

INTOPERL



HEAT INSULATING FIBER REINFORCED WATER REPELLENT PLASTER MADE OF HYDRAULIC BINDERS AND LIGHT AGGREGATES.- REI 120
Compliant with UNI EN 998-1

DESCRIPTION

Premixed lightened water repellent fiber reinforced plaster, made of hydraulic binders, light mineral aggregates, for heat insulating base coat plasters for interiors and exteriors and/or thermal on reinforced concrete beams and columns, with an high and constant quality level produced with an automated system to apply by hand or mechanically.

COMPOSITION

Hydraulic binders, light mineral aggregates, selected calcareous binders, fiber reinforced with a special composition of polypropylene fibers, water repellent agent, natural additives tested for the specific use which give to the product a very high adhesion and workability.

FEATURES

An accurate and selective choice of the main materials made with a perfect grading curve, thanks to the use of our own crush system, produce just adding water a mortar very plastic and easily workable. No cracks, no detachment, breathable and impact resistant. Good breathability, regulates humidity, weatherproof reduces the loss of heat by conduction and radiation. Has a good

thermal inertia, accumulating and retaining heat attorney continuous insulation leaving no thermal bridges in correspondence of the slabs and columns Thanks to these properties is realized, therefore, an excellent thermal insulation. Fibers give to the hardened mortar more ductility and resistance to the aggressive agents and to the thermal excursions, a better distribution of the loads and reduction of the micro cracks induced by external stresses, more resistance to the vibrations.

USE

INTOPERL is a fiber reinforced lightened plaster for external thermal insulation composite system, to apply directly on interiors and exteriors made with brick, old masonries, concrete, reinforced concrete, slabs in reinforced brick, etc., to apply by hand or mechanically.

APPLICATION

- The surface being plastered must be free of dust and dirt. Any traces of oil, grease, wax etc. must be removed in advance.
- To wet, in advance, not absorbent or dry or exposed to hot climates walls;
- To mix by hand, in a cement mixer or with a mixer on low speed, until when the mixture isn't homogeneous; with a plaster sprayer regulating the flow-meter until when the density isn't perfect.
- On particular substrates to apply a premixed rendering, type INTOBETON/R, to uniformly cover without smoothing and let it rest for 2/3 days at least.
Joints must be done with INTOPERL or with wood slide rules to obtain the thickness required, in this case remove the slide rules and fill in the blank with "INTOPERL".
- INTOPERL can be applied at different thicknesses: for just one application we advice you to don't exceed cm 2÷3.
- Once applied the desired thickness, after about 24/48 hours, level the surfaces with an american trowel, making the surface adapted to receive the finish.
- Waiting time for application of finishing 15 days at least.
- Waiting time for the application of decoration 20/22 days.
- The minimum thickness of the finished product don't have to be lower than 1cm.
- For very cold zones we advice a thickness of finishes product never lower to cm 5.
- With high temperatures, wind and low humidity, we advice you to protect from the quick drying moistening the substrates.
- To apply on reinforced concrete substrates previously treated with the bonding mortar "INTOAGGRAPPO".
- To apply on tuff substrates, stones, mixed masonries, previously treated with "INTOBETON/R".
- To apply on very smooth reinforced concrete substrates previously treated with the adhesion promoter "ANCOMUR".
- Don't apply on frozen surfaces, with frost or possible frost in 24 hours.
- Don't apply on gypsum substrates, synthetic coatings or paints.
- Don't apply with strong wind or in very sunny days.
- Don't apply until when the substrate isn't completely dried.





- Don't apply with driving rain.
- Don't apply on inconsistent and friable substrates.
- Don't add any other material to the product.
- We suggest to apply INTOPERL with a temperature between + 5 ° C and + 30 ° C.

FINISHES

Use as finish INTOFIN FLEX or INTORAS FLEX in a thickness never lower to 3/4 mm, inserting between the first and the second coat MALVIN NET network port plaster in glass fiber mesh 4x4 mm, of min. 150 gr, certified ETAG004.

Use for the decoration coatings or water-paints by ACRYL-SILOXANE LINE- SILOXANES LINE - SILICATES LINE - ELASTOMERIC LINE –ELASTOMERIC SILOXANES LINE.

YIELD

5/6 kg/mq for each cm of thickness.

PACKAGING

Multi-ply paper sacks with protection of kg 13 on wood pallets of 7,80 ql. (60 sacks).

TECHNICAL SPECIFICATIONS COMPLIANT WITH UNI EN 998-1

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| Water content of the mix | ~70-80% |
| Grading EN 1015-1 | ≤ 1,3 mm |
| Specific Weight EN 1015-10 | 500 kg/m ³ ± 10% |
| Workability time EN 1015-9 | 3 hours |
| Plastic shrinkage in cond. Termoigr. Standard | Absent |
| Compressive strength after 28 days EN 1015-11 | 2 N/mm ² (Category CS I) |
| Adhesion on brick EN 1015-12 | 0,3 N/mm ² FP: A |
| Water vapor diffusion resistance factor EN 1015-19 | μ ≥ 6 |
| Water absorption coefficient due to capillary action EN 1015-18 | Class "W1" |
| Fire reaction EN 998-1 | Class "A1" |
| Thermal conductivity Coefficient EN 1745 p.A.12 | λ _{10,dry,mat} = 0,09 W/mK |
| Durability | NPD |
| Toxicity - Regulation CE 1272/08 | Danger |
| Classification UNI EN 998-1:2010 | T2-CSI-W1/DOP nr. 176 |
| Fire resistance compliant with 16/02/2007 D.M. | REI 120 |

SUMMARY

The thermal insulation of walls and/or of beams and columns in reinforced concrete will be realized with a lightened fiber reinforced water repellent heat insulating plaster, made of hydraulic binders, light mineral aggregates, type "INTOPERL" by MALVIN S.r.l., applied by hand or mechanically and to mix just adding water, with a consume of 5/6 kg/mq for each cm of thickness, and thermal conductivity equal to λ_{10,dry,mat} = 0,09 W/mK, applying a thickness of finished product from cm 2 to cm 5 depending on the need.

The performance characteristics refer to laboratory tests, values depend on the weather conditions and on the methods of implementations. The operator must verify the suitability of the product depending on the use planned.



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