

PRODUCT DATASHEET



PAROC Pro Mat 50

Stone wool mat.

Thermal insulation in industrial equipments and 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-T2-ST(+)350-WS1-CL10
Nominal Density	50 kg/m ³
Package Type	Plastic Packs on Pallet

DIMENSIONS	
WIDTH X LENGTH	THICKNESS
1000 x 8000 mm	30 mm
1000 x 7000 mm	40 mm
1000 x 6500 mm	50 mm
1000 x 6000 mm	60 mm
1000 x 5500 mm	70 mm
1000 x 5000 mm	80 mm
1000 x 4500 mm	90 mm
1000 x 4000 mm	100 mm
1000 x 3000 mm	110 mm
1000 x 2500 mm	120 mm
According to EN 822	According to EN 823

PROPERTY	VALUE	ACCORDING TO
DIMENSIONAL STABILITY		
Maximum Service Temperature - Dimensional Stability	350 °C	EN 14303:2009+A1:2013 (EN 14706)

Properties

PROPERTY	VALUE	ACCORDING TO
FIRE PROPERTIES		
Reaction to Fire, Euroclass	A1	EN 14303:2009+A1:2013 (EN 13501-1)
Continuous Glowing Combustion	NPD	EN 14303:2009+A1:2013
THERMAL PROPERTIES		
Thermal Conductivity in 50 °C, λ_{50}	0,042 W/mK	EN 14303:2009+A1:2013 (EN 12667)
Thermal Conductivity in 100 °C, λ_{100}	0,054 W/mK	EN 14303:2009+A1:2013 (EN 12667)
Thermal Conductivity in 150 °C, λ_{150}	0,068 W/mK	EN 14303:2009+A1:2013 (EN 12667)
Thermal Conductivity in 200 °C, λ_{200}	0,085 W/mK	EN 14303:2009+A1:2013 (EN 12667)
Thermal Conductivity in 250 °C, λ_{250}	0,106 W/mK	EN 14303:2009+A1:2013 (EN 12667)
Thermal Conductivity in 300 °C, λ_{300}	0,132 W/mK	EN 14303:2009+A1:2013 (EN 12667)
Thermal Conductivity in 400 °C, λ_{400}	0,199 W/mK	EN 14303:2009+A1:2013 (EN 12667)
Dimensions and Tolerances	T2	EN 14303:2009+A1:2013
MOISTURE PROPERTIES		
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)
SOUND PROPERTIES		
Sound Absorption	NPD	EN 14303:2009+A1:2013 (EN ISO 354)
MECHANICAL PROPERTIES		
Compressive Stress at 10 % deformation CS(10), σ_{10}	NPD	EN 14303:2009+A1:2013 (EN 826)
EMISSIONS		
Release of Dangerous Substances	NPD	EN 14303:2009+A1:2013
DURABILITY OF FIRE AND THERMAL PROPERTIES		
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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