

# INTOCALCE MAS



**ECO-FRIENDLY BIO BASE SCREED FOR FLOORS BASED ON NATURAL HYDRAULIC LIMENHL 3,5**  
**Compliant with EN 13813-2004**

## DESCRIPTION

INTOCALCE MAS is a premixed eco-friendly bio-mortar at compensated shrinkage based on natural hydraulic lime NHL compliant with EN 459-1 with an high and constant quality level, produced with an automated system, for the realization of internal and external base screeds. The natural hydraulic lime NHL ensure an hydraulic hardening very slow and constant that allow to obtain plasters with an high durability and breathability. Form no vapor barriers and contains no solvents. Recyclable as inert at the end of life. Specific for the conservative historical restoration, thanks to the natural origin of its components that respect the nature of the original materials of the structures of historical interest.



## COMPOSITION

Natural hydraulic lime NHL 3,5 compliant with EN 459-1 obtained by burning marbly limestones at 950° C, cement free, selected calcareous aggregates in curve properly reassembled of grading from 0 to 3 mm, 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.

Used as screed can be applied directly on every kind of interior and exterior but stable and not subjected to rising damp. No cracks, no detachment it's breathable and impact resistant. It is the perfect base to receive every kind of floor.

## USE

INTOCALCE MAS is a premixed eco-friendly bio-mortar at compensated shrinkage at controlled dry ideal for the realization by hand or mechanically of base coat screeds to apply directly on every kind of interior and exterior but stable and not subjected to rising damp, perfect to receive the next application of every kind of pavement as potteries, natural stones, parquets and resilient floors suited for the realization of screeds with insertion of heating floors and floating screeds on resilient mats for the acoustic insulation of the footfall noises.

## SUBSTRATES

### Anchored screed

Verify that the substrate is resistant and has a u.r. < 2%.

Remove from the substrates all the crumbling and parts; eliminating dusts, mud, bitumen, oil stains, etc.

Apply along the perimeter walls a ribbon made of a compressible material with a thickness between mm 4 and 8.

For thicknesses between 2 and 3 cm to mix INTOCALCE MAS with water and latex INTOGUM in 1 to 4.

### Floating screed

Verify that the substrate is resistant and has a u.r. < 2%.

Apply along the perimeter walls a ribbon made of a compressible material with a thickness between mm 4 and 8.

Spread impermeable sheets (in polyethylene, PVC etc.) over the entire surface taking care to overlap the sheets in the joints for 25 cm at least and on the walls for at least 2 cm beyond the compressible tape.nastro comprimibile.





## MINIMUM THICKNESS OF APPLICATION

Anchored screed	cm 3.
Floating screed	cm 4.
Screed on heating floor cm 3 above the embossing	
Floating screed on insulating mats > 6mm	cm 5.

## APPLICATION

- Take particular care in the preparation of the substrate removing cracks and if necessary make insulations and waterproofing.
- For floors in contact with the ground perform waterproofing with sheath of the ground.
- To mix in a concrete mixer or with pressure pump or manual; with a continuous mixer regulating the flow-meter until when the density isn't perfect.
- The dough should have the consistency of moist earth.
- Eseguire le guide a livello.
- Prop and compact up to the desired level.
- In case of application on insulating panels is recommended to insert on the screed a suitable substrate network, taking care to keep it raised from the substrate so as to be inserted in the first / third of the screed.
- Arrange splits of the screed in correspondence of thresholds, doors or protrusions and in each case the length / width ratio of the local exceed the value of 3 and also in case of irregular surfaces.
- Can be realized without the use of network or joints, squares with regular shape not exceeding 100 mq.
- In case of application on acoustic insulating mats higher than 6 mm the minimum thickness to be achieved should not be less than 5 cm.
- During casting always insert MALVIN NET 4.4 network in glass fiber certified ETAG 004 mesh 4x4 cm, with weight of 130 gr/mq.
- In the presence of ducts, pipes and large depressions insert on the screed MALVIN NET 4.4 network in glass fiber certified ETAG 004 mesh 4x4 cm, with weight of 130 gr/mq.
- For floor heating systems is recommended to insert on the screed MALVIN NET 4.4 network in glass fiber certified ETAG 004 mesh 4x4 cm, with a weight of 130 gr/mq, taking care to fix it to the insulating panels and interrupting it on the height of the expansion joints in correspondence of doors and thresholds and in each case so that the area of a single jet does not exceed 40 mq.
- With high temperatures, wind and low humidity, is recommended to protect from the quick drying drowning the substrates.
- To protect the screed from the sun, wind and rain for 48 hours at least.
- Don't apply on frozen substrates, with frost or possible frost in 24 hours.
- Don't apply with strong wind or in very sunny days.
- Don't apply until when the substrate hasn't completely dried.
- Don't apply on inconsistent and friable substrates.
- Don't apply with driving rain.
- Don't add any other material to the product.
- We suggest to apply INTOCALCE MAS with a temperature between + 5 ° C and + 30 ° C.
- Finish the screed with a sponge float or with rotating disc machine.
- Lay the floors after be sure that the humidity of the screed is less than 2%.
- Is recommended to use adhesives with a good elasticity for laying ceramic floors.
- Can be walked on 24/48 hours.
- For screeds with insertion of floor heating, before laying the floor, slowly and gradually bring the plant to the maximum temperature, and then let cool up to the room temperature.



# INTOCALCE MAS

## YIELD

20 kg/mq for cm of thickness depending on the grade of compaction.

## PACKAGING

Loose in silo (Gravity feed).

Multi-ply paper sacks with protection of kg 25 on wood pallets of 17,50 ql. (70 sacks).

## TECHNICAL SPECIFICATIONS COMPLIANT WITH UNI EN 13813-2004

**Water content of the mix**

**Grading EN 1015-1**

**Specific Weight  $\pm 10\%$**

**Workability time EN 1015-9**

**Compressive strength after 28 days EN 13892-2**

**Flexural strength after 28 days EN 13892-2**

**Residual moisture after 28 days**

**Reaction to fire EN 13813**

**Thermal conductivity coeff. EN 13813 p.to.5.3.7**

**Durability**

**Mitigation of the level of impact noise ( $\Delta L_{nw}$ ):**

**Toxicity - Regulation CE 1272/08**

**Classification EN 13813-2004**

8,5 % (Up to consistency of moist earth)

$\leq 3$  mm

2.000 kg/m<sup>3</sup>

60 minutes

$\geq 16$  N/mm<sup>2</sup> (C16)

4 N/mm<sup>2</sup> (F4)

1,7%

Class "A1fl"

$\lambda = 1,83$  W/mK

NPD

dB 15

Danger

CT-C16-F4 /DOP nr.224

## SUMMARY

Internal and external base coat screeds, screeds on heating floors, floating screeds on resilient mats for the acoustic insulation of the footfall noises will be realized with an eco-friendly bio-mortar for premixed screed at compensated shrinkage, at controlled dry based on natural hydraulic lime NHL 3,5 - compliant with EN 459-1, obtained by burning marbling limestones at 950°C, cement-free, type "INTOCALCE MAS" by MALVIN S.r.l., to apply by hand or mechanically and to mix just adding water, with a consume of 20 kg/mq for each cm of thickness and classification EN 13813-2004 - CT-C16-F4 and thermal conductivity coefficient EN 13813 p.to. 5.3.7  $\lambda = 1,83$  W/mK.

*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.*



# MALVIN



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