

Spec the Prep!

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Assuming an older floor did not need moisture testing can lead to failures such as this.

Having written for FCI on resilient flooring now for a number of years, I have written about substrate preparation many times in many different ways. Few issues create more problems and failures on resilient flooring installations than improper preparation of the substrate. I have found that a lot of time the prep does not get done properly because of a communication breakdown. This usually happens when certain procedures or floor preparation products are not spelled out in advance, which can lead to misunderstandings later on if decisions on what to do are left to someone else (also known as "passing the buck"). I prefer to have everything specified in advance so there are no such misunderstandings.



Moisture testing should be specified on every job over concrete. Photo courtesy of Tramex

For example, when I was a retailer I tried to specify specific underlayments, adhesives and even the trowel to put the adhesive down with so the installer knew exactly what had to be done. The customer paid for the right material, the installer got paid to do the job the right way and I made a markup on all of it. The job got done right and lasted for years, the customer was happy and referred her friends back to me for their work, and everyone got paid a fair price.

For commercial projects, I try to work with the architects and have them include language about every detail of the floor covering installation in their written specifications. The reason for this is that the general contractor will then have the details so that the flooring subcontractor will bid on the work that needs to be done. This way the job gets done correctly, everyone gets paid for the work they do and there is no last minute change order for extra prep work. Of course, in a new construction project nobody can see the substrate at the time of bidding so the bid process may not be able to contain the amount of detail needed. However, as you will see shortly there are things that can always be included that will minimize misunderstandings later on. It's sometimes easier on projects where the building is already there so everyone can see the job in advance. Whether a residential or commercial job, many times the prep on these jobs is

pre determined, or an agreed upon "time and materials" bid is agreed to in cases where the substrate is covered and nobody is sure how involved the removal of the old floor and the prep work will be.

Here are a few areas where a specification can be written for floor prep so that there is less chance of misunderstanding when the time comes to do the job.

Testing

For concrete slabs, moisture testing is required by the resilient manufacturer and is specified in the industry standard on all jobs, "All concrete slabs shall be tested for moisture regardless of age or grade level" (ASTM F 710 Standard Practice for Preparing Concrete Floors to Receive Resilient Flooring). So why are so few slabs actually tested? "Not my job.... no time to do it.... I'm not getting paid for testing.... I've never had a problem before.... The slab looks dry...smells dry...feels dry..." and countless other excuses that I have covered here in this column over the past almost four years. Moisture-related flooring failures continue to be over a billion dollars a year and they are preventable if the floor is tested first. There is more and more awareness of these problems because so many people have been burned, and because mold is becoming a big issue everywhere. So, once Again, I encourage everyone to write it into the procedures for the job. If you don't test you are voiding the manufacturer's warranty!



Poured underlayment can be a big time saver over multiple coats of troweled patching compound. Photo courtesy of Pyramid Floors

Increasingly architects are including testing language in their specifications, even if it just says, "Prepare and test all concrete floor slabs as per ASTM F 710," which pretty well covers what has to be done and what the limits are. However, dealers can also take charge of this situation and make it a mandatory part of every job. "What if the customer won't pay for it?" you may ask. That gets tricky. Many dealers and installers tell men they will get the customer to "sign off" or give them a "hold harmless" agreement to release the dealer from any responsibility if the floor fails and the customer refused to allow testing. Such an agreement may prevent most ethical people from suing the dealer in this case but in other cases if you do get sued chances are you will lose because you knew better and did the job anyway. The bottom line is that if you are reading this, you know that all concrete slabs have to be tested and if you are not doing

it for whatever reason, you are at risk for the liability in the case of failures, and the flooring and adhesive manufacturer's will not be liable for this failure so you'll be on your own!

Panel Underlayments



Training is widely available and is a great way to upgrade your skills and professionalism.

I have covered panel underlayments in my column here several times and those of you who read my work regularly know I have come out against the use of Lauan panels for a long time. My reasoning is the same as what has been published by the National Association of Home Builders: "Typically, 1/4-inch lauan plywood is used as an underlayment when vinyl is installed over wood subflooring. The problem with lauan is that it is soft and susceptible to denting and

crushing under concentrated loads such as furniture legs or high heels." Major resilient manufacturers have quoted other reasons such as "discoloration, delamination and adhesion failures" for a number of years, and yet Lauan is still out there being used as a resilient floor underlayment. Other panel underlayments are available that are much higher quality than lauan. I prefer to specify "real" plywood such as "5-ply arctic birch," a very hard wood, sold under a variety of brand names. They perform extremely well even under heavy traffic conditions.

I recently visited with the installation manager of a generations old flooring business and he was lamenting the ability to find a good source of Lauan. I asked why he even bothered when there are so many other superior products available that have a manufacturer's warranty. He started talking about price and I reminded him that his customers will pay more because they expect the best from his company, and if given the choice of products between one that has a warranty and one that does not, they will pay more for the warranty every time. He immediately started researching the better products. Installers and dealers should not assume that your customers always want the least expensive options! More and more resilient flooring manufacturers are including warnings about lauan in their specifications so why take a chance? If a prospective customer is shopping around and gets a lower price, use the warranty and the better performance of the underlayment to justify the slightly higher cost!

Patching and Underlayment Compounds

As more and more renovation work is being done, preparation of existing substrates is more important than ever. As we just discussed, using a good quality panel underlayment over wood subfloor systems is very important, and using the best quality patching and leveling compounds over wood or concrete is no less important. There are different products for different uses, so make sure the product you use is made for the intended use, such as sealing in cutback adhesive or smoothing an embossed floor.

When I grew up in the business, when we had a rough concrete slab, we applied multiple coats of trowel-applied underlayments in order to get the floor smooth enough to receive resilient flooring. Today, there are a myriad of available poured underlayments (also called "self leveling") that can do the job much more quickly and with better results. They can be used to smooth out a rough floor, bring two adjacent areas up to the same level, or bring a sloping floor up to level. As versatile and easy to use as these products are, I find that a lot of installers and dealers have not yet embraced these products. Price is once again an objection but lack of knowledge is another reason that these products are not more widely used. As far as the price, material cost is one thing but labor and travel cost is entirely another. If you have to make three trips to a job to do the prep a troweled patching compound requires that is time and gas money wasted when you can pour the job on one trip. As far as learning how to properly apply poured underlayment, the major manufacturers all offer low cost training programs that can get you into the business. In many markets, there are companies that do little else but floor prep, so you can even hire someone else to prep the job for you if you like.

One other point I'd like to reiterate from previous columns is that a major cause of failure of patching or underlayment compounds is too much water. Adding more water to the mix may make the material easier to spread and makes it go further, but it weakens the finished product, and may make it softer and more porous. It is imperative to pay attention to the ratio of water to powder, and don't deviate. Finally, pay attention to drying time because if you cover the patching compound too soon, any excess water is trapped, and may cause the flooring adhesive to soften or lead to air bubbles, soft spots or other failures in the finished floor covering.

In the current tough financial times we are having, it may be tempting to cut

corners and try to do the job “cheaper than the other guy.” However, I always remember when my dad said, “When you buy cheap you get cheap.” I prefer to be “better than the other guy” by using better materials, and telling the customer you are supply them with a flooring system that will give the customer a high quality job while saving time for the installer. Some of the points I have made here can help you to do just that. When things are slow, learn about new, better quality products, get some training in how to use them and upgrade your professionalism. You’ll have a competitive advantage by being the best, not by being the cheapest!

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