

Designation code CE: MW-EN13162-T4-DS(70,90)-CS(10)5-TR2.5-AFr20-WS-WL(P)-MU1

ISOVER

OPTI VENT



STONE WOOL BOARDS

Benefits

HIGH QUALITY

-  **High thermal insulation performance** (low thermal conductivity);
-  **Fire safety** (noncombustible material);
-  **Excellent acoustic properties** (high absorption coefficient);
-  **Long life span and time-stable properties;**
-  **Low vapor flow resistance;**
-  **Resistant to mold, mildew, rodents and insects;**

ECONOMIC VALUE

-  **Contributes to the reduction of energy consumption;**
-  **Chemically neutral, non-corrosive, easy to handle, non-toxic;**

TECHNICAL SPECIFICATION

Boards made from ISOVER stone wool. The boards are obtained by melting the mineral raw materials in a furnace, fiberizing the melt by REX process, spraying a binder and adding mineral oils for protection against dust and water repellence. The mineral fibers mat is processed into boards which are packaged on the production line.

APPLICATION

Use (according to standard EN 13162:2012 + A1:2015): Thermal insulation for buildings (ThiB).

ISOVER OPTI VENT boards are used for thermal, acoustic and fire insulation in civil and industrial buildings:

- ventilated facades;
- curtain walls;
- wooden houses walls or metallic buildings walls;
- walls made of metal boxes for halls;
- partition walls with specified fire resistance performances;

PACKAGING

ISOVER OPTI VENT boards are packed in packages wrapped in PE foil, and the packages are packed in pallets.





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| TECHNICAL PARAMETERS | U.M. | VALUE |
|---|--|-----------------|
| THERMAL INSULATION PROPERTIES | | |
| Declared thermal conductivity - λ_D | W/(m•K) | 0.035 |
| MECHANICAL PROPERTIES | | |
| Compressive stress at 10% deformation 10% σ_{10} or CS (10\Y) | kPa | 5.0 |
| Perpendicular tensile strength σ_{mt} or TR | kPa | 2.5 |
| FIRE SAFETY PROPERTIES | | |
| Reaction to fire | - | A1 |
| Melting temperature (according DIN 4102-17) | °C | ≥ 1000 |
| OTHER PROPERTIES | | |
| Relative change in thickness $\Delta\epsilon_d$, DS(70,90) | % | max. 1 |
| Air flow resistivity AFR | kPa•s/m ² | ≥ 20 |
| Specific heat capacity c_p (according EN ISO 10456) | J/(kg•K) | 1030 |
| Short term water absorption W_p / Long term water absorption W_{lp} | kg/m ² | max. 1 / max. 3 |
| Water vapour diffusion resistance factor μ , MU | - | 1 |
| Thickness tolerances | Class | T4 |
| Chemical behavior | Chemically neutral. Does not retain moisture. Allows vapors diffusion. | |



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DIMENSIONS AND PACKAGING

| PRODUCT | Thickness (mm) | Length x Width (mm) | Area (m ² /package) | Number of packs/pallet | Area (m ² /pallet) | Declared thermal resistance R _D (m ² ·K/W) |
|-----------|----------------|---------------------|--------------------------------|------------------------|-------------------------------|--|
| OPTI VENT | 50 | 1000 x 600 | 4.8 | 12 | 57.6 | 1.40 |
| OPTI VENT | 60 | 1000 x 600 | 4.8 | 10 | 48.0 | 1.70 |
| OPTI VENT | 80 | 1000 x 600 | 3.6 | 10 | 36.0 | 2.25 |
| OPTI VENT | 100 | 1000 x 600 | 2.4 | 12 | 28.8 | 2.85 |
| OPTI VENT | 120 | 1000 x 600 | 1.8 | 12 | 21.6 | 3.40 |
| OPTI VENT | 140 | 1000 x 600 | 1.8 | 10 | 18.0 | 4.00 |
| OPTI VENT | 150 | 1000 x 600 | 1.8 | 10 | 18.0 | 4.25 |
| OPTI VENT | 160 | 1000 x 600 | 1.8 | 10 | 18.0 | 4.55 |
| OPTI VENT | 180 | 1000 x 600 | 1.2 | 12 | 14.4 | 5.10 |
| OPTI VENT | 200 | 1000 x 600 | 1.2 | 12 | 14.4 | 5.70 |
| OPTI VENT | 220 | 1000 x 600 | 1.2 | 10 | 12.0 | 6.25 |
| OPTI VENT | 240 | 1000 x 600 | 1.2 | 10 | 12.0 | 6.85 |
| OPTI VENT | 250 | 1000 x 600 | 1.2 | 10 | 12.0 | 7.10 |

RECOMMENDATION

During installation: mineral wool boards must be dry, clean, without traces of dust or other impurities. Moisture and water damages the properties of mineral wool. The thermal insulation must be protected against the action of moisture, whether it is generated by condensation, by an accident during installation or caused by flooding due to faulty installation.

INSTALLATION

During installation, ensure that the insulation is continuous, without gaps or free spaces, without leaks at the joints between the boards or in the end or perimeter areas.

Installation of the mineral wool boards will be done according to the manufacturer's instructions or the cladding system supplier's instructions in accordance with the designer's recommendations.

In the case of interior insulation of external walls, attics or decks, a vapor barrier film installed towards the warm area is recommended to be used to stop the transmission of moisture.

CERTIFICATES, STANDARDS, APPROVALS

- Certificate of constancy of performance:
1840-CPR-99/91/EC/0868-24
- Certificate of Management System:
ISO 9001:2015
ISO 14001:2015
ISO 45001:2018

STORAGE, TRANSPORT AND HANDLING

- The boards must be transported, stored and mounted avoiding contact with water or other damage. The boards shall not be stored in direct contact with the soil to avoid absorption of moisture from the soil. The products removed from the pallet, or unpacked, or those not palletized, will be protected and stored in a dry place. The handling of the pallets will be done in such a way as to preserve the integrity of the packaging and avoid damage to the plates.
- Pallets must be stored indoors or in covered areas. In the case of outdoor storage, depending on the external conditions, additional protective measures will be taken so that the products are not wetted or damaged. The area where the pallets will be stored must have very good drainage that allows maintaining a dry surface (without the formation of water accumulations).
- In the case of storage for longer periods, the integrity of the packaging will be periodically checked. The packaging will also be checked in case of extreme phenomena (storms, strong winds, heavy rains, snow, etc.) to ensure that the product is not wet.

SAFETY INSTRUCTIONS

Before starting to use the product, consult the technical safety data sheet and the information printed on the packaging. As personal protection, the use of protective gloves is recommended.

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Prior to installation, please ensure that you have thoroughly read and understood the specifications of your project, that you have tested the product for your specific purpose, and that the selected product will enable the required outcome. The information presented in this document does not constitute a guarantee as to certain properties of the product or compatibility for a specific use, hence Saint-Gobain Group cannot be held responsible for the quality of the installation works.