# EXPANDA**CORK**

## REINVENTING HIGH DURABILITY AND ELASTICITY ON EXPANSION JOINTS.

Reinventing how cork engages the world.

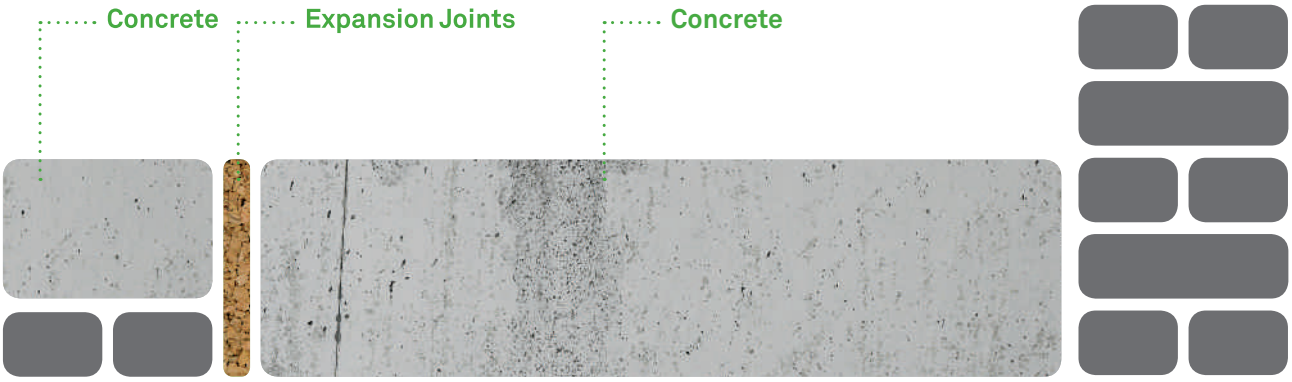
AMORIM
CORK COMPOSITES

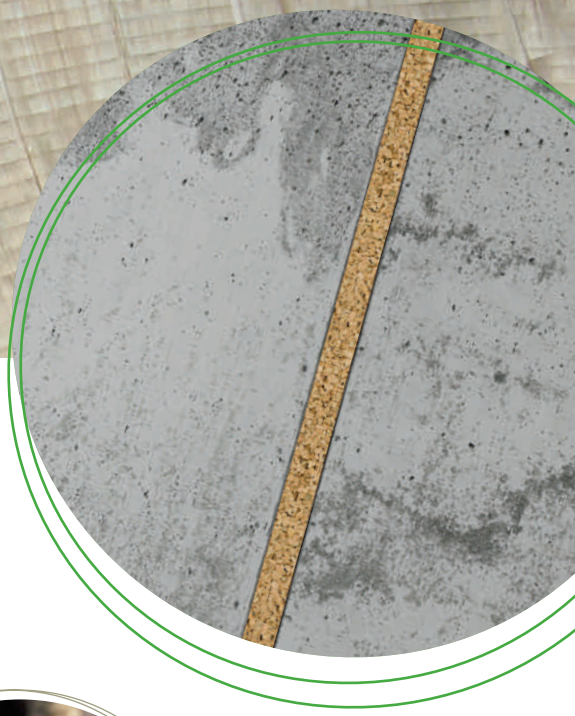
# HIGH TECHNICAL PERFORMANCE IN CONCRETE STRUCTURES

## EXPANDACORK
## Expansion Joints.

Designed to fill the gaps left between expansion joints in concrete slabs, EXPANDACORK products absorb the vibrations, expansions and contraction caused by heat in the different construction materials. The dilation joints enable the movement of structures without causing damage and ensuring these spaces are always filled. Thus, they are commonly apllied in tunnels, water storage and supply systems, aqueducts, dams and airports.

The additional advantages of cork, such as its high durability and resilience and its resistence to against water, oil and acid turn EXPANDACORK into a unique resource due to both its sustainability and technical performance.

