



FORUM® SOLIDS LUXURY TILE

GENERAL INFORMATION

Forum Solids tile products are designed to be installed in enclosed, heated areas only. The subfloor, all flooring material, and adhesive must be conditioned at a constant temperature between 68°F (20°C) and 85°F (29°C), for 48 hours prior to, during, and 48 hours after installation. Thereafter, maintain a room temperature between 55°F (13°C) and 100°F (38°C). **NOTE:** Exposure to extreme temperature variations can cause thermal expansion or contraction resulting in edge curl or gaps between tiles.

Tile cartons should be stacked no more than 5 cartons high to avoid distortion.

When installing tile from two or more cartons, check the code on the side of the cartons to ensure that the pattern and run numbers are the same. Mix tiles from several cartons to achieve the best appearance.

When arrows are printed on the back of each tile, install tile with arrows pointed in the same direction unless specifically instructed otherwise on a separate insert found in the carton.

Refer to “Congoleum Professional Installation Guide” (M0176) for details on installation procedures and subfloor preparation. To obtain a copy, contact Congoleum distributors, or write to Congoleum Corporation., Installation Dept., 861 Sloan Ave., P.O. Box 3127, Mercerville, NJ 08619.

TOOLS AND MATERIALS

- Congoleum AD-72 Wet-Set Adhesive
- 1/16" wide x 1/16" deep x 1/16" apart (1.6 mm x 1.6 mm x 1.6 mm) notched trowel
- 100-pound (45 kg), three-section, steel roller
- Chalk line and chalk
- Carpenter square
- Tile cutter (utility knife optional)
- Cutting board
- Tape measure or rule
- Kneeling board

⚠ WARNING: DO NOT SAND, DRY SWEEP, DRY SCRAPE, DRILL, SAW, BEADBLAST, OR MECHANICALLY CHIP OR PULVERIZE EXISTING RESILIENT FLOORING, BACKING, LINING FELT, ASPHALTIC “CUT-BACK” ADHESIVES, OR OTHER ADHESIVE. THESE PRODUCTS MAY CONTAIN **ASBESTOS FIBERS** AND/OR **CRYSTALLINE SILICA**. AVOID CREATING DUST. INHALATION OF SUCH DUST IS A CANCER AND RESPIRATORY TRACT HAZARD. SMOKING BY INDIVIDUALS EXPOSED TO ASBESTOS FIBERS GREATLY INCREASES THE RISK OF SERIOUS BODILY HARM. UNLESS POSITIVELY CERTAIN THAT THE PRODUCT IS A NON-ASBESTOS CONTAINING MATERIAL, YOU MUST PRESUME IT CONTAINS ASBESTOS. REGULATIONS MAY REQUIRE THAT THE MATERIAL BE TESTED TO DETERMINE ASBESTOS CONTENT.

Various federal, state, and local government agencies have regulations governing the removal of in-place asbestos containing material. If you are considering the removal of a resilient floor covering structure that contains or is presumed to contain asbestos, you must review and comply with all applicable regulations. Regulations outside the United States may vary.

Copies of the Resilient Floor Covering Institute Recommended Work Practices for the Removal of Resilient Floor Coverings are available from:

Congoleum Corporation
Installation Department
P.O. Box 3127
Mercerville, NJ 08619

or
Resilient Floor Covering Institute
401 East Jefferson Street
Suite 102
Rockville, MD 20850

SUBFLOOR REQUIREMENTS

Forum Solids is recommended for installation over properly prepared suspended wood floors and concrete on all grade levels.

The substrate must be clean, dry, smooth, structurally sound and free of paint, varnish, oil, grease, wax, solvent, curing compounds, and other foreign material that can affect the adhesive bond. Do not install tile in areas where excessive moisture, hydrostatic pressure, or alkali conditions exist.

CONCRETE SUBFLOORS

Concrete floors should be constructed with an effective moisture/vapor barrier. Before starting installations on concrete subfloors, a calcium chloride test should be performed to check for moisture emission. Moisture emissions should not exceed 3 pounds per 1,000 square feet (92.9 square meters) per 24 hours. A 72-hour bond test should be conducted, also.

WOOD SUBFLOORS

- Wood floors must be double layer construction, a minimum thickness of 1" (25.6 mm) and have a well-ventilated air space of 18" or more below the joist.
- Use a 4 mil polyethylene sheeting or other suitable ground cover to reduce moisture vapor emissions for wood floors constructed over a crawl space.
- Subfloor and/or underlayment must be smooth, dry, solid, free from movement and properly fastened.
- Countersink fasteners 1/32" (.8 mm) below the surface on new construction sites.
- Sand joints smooth.
- Gaps between underlayment panels that exceed 1/32" (.8 mm) must be filled with a portland-based, latex patching compound.

Double layer tongue-and-groove stripwood floors with boards up to 3" (76.9 mm) wide must be covered with a 1/4" or heavier underlayment panel. Rough floors, single-layer floors, and double-layer stripwood floors with boards wider than 3" (76.9 mm) should be covered with a minimum 1/2" (12.8 mm) thick underlayment.

Suitable underlayments include:

- APA Rated underlayment grade plywood with "sanded face."
- APA C-C plugged Ext. glued plywood with "sanded face."

Other panels may be suitable for use as underlayments for resilient floor coverings. Consult your supplier for recommendations and warranty information prior to performing the installation.

The responsibility for warranties and performance guarantees for the underlayment, regardless of the type, rests with the underlayment manufacturer and not with Congoleum.

