Specification code:
MW – EN 14303 – T4 – ST(+)600 – WS1 – CL10

Orstech 65
Orstech 65 NT / Orstech 65 H

(TECH Slab MT 3.1)
Slab of mineral wool

PRODUCT DESCRIPTION

Orstech 65 is stone wool slab, which can be manufactured with the aluminium foil facing (Orstech 65 H) or with the glass tissue facing (Orstech 65 NT).

APPLICATION

The slab is suitable for thermal and acoustic insulation for air ducts, sound absorbers, horizontal and vertical walls of vessels, tanks and equipment. Slab is suitable for flat and slightly curved walls. Slab Orstech 65 H is part of fire resistant ductwork system ORSTECH Protect (EI 60 S according EN 1366-1), details are available in system data sheet.

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.

When exposure to high temperatures and long-term dynamic loads (vibrations), it is recommended to use a slab with higher density (min. 100 kg/m³) or a wired mat. Orstech 65 has a maximum service temperature of 600 °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

- Quality certificate according to VDI 2055 – annual audit testing by FIW Munich from year 2000.
- Insulation material designation code according to AGI Q 132: 10.07.01.20.07.
- Slab Orstech 65 H is part of fire resistant ductwork system ORSTECH Protect according to EN 1366-1 with classification EI 60 S (rectangular duct type A – fire scenario outside).
- Easy to handle, easy to cut with a sharp knife.
- Fast installation.
- 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 in covered vehicles under such conditions to avoid moistening or other degradation.

DIMENSIONS AND PACKAGING

Thickness [mm]	Dimensions [mm]	Per package [m²]	Package/ Pallet [pcs]	m² / Pallet [m²]
40	1 000 × 500	6.0	10	60
50	1 000 × 500	5.0	10	50
60	1 000 × 500	4.0	10	40
80	1 000 × 500	3.0	10	30
100	1 000 × 500	2.5	10	25

Slab can be manufactured with the aluminium foil facing (Orstech 65 H) or with the glass tissue facing (Orstech 65 NT). Minimum order quantity (MOQ) of the slabs with the facing Orstech 65 H or NT has to be consulted with a producer. Without MOQ only slabs Orstech 65 H thickness 40 and 60 mm and slabs Orstech 65 NT thickness 50 mm. Other thicknesses and dimensions then stated can be produced at request when fulfilling minimum volume.

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
	W·m⁻¹·K⁻¹	0.041	0.048	0.058	0.068	0.081	0.097	0.134	0.183	0.248
Measured value of the thermal conductivity coefficient according to EN 12667*	W·m⁻¹·K⁻¹	0.039	0.046	0.054	0.063	0.075	0.089	0.123	0.166	0.220
Maximum service temperature ST(+)	°C	600 / max. 100				EN 14706				
Specific heat capacity c_p*	J·kg⁻¹·K⁻¹	800				-				

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(TECH Slab MT 3.1)
Slab of mineral wool

TECHNICAL PARAMETERS

Parameter			Unit	Value			Standard		
Physical properties									
Density*			kg·m^{-3}	65			EN 13470		
Short term water absorption (W_p) WS			kg·m^{-2}	<< 1			EN ISO 29767		
Equivalent diffusion thickness of the aluminium foil s_d*			m	> 100			EN 12086		
Longitudinal air-flow resistance Ξ*			kPa·s·m^{-2}	> 25			EN ISO 9053-1		
Fire safety properties									
Orstech 65, Orstech 65 NT: Reaction to fire			-	A1			EN 13501-1		
Orstech 65 H: Reaction to fire			-	A2-s1, d0			EN 13501-1		
Melting temperature t_t*			°C	≥ 1 000			DIN 4102 part 17		
Acoustic properties									
Acoustic absorption coefficient a_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	0.10	0.45	0.90	1.00	1.00	0.95
		60	mm	0.25	0.80	1.00	1.00	1.00	1.00
		80	mm	0.35	1.00	1.00	1.00	1.00	1.00
		100	mm	0.50	1.00	1.00	1.00	1.00	1.00
Definition of single numerical value according to EN ISO 11654*	**Weighted sound absorption coefficient**		-	α_w			**Absorption class**		
	Thickness	**40**	mm	0.75 (MH)			C		
		60	mm	1.00			A		
		80	mm	1.00			A		
		100	mm	1.00			A		
Classification according to AGI Q 132									
Insulation material designation code			-	10.07.01.20.07			AGI Q 132		

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

More about the product

www.isover.cz/en/products/orstech-65
www.isover.cz/en/products/orstech-65-nt
www.isover.cz/en/products/orstech-65-h

Orstech 65 | Orstech 65 NT | Orstech 65 H

25/11/2024 The information provided herein is valid at the time of publication. The manufacturer reserves the right to change the data.

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