

MonniProof TR2

Pitch Elastomeric Two Component Polyurethane Waterproofing Membrane

Product Description

MonniProof TR2 is a liquid applied, coal tar modified, two component moisture-cured Polyurethane coating, designed to form a seamless, elastomeric rubber waterproofing membrane. When fully cured MonniProof TR2 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 TR2 can be used for a wide range of waterproofing applications such as:

- ▶ 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
- ▶ Easy to repair

Advantages

- ▶ Excellent elasticity, allows expansion and contraction with the substrate, without cracking or becoming brittle
- ▶ Excellent chemical resistance has high resistance to oxidation and embitterment
- ▶ High thermal stability which eliminates melting and flowing at high temperature
- ▶ Excellent workability
- ▶ Excellent adhesion, can be applied to a wide range of substrates
- ▶ Seamless-no joints

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 TR2 of 1.0mm thick extended to 75 mm on both sides of the crack. Voids and honeycombs shall be patched with Monneli's range of repair products allowing the area to cure before applying the membrane. Voids and honeycombs shall be patched with MonniRep F6, a single component polymer modified fairing coat, 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 from Monneli 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 TR2 extending 150mm on both sides of the coving.

Allow the patched area to cure before applying the membrane.

VER.1.2019

Movement Joints

Expansion and movement joints should be sealed with MonniSeal PU. When cured a stripped layer of MonniProof TR2 200mm wide shall be applied and centered over all the sealed joints. While the membrane is still wet, fiber mesh shall be pressed to soak before saturating it again with another coat of MonniProof TR2 till it is fully covered. Allow to cure before the general application.

Priming

Highly porous concrete or concrete containing micro-silica will require sealing using MonniProof TR2 diluted with 20% solvent as primer.

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

Mixing

MonniProof TR2 is supplied in 2 pre-weighed components. Thoroughly stir the contents of the base can. Pour component B hardener into Component A pail and mix well with a mechanical jiffy-type mixer operated at low speed. Scrape the side of the pail to ensure the entire product has been properly mixed until a homogenous mixture is achieved.

Application

MonniProof TR2 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

Cleaning

Tools and equipment used for MonniProof TR2 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 TR2 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 TR2 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 ²
Recovery from 100 % elongation (ASTM D412)	95%
Adhesion to concrete	>1.0 N/mm ²
Tear resistance (ASTM D624)	14.5 N/mm
100% Modulus of Elasticity (ASTM D412)	0.6 N/mm ²
Crack bridging (ASTM C836)	No loss on bond after extension of 3.2mm
Water vapor transmission (ASTM E96)	0.3 g/h/m ²
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

0.9 m²/Liter at 1mm thickness depending on porosity and substrate's conditions

Packaging

The product supplied into sealed metallic containers as 15 liter kit.

Shelf Life & Storage

Keep the product in dry and sheltered place at temperature between +5 to +25 °C. in these conditions and in closed original containers, the product will have a shelf life of 12 months.

Health & Safety

Wear gloves, goggles to avoid any contact with eyes and skin. In case of splashes in the eyes wash abundantly with warm water and consult a doctor. Ensure adequate ventilation at working place.

Legal disclaimer

Monneli endeavors to ensure that any advice, recommendations, information it may give, is accurate and correct. It cannot accept any liability either directly or indirectly arising from the use of its products, because it has no direct or continuous control over where or how its products are applied, whether or not in accordance with any advice, specification, recommendation or information given by us. Monneli has the right to change any of the specifications mentioned in the Technical data sheets upon its discretion without prior notification. Hard copies of TDSs are printed once or twice a year, while our technical data sheets are continuously being updated as per R&D improvements and new 3rd party testing; kindly refer to our website for the latest updated TDSs.

VER.1.2019