

## PRODUCT DATASHEET

### PAROC Pro Bend WR 100



Prefabricated insulation component made of stone wool with outstanding water repellence

Thermal insulation of pipe elbows in industrial process pipework.

The superior water repellency of PAROC WR products at elevated temperatures 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.

Silicon added

<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(+)+640-WS1-CL10
<b>Nominal Density</b>	100 kg/m <sup>3</sup>
<b>Package Type</b>	Carton on pallet
<b>Single Package Size</b>	Carton 300 x 600 x 1200 mm or 300 x 600 x 600 mm
<b>Pallet Size</b>	1200 x 1200 mm

DIMENSIONS		
THICKNESS	INNER DIAMETER	PIPE SECTION LENGTH
30 - 120 mm	15 - 168 mm	Depending on pipe diameter mm
According to EN 13467	According to EN 13467	According to EN 13467
Other Dimensions: Depending on pipe diameter		

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/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 Bends are providing very low water absorption at elevated temperatures according to BS EN ISO 12623		
<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 Bends 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 Bends conform to BS3958-4.



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