AMORIM

AMORIM ISOLAMENTOS, S.A.

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 CO_2 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).

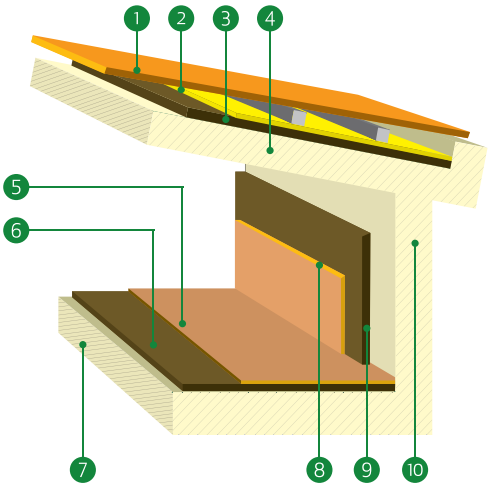
3) Technical characteristics:

> **Density:** 100/120Kg/m³. > **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/m² (maximum test result 0.3 kg /m²) – EN 1609. > **Longitude tolerance:** between +/- 3 y 5mm – EN 822. > **Thickness tolerance:** between +/- 1 y 2 mm – EN 823. > **Fire resistance:** Euro class "E" – EN 13501 – 1. > **Durability:** practically unlimited. > **Recyclable:** 100%. > **Impact noise:** 20dB LF - 40 dB MF - 30dB HF. > **Air noise:** 30dB LF - 35 dB MF - 34dB HF. > **50mm Sound absorption:** 40% at 400 Hz / 50 Hz to 3500% > **Sound speed on cork:** 500 m / second. > **Sound absorption coefficient 500 CPS:** 0.33/0.35.

100% NATURAL CHOICE

EXPANDED INSULATIION CORKBOARD IS A SUSTAINABLE MATERIAL FOR SUSTAINABLE INSULATION

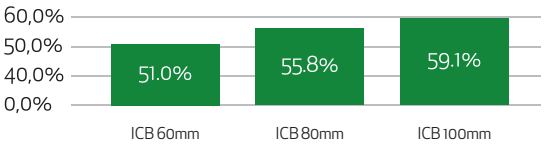
VISIT THE NEW SITE FOR CONSTRUCTION SOLUTIONS:
HTTP://WWW.BCORK.AMORIM.COM



REDUCTION IN ENERGY CONSUMPTION WITH EXPANDED INSULATION CORK BOARD

FOR GREATER ENERGY EFFICIENCY IT IS NECESSARY TO INCREASE INSULATION CORK THICKNESS
(SUPERIOR THICKNESS = BETTER INSULATION)

1. Final Covering. | **2.** Waterproofing.
3. Expanded Insulation Cork Board. | **4.** Slab.
5. Floor Covering. | **6.** Expanded Insulation Cork Board.
7. Slab. | **8.** Wall Covering.
9. Expanded Insulation Cork Board. | **10.** Existing wall.



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: (-) 180ºC and (+) 120ºC. **>** 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.

R0700144

Rua da Corticeira, nº66
4535-173 Mozelos VRF
Portugal

TEL: +351 227 419 100
FAX: +351 227 419 101
E: geral.aisol@amorim.com