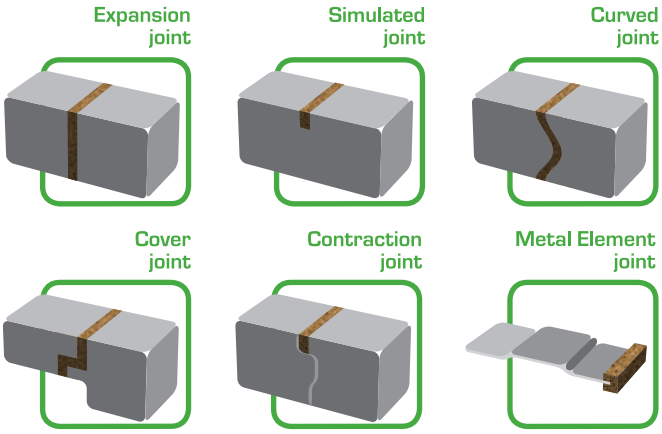




# The best solution for dilation joints.

**The various types of joints used in construction.**

The existing range of **EXPANDACORK** applications responds to a broad variety of the prevailing technical needs.




## REINVENTING SUSTAINABILITY FOR THE FUTURE

Resilience, durability and water resistance are intrinsic features to cork.

# The right choice for flexible construction solutions.

### The advantages of EXPANDACORK to the construction industry.

The materials incorporated into the manufacture of EXPANDACORK are especially developed to absorb expansions and the contractions inherent to concrete buildings. The product's unique flexibility enables not only its easy deployment but also its capacity to resist, and without any deterioration, the continuous deformations caused by different climate conditions and thermal ranges while always ensuring the joint remains appropriately filled.

- **Easy installation (optional mastic utilisation).**
- **Follows the natural movements of the joints.**
- **Great longevity without maintenance requirements.**
- **Water resistant.**
- **Resistant to intense traffic.**
- **No protrusions and entirely contained within the joint.**

# THE BEST JOINT SOLUTION FOR LARGE THERMAL RANGES

## List of Tests

| LABORATORY | COUNTRY | FILLING JOINT TYPE II | SELF-EXPANDING JOINT TYPE III |
|---|---|---|---|
| SIRIM | Malasya | ✓ | ✓ |
| SISIR | Singapore | ✓ | ✓ |
| Department of Science Service | Thailand | ✓ | ✓ |
| General Directorate of State Hidraulic Works | Turkey | ✓ | ✓ |
| Harry Stranger | United Kingdom | ✓ | ✓ |
| Crippen Laboratories | USA | ✓ | ✓ |
| ITECONS | Portugal | ✓ | ✓ |
| National Chung Hsing University | Taiwan | ✓ | ✓ |

## Technical specifications

**EXPANDACORK TYPE II** complies with ASTM 1752 & ASTM D 545
**EXPANDACORK TYPE III** complies with ASTM 1752 & ASTM D 545

| | FILLING THE JOINT TYPE II | FILLING THE JOINT TYPE III |
|---|---|---|
| COMPRESSION | 50% of initial thickness with a load of between 0.35MPa and 10.35MPa (50 to 1500PSI). | |
| RECOVERY | 90% of original thickness following 50% compression, **EXPANDACORK** attains 95%. | |
| EXTRUSION | There is a maximum extrusion level beyond the joint of 6.35mm (1/4") when subject to 50% compression. | |
| RESISTANCE TO HCI | Submerged into boiling HCI, **EXPANDACORK** does not disintegrate. | |
| EXPANSION | n.a. | Submersed in boiling water for the period of one hour, EXPANDACORK - Self-expanding cork type III expands by less than 40% of its original thickness. |
| DIMENSIONAL VARIATION | n.a. | **EXPANDACORK - Self-expanding cork type III** does not display any sign of degradation even after the simulation of ten cycles of ageing and continues to completely seal the joint. |
| SIZES | 10mm; 12,5mm; 15mm; 20mm; 25mm; 30mm; 40mm; 50mm* | |
| STORAGE | **EXPANDACORK** should be conserved in its original packaging and in a dry place through to its application. | |

*Other sizes upon request

# REINVENTING HIGH DURABILITY AND ELASTICITY ON EXPANSION JOINTS.

The highly sophisticated and purpose designed absorption and contraction EXPANDACORK properties respond and adapt perfectly to the technical needs in a different range of applications and surface types.

In inventing new products, we reinvented the way we solve problems and thereby generate differentiated solutions guaranteeing both greater durability and elasticity in expansion joints.

## REINVENTING SUSTAINABILITY FOR THE FUTURE

Cork is extracted every nine years without harming the tree.

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