

Orstech 100

Orstech 100 NT / Orstech 100 H

(TECH Slab MT 5.1)
Slab of mineral wool



PRODUCT DESCRIPTION

Orstech 100 is a strong and rigid slab.



APPLICATION

The slab is suitable for thermal and acoustic insulation of boilers, columns and vessels with very high temperatures. Despite the fact that hydrophobing additives in the insulation impede the ingress of water, it is necessary to protect the slab in the construction against moisture and possible mechanical damage by a proper manner.

Orstech 100 has a maximum service temperature of 660 °C according to EN 14706. If the slab is with a facing then the surface temperature must not exceed 100 °C on the facing; proper thickness of insulation must be designed to fulfil that. 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

- Excellent insulation performance.
- Very high temperature operation (up to 660 °C MST).
- Easy to handle, easy to cut with a sharp knife.
- AS quality – suitable for use over stainless steel.

PACKAGING, TRANSPORT, WAREHOUSING

The product is supplied as free packages or 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 [m ²]	Quantity per pallet [m ²]
40	1 000 × 500	6.0	60
50	1 000 × 500	4.0	48
60	1 000 × 500	4.0	40
80	1 000 × 500	3.0	30
100	1 000 × 500	2.0	24

Slab can be manufactured with the aluminium foil facing (Orstech 100 H) or with the glass tissue facing (Orstech 100 NT). Minimum order quantity has to be consulted with a producer.

TECHNICAL PARAMETERS

Parameter	Unit	Value						Standard			
Thermal technical properties											
Declared value of the thermal conductivity coefficient λ_b according to EN ISO 13787	°C	50	100	150	200	250	300	400	500	600	660
	W·m ⁻¹ ·K ⁻¹	0.041	0.047	0.054	0.063	0.073	0.084	0.110	0.143	0.182	0.209
Measured value of the thermal conductivity coefficient according to EN 12667*	W·m ⁻¹ ·K ⁻¹	0.039	0.045	0.052	0.059	0.068	0.077	0.099	0.128	0.160	0.190
Maximum service temperature ST(+)	°C	660 / max. 100						EN 14706			
Specific heat capacity c_p *	J·kg ⁻¹ ·K ⁻¹	800						-			

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Parameter	Unit	Value	Standard
Physical properties			
Density*	kg·m ⁻³	100	EN 13470
Short-term water absorption (W_p) WS	kg·m ⁻²	<< 1	EN ISO 29767
Longitudinal air-flow resistance Ξ^*	kPa·s·m ⁻²	> 65	EN ISO 9053-1
Fire safety properties			
Orstech 100, Orstech 100NT: Reaction to fire	-	A1	EN 13501-1
Orstech 100H: Reaction to fire	-	A2-s1, d0	EN 13501-1
Melting temperature t_f^*	°C	≥ 1 000	DIN 4102 part 17
Acoustic properties			
Acoustic absorption coefficient α_p for perpendicular impact of acoustic waves (-) 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 0.50 1.00 1.00 0.95 1.00
		50	mm 0.20 0.75 1.00 1.00 0.95 1.00
		100	mm 0.45 0.95 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 B
		50	mm 1.00 A
		100	mm 1.00 A

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

More about the product

www.isover.cz/en/products/orstech-100



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