

# BIOCORK

## TECHNICAL DATA SHEET



### PHYSICAL CHARACTERISTICS

Material	Natural blond cork's panels
External dimensions	Length 1000 mm - Width 500 mm
Available thickness	2 to 20 cm (tolerances $\pm 3$ mm)
Packaging	Shrink-wrapping, pack measures 100x50x30 cm

### TECHNICAL CHARACTERISTICS (thickness from 2 to 10 cm)

Density and specific weight	150 kg/m <sup>3</sup>
Thermal conductivity	0.041/0,045 W/mK
Resistance to the diffusion of water vapour	$\mu$ 10÷13
Sound absorption	$\alpha$ 0,73 (73%)
Resistance to boiling water	Disintegration absent
Compression strength	12,95 kg/cm <sup>2</sup>
Bending strength	3,42 kg/cm <sup>2</sup> 0 330 kpa
Reaction to fire class	Class 2 self-extinguishing
Dimensional changes	In 23° 0,1% - In 60° 0,5%
Stability in time	limitless
Attackability by insects	nothing
Putrescibility	nothing
Specific heat	1780 J/KGXX
Airborne sound insulation wall*	RW 58 db
Airborne sound insulation*	RW 52 db



Via G. Calabrò 1/c - 66034 Lanciano (CH)  
Tel. +39 0872 716866 • info@biosughero.it - www.biosughero.it

### TECHNICAL CHARACTERISTICS (thickness from 12 to 20 cm)

Density	180 ÷ 190 Kg/m <sup>3</sup>
Thermal conductivity	0.047 W/m°K
Specific heat	2,1 kJ/kg°K
Resistance to the diffusion of water vapour (μ)	7,3
Steam permeability	9,6 * 10 <sup>-2</sup> mg/mhPa
Reaction to fire	Class 2 - Euroclass E
Moisture content	7,50%
Bending breaking load (30 mm thick; 75 mm wide; distance between supports 150 mm)	6,44 kg
Unit tensile strength load	1,46 kg/cm <sup>2</sup>
Compressive strength (deformation 50%)	10,40 kg/cm <sup>2</sup>
Sound absorption	0.20*0.85 (125*8000 Hz)
Dynamic rigidity thickness 3 cm (s')	23 MN/m <sup>3</sup>
Airborne sound insulation (double partition plastered vestment, perforated brick blocks 8 cm thick, cavity with natural cork panel thickness 5 cm)	Rw (C;Ctr) = 46 (-1;-4) dB

### APPLICATIONS

It is used in the cavity of perimeter walls and partitions, in roofs, for the realization of internal and external cladding system, in the subfloors of terraces and walkable floors, stairwells as an excellent thermo-hygrometric and acoustic insulation for airborne and footfall noise. Thanks to its high thickness, it is particularly suitable for applications with coats (both internal and external) in the construction and renovation of healthy and low energy consumption buildings. For the coats we recommend the use of a breathable lime based adhesive/breathable adhesive/shaving plaste

### ADDITIONAL INFORMATION

**PROPERTIES:** No putrescibility; Indigestible for insects and rodents; Good resistance to: water; hydrochloric, sulphuric, lactic acid 10%, concentrated citric acid, benzene, ethyl alcohol. Slight degradation to: acetic acid, 10% ammonia, ethylene acetate, trichloroethylene. Degradable from the soda used at 10%.



Via G. Calabrò 1/c - 66034 Lanciano (CH)  
Tel. +39 0872 716866 • info@biosughero.it - www.biosughero.it