



TECHNICAL BULLETIN

SELF-EXPANDING CORK EXPANSION JOINT

Purpose. This guideline provides supplemental handling and installation requirements for SELF-EXPANDING CORK EXPANSION JOINT from W. R. MEADOWS. Proper control of packaging, moisture exposure, installation timing, and activation conditions are necessary for the cork to expand and establish the intended friction fit within the joint.

How Product Expands

SELF-EXPANDING CORK EXPANSION JOINT is manufactured in a compressed condition under heat and pressure. The term “self-expanding” describes the cork's ability to recover from this factory-compressed condition when sufficient moisture and heat are available. The product may expand up to approximately 140% of its supplied thickness, allowing it to compensate for concrete shrinkage and maintain contact with the joint faces.

Normal humidity conditions after installation activate the self-expanding properties of the cork. Steam is not a chemical reactant and is not

required for every installation but will help facilitate re-expansion. In existing concrete, a steam cleaner is simply one practical way to deliver the clean, hot water needed to facilitate expansion when the moisture and heat associated with a new concrete pour are unavailable.

Packaging and Storage

The material is wrapped in moisture-proof paper to prevent premature activation during storage and handling. Keep the moisture-proof wrapping intact until the material is ready to be cut and installed. Do not expose unopened cartons to excessive or continuous weathering, heat, or moisture. Once the wrapping is opened, cut and install the material promptly.

Field Cutting

The cork may be cut at the jobsite to the exact dimensions per the specification requirements required. Verify the joint dimensions before cutting and provide the specified recess at the exposed surface when a joint sealant will be installed.

Installation Requirements

Condition	Activation Source	Installation Requirement
New concrete	Moisture in the concrete and heat of cement hydration	Install the cork in the concrete joint within 24 hours of pouring. Under typical conditions, the available moisture and hydration heat are sufficient to cause full expansion.
Existing concrete	Clean hot water above 180° F (82° C)	Apply the hot water to the exposed edges of the installed cork to facilitate expansion. A hot-water pressure washer or steam cleaner may be used to supply the required hot water.





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Existing Concrete Installation Procedure

1	Confirm that the existing joint is properly prepared and that its dimensions are suitable for the specified cork size.
2	Keep the moisture-proof wrapping intact until cutting and installation are ready to proceed.
3	Cut the cork to the required dimensions and install it in the joint.
4	Apply clean hot water above 180° F (82° C) to the exposed edges of the cork using suitable hot-water equipment.
5	Allow the activated cork to expand and establish firm contact with the joint faces before completing subsequent joint-sealing work.

Equipment

Suitable equipment includes a pressure washer capable of producing water above 180° F (82° C) or a steam cleaner capable of delivering the required hot-water treatment. Sioux Corporation is one potential equipment source and may be contacted at (888) 763-8833 or www.siuox.com. Other equipment may be used if it safely provides the required clean, hot water.

Safety and Limitations

Hot water and steam can cause severe burns. Follow the equipment manufacturer's operating instructions and use appropriate personal protective equipment. Protect adjacent materials and personnel from hot-water discharge and steam exposure.

This guideline supplements, but does not replace, the current product data sheet, project specifications, approved details, and applicable safety information. Site and weather conditions can affect the rate of expansion.

