

ALSIFLEX[®]-1600 (blankets)



High temperature wool blankets

ALSIFLEX[®]-1600 is a polychrystalline aluminium oxide wool.

The blankets are needed from both sides and produced in different thicknesses and bulk densities.

Technical data				
Type		1600/100		1600/130
Colour			white	
Bulk density	kg/m ³	100		130
Classification temperature	°C		1600	
Shrinkage 1500 °C - 24h	%	0.8		0.8
Melting point	°C		> 2000	
Specific heat capacity	kJ/kg K		1.16	
Thermal conductivity				
400 °C	W/m K	0.14		0.13
600 °C	W/m K	0.22		0.18
800 °C	W/m K	0.30		0.22
1000 °C	W/m K	0.41		0.26
1200 °C	W/m K	0.54		0.36
Chemical analysis				
Al ₂ O ₃	%		72	
SiO ₂	%		28	
Al ₂ O ₃ + SiO ₂	%		99.8	
Mean fibre diameter	µm		3.3	

Delivery sizes (Production tolerances)				
Thickness	mm	12.7 (-1/+4)		25.1 (-1/+4)
Length	mm		7200 (+30)	
Width*	mm		610 (+5)	

* Roll width 1220 mm on request

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Properties & advantages

- lightweight and flexible
- low thermal conductivity and heat storage
- high thermal and chemical resistance
- high thermal shock resistance
- easy to work
- electrically non-conductive
- numerous delivery forms
- prefabricated building components and cut sections

Application areas

HEAVY INDUSTRY

ALSIFLEX[®] blankets are used for the thermal insulation of high-temperature plants in numerous industries.

Examples:

- fibre linings in industrial furnaces in layered construction or module systems, such as bogie hearth furnaces, bell furnaces, forging furnaces, tunnel kilns, regenerative thermal oxidizer and regenerative afterburning plants
- expansion joint material
- thermal insulation of welded seams
- arch insulation of tunnel kilns and glass melting tanks

Due to the low bulk densities and the almost unlimited thermal shock resistance, ALSIFLEX[®] is used especially in plants that are only operated periodically.

Working & processing

ALSIFLEX[®] can be easily cut and processed with conventional tools. Suitable items are knives with a serrated edge, band saws and punching machines.

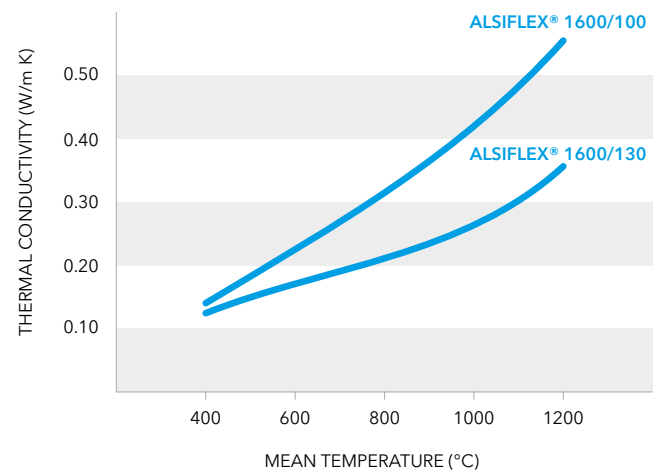
When working and processing high temperature wool products, the Technical Regulations for Hazardous Materials (TRGS 558) must be observed.

Dust is produced during processing. Dust can be harmful to the health. Avoid contact with eyes and skin. Do not breathe in the dust. Dust should be removed by suction. The dust limits are to be adhered to. See product safety information sheet.

The Promat[®] systems ALSIPACK[®], ALSIBLOCK[®], ALSITHERM[®], PROMACOMB[®] and PROMAWALL[®] are produced from ALSIFLEX[®].

Attachment to expanded metal is carried out with ALSIBLOCK[®]-H bonding agent. For gluing ALSIFLEX[®] blankets together or to other refractories we recommend ALSIBLOCK[®]-D bonding agent.

Thermal conductivity



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