

MONNELI IDROLASTIC

Elastomeric Cementitious Waterproofing Mortar

Product Description

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

IDROLASTIC can be applied on concrete, brick, ceramic, marble, 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 for balconies, terraces, bathrooms, kitchens, prior to floor and wall tiling.

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

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.

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 IDROLASTIC 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 PRIMER A18 followed by the application of Colmef cementitious repair material.

Voids and honeycombs shall be patched with BETOFINISH C, 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 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 IDROLASTIC extending 150mm on both sides of the coving.

Movement Joints

Expansion and movement joints should be sealed with ELASTOSEAL PU25, a Polyurethane sealant. The joint sealant shall be left to cure before the application of IDROLASTIC waterproofing membrane.

Priming

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

Highly porous concrete or concrete containing micro-silica will require priming with PRIMER 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.

Mixing

IDROLASTIC is supplied in pre-measured quantities. 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.

Pour into a clean container component B (liquid) and then add component A (powder). Mix at 500-700rpm until obtaining a homogeneous mixture free from lumps.

Application

Apply the mixture using a spatula, a roller, or a brush, 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 ARMOFLEX 60, reinforcing glass fiber mesh into the first coat of IDROLASTIC.

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 NEOFIL F8 tile adhesive mixed with ELASTOKOL. Joints must be filled using NEOFIL COLOR tile grout mixed with GIUNTOLASTIC.

Curing and Protection

Surfaces treated with IDROLASTIC must be kept damp and must be protected from the drying action of direct sunlight (exposed areas) for a minimum period of 3 days after application.

Cleaning

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

Recommendations

- Store the components of IDROLASTIC 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.

Technical Data

Properties	Results
Component A	
Appearance	White or grey powder
Density	1.45 kg/L
Component B	
Appearance	Liquid
Density	1.0 kg/L
Wet density	1.8 kg/L
Solar reflective index	>81
Elongation (ASTM D 412)	>60%
Tensile strength (ASTM D638)	>1 N / mm ²
Crack bridging (ASTM C 1305)	Up to 2mm
Chloride ion penetration ASTM D1556 - 04	NIL
Moisture vapor transmission	>300 g/m ² / day
Adhesion to concrete	>1.0 N / mm ²
Drying time between coats	8 hours
Curing time before application of tile	48 hours
Drying time before waterproofing testing	3 days
Noxiousity according to ECM 88/379	no
Workable time	>30 minutes
Application temperature	from +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

Applicable Standards

- BS 6920
- WRAS Approved

Consumption

1.80 kg/ m² per mm of thickness

Packaging

IDROLASTIC is supplied as 20kg of component A (powder) and 8 Liter of component B (liquid).

Storage

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

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.

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DUBAI
ABU DHABI
KSA
ITALY

P.O. Box 123808 Dubai UAE
P.O. Box 127326 Abu Dhabi, UAE
P.O. Box 335896 Code: 11383 - Riyadh KSA
Z.I. Ponte d'Assi 06024 Gubbio (PG)

T. +971 4 8803488 F. +971 4 8803450
T. +971 2 5511949 F. +971 2 5511749
T. +966 1 2654277 F. +966 1 2654335
T. +39 75 9221297 F. +39 75 9221174

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colmef@colmef.ae

www.colmef-me.com