HOMEOWNER REPAIR GUIDE

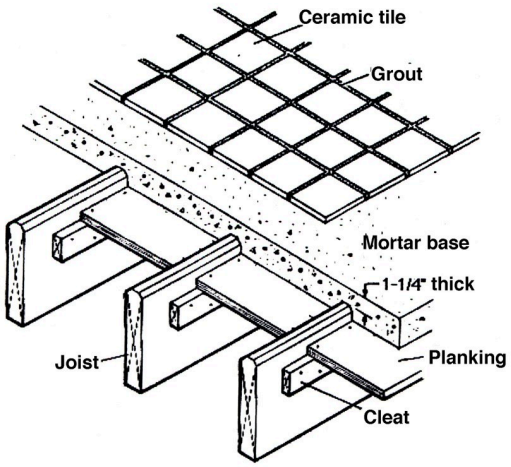
INSTALLING NEW CERAMIC TILE OVER OLD

For do-it-yourself repairs

IS YOUR FLOOR A CANDIDATE?

The ceramic tile on the bathroom floors of many older homes can be pretty worn out, with cracks and/or missing tiles. Replacing that tile can often be complicated by the original construction of the floor (see illustration). Many tile floors in Cleveland Heights and nearby communities (from 1900 through the 1960s) have a **mortar-bed subfloor**. These floors are usually solid and rigid, but sometimes settling or water seepage has caused a joist to bow, creating a long crack in the floor on top of it.

If your floor shifts or moves when you walk on it, the only real solution is to demolish the entire floor and install a new one. If the floor is sturdy (with no movement when walked upon), and the existing tile is firmly attached, it is possible to install a new layer of tile on top of the original flooring, so long as you prepare the surface properly.



Mortar-bed floor (cut-away view)

PREPARING THE SURFACE

1. Remove the toilet and any floor-mounted items like vanity cabinets and radiators, so that new tile can be installed under those items.
2. The existing tile and grout has to be clean and relatively smooth. Fill any cracks in the floor with **thinset mortar**.
3. Imbed **mesh tape** (like that used for drywall joints, but the kind you buy in the tile department) into the mortar over the crack; the tape will stabilize the filling, so the crack doesn't reappear in the new layer later on.
4. Thinset mortar can also be used to fill any areas where tiles are missing. Let these repairs dry before starting the tile layout.

LAYING THE NEW TILE

Lay out the new tile just as you would over any other surface, finding your center point and working out from there. You can snap chalk lines over the old floor, as needed, to serve as guides for your new tiles. When you install the tile, however, you won't use adhesive. Instead, you'll be bedding the tile in a new layer of mortar.

SEE ALSO

See the separate handout on “Ceramic Tile” for how-to procedures on layout and installation.

1. To get a better bond to the old flooring, combine **powdered thinset mortar mix** with **latex bonding additive** as the liquid, instead of water.
2. Apply the wet mortar with a **notched trowel** to a thickness of about 1/4”, and imbed the new tile in it.
3. Clean any excess off the tiles with a wet cloth, and let the mortar dry for 24 hours before adding **grout** around the tile.
4. Seal the joint along the base of the bathtub with **silicone caulk**.
5. When the grout is cured (in about three days), coat it with **silicone grout sealer**.

AT THE DOORWAY

Because the new floor will be higher than your old one, you may need to raise the **threshold** or replace it with a new piece where you terminate the floor at the doorway. (Thresholds are available at the place you purchased your ceramic supplies.) You may also need to trim the bottom of the door itself.

Home Repair Resource center

Home Repair Resource Center empowers homeowners to maintain their homes for sustainable and diverse communities.

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