

# AMORIM EXPANDACORK

Construction



## TYPE III

Technical Datasheet

### Material Description & Properties

Amorim Expandacork is an engineered granulated cork and binder material designed to fill gaps left between expansion joints in concrete structures.

Amorim Expandacork products absorb vibration, and allow for expansion and contraction caused by heat in different construction materials.

Expandacork Type III expansion joint is manufactured by a pressure and heat process that binds together cork particles and a resin of insoluble nature. After agglomerated in blocks, it can be cut in strips to comply with the project's needs.

Amorim Expandacork Type III is considered a high performing expansion joint, differentiating itself from others due to its ability to expand upon contact with humidity, according to ASTM D1752 Type III specification. Some areas of application that can be considered for this material are footpaths, heavy trafficable areas, sewage treatment plants, etc. This product is also ideal for wet areas and for all applications where water infiltration, compression and recovery are needed and valued, as the joint expands to fill the gap.

### Technical specification

<b>Density</b>	250-370 kg/m <sup>3</sup> (15.60-23.10 lb/ft <sup>3</sup> )
<b>Compression</b>	50% of initial thickness with a load between 0.35MPa and 10.35MPa (50 to 150psi)
<b>Recovery</b>	≥90% of original thickness after 50% compression
<b>Extrusion</b>	There is a maximum extrusion level beyond the joint of 6.35mm (1/4") when subject to 50% compression.
<b>Resistance to HCl</b>	Submerged into boiling HCl, Amorim Expandacork does not disintegrate
<b>Expansion</b>	Submersed in boiling water for a period of one hour, Expandacork self-expanding cork type III expands at least 40% of its original thickness
<b>Dimensional Variation</b>	Amorim Expandacork self-expanding cork type III does not display any signs of degradation even after the simulation of ten cycles of ageing and continues to completely seal the joint

Tested according to: ASTM D1752 & ASTM D545

### Standard dimensions

<b>Thickness (mm)</b>	10, 12.5, 15, 20, 25, 30, 40, 50
<b>Width x length (mm)</b>	915 x 610mm (36 x 24in)

### Fire classification

E <sup>(1)</sup>

(1) Test according standard EN 13501:2009; Report n° 51/LFF/11

### Storage conditions

Amorim Expandacork should be conserved in its original packaging, in a dry place and on a level surface throughout its application.

## General installation instructions

The following installation instructions are recommended by Amorim Cork Composites, but are not intended as a definitive project specification. They are presented in an attempt to be used with recommended installation procedures of the project contractor.

### Unpacking

Unpack the Expandacork allowing it to acclimatize for a few hours.

### Joint Preparation

The thickness of the joints should match the project specification. To cut the joints, a saw or a scalpel should be used. First, snap a chalk line across your driveway slab and follow this line as you cut. Make sure the line is as perpendicular as possible.

### Add joint during concrete pour

The installation of the joint should be made immediately before the pouring of the concrete, ensuring that it is fixed and will not move during the operation. When the pouring of a section on one side is finished, the expansion joint should be installed into the form between section just poured and the section about to pour.

Position it along the edge of the form, so that it will be in a vertical position when concrete is poured against it. With the joint in place when the concrete hardens, a slight drop in the driveway slope will not cause a crack in the concrete.

### Add joint on sidewalks

For precast structures, like kerbs and others, the joint should be installed in between the settlement of the kerbs.

### Sealant

A capping profile and/or a sealant should be installed on the top of the Expandacork, when required.

The data provided in this Technical Datasheet represents typical values. This information is not intended to be used as a purchasing specification and does not imply suitability for use in a specific application. Failure to select the proper sealing product may result in either product damage or personal injury. Please contact Amorim Cork Composites regarding recommendations for specific applications. Amorim Cork Composites expressly disclaims all warranties, including any implied warranties or merchantability or of fitness for a particular purpose. Amorim Cork Composites is not liable for any indirect, special, incidental, consequential, or punitive damages as a result of using the information listed in this Technical Datasheet, any of its brochures, its products or any future use or re-use of them by any person or entity. For contractual purposes, please request our Product Specifications Sheet (PDA).

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