

## PAROC Pro Mat 50



|                      |  |
|----------------------|--|
| Certification Number | 0809-CPR-1016 / Eurofins Expert Services Ltd, Kivimiehentie 4, FI-02150 Espoo, Finland |
| Designation Code     | MW-EN 14303-T2-ST(+)-350-WS1-CL10  |
| Short Description    | Stone wool mat.  |
| Application          | Thermal insulation in industrial equipments and applications.                          |
| Nominal Density      | 50 kg/m <sup>3</sup>   |

PAROC stone wool products are capable of withstanding high temperatures. The binder starts to evaporate when its temperature exceeds approximately 200 °C. The insulating properties remain unchanged, but the compressive stress weakens. The softening temperature of stone wool products is over 1000 °C.

### Dimensions

| Dimensions                |                           |
|---------------------------|---------------------------|
| Width x Length            | Thickness                 |
| 1000 x 8000 mm            | 30 mm                     |
| 1000 x 7000 mm            | 40 mm                     |
| 1000 x 6500 mm            | 50 mm                     |
| 1000 x 6000 mm            | 60 mm                     |
| 1000 x 5500 mm            | 70 mm                     |
| 1000 x 5000 mm            | 80 mm                     |
| 1000 x 4500 mm            | 90 mm                     |
| 1000 x 4000 mm            | 100 mm                    |
| 1000 x 3000 mm            | 110 mm                    |
| 1000 x 2500 mm            | 120 mm                    |
| In accordance with EN 822 | In accordance with EN 823 |

| Dimensional Stability                               |        |                                  |
|---|--------|----------------------------------|
| Property  | Value  | According to                     |
| Maximum Service Temperature - Dimensional Stability | 350 °C | EN 14303:2009+A1:2013 (EN 14706) |

### Packaging

## Fire Properties

| Reaction to Fire            |       |                            |
|-----------------------------|-------|----------------------------|
| Property                    | Value | According to               |
| Reaction to Fire, Euroclass | A1    | EN 14303:2009 (EN 13501-1) |

## Thermal Properties

| Thermal Resistance                              |            |                                  |
|---|------------|----------------------------------|
| Property  | Value      | According to                     |
| Thermal Conductivity in 50 °C, $\lambda_{50}$   | 0,042 W/mK | EN 14303:2009+A1:2013 (EN 12667) |
| Thermal Conductivity in 100 °C, $\lambda_{100}$ | 0,054 W/mK | EN 14303:2009+A1:2013 (EN 12667) |
| Thermal Conductivity in 150 °C, $\lambda_{150}$ | 0,068 W/mK | EN 14303:2009+A1:2013 (EN 12667) |
| Thermal Conductivity in 200 °C, $\lambda_{200}$ | 0,085 W/mK | EN 14303:2009+A1:2013 (EN 12667) |
| Thermal Conductivity in 250 °C, $\lambda_{250}$ | 0,106 W/mK | EN 14303:2009+A1:2013 (EN 12667) |
| Thermal Conductivity in 300 °C, $\lambda_{300}$ | 0,132 W/mK | EN 14303:2009+A1:2013 (EN 12667) |
| Thermal Conductivity in 400 °C, $\lambda_{400}$ | 0,199 W/mK | EN 14303:2009+A1:2013 (EN 12667) |
| Dimensions and Tolerances                       | T2         | EN 14303:2009+A1:2013            |

## Moisture Properties

| Water Permeability                     |                         |                                 |
|--|-------------------------|---------------------------------|
| Property                               | Value                   | According to                    |
| Water Absorption, Short Term WS, $W_p$ | $\leq 1 \text{ kg/m}^2$ | EN 14303:2009+A1:2013 (EN 1609) |

## Rate of Release of Corrosive Substances

| Trace Quantities of Water Soluble Ions and the pH Value |          |                                  |
|---|----------|----------------------------------|
| Property  | Value    | According to                     |
| Chloride Ions, Cl-                                      | < 10 ppm | EN 14303:2009+A1:2013 (EN 13468) |

## Durability

Durability of Reaction to Fire Against Ageing/Degradation

The fire performance of mineral wool does not deteriorate with time. The Euroclass classification of product is related to the organic content, which cannot increase with time.

Durability of Reaction to Fire Against High Temperature

The fire performance of mineral wool does not deteriorate with high temperature. The Euroclass classification of the product is related to the organic content, which remains constant or decreases with high temperature.

Durability of Thermal Resistance Against Ageing/Degradation

Thermal conductivity of mineral wool products does not change with time, experience has shown the fibre structure to be stable and the porosity contains no other gases than atmospheric air.

Durability of Thermal Resistance Against High Temperature

Thermal conductivity of mineral wool products does not change with time, experience has shown the fibre structure to be stable and the porosity contains no other gases than atmospheric air.

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