

# MonniProof TR

## Pitch Elastomeric Single Component Polyurethane Waterproofing Membrane

### Product Description

MonniProof TR is a liquid applied, pitch modified, single-component moisture-cured polyurethane coating, designed to form a seamless, elastomeric rubber waterproofing membrane. When fully cured MonniProof TR forms a permanently flexible waterproof lining to most building surfaces including reinforced concrete, block works, brick works, cement render, plaster board and fibre-reinforced cement.

### Uses

MonniProof TR can be used for a wide range of waterproofing applications for:

- ▶ Roofs
- ▶ Basements and Foundations
- ▶ Tunnels and Bridges
- ▶ Terraces and Balconies
- ▶ Car Decks
- ▶ Plaza Decks
- ▶ Planter Boxes
- ▶ Retaining Walls
- ▶ Internal Wet Areas (kitchens, bathrooms)
- ▶ Fountains and Pools
- ▶ Sewages works
- ▶ Tanking applications in areas where aggressive ground water conditions prevail

### Advantages

- ▶ Creates a seamless, tough & flexible elastomeric membrane when fully cured
- ▶ Excellent chemical resistance
- ▶ Resistant to standing water
- ▶ Excellent adhesion to various substrates with suitable primer
- ▶ Excellent resistance to water and carbon dioxide permeability
- ▶ High water vapour permeability
- ▶ Free of pitch or bitumen modification
- ▶ Ready to use – no measuring and mixing required
- ▶ Excellent workability
- ▶ Reaches sufficient cure generally in 24 hours allowing for toppings or coverings to be placed
- ▶ Easy to repair

### 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.

Oil, grease, varnishes, rust, dust and mould on metal surfaces shall be removed by wire or stiff brushing and grit blasting then wiped with Monneli SOLVENTE 10 prior to priming.

New concrete or cementitious surfaces should be at least 28 days old and have moisture content not exceeding 5%. Old or existing surface should be refurbished mechanically to ensure clear and sound substrate.

#### Crack Treatment

Shrinkages and non-moving structural cracks less than 1.0mm shall be filled with a pre-treatment strip of MonniProof TR on 1.0mm thick both sides of extended to 75 mm the crack. Voids and honeycombs shall be patched with MonniRep F6 or MonniFinish EC allowing the area to cure before applying the membrane.

#### Right angle bonds

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 MonniRep 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 MonniProof TR extending 150mm on both sides of the coving.

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### Movement Joints

Expansion and movement joints should be sealed with a Polyurethane sealant. When cured a stripped layer of 200mm wide shall be applied and centered over all the sealed joints. While the membrane is still wet, fibre mesh shall be pressed to soak before saturating it again with another coat of MonniProof TR till it is fully covered. Allow to cure before the general application. The surface shall be prepared.

### Priming

In case of very porous substrates, it is advisable to apply MonniProof TR diluted with 20% OF Monneli SOLVENTE 10 as primer.

The primer should be left to achieve a tack-free condition before applying the top coat.

### Mixing

MonniProof TR should be stirred before use until a uniform color and consistency of the product is achieved.

### Application

MonniProof TR shall be applied by brush, roller, trowel or airless spray in 2 coats to achieve a minimum dry film thickness of 1.0 mm for each coat. The two coats must be applied at right angles to one another. A layer of ARMOFLEX, a fiber glass mesh should be embedded between the two MonniProof TR coats over pipe culverts, floor drains, corner joints and floor / wall junctions.

### Cleaning

Tools and equipment used for MonniProof TR should be cleaned with Monneli SOLVENTE 10 directly after use.

### Recommendations

- ▶ Don't apply the product with imminent rain forecast, or on humid support
- ▶ MonniProof TR should not be applied on surfaces with a risk of rising dampness and should not be applied at temperature below +5°C
- ▶ The minimum application life for the opened pack is up to 48 hours if stored in closed and dry container
- ▶ Water test should be run after the membrane is fully cured
- ▶ During the peak temperature of the day in the summer season, working area should be covered to prevent direct sun effects
- ▶ It is recommended to spread sufficient clean silica and to the final wet coat of MonniProof TR before applying tile adhesives. Tiling or finished floor installations should be carried out as soon as possible after full cure of membrane is established

## Technical Data

Category	Typical Values
Appearance	Black Liquid
Density at 25°C	1.3 kg/L
Elongation at Break (ASTM D412)	500 ± 50 %
Tensile Strength (ASTM D412)	1.4 N/mm <sup>2</sup>
Recovery from 100 % elongation (ASTM D412)	95%
Adhesion to concrete	>1.0 N/mm <sup>2</sup>
Tear resistance (ASTM D624)	14.5 N/mm
100% Modulus of Elasticity (ASTM D412)	0.6 N/mm <sup>2</sup>
Crack bridging (ASTM C836)	No loss on bond after extension of 3.2mm
Water vapor transmission (ASTM E96)	0.3 g/h/m <sup>2</sup>
Swelling in Water at 3 days	Nil
Shore A Hardness	45 ± 5
Extensibility after heat aging	No Cracking or Tearing
Chemical Properties	Good resistance against acidic and alkali solutions, detergents, seawater and oils.
Tack free time at 25 °C	12 hours
Final Curing time at 25°C	2 days at 1.3mm thickness
Service temperature	-5°C to +80 °C

All values are subject to 5-10% tolerance

## Consumption

Approximately 0.9 m<sup>2</sup>/Liter at 1mm thickness

## Packaging

The product supplied in 20 Liter cans.

## Shelf Life & Storage

Keep the product in dry and sheltered place at temperature between +5°C to +25 °C. In these conditions and in closed original containers, the product will have a shelf life of 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.

## Legal disclaimer

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VER.1.2019