

## PRODUCT DATASHEET



### PAROC Pro Slab WR 450

Non-combustible stone wool insulation slab for thermal insulation of process tank walls, vessels, smaller rounded and other large cylindrical or flat surfaces. 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.

Thermal insulation slab for industrial applications.

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-T5-ST(+)-450-WS1-CL10

**Nominal Density**

60 kg/m<sup>3</sup>

**Package Type**

Plastic packs on pallet

DIMENSIONS	
WIDTH X LENGTH	THICKNESS
600 x 1200 mm	25 - 250 mm
According to EN 822	According to EN 823
Other Dimensions: Available on request.	

PROPERTY	VALUE	ACCORDING TO
<b>DIMENSIONAL STABILITY</b>		
Maximum Service Temperature - Dimensional Stability	450 °C	EN 14303:2009+A1:2013 (EN 14706)

## Properties

PROPERTY	VALUE	ACCORDING TO
<b>FIRE PROPERTIES</b>		
Reaction to Fire, Euroclass	A1	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, $\lambda_{10}$	0,035 W/mK	EN 14303:2009+A1:2013 (EN 12667)
Thermal Conductivity in 50 °C, $\lambda_{50}$	0,040 W/mK	EN 14303:2009+A1:2013 (EN 12667)
Thermal Conductivity in 100 °C, $\lambda_{100}$	0,047 W/mK	EN 14303:2009+A1:2013 (EN 12667)
Thermal Conductivity in 150 °C, $\lambda_{150}$	0,056 W/mK	EN 14303:2009+A1:2013 (EN 12667)
Thermal Conductivity in 200 °C, $\lambda_{200}$	0,067 W/mK	EN 14303:2009+A1:2013 (EN 12667)
Thermal Conductivity in 300 °C, $\lambda_{300}$	0,095 W/mK	EN 14303:2009+A1:2013 (EN 12667)
Thermal Conductivity in 400 °C, $\lambda_{400}$	0,129 W/mK	EN 14303:2009+A1:2013 (EN 12667)
Thermal Conductivity in 450 °C, $\lambda_{450}$	0,149 W/mK	EN 14303:2009+A1:2013 (EN 12667)
Dimensions and Tolerances	T5	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 1609)
Water Vapour Diffusion Resistance	NPD	EN 14303:2009+A1:2013 (EN 12086)
Chloride Ions, Cl-	< 10 ppm	EN 14303:2009+A1:2013 (EN 13468)
PAROC WR slabs providing very low water absorption (< 0,1 kg/m <sup>2</sup> at temperatures up to 300 °C according to EN 1609).		
<b>SOUND PROPERTIES</b>		
Sound Absorption	NPD	EN 14303:2009+A1:2013 (EN ISO 354)
<b>MECHANICAL PROPERTIES</b>		
Compressive Stress at 10 % deformation CS(10), $\sigma_{10}$	NPD	EN 14303:2009+A1:2013 (EN 826)
<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.	



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