

ISOLCORE™

The best insulation in the world

Installation manual panel CZ - FLOORS

Description

ISOLCORE is the Italian brand that has invented the best performing insulation in the world.

The VIP (Vacuum Insulated Panels) are products, usually composed of a pressed mineral component, vacuum-packed by a special casing. The CZ panel is composed of a core (core) mainly in fiberglass and a special jacket in fiberglass fabric, and aluminum which makes it much more resistant to cutting and erosion,



compared to all other vacuum panels. (VIP) currently on the market. This special film makes it impermeable to gas and vapor, preserving performance for a duration 3 times longer than that of a traditional insulating panel.

The panels are deprived of the air inside them until very low pressures are obtained: this process greatly reduces the mobility of the few remaining air molecules, decreasing the thermal conductivity, which reaches values even lower than 0.002 W / mK.

This high insulating capacity, obtained by subtracting air from inside the panels themselves, leads to a reduction in the transmission of energy by thermal conduction, radiation and convection.

This process suppresses the thermal conductivity of the air and heat transfer, obtaining a highly insulating material.

Fields of use

The vacuum panels are particularly suitable in construction for the insulation of:

- a) curtain walls
- b) paving of terraces
- c) walkable flat roofs
- d) roof insulation under tile
- e) insulation of internal walls and ceilings

Furthermore, they are used in many other fields, from domestic refrigerators and freezers to refrigerated transport.

PLUS

The main plus are:

- high insulating performance (1 cm of CZ = about 17 cm of EPS insulation)
- lower energy consumption
- reduced thicknesses
- duration of thermal performance 3 times higher than that of traditional insulation
- also applicable to buildings subject to landscape, historical, environmental constraints, etc.
- the problem of cleaning the building site and disposing of all the scraps that would otherwise occur with traditional insulation is eliminated, eg. EPS, or others.
- the storage of goods requires 10-15 times less space than what is needed with traditional panels.

INSTRUCTIONS FOR A CORRECT LAYING

FLOOR INSULATION

1° Step

The horizontal installation on floors (or attics, terraces, flat roofs) must take place on flat surfaces free of impurities and must be laid simply by placing it on top of a 300 g / m² non-woven fabric layer.



2° Step

Particular attention should be paid to the juxtaposition of panel and panel, exerting a slight lateral pressure aimed at eliminating empty spaces or joints.





Note: it is recommended to tape the joints / joints of the CZ panels and the perimeter of the flooring using the silver ISOL-TAPE adhesive tape.

During the installation phase, be careful not to step on the CZ panel so as not to risk damaging / drilling it. For this reason, we recommend leaving one or more empty strips of panels so that you can walk safely from one part of the room to the other. In the final stage, lay the CZ panels to close the strips left previously.

If you have to walk over the CZ insulation again, first lay the layer of non-woven fabric, which also acts as a protection for the panel itself.

(In any case it is recommended to use wooden boards to distribute the weight when walking).

The CZ panel also acts as a vapor barrier, thanks to its special casing which makes the panel vacuum and very impermeable to vapor.

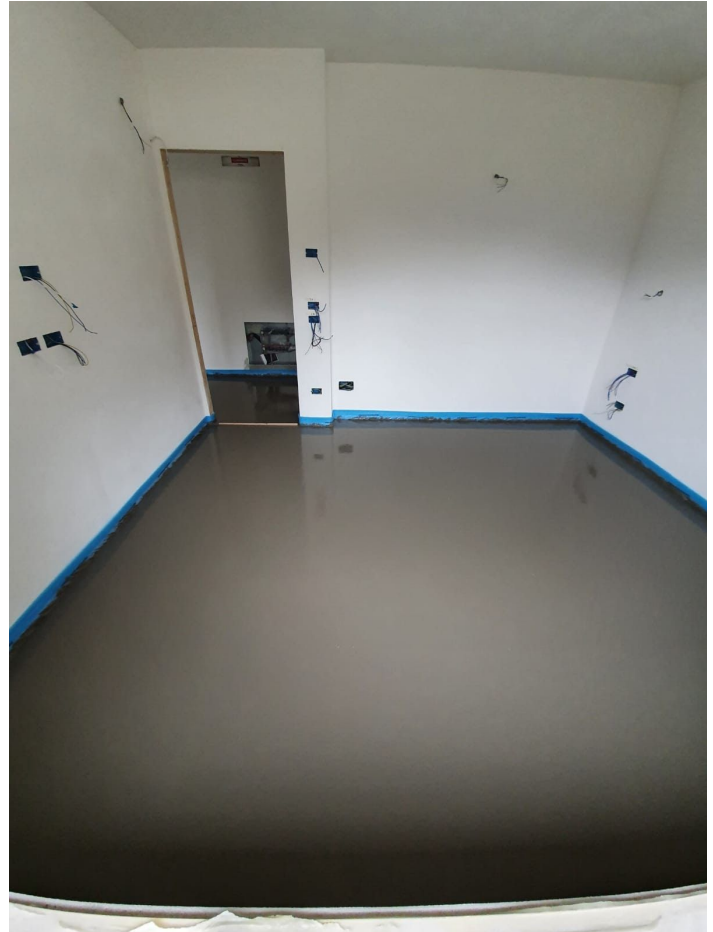
Note: a bituminous flame membrane can be placed on the existing floor before gluing the CZ panel, or on top of the lightened screed.

3rd Step

Cover the panel with an additional layer of non-woven fabric (200/300 gr geotextile) and a layer of nylon.



4th Step: then proceed with the installation of a screed lightened by at least 4 cm.



It is now also possible to do any underfloor heating ...



Restrictions / precautions.

The vacuum panel must be treated with particular attention and delicacy, before laying it is necessary to check that the vacuum is not damaged. Damage in this sense can be recognized by noting the imperfect adhesion of the external film to the internal core. For the installation of the CZ - ISOLCORE vacuum panels it is essential to pay attention to the following points:

- 1) Upon delivery of the vacuum panels, they must be checked visually according to the aforementioned criteria to verify their integrity;
- 2) The panels cannot be cut and folded: usually rectangular or square shaped panels are marketed, but potentially different shapes and / or dimensions of production may be possible to better adapt to specific applications.
- 3) It is not recommended to drill the panels in order not to cause a decrease in the performance of the panel itself.
- 4) The surface on which the vacuum panels will be installed must be regular, smooth, flat and must not show edges or other sharp protuberances.

The paneling, on request, can be made to measure on project and supplied in modules to be laid on site. The panels also have reduced dimensions to cover in this way even the most difficult points to isolate and / or where you cannot get there with the largest formats.

We recommend that you possibly supply us with the quantities of panels for each standard format (see technical data sheet) in order to optimize their consumption during the installation phase.

***Notes:** if small parts remain uncovered, these can be isolated with the NANOFELT nanotechnological felt with high thermal performance, thickness 1cm (or multiples) so as to optimally isolate 100% of any thermal bridges. This panel can be easily shaped and cut even with a simple cutter.*

LEGAL NOTICES

The advice on how to use our products corresponds to the current state of our knowledge and does not imply the assumption of any guarantee and / or responsibility on the final result of the work. They therefore do not exempt the customer from the responsibility of verifying the suitability of the products for the intended use and purposes through preventive tests. The website at www.isolcore.com contains the latest revision of this technical data sheet: if in doubt, check the date of issue.

EDITION

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