



## **POLYFLEX MS ROOF MEMBRANE TDS – TECHNICAL DATA SHEET**

# **POLYFLEX MS ROOF MEMBRANE**

### **PRODUCT DESCRIPTION**

Single component, fluid, ready-to-use, solvent and isocyanate free, UV resistant, high technology coating and waterproofing material, produced with MS Polymer hybrid technology.

Polyflex MS Roof Membrane can be used for waterproofing of horizontal and vertical large surfaces and for bridging capillary cracks up to 3mm.

### **APPLICATION AREAS**

- Indoor and outdoor,
- Waterproofing and local repairs of horizontal surfaces, thanks to its self levelling properties,
- Waterproofing and local repair of vertical surfaces, thanks to its ease of application with a roller or brush
- On almost all kinds of mineral surfaces, such as concrete, stone, marble, ceramic, tile, all kinds of wood, glass, metal, tile, brick, cement mixed chip panel, gas concrete and their combinations,
- Balconies, terraces or pitched roofs where waterproofing is required, on wood and metal surfaces, in intersections of chimneys, ventilations and skylights,
- Wet areas such as bathrooms and kitchens,
- Places below ground level, such as foundations, garage and basements, against non-pressurized water and ground moisture.

### **FEATURES & BENEFITS**

Polyflex MS Roof Membrane is an MS Polymer based product with high technical qualifications, developed with Japanese technology. MS Polymer technology has important advantages compared to existing polyurethane, silicone, bitumen or cement-acrylic based coatings:

- Does not contain solvent and isocyanate which are harmful to human health and to the environment.
- Has 100% elastomeric composition, does not shrink as it does not contain solvent.
- Resistant to UV, does not crack, sag or turn yellow. Can be safely used outdoor.
- Bonds even on damp surfaces, provides high adherence.
- Not harmful to human health and to the environment thanks to its low VOC values. Almost odourless.
- Easily and quickly applied with a brush or a roller.
- Does not form seams. Over paintable
- Very flexible. Can cover the cracks up to 3mm, fills the cracks up to 2mm. Keeps its elasticity and bonding properties in joints and cracks caused by the movement of the buildings. Turns to its original form perfectly.



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## FEATURES & BENEFITS CONTINUED

- Protects its elasticity even in low temperatures, when cured.

Polyflex MS Roof Membrane is a new generation product which offers all these advantages in a single product.

## TECHNICAL DATA

PROPERTY	VALUE
Appearance	Medium viscosity elastomeric fluid liquid coating
Colour	Please see the color chart
Density	1.45 ± 0.05 kg/L
Application Temperature	Between +5°C and +35°C
Hardness (Shore A)	30 ± 5
Bond Strength by Pull-off	≥ 2.0 MPa (EN 1542)
Elongation at Break	> 300% (7 days)
Capillary Absorption and Water Permeability	w < 0.1 kg/(m <sup>2</sup> .h <sup>0.5</sup> ) (EN 1062-3) 0.018 kg/(m <sup>2</sup> .h <sup>0.5</sup> ) (TS 4045)
Film Formation Time	150 to 30 minutes
Curing Rate	2 mm / 24 hours
Service Temperature	-30°C / +80°C

## CONSUMPTION

1.40 - 1.50 kg/m<sup>2</sup> for approximately 1mm thickness in each layer. (Varies depending on the application area, roughness and absorption of the surface.) At least two layers are recommended.



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## APPLICATION

### Preparation of the surface

- The surface must have a minimum fall of 1:80, be clear of materials that prevent bonding such as dust, oil, tar, paint, silicone, curing materials, detergents and mould oils.
- Repair any weak parts of concrete, remove any previous delaminating coatings; make the surface sound and solid.
- Under normal conditions, there is no need for primer. However, if the surface is dusting or excessively wet, prime with POLYFLEX PRIMER 100. Apply the product within 6 - 18 hours after priming.

Flat roofs should be installed compliant with BS 6229:2018 (Flat roofs with continuously supported flexible waterproof coverings)

### Application

- Polyflex MS Roof Membrane is ready-to-use. Do not dilute or add any external substance. Mix before use.
- Cut the aluminium packaging of Polyflex MS Roof Membrane from the top corner in a triangle shape with scissors and pour directly onto the surface. Spread with a roller, spatula, flat or notched trowel.
- Apply Polyflex MS Roof Membrane in two layers perpendicular to each other. Wait 6-12 hours after the application of the first layer.
- Bevel the corners with reinforcing bandage or matting and apply the second layer.
- It is recommended to use Roofers No1 Mesh between both layers on any area above 100m<sup>2</sup>.
- For a smooth finish at the borders, surround the application area with masking tape. Remove the tape within 5 minutes after the application.
- The area can be open for use in 24 - 48 hours, final curing takes places after 7 days.

## CAUTION

- Avoid application at the temperatures below +5c and above +35c.
- There are 2 aluminium packages of 7kg in the 14kg bucket to prevent fast curing of the product during application. The packages are designed for single use. Use the product completely within the specified duration when opened.
- Do not add water or thinning solvent to the product.
- After the application, protect the surface from water, rain, dew, frost and snow until it is completely dry.



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## PACKAGING

14kg plastic buckets (2 x 7kg aluminium foiled packages).

## SHELF LIFE

Expires in 12 months. Store unopened packages between +10c and +25c, in a dry environment. Protect from sunlight, stack up to 3 packages on the pallet.

## HEALTH AND SAFETY

As with all chemical products, avoid contact with food products, skin, eyes and mouth during use and storage. During the application, use work clothes, protective gloves and glasses in accordance with health and safety guidelines. Consult a doctor if accidentally swallowed. In case of contact with skin, rinse with water. Do not leave the cover open. Store out of the reach of children.

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