High insulating render mortar
PRODUCT DESCRIPTION

THERMOINTONACO is a premixed ready to use, highly insulating render mortar that combines in one product both a base plaster and a thermal insulator. The product is designed to be applied by hand or by spraying machine on both internal and external walls.

Thanks to its high thermal capacity it can be used for thermal insulation coating, thermal insulation of internal walls, thermal insulation of ceilings, eliminating thermal bridges and for protecting building facades from rainwater.

The product is permeable to the diffusion of water vapour and is particularly suitable as a thermal insulation, base plaster under subsequent mineral finishing coats.

COMPOSITION

THERMOINTONACO consists of special hydraulic binders, perfectly spherical, granulometric consistent virgin EPS pearls, and specific additives that improve the performance and workability.

MIXING AND APPLICATION

THERMOINTONACO can be applied by mechanical spraying, using a plastering machine for pre-mixed products, or by hand.

The supports to be plastered must be homogeneous, stable, clean, fixed, free of brittle parts, dust, bacterial proliferation, saline efflorescence, oils, grease, wax, residues of previous work, etc. If necessary, clean the support by sandblasting or pressure washing.

Smooth and non-absorbent or compact concrete supports must be previously treated with the application of a layer of BETON RINZAFFO to improve the adhesion of the render mortar to the lower support. The plaster application should be done 24-48 hours after application of the preparation coat BETON RINZAFFO.

It is recommended to use THERMOINTONACO for the preparation and carrying out of intermediate layers or, alternatively, by applying to the wall polystyrene blocks to the final thickness desired. If wooden boards or metal strips are used, remove them immediately after applying the thermal insulation plaster replacing and filling the gaps created with THERMOINTONACO.

The preparation of corner bead, level guides, etc. should be performed before applying the plaster layer on the wall. The edges and openings for doors and windows can be previously prepared with the installation of steel staff angles to be fastened by screw or plastered in. You can also use wooden boards for the realization of edges but they will be less resistant once finished. In case you need to reinforce the edges obtained, insert into coating PARASPIGOLO CAPPOTTO PVC.

For manual application, mix the product by adding approx. 9.0-10.0 litres of clean water per sac in the cement mixer. Put the correct amount of water into the cement mixer then add the powder. Mix the product for about 2’-3’ minutes until the mixture is smooth and free of lumps. Apply the product with a trowel as a traditional render mortar. The mixed product is usable within 90’ minutes after mixing with water. Apply manually the product using a large trowel in several layers until the desired thickness is obtained. For application by mechanical projection, set up the plaster machine with a large blade helical mixer of a rotor/stator group specific for lightweight products.

Apply an initial layer of about 10 mm of product to the whole surface. Wait for it to set before proceeding with the next layer of thickness (from 4 to 24 hours depending on the
To achieving the desired thickness, proceed with the application of successive layers of between 20 and 30 mm. thickness. Level and finish the plaster layer with an aluminium screed bar. Any smudges or excess product is to be eliminated by scraping and sanding the supports. The prepared surfaces are then suitable for treating with finishing products. Wait at least 10 days before proceeding with final coating. Apply the final product to the whole area plastered with a metal trowel applying a constant thickness never less than 3 mm. Insert in to the plaster from top to bottom the reinforced mesh ARMANET 4x4 in fibreglass primed and certified, with alkali treatment, taking care to overlay the strips by at least 10 mm. Once the layer has set, apply a second coat to uniform the entire surface. We recommend for decorative and protective finishes, coatings that are coloured mineral and permeable to water vapour diffusion such as ARENINO VK2 or TALOCCIATO VK3.

**INDICATIVE AMOUNTS REQUIRED**

| 10 litres per m² per cm of thickness. |

**COLOUR**

Grey.

**PACKAGING**

60 litre bags on disposable pallet (40 bags) protected by waterproof plastic wrap.

**STORAGE**

6 months in original intact packaging and stored in a dry place.

**RECOMMENDATIONS**

Do not apply at temperatures below + 5°C, in the presence of strong wind, rain and under direct sunlight or above + 35°C.

At high temperatures, it is recommended to evenly wet the supports before applying product.

Do not apply on frozen, dusty, uneven and inconsistent supports.

Plaster thickness should be between 30 to 120 mm.

Avoid application on gypsum-based substrates or mineral and organic insulating panels.

Protect the applied product from frost, rain and rapid drying for the first 24 hours after application.

**PRODUCT DATA**

- **Appearance**: powder
- **Colour**: grey
- **Dry bulk density**: ~ 220 kg/m³
- **Maximum aggregate size**: ≤ 3.0 mm

**APPLICATION DATA**

- **Water content of mix**: 15-17% v/v
- **Mixing ratio**: 1 bag + 9.0-10.0 ℓ of water
- **Minimum application temperature**: + 5°C
- **Maximum application temperature**: + 35°C
- **Working time**: ≥ 90’ minutes

**PERFORMANCE**

- **Bulk density of fresh mortar**: ~ 445 kg/m³
### DATA

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
<th>Standard</th>
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<tbody>
<tr>
<td>Bulk density of hardened mortar</td>
<td>~ 300 kg/m³</td>
<td>EN 1015-10</td>
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<tr>
<td>Air content</td>
<td>11%</td>
<td>EN 1015-7</td>
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<tr>
<td>Adhesion</td>
<td>≥ 0.13 N/mm² (FP) B</td>
<td>EN 1015-12</td>
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<tr>
<td>Compressive strength</td>
<td>≥ 1.0 N/mm² CS I</td>
<td>EN 1015-11</td>
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<tr>
<td>Flexural strength</td>
<td>≥ 0.5 N/mm²</td>
<td>EN 1015-11</td>
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<tr>
<td>Capillary water absorption</td>
<td>≤ 0.40 kg/m² x min⁰.⁵ W₁</td>
<td>EN 1015-18</td>
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<tr>
<td>Water vapour permeability coefficient</td>
<td>µ 9</td>
<td>EN 1015-19</td>
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<tr>
<td>Thermal conductivity</td>
<td>0.062 W/mK T₁</td>
<td>EN 12667</td>
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<tr>
<td>Specific heat capacity</td>
<td>0.24 kJ/kgK</td>
<td>EN 1745, A.12</td>
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<tr>
<td>Reaction to fire</td>
<td>A₂ s₁ d₀ Class</td>
<td>EN 13501-1</td>
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<tr>
<td>Durability</td>
<td>Evaluation based on provisions valid in the intended place of use of the mortar</td>
<td>EN 998-1</td>
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<tr>
<td>Hazardous substances</td>
<td>See MSDS</td>
<td>EN 998-1</td>
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</table>

### ACCORDING TO

- EN 998-1

Rendering/plastering mortar for thermal insulation (T)

### REMARKS

**Product for professional use.** The data and instructions in this data sheet are based on our best practical and laboratory experience. They refer to laboratory tests and should be considered indicative. In view of the different conditions of use and application, which depend on factors over which Vimark has no control (type of surface, environmental conditions, technical indications for fixing, etc.), those who use the product are responsible for ascertaining whether or not it is suitable for the intended purpose. Thus our warranty obligation merely covers the quality and fade-free characteristics of the actual product, and exclusively in relation to the aforementioned data. Vimark reserves the right to make technical modifications without prior notice. This technical data sheet voids and substitutes all previous editions. Updates will be published on the website www.vimark.com.