95)</b>	SikaTite-BE	:	SikaTite Filler	Absorption rate
	1	:	1	1.66%
	1	:	3	2.10%
	1	:	5	2.35%
<b>Packaging</b>	SikaTite-BE: 20 litre pails SikaTite-Filler: 18.75kg bags SikaTite Primer: 5 litre pail or 20 litre pail Sika Fabric: 100m rolls (various widths)			



## Important Notes

- SikaTite-BE is subject to surface crazing when continuously exposed to UV light.
- SikaTite-BE cannot bond two non-porous substrates together. It requires one surface to be porous for proper curing.
- A minimum of 10 days curing is required before SikaTite-BE lined tanks can be filled with water.
- When using over existing paints, membranes and coatings, trials are recommended before applications.
- It is recommended that SikaTite-BE be coated with Sika RainTite, or other acrylics, early in the morning or late in the evening, when ambient and substrate temperatures are low.
- SikaTite-BE should not be used as a trafficable surface.
- Do not apply when rain is imminent.
- Do not apply when surface temperature is below 10°C or above 35°C.
- All finish coatings over this membrane must be water based and solvent free such as Sika RainTite.
- On block walls, for immersed areas and planters/subterranean areas, before the application of the membrane, the wall surface needs to be slurry sealed using a product such as Sika Latex in a cement slurry form, i.e. sand and cement, applied at approx. 1-2mm thick achieved using a medium grade sand in the slurry. This is to ensure pores of blocks are filled and more importantly the joints between blocks are properly sealed, as often mortar joints between blocks are face filled and have voids behind them which are weak points. All voids must be filled.
- Wall/floor junctions must be filleted using SikaTite-BE in a fillet form. This is formed by mortar 3:1 sand to cement, wet into working consistency then mix 1 part mortar to 2 parts SikaTite-BE. Trowel into position forming a curved fillet or 45 degree angle fillet. This is the point with the greatest head of pressure. Bond breaker beads using polyurethane or silicone sealant are not compatible with SikaTite-BE or suitable in this type of environment.
- In applications where tanks or garden beds are underground and have earth against the other side, the positive side, i.e. where earth is packed against, must be waterproofed first before attempting to seal the internal area. In the event the external side has already been backfilled and has not been waterproofed, a coating on the internal side which can handle negative pressure, such as Sikalastic-150 needs to be applied to prevent any blistering or bubbling from moisture vapours forming from the other side, before the application of SikaTite-BE.
- In confined, humid or cool areas where drying is restricted, it is recommended to incorporate a 5% cement slurry into the SikaTite-BE product to be applied, which will assist as a drying catalyst. Cement slurry consist of 50-50 portland cement and water., e.g. 1 litre slurry into 20 litre SikaTite-BE using an electric stirrer.
- If the surface is to have any traffic or resting of materials, heavy items placed over it, a protective layer using SikaTite-BE mixed with mortar should be applied over it to offer a harder wearing surface. SikaTite-BE is a soft flexible material and is not designed to have traffic over it nor any heavy items placed on it as it will always remain pliable with a low shore A hardness.
- In areas with limited circulation a minimum 21 days curing should be allowed for and if possible use fans or blowing apparatus to get some air circulation inside e.g. in a confined area with only a small manhole being the only point of air entry, the extended curing time and assisted air circulation is recommended.
- Tanks should be filled at quarter intervals if possible, enabling the first fill to assess if bottom section is waterproof, then fill to half way, etc etc.

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**Handling Precautions**

- Avoid contact with skin, eyes and avoid breathing in vapour.
- Wear protective gloves when mixing or using this product.
- If poisoning occurs contact a doctor or Poisons Information Centre.
- If swallowed do NOT induce vomiting, give a glass of water.
- If skin contact occurs, wash immediately and thoroughly with soap and water.
- If in contact with the eyes, hold eyes open, flood with water for at least 15 minutes and see a doctor.
- A full Material Safety Data Sheet is available from Sika on request.

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**Important Notification**

The information, and, in particular, the recommendations relating to the application and end-use of Sika's 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 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 proprietary rights of third parties must be observed. All orders are accepted subject of our terms and conditions of sale. Users should always refer to the most recent issue of the Technical Data Sheet for the product concerned, copies of which will be supplied on request.

PLEASE CONSULT OUR TECHNICAL DEPARTMENT FOR FURTHER INFORMATION.

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