

MONNELI MANTOFLEX

Elastomeric Acrylic Waterproofing Membrane

Product Description

A product composed of water based synthetic polymers. It is a thixotropic paste, easily applicable on horizontal and vertical surfaces. Once dried, it forms an elastic, continuous, waterproofing membrane that is resistant to thermal changes, UV rays, and diluted acid solutions.

Uses

MANTOFLEX adheres perfectly to a variety of supports as, concrete, asbestos, cement, gypsum and cement boards, wood, metallic surfaces, etc. It can be used as a waterproofing and flexible protective layer for the following:

- Ceramic coverings in showers and bathrooms.
- As protective coating for polyurethane sprayed foam against UV effect.
- Used as a waterproofing system for roofs, terraces, balconies, etc for both floor and wall application.
- As waterproofing and protective coating for wet areas not exposed to pressurized water, such as showers, kitchens, bathrooms, residential buildings and hospitals.

Advantages

- Single component water based. Ready for use direct from container
- Elastomeric, high crack bridging capability
- Easy water clean-up
- UV and weathering resistant
- Can be applied to both vertical and horizontal surfaces
- Can be applied to wide range of substrates
- Good resistance to Chloride & Carbon dioxide Diffusion

Instructions for Use

Surface Preparation

The surface of the concrete shall be sound, clean and uncontaminated.

This preparation shall be such as to leave a sound exposed concrete surface free from dust, loose particles and any deleterious matter. If the concrete surface is defective or has laitance, it must be cut back to a sound base.

Moss and lichen must be removed physically followed by treatment with fungicidal wash. After treatment, it must be washed down thoroughly with clean water and allow to dry.

Crack Treatment

Shrinkages and non-moving structural cracks less than 1.0mm shall be filled with a pre-treatment strip of MANTOFLEX of 1.0mm thick extended to 75 mm on both sides of the crack.

Voids and honeycombs shall be patched with BETOFINISH C or EPOFINISH C allowing the area to cure before applying the membrane.

Right Angle Bends

All right angle bends must have a coving detail installed. In areas where parapet walls, columns, pipe penetrations are present, a 45° coving fillet shall be made at all corners using BETOCEM FIBER, a Fiber reinforced shrinkage controlled mortar for concrete repair to the water saturated cured surface.

All other angles, joints, protrusions and stress joints should be pre-treated with a heavy application of MANTOFLEX extending 150mm on both sides of the coving. Allow the patched area to cure before applying the membrane.

Movement Joints

Expansion and movement joints should be sealed with ELASTOSEAL PU25, a Polyurethane sealant. Allow to cure before the application of MANTOFLEX.

Priming

In case of very porous substrates, apply the first coat of MANTOFLEX diluted with 20% of water. Alternatively, apply one coat of PRIMER A 18.

Mixing

MANTOFLEX should be stirred before use until a uniform color and consistency is achieved. Product is ready for use.

Application

MANTOFLEX shall be applied by brush, roller, or airless spray in 2 coats to achieve a minimum dry film thickness of 0.5 mm for each coat. The two coats must be applied at right angles to one another once the first coat dries completely. Substrates that are exposed to movements and deformation or where cracks are expected, reinforcing glass fibre mesh shall be spread into the first coat of MANTOFLEX before applying the second coat.

A layer of ARMOFLEX, a fiber glass sheet should be embedded between the two MANTOFLEX coats over pipe culverts, floor drains, corner joints and floor / wall junctions.

It is recommended to spread sufficient clean silica and to the final wet coat of MANTOFLEX before applying tile adhesives. Tiling or finished floor installation should be carried out as soon as possible after full cure of membrane is established.

Cleaning

All tools employed for the application of MANTOFLEX can be cleaned with water before it hardens. Cured materials should be mechanically removed.

Recommendations

- MANTOFLEX is not recommended for use in swimming pools.
- After curing, tiles and flags can be laid over the applied MANTOFLEX layer on vertical and horizontal areas using an appropriate specified adhesive from COLMEF'S NEOFIL range.

Technical Data

Properties	Results
Appearance	Dense paste
Standard color	white, grey other colors on request
Density at 25°C	1.3 kg/L
VOC	Negligible
Solid content	>60%
pH at 25°C	8.5– 9.0
% Elongation (ASTM D412)	450%
Tensile strength (ASTM D412)	1.2 N / mm ²
Modulus of elasticity at 100 % elongation (ASTM D412)	0.05 N/mm ²
Cracking bridging (ASTM C1305)	>1.5mm
Shore A hardness	50
Chemical resistance	Resistant to diluted, alkalis, diesel, petrol
Superficial film formation at +25°C	1.5 hours
Complete hardening at +25°C	7 days
Harmfulness EEC 88/379	No
Water absorption	NIL
UV Resistance (ASTM D822)	No effect after 5000 hours

All values are subject to 5-10 % tolerance

Consumption

2.2 kg/m² for 1mm thickness

Packaging

MANTOFLEX is supplied in 20 kg plastic containers

Storage

Keep the product at a temperature not less than +5°C and not more than +30°C in a tightly closed container. In these conditions MANTOFLEX maintains its characteristics unchanged for 12 months.

Health & Safety

During application, wear appropriate protective clothing, goggles, gloves and respiratory equipment if necessary.

In case of contact with skin, rinse with water and again wash thoroughly with soap and water. In case of contact with eyes, rinse with plenty of water and seek medical advice accordingly.

If ingested, obtain medical attention immediately. Do not induce vomiting.

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