



la scelta giusta
per grandi progetti.

SCHEDA TECNICA



LS BOARD

CE

NATURAL CORK INSULATION
BOARD

PRODUCT

Natural cork eco-friendly breathable ageing-resistant and formaldehyde-free board for thermal and acoustic insulation. Thermal conductivity (λ): 0,04 W/mK.

CARATTERISTICS

Natural, environmentally friendly, biocompatible, formaldehyde free, harmless for health, breathable, resistant to aging, suitable for all types of thermal and acoustic insulation. Thickness from 20 to 100 mm.

APPLICATION FIELDS

Internal and external insulating systems, crawlspaces, attic floors, underlay, attics, ceilings, insulation of cold rooms and all types of sound insulation.

SUBSTRATES

Brick masonries, thermo-bricks, mixed or of stone, concrete, old and new plaster, tuff.

PACKAGING

The cork boards for thermal-acoustic insulation are supplied in polyethylene packaging. Standard board dimensions: 1000x500 mm.

STORAGE

Storable for at least 12 months in its original packaging, protect from moisture and UV rays.

ITEM SPECIFICATIONS

The internal/external ecological and biocompatible insulation system will be realized through the laying of natural cork boards such as LS Boards by Edilcol Italia which has a thermal conductivity (λ) = 0,04 W/m·K.

PREPARATION OF THE SUBSTRATE

- Check that the substrates are clean, resistant, rough and perfectly seasoned.
- Remove the detached parts without leaving any residues. Treat with a suitable consolidating or remove entirely the crumbly surfaces or tending to crumbling.

WORKING PROCESS

- The fixing and the levelling of the boards will be carried out with the adhesive mortar based on natural hydraulic lime such as CR 510 BIO Insulating system.
- If the substrate is perfectly planar, apply with a notched trowel on the entire surface of the board.
- If the substrate is not perfectly planar and has irregularities lower than one centimeter in height, apply with a trowel in order to form some width strips of few centimeters in parallel to the board sides and at the center of thickness at points with a diameter of about 5-10 cm.
- Place the boards from the bottom to the top, carefully beating them for a perfect adhesion, using when necessary, a mechanical fixing with appropriate bolts after about 24 hours from the laying of boards.
- Do not apply the product on the edges of the insulation boards, possible cause of the formation of thermal bridges.
- In correspondence of the edges, the boards must be alternated to absorb the tensions.

- After at least 48 hours after the application of the boards, realize the reinforcement layer applying a first coat of CR 510 BIO Insulating system on which drown the fibreglass mesh HT 150, crushing it with a smooth trowel on the fresh layer of the mixing taking care of overlay the mesh for 10 cm.
- At a distance of 1 hour, cover with a second coat of levelling grout.
- Realize the finishing when the smoothing grout will be well hardened and cured, using highly flexible products.

RECOMMENDATIONS

During the laying protect the boards from rain.

Do not use cork boards to realize wainscoting. In this case use LZ 200 Board. Do not use CR 510 BIO Insulating system for the bonding of boards on metal surfaces or on substrates subject to strong movements.

The laying of the boards must not be carried out at temperatures below + 5 ° C or above + 35 ° C.

Although the details contained in this product report correspond to the best of our current experience, all the above information must be confirmed after practical applications. Anyone who intends to use the product must ensure beforehand that it is suitable for the envisaged application: in every case, the user alone is fully responsible for any consequences deriving from the use of product. The values given in the technical data derived from tests conducted in laboratory, in a controlled environment, so they may be greatly modified by the conditions of installation.

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Rev. 02 - 02/2016

TECHNICAL FEATURES

Lenght:	1000 mm
Width:	500 mm
Density:	150 Kg/mc
Thickness:	20 - 100 mm

THERMAL / ACOUSTIC FEATURES

Coefficient of thermal conductivity:	$\lambda = 0,04 \text{ W/m}\cdot\text{K}$
Thermal resistance (from 3 cm board):	$R_d = 0,73 \text{ mq}\cdot\text{K/W}$
Factor of water vapor diffusion resistance:	$\mu = 10 - 13$
Sound absorption:	$\alpha = 0,73 \text{ (tra 800/5000 hz) } 73\%$
Soundproofing power (sp. 3cm) external walls:	$R_w = 52 \text{ dB (500hz)}$
Soundproofing power (sp. 4cm) external walls:	$R_w = 58 \text{ dB (500hz)}$

MECHANICAL FEATURES

Compressive strength at 50% deformation:	$\approx 12 \text{ N/sqmm}$
Compressive strength at 1 mm deformation:	$\approx 1 \text{ N/sqmm}$
Flexural strength:	$\approx 3 \text{ N/sqmm}$
Tensile strength parallelal to the faces:	$\approx 3 \text{ N/sqmm}$

OTHER FEATURES

Putrescence:	None
Stickiness from insects and rodents:	None
Stability over time:	Unlimited
Electric conducibility:	Electrically neutral
Reaction to fire:	Class 2 - Self-extinguishing
Toxicity - emissions of dangerous substances:	Any known effect