

Replacing a Broken

With a little care and the right tools, it's easy to make a fast fix in a flawed floor

BY JANE AEON

It was bound to happen. The new floors have been finished for less than a week, and someone already has dropped a hammer on the kitchen's tile floor. Unless the tile guy is still on the job, you're either going to wait a long time or fix it yourself.

Luckily, it's a fairly easy fix, as long as you use the right technique. Although you can use a hammer and an old chisel to break out the damaged tile, this technique can be risky. Within grout joints tighter than $\frac{3}{16}$ in., hammer blows can chip or crack adjacent tiles. Hammering also can pulverize the substrate beneath the damaged tile.

Occasionally, I use a hole saw to cut out the center portion of a cracked tile. This technique is good for removing soft-bodied tile. It's usually a slow process, but I'm left with a hole in the tile that makes it easy to pry with the tip of a chisel or a screwdriver.

My preferred technique, however, is to use an angle grinder outfitted with a 4-in. diamond blade made by Pearl Abrasive (\$42; 800-969-5561; www.pearlabrasive.com) and a shop vacuum. This technique is good for thick, soft-bodied tiles such as saltillo, but it works on

1. Isolate the victim. To keep the neighboring tiles intact, the first step is to score the grout lines with a utility knife. A few light passes do the trick.

2. Protection is prevention. Before cutting, it's a good idea to mask off any nearby cabinets or furniture with plastic and tape. On the floor, angle brackets taped to the surrounding tiles protect them from inadvertent slips of the grinder's blade.



Tile

3. Diagonal cuts open up the tile. With both hands firmly holding the grinder, the author carefully plunges the blade into the tile's center and cuts diagonally, then along the tile's sides. A helper holds the vacuum hose to catch the dusty exhaust.

4. A junky tool still has its uses. Using a hammer and an old chisel or putty knife, the author works from the outside toward the tile's center, carefully prying out the pieces.



5. Make a clear space. After the tile is removed, all old thinset and grout are scraped from the substrate, which then is vacuumed clean.

6, 7. Back to square one, again. After making sure the replacement tile fits, the author mixes a small batch of thinset, trowels it into the space (left), and sets the tile. After the thinset dries, the tile can be grouted.

others as well. The tile must be larger than 4 in., or there won't be room for a 4-in. grinder blade.

Basically, the trick is first to isolate the tile from neighboring tiles by removing the surrounding grout line, then carefully break the tile into pieces and remove it. Using a grinder can be messy unless you keep a vacuum nozzle trained on the dust stream. I mask off any surrounding cabinet faces or furniture, and also protect neighboring tiles with sheet metal or plywood in case I overcut. I mask off myself as well, donning safety glasses, a dust mask, and hearing protection.

I start by making diagonal cuts, then make separate cuts that run parallel to the edges. The parallel cuts along the tile edges make it possible to position a chisel from the edge

of a tile facing in so that the neighboring tile is not damaged. This technique is good for removing tiles with tight joints, like marble. There's also a cordless 3/8-in. saw made by Makita (www.makita.com; 800-462-5482) with a slightly smaller diamond blade that comes in handy; I also use a Dremel tool fitted with a small #7134 diamond-point bit (www.dremel.com; 800-437-3635) in the corners where the grinder can't reach.

Once the tile is removed, I scrape out any remaining thinset and vacuum the substrate. With fresh thinset and a new tile, the job is finished, except for the grouting work. □

Jane Aeon is a tile contractor in Berkeley, Calif. Photos by Charles Bickford.

continued



Reader Response

Diamond wheels are dangerous

I couldn't help noticing that Ms. Aeon, in her very fine article "Replacing a Broken Tile" (*FHB* #168, pp. 68-69), is using what appears to be a 4½-in. DeWalt grinder to remove the tile. Be advised that DeWalt specifically warns against the use of the type-27 guard (the kind Ms. Aeon is using) when cutting with a diamond wheel.

DeWalt makes a two-sided guard (the DW4705) that provides much better protection. Having witnessed a diamond wheel come apart at high speed, I personally recommend and use the DW4705.

—LARRY SCHUETTE
McLean, Va.