

PRODUCT DATASHEET

PAROC Hvac Mat AluCoat



PAROC Hvac Mat AluCoat is a ventilation and air conditioning duct insulation mat made of non-combustible PAROC® stone wool. The product is designed for thermal and condensation insulation of circular and rectangular ductwork in HVAC systems. Suitable for all indoor ventilation ducts and HVAC equipment with medium temperature up to 250°C.

PAROC Hvac Mat AluCoat does not burn nor contribute to fire spread with a reaction to fire classification of Euroclass A1, according to EN 13501-1.

The product flexibility makes the installation process efficient and effective, allowing the mat to easily conform to the shape of ducts and other HVAC systems. It is reinforced with an AluCoat facing, a water vapour-resistant barrier which together with taped joints reduces condensation risk and vapour permeability. With PAROC Hvac AluCoat Tape/PAROC Hvac Alu Tape/PAROC Alu Tape and PAROC Hvac Dots, which have an identical facing of the mat, and other PAROC accessories, correct and efficient insulation can be achieved.

The surface temperature of the facing must not exceed +80°C (temperature restriction determined in accordance with the heat resistance of 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-T2-ST(+100)250-WS1-MV2-CL10
Package Type	Plastic Packs on Pallet

DIMENSIONS	
WIDTH X LENGTH	THICKNESS
500/1000 x 8000	30 mm
500/1000 x 7000	40 mm
500/1000 x 7000	50 mm
500/1000 x 7000	60 mm
500/1000 x 5000	70 mm
500/1000 x 5000	80 mm
500/1000 x 4000	90 mm
500/1000 x 4000	100 mm
According to EN 822	According to EN 823

PROPERTY	VALUE	ACCORDING TO
DIMENSIONAL STABILITY		
Maximum Service Temperature - Dimensional Stability	(+100)250 °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 0 °C, λ_0	0,034 W/mK	EN 14303:2009+A1:2013 (EN 12667)
Thermal Conductivity in 10 °C, λ_{10}	0,036 W/mK	EN 14303:2009+A1:2013 (EN 12667)
Thermal Conductivity in 50 °C, λ_{50}	0,046 W/mK	EN 14303:2009+A1:2013 (EN 12667)
Thermal Conductivity in 100 °C, λ_{100}	0,060 W/mK	EN 14303:2009+A1:2013 (EN 12667)
Thermal Conductivity in 150 °C, λ_{150}	0,075 W/mK	EN 14303:2009+A1:2013 (EN 12667)
Thermal Conductivity in 200 °C, λ_{200}	0,093 W/mK	EN 14303:2009+A1:2013 (EN 12667)
Thermal Conductivity in 250 °C, λ_{250}	0,115 W/mK	EN 14303:2009+A1:2013 (EN 12667)
Dimensions and Tolerances	T2	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.	

PAROC mats can be used to satisfy the requirements as given in the tables for insulation thickness in BS5422:2023. PAROC can offer help and assistance to customers to confirm that the insulation systems proposed do in fact achieve the necessary performance criteria.

Appearance

Facing Material	Reinforced aluminium foil
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