

Product

## **STARFLEX MONO 100**

cod. 6828 M100





# ONE COMPONENT MOISTURE CURING LIQUID POLYURETHANE MEMBRANE

**Features** 

- In compliance with the requirements of the 1504-2 european standard: Product for the protection against the risk of penetration 1.3, moisture control 2.2, resistivity increase 8.2
- Easy to apply with roller, brush, spray.
- Crack bridging ability.
- Excellent elasticity, even at low temperatures.
- Thixotropic version available.
- External fire performance Broof t4 version available.
- Application temperature from  $+5^{\circ}$ C to  $+35^{\circ}$ C, substrate humidity < 4 %, R.H. between 35 and 80 %, above the dew point by at least 3°C.
- Operating temperature from -40°C to +80°C in air.

Application fields

Waterproofing systems with or without reinforcement for:

- Roofs, terraces and balconies.
- Tanks, channels, pipelines.
- Renewing old membranes.
- Parking and sport areas.
- Wet areas.
- Bridge decks, overpasses and podiums.

**Application** 

#### **PRODUCT PREPARATION**

One-component product ready to use after steering carefully.

At this stage the product can be thinned with 5-10% by weight of DIL-UENTE 15 or can be added with ACCELERANTE 1 (in order to decrease curing time).

If necessary, it is possible to dilute with 5% by weight of Diluent 15. Do not use thinners containing reactive groups such as alcohols. Inappropriate thinners cause the product does not harden.

To increase the hardening speed, use a maximum of 3 - 4% of ACCEL-LERANTE 1. 850 g of ACCELLERANTE in 25 kg of product. Do not exceed the indicated quantity of ACCELLERANTE 1, otherwise the product will not harden.

#### SUBSTRATE PREPARATION

Substrates to be treated must be sound, clean and free from contaminations and debris by using high pressure washing sprays.

Substrate preparation is fundamental, thus the substrate to be treated must be free of any pollutant, dry, coherent and it must have a bond strength of at least 1,5 MPa. In any case it is necessary, depending on the type of substrate, to make a preparation of the flooring by sand-blasting, milling, smoothing or sanding.

Free and stagnant water coming from the foundation, from previous washing processes or from meteorological events must be removed or dried.

Application on bituminous membrane: remove all deformation. Some repair can be done with membrane itself. Possible repairs can be done with polyurethane foam.

STARFLEX MONO 100 adheres directly on concrete. For better adhesion use PRIMER 0230. For substrates with pores that are more difficult to close, PRIMER 0260 can be used in more than one coat and interposing a light scatter of quartz.

If the substrate is damp or subject to back pressure, DUROGLASS FU BIANCO TIX or DUROGLASS FU RAPID must be applied in one or two coats, according to their technical data sheet.

For the repair of existing waterproofing or on old roofing felt,100 g/m<sup>2</sup> of PRIMER 0230 must be previously applied.

As an alternative primer, STARCEMENT 5/A can be used.

#### **PRODUCT APPLICATION**

STARFLEX MONO 100 can be applied by brush, squeegee, roller or airless spray (pressure 130-150 bar and nozzle 0,031"-0,035"). Roller application is necessary for reinforced systems.

**Non reinforced system:** apply two coats of product, with a consumption of 0,6-0,8 Kg/m² for the first layer and 0,6-0,9 Kg/m² for the second. (over-application time from 6 to 48 hours maximum.)

If the substrate is horizontal or slightly slopped, the maximum amount of product which can be applied without reinforcement is 0,800 Kg/m<sup>2</sup> per layer.

**Reinforced system**: use STARTEX NW and impregnate it with two layers of 1,1 Kg/m<sup>2</sup> each.

After minimum 24 hours and not later than 48 hours, a protective colored coating can be applied on the waterproofing layer: POLISTAR E/P with the consumption of  $100 - 150 \text{ g/m}^2$  or STARFLEX MONO TOP with a consumption of  $150 - 400 \text{ g/m}^2$ .

Minimum total consumption: 2,1 kg/m<sup>2</sup>·

Clean the tools with DILUENTE 15 after every use.

### Technical Data

Color	Grey, White, other requested colors			
Specific weight UNI EN ISO 2811-1	1,59± 0,05 g/ml			
Viscosity at 20°C UNI EN ISO 2555	7.500 ± 1.500 mPa.s			
Solid content EN ISO 3251	90±2% in weight 82±1% in volume			
Chemical resistance	Good resistance against acidic and alkali solutions, detergents, oils and sea water			
Theoretical consumption	2.000 – 2.500 g/m <sup>2</sup>			
Theoretical thickness	1.000 – 2.250 µm			
Curing at 22°C, 50% R.H.	<ul> <li>tack free 7-9 hours</li> <li>insensitive to rain 7 hours</li> <li>overapplication 24 hours</li> <li>completely cured 10 days</li> </ul>			
fluenced by relative envir	curing. The rapidity of hardening is strongly inconmental humidity.  e "tack free" condition depends on the amount			
Permeability to carbon dioxide EN 1062-6	Sd > 50 m			
Permeability to	Sd < 5 m			
water vapour EN ISO 7783-2				
Capillary absorption and permeability to water EN ISO 1062-3	< 0,1 kg/m <sup>2</sup> · h <sup>0.5</sup>			
Adhesion to concrete (traction) EN 1542	> 4,0 MPa			
Crack bridging EN 1062-7	A method - static: A5 (23° C) B method - dinamic: B4.2 (23° C)			
Wear resistance EN ISO 5470-1	Mole H22- 1000 g, 1000 giri < 350 mg			
Shock resistance EN ISO 6272	4Nm			
Adhesion to green concrete EN 13578	No swelling, no cracks, no spalling			
UV Resistance (INVE 2000) P-500W lamp 50 hours at 70°C	Excellent			
Tensile strength UNI EN 12311-2	> 4 M Pa			

Elongation at failure UNI EN 12311-2	> 450 %
Shore A Hardness EN ISO 868	70
Liquid applied water- proofing products to be used under the ceramic tiles, glued with adhesives Initial membership Adhesione after immersion in water UNI EN 14891	> 0,5 MPa > 0,5 MPa
Storage	12 months from date of production if stored properly in original, unopened sealed packaging, in a dry place at temperatures between +5°C and +35°C.

CE						
1305						
MPM Srl - Via Adda, 15- 20090 Opera (MI)						
12						
1305-CPR-1222						
EN 1504-2	DoP 029		Product type 6828			
Protection against ingress 1.3 (C) , Moisture control 2.2(C); Physical resistance 5 1.(C); Increasing resistivity 8.2 (C).						
CO2 permeability		sD > 50 m				
Water vapour permeability		Class I				
Liquid water permeability		w < 0.1  kg/m2  x h0.5				
Bond strength by pull-off		> 2,0 N/mm2				
Crack bridging		A5 (23°C)				
		> B4.1 (23°C)				
Impact resistance		Class I				
Abrasion resistance		< 3000 mg				
Hazardous substances		The hardened product does not				
		release hazardous substances				
Reaction to fire		F				
Exposition to artificial atmospheric agents		No blistering, no cracking, no fla- king				