Photos by Roe Osborn/JLC

Tiling Over Existing Tile

BY TOM MEEHAN

Recently, I was called in to look at a 12-year-old shower floor. The floor was intact, but the grout lines had darkened over time, and it was unsightly **(1)**. The house is a seasonal rental on the beach that rents for top dollar, and the owners wanted the bathroom to be presentable.

Often, a situation like this can be addressed by cleaning with a strong detergent acid. So I tried that, but the powerful cleanser didn't touch the grime. Apparently, the grout had never been properly sealed.

Since I couldn't clean the shower floor, I suggested a simple solution: Given that the existing tile floor was sound and wasn't leaking, why not tile over the floor with new tile? I've done this many times before. The owners liked the idea, so I went ahead.

Before I started, I removed the existing drain cover **(2)**. I wanted the new drain cover to be flush with the new tile, so I inserted some spacers cut from a sheet of Schluter Ditra mat. I applied a little dab of thinset mortar to the Ditra pieces and set them in the corners of the existing drain **(3)**. That way, the new drain I would install later would come flush to the surface of the new tile.

In this case, the existing floor was porcelain tile, but this tiling technique can be used over any kind of tile—porcelain, ceramic, or natural stone. I started by scarifying the surface of the tile using a grinder with an aggressive blade **(4)**. I roughened up about 85% of the surface, which is enough to give thinset mortar a powerful grip. I was careful to ventilate the space, and I wore a respirator mask to protect my lungs.

Before I started to apply mortar, I checked the pitch of the existing tile floor **(5)**. I made sure that the pitch was at least 1/4 inch per lineal foot and that there were no low spots. Had I found a problem, I would have made up for it when I applied the cement. But in this case, the floor had an adequate pitch and there were no low spots.

Having roughened up the floor, I began to apply a skim coat of thinset mortar, about 1/16 inch thick, to the existing tile **(6)**. I used Laticrete Platinum 254, an extremely tacky, dense polymer-modified formula that bonds tenaciously to anything (laticrete.com). This is the kind of stuff that if it gets on your jeans, you don't launder them—you just throw them away.

Next, I set the new drain and drain cover. I buttered the back of the drain first **(7)**, and then, with its cover


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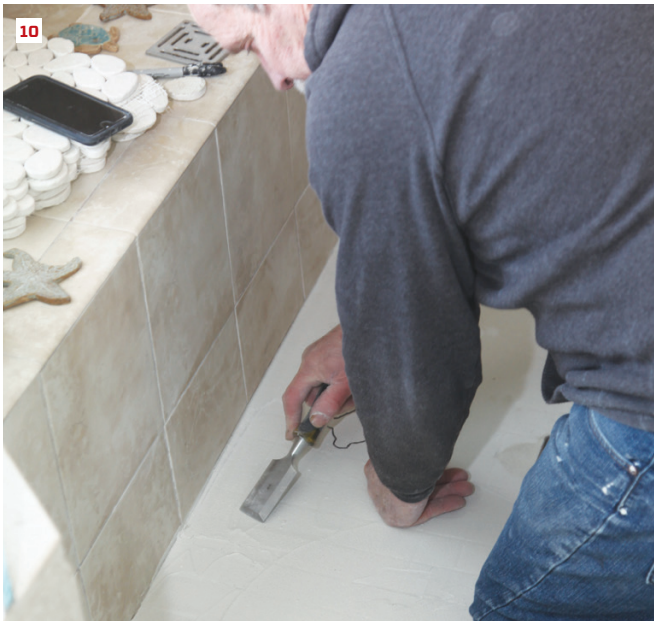
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screwed on, I set the drain carefully in place over the existing one **(8)**. I buttered it carefully, putting on just enough to make a good seal but not so much that it would squeeze out and go inside the drain.

When I had applied thinset to the entire shower floor, I stopped for the day and allowed the cement to harden overnight. The next morning, I positioned the decorative tiles, marking their locations with a Sharpie marker **(9)**. These custom-made tiles, in the shape of sea creatures such as fish, crabs, and clams, came from my wife's business, C Shore Designs (cshoredesigns.com), so I got them locally, but they're available worldwide by mail order. Earlier, I had asked the homeowners to position the sea-creature tiles on the shower floor, and I took a picture so I would remember where to place them. Now I would use the Sharpie markings as a guide.

Laticrete Platinum 254 is extremely strong and tenacious, but it's as sticky as salt-water taffy to work with. It's hard to apply it perfectly flat and smooth it the way you can a traditional mortar bed. After


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I applied it, there were a few ridges in the surface. So the next day, when the Laticrete was set up but still not fully cured, I used a sharp chisel to cut off the ridges and make a flat surface **(10)**.

Now it was time to start setting tile. I used natural stone tiles in a mesh sheet, supplied by Island Stone (islandstone.com). I like this brand because tiles always interlock perfectly—you can turn them left or right, and they still mate up. This variety was flat river stones. I started by cutting the edge of a sheet to make a flat side **(11)**. You have to cut the stones on a wet saw—you can't score and snap them the way you would a ceramic or porcelain tile. But for trimming or cutting small pieces, you can use hand tile nippers.

With a 1/4-inch V-notch trowel, I spread a second coat of thinset mortar to make a setting bed. For this coat, I didn't use latex-modified thinset—I used regular thinset. Then I began to set the sheets of river stone **(12)**. Where the sea-creature tiles would be, I cut out the shapes in the sheets of stone, cutting the plastic mesh with a utility knife.

As I worked, I set the decorative tiles in the voids I had created. I back-buttered the decorative tiles carefully **(13)**, making sure to evenly spread the mortar over the claws of the crabs and the fins of the fish and the arms of the starfish. The decorative tiles are strong, but they're still delicate until they're supported evenly by mortar. I put on enough mortar to hold the decorative tiles a hair higher than the surrounding stones, to make a lifelike presentation **(14)**. When the sea creatures were in place, I cut some small pieces of stone with the nippers and pieced in around them.

Once all the tile was in place, I pressed the stones down with a rubber grout trowel to make sure there were no high edges **(15)**. That way, I knew the floor would be flat, with a smooth pitch to the drain.

The next day, before grouting the floor, I cut some mortar out around the decorative tiles using a utility knife. I wanted to be sure that the grout would go down at least 1/8 inch below the surface of the tile, so that the grout would have enough substance to take hold. I used a vacuum to pull out the dust as I cut **(16)**.

After grouting the tile using Power Grout from TEC (tecspecialty.com), I cleaned the surface of the stones with a sponge **(17)**. When I was finished, I had a brand new floor **(18)**.

There's one more step that you don't want to skip: sealing the tile. I used 511 Impregnator by Miracle Sealants (rustoleum.com). And in this case, because I was using natural stone, I applied sealer twice: once before grouting, and once a few days after grouting and cleaning. It's always good to put two coats of sealer on natural stone (overkill is always a good thing).

If you didn't know about this method, you might think that to replace an existing tile floor, you have to chisel out the old tile and start over again. But this way is much simpler. In addition to saving labor, it has the advantage that you don't jeopardize the integrity of the existing drain and shower pan by chiseling.

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