PRODUCT DATASHEET

PAROC Pro Wired Mat WR 680 TH1

Stone wool wired mat with outstanding water repellence and with a galvanized mesh attached on one side with galvanized sewing wire. Available also with stainless steel mesh and sewing wire (W2).

Thermal and acoustical insulation of industrial equipment.

The outstanding water repellency of PAROC WR products up to 300°C reduces the risk of corrosion under insulation. PAROC WR products are safe to use in combination with painting operations: PAROC WR products are 3rd party tested, passing the requirements of the most stringent class of the LABS conformity (paint wetting impairment) standard, VDMA 24364.

Maximum temperature exposure of the galvanized mesh: 300°C. For higher temperatures we recommend choosing the stainless steel mesh (W2).

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(+)680-WS1-CL10
Nominal Density	100 kg/m³
Package Type	Plastic packs on pallet

DIMENSIONS	
WIDTH X LENGTH	**THICKNESS**
500/600/900/1000 x 6500/7000 mm	30 mm
500/600/900/1000 x 4500/5000 mm	40 mm
500/600/900/1000 x 4500/5000 mm	50 mm
500/600/900/1000 x 3500/4000 mm	60 mm
500/600/900/1000 x 2500/3000/3500 mm	70 mm
500/600/900/1000 x 2500/3000/3500 mm	80 mm
500/600/900/1000 x 2500/3000 mm	90 mm
500/600/900/1000 x 2100/2300/2500 mm	100 mm
500/600/900/1000 x 2500 mm	110 mm
500/600/900/1000 x 2000 mm	120 mm
According to EN 822	According to EN 823

PROPERTY	VALUE	ACCORDING TO
DIMENSIONAL STABILITY		
Maximum Service Temperature - Dimensional Stability	680 °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 10 °C, λ_{10}	0,036 W/mK	EN 14303:2009+A1:2013 (EN 12667)
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}	0,047 W/mK	EN 14303:2009+A1:2013 (EN 12667)
Thermal Conductivity in 150 °C, λ_{150}	0,054 W/mK	EN 14303:2009+A1:2013 (EN 12667)
Thermal Conductivity in 200 °C, λ_{200}	0,063 W/mK	EN 14303:2009+A1:2013 (EN 12667)
Thermal Conductivity in 300 °C, λ_{300}	0,083 W/mK	EN 14303:2009+A1:2013 (EN 12667)
Thermal Conductivity in 400 °C, λ_{400}	0,110 W/mK	EN 14303:2009+A1:2013 (EN 12667)
Thermal Conductivity in 500 °C, λ_{500}	0,142 W/mK	EN 14303:2009+A1:2013 (EN 12667)
Thermal Conductivity in 600 °C, λ_{600}	0,180 W/mK	EN 14303:2009+A1:2013 (EN 12667)
Thermal Conductivity in 680 °C, λ_{680}	0,214 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)	≤ 1 kg/m²	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-grade flat products are providing a very low water absorption (average water absorption level <0,1 kg/m² after 300°C/24h prebake) according to EN 1609 / EN 29767, based on 3rd-party testing in 2019 and internal testing in 2023-2024.		
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	Galvanized wire mesh and galvanized sewing wire.

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