

ISOLCORE[®]

The world's thinnest and best performing insulation

INSTALLATION MANUAL

Nanofelt - Aerogel insulating felt

Description

ISOLCORE is the Italian brand that boasts the world's best performing insulation



Nanofelt is an aerogel-based nanotechnology mat with excellent insulating performances. Aerogel is less dense than glass but heavier than air. It is also able to withstand high temperatures and it is an excellent thermal insulator. The low thermal conductivity, the flexibility, the resistance to compressive strength, the hydrophobicity and the breathability make Nanofelt the best insulating material on the market, with the exception of the vacuum insulation.

Where to place it

Cz panel is highly recommended in the construction field to insulate:

- Exterior walls (behind a false wall - total figure of thickness 3-3.5 cm)
- Interior walls (behind a false wall - total figure of thickness 2.5 cm)
- Terraces floors
- Pedestrian rooves
- Ceiling/garage

In addition, they can be used in many other areas, from domestic fridges and freezers to refrigerated transport.

Advantages

The main advantages are the following:

- its high insulating performances
- its low energy costs
- its flexibility
- Easy to cut
- Its fire resistance
- its thermal performance are 3 times longer over the time than traditional insulation products
- it can be placed also on those buildings that must follow some restrictions related to the landscape they are located in, their history or to the environment laws of their Country

INSTALLATION INSTRUCTIONS

CASE A) : EXTERIOR WALL INSULATION

Nanofelt is applied like a traditional insulation panel; it is placed on the external surface of the wall. The felt is placed to the existing masonry by gluing or by dowelling, then it is covered with a layer of reinforced skim coat, and in the end with a suitable colour.

Note: there are no contraindications in case you need to drill holes in it.

CASE B -C) : INSULATION OF TERRACE FLOORS AND FLAT ROOFS THAT CAN BE WALKED ON

NANOFELT is glued on using polyurethane foam glue.

The foam should be placed along the edges and in the middle of the panel. Horizontal laying on floors, terraces, floors must be carried out on flat surfaces without impurities. It is recommended to level the substrate.

CASE D) UNDER TILE INSULATION

NANOFELT is glued on using polyurethane foam glue.

The foam should be placed along the edges and in the middle of the panel. Horizontal laying on floors, terraces, floors must be carried out on flat surfaces without impurities. It is recommended to level the substrate.

CASE E) : INSULATION OF INTERNAL WALLS AND FALSE CEILINGS

In the case of interior walls and/or false ceilings, NANOFELT can be placed in the same way as in case A) or using a 2 cm thick plasterboard structure. If you want to add a better

acoustic insulation to the thermal one, it is recommended a plasterboard already coupled with noise-blocking rubber sheathing. The classic aluminium structure will then be made and NANOFELT will be placed inside it. Next, the plasterboard sheet will be applied. In the last stage, the plasterboard sheet will be painted.