

# TECH Wired Mat MT 4.1

## Wired mat



Specification code: MW – EN 14303 – T2 – ST(+)-640 – WS1 – CL10

### 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.

### PACKAGING, TRANSPORT, WAREHOUSING

The product is supplied palletized. Material has to be transported in covered vehicles under such conditions to avoid moistening or other degradation.

### BENEFITS

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

### DIMENSIONS AND PACKAGING

Product	Thickness (mm)	Dimensions (mm)	Per package (m <sup>2</sup> )	Rolls / Package	Packages / Pallet	m <sup>2</sup> / Pallet
TECH Wired Mat MT 4.1	40	1000 × 5500	5.50	1	21	115.5
TECH Wired Mat MT 4.1	50	1000 × 4000	4.00	1	21	84.0
TECH Wired Mat MT 4.1	60	1000 × 3500	3.50	1	21	73.5
TECH Wired Mat MT 4.1	80	1000 × 3000	3.00	1	21	63.0
TECH Wired Mat MT 4.1	100	1000 × 2500	2.50	1	21	52.5
TECH Wired Mat MT 4.1	120*	1000 × 2000	2.00	1	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	
<b>THERMAL INSULATING PROPERTIES</b>											
Declared value of the thermal conductivity coefficient $\lambda_p$ according to EN ISO 13787	°C	50	100	150	200	250	300	400	500	600	640
	W·m <sup>-1</sup> ·K <sup>-1</sup>	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 facing	°C	640 / max. 100								EN 14706	
Specific heat capacity $c_p$ *	J·kg <sup>-1</sup> ·K <sup>-1</sup>	800								-	
<b>PHYSICAL PROPERTIES</b>											
Density*	kg·m <sup>-3</sup>	80								EN 1602, EN 13470	
Short term water absorption ( $W_p$ ) WS	kg·m <sup>-2</sup>	<< 1								EN 1609	
Longitudinal air-flow resistance $\Xi^*$	kPa·s·m <sup>-2</sup>	> 45								EN ISO 9053-1	
<b>FIRE SAFETY PROPERTIES</b>											
Reaction to fire	-	A1								EN 13501-1	
Melting temperature $t_m$ *	°C	≥ 1000								DIN 4102 part 17	
<b>ACOUSTIC PROPERTIES</b>											
The practical sound absorption coefficient $\alpha_p$ according to EN ISO 354 and EN ISO 11654*	Frequency	Thickness	Hz	125	250	500	1000	2000	4000		
			40 mm	0.15	0.60	1.00	1.00	0.95	1.00		
			60 mm	0.35	1.00	1.00	1.00	1.00	1.00		
			80 mm	0.50	1.00	1.00	1.00	1.00	1.00		
Definition of single numerical value according to EN ISO 11654*	Thickness	Weighted sound absorption coefficient	-	$\alpha_w$				Absorption class			
			40 mm	0.90				A			
			60 mm	1.00				A			
			80 mm	1.00				A			
			100 mm	1.00				A			

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

28. 8. 2019 The information is valid up to date of publishing. The manufacturer reserves right to change the data.