

# Orstech LSP H

(TECH Lamella Mat 2.2 Alu2)  
Lamella mat



## PRODUCT DESCRIPTION

Lamella mat Orstech LSP H consists of mineral wool lamellas which have been glued to aluminium foil reinforced with a glass fibre grid, and these fibres are predominantly perpendicular to the surface of the mat. Compressive strength, but thermal conductivity too, are increased compared to mats with a fibre orientation parallel to the surface.



## APPLICATION

Lamella mat Orstech LSP H is suitable for piping, appliances and vessels (both ends and cylindrical parts) and residential heating systems. Despite the fact that hydrophobing additives in the insulation impede the ingress of water, it is necessary to protect lamella mat in the construction against moisture and possible mechanical damage by a proper manner.

Orstech LSP H has a maximum service temperature of 600 °C according to EN 14706. Surface temperature on the aluminium side must not exceed 100 °C; 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: 10.02.01.99.06
- AS quality – suitable for use over stainless steel.

## PACKAGING, TRANSPORT, WAREHOUSING

The product is supplied as free rolls 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 <sup>2</sup> ]	Rolls / Package [pcs]	Package/ Pallet [pcs]	Quantity per pallet [m <sup>2</sup> ]
20*	1000 × 8000	8.0	1	20	160.0
30	1000 × 5000	5.0	1	20	100.0
40	1000 × 4000	4.0	1	20	80.0
50	1000 × 3000	3.0	1	20	60.0
60	1000 × 3000	3.0	1	21	63.0
80	1000 × 2000	2.0	1	20	40.0
100	1000 × 2300	2.3	1	18	41.4

\*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 $\lambda_D$ according to EN ISO 13787	°C	50	100	150	200	250	300	400	500	600	
	W·m <sup>-1</sup> ·K <sup>-1</sup>	0.046	0.056	0.069	0.084	0.103	0.125	0.180	0.251	0.340	
Measured value of the thermal conductivity coefficient according to EN 12667*	W·m <sup>-1</sup> ·K <sup>-1</sup>	0.043	0.052	0.064	0.077	0.093	0.113	0.160	0.222	0.300	
Maximum service temperature ST(+) / on the aluminium side	°C	600 / max. 100						EN 14706			
Specific heat capacity $c_p$ *	J·kg <sup>-1</sup> ·K <sup>-1</sup>	800						-			
Physical properties											
Density*	kg·m <sup>-3</sup>	55						EN 13470			
Short-term water absorption (W <sub>t</sub> ) WS	kg·m <sup>-2</sup>	<< 1						EN ISO 29767			

# Orstech LSP H

(TECH Lamella Mat 2.2 Alu2)  
Lamella mat

## TECHNICAL PARAMETERS

Parameter		Unit	Value				Standard		
Fire safety properties									
Reaction to fire		-	A2-s1, d0				EN 13501-1		
Melting temperature $t_i^*$		°C	≥ 1 000				DIN 4102 part 17		
Acoustic properties									
The practical sound absorption coefficient $\alpha_p$ according to EN ISO 354 and EN ISO 11654*	Frequency		Hz	125	250	500	1 000	2 000	4 000
	Thickness	20	mm	0.05	0.15	0.45	0.75	0.90	0.95
		50	mm	0.15	0.50	0.90	0.95	0.95	1.00
		80	mm	0.30	0.85	1.00	1.00	1.00	1.00
		100	mm	0.40	1.00	1.00	1.00	1.00	1.00
Definition of single numerical value according to EN ISO 11654*	Weighted sound absorption coefficient		-	$\alpha_w$			Absorption class		
	Thickness	20	mm	0.45 (MH)			D		
		50	mm	0.80 (H)			B		
		80	mm	1.00			A		
		100	mm	1.00			A		
Classification according to AGI Q 132									
Insulation material designation code		-	10.02.01.99.06				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-lsp-h](http://www.isover.cz/en/products/orstech-lsp-h)



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