

Sikalastic® -450 (I) TH

High Performance Aliphatic Polyurethane Modified Liquid Waterproofing Membrane

Product Description

Sikalastic® -450 (I) TH is a high performance, ready to use, cold applied, single component, elastomeric high build liquid waterproofing membrane, based on Aliphatic Polyurethane modified bitumen emulsion.

Sikalastic® -450 (I) TH forms a seamless, highly elastic and durable film that adheres well to most of the common substrates e.g. concrete, cement blocks, wood, existing roof felts.

Sikalastic® -450 (I) TH is highly resistant to chlorides and sulphates commonly present in the soil. It is also UV resistant.

Uses

- New roofs
- Balconies, terraces, parking garages, asbestos and concrete roofs
- Industrial washrooms and shower
- Water reservoirs and swimming pools
- Foundations, cellar walls, retaining walls, bridges abutments
- Refurbishing of old waterproofing system including torch-on membrane
- Facade damp proofing
- Water proofing/curing membrane and protective coating for sub structure

Characteristics / Advantages

- Single component and cold applied
- Sikalastic® -450 (I) TH has UV resistance
- Cured membranes from Sikalastic® -450 (I) TH remain highly flexible even at extremes of temperatures (-25°C to 120°C)
- Excellent vapour barrier
- Easy to use
- Non-flammable and non-toxic
- Environment friendly
- Resistant to chlorides and sulphates commonly present in the soil
- Compatible with cementitious tiling adhesive

Form

Appearance

Thixotropic black emulsion dries to a black.
Flexible protective membrane.

Colour

Black

Packaging

20 kg/drum



Storage

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|---------------------------|--|
| Storage Conditions | Keep in undamaged and unopened original container and store at protected area from direct sunshine in dry condition at temperatures between +10°C and +30°C. |
| Shelf Life | 12 months |

Technical Data

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|----------------------------------|---|--------------|
| Non-volatile Content | 65% min | |
| Elongation | >700% approximately | (ASTM D 412) |
| Ultimate Tensile Strength | >0.5 N / mm ² | (ASTM D 412) |
| Specific Gravity | 1.2 | |
| pH Value | >9 | |
| UV and Ozone Stability | Excellent | |
| Chemical Stability | Resists most common spills like oil and mild chemicals. Will not resist solvents which will dissolve bitumen. | |
| Temperature Resistance | -25°C / +120°C | |
| Touch Dry | 1-2 hours | |
| Remark | The drying time depends on the type of substrate, temperature, humidity and thickness of layer and etc. | |

Properties of Dry Film

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|---|------------------------------------|----------------|
| Softening point R&B: | >120°C | (ASTM D 36-84) |
| Water vapour permeability: | >0.15 g/m ² /day | (ASTM E 96-92) |
| Elongation at break: | >700% | (ASTM D 412) |
| Resistance to water: | No Blistering or re-emulsification | (ASTM D 2939) |
| Protection of buildings against ground water: | As per BS 102 Code of practice | |

System Information

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|-------------------------|-------------------|--|
| System Structure | Layer Thickness : | 1.0 mm |
| | Primer: | 1 part Sikalastic® -450 (I) TH + 1 part Water |
| | Base Coat: | 1 part Sikalastic® -450 (I) TH (Diluted with Water up to 20% Max.) |
| | Top Coat: | 1 part Sikalastic® -450 (I) TH (Diluted with Water up to 10% Max.) |

Application Details

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|-----------------|---|------------------------------|
| Coverage | Primer: | 0.25 kg/m ² /coat |
| | Base Coat: | 0.50 kg/m ² /coat |
| | Top Coat: | 0.50 kg/m ² /coat |
| | For higher performance Glass Fibre reinforcement can be applied between 2 coats of Sikalastic® -450 (I) TH. | |

Substrate Preparation All surfaces should be sound, clean and free of contaminants. Absorbent surfaces e.g. concrete should preferably be dampened with water. In kitchens, toilets and other wet areas all the openings should be properly sealed. On all weak points such as cracks or around the pipes use a woven fiber glass mesh as reinforcement between the two coats of Sikalastic® -450 (I) TH.

Application Instructions

Application Method / Tools Sikalastic® -450 (I) TH can be applied by brush, roller or squeegee. Hot, dry or very porous substrate should be dampened with clean water prior to application of Sikalastic® -450 (I) TH. When two or more coats are required, ensure that the preceding coat is fully dry before applying the successive coat, which should be applied at right angle to preceding coat. Sikalastic® -450 (I) TH also acts as a non-degradable curing membrane hence it may be applied immediately after the removal of mould to the concrete structure which has no aesthetic value such as the sub structure of the building.

Cleaning of Tools Tools may be cleaned with water as long as the product is wet. Once dry, by mechanical means only.

Health and Safety Information Use normal safety precautions. Wear rubber hand gloves, safety shoes and safety goggles while using and handling the product. Avoid contact with skin and eyes. In case of accidental contact with eyes, wash with plenty of water and seek medical treatment immediately.

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.

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Sikalastic® -450 (I) TH 3/3

