BUILDING TRUST

PRODUCT DATA SHEET

SikaProof®-731 1.5 mm

(formerly MSeal 731 1.5 mm)

Pre-Applied Fully Bonded Sand Finished HDPE (High Density Polyethylene) Membrane for below grade waterproofing

DESCRIPTION

SikaProof®-731 1.5 mm is a 1.5 mm thick HDPE membrane with unique pressure sensitive adhesive and selected hard wearing mineral (sand) aggregates to enable good adhesion with concrete surfaces in chemical and mechanical bonds and becomes monolithic to the overlying layer of fresh concrete.It forms a unique integral seal around the concrete poured against it, prevents water ingress even under high hydrostatic pressure and prevents lateral water migration as well.SikaProof®-731 1.5 mm remains fully adhered to concrete (i.e. monolithic) helping retain its performance even when there is ground settlement beneath the slabs

USES

SikaProof®-731 1.5 mm is intended for use in below grade waterproofing applications such as basements rafts and confined retaining walls with high water table and cut & cover structures (e.g. tunnels) and allows efficient use of confined sections.

CHARACTERISTICS / ADVANTAGES

- Fully Adhered to Poured Concrete – Prevents later water migration between concrete and membrane
- Unaffected by hydrostatic pressure – Can be used in high water table areas
- Unaffected by Contamination – Does not require any special protection during construction – can be easily cleaned with water and high-pressure air
- Simple and Easy to Install – Does not require special tools and welding techniques
- Chemically resistant – Can be used in all soil and sub-soil conditions, even if contaminated with salts.
- Fully adhered watertight overlaps – Ensures water tightness

PRODUCT INFORMATION

Product declaration	Bonded sheet membrane according to IS 16471 : 2017
Chemical base	HDPE sheet membrane with adhesive layer and sand topping
Packaging	**SikaProof®-731 1.5 mm** 1.0 m (W) x 20 m(L) Rolls. Other sizes possible for bulk volumes **SikaProof®-936 (Double side tape)** 80 mm (W) x 20 m(L) Rolls **SikaProof®-937 (Single Side tape)** 120 mm (W) x 20 m(L) Rolls
Shelf life	24 months from the date of production
Storage conditions	The product must be stored in original unopened and undamaged sealed

	packaging in dry conditions and temperatures between +5 °C and +30°C.Protect from direct sunlight, rain, snow and ice, etc. Store in a horizontal position. Do not stack pallets of the rolls on top of each other, or under pallets of any other materials during transport or storage	
Colour	White	
Effective thickness	HDPE membrane (composite) > 1.5 mm	(ASTM D3767)

TECHNICAL INFORMATION

Tensile strength	Under Standard Conditions	≥ 25 MPa (free film)	(ASTM D412 mod)
	Retention of Tensile Strength Under Heat Aging	≈ 90%	
Elongation	Under Standard Conditions	> 550%	(ASTM D412 mod)
	Retention of Elongation Under Heat Aging	≈ 80%	
Adhesion in peel	≥ 1.5 N/mm (Concrete)		(ASTM D903 mod)
Joint peel resistance	≥ 0.8 N/mm		(ASTM D1876)
Flexibility at low temperature	Unaffected at -23 °C		(ASTM D1970)
Water tightness	> 71 m of hydrostatic head		(ASTM D5385 mod)
Resistance to lateral water migration	> 71 m		(ASTM D5385 mod)

APPLICATION INFORMATION

Ambient air temperature	+5 °C min. / +40 °C max.
Substrate temperature	+5 °C min. / +40 °C max.

SYSTEM INFORMATION

System structure	The following system products must be used: ▪ SikaProof®-731 1.5 mm sheet membrane ▪ SikaProof®-936 (Double side) & SikaProof®-937 (Single Side) sticky tape used for specialized detailing and overlaps.(Refer to individual Product Data Sheets) Ancillary products: Accessories and complementary products are available to provide detailing and connection solutions

BASIS OF PRODUCT DATA

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

ECOLOGY, HEALTH AND SAFETY

User must read the most recent corresponding Safety Data Sheets (SDS) before using any products. The SDS provides information and advice on the safe handling, storage and disposal of chemical products and contains physical, ecological, toxicological and other safety-related data.

APPLICATION INSTRUCTIONS

EQUIPMENT

- Measuring tape
- Membrane Cutter
- Marking pen
- Scissors
- Pressure roller
- Clean lint-free cloth
- Metal straight edge for cutting
- Hot air gun (Leister Triac)
- Automatic thermal jointing machine (Leister Twinny or Leister Varimat,etc)

APPLICATION

Surface Preparation
It is essential to create a sound and solid substrate to eliminate movement during the concrete pour. Substrates
must be regular and smooth with no gaps or voids. Grout around all penetrations for stability

Horizontal Blinding
The blinding must be free of loose aggregate, voids,surface irregularities and sharp protrusions. The surface needs to be in a touch dry condition. SSD condition (no standing water) is also acceptable.

Vertical Surfaces
The vertical surfaces should have proper levelled brickwork, blockwork or formwork without any irregularities.For the case of sheet piles, the substrate should be made regular with a smooth finished shotcrete or sacrificial formwork to be installed

Installation
Please refer to the Sika® Method Statement:SikaProof®-731 1.5 mm for detailed installation guidelines or contact Sika® Technical Services team for
support

Membrane Repair
Generally, the membrane is very tough, and the execution should not encounter any repair. In the most extreme cases, if for some site issues, there is any reason to do a patch work, then please contact our Sika® Technical Services team for the rectification procedure

Pouring of Concrete
It is recommended that concrete is poured within a maximum of 45 days after the HDPE membrane has been installed on the sub-base (e.g. PCC). Care should be taken to avoid any damage to the membrane during laying steel reinforcement, consolidation and compaction
of concrete.Care should be taken to avoid any damage to the membrane during the reinforcement laying. Additionally,during placement of concrete, the vibrator needle should not touch the placed HDPE membrane. For best results use Sika® Smart Dynamic Concrete

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 exact product data and uses.

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 India Pvt. Ltd.
620, Diamond Harbour Road
Commercial Complex II
Kolkata - 700 034
West Bengal, India

Contact:
Phone: +91 33 2447 2448
Fax: +91 33 2397 8688
info.india@in.sika.com
www.sika.in