



THERMOKLIMA RUSTICO

HIGH-PERFORMANCE ADHESIVE AND LEVELING COMPOUND WITH IMPROVED WORKABILITY FOR THE CONSTRUCTION OF ROUGH-GRAINED FINISH EXTERNAL THERMAL INSULATION SYSTEMS.



Description:

THERMOKLIMA RUSTICO is used as an adhesive and skim coat with a "rustic" finish for the construction of high-quality and impact-resistant external thermal insulation composite systems (ETICS) on external facades, attic spaces, basements, and other areas. It can be used both indoors and outdoors and is ideal for under-tile insulation, ventilated facades, radiator niches, etc. The special grain size of the aggregates gives the surface finish a pleasant "rustic" effect.

THERMOKLIMA RUSTICO is a fibrous cement mortar available in gray or white, made from high-strength cement, selected aggregates, mineral fibers, and modified with synthetic elasticizing additives.

Application fields:

Adhesive and "rustic" skim coat for bonding and finishing expanded or extruded polystyrene sheets, expanded polyurethane, cork, mineral fiber panels (rock wool), or equivalent materials on walls or ceilings, on substrates such as masonry, concrete, cement-based renders, mortar mixes, etc.

"Rustic" skim coat for absorbent or non-absorbent surfaces such as renders, concrete, precast concrete panels, old paints or plastic finishes, etc.

Preparation of substrates:

Ensure that the substrates are mature, solid, consistent, sufficiently flat, free from oils, grease, dust, loose parts, paints, and general dirt. Any depressions or unevenness should be corrected using a skim coat from the *Industria Calce Casertana SrI* catalog. Slightly dusty surfaces can be covered only after treatment with the appropriate *ICC GRIP* consolidating primer.

Preparation of mortar:

Mix **THERMOKLIMA RUSTICO** using a mixer or low-speed drill with a whisk attachment, with approximately 5.5 ÷ 6 liters of clean water per 25 kg bag of product until a creamy, homogeneous, and lump-free mixture is obtained. Allow the mixture to mature for approximately 10 minutes.

Briefly stir the mortar and start the operations. The obtained mortar can be used for approximately 4 hours.

Application:

Check the flatness of the substrate:

- If the panels are applied directly on brickwork (poor flatness), apply a cord of adhesive with dimensions of 5 ÷ 8 cm in width and a thickness of 2 ÷ 3 cm using a trowel. Apply the cord along the entire perimeter of the panel and on the two diagonals to form an "X" in the center of the panel. Only indoors, THERMOKLIMA RUSTICO can also be applied in points with a normal trowel. Press the panel against the surface by tapping it with your hand or a wooden trowel to ensure good adhesion of the adhesive mortar to the substrate. Always check that the minimum bonding surface is greater than 40% of the total panel surface.
- On leveled substrates such as renders, concrete, or reinforced concrete, apply the adhesive on the entire surface of the panel using a notched trowel with a 10 mm notch. In outdoor or with heavy or large panels, it is always recommended to fully cover the surface of the insulation panel by applying the mortar with a notched trowel; always check the instructions provided by the manufacturer of the panels. During the placement of the panels, it is necessary to frequently check the flatness of the obtained surface using a metal straightedge.

In external walls, additional fixing of the panels is always necessary using specific expansion plugs that should be applied after the adhesive has started to set.

Wait for the adhesive to harden for at least 48 hours, then apply a layer of **THERMOKLIMA RUSTICO** with a 10 mm notched trowel over the entire panel and cover it with a suitable alkaliresistant fiberglass mesh. Use a smooth American steel trowel to "bury" the mesh by incorporating it into the adhesive, without smoothing its surface. In the joints, the edges of the mesh should overlap by about 10 cm.

Wait for the product to harden for approximately 24 hours, then apply an additional layer of **THERMOKLIMA RUSTICO** with a thickness of about 2 ÷ 3 mm; the total thickness of the skim coat should be 5 mm. The second skim coat can optionally be "finished in a civil manner". Additional finishes can only be applied after maturation (approximately three weeks). As a surface finish, it is recommended to apply an acrylic or acrylic-siloxane-based paste plaster with elastic and water-repellent characteristics.

Consumption:

- For "spot" bonding, approximately 3 ÷ 4 kg/m² is required.
- For bonding with a notched trowel on the entire surface, approximately 4 kg/m² is required.
- For skim coating the panels, approximately 1.5 kg/m² is required for each mm of applied thickness.

TECHNICAL DATA

Consistency
Maximum grain size:
Bulk density (fresh mortar):
Mixing water per 25 kg bag
Working time
Allowed application temperatures

Execution of surface skim coat
Execution of second skim coat
Application of any finishes

Grey or white powder 1,2 mm 1,6 gr/cm³ approx. 5,5 - 6 lt

from +5°C to +35 °C

approx. 4 h*

after at least 24 h* from installing after approx. 24 h* from the first

after approx. 15÷21 days*

FINAL PERFORMANCE

Adhesion to polystyrene panel ≥ 0,1 N/mm² (Broken panel)

Adhesion to concrete $\geq 1 \text{ N/mm}^2$ Adhesion to brick $\geq 0.5 \text{ N/mm}^2$

Thermal conductivity $\lambda_{10,dry,mat}$ 0,51 W/m (tabulated value)

Impact and puncture resistance:Very goodAging resistanceExcellentMoisture resistance:Excellent

Cleaning of equipment:

Wash hands and equipment with plenty of clean water before the product starts to set; mechanical means will be required afterwards.

Hygiene and safety:

EUH 208 Contains cement. May cause an allergic reaction. The Portland cement in the product can cause skin irritation and serious eye damage. Do not breathe dust, ventilate the area during mixing, and adequately protect yourself with gloves, protective clothing, and goggles. Read the instructions on the packaging carefully before use and consult the Safety Data Sheet.

Packaging:

THERMOKLIMA RUSTICO is supplied in 25 kg bags on wooden pallets weighing 1500 kg each.

Storage:

Store the product in intact original packaging in cool, dry areas. Do not disperse the dust. Product compliant with DM 10/05/2004. Cr VI content below 2 ppm. The properly stored product should be used within 6 months from the packaging date stamped on the bag.

Warnings:

- -Non Do not use on metal, wood, plastic, or surfaces subject to heavy movement.
- Do not use on particularly smooth panels or panels coated with protective films.
- If necessary, level surfaces with a skim coat from the *Industria Calce Casertana SrI* catalog and wait 48 hours before starting panel installation.
- As a skim coat, do not use in thicknesses greater than 5 mm total.
- In external facades, use mechanical fixing with plastic mushroom head in combination.
- Protect the completed work for at least 48 hours from rain, washing, or freezing and for at least 7 days from direct sunlight.
- Do not apply on frozen substrates or at ambient temperatures below +5°C.
- It is recommended not to add foreign products.

PRODUCT FOR EXCLUSIVE PROFESSIONAL USE

All data and information provided in this technical data sheet, although resulting from laboratory tests and our direct application experience, are purely indicative due to the infinite variables associated with site conditions. Therefore, before applying the product, the user is responsible for determining if it is suitable for their intended use, in the specific hygrothermal and application conditions expected at the time of use, and assumes all responsibility. We are not liable for any damage to people or property resulting from improper use of the product.

^{*} Data expressed at (23±2)°C and (50±5)% relative humidity. Lower temperatures extend maturation and hardening times.