TECH Wired Mat MT 4.1

Wired mat

PRODUCT DESCRIPTION

Tech Wired Mat MT 4.1 is a lightly bonded stone wool mat stitched on galvanised wire mesh using galvanised wire. On request for temperatures higher than 400 °C and/or for stainless steel pipes/ surfaces it is possible to produce mats with stainless steel wire and galvanised mesh (Tech Wired Mat MT 4.1 X) or with stainless steel wire and stainless steel mesh (Tech Wired Mat MT 4.1 X-X); all combinations according to EN 10223-2.

APPLICATION

The wired mat is suitable for thermal and acoustic insulation of industrial applications reaching high temperatures, such as industrial pipe work, boiler walls, furnaces, smoke ducts, appliances and vessels (both ends and cylindrical parts). Despite the fact that hydrophobing additives in the insulation impede the ingress of water, it is necessary to protect wired mat in the construction against moisture and possible mechanical damage by a proper manner.

Tech Wired Mat MT 4.1 has a maximum service temperature of 640 °C according to EN 14706. Binders and greasing agents in mineral wool products dissolve and evaporate in areas with temperatures > 150 °C. In the outer, colder areas, no dissolution and evaporation take place.

BENEFITS

- Very good insulation performance.
- High temperature operation (up to 640 °C MST).
- AS quality – suitable for use over stainless steel.

PACKAGING, TRANSPORT, WAREHOUSING

The product is supplied palletized. Material has to be transported and stored under such conditions to avoid moistening or other degradation.

DIMENSIONS AND PACKAGING

Thickness [mm]	Dimensions [mm]	Per package [m²]	Rolls / Package [pcs]	Package/ Pallet [pcs]	Quantity per pallet [m²]
40	1000 × 5500	5.5	1	21	115.5
50	1000 × 4000	4.0	1	21	84.0
60	1000 × 3500	3.5	1	21	73.5
70*	1000 × 3500	3.5	1	21	73.5
80	1000 × 3000	3.0	1	21	63.0
90*	1000 × 2500	2.5	1	21	52.5
100	1000 × 2500	2.5	1	21	52.5
120*	1000 × 2000	2.0	21	21	42.0

On request it is possible to insert the aluminium foil between insulation and wire mesh (ALU facing). Wired mat with width 500 mm on request.
*Minimal volume need to be consulted with a customer service.

TECHNICAL PARAMETERS

Parameter	Unit	Value										Standard
Thermal technical properties												
Declared value of the thermal conductivity coefficient λ_D according to EN ISO 13787	°C	50	100	150	200	250	300	400	500	600	640	
	W·m⁻¹·K⁻¹	0.039	0.045	0.053	0.062	0.072	0.084	0.112	0.146	0.192	0.213	
Maximum service temperature ST(+) / on the aluminium side	°C	640 / max. 100										EN 14706
Specific heat capacity c_p*	J·kg⁻¹·K⁻¹	800										-

Isover Division
Saint-Gobain Construction Products CZ a.s.
Smrčkova 2485/4, 180 00 Prague 8 – Libeň, Czech Republic

podpora@saint-gobain.com • www.isover.cz

TECHNICAL PARAMETERS

Parameter		Unit	Value			Standard		
Physical properties								
Density*		kg·m⁻³	80			EN 13470		
Short-term water absorption (W_p) WS		kg·m⁻²	<< 1			EN ISO 29767		
Longitudinal air-flow resistance =*		kPa·s·m⁻²	> 45			EN ISO 9053-1		
Fire safety properties								
Reaction to fire		-	A1			EN 13501-1		
Melting temperature t_t*		°C	≥ 1 000			DIN 4102 part 17		
Acoustic properties								
The practical sound absorption coefficient a_p according to EN ISO 354 and EN ISO 11654*	Frequency	Hz	125	250	500	1 000	2 000	4 000
	Thickness 40	mm	0.15	0.60	1.00	1.00	0.95	1.00
	Thickness 60	mm	0.35	1.00	1.00	1.00	1.00	1.00
	Thickness 80	mm	0.50	1.00	1.00	1.00	1.00	1.00
	Thickness 100	mm	0.60	1.00	1.00	1.00	1.00	1.00
Definition of single numerical value according to EN ISO 11654*	Weighted sound absorption coefficient	-	a_w			Absorption class		
	Thickness 40	mm	0.90			A		
	Thickness 60	mm	1.00			A		
	Thickness 80	mm	1.00			A		
	Thickness 100	mm	1.00			A		

* Informative non-declared value beyond scope of CPR, obtained by concrete tests.

1/11/2023   The information provided herein is valid at the time of publication. The manufacturer reserves the right to change the data.