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OBEX JOINT AND CRACK TECHNICAL BULLETIN

A frequently encountered jobsite issue concerns the saw cuts, joints, and cracks found on newly poured, or existing, retrofit concrete slabs. The principal concern is typically related to the significance of these conditions with respect to an installed moisture control system. Will these conditions undermine the efficacy of the moisture control system? The concern expressed is appropriate, and if the saw cut/joint/crack conditions are not properly addressed in accordance with industry standards, they could contribute to damage to the finished resilient flooring system. Resilient flooring system damage can be avoided when flooring subcontractors adhere to the moisture control system installation requirements, the resilient flooring system manufacturer's recommendations, and industry standards for flooring installation. There are some key differences in the saw cut, joint, and crack treatment requirements for Creteseal CS2000 and Creteseal MAX installations discussed below. OBEX's recommendation is to fill properly prepared joints and cracks with a polyurea filler designed for use under resilient flooring, and offers Perfect Patch™ for this purpose.

New Slab

On a newly poured concrete slab that has been treated with the Creteseal CS2000 moisture control system, any structural cracking or saw cut edge damage to joints should be remediated with Perfect Patch® polyurea joint filler. OBEX's best practice recommendation is to fill control joints with Perfect Patch® polyurea joint filler.

- Clean out and "V" groove the saw cuts/joints/cracks with a concrete saw or crack chaser if the existing opening is not wide or deep enough to apply a polyurea filler.
    - The opening should be a minimum of approximately 1/4-inch-wide and 1/2-inch-deep.
    - Employ white silica sand or backer rod for extended cuts/joints/cracks reducing them to a depth of 1/2-inch.
    - Apply a non-porous primer over installed Perfect Patch® and over CS2000-treated concrete if using a cementitious coat prior to the resilient flooring installation.

Existing Slab

During the preparation of an existing concrete slab that will receive the Creteseal MAX moisture control system, it is important that all saw cuts, joints, and cracks be addressed in the following manner:

- Clean out and "V" groove the saw cuts/joints/cracks with a concrete saw or crack chaser if the existing opening is not wide or deep enough to apply a polyurea filler.
    - The opening should be a minimum of approximately 1/4-inch-wide and 1/2-inch-deep.
    - Employ white silica sand or backer rod for extended cuts/joints/cracks reducing them to a depth of 1/2-inch.
- After preparing these areas, they must be thoroughly cleaned out with a vacuum and then filled with Perfect Patch®.

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- Once the saw cuts/joints/cracks are filled and allow to cure, the slab is coated with Creteseal MAX, allowed to cure, then primed, and a cementitious skim or level coat is installed to create a flat, smooth floor.
    - This process will help reduce, as a result of normally occurring slab expansion and contraction, any deflection transfer from the saw cut, joints or cracks that could telegraph through the finished resilient floor system.
- Expansion joints should be honored. Large expansion joints may need to be spaced during, or cut following, the cementitious application, and then backfilled with polyurea.
    - This process will help reduce the likelihood that the cementitious topcoat cracks after application, which may telegraph into the resilient flooring.
    - Over time, the slab movement along expansion joints may impact or telegraph into the resilient flooring. Moisture control systems and cementitious topcoat installations may reduce impacts from this movement, but no product can completely eliminate this issue.

It is imperative that all manufacturer recommendations (polyurea and patching materials) be followed during the installation of each component. In all instances, please advise OBEX of the chosen patching products that will be employed in the preparation process for warranty validation purposes.