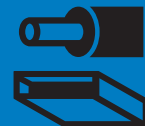


# Orstech LSP 40

## (TECH Lamella Mat 2.1 Alu2)

### Lamella mat



Specification code: MW – EN 14303 – T4 – ST(+)-300 – WS1 – CL10

## TECHNICAL SPECIFICATION

Lamella mats Orstech LSP 40 consist 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. The production is based on the defibering of molten raw materials consisting of minerals and different amounts of artificial resins as binders, mineral oils for dust suppression and hydrophobic means dependent on the application.

Behaviour with stainless austenitic steels – AS quality for this application according to AGI Q 132, EN 13468 and ASTM C 795. Fibres are hydrophobic according to EN 1609.

## APPLICATION

Lamella mats Orstech LSP 40 are suitable for piping, appliances and vessels (both ends and cylindrical parts), residential heating systems and air ducts. For outdoor application metal steel jacketing is required.

Orstech LSP 40 has a maximum service temperature of 300 °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.

## PACKAGING, TRANSPORT, WAREHOUSING

Lamella mats Orstech LSP 40 are wrapped into PE foil. They must be transported in covered vehicles under such conditions to avoid moistening or other degradation. They must be stored in covered places, horizontally, piled on top of each other.

## BENEFITS

- very good thermal insulation performance (low thermal conductivity)
- fire resistance – non-combustible material
- very good sound attenuation (high absorption coefficient)
- environmental friendly and hygienic
- hydrophobicity – Isover insulation materials are made water repellent
- long life span (material is not aging)
- resistant to wood-destroying pests, rodents, and insect
- easy to handle, easy to cut with a sharp knife
- AS quality – suitable for use over stainless steel

## RELATED DOCUMENTS

- Certificate of Constancy of Performance 1390-CPR-0313/11/P
- Declaration of Performance CZ0002-008 ([www.isover.cz/DOP](http://www.isover.cz/DOP))

## DIMENSIONS AND PACKAGING

Product	Thickness (mm)	Dimensions (mm)	Per package (m <sup>2</sup> )	Rolls / Package	Packages / Pallet	m <sup>2</sup> / Pallet
Orstech LSP 40	20	1000 x 8000	8.0	1	20	160.0
Orstech LSP 40	30	1000 x 5000	5.0	1	20	100.0
Orstech LSP 40	40	1000 x 4000	4.0	1	20	80.0
Orstech LSP 40	50	1000 x 3000	3.0	1	20	60.0
Orstech LSP 40	60	1000 x 3000	3.0	1	20	60.0
Orstech LSP 40	80	1000 x 2000	2.0	1	20	40.0
Orstech LSP 40	100	1000 x 2300	2.3	1	18	41.4

## TECHNICAL PARAMETERS

Parameter	Unit	Value				Standard			
THERMAL INSULATING PROPERTIES									
Declared value of the thermal conductivity coefficient $\lambda_D$ according to EN ISO 13787	°C	10	40	50	100	150	200	250	300
	Wm <sup>-1</sup> .K <sup>-1</sup>	0.040	0.044	0.046	0.056	0.069	0.084	0.103	0.125
Maximum service temperature / on the aluminium side	°C	300 / max. 100				EN 14706			
Specific heat capacity c <sub>p</sub>	J.kg <sup>-1</sup> .K <sup>-1</sup>	800				-			
PHYSICAL PROPERTIES									
Density	kg m <sup>-3</sup>	40				EN 1602, EN 13470			
Short term water absorption W <sub>p</sub>	kg.m <sup>-2</sup>	<< 1				EN 1609			
FIRE SAFETY PROPERTIES									
Reaction to fire	-	A2-s1, d0				EN 13501-1			
Melting temperature t <sub>i</sub>	°C	≥ 1000				DIN 4102 part 17			

16. 3. 2016 The information is valid up to date of publishing. The manufacturer reserves right to change the data.