

PRODUCT DATASHEET



PAROC Pro Lamella Mat Clad

Stone wool lamella mat with a double layer laminate of aluminium, glass fabric woven and LPDE coating. Clad coating is resistant for external weather conditions (chemicals and UV protection) and mechanical damages.

Thermal insulation of industrial circular and rectangular ventilation ducts, flat surfaces of industry equipment and pipework for outdoor and indoor application. Product can be used without any additional cladding.

Surface temperature of the facing must not exceed 80°C (temperature restriction determined in accordance with heat resistance adhesive).

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-T4-ST(+)-500-WS1-MV2-CL10

Nominal Density

50 kg/m³

Package Type

Plastic Packs on Pallet

DIMENSIONS	
WIDTH X LENGTH	THICKNESS
500, 1000 x 10000	20 mm
500, 1000 x 8000	25 mm
500, 1000 x 8000	30 mm
500, 1000 x 6000	40 mm
500, 1000 x 5000	50 mm
500, 1000 x 4000	60 mm
500, 1000 x 3500	70 mm
500, 1000 x 3000	80 mm
500, 1000 x 2500	90 mm
500, 1000 x 2500	100 mm
According to EN 822	According to EN 823

PROPERTY	VALUE	ACCORDING TO
DIMENSIONAL STABILITY		
Maximum Service Temperature - Dimensional Stability	500 °C	EN 14303:2009+A1:2013 (EN 14706)

Properties

PROPERTY	VALUE	ACCORDING TO
FIRE PROPERTIES		
Reaction to Fire, Euroclass	C - s1 , d0	EN 14303:2009+A1:2013 (EN 13501-1)
Continuous Glowing Combustion	NPD	EN 14303:2009+A1:2013
THERMAL PROPERTIES		
Thermal Conductivity in 10 °C, λ_{10}	0,039 W/mK	EN 14303:2009+A1:2013 (EN 12667)
Thermal Conductivity in 50 °C, λ_{50}	0,045 W/mK	EN 14303:2009+A1:2013 (EN 12667)
Thermal Conductivity in 100 °C, λ_{100}	0,055 W/mK	EN 14303:2009+A1:2013 (EN 12667)
Thermal Conductivity in 150 °C, λ_{150}	0,066 W/mK	EN 14303:2009+A1:2013 (EN 12667)
Thermal Conductivity in 200 °C, λ_{200}	0,081 W/mK	EN 14303:2009+A1:2013 (EN 12667)
Thermal Conductivity in 300 °C, λ_{300}	0,120 W/mK	EN 14303:2009+A1:2013 (EN 12667)
Thermal Conductivity in 400 °C, λ_{400}	0,169 W/mK	EN 14303:2009+A1:2013 (EN 12667)
Thermal Conductivity in 500 °C, λ_{500}	0,230 W/mK	EN 14303:2009+A1:2013 (EN 12667)
Thickness Tolerance, T	T4	
Dimensions and Tolerances	T4	EN 14303:2009+A1:2013 (EN 823)
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	MV2	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.	

Appearance

Facing Material	Aluminum coated glass fiber cloth cladding with UV-protection
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