

MonniProof NT

Elastomeric Cementitious Waterproofing Mortar

Product Description

MonniProof NT is a two component acrylic modified cementitious waterproofing mortar composed of high quality cement, silica sand, special hydrophobic agents in powder form (component A) and specially formulated copolymer acrylic agent in liquid form (component B). It can be applied on concrete, bricks, cement plasters, etc.

Apart from waterproofing, MonniProof NT plugs the support and avoids the noxious substances migration which makes it an ideal solution for the waterproofing treatment of potable water tanks.

Uses

MonniProof NT is primarily used for waterproofing surface treatments of concrete or masonry water tanks designed to contain drinking water. It is non-toxic and easy to apply, with excellent bonding to concrete and masonry. MonniProof NT can also be used for the following:

- ▶ Waterproofing coating on roof
- ▶ Protection against brackish water
- ▶ Coating seawater channels
- ▶ Waterproofing and protective coating for marine structures

Advantages

- ▶ Excellent bonding to concrete and block work
- ▶ Economical and effective product for waterproofing drinking water tanks
- ▶ Elastomeric, can bridge cracks up to 2.0mm
- ▶ Easy to apply by brush or spatula
- ▶ Non-toxic which makes it suitable for contact with potable water
- ▶ Can be used to waterproof against positive and negative pressure

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.

In addition, make sure that all surfaces must be damp but not totally wet before progressing the work.

Crack Treatment

Shrinkages and non-moving structural cracks less than 0.3mm shall be filled with a pre-treatment strip of MonniProof NT directly bridging over the crack. Static cracks that are greater than 0.3mm shall be repaired by chiseling the crack into a V-shape, to a depth and width of 25mm and priming it with MonniPrime A18 followed by the application of Monneli's cementitious repair material.

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 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 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 NT extending 150mm on both sides of the coving.

Movement Joints

Expansion and movement joints should be sealed with MonniSeal PU, a Polyurethane sealant. Allow to cure before the application of MonniProof NT.

Priming

Highly porous concrete or concrete containing micro-silica will require priming with MonniPrime A18, from Monneli, a synthetic, high penetrating primer.

The primer shall be applied at a rate of 5-6 m²/L and left to achieve a tack-free condition before applying the top coat. A second coat of primer may be required if the substrate is excessively porous.

Mixing

MonniProof NT is supplied in a kit of pre-measured two components. Add the 25 kg bag of powder into a clean container containing 8 Liter of liquid (Part B). Mix the product thoroughly using a slow speed mechanical mixer, or electric drill fitted with a suitable paddle at a rate of 200-300rpm. Mix to obtain a homogeneous mixture free from clots. In case of spray application, please contact the technical service department for the right recommended spraying machine.

Application

MonniProof NT can be applied with brush or with spatula in two consecutive coats onto the surface. Before the application of MonniProof NT, make sure that the preceding treatment has already set, however it must not be completely hardened. Finishing can be done with a trowel.

Curing and Protection

Surfaces treated with MonniProof NT must be kept damp and must be protected from the drying action of direct sunlight for a minimum period of 3 days after application.

Protect all treated surfaces from wind and frost, by covering with plastic sheeting, damp hessian or equivalent

Cleaning

Clean the tools immediately after use with clean water. During work, it is recommended to place the tools in water while not in use. Cured materials should be mechanically removed.

Recommendations

- ▶ Do not apply MonniProof CR on temperatures below +5°C
- ▶ MonniProof CR could not be used as an additive to concrete or plasters
- ▶ MonniProof CR is not suitable for use as curing compounds

Technical Data

Category	Typical Values
Appearance	Cementitious Powder
Color	Grey, White
Wet Density at 25°C	1.75 kg/L
VOC	6.0 g/L
Elongation (ASTM D412)	Up to 20%
Tensile Strength (ASTM D412)	>0.7 N/mm ²
Adhesion to concrete	>1 N/mm ²
Shore A hardness (ASTM D2240)	65
Chloride Ion Permeability	NIL
Water vapour transmission (24 hours) (ASTM E96 – 95)	1.09 g/h.m ²
Crack Bridging (ASTM C1305)	0.5 mm
pH at 25°C	10 -11
Service Temperature	From -5°C to +80°C
Water penetration resistant	Up to 1.5 bars on 2 mm thick coating
Maximum thickness per coat	1 mm
Workability time at 25°C	>30 minutes
Toxicity	Non-toxic
Harmless EC 88/379	No

All values are subject to 5-10% tolerance

Applicable Standards

- ▶ BS 6920 Part 1, 2005
- ▶ BS 1881 Part 5, 1983
- ▶ DIN 1048
- ▶ ASTM D412, D2240, E96
- ▶ ASTM E 96

Consumption

Advisable consumption:

Against static water:	3 - 4 kg / m ²
Continuous water pressure:	4 - 6 kg / m ²
For negative pressure :	3 - 4 kg / m ²

Packaging

MonniProof NT supplied in two components; 25kg cementitious bag and 8 Liter of Acrylic latex.

Storage

Should be stored under cover away from extreme heat, direct sunlight. Shelf life is 12 months if stored tightly sealed containers under good storage conditions.

Health and Safety

MonniProof NT is a cement-based product.

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

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