

MonniProof 60

Elastomeric Cementitious Waterproofing Mortar

Product Description

MonniProof 60 is a two component mortar composed of special type of cements, bonding agents, selected fillers and special additives (component A) and water based synthetic acrylic co-polymer (component B). When mixing the two components together a workable paste is obtained that can be applied either horizontally or vertically which adheres to concrete and masonry supports. Once hardened, it forms a waterproofing and flexible layer resistant against aggression of Chlorides and Sulphates.

Uses

MonniProof 60 can be applied on concrete, brick, ceramic, marble, polyurethane foam, etc. It is used for:

- ▶ Protection of concrete structures exposed to chemical aggression
- ▶ Waterproofing for water tanks, retaining walls and foundations
- ▶ Waterproofing for substrates exposed to deformation or vibration
- ▶ Waterproofing for balconies, terraces, bathrooms, kitchens, prior to floor tiling
- ▶ Waterproofing and protection of concrete and masonry in contact with soil
- ▶ To protect cracked plastering against water or steam penetration
- ▶ Maintenance on top of existing ceramic or marble flooring as a waterproof coating prior to fixing new tiles
- ▶ Waterproofing for hydraulic channels and foundations
- ▶ Waterproofing and protection of polyurethane spray foam for roofing as part of Combo Roof System

Advantages

- ▶ For external and internal applications on both old and new surfaces
- ▶ Resistant against harsh environment
- ▶ Polymer modified, therefore reduces permeability and improves adhesion and mechanical strength
- ▶ Easy to use, which reduces labour cost
- ▶ Flexible and can accommodate fine cracks
- ▶ Breathable coating which allows substrate to breath

Usage Instructions

Substrate Preparation

The surface should be sound, clean, free from loose material. 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.

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 60 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 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 60 extending 150mm on both sides of the coving.

Movement Joints

Expansion and movement joints should be sealed with MonniSeal PU, a Polyurethane sealant. The joint sealant shall be left to cure before the application of MonniProof 60 waterproofing membrane.

Priming

Priming is not normally required on good quality concrete substrates. However, all surfaces must be splashed with clean water before applying MonniProof 60.

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

The primer shall be applied at a rate of 5-6m²/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. MonniProof 60 is supplied in pre-measured quantities.

Mixing

Pour into a clean container component B (liquid) and then add component A (powder). Mix till obtaining a homogeneous mixture free from lumps.

It is recommended to mix with an electrical drill fitted with suitable paddle, at low number of turns, to avoid air bubbles.

Application

Apply the mixture with a spatula, in at least two coats, with a thickness not more than 1 mm per coat. Before the second coat is applied make sure that the first one has hardened sufficiently. On substrates exposed to movements deformation or where cracks are expected it is recommended to fix MonniFlex, reinforcing glass fiber mesh into the first coat of MonniProof 60.

The finishing can be done with a smooth spatula, few minutes after the application.

Ceramic tiles laying can start after at least 2 to 3 days, using elastic adhesives such as Premium Fix tile adhesive mixed with MonniKol. Joints must be filled using Monneli Grout tile grout mixed with MonniLatex SBR.

Curing and Protection

Surfaces treated with MonniProof 60 must be kept damp and must be protected from the drying action of direct sunlight for a minimum period of 3 days after application.

Cleaning

All tools should be cleaned with water. Cured material can only be removed mechanically.

Technical Data

Category	Typical Values
Appearance	
Component A:	White Powder
Component B:	Liquid
Density	
Component A:	1.45 Kg/L
Component B:	1.0 Kg/L
Wet Density	1.8 Kg/L
Solar Reflective Index	>81
Elongation (ASTM D412)	>60%
Tensile Strength (ASTM D638)	≥ 1 MPa
Crack Bridging (ASTM C1305)	Up to 2 mm
Depth of Water Penetration (BS EN 12390 pt. 8)	NIL
Flexural Strength (ASTM C348)	≥ 2.5 MPa @ 28 days
Chloride Ion Penetration (ASTM D1556 - 04)	NIL
Moisture Vapor Transmission	> 300 g/m ² /day
Adhesion to Concrete	≥1.0 MPa
Drying Time Between Coats	8 hours
Drying Time Before Waterproofing Testing	3 days
Abrasion resistance (ASTM D4060)	40 MPa (Concrete)
Workable Time	>30 minutes
Resistance to water pressure (DIN1048)	> 8 Bar (positive) > 3 Bar (Negative)
Crack accomodation	> 1 mm (static) 0.3 mm (Dynamic)

CO2 Diffusion > 80 m of concrete

Application Temperature +5°C to +35°C

Service Temperature -5°C to +80°C

Test performed at 25°C, 50% of relative humidity and in absence of ventilation. All values are subject to 5-10% tolerance

Standards Compliance

- ▶ BS 6920
- ▶ WRAS Approved

Consumption

MonniProof 60 usage yields 1.80 Kg per 1 square meter of 1 mm DFT.

Packaging

MonniProof 60 is supplied in 15 Kg as powder (component A) and 5 L of liquid (component B).

Shelf Life & Storage

Keep in tightly closed containers and in sheltered and dry place. In these conditions it maintains unchanged its characteristics for 12 months.

Recommendations

- ▶ Store the components of MonniProof 60 out of direct sunlight before mixing during hot weather
- ▶ After application, use sheets to protect the drying surface from the rapid evaporation during dry, hot or windy conditions

Health & Safety

The product must be handled with caution. Use gloves, protective creams and goggles to avoid the contact with eyes and skin.

In case of skin contact clean immediately with a resin removing cream, followed by soap and water. In case of contact with eyes, use clean water to wash the eyes and seek doctor medical attention immediately.

Legal disclaimer

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