

# **Smart Roof Thermal**

## April 2020



## **APPLICATIONS**



## **PRODUCT DESCRIPTION**

#### Insulation slab for flat roofs

Smart Roof Thermal is a compact rock mineral wool slab of stable density equally distributed across the slab thickness. It belongs to the group of very hard products. The product is non-combustible, resistant to high temperatures, resistant to aging and chemically neutral. Its dimensions do not change due to large temperature changes.

## **TECHNICAL CHARACTERISTICS**

| Declared coefficient of thermal conductivity $\lambda_{\text{D}}$ | 0.036 W/mK                    |
|---|-------------------------------|
| Reaction to fire  | A1 - non-combustible material |
| Water vapour diffusion resistance factor µ                        | ~1                            |
| Short term water absorption W <sub>p</sub>                        | ≤1 kg/m²                      |
| Long term water absorption $W_{lp}$                               | ≤3 kg/m²                      |
| Tensile strength perpendicular to the faces TR                    | >10 kPa                       |
| Compressive Strength (at 10% deformation) CS(10)                  | >50 kPa                       |
| Point load F <sub>p</sub>   | >500 N                        |

#### **BENEFITS**

Very good thermal insulation properties

Increased safety in case of fire

Excelent sound absorption due to dense fibre structure.

Vapour permeable

Stable and compact material

Resistance to aging

Simple and quick installation

DESIGNATION CODE: MW - EN 13162 -A1-T5-DS(T+)-DS(TH)-CS(10)50-TR 10-PL(5)500-WS-WL(P)-MU1-AF 5

## **DIMENSIONS AND PACKAGING**

| Thickness | Width | Length | pcs      | m <sup>2</sup> | m³       | R Thermal resistance |
|-----------|-------|--------|----------|----------------|----------|----------------------|
| (mm)      | (mm)  | (mm)   | / pallet | / pallet       | / pallet | (m <sup>2</sup> K/W) |
| 40        | 1200  | 2000   | 32       | 76,80          | 3,07     | 1,11                 |
| 50        | 1200  | 2000   | 26       | 62,40          | 3,12     | 1,39                 |
| 60        | 1200  | 2000   | 22       | 52,80          | 3,17     | 1,67                 |
| 70        | 1200  | 2000   | 19       | 45,60          | 3,19     | 1,94                 |
| 80        | 1200  | 2000   | 16       | 38,40          | 3,07     | 2,22                 |
| 90        | 1200  | 2000   | 14       | 33,60          | 3,02     | 2,50                 |
| 100       | 1200  | 2000   | 13       | 31,20          | 3,12     | 2,78                 |
| 120       | 1200  | 2000   | 11       | 26,40          | 3,17     | 3,33                 |
|           |       |        |          |                |          |                      |

## **CERTIFICATES**













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## ADDITIONAL INFORMATION

### **Application**

The product is intended for thermal and sound insulation, as well as for fire protection in flat roofs. It is adequate for application under all types of waterproofing foils for walkable and non walkable roofs - terace. It is easily installed on a concrete base and on profiled steel structures.

### **Packaging**

The product Smart Roof Thermal is delivered in PE heat-shrinking foil. The products must be stored in a dry place, indoors or under roof.

In exceptional situations, the packages stored outdoors should be protected by watertight foil. The packages must not be placed directly on the ground.

## Quality

The product Smart Roof Thermal is certified to comply with standard EN 13162 as well as with the EUCEB certificate which ensures that the product is biosoluble and not dangerous for health in accordance with European Directive 97\69\EC.

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