THERMAL INSULATION

THERMAK



THERMAL INSULATING PANELS COUPLED WITH BITUMINOUS MEMBRANES

Rock Wool Panel

ROCK WOOL PANEL is an insulating system in panels, put together and heat joined to a bituminous waterproof membrane.

On demand is available a special selvedge for sealing the overlaps, 8 cm wide on polyester versions and 5 cm on fiberglass versions, composed of a strip self-adhesive protected by siliconized polyethylene.

The sealing of the side overlaps always occurs by selfadhesion while the head overlaps or however on the slate, they must be sealed with the help of bituminous mastic PRATIKO MASTIC or, when it is possible, they can be welded with hot air.

This special selvedge allows a fast and safe application (without using flame).

ROCK WOOL PANEL are recommended for the insulation and waterproofing of covers in general, with the great convenience of using a single product; in fact, they offer the good thermal insulation capacity of rock wool and the waterproofness of a bituminous membrane.

ROCK WOOL PANEL are made with preformed slabs of rock wool with semi-oriented high density fibers, treated with thermosetting incombustible resins.

Fields of use

ROCK WOOL PANEL fit any type of cover: flat, sloped and curved.

They are quick to apply and once installed, thanks to the overlapping flange, the cover is already waterproofed. After installing the ROCK WOOL PANEL, a second waterproofing membrane or the definitive roof covering can be applied.

Installation

ROCK WOOL PANEL should be anchored according to the nature and the slope of the application surface and local weather conditions (windy, cold weather etc.) using adequate mechanical fasteners.

ROCK WOOL PANEL offers good resistance to mechanical stress together with good thermal and acoustic insulation; the system's bituminous component is exclusively to protect the insulating element.

Laying of the next gripping layer must be carried out in total adhesion and on top of the underlying membrane.

| MEMBRANE TECHNICAL CHARACTERISTICS | M.U. | REFERENCE NORM | Р | Р | PA | PA | PA | V | ٧ | TOLERANCE |
|---|----------|-------------------|-------------------------|------|---------|-----|-------|-------|----------|-----------|
| REINFORCEMENT TYPE | | | Single strand polyester | | | | Fibre | glass | | |
| UPPER FACE FINISH | | | PE film Mineral* | | PE film | | | | | |
| LOWER FACE FINISH | | | PE film | | | · | • | | | |
| THICKNESS | mm | EN 1849-1 | 3 | 4 | | | | 2 | 3 | ±5% |
| MASS | kg/m² | EN 1849-1 | | | 3,5 | 4,0 | 4,5 | | | ±10% |
| COLD FLEXIBILITY | °C | EN 1109 | -10 | | | | | | | |
| FLOW RESISTANCE | ۰C | EN 1110 | 120 | | | | | | | |
| FLOW RESISTANCE AFTER AGEING | °C | EN 1296 | | 110 | | 1: | 10 | | | -10°C |
| SHEAR RESISTANCE L / T | N / 5 cm | EN 12317-1 | 300 | /200 | | | | | | ±20% |
| TENSILE STRENGTH L / T | N / 5 cm | EN 12311-1 | 400/300 | | | | | 300 | /200 | ±20% |
| ELONGATION AT BREAK L / T | % | EN 12311-1 | 35/35 | | | | 2 | /2 | ±15 / ±2 | |
| TEAR RESISTANCE L / T | N | EN 12310-1 | 130/130 | | | | 70 | /70 | ±30% | |
| DIMENSIONAL STABILITY | % | EN 1107-1 | -0,3 | | | N | PD | | | |
| LOSS OF MINERAL SLATE | % | EN 12039 | | | | 30 | | | | |
| STATIC PUNCTURE RESISTANCE | kg | EN 12730 | 1 | lO | | | | | | |
| DYNAMIC PUNCTURE RESISTANCE | mm | EN 12691 | 7 | 00 | | | | | | |
| FIRE RESISTANCE | | EN 13501-5 | F ROOF | | | | | | | |
| REACTION TO FIRE | | EN 13501-1 | F | | | | | ••••• | | |
| TENSILE STRENGTH AFTER AGEING L / T | N / 5 cm | EN 1296 | | | | NPD | | | | ±20% |
| IMPERMEABILITY AFTER ARTIFICIAL AGEING | kPa | EN 1296 | 60 | | | | | | | |
| WATERTIGHTNESS | kPa | EN 1928 | 60 | | | | | | | |
| | | | | 1.1 | | _ | | | 1 | ć 1 |

^{*} Mineral self-protected products may undergo color tone variations due to the time and length of storage. Exposure to atmospheric conditions, after application, will tend to uniform the color after a few months. The change in color tone cannot therefore be contested and / or complained of as it is a natural phenomenon that the slate manufacturer himself cannot guarantee.

NPD = No Performance Declared in accordance with the EU Construction Products Directive.

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ROCK WOOL technical specifications

THERMAL INSULATING PANELS **COUPLED WITH BITUMINOUS MEMBRANES**

| CHARACTERISTICS | U.M. | |
|-----------------------|------|-------------|
| Panel size | m | 1,00 X 1,20 |
| Available thicknesses | mm | 40 |
| | mm | 50 |
| | mm | 60 |
| | mm | 80 |
| | mm | 100 |
| | mm | 120 |





| CHARACTERISTICS | SYMBOL U.M. | VALUE | STANDARD |
|---|------------------------|------------------------|----------------------|
| Reaction to fire | Euroclass | A1 | EN 13501-1 |
| Declared thermal conductivity | λ _D W/mK | 0.037 | EN 12667 EN 12939 |
| Resistance to water vapor diffusion | μ | 1 | EN 12086 |
| Specific heat capacity | KJ/kgK | 1.03 | EN 10456 |
| Short-term water absorption | kg/m² | ≤ 1 | EN 1609 |
| Resistivity to air flow | kPa∙s/m² | 50 | EN 29053 |
| Compressive strength at 10% deformation | kPa | 50 | EN 826 |
| Compressive strength under concentrated load | N | 500 | EN 12430 |
| Water absorption in the long term | kg/m² | ≤3 | EN 12087 |
| Compressibility | mm | 2 | EN 13162 EN 12431 |
| Tensile strength | kPa | 15 | EN 1607 |
| Dynamic stiffness (for 50mm thickness) | SD | 33 | EN 29052-1 |
| Acoustic absorption α_{w} (for thickness \geq 50 mm) | AW NRC | o.95 (class A) o.90 | ISO 354 ISO 11654 |

The data reported in this table refer to a bare, uncoupled panel.

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