

## TECHNICAL DATA SHEET: IZONIL UNIVERSAL

High Quality industrial dry mix mortar with 100% waterproof and breathable and dehumidifying properties. It is formulated with OPC 43 Portland cement, graded silica sand, unique natural additive (Izocomponent) duly reinforced with special fibers for application in above grade internal and external plastering. Product is suitable for plastering Brick walls, concrete block and concrete hollow block walls as a replacement for general purpose plastering mortar and diffusion closed waterproof membrane and coating. It can resist heavy rain/monsoon rain with water penetration less than 1mm.

### ADVANTAGES

- World-unique plastering mortar - simultaneously 100% water proof, breathable and dehumidifying
- Resistant against penetration of water from heavy rain / monsoon rain
- Highly breathable (water vapor diffusion coefficient < 15)
- Dehumidifying - constantly dries out moisture from inside the wall 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
- Applicable manually or by plastering machine
- Paintable with any type of masonry paint
- Non-toxic



### USAGE

Applicable on vertical surface - above ground only both for renovation of existing / historical buildings and new buildings:

- External clay brick wall / precast concrete brick wall / concrete hollow block wall
- Internal clay brick wall / precast concrete brick wall / concrete hollow block wall

### TECHNICAL DATA

Appearance / color	Powder / grey
Chemical composition	Silica sand, Portland cement, natural admixture Izocomponent, PP fibers
Size of silica sand particles	0 - 0.8 mm
Packaging	25 kg plastic bag
Shelf life	Minimum 18 months
Water / powder ratio	4.0 - 4.7 litres of clean water / 25 kg of dry plaster
Pot life / workability	3 hours (at temperature 20 ° C)
Thickness of layer	10 mm - 20 mm
Coverage / Estimation	10mm thick x 1m <sup>2</sup> = 12.5 kg of dry plaster 13mm thick x 1m <sup>2</sup> = 16.25 kg of dry plaster 19mm thick x 1m <sup>2</sup> = 23.75 kg of dry plaster
Depth of water penetration	< 1 mm (exposed to heavy rain / monsoon rain)
Workable life of fresh mortar	≥ 180 minutes
Bulk density of hardened mortar	1600 kg/m <sup>3</sup> ± 100 kg/m <sup>3</sup>
Compressive strength	6 - 8 N.mm <sup>-2</sup>
Flexural strength after 28 days	≥ 1.6 N.mm <sup>-2</sup>
Adhesive strength	≥ 0.3 N.mm <sup>-2</sup>
Water vapor permeability coefficient (μ)	≤ 12

### SURFACE PREPARATION

IZONIL UNIVERSAL is designed to be applied on above-ground vertical substrates (clay brick walls, concrete brick walls, concrete hollow block walls).

Surface must be solid and without impurities, loose particles and contaminants such as oil, dust, grease, alcohol, etc. The substrate must be thoroughly moistened immediately before applying IZONIL UNIVERSAL.

### MIXING

It is advisable to use a gravity mixer (concrete mixer) or hand-held electric mixer to mix IZONIL UNIVERSAL and use 4.0 - 4.7 liters of water per 25 kg of IZONIL UNIVERSAL. Add the prescribed amount of water into the Gravity mixer (concrete mixer) first, followed by IZONIL UNIVERSAL powder and mix for at least 5 minutes with constant slowly mixing into a homogeneous smooth slurry. Then let the slurry rest for 5 minutes and then mix again for 1 minute. Mixed IZONIL UNIVERSAL must be used within 3 hours.

### APPLICATION

IZONIL UNIVERSAL is applied manually (using standard tools for plastering) or by a plastering machine pump.

IZONIL UNIVERSAL contains PP fibers for elimination of surface hairline cracks, Recommended specification of fiberglass mesh is 5 mm x 5 mm (size) and 145 g /m<sup>2</sup> (weight), which can be used to reinforce joints.

Fiberglass mesh is applied close to the final surface. First, approx. 70% of total thickness of IZONIL UNIVERSAL is applied (e.g. 7 mm at 10 mm total thickness), then fiberglass mesh is gently pushed with trowel into fresh layer of IZONIL UNIVERSAL and the rest 30% of total thickness of IZONIL UNIVERSAL is applied immediately (e.g. 3 mm at 10 mm total thickness).

Surface of IZONIL UNIVERSAL is finished in the same way as ordinary cement-based plasters by foam trowel.

### CARE AFTER APPLICATION

It is necessary to prevent IZONIL UNIVERSAL from too fast drying since the optimal moistness enables permanent hydration of cement materials and minimization of cracking. Protect freshly applied IZONIL UNIVERSAL prior to rapid drying using appropriate protective methods for at least 48 hours, especially at dry and windy weather, or when exposed to direct sunlight.

### FINAL COATING / PAINTING

Let IZONIL UNIVERSAL to dry / harden at least 3 weeks before finishing the surface. IZONIL UNIVERSAL can remain exposed without any final coating / painting. If final coating / painting is required, decorative coatings with high water vapor permeability should be used (highly breathable - diffusion-open decorative coatings / paints like silicate paints, cement paints, lime paints). If you are using a different type of paint, check its suitability with the distributor.

### LIMITATIONS AND WARNINGS

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

### LEGAL NOTICE

The information and, in particular, the recommendations relating to application and final use of IZONIL products are provided in good faith, resulting from the present knowledge and experience with the products when properly stored, handled and applied under normal conditions in accordance with the recommendations of SEED or its distributors. As long as the use and processing of the product is not subject to our direct influence, we will not be liable for any damages caused by its misuse. We reserve the right to make changes resulting from technical progress.

### MANUFACTURER



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