

# Siltherm Fibrax

## Microporous Solutions for High Temperature Insulation

Siltherm Fibrax is a lightweight, custom made insulation panel wrapped with organic coating treated E-class fibre cloth.

SILTHERM FIBRAX--HB is a lightweight, customized panel encapsulated with E-class fibre cloth with a treatment to repel water. It is ideal for applications where contact with liquid water or condensation



### Properties & Advantages

- Extremely low thermal conductivity
- High thermal stability
- High compressive strength
- No harmful respirable fibres
- Environmentally friendly
- Free of organic binders
- Resistant to most chemicals
- Non combustible
- Easy to handle

### Typical Applications

- Back-up insulation in industrial furnaces
- Aluminium industry (launders, holding furnace)
- Glass & ceramics industry
- Annealing & galvanizing lines
- Night storage heaters
- Petrochemical industry (cracking furnace, hydrogen reformer)



### Working & Processing

Siltherm Fibrax can be shaped both manually and with stationary wood processing machinery.

They can be cut, sawn, drilled and punched. The boards can be fixed in place with glue or by mechanical means such as anchors, pins and clips.

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Description		Siltherm Fibrax / Fibrax-HB			
Classification Temperature	C°	850	1000	1100	1200
Long time Exposure		850	950	1050	1150
Nominal Density	[kg/m <sup>3</sup> ]	240-320	240-320	260-350	350-450
Typical Density		280	280	320	400
Compressive Strength @ 10% deformation (ASTM C-165)	[MPa]	0.32	0.32	0.36	0.40
Thermal Conductivity (ISO 8302)					
200°C	W/m.K	0.022	0.022	0.024	0.027
400°C	W/m.K	0.025	0.025	0.028	0.032
600°C	W/m.K	0.028	0.028	0.032	0.037
800°C	W/m.K	0.033	0.033	0.035	0.043
Specific Heat Capacity					
200°C	[KJ/Kg K]	0.85	0.86	0.86	0.89
400°C	[KJ/Kg K]	0.95	0.96	0.97	0.99
600°C	[KJ/Kg K]	1.02	1.03	1.04	1.05
800°C	[KJ/Kg K]	1.07	1.08	1.08	1.08
Linear Shrinkage					
12h full soak @ 850 °C	%	≤2	≤0.5	≤0.1	≤0.1
24h full soak @ 950 °C		--	≤2.5	≤0.5	≤0.1
24h full soak @ 1050 °C		--	--	≤2.5	≤0.8
24h full soak @ 1150 °C		--	--	--	≤3.5
24h full soak @ 1150 °C		--	--	--	--
<b>Standard Coverings</b>	Organic Coating Coated E-Class Fabric Cloth				

### Product Dimensions and Size Availability

Product Type	Length * Width (mm)	Thickness (mm)
Siltherm Fibrax / Fibrax-HB	1000 * 600	5-50