MOLD AND MILDEW ISSUES

Prior to removing an existing floor following the RFCI Recommended Work Practices for Removal of Resilient Floor Coverings (unless state or local law requires other measures), if there are visible indications of mold or mildew or the presence of a strong musty odor in the area where resilient flooring is to be removed or installed, the source of the problem should be identified and corrected before proceeding with the flooring work. In virtually all situations, if there is a mold issue, there is or has been an excessive moisture issue. Visible signs of mold or mildew (such as discoloration) can indicate the presence of mold or mildew on the subfloor, on the underlayment, on the back of the flooring, and sometimes even on the floor surface. If mold or mildew is discovered during the removal or installation of resilient flooring, all flooring work should stop until the mold or mildew problem (and any related moisture problem) has been addressed.

In areas where flooding has occurred, it is recommended that damaged flooring be removed following the RFCI Recommended Work Practices for Removal of Resilient Floor Coverings (unless state or local law requires other measures). Any underlayment and subfloor should be allowed to thoroughly dry and, if necessary, cleaned, disinfected, and otherwise remediated consistent with the U.S. Environmental Protection Agency (EPA) guidelines referenced below. Any structural damage or signs of mold or mildew must be corrected before reinstalling resilient flooring. This may include for example replacement of the underlayment and/or subfloor.

For water damage caused by leaking fixtures, the source of the moisture leak must be located and corrected. Any structural damage must be repaired and any signs of mold or residual moisture must be addressed before replacing the resilient flooring in the affected area.

To deal with mold and mildew issues, you should refer to

the EPA guidelines that address mold and mildew. Depending on the mold and mildew condition present, those remediation options range from cleanup measures using gloves and biocide to hiring a professional mold and mildew remediation contractor to address the condition. Remediation measures may require structural repairs such as replacing the underlayment and/or subfloor contaminated with mold and mildew as a result of prolonged exposure to moisture.

The EPA mold guidelines are contained in two publications "A Brief Guide to Mold, Moisture and Your Home" (EPA 402-K-02-003) and "Mold Remediation in Schools and Commercial Buildings" (EPA 402-K-01-001). Appendix B of the "Mold Remediation in Schools and Commercial Buildings" publication describes potential health effects from exposure to mold, such as allergic and asthma reactions and irritation to eyes, skin, nose and throat. These publications can be located on EPA's website at www.epa.gov/iaq/molds/

PREPARING THE AREA

Remember to condition all flooring material, subfloor, and adhesive at 68°F (20°C) to 85°F (29°C) for 48 hours prior to, during, and 48 hours after installation.

- Move all furniture, appliances, and fixtures from the room.
- Remove all binding strips or other restrictive molding from doorways, walls, etc.
- For a more professional-looking job, undercut the wood door casing where possible so that the flooring can be slid under it.

FLOOR LAYOUT

To start the layout, place a mark in the center of the floor at each end of the room. Then connect the marks by snapping a chalk line down the center of the room.

Next, divide the room into equal quadrants. To do this, locate the center point of the chalk line and snap a perpendicular line. Use the 3', 4', 5' method to form a right angle.

Make a dry layout in one quadrant along the center and perpendicular chalk lines. Measure the distance between the last whole tile and the wall. If the distance in either row is less than half a tile, adjust the starting point and snap a new chalk line 6" away from the original chalk line. This will provide a balanced layout with larger cut tile around the perimeter.

ADHESIVE APPLICATION—AD-72 ADHESIVE

Congoleum AD-72 is a wet-set adhesive that dries hard to resist thermal expansion and contraction of tile. Because it is a wet-set adhesive, AD-72 can only be used on porous surfaces such as wood and concrete. AD-72 will not dry when applied over old resilient floors. Therefore, old resilient floors should be either removed or covered with wood underlayment.

Starting in a section farthest from the entrance doorway, spread adhesive in an area no larger than what can be covered in 20 minutes. Allow the adhesive to tack up for about 5 minutes after applying it with a 1/16" x 1/16" x 1/16" (1.6mm x 1.6mm x 1.6mm) square notch trowel.

TILE INSTALLATION

When installing Forum Solids, two locations can be used to start the installation:

- Start installing tile at the center of the room, working out toward the walls.
- An alternate method to starting at the center of the room requires shifting the center lines out toward the wall farthest from the doorway. Position the new lines between 2' to 3' (61 cm to 91 cm) from the wall depending on your reach and the tile layout. This method will help to reduce tile shifting in wet adhesive and eliminates the need to work on freshly laid tile. The last row of tile should be fit net to the wall to further reduce the possibility of shifting.

Complete one small section of the room at a time. Press tile firmly into the adhesive. **DO NOT SLIDE.** **NOTE:** Skinned-over adhesive must be scraped up and replaced with fresh adhesive.

Immediately after completing each section, roll the floor with a 100-pound (45 kg), three-section, steel roller. Avoid stepping or working on freshly laid flooring. A kneeling

board will be required to complete the final section. Re-roll the entire floor after one or two hours. Do not wash the floor for a least 48 hours. Restrict traffic for 24 hours.

CUTTING TILE TO FIT

The last row of tiles will need to be cut to fit to walls and other vertical surfaces.

- **Straight Cuts** — Place loose tiles directly over the top of the last full row of tile making sure all edges are lined up. Using a whole tile as a measuring device, position one edge against the wall and mark the loose tile with a pencil along the opposite edge.

Next, place the marked tile on a cutting board. Using a carpenter square as a guide, score the pencil line deeply with a sharp knife. Break or cut tile along the score mark. Caution: Keep fingers away from the knife's or tile cutter's blade to avoid injury. Install the tile with cut edge against the wall.

- **Irregular Shapes** — Before spreading adhesive, make a pattern or template out of heavy paper or cardboard to fit to irregular shapes such as door trim, pipes, etc. Trace the pattern onto the tile and cut with a utility knife or coping saw.

Replace the base moldings and return appliances and furniture to the room by rolling or sliding them over strips of hardboard.