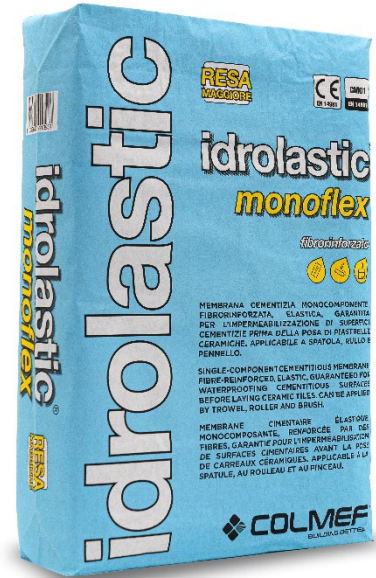


Idrolastic Monoflex

SINGLE-COMPONENT CEMENTITIOUS MEMBRANE, FIBRE-REINFORCED, ELASTIC, GUARANTEED FOR WATERPROOFING CEMENTITIOUS SURFACES BEFORE LAYING CERAMIC TILES. CAN BE APPLIED BY TROWEL, ROLLER AND BRUSH.



TECHNICAL DATA SHEET - REV. 02/2024

DESCRIPTION

IDROLASTIC MONOFLEX is a fibre-reinforced, elastic, flexible, single-component waterproofing mortar based on selected aggregates, cement binders, hydrophobised polymers and special additives. Easily workable by trowel, brush and roller for both horizontal and vertical application, with excellent adhesion on concrete surfaces, cement screeds and plaster, and old ceramic floors. Thanks to its composition, it allows the creation of continuous, flexible waterproofing with good crack-bridging capacity and high durability on balconies, terraces, and bathrooms prior to the installation of ceramic tiles, forming a continuous, resistant layer. Use ARMOFLEX 160 as reinforcement between the first and second coat.

Compliant with European Standard EN 14891 for liquid-applied water-resistant cement products with improved crack-bridging capacity at very low temperatures (-5 °C) and resistant to contact with chlorinated water (CM01P).

FIELDS OF APPLICATION

IDROLASTIC MONOFLEX is used for the flexible waterproofing of cement screeds or concrete supports in general, as long as they are perfectly cured and not subject to rising humidity or less than 4%, both of new constructions and of old structures to be restored. IDROLASTIC MONOFLEX can be used for waterproofing concrete surfaces used to contain water, balconies, terraces, kitchens and bathrooms.

SUBSTRATE PREPARATION

Always provide the appropriate slopes and flatten the evenness of surfaces to eliminate any hollows and allow water to drain off properly.

Substrates must be sufficiently seasoned, flat, solid, compact, free of crumbling or loose parts, and free of dust, grease, oils, paints, waxes or anything else that may affect the perfect adhesion of the product. Cementitious screeds must have already undergone hygrometric shrinkage, which can be assessed in at least 28 days, and must be dry with a residual moisture content of less than 4%.

In the presence of degraded concrete structures, proceed with the removal of detached concrete (recommended hydro-sanding or washing with high-pressure water) and then cleaning the rusted reinforcement rods, which must be vigorously brushed or sandblasted and then treated to prevent further oxidation. Reconstruct the initial concrete volumes and even out the surfaces with thixotropic, fibre-reinforced, shrinkage-compensated mineral mortar PRATIKO, PRATIKO R 3 TIXO. Regularise the evenness of old cement screeds with NEOCEM PRONTO FIBRATO fast-drying, shrinkage-compensated ready-mixed screed or RASOTECH G 30 smoothing agent.

Old ceramic floor coverings must be undamaged, strong, well adhered, dry and clean from residues of previous processing and from anything that could impair the adhesion of the product such as oils, greases and waxes. For proper cleaning, wash the floor with abrasive scrubbing machines and vacuum liquids and residues until perfectly clean.

The substrates to be waterproofed must in any case be evenly distributed over their entire surface to avoid excessive accumulation of product and must be dampened, avoiding stagnation, when the membrane is applied.

APPLICATION

To prepare the product, pour 4 - 5 litres of water into a clean container, depending on the desired consistency. Slowly add a 20 kg bag of IDROLASTIC MONOFLEX under mechanical agitation. Use an electric whisk mixer at low speed to avoid excessive incorporation of air. Stir the mixture, taking care to remove the part of the powder that is not perfectly dispersed from the sides and bottom of the container, until the mixture has a smooth, homogeneous and lump-free desired consistency. Let the mixture rest for a few minutes, remixing quickly before use.

Provide for the treatment of pipes or drains, the placement of system accessories G-TEX STRIP H 20 for sealing floor-to-wall connections or for making expansion and fraction joints, G-TEX STRIP 90 and G-TEX STRIP 270 for sealing floor-to-wall connections at 90° and 270° angles respectively. Bond the system accessories by applying IDROLASTIC MONOFLEX with a smooth trowel.

