

### 1) Favourable impact on cork forests:

➤ Total area (Portugal) 735,000 hectares. ➤ The cork tree produce cork every nine years (a renewable raw material). ➤ Avoids soil desertification. ➤ Provides local employment in the forestry sector hence prevent population desertification. ➤ Important in maintaining biodiversity (unique in Europe). ➤ Portuguese forests (cork oaks) trap 5 million tons of CO2 every year.

### 2) 100% natural industrial process:

➤ Only uses cork as a raw material. ➤ Without additives... agglomerate of its own resins (suberin). ➤ 90% of the energy consumed is biomass (a by-product of its own industrial processing). ➤ Any wastage from the industrial process is 100% reusable (cork and dust granules).

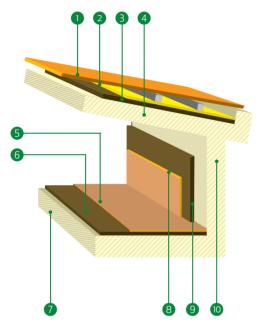
### 3) Technical characteristics:

> Density:  $100/120 \text{Kg/m}^3$ . > Thermal conductivity: test results range between 0.036/0.038 W/mk. > Value declared for EU label: 0.040 W/mk. > Resistance to compression at 10%: declared 100 Kpa (test results 110/120 Kpa) – EN 826. > Perpendicular face resistance: declared TR50 (test results 60 Kpa) – EN 1607. > Level of humidity: maximum 8% - EN 1215. > Water absorption: declared  $0.5 \text{ Kg/m}^2$  (maximum test result  $0.3 \text{ kg/m}^2$ ) – EN 1609. > Longitude tolerance: between +/- 3 y 5mm – EN 822. > Thickness tolerance: between +/- 1 y 2 mm – EN 823. > Fire resistance: Euro clase "E" – EN 13501 – 1. > Durability: practically unlimited. > Recyclable: 100%.

# 100% NATURAL CHOICE

EXPANDED
INSULATION
CORKBOARD IS
A SUSTAINABLE
MATERIAL FOR
SUSTAINABLE
INSULATION





## REDUCTION IN **ENERGY CONSUMPTION**

BY 60MM THICK EXPANDED INSULATION CORKBOARD

(SUPERIOR THICKNESS - BETTER INSULATION)

- 1. Final Covering. | 2. Waterproofed.
- **3**. Insulation with standard layer. | **4.** Covering layer.
- **5.** Final finishing. | **6.** Agglomerate of expanded cork.
- 7. Existing pavement. | 8. Finished interior.
- **9.** Expanded insulation corkboard. | **10.** Existing stonework.

### 5) Quality control:

> Conforms to EN 13170 + EN 13172. > Thermal conductivity tested by the independent laboratories: CSTB (France) and LNEC (Portugal). > Industrial quality /Quality control by CSTB (twice annually).

Other certifications (in addition to EN 13170): > MPA Stuttgart - Otto-Graf-Institut (quality verification). > ARGE KDR – Zertifikat no. - R0700144 "R" green 100% vegetal. > ACERMI by CSTB, France (Industrial and quality control).

### 6) In general:

> High level of stability... coping with major thermal variations. > Deals with temperatures of between: (-) 180°C and (+) 120°C. ➤ In case of fire, cork does not release toxic gases. ➤ Unlimited durability, maintaining its technical characteristics (official tests demonstrate between 45 and 50 years). > Totally recyclable after utilisation... It may again be reused in construction applications.











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