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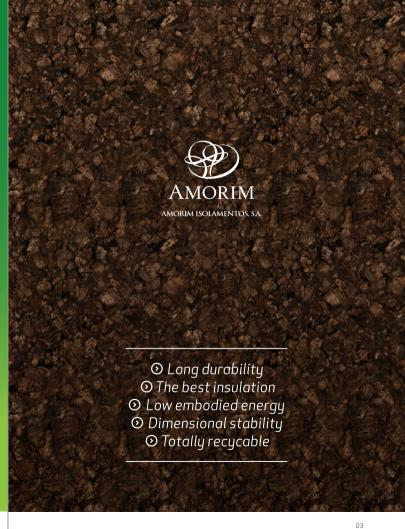
# INSULATION GUIDE 100% NATURAL

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100% NATURAL

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Reduce or eliminate the transmission of vibrations and consequent noise to the building in which it is installed and the neighbouring buildings. All machines should be insulated.

#### TECHNICAL FEATURES

- > Standard density: 110 to 120 kg/m<sup>3</sup>;
- > Thermal conductivity:  $\lambda$  = 0.037 to 0.040 W/m°C.
- > High density: 170 to 190 kg/m³;
- > Thermal conductivity:  $\lambda = 0.043 \text{ W/m}^{\circ}\text{C}$ .
- > Excellent thermal lag.
- > Excellent acoustic insulation.
- > Permissible temperatures: -180°C to 120°C.
- > Does not absorb water by capillary action.
- > Fire resistance: EuroClass E.

#### **ENVIRONMENTAL FEATURES**

- > 100% natural and additive-free industrial process.
- > Durability of 50 to 60 years without loss of features.
- > Carbon sink.
- > Low embodied energy.
- > Totally recyclable.

# **PRODUCT LINES**

- > Standard Density 110/120 Kg/m3: 1000 x 500 mm x [10 to 320mm].
- ➤ High Density 170/190 Kg/m3: 1000x500x [25; 50; 75; 100mm]







Expansion joints are used in demanding concrete constructions neutralizing expansion and contraction, preventing cracks and burst concrete.

#### TECHNICAL FEATURES

- > Meets ASTM D 1752/84 Type II standard.
- > Compression: 50% of thickness with loads from 0.34 to 10.35MPa.
- > Recovery: 90% of original thickness at 50% compression.
- > Extrusion: 6.35 mm (max.) expansion when subjected to 50% compression.
- > No disintegration in boiling water.
- > No disintegration in HCl.

#### **ENVIRONMENTAL FEATURES**

- > 100% natural and additive-free industrial process.
- > Excellent durability without requiring maintenance.
- > Carbon sink
- > Low embodied energy.
- > No emission of compounds harmful to indoor air quality.

#### PRODUCT LINES

- > Standard size: 1000 x 500 mm x [12,5; 15; 20; 25; 50mm].
- > Density: 170/190 Kg/m3.







Thermal and acoustic insulation for green roofs, providing a more aesthetically pleasing landscape but also absorbing rainwater, providing insulation and lowering urban air temperature.

#### TECHNICAL FEATURES

- > Density: 110 to 120 kg/m3.
- > Thermal conductivity:  $\lambda = 0.037$  to 0.040 W/m°C.
- > Excellent thermal lag.
- > Excellent acoustic insulation.
- > Resistance to compression at 10%: ≥ 100 Kpa.
- > Permissible temperatures: -180°C to 120°C.
- > Does not absorb water by capillary action.
- > Fire resistance: FuroClass F.

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# Thermal and acoustic insulation for flat roofs, allowing the roof space to be visitable and useable

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Acoustic insulation against impact noise for screeds and additionally providing thermal insulation with Expanded Insulation Cork Board.

## TECHNICAL FEATURES

- > Insulation against impact noise:
- a) Slab 140mm, Insulation cork 20mm, Floating slab (screed) 50mm:  $\Delta$ Lw = 21 dB.
- b) Slab 140mm, Insulation cork 50mm, Floating slab (screed) 50mm: ∆Lw = 22 dB.
- c) Slab 140mm, Insulation cork 20mm, Floating slab (screed) 70mm: ΔLw = 22 dB.
- d) Slab 140mm, Insulation cork 50mm, Floating slab (screed) 70mm: ΔLw = 25 dB.
- > Density: 110 to 120 kg/m3.
- > Thermal conductivity: λ = 0.037 to 0.040 W/m°C.
- > Resistance to compression at 10%: ≥ 100 Kpa.
- > Excellent dimensional stability.
- > Fire resistance: EuroClass E.

## **ENVIRONMENTAL FEATURES**

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#### **PRODUCT LINES**

> Standard size: 1000 x 500 mm x [10 to 320mm].







Thermal and acoustic insulation for external walls with Expanded Insulation Cork Board, applied to the outer surface of the wall in the External Thermal Insulation Composite

System / External Insulation Façade System.

# **TECHNICAL FEATURES**

- > Density: 110 to 120 kg/m3.
- > Thermal conductivity: λ = 0.037 to 0.040 W/m°C.
- > Resistance to bending: > 1.8x106 kg/m².
- > Resistance to perpendicular traction: 50 Kpa.
- > Resistance to compression 10% of deformation ≥ 100 Kpa.
- > Excellent dimensional stability does not expand or contract.
- > Permissible temperatures: -180°C to 120°C
- > Does not absorb water by capillary action.
- > Excellent acoustic insulation.
- > Fire resistance of product: EuroClass E.
- > Fire resistance in the system: EuroClass B

## ENVIRONMENTAL FEATURES

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# **PRODUCT LINES**

> Standard size: 1000 x 500 mm x [10 to 320mm].







Thermal and acoustic insulation for external cavity walls with Expanded Insulation Cork Board, partially filling the cavity.

#### TECHNICAL FEATURES

- > Density: 110 to 120 kg/m<sup>3.</sup>
- > Thermal conductivity: λ = 0.037 to 0.040 W/m°C.
- > Coefficient of insulation against airborne noise: Rw = 53 dB.
- > Excellent dimensional stability.
- > Excellent breathing capacity.
- > Does not absorb water by capillary action.
- > Fire resistance: FuroClass F.

# **ENVIRONMENTAL FEATURES**

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# **PRODUCT LINES**

> Standard size: 1000 x 500 mm x [10 to 320mm].



The Cork Tree is the basis of a worldwide unique ecosystem, thus contributing for the survival of many native fauna species and for the protection of environment.

# TECHNICAL CHARACTERISTICS

- > Density (standard) 110/120 kg/m<sup>3</sup>
- > Lambda: 0,037 / 0,040 W/mk.
- > Very good acoustical insulation.
- > Resistance 10% compression: 100 Kpa.
- > Resistance perpendicular to the faces: 50 Kpa.
- > Excellent dimensional stability.
- > Fire resistance: Euroclass "E".
- > Practically unlimited durability (keeping their technical characteristics).
- > Standard dimensions: 1000 x 500 mm.
- > Working temperature: between 180°c + 120°c

# 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 trap 5 million tons of CO2 every year.