Proceed with waterproofing the surface by applying the IDROLASTIC MONOFLEX mix to the entire substrate using a smooth metal trowel in at least two coats, not exceeding a maximum thickness of 2 mm per coat. Fresh on fresh, place ARMOFLEX 160 glass fibre technology mesh between the first and second coat, pressing with a smooth trowel to ensure perfect contact and allow any air bubbles to escape. Make overlaps of at least 10 cm between one net of ARMOFLEX 160 and the other, sealing the overlaps with the same IDROLASTIC MONOFLEX. When the first coat is sufficiently dry and hardened (walkable), apply the second coat in a criss-cross pattern, observing a consumption of 1.1 kg/m² per mm of thickness, until a seamless, homogeneous layer is obtained that completely covers the first coat.

After complete curing (at least 5-6 days), proceed with the installation of the planned ceramic coating with COLMEF mineral adhesives. Apply the adhesive using a trowel with suitable teeth and lay the covering in accordance with UNI 11493. Design the expansion joints of the covering on those existing in the substrate. If needed, provide additional expansion joints according to the size of the surface to be covered, to the format and the type of material used (indicatively, make fraction joints every 9-15 m²). Always set up joints between tiles as per standard UNI 11493.

YIELD

1.1 kg/m² per mm of thickness.

RECOMMENDATIONS

- ◆ On surfaces larger than 30 m², always provide expansion joints.
- ◆ Do not apply on uncured screeds, plasters and concretes.
- ◆ Do not apply on frozen substrates or exposed to direct sunlight.
- ◆ When the weather is very hot, do not expose the material to sunlight before use.
- ◆ Protect the waterproofed surface from rapid evaporation, especially on hot or very windy days, covering it with waterproof sheets.
- ◆ Protect the waterproofed surface from rain, frost or direct sunlight until it is fully cured.
- ◆ Temperature variations can significantly affect the curing time of the product.
- ◆ Do not work in temperatures below +5°C or above +35°C.
- ◆ Wash all the equipment used for preparing and applying the product with water before it hardens. After setting, the mortar can only be removed mechanically.

PACKAGING

IDROLASTIC MONOFLEX is available in 20 kg polyethylene coated paper bags on 1200 kg pallets. Store the product in a dry place and in its original packaging, well closed. In these conditions its stability lasts at least 12 months.

SAFETY INSTRUCTIONS

IDROLASTIC MONOFLEX contains cement that produces an irritating alkaline reaction when in contact with body sweat. Refer to the respective Safety Data Sheet for more information about how to use the product safely.

SPECIFICATIONS

Flexible waterproofing with high adhesion and durability by applying a single-component, anti-alkaline, breathable, organic mineral membrane classified as CM01P by Standard EN 14891, such as **IDROLASTIC MONOFLEX** by Colmef Srl. The membrane must be applied in two coats using a smooth metal trowel, with a consumption of 1.1 kg/m² per mm of thickness, interposing between the first and second coat a technological fibreglass mesh, such as ARMOFLEX 160 by Colmef Srl. Adjacent nets must be overlapped along the edges for a length of at least 10 cm and sealed with

the same **IDROLASTIC MONOFLEX**. The waterproof layer will be suitable to directly receive the ceramic coating to be laid with class C2 S1 cementitious adhesive.

TECHNICAL DATA

Compliant with Standard:	EN 14891
Class according to EN 14891:	CM01P
Appearance:	powder
Colour:	grey
Apparent specific weight (kg/m ³):	1.1
Solid residue (%):	100
Mixing ratio:	4-5 litres of water per 20 kg of product
Feasible thickness per coat (mm):	~ 2
Maximum achievable thickness (mm)	≤ 4
Mix pot life:	~ 1 h
Allowed application temperature:	from +5 °C to +35 °C

FINAL PERFORMANCE according to EN 14891 Class CM01P

	Requirements	Results	Test method
Initial adhesion (N/mm ²):	≥ 0.5	1.3	EN 14891
Adhesion after immersion in water (N/mm ²):	≥ 0.5	0.6	EN 14891
Adhesion after heat action: (N/mm ²):	≥ 0.5	1.2	EN 14891
Adhesion after freeze-thaw cycles ((N/mm ²):	≥ 0.5	0.7	EN 14891
Adhesion after immersion in basic water (N/mm ²):	≥ 0.5	0.9	EN 14891
Adhesion after immersion in chlorinated water (N/mm ²):	≥ 0.5	1.1	EN 14891
Impermeability to pressurised water:	no penetration	no penetration	EN 14891
Crack-bridging ability (mm):	≥ 0.75	1.1	EN 14891
Crack-bridging ability at -5 °C (mm):	≥ 0.75	0.88	EN 14891

DATA DETECTION AT +23°C - 50% R.H. AND IN ABSENCE OF VENTILATION

The information in this bulletin is based on our best experience. We cannot be held liable for any product misuse. We therefore recommend anyone who intends to use this product to assess whether it is suitable for the intended application and to perform preliminary tests in any case. Always refer to the latest updated version of the technical data sheet available at www.colmef.com.

FOR MORE INFORMATION OR PARTICULAR USES, CONTACT THE COLMEF TECHNICAL SUPPORT DEPARTMENT.

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