

ALSIFLEX® ALCEN 1600°C

ALSIFLEX® ALCEN 1600°C is a polycrystalline aluminium fiber based on mulite and corund.



ADVANTAGES AND PROPERTIES

- Stability to 1750°C
 - Resistance to chemical attack
 - High resilience
 - Low linear shrinkage
 - Very low 'shot' content
 - Lightweight
 - Low thermal conductivity
 - Low thermal mass
 - Excellent resistance to thermal shock
 - Easy to manipulate
 - High strength & modulus
- Storage
ALSIFLEX® should be transported and stored under dry conditions.
 - Health and safety
Safety data sheets are available on request.
 - Technical information
For additional details of product properties and applications please contact Promat Technical Services
 - ALSIFLEX® can be cut, punched and worked using conventional tools, e.g. knives, machines

WORKING AND PROCESSING

- Cutting to Size
When cutting to size, the maximum workplace concentration values for dust generation must be observed. In general dust suction is recommended.

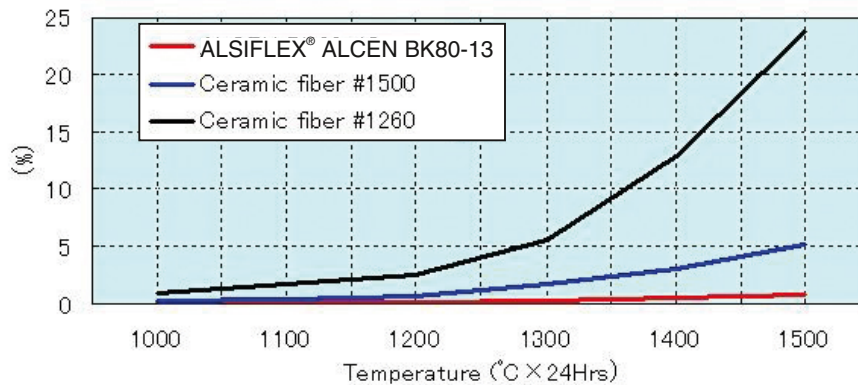
AREAS OF APPLICATION

- Iron Making
 - Blast Furnaces
- Steel Reheating
 - Slab Reheaters
- Heat Treatment
 - Annealing furnaces
 - Galvanising furnaces
 - Vacuum furnaces
- Forging
 - Hot Isostatic pressing (HIP) furnaces
- Ceramic Kilns
 - High performance ceramics – ceramic substrates
 - Porcelain
- Catalyst Kilns
 - Sulphur recovery units
- Laboratory / Development kilns
- Petrochemical furnaces
 - Ethylene / Naptha heaters
 - Hydrogen / Ammonia reformers





Thermal Shrinkage of Blankets



TECHNICAL DATA

STANDARD SIZES

Grade		BK80-10	BK80-13	BK95-10
Classification Temperature	°C	1600	1600	1600
Dimension	Thickness	mm	12.5, 25	12.5, 25
	Width	mm	620	620
	Length	mm	3600, 7200	3600, 7200
Bulk Density	g/cm ³	0.10	0.13	0.10
Chemical Composition	Al ₂ O ₃	%	80.3	80.3
	SiO ₂	%	19.5	19.5
	Al ₂ O ₃ °CSiO ₂	%	99.8	99.8
Mineral Composition	α-Alumina	%	0	34
	Mullite	%	57	57
Mean Fiber Diameter	µm	3.3	3.3	3.3
Tensile Strength	kPa	38	41	22
Melting Point	°C	>2000	>2000	>2000
Thermal Shrinkage at 1500°Cx24hrs	Thickness	%	1.8	1.8
	Length	%	0.8	0.8
Thermal Conductivity W/mK (ASTM C-177)	800°C		0.22	0.18
	1,000°C		0.30	0.22
	1,200°C		0.41	0.26
	1,400°C		0.54	0.30
Packing			1roll/box	

Dimensions	boards/ pallet
ALSIFLEX® ALCEN 1600	
620 x 7200 x 12,3 mm	16
620 x 7200 x 25,4 mm	12
ALSIFLEX® ALCEN 1600 Bulk	
Packaging: 10kg/bag	

Promat contains the right to change without notice the properties and values of all products. The given technical values are obtained in specific conditions and are average and indicative. In case of any doubt if these properties and/or values are matching the application requirements, please contact Promat for advise.

