

Installing a Tile-Shard Floor

By Dan Phillips

Really, where would we be without floors? We'd be standing on the ground, kind of like camping out. Generally, when people the world over think of a house, they include the concept of a floor in their vision. Everyone needs to stand on something. It might as well be a floor—especially one that you like.

Options available in the marketplace are all the standard ones—carpet, vinyl, tile and wood, with wood and tile being head and shoulders above the rest. And you can create your own tile floor, which will have a half-life of approximately one millions years. No kidding.

Here is a test:

1. Do you have to be a rocket scientist to install tile?
2. Is it difficult to sip coffee while you're working on your tile floor?
3. Does it hurt tile to put an area rug over tile?
4. Must we own a vacuum to clean tile?
5. Is it difficult to find salvage tile?
6. Is it easier to clean spilled spaghetti sauce from carpet, rather than tile?
7. Is it possible to tile over carpet?
8. Is the tool investment numbingly expensive?
9. Do vinyl and carpet last longer than tile?
10. Does wonderful music interfere with installation of tile?

These were rhetorical questions, meaning that if you ask for the answers, you automatically flunk.

Now, let's get down to business. Tile has a shiny side (the top) and a dull side (the bottom).

Tile is usually installed over concrete, or over wood with a special underlayment designed for tile setting. Underlayment comes in a number of brand names, but all you have to do is ask the guy at the building supply store what is a good underlayment for tile. I personally use salvage Hardi board. It's free, and the goo that you use to set tile, known as "thin set mortar," sticks to it quite readily. (If you spot a contractor putting Hardi board on a house, stop by and ask if you can have the scrap.) If you use an underlayment, simply glue and screw the underlayment to the wooden floor.

Thin set mortar ("goo") comes in a variety of types, with directions on the bag. Again, ask the guy at the counter what would be good for you. He might suggest an additive to make it stronger, albeit a bit more expensive.

There are a few tools you need. A “toothed” trowel is handy, but not necessary. A nice big sponge is handy, but not necessary. Something to stir with is handy, but it does not have to be sterling silver. Two buckets are appropriate—one to mix the thin set mortar, and one with clean water to keep things tidy. Ok, you’re ready.

Put some of the dry thin set mortar in a bucket, and add water (or the additive if he talked you into it). Stir it up until there are no lumps, and it has the consistency of very thick gravy. Coffee break. You see, after you mix the thin set mortar with water, you need to let it sit for ten to fifteen minutes, before stirring it again. It’s called letting it “slake.” (Tile-setters are very proud of that term, and will slide it into a conversation either to test your curiosity, or to wave a credential. After you finish, you will be able to do the same.)

Once the goo slakes, slather it onto the underlayment with your toothed trowel, or a bit of hard plastic. The reason for the toothed trowel is so that—especially with large tiles—air is allowed to escape and there is maximum contact of the thin set mortar with the back of the tile. If you don’t have a toothed trowel, simply squish the tile into the thin set mortar and wiggle it until you know there is good contact. Lift one up occasionally to check. If there are voids, perhaps it would be good to butter the back of each tile with a bit of thin set mortar, before putting it down. The spaces between the tiles are known as “grout lines.” If you’re setting full tiles, you can buy little plastic spacers that will help you keep track. Thinner grout lines are better.

And there will be squeeze-out. It is important to sponge the squeeze-out off the surface of the tile (otherwise it will harden on the surface of the tile). Leave a slight dip between tiles to make room for another material known as “grout,” which fills in between the tiles, and is available wherever you bought the thin set mortar. It comes with and without sand. Get the grout *with* sand for your first project. Let the thin set mortar dry completely—a couple of days.

Mix the color of grout you want just like thin-set mortar, and let it slake. Once the grout has slaked, squish it into the cracks between the tiles. Here is where a rubber trowel is a good investment—probably about 5-10 dollars. It allows you to not only squeeze the grout into the cracks, but also to squeegee the excess off the surface of the tile before wiping with a clean sponge. Once the grout has dried thoroughly, you can clean off any haze with a dilute solution of muriatic acid (rubber gloves, lots of ventilation), followed by sponging with clean water. Once that is try, brush a special “grout sealer” onto the grout, and sponge off. When it’s dry, it is time to spill spaghetti sauce.

When you design your floor, you can use square tiles and make them smaller when necessary with a tile cutter (ask the guy at the counter), or you can hit them with a hammer and make them smaller for a tile-shard floor. I personally prefer the shard floor, since you can use whatever is available, giving a random pattern, or whatever design you choose.

Pilot studies are always a good thing. Give yourself a learning curve. Pretty soon, you’ll be advising the whole neighborhood on tile floors.

