Congoleum® EVOLUTION® LUXURY TILE

GENERAL INFORMATION

The importance of proper temperature at the time of installation cannot be over-emphasized. The subfloor, all flooring material, and adhesive must be conditioned at a constant temperature between 65°F (18°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 tile.

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.

Perimeter grout lines will vary in width from tile to tile. This variation has been designed into your floor to create a more realistic visual of a hand-set tile and to help conceal seams between tile.

TOOLS AND MATERIALS

- Congoleum DS100 DuraSet Adhesive
- Notched trowel (1/16″ wide, 1/32″ deep, 1/32″ apart)
- 100-pound, three-section, steel roller
- Chalk line and chalk
- Carpenter square
- Utility knife (tile cutter optional)
- Cutting board
- Tape measure or ruler

SUBFLOOR REQUIREMENTS

Tile may be installed over dry concrete on all grade levels, suspended wood floors and qualifying old, smooth, non-cushioned resilient floors that are fully adhered and securely bonded. **All surface imperfections should be leveled with a portland cement-based latex patching compound or underlayment. The use of gypsum-based latex patching compound or underlayment is not recommended by Congoleum and may result in bond failure.**

NOTE: The use of a high-quality latex primer which is specifically designed to improve adhesion may be required over wood, porous concrete and patching compounds. The primer will help to seal the surface and tie down dust that can interfere with the adhesive bond.

Concrete subfloors must be clean, dry, and free of paint, efflorescence, curing, hardening and parting compounds, sealers, and old adhesive residue. Congoleum does not recommend the installation of tile where excessive moisture, vapor emissions, hydrostatic pressure or alkali conditions exist. Installation failures resulting from these conditions are not warranted by Congoleum.

Wood subfloors must be structurally sound and free of movement with at least 18″ of well-ventilated air space below. Single layer floors and double stripwood floors must be covered with a 1/4″ or heavier underlayment to achieve a total subfloor thickness of 1″. Single layer stripwood floors should be covered with a minimum 3/8″ underlayment.

Approved underlayments include APA Rated Underlayment grade plywood (specify “Fully Sanded Face”), APA C-C Plugged Exterior grade plywood, lauan plywood Type 1 Grade BB (5.2 mm minimum thickness). 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. Fasten underlayment with 1¼″ ring-shank nails or approved divergent staples, spaced as follows:

Underlayment Thickness	Interior	Along Edges
1/4″	4″	2″
3/8″ or heavier	6″	3″

Sand underlayment joints level and fill gaps wider than 1/32″.

EXISTING RESILIENT FLOORS

⚠ 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 RESIDUE. THESE PRODUCTS MAY CONTAIN **ASBESTOS FIBERS** AND/OR **CRYSTALLINE SILICA.** AVOID CREATING DUST. INHALATION OF SUCH DUST CONTAINING RESPIRABLE FIBERS OR CRYSTALLINE SILICA MAY CAUSE CANCER AND RESPIRATORY TRACT DISEASES. 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 AND MAY GOVERN THE REMOVAL AND DISPOSAL OF MATERIAL. WHENEVER POSSIBLE, EXISTING FLOORING SHOULD BE LEFT IN PLACE AND THE NEW FLOOR INSTALLED OVER THE TOP. IF YOU MUST REMOVE OLD FLOORING MATERIAL, CONTACT YOUR RETAILER OR CONGOLEUM CORPORATION INSTALLATION DEPARTMENT, P.O. BOX 3127, MERCERVILLE, NJ 08619, FOR A COPY OF RECOMMENDED WORK PRACTICES. THESE PRACTICES SHOULD BE FOLLOWED.

Various federal, state, and local government agencies have regulations governing the removal of in-place asbestos containing material. If you contemplate 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 (RFCI) *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

Please note that the RFCI Recommended Work Practices are subject to change as new practices are incorporated. It is your responsibility to determine that the recommended work practices you use are those in effect.

Whenever possible, it is desirable to leave the old flooring in place with the last alternative being removal. Suitable old, resilient floors should be smooth, non-cushioned, single layer, fully adhered, securely bonded, and in good condition. All floor polish, wax, and finish should be stripped with a liquid stripping solution following label instructions.

Tiles can be installed over embossed non-cushioned and thin cushioned vinyl flooring that is covered with wood underlayment (provided the subfloor is suspended wood) or prepared with a latex modified portland cement-based embossing leveler.

Do not install over soft, heavy cushioned floors, tile installed on concrete below grade level, or existing self-adhered flooring.

