

ISOLCORE[®]

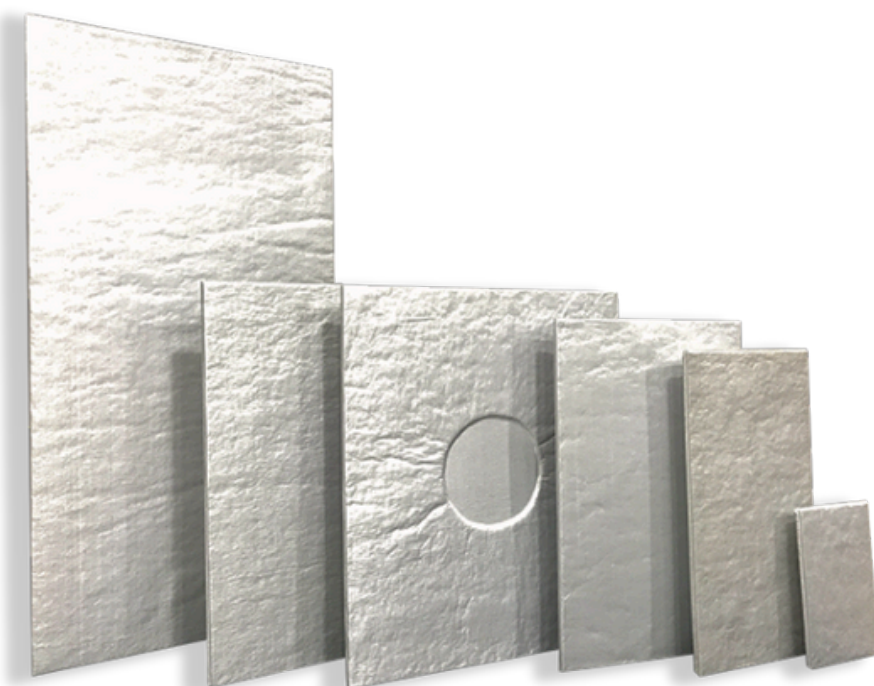
The thinnest and most efficient insulation in the world

Technical data sheet **CZ**



VACUUM PANEL IN FIBERGLASS (CZ)

PRODUCT FEATURES



Recyclable



Non-hazardous waste

IN ACCORDANCE WITH



DESCRIPTION

Vacuum panels are products typically made of a compressed mineral component enclosed in a special vacuum-sealed casing. The CZ panel consists of a core primarily made of glass fiber and a special jacket in glass fiber fabric and aluminum, which makes it significantly more resistant to cutting and erosion compared to all other vacuum panels currently on the market. This special outer layer makes it impermeable to gas and vapor, preserving its performance for a period four times longer than a traditional insulation panel.

DIMENSIONS

1000x550 / 1000x350 / 600x550 /
550x350 / 250x350 / 150x350 /
50x350 mm

Other sizes available on request

PANEL THICKNESS

10-13-20-30 mm

Other sizes available on request

This high insulating capacity, achieved by removing air from within the panels themselves, results in a reduction of energy transmission through thermal conduction, radiation, and convection. This process suppresses the thermal conductivity of air and heat transfer, resulting in a highly insulating material.

Areas of application

The CZ panel is particularly suitable in building construction for the thermal insulation of:

- External façades (behind the lining system. Total build-up thickness starting from 3/3.5 cm)
- Terrace floor build-ups
- Roofs and ceilings of porches and garages
- Internal wall and ceiling insulation (installed behind lining systems. Total build-up thickness starting from 2.5 cm)

CZ panels are also used in several other sectors, including: domestic refrigerators and freezers, as well as refrigerated transport systems.

Key performance benefits

- Outstanding thermal insulation performance (up to 20 times higher than traditional insulation materials)
- Reduced energy consumption
- Ultra-thin thickness
- Thermal performance durability up to three times longer than conventional insulation materials
- Suitable for buildings subject to architectural, landscape, historical or environmental constraints
- Sound insulation:
21 dB with only 10 mm thickness. 41 dB with the CZ-SoundStop system.

LABORATORY INSIGHT

Density	400 Kg/m ³
Weight	4 Kg/m ²
Compressive strength	140 - 180 kPa
Thermal conductivity	0,002W/mK*
Resistance to cold and heat	da -50 a +90° C
Vapor Resistance (μ)	1688 μ +/- 253 **
Fire resistance	Class A2 - S1 d0***
Specific heat	1000 J/kgK
Standard formats (others on request)	1000x550 / 1000x350 / 600x550 / 550x350 / 250x350 / 150x350 Special format 50 x 350 mm: Two pieces can cover the distance between the two spacers positioned under the structure, where they can be installed using the 5 cm panels. For packages with a thickness of 3 or 3.5 cm, Nanofelt is the best solution to apply under the structure.

Thickness (mm)	λD W/mK	Rd m2K/W	Ud W/m2K
CZ 10 (10mm)	0,002	5,00	0,20
CZ 13 (13mm)		6,50	0,15
CZ 20 (20mm)		10,00	0,10
CZ 30 (30mm)		15,00	0,07

*Certified value by CMR laboratory (ACCREDIA), technical report n° 1992-1-21. Thermal resistance and thermal conductivity tested using the guarded hot plate method according to UNI EN 12667:2002 standard: tests performed on multiple samples (by Ist. Giordano and CMR). The declared thermal conductivity value is in compliance with UNI EN 10456:2008.

** Test performed by CMR institute (Vicenza - ACCREDIA) - Test report n.1497-1-19. (This high value ensures the maintenance of the panel's thermal performance as there is no vacuum loss).

*** Test performed by Istituto Giordano (ACCREDIA) - Test report n° 414756

CAM certification according to ISO 14021 and UNI PDR88 certified by an accredited body - SGS.

RESTRICTIONS

The panel casing must not be damaged by cuts, sharp objects, improper handling on site, transport, or excessive weight load, as this could compromise the product's characteristics.

Caution: Read the installation manual and technical dossier before proceeding with the installation.

rev. del 06/01/2026

Contacts

NEW ZEALAND COMPANY SRL
ADDRESS EMILIA E ROMAGNA, 38 35020
SAONARA - PD (ITALY)
UK@ISOLCORE.COM
WWW.ISOLCORE.COM

This technical data sheet replaces and nullifies any previous version. The data and information contained are representative of the typical characteristics of the material and correspond to our current and best knowledge. However, no liability or recourse can be attributed to New Zealand Company S.R.L. It is the user's responsibility to verify the suitability of the product for its specific use, assuming all inherent and resulting responsibilities from the use of the product itself. Our technicians are at your disposal for information, clarifications, and questions regarding the use and processing of our products. Updated technical data sheets are available on the website www.isolcore.com or can be requested from our offices.

ISOLCORE®
The thinnest and most efficient insulation in the world