

IZONIL®

TECHNICAL DATA SHEET: IZONIL QUATRO

High Quality industrially dry-mixed thermal and sound insulating 100% waterproof breathable lightweight plastering mortar with dehumidifying ability based on Portland cement, silica sand and unique natural admixture (Izocomponent), reinforced with fibers and mixed at construction site with polystyrene beads for application on above-ground concrete slab (roof, floor) used as replacement for thermal insulation materials and diffusion-closed waterproof membranes and coatings.



ADVANTAGES

- Unique lightweight mortar: simultaneously thermal and sound insulating, 100% waterproof, breathable and dehumidifying
- Resistant against penetration of water from heavy rain / monsoon rain
- Highly breathable
- Dehumidifying ability - constantly dries out moisture from the slab and allows it to evaporate outside
- Excellent adhesion to the substrate with minimum waste during application
- Resistant against salt crystallization and sulphur-resistant
- Applicable on damp surface
- Non-toxic

USAGE

Applicable on horizontal surface - above ground only (concrete slab - roof, floor) both for renovation of existing / historical buildings and new buildings:

- Concrete slab - roof deck
- Concrete slab - floor

TECHNICAL DATA

Appearance / color	Powder / grey
Chemical composition	Silica sand, Portland cement, natural admixture Izocomponent, PP fibers
Size of silica sand particles	0 - 0.6 mm
Packaging	22 kg plastic bag
Shelf life	Minimum 18 months
Additional material to be mix with	60 liters (approx. 1 kg) of polystyrene beads (3-5 mm size)
Water / powder ratio	11 - 12 liters of clean water / 22 kg of IZONIL QUATRO and 60 liters of polystyrene beads
Pot life / workability	Minimum 3 hours (at temperature 20 °C)
Thickness of layer	50 - 60 mm
Coverage / consumption	22 kg of IZONIL QUATRO + 60 liters of polystyrene beads = 1 m ² at thickness 50 mm
Depth of water penetration	< 3 mm (exposed to heavy rain / monsoon rain)
Workable life of fresh mortar	≥ 180 minutes
Bulk density of hardened mortar	500 kg/m ³ ± 50 kg/m ³
Compressive strength	≥ 1.1 N. mm ²
Thermal conductivity	0.033 W / (m.K) thermal conductivity of polystyrene beads (polystyrene beads make up to 80% of IZONIL QUATRO mass)

SURFACE PREPARATION

IZONIL QUATRO is designed to be applied on above-ground horizontal substrate (concrete slab). Surface must be solid and without impurities, must be cleaned and thoroughly moistened immediately before applying IZONIL QUATRO.

If plastic pipes or steel elements are part of application surface, it is highly recommended to seal plastic pipes or steel elements with fast setting plug before application of IZONIL QUATRO.

If application area (roof deck) contains parapet wall, IZONIL plaster is applied (at least 24 hours before application of IZONIL QUATRO) on the parapet wall in minimum 5 mm thickness, at least 30 cm height on wall portion and 30 cm width on slab portion which results in L-shape-applied IZONIL plaster.

Surface must be properly wetted immediately before application. Excessive water must be removed prior to application.

MIXING

It is advisable to use a gravity mixer (concrete mixer) to mix IZONIL QUATRO. Water is always added first, 11 - 12 liters of water per 22 kg of IZONIL QUATRO and 60 liters of polystyrene beads.

Add the prescribed amount of water into the mixer first, followed by IZONIL QUATRO powder and mix for at least 5 minutes in constant slowly mixing, into a homogeneous smooth slurry. Add 60 liters of polystyrene beads after 5 minutes and mix for additional 7 minutes. Mixed IZONIL QUATRO must be used within 3 hours.

APPLICATION

IZONIL QUATRO is applied manually (using standard tools for plastering). Minimum recommended thickness is 50 mm applied at one layer. Surface of IZONIL QUATRO is finished by steel trowel. Surface of IZONIL QUATRO can be sloped if slope to drain is required.

CARE AFTER APPLICATION

It is necessary to prevent IZONIL QUATRO from too fast drying since the optimal moistness enables permanent hydration of cement materials and minimization of cracking. Protect freshly applied IZONIL QUATRO prior to rapid drying using appropriate protective methods for at least 5 days, especially at dry and windy weather, or when exposed to direct sunlight.

FINAL COATING / PAINTING

Let IZONIL QUATRO to dry / harden at least 3 weeks before finishing the surface. IZONIL QUATRO can remain exposed without any top finish. Tiles/marble can be used as top layer.

LIMITATIONS AND WARNINGS

- No additives other than clean water and polystyrene beads are added to IZONIL QUATRO
- IZONIL QUATRO is not applied at direct sunlight and / or strong wind or rain
- IZONIL QUATRO is only applied on a solid, pre-prepared substrate
- The freshly applied IZONIL QUATRO must be protected from rain for at least 24 hours (at 20 ° C)
- If IZONIL QUATRO is applied inside, it is necessary to ensure proper ventilation of the room for optimum drying of the wall
- Mixed IZONIL QUATRO can only be processed at air and substrate temperature above + 5 ° C
- With the expected freeze, it is not recommended to use IZONIL QUATRO
- Potable water is used for mixing of IZONIL QUATRO
- Unused IZONIL QUATRO remnants are mixed with water, allowed to cure and disposed as construction waste

LEGAL NOTICE

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