Idrolastic (A+B)

BI-COMPONENT, ANTI-ALKALINE, FIBRE-REINFORCED, BREATHABLE, ORGANIC MINERAL MEMBRANE, GUARANTEED FOR FLEXIBLE WATERPROOFING, WITH HIGH ADHESION AND DURABILITY, OF CEMENT SUBSTRATES BEFORE LAYING CERAMIC TILES. IDEAL FOR PROTECTING CONCRETE SURFACES AND FOR RESTORING OLD WATERPROOFING WITHOUT DEMOLISHING THE EXISTING FLOOR. FOR INDOORS AND OUTDOORS.

CE EN 14891 · CM02P EN 14891 · HIGH PERFORMANCE COLMEF SPECIALIST · CE EN 1504-2 · PI-MC-IR EN 1504-2

TECHNICAL DATA SHEET – REV. 01/2024

DESCRIPTION

IDROLASTIC (A+B) is a bi-component, breathable, fibre-reinforced, mineral organic membrane composed of: 'component A' based on cement binders, selected aggregates and special additives; 'component B' based on synthetic polymers in water dispersion. Mixing them produces an easily workable mixture with a trowel-like consistency that can be applied both horizontally and vertically. IDROLASTIC (A+B) adheres perfectly to all concrete, masonry and ceramic surfaces. Thanks to its composition, it allows the creation of flexible, highly adhesive and durable waterproofing on balconies, terraces and bathrooms, forming a seamless layer that is resistant to the aggressive action of agents such as CO_2, SO_2 or the chemical aggression of de-icing salts. 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 (-20 °C) and resistant to contact with chlorinated water (CM02P).
Conforms to European Standard EN 1504-2, coating (C) according to PI (protection against penetration risks), MC (moisture control) and IR (increased resistivity).

FIELDS OF APPLICATION

IDROLASTIC (A+B) is used for the protection and flexible waterproofing of cementitious screeds or concrete substrates in general, provided they are perfectly cured and not subject to rising damp, both of new constructions and of old structures to be restored. IDROLASTIC (A+B) can be used for waterproofing concrete structures containing water, masonry against the ground, roofs subject to deformation or subject to vibration, balconies, terraces, kitchens and bathrooms before laying ceramic floor tiles with deformable adhesives. It can also be used for smoothing cracked plaster, and thus subject to weak infiltration. IDROLASTIC (A+B) is also suitable for the protective waterproofing treatment of concrete structures such as pylons, beams, underground elements, lift pits, concrete foundations.

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 dry and 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 moisture content of less than 4%.
In the presence of downgraded concrete structures, remove detaching concrete (hydro-sandblasting or high pressure water wash recommended) and then clean the oxidation of the iron reinforcements. Particularly deteriorated and rusted substrates must be vigorously brushed or sandblasted and treated to prevent further oxidation. Reconstruct the initial concrete volumes and even out the surface with thixotropic, fibre-reinforced, shrinkage-compensated mineral mortar PRATIKO R 3 TIXO. Regularise the evenness of old cement screeds with NEOCEM PRONTO FIBRATO fast-drying, shrinkage-compensated ready-mixed screed.
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 a solution of water and caustic soda (30%) and rinse thoroughly with water to remove any residue.
The substrates to be waterproofed must in any case be evenly distributed over their entire surface to avoid excessive accumulation of product and, when the membrane is applied, they must be saturated with water, avoiding stagnation.

APPLICATION

To prepare the product, pour 8 kg IDROLASTIC 'component B' (liquid) into a clean container and slowly add 24 kg IDROLASTIC 'component A' (powder) under mechanical stirring. 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 consistency. Let the mixture rest for a few minutes, remixing quickly before use.
Provide for the treatment of pipes or drains and the placement of system accessories G-TEX STRIP H 15 for sealing floor-to-wall connections, 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 (A+B) with a smooth trowel.
Proceed with waterproofing the surface by applying the IDROLASTIC (A+B) mix to the entire substrate using a smooth metal trowel in at least two coats, not exceeding a maximum thickness of 2.5 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 (A+B). When the first coat is sufficiently dry and hardened (walkable), apply the second coat in a criss-cross pattern, observing a consumption of 1.6 kg/m^2 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 m^2). Always set up joints between tiles as per standard UNI 11493.

YIELD

1,6 kg/m^2 per mm of thickness.

RECOMMENDATIONS

- On surfaces larger than 40m^2, 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, regardless if in powder or liquid form.
- 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 (A+B) is supplied in 32 kg units containing IDROLASTIC 'component A' in a 24 kg bag and IDROLASTIC 'component B' in an 8 kg canister, on 1920 kg pallets. Store the product in a dry place and in its original packaging, well closed. In these conditions it is stable for at least 12 months.

SAFETY INSTRUCTIONS

IDROLASTIC 'component A' contains cement that produces an irritating alkaline reaction when in contact with body sweat. IDROLASTIC 'component B' contains no solvents and is therefore not flammable or harmful to health. The resin used is highly adhesive; prolonged use may lead to skin sensitisation. Use suitable gloves, goggles and protective clothing.
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 bi-component, anti-alkaline, breathable, fibre-reinforced, organic mineral membrane classified as CM02P by Standard EN 14891 and conforming to Standard EN 1504-2 coating (C), according to PI-MC-IR principles, type **IDROLASTIC (A+B)** by Colmef Srl. The membrane must be applied in two coats using a smooth metal trowel, with a consumption of 1.6 kg/m^2 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 (A+B)**. 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** **EN 1504-2**	
Class according to EN 14891:	**CM02P**	
Class according to EN 1504-2:	**covering (C), principles:** **- protection against penetration risks (PI)** **- moisture control (MC)** **- increase in resistivity (IR)**	
	COMPONENT A	COMPONENT B
Appearance:	powder	liquid
Colour:	grey	white
Apparent specific weight (kg/m^3):	1.6	1.1
Solid residue (%):	100	50
pH value:	-	10
Mixing ratio:	comp. A : comp. B = 3 : 1	
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 CM02P

	Requirements	Results	Test method
Initial adhesion (N/mm^2):	≥ 0.5	1.1	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	0.9	EN 14891
Adhesion after freeze-thaw cycles ((N/mm^2):	≥ 0.5	0.8	EN 14891
Adhesion after immersion in basic water (N/mm^2):	≥ 0.5	0.8	EN 14891
Impermeability to pressurised water:	no penetration	no penetration	EN 14891
Crack-bridging ability (mm):	≥ 0.75	0.8	EN 14891

FINAL PERFORMANCE according to EN 1504-2 principles PI-MC-IR

	Requirements	Results	Test method
Adhesion to concrete after 28 days at +20°C and 50% RH (N/mm^2):	for flexible systems with no traffic ≥ 0.8 with traffic ≥ 1.5	1.02	EN 1542
Thermal compatibility with storm cycles, measured as adhesion (N/mm^2):		0.92	EN 1542
Permeability to water vapour – equivalent air thickness S_D (m):	Class I S_D < 5 (permeable to vapour)	S_D < 0.31	EN ISO 7783-1
		μ = 71	
Capillary absorption and impermeability to water ($kg/m^2 \cdot h^{0.5}$):	< 0.1	0.06	EN 1062-3
Permeability of carbon dioxide (CO_2) - diffusion in equivalent air thickness S_{DCO2} (m):	S_D > 50	S_D = 285	EN 1062-6
Linear shrinkage (mm):	< 0.3	< 0.3	EN 12617-1

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

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