

Large-size insulation boards

SILCAPAN 400, 45M, 600, 800

SILCAPAN 400 has a high thermal stability and is used primarily as a large-size, self-supporting building board for the cladding of dryers and as a composite element cover panel.

SILCAPAN 45M has a good insulating effect and is particularly suitable for thermal separation in machine, plant and dryer construction. **SILCAPAN 600** and **800** boards have an increased bulk density and high strength.

SPECIAL FEATURES

- large-size
- self-supporting
- high strength

Machining

The elements can be machined using woodworking machines. As a result of the high strength values, tools with carbide cutting elements should be used. An appropriate dust extraction system should be provided. We will be pleased to produce the particular parts you require on our computer-controlled machines.

SILCAPAN		Unit	400	45M	600	800	
Upper application limit temperature		°C	400	500	1,000	1,000	
Bulk density		kg/m ³	870	470	750	950	
Compression strength		MPa	9.3	2.4	18	> 27	
Flexural strength		MPa	7.6**/4.8***	3.1	6	7	
Tensile strength		MPa	4.8**/2.6***	-	-	-	
Elastic modulus		MPa	4,200**/2,900***	1,200	-	-	
Reaction to fire	EN 13501-1		A1	A1	A1	A1	
Shrinkage after a time of		%	0.25	0.25	0.9	0.8	
		h	12	12	24	24	
Thermal conductivity λ at t _m		20 °C	0.17	0.083	0.23	-	
		100 °C	0.19	-	-	-	
		200 °C	0.21	0.095	0.22	0.20	
		300 °C	0.23	-	-	-	
		400 °C	-	0.11	0.20	0.21	
		600 °C	-	-	0.20	0.22	
		800 °C	-	-	0.22	0.23	
Specific thermal capacity		kJ/(kg K)	0.92	0.95	0.96	1.03	
Thermal expansion coefficient		K ⁻¹ x 10 ⁻⁶	6.4	6.0	7.4	7.3	
Dimensions							
Standard sizes		Length	mm	2,500/3,000	2,500	2,500	2,500
		Width	mm	1,250	1,200	1,200	1,200
		Thickness	mm	6*/8/10/12/ 15/20/25	20/25/30/ 40/50	12.7/20/25/ 30/40/50/60	12.7/20/25/ 30/40/50/60
Tolerances		Length/Width	mm	± 3	± 3	± 1	± 1
		Thickness	mm	± 0.5 (6 - 12) ± 1.0 (15 - 20) ± 1.5 (25)	± 0.5	± 0.4	± 0.4

* 6-8 mm thickness only with a length of 2,500 mm available. ** boards-longitudinal direction, *** boards-transverse direction

The properties mentioned are typical values obtained according to the listed methods. Product specific variations have to be taken into account. The data do not represent guaranteed properties and cannot be used for any warranty claim. Data are subject to technical modifications.