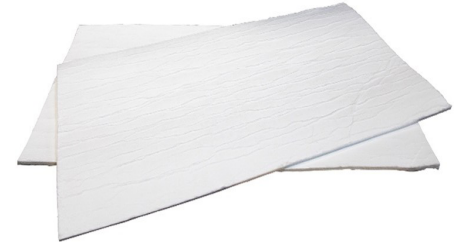


Semi-rigid nanotechnological insulation panel in Aerogel

DESCRIPTION

Insulation panel based on ultra-pure silica aerogel, specifically developed to provide high thermal insulation performance in the smallest possible space. Its high insulating capacity, combined with fire resistance, breathability, and hydrophobicity, makes it highly valued and suitable for both new constructions and renovations. The panels comply with the Minimum Environmental Criteria (CAM).



MAIN PROPERTIES

- Low thermal conductivity
- Hydrophobic, does not absorb moisture
- High breathability
- Easy and quick to apply

TECHNICAL DATA

Resistance to water vapour passage (EN 12086)	7.6 ± 1 μ
Specific heat (EN 10456)	1030 J/kgK
Compression stress at 10% deformation (EN 826)	45 ± 5
Nominal density (EN 1602)	170 ± 30
Long-term water absorption by partial immersion (EN 29767)	0.03 Wp Kg/m2
Thermal conductivity (λ) (EN 12667)	0,016 W/mK
Reaction to fire (EN 13501-1)	A2-s1, d0
Dimensional stability (EN 1603)	≤ 1 %

CHARACTERISTICS

Size slabs	145 cm x 70 cm
Thickness	1, 2, 3, 4 cm

APPLICATION

Preparation of the Substrate:

All substrates must be free of release agents, dry, clean, and cohesive, and not subject to rising damp. Plasters must be sufficiently cured according to the type of material and the manufacturer's instructions. On surfaces with the presence of mold or algae, first apply a coat of Vitasana Solux (IVAS) and wait at least 24 hours before proceeding as indicated in the technical data sheet. In the case of old paints or dusty substrates, it is recommended to apply a coat of consolidating primer MICRALICA (IVAS), or to proceed with removal if this is not sufficient.

Application Procedure:

1. Panel installation (wall application)

Panels must be installed from bottom to top on vertical surfaces. They should be placed with the $\epsilon\eta\lambda\upsilon\mu\eta$ side horizontally and with staggered joints, alternating panel ends at corners.

After installation, apply uniform pressure to ensure proper adhesion to the substrate. Check flatness using a straightedge.

2. Mechanical fixing (anchoring)

Mechanical fixing with anchors is required to ensure resistance to wind loads and long-term durability.

After the adhesive has cured (depending on climatic conditions), install certified anchors (approx. 6 pcs/m²) with suitable length to ensure proper anchorage.

3. Reinforced base coat

Apply a first layer of adhesive مخصوص for aerogel panels using a smooth trowel, followed by a 10 mm notched trowel to achieve the required thickness.

Embed a fiberglass mesh (160 g/m²) into the fresh layer, pressing it gently and ensuring overlaps of at least 10 cm between adjacent sheets.

After drying (12–24 hours), apply a second coat to obtain a smooth surface ready for finishing.

4. Finishing

Before applying the finishing coat, it is recommended to use a bonding primer such as MICRALICA.

Then apply a breathable acrylic-siloxane finish (e.g. RIVATONE TRV or RIVATONE IDROSILICONICO).

A grain size ≥ 1.0 mm is recommended to ensure adequate weather protection and durability.

Floor application

1. Preparation and bonding

For floor installation of NOVAFELT, full-surface bonding using $\alpha\rho\eta\alpha\iota\upsilon$ polyurethane foam is recommended. Dry installation is also possible.

2. Panel installation

Install panels starting from a corner, with the long side horizontal and staggered joints.

In case of bonding, apply firm pressure and check flatness with a straightedge.

3. Screed application

After installing NOVAFELT panels, apply a reinforced pre-mixed screed to create a uniform and durable base for the final flooring.

STORAGE

Storage:

Panels should be kept in their packaging until they are ready to be used.

Unpack the material in the work area. This will help minimize the area where dust exposure may occur. Avoid leaving the panels exposed to ultraviolet rays for prolonged periods.

TECHNOLOGIES/CERTIFICATIONS

