The technical data of SILICAWOOD, specified within this document, refer to test samples of varying amounts.
Here are presented the main results.

TECHNICAL SILICAWOOD PANEL CARD	Cement quantity	
	120 Kg/m³	**150 Kg/m³**
SILICAWOOD specific weight	500 Kg/m³	550 Kg/m³
Max size variation	1 mm/m	1 mm/m
Thermal conductivity	0,09 W/m °K	0,09 W/m °K
Compression strength (breaking)	1,96 N/mm²	2,74 N/mm²

TESTS OF REACTION AND RESISTANCE TO FIRE	350 kg/m³ of cement
Fire reaction - (10 cm SILICAWOOD)	M1
Resistance to fire - (10 cm SILICAWOOD)	REI 90
Reaction to fire - (1 cm plaster + 10 cm SILICAWOOD + 1 cm plaster)	M0
Resistance to fire - (1 cm plaster + 10 cm SILICAWOOD + 1 cm plaster)	REI 180

Frost resistance - SILICAWOOD 300
C.E.B.T.P. 3182-9-212-2 dated 3.8.94 BC/CD.
After 96 cycles of frost and thaw the samples do not show any deterioration, neither does after 46 cycles an aged sample.

Resistance to U.V. rays. – SILICAWOOD 300
C.E.B.T.P. 2352-9-616
No pulverization and no degradations after 350 hours of exposure to U.V. rays.

Resistance to electric arcs – SILICAWOOD 300
E.D.F HM 21/09-408 dated 25.4.94
No flames, no reduction of thickness, no degradations of the surfaces on the sample.

Resistance to water and stone throw – SILICAWOOD 300
C.E.B.T.P. n. 2322-9-031 JMT/JG dated 24.12.93
No degradations.

Insulation coefficient Alpha-Sabine – SILICAWOOD 300
C.E.B.T.P 2312.6.471 dated 29.9.93 e C.E.B.T.P. 2313.6.080 dated 30.9.93 Excellent results.

C.E.B.T.P. Centre Experimental de Recherches et d'Etudes du Batiment et des Travaux Publics - Parigi.
I.T.L. Istituto per la Tecnologia del Legno - San Michele all'Adige (TN)
E.D.F. Electricité de France – Moret-sur-Loing (Marne)

SILICAWOOD SOUND ABSORPTION
Giordano Institute, Test n. 131036 dated 20/10/1999
Norms:
The test has been made according to the norm ISO 354 dated 1985 "Acoustics – Measurement of sound absorption in a reverberation room", using the procedure of internal test PP016 "Measurement of the coefficient of sound absorption in rumbling room" revision 0 dated 29/02/1996.

Weighted coefficient of sound absorption "αw" Value in 500 Hz on the reference curve	**0,75**
Form indicator* Frequency spacing in which "αp" curve is of 0,25 higher than the reference curve	**H (4000 Hz)**
Class of sound absorption **	**C**

(*) **L** = Low **M** = Medium **H** = High
(**) **A**: α_w = 0,90 0,95 1,00
B: α_w = 0,80 0,85
C: α_w = 0,60 0,65 0,70 0,75
D: α_w = 0,30 0,35 0,40 0,45 0,50 0,55
E: α_w = 0,15 0,20 0,25
Non classified: α_w = 0,00 0,05 0,10

TRANSMITTANCY VALUES OF THE MATERIALS TRADITIONALLY USED IN THE BUILDING INDUSTRY
The following table compares the transmittancy of four traditional partition or load-bearing walls.
The thermal insulation of this load-bearing SILICAWOOD is much higher than other load-bearing materials used for buildings.

Material		cm.	Watt/ (m² K)	cal/ hm² K
BRICKS ALVEOLAR		30	0,540	0,460
CELLULAR CONCRETE		30	0,530	0,456
TRADITIONAL WALL	Hollow bricks	12	0,386	0,329
	Traditional insulating material	6		
	Hollow bricks	12		
LOAD BEARING 380 SILICAWOOD		**30**	**0,345**	**0,294**

TECHNICAL FEATURES OF SILICAWOOD FOR LOAD BEARING WALLS	Quantity of cement	
	380 kg/m³	**300 kg/m³**
Specific weight of pressed green SILICAWOOD	1.320 Kg/m³	1.280 Kg/m³
Specific weight of pressed hardened SILICAWOOD	1.288 Kg/m³	1.210 kg/m³
SILICAWOOD bond to reinforcement ∅ 16, length 15 cm.	30.250 N	24.750 N
Secant modulus of elasticity	3.006 N/mm²	2.727 N/mm²
Compression strength (breaking) characteristic value	(*)	1,75 N/mm²
Thermal conductivity λ	0,119 W/mK	(*)
Specific thermal conductance (C_s)	1,44 W/m²K	(*)
Max probable uncertainty	1,80%	(*)
Average value of steam transmission speed "g"	2654 mg/hm²	3892 mg/hm²
Average value of permeability "W"	2,1mg/m2hPa	3,2 mg/m2hPa
Average value of the resistance factor of diffusion "μ"	13	7,8
Average value of the equivalent air thickness "Sd"	35 cm	23 cm
Average value of permeability to steam "δ"	0,057 mg/mhPa	0,09 mg/mhPa
Overall uncertainty to permeability to steam	8,10%	7,80%
Weighted coefficient of sound absorption "αw"	0.75	(*)
Form indicator	alto	(*)
Class of sound absorption	C	(*)
Footfalls softening	10 db	(*)
Acoustical insulation (2 cm plaster+10 cm SILICAWOOD +2 cm plaster) "Rw"	38 db	(*)
(*) Not measured values.		