

## PRODUCT DATASHEET



### PAROC Pro Bend WR 140

Water repellent prefabricated insulation component made of stone wool.

Thermal insulation of pipe elbows in industrial process pipework in higher temperature.

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-CL10

**Nominal Density**

140 kg/m<sup>3</sup>

**Package Type**

Carton on Pallet, Plastic on Pallet

**Single Package Size**

Carton 300 x 600 x 1200 mm or 300 x 600 x 600 mm

**Pallet Size**

1200 x 1200 mm

DIMENSIONS		
THICKNESS	INNER DIAMETER	PIPE SECTION LENGTH
30 - 50 mm	28 - 168 mm	Depending on pipe diameter mm
According to EN 822	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
<b>FIRE PROPERTIES</b>		
Reaction to Fire, Euroclass	A1 <sub>L</sub>	EN 14303:2009 (EN 13501-1)
Continuous Glowing Combustion	NPD	EN 14303:2009+A1:2013
<b>THERMAL PROPERTIES</b>		
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 250 °C, $\lambda_{250}$	0,073 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
<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)
Complies with the requirements set by BS 2972 Part 12 (even after preheated up to 250 °C).		
<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 Pro Bend WR 140 can be used to satisfy the requirements as given in the tables for insulation thickness in BS5422:2009. Paroc can offer help and assistance to customers to confirm that the insulation systems proposed do in fact, achieve the necessary performance criteria. PAROC Pro Bend WR 140 conforms to BS3958-4.



Head Office: PAROC GROUP, P.O. Box 240 (Energiakuja 3), FI-00181 Helsinki, Finland, Tel. +358 46 876 8000, Fax +358 46 876 8002, [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: United Kingdom.