



REFLEX M1 PRO

ONE-COMPONENT POLYURETHANE MOISTURE CURING COATING

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

Broof t4

Features

- Fluid product, applicable with roller, brush, spray.
- Seamless waterproofing.
- Resistant to UV rays, abrasion, bad weather.
- Crack bridging ability.
- Excellent elasticity, even at low temperatures.
- External fire performance Broof t4.
- Application temperature from +5°C to +35°C (substrate), support 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.

Field of use

- Waterproofing protective product for vertical applications for roofs, stairs, balconies, bridges, terraces, etc.
- Easy to apply even in spots difficult to reach.
- Usable to make waterproofing with nonwoven fabric.
- Waterproofing beneath ceramic tiles.
- It can extend the operation of pre-existing waterproofing products.

Application

Substrate preparation

- *Concrete*: the surface 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 to make a preparation of the flooring by milling, shot peening, smoothing or sanding.
- *Tar paper*: remove all deformations of the tar paper. Some repair can be done with tar paper itself. Possible repairs can be done with polyurethane foam.
- *Ceramic tiles*: prepare the surface through shot peening, smoothing or sanding.

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

Primer

On surfaces affected by humidity or counterthrust, apply at least two coats of **EPOXCEMENT TIXO** or **EPOXCEMENT HB RAPIDO** until a dry surface is obtained.

On surfaces without high humidity or counterthrust apply **PRIMER 60** or **ITAPOX 50**, refer to the technical office.

On irregular or damaged substrates, on cracks and joints apply a glass fabric or mat.

Product preparation

One-component product ready to use after homogenization with a low rate drill.

If necessary it is possible to thin it with at most 5 % **DILUENTE PER 350 MONO**. Do not use thinners which contain reactive groups such as alcohols. Inappropriate thinners prevent the product from curing.

Application

Applicable by brush, roller or airless spray gun.

In the latter case thin the product with 5-8 % of **DILUENTE PER 350 MONO**, use a pump such as Graco Mark V, 421-423 nozzles, 200 bar pressure, hoses diameter: 1/2 inch (first 15 metres), 3/8 inch (next 15 metres), 1/4 inch (latest 1-2 metres).

Where necessary it is possible to apply the nonwoven fabric or the glass mat.

With this product it is possible to use the wet on wet technique.

Apply on the suitable primer the correct quantity of **REFLEX M1 PRO** as a first coat, then on the wet product apply the nonwoven fabric or the glass mat, then immediately apply the second coat.

When the nonwoven fabric or the glass mat is laid on the first coat, it is advisable to use a dry roller to improve the impregnation of the geotextile with the product.

To increase the UV resistance, apply one 150 g/m² coat of **ITALPAINT 10** or **ITALPAINT 67**, two-component polyurethanes, or the same quantity of **ELASTOPAINT MONO TOP**, one-component polyurethane.

Joints and connections with different materials

Pay the utmost attention to structural joints. Before the application of the protective coating create an omega-shaped support with an elastic butyl strap or a nonwoven fabric.

COAT	PRODUCT	CONSUMPTION
Primer	Refer to technical office	
First coat	REFLEX M1 PRO	1000 - 1500 g/m ²
Second coat	REFLEX M1 PRO	1000 - 1200 g/m ²
Thockness about 1300 µm		

Tools cleaning

The tools must be cleaned with **DILUENTE PER 350 MONO** after use.

Technical data

Colour	Grey, white, red	-
Density at 20°C	1,47 ± 0,05 kg/l	EN ISO 2811-1
Viscosity at 20°C	18000 ± 5000 mPa · s	EN ISO 2555
Non-volatile-matter content	87 %	EN ISO 3251
Impact resistance	4 N · m	EN ISO 6272
Elongation at break	> 450 %	EN 12311-2
Bond strength by pull-off	> 4 MPa	EN 1542
Shore A hardness	> 70	EN ISO 868
UV Resistance (INVE 2000) P-500W lamp	Excellent 50 hours at 70°C	
Crack bridging <i>Method A, static</i> <i>Method B, dynamic</i>	A5 (23°C) > B4.1 (23°C)	EN 1062-7
Hydrolysis resistance 30 days at 55°C	Excellent	
Carbon dioxide permeability	s _D > 50 m	EN 1062-6
Water vapour permeability	s _D < 5 m	EN ISO 7783-2
Liquid water permeability	w < 0,1 kg/m ² x h ^{0.5}	EN ISO 1062-3
Liquid-applied water impermeable products for use beneath ceramic tiling bonded with adhesives <i>Initial adhesion</i> <i>Adhesion after water contact</i>	 > 0,5 MPa > 0,5 MPa	UNI EN 14891

Curing

At 22°C, 50 % R.H.	
- Touch dry	2-4 hours
- Overcoating	24 hours maximum
- Complete curing	10 days

Since the product is moisture curing, the curing speed is strongly affected by the relative humidity of the environment.

Storage

The product in the original sealed packaging, stored in a dry and sheltered place at a temperature comprised between +5°C and +35°C, is preserved for 6 months.

Safety

In the application of this product it is advisable to use goggles, rubber gloves and all the PPE required by the laws on the use of chemical substances.

For all the additional information consult the material safety data sheet of the product.

		
PERFORMACES IN COMPLIANCE WITH CERTIFICATION CE EN 1504-2		
Product type 1820		DoP 148
Characteristics	Product performance	Test Method
Water vapour permeability	Class II	EN ISO 7783-2
Liquid water permeability	$w < 0,1 \text{ kg/m}^2 \times \text{h}^{0.5}$	EN ISO 1062-3
Bond strength by pull-off	$> 1,5 \text{ N/mm}^2$	EN 1542
Hazardous substances	The hardened product does not release hazardous substances	
Reaction to fire	F	EN 13501-1

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