

# WHY SHOULD WE USE CORK IN CONSTRUCTION?

#### 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: 100/120Kg/m<sup>3</sup>. > Thermal conductivity: test results range between 0.036/0.038 W/mk. > Value declared for EU label: 0.040W/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 Kg/m<sup>2</sup> (maximum test result 0.3 kg /m<sup>2</sup>) – 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

INSULATIION CORKBOARD IS A SUSTAINABLE MATERIAL FOR SUSTAINABLE INSULATION VISIT THE NEW SITE FOR CONSTRUCTION SOLUTIONS: HTTP://WWW. BCORK.AMORIM.COM





**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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