MONOSEAL

Go to TDS

HYDROISOLATION

ONE-COMPONENT ELASTIC CEMENTITIOUS WATERPROOFING PRODUCT

PRODUCT DESCRIPTION

Monoseal is a one-component, waterproofing membrane based on cementitious binders, selected fine-grained inert materials and special highly-flexible acrylic polymer additives. When mixed with water, it forms an slurry with excellent workability which is easy to apply with a trowel, roller or brush, and which may also be applied on vertical surfaces without slumping. Monoseal bonds extremely well to all surfaces in concrete, masonry, ceramic and marble, if they are mechanically stable and clean.

FIELD OF APPLICATION

· Interior and exterior use.
· For waterproofing before installing all types of tiles.
· Swimming pools, fountains, and water features.
· Terraces and balconies over unoccupied spaces.
· Restoring old balconies without removing the existing floor.
· Shower pans, stalls, and tub surround.
· Protection of concrete from aging and carbonation
· Protection of concrete on grade.

SUITABLE SUBSTRATES

· Concrete
· Cement Mortar Bed
· Cement Mortar
· Cement Plaster/Render
· Concrete Masonry
· Masonry
· Cement Backer Board
· Ceramic Tile and Stone

LIMITATIONS

· Do not mix with other cement or components.
· Do not apply on metallic or rubber substrate.
· Do not apply on not sufficient cured substrate.
· Do not apply over 4 mm thicknesses per coat.
· Do not apply in temperatures above 40°C and below +5°C.
· It must be protected from rain or bad weather for at least 24 hours after application.
· Avoid direct sunlight during application.
· Prime highly absorbent surfaces to improve adhesion.
· In case of negative water pressure can lead to delamination during frost conditions.
· Always apply at least two layers, making sure to wait until the previous layer is dry before applying the next.

Via Sorte, 2, 24030
Barzana BG, Italy

APPLICATION PROCEDURE

A) Preparing the substrate
All substrates must be mechanically strong, free of dirt, oil, grease, paint, laitance, concrete sealers, efflorescence, or curing compounds. Any grease or wax must be removed from old ceramic floors using a basic detergent. Screeds and concrete must be completely cured, at least 30 days for screeds and 3 months for concrete. Prime highly absorbent surfaces like lightweight concrete with Seal Primer or DCI Grip Primer to improve adhesion. For exterior applications, always maintain expansion joints from the substrate and treat with DCI Tape W12. For all coves, corners, columns, expansion joints, floor/wall transitions, and other changes in substrate plane, treat with appropriate TAPE before application of Monoseal.

B) Preparing the product
Pour 6-7 liters of water into a clean container and slowly add Monoseal while mixing. Mix thoroughly for a further 3 minutes until it is completely blended, making sure that no powder remains attached to the sides and bottom of the container. A low-speed mechanical agitator is recommended for this operation, to avoid too much air being entrapped in the mix. Avoid mixing the product manually.

C) Applying the product
Apply Monoseal within 60 minutes after preparation. Applied on the prepared surface to a feather edge with a thin layer of Monoseal with a smooth trowel or brush; then, while the first coat is still fresh, apply a second coat to form a final thickness of at least 2 mm thick. In the case of waterproofing terraces, balconies, basins, and swimming pools, we recommend embedding alkali-resistant reinforcement mesh in the first layer of Monoseal while it is still fresh. The mesh must be used in areas with either small cracks or regions under particular stress. After installing the mesh, finish off the surface with a flat trowel and apply a second layer of Monoseal when the first one has set (after 4-5 hours). After applying Monoseal, wait 5 days for curing before laying ceramic tiles.

D) Installing the tiles
Wait approx one day after applying Monoseal before installing tiles and using a C2 adhesive.

COVERAGE / CONSUMPTION
The consumption is approximately 1 – 1.2 kg/m2 at 1 mm thickness.

PACKAGING
Monoseal is supplied in:
–25 kg paper bags

SHELF LIFE-STORAGE
Original sealed packaging of this product is guaranteed to be of first quality for 12 months. Areas with high humidity will reduce the shelf life of the bagged product.

SAFETY INSTRUCTION
MONOSEAL contains cement that, when in contact with sweat or other body fluid, causes allergic reactions to those predisposed and an irritant alkaline reaction. It can cause damage to the eyes. During the usage, wear protective gloves and goggles and take the usual precautions for handling chemicals. When in contact with skin or eyes, wash immediately with plenty of water and seek medical attention.

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TECHNICAL DATA

Product identity

Consistency:	Powder
Color:	Gray
Bulk density (kg/m³):	1250
Dry solids content (%):	100
Classification Standard	EN 1504-2; EN 14891
Application data (at +23°C and 50% R.H.)	
Mix ratio:	25 parts MONOSEAL A with 6-7 parts water
Consistency of mix:	Liquid pasty
Density of mix (kg/m³)	1750
pH of mix:	13
Pot life:	over 1 hours
Application temperature:	+8°C to +40°C
Final performances	
Adhesion strength according to EN 1542: - Adhesion strength after 28 days at +20°C and 50% R.H. (N/mm²): 1.45 - Adhesion strength after 7 days at +20°C and 50% R.H. + 21 days in water (N/mm²): Thermal compatibility to freeze/thaw cycles, according to EN 1542 (N/mm²): 1.24 Flexibility according to DIN 53504 expressed as elongation: - Flexibilit after 28 days at +20°C and 50% R.H. (%): Static crack-bridging at -20°C according EN 1062-7 expressed as the maximum width of the crack (mm): Dynamic crack-bridging at -20°C according EN 1062-7 of a film of MONOSEAL reinforced with fiber mesh, expressed as resistance to cracking cycles: classB3.1(-20°C) No Fail Impermeability to water expressed as capillary water absorption according EN 1062-3 (kg/m²·h0.5): Permeability to carbon dioxide (CO2) according EN 1062-6 - diffusion in an equivalent thickness of air SDCO2 (m): Crack-bridging at +20°C according EN 14891-A.8.2 (mm): Crack-bridging at -20°C according EN 14891-A.8.3 (mm): Initial bond strength according to EN 14891-A.6.2 (N/mm²): Adhesion strength after immersion in water according to EN 14891-A.6.3 (N/mm²): Adhesion strength after application of heat source according to EN 14891-A.6.5 (N/mm²): Adhesion strength after freeze-thaw cycles according to EN 14891-A.6.6 (N/mm²): Adhesion strength after immersion in basic water according to EN 14891-A.6.9 (N/mm²):	1.45 1.12 1.24 30 Class A3 classB3.1(-20°C) No Fail < 0.05 > 50 0.97 0.92 0.88 0.59 1.14 0.67 0.69

WARNING

Danger. Contains Portland Cement: Chromium VI < 2 ppm within the validity period of the product. H315 Causes skin irritation. H317 May cause an allergic skin reaction. H318 Causes serious eye damage. H335 May cause respiratory irritation. P261 Avoid breathing dust. P280 Wear protective gloves/protective clothing/eye protection/face protection. P302 + P352 IF IN CONTACT WITH YOUR SKIN: Wash with plenty of water/... P305 + P351 + P338 IF IN CONTACT WITH YOUR EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P310 Immediately call a POISON CENTER/ doctor/...

EMISSION CLASS FOR BUILDING MATERIAL M1

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