

INSTALL TILE AND STONE FLOORING

Installing tile or stone flooring is a great way to enhance the beauty of your home or office. Below are the essential things you'll need to know during your tile or stone installation. For more detailed information on what to do before, during and after your tile installation, see the full **Installing Tile and Stone Flooring** guide on FindAnyFloor.com.



TOOLS AND MATERIALS

- | | |
|---|---|
| <input type="checkbox"/> ½" drill & mixing paddle | <input type="checkbox"/> Large sponges |
| <input type="checkbox"/> 4' or 6' Level | <input type="checkbox"/> Manual tile cutter |
| <input type="checkbox"/> Boxes of tile | <input type="checkbox"/> Notched, grooved and/or margin trowel(s) |
| <input type="checkbox"/> Buckets | <input type="checkbox"/> Putty knife |
| <input type="checkbox"/> Carpenter's square | <input type="checkbox"/> Razor knife |
| <input type="checkbox"/> Chalk line | <input type="checkbox"/> Rubber gloves |
| <input type="checkbox"/> Electric drill and mixing paddle | <input type="checkbox"/> Safety goggles |
| <input type="checkbox"/> Felt tipped pen and/or pencil | <input type="checkbox"/> Straight edges |
| <input type="checkbox"/> Floor scraper | <input type="checkbox"/> Tape measure |
| <input type="checkbox"/> Grout | <input type="checkbox"/> Thin-set mortar |
| <input type="checkbox"/> Grout float and/or rubber squeegee | <input type="checkbox"/> Tile nippers |
| <input type="checkbox"/> Grout sealer and brushes | <input type="checkbox"/> Tile smoothing stone |
| <input type="checkbox"/> Hammer or rubber mallet | <input type="checkbox"/> Tile spacers or wedges |
| <input type="checkbox"/> Knee pads | <input type="checkbox"/> Underlayment |
| | <input type="checkbox"/> Wet or dry tile saw, and/or rod saw |



PREPARE THE FLOOR

- You can install your new tile/stone over existing vinyl or tile/stone if it is structurally sound and this type of installation is approved by your manufacturer. Remove all other old floor coverings if asbestos are NOT present. If there is evidence of asbestos, install a plywood underlayment above the existing floor.
- Make sure your subfloor is level and free from all dips, valleys or imperfections (such as paint overspray). Scrape your subfloor clean. Sand down any high areas. Use self-leveling compound to level low areas.
- Wood subfloors must be structurally sound and free from movement.
- Installing concrete backer unit (CBU) board is highly recommended for all wood subfloors and when installing above existing flooring.
- Installing a crack isolation underlayment above concrete subfloors is highly recommended.
- Installing a sound abatement underlayment is highly recommended for multi-story residences.
- If desired, undercut door casings in the installation area.
- Remove all molding and doors.
- Sweep and vacuum your floor before installing your tile/stone.
- Always install safely using the proper safety equipment. Follow all manufacturer safety recommendations.
- Always check with your manufacturer before installing tile/stone over a radiant heating system.




TIPS AND TRICKS

- Use sanded grout for porcelain, ceramic and other tiles with grout joints larger than 1/8".
- Use unsanded grout for stone or other tiles with grout joints smaller than 1/8".
- Leave a ½" expansion perimeter around the entire installation area for interior and exterior installations.
- Leave ½" movement joints every 20'-25' for interior rooms. For exterior installation areas (sunrooms and patios), leave 3/8" movement joints every 8'-12'.
- Use tile from multiple cases throughout your installation so that your floor has balanced color variations.
- For straight and diagonal cuts, use a wet or dry tile saw.
- For curved cuts, use a rail saw or nippers.
- When cutting, gently direct the tile/stone towards the blade. Do not use excessive force.
- Use a smoothing stone to soften roughly cut edges.
- **Always work from the unfinished part of the floor and NOT from your newly installed tile/stone.**



INSTALL THE UNDERLAYMENT

Install your CBU board, crack isolation or sound abatement underlayment according to the manufacturer's recommendations.



APPLY MORTAR AND SET TILE OR STONE

When installing tile, you'll begin in the middle of the room and work towards the walls.