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 65°F (18°C) to 85°F (29°C) for 48 hours prior to, during and after installation.

- Move all furniture, appliances, and fixtures from the room.
- Remove all binding strips or other restrictive moldings from doorways, walls, etc.
- For a more professional-looking job, undercut the wood door casing where possible so that the tile 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, using the 3-4-5 method or a carpenter square as a guide. (Figure 1).

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 away from the original chalk line. (Figure 2) This will provide a balanced layout with larger cut tile around the perimeter.

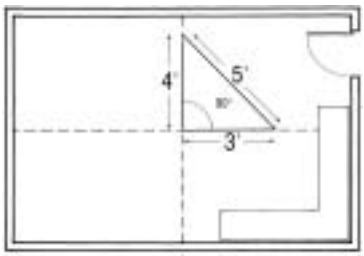

Figure 1 — Room layout.

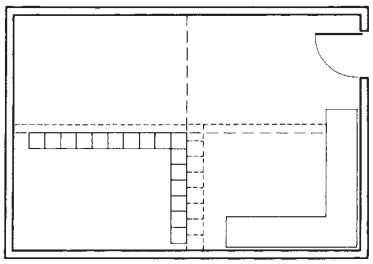

Figure 2 —Adjusting lines.

ADHESIVE APPLICATION - DS100 DURASET ADHESIVE
Caution: EYE AND SKIN IRRITANT. PROVIDE ADEQUATE VENTILATION.

DS100 DuraSet Adhesive is required for installing Congoleum Evolution Luxury Tile. Spread the adhesive over one-half of the subfloor and a few inches beyond the chalk line with a notched trowel. The recommended notch size is 1/16″ wide, 1/32″ deep, 1/32″ apart.

Figure 3 —Notched trowel.

Periodically check the trowel for notch wear. Allow the adhesive to dry (approximately 45 to 60 minutes) before installing tile. Drying time can vary depending on temperature, humidity and substrate conditions. Press a finger onto the adhesive. If it is firm and does not transfer to your finger, the adhesive is dry and ready for tile installation.

TILE INSTALLATION

Carefully position the first tile into the adhesive at the intersection of the chalk line (Figure 4).

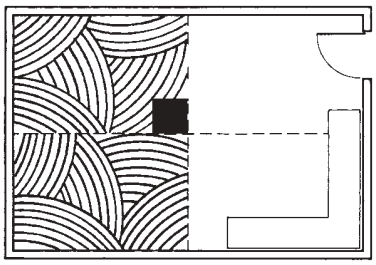

Figure 4 — Positioning tile.

Complete one-half of the room at a time. Remember to install tile with arrows pointing in the same direction unless instructed otherwise. Position tiles at a low angle into the adhesive tightly against previous tiles with corners lined up. Press tile firmly into the adhesive. DO NOT SLIDE. Continue, working toward the walls positioning each tile tightly against the previous one with corners lined up. Spread the adhesive on the second half of the floor so it can dry while you are cutting and fitting the last row of tiles along the wall. Before spreading the adhesive remember to move all supplies and tile onto the installed floor so they are accessible.

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 (Figure 5).

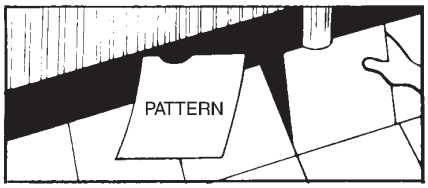

Figure 5 — Straight cuts.

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 knife blade to avoid injury. Install the tile with cut edge against the wall.

- **Irregular Shapes** — Make a pattern or template out of heavy paper or cardboard to fit to irregular shapes such as door trim, pipes, etc. (Figure 6). Trace the pattern onto the tile and cut with a utility knife or coping saw.

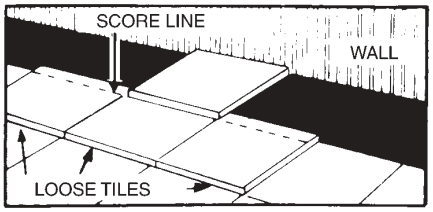

Figure 6 — Irregular cuts.

Immediately after installing the tile, roll the entire floor with a 100 to 150-pound, three-section, steel roller. Roll the floor across tile joints in both directions.

Tile installed with DS100 DurSet Adhesive can be walked on immediately. Wait 48 hours before washing. Adhesive smears can be removed with mineral spirits or charcoal lighter fluid. **Caution:** Solvents are hazardous materials and should be used with caution in accordance with the manufacturer's label instructions.

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