

# Planning and Design

**TIM,**

*If a tile is not damaged by water, why do we need a waterproofing system installed under the tile in a shower?*

## **WHY SHOWER WATERPROOFING IS SO IMPORTANT**

**Custom-tiled showers** are a sizable investment and should last the lifetime of your home. Unfortunately, if you tear out shower tile as often as I do, you'll find a host of catastrophes, including horrifying

mildew and mold growth as well as failed framing – rotted through after long-term exposure to water.

The culprit often is misunderstood building science in a tile shower system. From a construction perspective, the function of a shower is to protect



the wood structure of the home by capturing water and directing it into the plumbing system. This principle, if misunderstood, can lead to inadequate or incomplete water-management systems installed under otherwise beautiful tile showers.

When I meet with a homeowner experiencing tile shower issues, they are often surprised to learn that a tile shower has two parts. Part A is the waterproofing system, Part B is the tile surface – and just as importantly, one cannot function without the other.

The trouble is that tile and grout are water-permeable, meaning they let water through to the substrate. Unfortunately, without a properly functioning waterproofing layer, the substrate soaks up moisture, allowing water to pass through to the structural framing underneath, leading to decay, mold, and fungus, etc.

Fortunately, a professional builder with a proper understanding of the tile shower system can prevent failures, and you and your family can enjoy your new tile shower for many worry-free decades to come. **BC**



Tim Graham has been building homes in South Central, KY for over 30 years. He is a Master Builder, a Registered Builder and a Certified Green Professional.

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