1. Snap a chalk line between the center point of each opposite wall to divide the room into four equal quadrants.
2. Layout a row of loose tile and spacers in all directions at the center intersection point. Evaluate the fit. If there are small cuts (less than ½") along walls, move the starting point down by ½ a tile width and re-snap the chalk lines. Snap chalk lines to divide the larger quadrants into smaller (approx. 2' x 3') sections.
3. Mix the thin-set mortar according to the manufacturer's instructions (usually on the bag).
4. Start in one of the center quadrants at the center intersection point.
5. Using a notched trowel, spread the mortar in a quadrant area but do not cover your chalk lines. For 16" tiles and up, back butter each tile with the flat part of your trowel to ensure 100% coverage.
6. Set the tile into the mortar. Add spacers, if desired. Work quickly so the thin-set does not skin over.

7. Upon completion of each quadrant section, tap tiles into the mortar with a rubber mallet. Use a level to ensure all tiles are level and flush with each other.
8. Remove any mortar that is in joints with margin trowel. Clean mortar from the face of tiles with a damp sponge.
9. Repeat steps 3 through 8 for the rest of the floor. Ensure each section grid is straight with the walls and level so that your whole floor turns out well.
Discard the mortar as it gets tacky (which usually happens after about 30 minutes) and prepare a new batch.
10. Let the mortar set and cure according to the manufacturer's recommendations (usually 48 to 72 hours).



APPLY THE GROUT

Once the mortar has set, it's time to grout the joints.

1. Remove all spacers throughout the floor. Vacuum or sweep the floor, if necessary. Remove any high spots in the mortar between each tile.
2. Apply a presealer if required by your manufacturer (such as for concrete pavers or Saltillo). Follow all the manufacturer's application instructions.
3. Mix the grout according to the manufacturer's instructions. Only mix as much grout as you'll use in 30 minutes. Always wear rubber gloves and any other equipment as recommended by the grout manufacturer.
4. Start in one corner of the room. Spread the grout across the face of the tile and force down into each joint with a squeegee or rubber grout float. Scrape away excess grout from the face of the tile.
Do not spread too much at a time as you do not want the grout to be too hard to clean off the surface of the tile. Discard grout after 30 minutes or when it becomes stiff. Never add water to soften stiffening grout.
5. Leave all movement joints ungrouted. You will fill these later with caulk.



CLEAN UP THE FLOOR

You can begin cleaning up the floor as soon as the grout begins to set, usually 15 to 20 minutes after you've applied it.

1. With a sponge and bucket of clean water, gently wipe away all grout from the face of the tile. Do NOT gouge the grout from the joints. Avoid dripping water into the grout joints during cleaning. Replace the water as it gets dirty.



INSTALL ON STAIRS

Safety is a major concern when installing tile or stone on stairs. For installation instructions and safety information, see the full **Installing Tile and Stone Flooring** guide on FindAnyFloor.com.



INSTALL AROUND BRICKWORK

When installing around brickwork (such as fireplaces) you can:

- Undercut the brickwork and install tile underneath. The brickwork will cover all expansion spacing.
- Install flush with brickwork and use end molding to hide the expansion spacing.



CAULK MOVEMENT JOINTS

Use a matching flexible caulk to fill all movement joints throughout the floor.



LET THE FLOOR CURE

Let the entire floor cure for 72 hours. Do not walk excessively or put anything on the newly tiled floor during this time.



INSTALL TRANSITIONS

Once your floor has cured, you can install your transition pieces to hide your expansion spacing at doorways as well as transition to other types of flooring. The following transition pieces can be used:

- **Bullnose Tile** – The rounded edge provides a smooth transition to similar height floors.
- **T-Molding** – For similar height floors (such as hardwood).
- **Reducer Strip** – For lower height floors (such as vinyl).
- **End Molding/Square Nose/Universal Edge** – For carpet, similar height floors or outside threshold transitions; also used around brickwork.

Tile transitions are either glued to the subfloor with a quality adhesive or secured using trim tracks.



INSTALL TRIM

Install all wall base, shoe base and quarter round to hide the expansion spacing around the perimeter of the room.



SEAL THE FLOOR

Sealing helps protect the grout as well as prevent stains, mildew and mold. Sealing is critical for tile or stone installed in wet areas such as bathrooms, kitchens or outdoors. Always follow your tile manufacturer's recommendations when choosing a sealant.