



Mold: The Problem or the Symptom?

By Donato Pompo

At Coverings 2006, Donato Pompo of Ceramic Tile and Stone Consultants, LLC facilitated a CTDA-sponsored panel of experts who shared their information and experience on mold. The experts were Greg Mowat of Forensic Tile Consultants, a forensic tile investigator; Will Spates, president of Indoor Environmental Technologies, Inc., an indoor air quality professional and scientist; Dave Gobis, executive director of the Ceramic Tile Education Foundation and a TCNA national installation trainer; Richard Kahanowich, a senior partner with the law firm Zimmerman & Kahanowich of Los Angeles, with legal expertise from both plaintiff and defense perspectives.

This is the first article of a three-part series that will share some of the insight provided by that panel on the growing concerns about mold. This article will provide an overview of mold and how it is affecting the ceramic tile and stone industry. Future articles will review the science and legal aspects of mold that affect the industry, highlight common installation failures that lead to mold, and review industry recommendations and guidelines that will help avoid water intrusion problems that result in mold.

A lot of misinformation has been circulating about mold. The goal of this series of articles is to state the facts about mold and to show how it is affecting the ceramic tile and stone industry.

Mold has been around since the beginning of time. Today, however, the construction methods that are being used often lead to moisture problems. Mold is not the problem itself, but it is the symptom of a moisture problem. If moisture isn't present, then mold can't exist.

The difficulty is that many showers and other wet areas are not installed correctly, per industry standards, and this leads to moisture intrusion problems. Mold needs food in order to grow, and a wet environment within wall cavities is just the right situation to enable mold to propagate. Gypsum water resistant green-board is no longer recommended for shower

areas because gypsum and the organic mastic that's typically used to adhere the tile to the board are substantial food sources that perpetuate the growth of mold. On the other hand, cementitious mortar beds and other backings are highly alkaline, and therefore not a good source of food or a friendly environment for mold.

Mold needs to be controlled. According to scientist Will Spates, mold is not a great health risk, but people that are hyper-sensitive to various products and that have allergies can be adversely affected by mold. More to the point—water needs to be managed to avoid intrusion problems and the resulting damage, including mold.

Slight surface instances of mold can be cleaned off of finishes such as ceramic tile and stone, but when there is water intrusion into wall cavities, mold can be very





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severe. Special remediation may be required with isolation tents, HVAC ventilation systems to control the air flow, and containment and removal of the infected areas. These cases get very expensive and require the employment of Indoor Air Quality Professionals.

You may have heard that "Mold is Gold" for attorneys and for those who investigate and remediate mold issues—and for good reason! Reports indicate that in 2001 mold claims cost homeowner insurance companies more than \$1 billion in claims; 5 times more than the previous year. The Insurance Information Institute estimates that \$3 billion in mold claims were paid out in 2002, and more than \$5 billion in 2003. There have been some well published lawsuits which resulted in claims as high as \$32 million. The average homeowner's claim cost runs between \$15,000 to \$50,000. Insurers have paid out nearly \$15.5 billion in homeowners insurance claims to Katrina hurricane victims in Louisiana and Mississippi, and you can be sure that a good percentage of that went toward mold claims.

How legitimate are the mold claims and the solutions? Attorney Richard Kahanowich reports that insurance companies are now excluding mold coverage, and laws have been created that limit claims by plaintiffs who must show cause and the resultant damage to have a valid claim. Kahanowich also points out that installers are in a precarious position if mold is discovered while performing remodeling work. In the past, installers would largely ignore these mold conditions when replacing faulty tile installations, but today they put themselves at risk if they don't disclose it. Now they should insist on having mold remediation experts evaluate these types of findings.

Lately there has been a proliferation of new and improved installation products on the market that contain anti-microbial ingredients. These "ingredients" are added to the products, at negligible cost, during the manufacturing process. The installation manufacturers that offer these upgraded products do so with limited warranties.

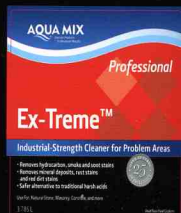
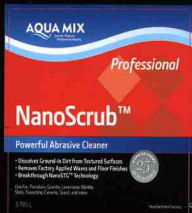
Do anti-microbial ingredients prevent or substantially restrict the growth of mold while adding protection from water intrusion?

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sion? Ceramic Tile Education Foundation executive director Dave Gobis suggests that if installers follow industry standards and perform the installation properly, then there won't be water intrusion problems or mold. So is there some value in having anti-microbial laced products? The manufacturers of these installation products say, in general, if their installation recommendations and industry standards are not followed, they will not warrant your tile installation if mold develops.

Normally the mold problem does not exist as much within the installation products as it does in adjacent wall cavities where there is an abundant source of food for the mold. Forensic investigator Gregory Mowat says that almost every tiled shower mold case he has seen could have been avoided if the tile installation and its underlying substrate had been installed correctly per industry standards. So the question is, will these anti-microbial laced installation products substantially prevent or restrict the growth of mold?

THE MANUFACTURER'S POSITION HAS REPEATEDLY BEEN NO

Some tile manufacturers and industry associations are reluctant to take a stand on endorsing anti-microbial installation products for several reasons:

1. They don't want to give the impression that tile can be installed incorrectly using anti-microbial products and would therefore have some degree of substantial protection;
2. They don't want to make the tile installation more expensive by about \$2+ per sf, making it less affordable to the consumer; and
3. They don't want to scare the consumers away from tile use because of the potential of mold.



Instead, tile manufacturers and industry associations believe that the promotion of proper installation methods for ceramic tile and stone is the correct approach and that this will ultimately prevent water intrusion and mold issues.

On the other hand, I believe that these anti-microbial product installation systems are adding some value in providing the installers with a system approach and requiring the installer to fol-

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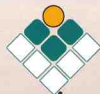
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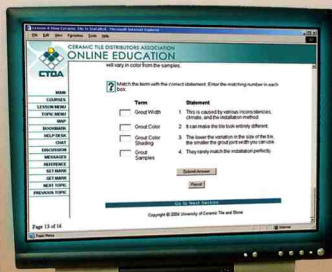
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low industry standards. For that reason, I always specify using single source product installation systems that provide a minimum 10-Year Labor and Material Warranty.

This is not no-fault insurance, and the product rarely fails in itself; usually failures are the result of design or installer error. Rather, these system warranty products provide guaranteed compatibility, higher product performance, and require the installer to follow industry standards, which help compensate for job site conditions and a labor force that is at times not perfect.

For more information there are organizations such as the Responsible Solutions to Mold Coalition (RSMC) that are trying to provide factual information for the construction industry and its consumers on their website at www.responsiblemoldsolutions.org.

Donato Pompo is principal of Ceramic Tile and Stone Consultants, LLC. CTaSC a professional company of expert consultants comprised of accomplished ceramic tile and stone installers, construction scientists, and other industry specialists located throughout North America that specializes in ceramic tile and stone consulting in North America. Email: Donato@CTaSC.com; Website: www.CTaSC.com

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