

# PRODUCT DATA SHEET

# SikaProof®-731 1.2 mm

(formerly MSeal 731 1.2 mm)

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

#### **DESCRIPTION**

SikaProof®-731 1.2 mm is an HDPE membrane with unique pressure sensitive adhesive and selected hard wearing mineral aggregates to enable good adhesion with concrete surfaces in chemical and mechanical bonds and becomes monolithic to the overlying layer of fresh concrete.

SikaProof®-731 1.2 mm 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 1.2 mm remains fully adhered to concrete (i.e. monolithic) helping retain its performance even

when there is ground settlement beneath the slabs. SikaProof®-731 1.2 mm comes with dual adhesive tape lap seam technology enabling high performance joints even in damp conditions.

#### **USES**

SikaProof®-731 1.2 mm is intended for use in below grade waterproofing applications such as basements rafts and confined retaining walls

## **CHARACTERISTICS / ADVANTAGES**

- Dual Lap- Improves Lap adhesion and lap formation even in damp conditions.
- Fully Adhered to Poured Concrete Prevents later water migration between concrete and membrane
- Uniform distribution of mineral particulates-Enables improved protection of pressure sensitive adhesive from UV
- 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 membran	Bonded sheet membrane according to IS 16471 : 2017		
Chemical base	HDPE sheet membrane v	HDPE sheet membrane with adhesive layer and sand topping		
Packaging	SikaProof®-731 1.2 mm	SikaProof®-936 (Double side tape)	SikaProof®-937/S (Single Side tape)	
	1.2 mm (W) x1.2mm (T) x20m (L) Rolls	· <del></del>	120 mm (W) x 8 mm(T) x 20m Rolls	
Shelf life	12 months from the date of production			
Storage conditions	The product must be stored in original unopened and undamaged sealed			

Product Data Sheet SikaProof®-731 1.2 mm September 2024, Version 03.01 0207200000000000004

	°C.Protect from direct sunlight, rain, snow and ice al position. Do not stack pallets of the rolls on top	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.	
Appearance / Colour	Grey Sand Finish		
Effective thickness	HDPE membrane (compos- > 1.2 mm ite)	(ASTM D3767)	

TECHNICAL INFORMATION		
Resistance to static puncture	≥ 900 N	(ASTM E154)
Tensile strength	≥ 25 MPa (free film)	(ASTM D412)
Elongation	> 500%	(ASTM D412)
Adhesion in peel	≥ 1.8 N/mm (Concrete)	(ASTM D903)
Joint peel resistance	≥ 1.4 N/mm (HDPE to HDPE Membrane at Overlap) @ 23°C ≥ 0.8 N/mm (Double/Single Side Jointing Tape to HDPE Membrane) @ 23°C	(ASTM D1876)
Flexibility at low temperature	Unaffected at -23 °C	(ASTM D1970)
Water tightness	> 71 m of hydrostatic head	(ASTM D5385)
Resistance to lateral water migration	> 71 m	(ASTM D5385)
APPLICATION INFORMATIO	N	
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 1.2 mm sheet membrane  • SikaProof®-936 (Double side) & SikaProof®-937/S (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 METHOD / TOOLS**

### **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 1.2 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









Product Data Sheet SikaProof®-731 1.2 mm September 2024, Version 03.01 020720000000002004



SikaProof-73112mm-en-IN-(09-2024)-3-1.pdf