



# KITOFLEX 4P & 5P

## Description

KITOFLEX 4P & 5P, high-quality torch-applied membranes with a core of either fiberglass or non-woven polyester, boast rot-proof durability, malleability, and excellent mechanical properties. Crafted from premium-grade modified bitumen, these membranes offer superior resistance to piercing and good elongation, combining resilience in high temperatures with the classic attributes of an APP membrane.

The waterproofing compound utilized in KITOFLEX membranes is crafted from a high-performance elastomeric material, skillfully engineered to withstand elevated ambient temperatures with exceptional resilience.

The coating blend comprises bitumen modified with Amorphous Poly-olefins, thermoplastic resins, and stabilizers, imparting outstanding resistance to atmospheric agents and aging to the membrane. This formulation ensures the membrane maintains shape stability even at high temperatures, enhances adhesion strength, and facilitates easy application, thereby saving time and labor costs.

## Uses

"To deliver effective waterproofing solutions, our products are designed for a wide range of applications, including Foundation & Basements, Roofs & Terraces, Pile Capping & Footings, Tanking, Car parks, Abutments & Swimming Pools, Tunnels, Airport Aprons & Ramp Areas, subways & Concrete retaining structures."

## Advantages

- » Acts as a robust shield against water and dampness
- » Exhibits exceptional resilience to aging and environmental factors
- » Maintains flexibility even in sub-zero temperatures, without physical strain
- » Ensures shape stability under high-temperature conditions
- » Allows direct torch application over existing shingles or bituminous membranes
- » Adaptable to structural movements
- » Endures thermal shock effectively
- » Facilitates easy application through torching
- » Forms strong bonds with the substrate
- » Easily conforms to various contours
- » Resilient against chemical exposure from soil or water

## Properties

## Values

Properties	Values			
Membrane Thickness (+/- 5%) (ASTM D751)	4mm	5mm	4mm	5mm
Mass per unit area	4.7 kg/m <sup>2</sup>	5.7 kg/m <sup>2</sup>	4.7 kg/m <sup>2</sup>	5.7 kg/m <sup>2</sup>
Reinforcement	180 g/m <sup>2</sup> polyester		200 g/m <sup>2</sup> polyester	
Softening Point (ASTM D36)	>150°C		>150°C	
Penetration @ 25 Deg C Of Coating Mixture (ASTM D5)	20 – 25 dmm		20 – 25 dmm	
Flexibility at low temperature (ASTM D5147)	-5°C		-5°C	
Tensile strength (L/T) (ASTM D5147)	750/550 N/5cm		960/700 N/5cm	
Elongation Of Membrane (L/T) (ASTM D5147)	40 / 50 %		45 / 50 %	
Tear resistance (L/T) (UEAtc)	190 / 190 N		220 / 240 N	
Lap joint strength (L/T) (ASTM D5147)	750/550 N/5cm		960 / 860 N/5cm	
Puncture Resistance (UEAtc), Static Dynamic	L4 I4		L4 I4	
Water absorption (ASTM D570)	<0.15 %		<0.15 %	
Dimensional stability at +80C (L/T) (ASTM D5147)	-0.5 % -0.5 %		-0.5 % -0.5 %	
Water vapor transmission (ASTM E96)	< 0.50 g/m <sup>2</sup> /24h		< 0.50 g/m <sup>2</sup> /24h	
Resistance to ageing due to UV radiation (ASTM G53)	No signs of deterioration after the test		No signs of deterioration after the test	

## FEATURES

The membrane is available in various types tailored to suit different surface tops.

**SAND :** The top surface is covered with fine Sand.

**PBS :** The top surface is covered with a thin easy torched Poly-ethylene film.

- SL:** The top surface is coated with reflective slates, available in either natural gray or pigmented in various colors.
- AL:** The top surface is coated with reflective aluminum film.

## Method of Application

### SURFACE PREPARATION:

For applications on concrete, tiles, or any other porous surface, begin by coating the substrate with BETOPRIME SB (a solvent-based bituminous primer according to ASTM D41) at a rate of 4-5m<sup>2</sup> per liter. Allow this coating to thoroughly dry. In periods of high humidity, it is advisable to let it dry overnight.

### APPLICATION:

**Unrolling and Positioning:** Start by unrolling the BETOFLEX membranes and ensuring they are positioned correctly. Each roll should overlap the adjacent roll by 10cm. After proper positioning, roll the membrane back up, being careful not to alter its orientation.

**Heating and Adhering:** Utilizing a propane gas torch, heat the lower surface of the membrane using left to right movements. This heating will cause slight surface melting, allowing the molten bitumen to adhere to the surface.

**Torching the Side Overlap:** Proceed to torch on the side overlap to the recommended size of 100mm.

**Continuing the Process:** Repeat the above method for consecutive rolls, ensuring that end-laps are a minimum of 150mm. It is crucial to inspect lap joints thoroughly to ensure complete adhesion.

## Tools and Equipment

Applying the KITOFLEX membrane requires only a few essential tools, including propane gas torches with their corresponding gas cylinder, a knife for precise membrane cutting, and a trowel with a rounded end. It is imperative to wear protective gloves and goggles when operating the gas torch.

### Product Disclaimer:

Kito products are guaranteed against defects in materials and manufacturing, and their sale is governed by our standard Conditions for the Supply of Goods and Services. The technical information provided has been meticulously compiled, and to the best of our knowledge, it is accurate and true as of the leaflet's printing date. However, continuous development efforts may lead to variations based on factors such as raw material availability, client specifications, and environmental conditions. The actual technical specifications may differ from those outlined herein, as we reserve the right to make changes, modifications, or improvements without prior notice.

All recommendations and suggestions are made in good faith and are intended for general guidance only. We do not imply or provide any warranty regarding application, as conditions of use and associated labor are outside our control.



## Packing

KITOFLEX 4P & 5P : 10m long x 1m wide roll  
KITOPRIME SB : 20 & 200 Ltr Drums

## Limitation

Keep stored in a shaded warehouse below 30°C, away from heat sources and direct sunlight.

## Storage

All products maintain a shelf life of 12 months when stored in a cool, dry environment, away from heat sources, within their original unopened packaging. It is recommended to store them horizontally, not exceeding one pallet in height.

## Health & Safety

If KITOPRIME SB is swallowed, do not induce vomiting; instead, drink a glass of water. In case of contact with eyes, flush with copious amounts of clean water for at least 15 minutes and seek medical advice. If it comes into contact with the skin, remove any contaminated clothing and thoroughly wash the skin. For more detailed information, please refer to the Material Safety Data Sheets for the aforementioned products.



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