

## PRODUCT DATASHEET

### PAROC Pro Lock WR 100



Stone wool pipe section with outstanding water repellence and a Z-joint on the longitudinal and circumferential seams.

Insulation of industrial pipework with high temperatures.

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.

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

MED Type-Examination (Module B) certificate No. 74480/A2 and UK Type-Examination (Module B) certificate No. 74465/A2.

**Designation Code**

MW-EN 14303-T8/T9-ST(+)-640-WS1-CL10

**Nominal Density**

100 kg/m<sup>3</sup>

**Package Type**

Carton on pallet, plastic on pallet

**Single Package Size**

Carton 300 x 400 x 1200 mm

**Pallet Size**

1200 x 1200 mm

**DIMENSIONS**

| THICKNESS             | INNER DIAMETER        | PIPE SECTION LENGTH   |
|-----------------------|-----------------------|-----------------------|
| 80 - 160 mm           | 219 - 914 mm          | 1200 mm               |
| According to EN 13467 | According to EN 13467 | According to EN 13467 |

| PROPERTY                                            | VALUE  | ACCORDING TO                     |
|-----------------------------------------------------|--------|----------------------------------|
| <b>DIMENSIONAL STABILITY</b>                        |        |                                  |
| Maximum Service Temperature - Dimensional Stability | 640 °C | EN 14303:2009+A1:2013 (EN 14707) |

## Properties

| PROPERTY                                                                                                                                                                                                                                             | VALUE                                                                                                                                                                                                                                                    | ACCORDING TO                        |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|
| <b>FIRE PROPERTIES</b>                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                          |                                     |
| Reaction to Fire, Euroclass                                                                                                                                                                                                                          | A1 <sub>L</sub>                                                                                                                                                                                                                                          | EN 14303:2009+A1:2013 (EN 13501-1)  |
| Continuous Glowing Combustion                                                                                                                                                                                                                        | NPD                                                                                                                                                                                                                                                      | EN 14303:2009+A1:2013               |
| <b>THERMAL PROPERTIES</b>                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                          |                                     |
| Thermal Conductivity in 10 °C, $\lambda_{10}$                                                                                                                                                                                                        | 0,036 W/mK                                                                                                                                                                                                                                               | EN 14303:2009+A1:2013 (EN ISO 8497) |
| Thermal Conductivity in 50 °C, $\lambda_{50}$                                                                                                                                                                                                        | 0,039 W/mK                                                                                                                                                                                                                                               | EN 14303:2009+A1:2013 (EN ISO 8497) |
| Thermal Conductivity in 100 °C, $\lambda_{100}$                                                                                                                                                                                                      | 0,045 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, $\lambda_{200}$                                                                                                                                                                                                      | 0,064 W/mK                                                                                                                                                                                                                                               | EN 14303:2009+A1:2013 (EN ISO 8497) |
| Thermal Conductivity in 300 °C, $\lambda_{300}$                                                                                                                                                                                                      | 0,092 W/mK                                                                                                                                                                                                                                               | EN 14303:2009+A1:2013 (EN ISO 8497) |
| Dimensions and Tolerances                                                                                                                                                                                                                            | T8 for outer diameter < 150 mm, T9 for outer diameter ≥ 150 mm                                                                                                                                                                                           | EN 14303:2009+A1:2013 (EN 823)      |
| <b>MOISTURE PROPERTIES</b>                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                          |                                     |
| Water Absorption, Short Term WS, ( $W_p$ )                                                                                                                                                                                                           | ≤ 1 kg/m <sup>2</sup>                                                                                                                                                                                                                                    | EN 14303:2009+A1:2013 (EN 13472)    |
| Water Vapour Diffusion Resistance                                                                                                                                                                                                                    | NPD                                                                                                                                                                                                                                                      | EN 14303:2009+A1:2013 (EN 13469)    |
| Chloride Ions, Cl <sup>-</sup>                                                                                                                                                                                                                       | < 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/m <sup>2</sup> after 300°C/24h prebake) according to BS EN ISO 12623, based on 3rd-party testing in 2019 and internal testing in 2023-2024. |                                                                                                                                                                                                                                                          |                                     |
| <b>SOUND PROPERTIES</b>                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                          |                                     |
| Sound Absorption                                                                                                                                                                                                                                     | NPD                                                                                                                                                                                                                                                      | EN 14303:2009+A1:2013 (EN ISO 354)  |
| <b>EMISSIONS</b>                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                          |                                     |
| Release of Dangerous Substances                                                                                                                                                                                                                      | NPD                                                                                                                                                                                                                                                      | EN 14303:2009+A1:2013               |
| <b>DURABILITY OF FIRE AND THERMAL PROPERTIES</b>                                                                                                                                                                                                     |                                                                                                                                                                                                                                                          |                                     |
| 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.                                                            |                                     |

PAROC pipe sections can be used to satisfy the requirements as given in the tables for insulation thickness in BS5422:2023. PAROC can offer help and assistance to customers to confirm that the insulation systems proposed do in fact achieve the necessary performance criteria. PAROC pipe sections conform to BS3958-4.



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