HOME BUILDERS ASSOCIATION OF GREATER TOLEDO

CONCRETE EDUCATION STATEMENT

The Home Builders Association of Greater Toledo is sharing this information to help homeowners and first-time buyers better understand a common concern with newly installed exterior concrete driveways, walkways, patios, stoops, and steps: surface "popping," scaling, flaking, or other surface deterioration. These conditions can be frustrating and unattractive, but they are usually surface conditions rather than signs that the concrete is unsafe or structurally unsound.

Modern concrete often includes supplementary cementitious materials, including coal fly ash, which is a recycled byproduct of coal combustion. Over roughly the last decade, the U.S. Environmental Protection Agency has recognized and supported the appropriate beneficial use of coal fly ash in concrete, including as a substitute for a portion of Portland cement when properly used. As local concrete suppliers have adjusted mix designs and incorporated fly ash and other supplementary cementitious materials, Toledo-area builders have seen more homeowner reports of surface popping, scaling, and flaking on newly installed exterior flatwork. These reports do not point to one simple cause. Exterior flatwork in Ohio is exposed to harsh freeze-thaw cycles, moisture, snow and ice, deicing chemicals, drainage conditions, and everyday use. Concrete that is still young or curing through its first winter can be especially sensitive.

Homebuilders generally do not manufacture the concrete delivered to a home site, control the specific mix designs offered by local ready-mix suppliers, or have a practical ability to source concrete from distant markets for ordinary residential work. For that reason, supplied product and exposure issues do not automatically mean the builder failed to perform the work properly. In many residential projects, exterior surface popping or scaling is more closely connected to mix design, weather exposure, moisture, deicing salts, curing age, drainage, and maintenance than to any failure by the homebuilder.

Homeowners also may notice that basement floors, garage floors, and foundation concrete do not show the same surface condition. That comparison is not unusual. Those areas are typically protected from direct weather, standing snow and ice, repeated freeze-thaw cycling, road salt, and other conditions that affect exterior flatwork. A driveway or patio lives in a much tougher environment than concrete inside the home or below grade.

Homeowners play an important role in protecting exterior concrete after installation. Ask the builder or concrete supplier when and how to seal the surface, use a breathable concrete sealer appropriate for the specific concrete, and follow the recommended resealing schedule. Sealing and resealing are not guarantees against every surface issue, but they can reduce water and salt intrusion and help preserve the surface.

During the first winter in particular, homeowners should avoid deicing salts and chemical ice melters on new concrete whenever possible. If traction is needed, consider sand or other non-corrosive traction materials, and remove snow and ice promptly so meltwater does not repeatedly soak into the surface and refreeze. Good drainage also matters: downspouts, sump discharge, irrigation, and grading should direct

water away from driveways, walks, patios, stoops, and steps. Regular maintenance, prompt snow and ice removal, and careful water management are the homeowner's best tools for reducing surface distress.

If you see popping, scaling, spalling, or other surface deterioration, contact your builder early and provide photographs, dates, and a description of the condition. Your builder or concrete supplier can help explain likely contributors and appropriate maintenance or repair options. Ohio's workmanlike-manner standard is based on minimum quantifiable standards adopted by the Ohio Home Builders Association. For driveways and sidewalks, those standards focus on measurable conditions such as drainage, crack width outside control joints, and height differences between adjoining sections at the time of installation. Surface popping, scaling, or spalling, by itself, is generally an aesthetic surface condition and is not the same thing as failing to meet those measurable workmanlike-manner standards. The Toledo HBA's one-year limited warranty language is intended to provide a practical process for homeowners and builders to address covered concerns during the first year. The goal is to give homeowners practical information while recognizing that, in Ohio's climate, exterior concrete surface changes often reflect supplied-product, exposure, and maintenance conditions rather than a failure by the homebuilder.