

## PRODUCT DATASHEET

# PAROC Pro Segment WR DL 140



Prefabricated insulation component made of stone wool with leading edge water repellence in two layers.

Thermal insulation of pipe elbows in industrial pipework.

The superior water repellency of PAROC WR products up to 300°C reduces the risk of corrosion under insulation. PAROC WR products are also safe to use in combination with painting operations: PAROC WR products are 3rd party tested and certified according to 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.

|                             |  |
|-----------------------------|--|
| <b>Certification Number</b> | 0809-CPR-1016 Eurofins Expert Services Ltd, Kivimiehentie 4, FI-02150 Espoo, Finland |
| <b>Designation Code</b>     | MW-EN 14303-T8/T9-ST(+)-680-WS1-CL10   |
| <b>Nominal Density</b>      | 140 kg/m <sup>3</sup>  |
| <b>Package Type</b>         | Plastic packs on pallet  |

| DIMENSIONS   |                       |                     |
|--|-----------------------|---------------------|
| THICKNESS  | INNER DIAMETER        | PIPE SECTION LENGTH |
| 80 - 300 mm  | 168 - 914 mm          |                     |
| According to EN 13467                                    | According to EN 13467 |                     |
| Other Dimensions: Other dimensions available on request. |                       |                     |

| PROPERTY  | VALUE  | ACCORDING TO                     |
|---|--------|----------------------------------|
| <b>DIMENSIONAL STABILITY</b>                        |        |                                  |
| Maximum Service Temperature - Dimensional Stability | 680 °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, $\lambda_{10}$  | 0,038 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) |
| Dimensions and Tolerances  | T8/T9  | EN 14303:2009+A1:2013 (EN 823)      |
| <b>MOISTURE PROPERTIES</b>   |  |                                     |
| Water Absorption, Short Term WS, ( $W_p$ )   | $\leq 1 \text{ kg/m}^2$  | EN 14303:2009+A1:2013 (EN 13472)    |
| Water Vapour Diffusion Resistance  | NPD  | EN 14303:2009+A1:2013 (EN 13469)    |
| Chloride Ions, Cl-   | < 10 ppm   | EN 14303:2009+A1:2013 (EN 13468)    |
| PAROC WR Segments are providing very low water absorption < 0,1 kg/m <sup>2</sup> at temperatures up to 300°C according to EN 13472. |  |                                     |
| <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.  |                                     |



Head Office: PAROC GROUP, P.O. Box 240 (Energiakuja 3), FI-00181 Helsinki Finland, Tel. +358 46 876 8000, [www.paroc.com](http://www.paroc.com)

The information in this brochure describes the conditions and technical properties of the disclosed products, valid at the time of publication of this document and until replaced by the next printed or digital version. The latest version of this brochure is always available on the Paroc website. Our information material presents applications for which the functions and technical properties of our products have been approved. However, the information does not mean a commercial guarantee. We do not assume liability of the use of third party components used in the application or the installation of our products. We cannot warrant the suitability of our products if used in an area or conditions which are not provided in our information material. As a result of constant further development of our products we reserve the right to make alterations to our information material at any time. PAROC is a registered trademark of Paroc Group. This data sheet is valid in following countries: international use (general information).