PRODUCT DATASHEET

# PAROC Pro Combi (WR) 140 Clad T

Stone wool pipe section suitable for several pipe dimensions with outstanding water repellence and aluminium coated strong glass fibre cloth cladding with UV-protection. Tape fastening on the longitudinal seam.

Thermal insulation of industrial pipework for outdoor and indoor applications, with water vapour permeability properties reducing condensation risk when properly installed. Product can be used without any additional cladding.

The outstanding water repellency of PAROC WR products up to 300°C reduces the risk of corrosion under insulation. PAROC WR products are safe to use in combination with painting operations: PAROC WR products are 3rd party tested, passing the requirements of the most stringent class of the LABS conformity (paint wetting impairment) standard, VDMA 24364.

Surface temperature of the facing must not exceed 80 °C (temperature restricting determined in accordance with heat resistance adhesive).

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.

**Certification Number** 0809-CPR-1016 Eurofins Expert Services Ltd, Kivimiehentie 4, FI-02150 Espoo. Finland

**Designation Code** MW-EN 14303-T8/T9-ST(+)680-WS1-MV2-CL10

**Nominal Density** 140 kg/m³

**Package Type** Cartons or plastic packs on pallet.

| DIMENSIONS | | |
|---|---|---|
| **THICKNESS** | **INNER DIAMETER** | **PIPE SECTION LENGTH** |
| 25 - 60 mm | 12 - 18 mm | 1200 mm |
| 25 - 70 mm | 22 - 28 mm | 1200 mm |
| 25 - 60 mm | 32 - 38 mm | 1200 mm |
| 25 - 60 mm | 42 - 48 mm | 1200 mm |
| According to EN 13467 | According to EN 13467 | According to EN 13467 |

| PROPERTY | VALUE | ACCORDING TO |
|---|---|---|
| **DIMENSIONAL STABILITY** | | |
| Maximum Service Temperature - Dimensional Stability | 680 °C | EN 14303:2009+A1:2013 (EN 14707) |

## Properties

| PROPERTY | VALUE | ACCORDING TO |
|---|---|---|
| **FIRE PROPERTIES** | | |
| Reaction to Fire, Euroclass | OD ≤ 300 mm: $A2_L$ - s1, d0<br>OD > 300 mm: C-s1, d0 | EN 14303:2009+A1:2013 (EN 13501-1) |
| Continuous Glowing Combustion | NPD | EN 14303:2009+A1:2013 |
| **THERMAL PROPERTIES** | | |
| Thermal Conductivity in 10 °C, $\lambda_{10}$ | 0,038 W/mK | EN 14303:2009+A1:2013 (EN ISO 8497) |
| Thermal Conductivity in 50 °C, $\lambda_{50}$ | 0,041 W/mK | EN 14303:2009+A1:2013 (EN ISO 8497) |
| Thermal Conductivity in 100 °C, $\lambda_{100}$ | 0,047 W/mK | EN 14303:2009+A1:2013 (EN ISO 8497) |
| Thermal Conductivity in 150 °C, $\lambda_{150}$ | 0,054 W/mK | EN 14303:2009+A1:2013 (EN ISO 8497) |
| Thermal Conductivity in 200 °C, $\lambda_{200}$ | 0,063 W/mK | EN 14303:2009+A1:2013 (EN ISO 8497) |
| Thermal Conductivity in 300 °C, $\lambda_{300}$ | 0,085 W/mK | EN 14303:2009+A1:2013 (EN ISO 8497) |
| Thermal Conductivity in 400 °C, $\lambda_{400}$ | 0,110 W/mK | EN 14303:2009+A1:2013 (EN ISO 8497) |
| Thickness Tolerance, T | T8/T9 | EN 14303:2009+A1:2013 |
| Dimensions and Tolerances | T8 for outer diameter < 150 mm, T9 for outer diameter ≥ 150 mm | EN 14303:2009+A1:2013 (EN 823) |
| **MOISTURE PROPERTIES** | | |
| Water Absorption, Short Term WS, ($W_p$) | ≤ 1 kg/m² | EN 14303:2009+A1:2013 (EN 13472) |
| Water Vapour Diffusion Resistance | MV2 | EN 14303:2009+A1:2013 (EN 13469) |
| Chloride Ions, Cl- | < 10 ppm | EN 14303:2009+A1:2013 (EN 13468) |
| PAROC WR Pipe Sections are providing a very low water absorption (average water absorption level <0,1 kg/m² after 300°C/24h prebake) according to EN 13472, based on 3rd-party testing in 2019 and internal testing in 2023-2024. | | |
| **SOUND PROPERTIES** | | |
| Sound Absorption | NPD | EN 14303:2009+A1:2013 (EN ISO 354) |
| **EMISSIONS** | | |
| Release of Dangerous Substances | NPD | EN 14303:2009+A1:2013 |
| **DURABILITY OF FIRE AND THERMAL PROPERTIES** | | |
| Durability of Reaction to Fire Against Ageing/Degradation | No change in reaction to fire properties for mineral wool products. The fire performance of mineral wool does not deteriorate with time. The Euroclass classification of the 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. | |

## Appearance

| | |
|---|---|
| Facing Material | Aluminum coated glass fiber cloth cladding with UV-protection |

## Handling

| **INSTALLATION** | |
|---|---|
| Work Descriptions | AT/98-01-0414-02 |

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