Q. I live in part of the country with extremely harsh winters that inevitably damage concrete steps and sidewalks around my house each year. How can avoid these frustrating repair projects next spring?

A. During the winter concrete is susceptible to chipping, cracking and flaking, so it’s important that homeowners protect surfaces now to avoid costly repairs later. When rain, snow or ice migrate through cracks and saturate the ground under the concrete, the concrete will shift and move every time freezing and thawing occurs. This repeated movement can cause the cracks to expand or create new ones. Concrete also acts as a rigid sponge that if left unprotected becomes saturated from rain, snow and ice during the winter. When temperatures drop below freezing, the water saturating the concrete expands and can cause the surface to flake. Fortunately, there are easy ways homeowners prepare for these winter challenges: repair existing cracks so they don’t get worse and seal concrete surfaces so they’re protected from possible harm.

Tips for repairing concrete cracks
- Use a flexible polyurethane sealant like QUIKRETE Polyurethane Concrete Crack Sealant that allows concrete to move and shift without the crack reoccurring.
- Widen existing cracks to minimum of 1/4-inch with a hammer and chisel, and clean debris from the crack with a brush. Then fill the crack with the sealant level to the surface using a standard caulk gun.

Tips for protecting concrete surfaces
- Clean the surface with a pressure washer and/or cleaner to remove all dirt, grease, salts and other bond inhibitors. Then apply a water-based acrylic sealer like QUIKRETE Concrete Cure & Seal using a garden sprayer, roller or brush to waterproof and protect concrete surfaces.
- Remove snow and ice from concrete surfaces using a shovel rather than deicers or rock salt whenever possible. If removal requires a deicer or rock salt, use the minimum amount required to avoid damage caused by chemicals in the products.

For more information, tips and how-to videos on protecting concrete during the winter, visit www.quikrete.com.