

Industry Q&A: Fishman's Richmond on the Rise in Moisture Issues

hane Richmond, regional vice president of Fishman Flooring Solution's Mid-Atlantic region (covering Delaware, Maryland, New Jersey, parts of Pennsylvania, Northern Virginia and the District of Columbia), recently shared his perspectives on a variety of moisture-related topics with FCI. He has more than 25 years of experience in the flooring installation industry. In that time Richmond has witnessed the evolution and growth of moisture problems in concrete slabs—as well as the costly impact those problems have had on installation contractors, architects, designers, building owners and others.

Q: How big a problem is moisture in slabs when it comes to installing commercial flooring?

A: Moisture is a very serious issue when it comes to commercial flooring installations, due in large part to the fast pace of building construction today. Compressed building schedules don't always allow sufficient time to test for moisture in slabs and address any problems before the flooring is installed.

This can lead to all sorts of challenges on flooring projects, ranging from having to use specific adhesives based on the relative humidity in the slab all the way to moisture-related flooring failures, which is the worst possible outcome.

Q: You've been in the flooring installation industry for more than 25 years. How has the state of moisture testing changed over that period?

A: Moisture testing has evolved dramatically since I started in the flooring installation industry. Back then, moisture testing was rare. Occasionally, a flooring contractor would put down a few calcium chloride tests if he thought there might be a problem, but that would be the extent of it.

Above: Training conducted at a Fishman sales meeting by Ardex. Photo courtesy of Fishman Flooring Solutions.



Today, commercial flooring contractors test for moisture on nearly every project. In fact, moisture testing and moisture mitigation has become its own industry. Commercial flooring contractors today have to be experts on concrete and moisture mitigation to protect themselves from the risks. Remember that, unless contractually excluded, the liability for a failed flooring installation caused by moisture or other problems rests with the flooring contractor.

Q: Have there been any major changes in moisture testing over the past few years that stand out in your mind? If so, how have they made a difference?

A: Moisture testing methods have improved continually in the last decade. The most recent breakthrough has been the change to the ASTM F-2170 standard that allows for an *in-situ* relative humidity reading after just 24 hours. This enables a flooring contractor to understand any challenges that may exist on a project much sooner than under the old standard. That's important because he or she is often working on an already tight schedule. Before the standard was changed, the minimum allowable time for a verifiable reading was 72 hours.

Q: What are some of the recent technology breakthroughs in mitigating moisture in a slab once the problem has been identified?

A: There are many new roll-on type products that are making better use of urethane and polymer technology to accelerate both the moisture mitigation process and, in turn, the flooring installation. PU-280, which is made by Wakol, is one new product that comes to mind.

There are also new time-of-placement products that can be applied to the slab when the concrete is poured. They completely mitigate potential issues before any work is done on the slab. These new products help control cost and are an insurance policy against potential issues.

Q: Are there any products for moisture testing or moisture mitigation that, in your opinion, have become time-tested solutions?

A: Two-part, epoxy-based moisture barriers have performed well for many years. These products require extensive preparation and the installation process is more technical than some of the newer technologies. In my opinion, however, they provide the best long-term protection against moisture-related flooring failures.

Left: MAPEI reps share information on their latest products during a Fishman sales meeting. Photo courtesy of Fishman Flooring Solutions.

Q: Do you think product manufacturers are putting enough emphasis on developing new and better products for moisture testing and moisture mitigation in slabs today?

A: I think that manufacturers are doing a terrific job bringing innovative moisture testing and moisture mitigation products to market. They understand that time and cost are very important in today's fast-track construction environment and are improving their technologies regularly to help reduce product and labor costs and compress the time required to properly identify and address moisture problems. MAPEI, for instance, has continuously added new products to their Planiseal line of moisture mitigation products

Q: How would you characterize the training of installers in terms of dealing with the widespread issue of moisture in slabs?

A: Flooring and adhesive manufacturers have done excellent work educating the flooring contractor community about moisture issues in slabs and how to deal with them. It's hard to be a successful commercial flooring installer or contractor without being informed about the implications of moisture in slabs.

That said, I've read estimates that show moisture-related flooring failures cost commercial property owners as much as \$2 billion a year. That's a pretty good indication that there is still great opportunity for training installers in both identifying moisture problems in slabs and addressing those problems using the most efficient and effective products on the market.

Q: What would you say to installers who want to keep up with the newest moisture testing and moisture mitigation products? How do the best flooring contractors in your sales region deal with this?

A: My advice to flooring contractors and installers is as simple as it is important.

Take advantage of any and all learning opportunities that come your way. And those opportunities are not difficult to find.

Many distributors, including Fishman Flooring Solutions, regularly provide training on the proper use of new products. At Fishman, we typically partner with our manufacturers to ensure that the marketplace is kept up-to-date on new innovations. Information on when and where training will be conducted is available at all of our branches, on our website and from members of our sales team.

In my sales region, it's easy to separate the best flooring contractors from the rest of the pack. The contractors who are most in demand invest in their installers by making time in the schedule for them to learn about new products.

Q: How important is it for general contractors, architects, designers, specifiers, building owners and others to understand

the basics of moisture testing and moisture remediation in slabs?

A: It's extremely important for all stakeholders to understand the basics of moisture in substrates and how it can affect the flooring in their buildings. In fact, for many stakeholders it's a responsibility. For example when it comes to moisture in slabs, architects and general contractors are responsible for making decisions that are in the best interests of building owners and end-users. They can't make the right decisions if they don't understand at least the fundamentals of moisture testing and how to address moisture-related problems.

Q: I've heard that your company offers architect and design consultants who understand the best ways to test for moisture and remediate the problem. Do you think architects, designers, general contractors and others

are taking full advantage of this resource?

A: From my perspective at Fishman, I think the architect and design communities *do* take advantage of our knowledgeable consultants. Most of them understand the severity of moisture problems in concrete slabs and they routinely reach out to our team for advice.

Because we do business with a large number of manufacturers, members of our A&D team are knowledgeable about a wide range of moisture testing and moisture mitigation products and can recommend those that are most efficient and effective for a specific project. They also have immediate access to those products in Fishman warehouses and can ensure their timely delivery to the job site. The best time to contact our architect and design consultants, whose information can be found on our website at lfishman.com, is several months before the scheduled flooring installation.