

## Technical Bulletin #44 Key Urecon Systems Waterproofing/Crack-Isolation Membrane Requirements

Key Urecon Systems are urethane-modified cement toppings that are chemical resistant, waterproof, impact resistant and thermal shock resistant. Because Key Urecon Systems contain Portland cement some amount of shrinkage occurs during the curing process. For this reason, Key Urecon Systems should not be applied directly to flexible waterproofing/crack-isolation resinous membranes such as Key #400 or Key #580, or any type of prefabricated waterproofing sheet good---otherwise cracks may occur in the Key Urecon topping due to excessiveshrinkage movement during curing over a non-rigid substrate. Key Urecon Systems are waterproof, however certain building codes may require a flexible waterproof membrane underneath all flooring materials for elevated slabs in wet areas (e.g., kitchen, shower, restroom). For these situations Key Resin recommends three possible options:

1. Substitute for the Key Urecon System a Key Resin approved epoxy resin system of similar performance,thickness, design, and chemical resistance, which can be bonded direct to Key #400 or Key #580.
2. Install a Key Resin approved aggregate-reinforced ¼" thick epoxy topping over the resinous flexible membrane, followed with installation of the Key Urecon System. The surface of the epoxy topping must bebroadcasted with 30 mesh sand to excess. Be aware of the extra height clearance required for this option.
3. Obtain approval to install the Key Urecon System directly to the concrete substrate with the understanding thatthe Key Urecon System is waterproof. If the substrate cracks or otherwise moves excessively in the future and creates a telegraphing crack in the Key Urecon System, this can be repaired easily with Key Urecon or fast cure epoxy such as Key #730 supplied in a standard size caulk tube for ease of use by facility maintenance personnel.

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