

PRODUCT DESCRIPTION

Endurance SmartLink and Carefree Plank are floating flooring systems that utilize an attached adhesive strip to connect the planks together. No additional adhesive is required. You simply connect the planks together by pressing the edges into the adhesive strip. The planks bond to each other, not to the floor.

WARNING

Existing Resilient Flooring

DO NOT SAND, DRY SWEEP, DRILL, SAW, BEADBLAST, OR MECHANICALLY CHIP OR PULVERIZE EXISTING RESILIENT FLOORING, BACKING, LINING FELT, ASPHALTIC “CUTBACK” ADHESIVE, 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.

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:

Resilient Floor Covering Institute
115 Broad Street
Suite 201
LaGrange, GA 30240
www.rfci.com

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. 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 clean up measures using gloves and biocide to hiring a professional remediation contractor to address the condition. Remediation measures may require structural repairs such as replacing the underlayment and/or subfloor contaminat-

ed 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 www.epa.gov/mold.

LEAD PAINT

Installers should follow the EPA’s 2008 Lead-Based Paint Renovation, Repair and Painting (RRP) Rule (as amended in 2010 and 2011). Under the rule firms performing renovation, repair and painting projects that disturb lead-based paint in homes, child care facilities, and kindergartens built before 1978 must be EPA- or state-certified and must use certified renovators who follow specific work practices to prevent lead contamination. This includes in-house maintenance staff and many types of outside contractors.

SAFETY PRECAUTIONS

Safety for yourself and others on the job site is your responsibility as a professional flooring installer. Read and observe the following safety precautions.

- Keep work areas free of obstructions, such as tools, scraps or loose tiles, and dispose of scrap materials promptly and properly to eliminate a slip or trip hazard.
- Always use the correct lifting practices.
- Use heavy-duty extension cords and keep them in good repair.
- If using minerals spirits as suggested in this guide, **CAUTION: Minerals spirits is a flammable material. Read and follow cautionary instructions on the labels of these products.**
- Wear protective equipment when appropriate such as safety glasses, respirators, NIOSH-designated dust masks, knee-pads, gloves, etc.

Read and follow the safety precautions and warnings printed on the label of the installation accessory products being used. Obtain the appropriate Safety Data Sheets (SDS) for information that may be required for products which may contain hazardous materials. You may obtain an SDS for Congoleum products by

calling or writing to your Congoleum distributor or contacting Congoleum Corporation, Installation Department, P.O. Box 3127, Mercerville, NJ 08619, or calling at 609-584-3805.

- Remove all wood, metal or vinyl transition strips, base moldings or other restrictive molding from doorways, walls, etc.
- Undercut wood door casing where possible so that the flooring can be slid under it.

GENERAL INFORMATION

- Flooring installation should be scheduled after all other trades have completed their work.
- The HVAC systems must be in operation for at least 7 days prior to flooring installation and thereafter to maintain a constant temperature.
- It is important to maintain proper temperature at the time of installation in order to minimize thermal dimensional changes. 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 the room temperature between 55°F (13°C) and 85°F (38°C). Failure to condition the materials and subfloor or maintain proper temperatures can lead to plank joint peaking or separation. Congoleum will not assume liability for installation or performance failures resulting from improper temperatures.
- Un-opened cartons of flooring should be neatly stacked in the room (maximum 10 cartons high) where they will be installed during the acclimation period. Avoid placing cartons in direct sunlight during acclimation. Open cartons just prior to installation.
- Install base cabinets, island cabinets and vanities prior flooring installation when installing flooring in a floating application. Do not install cabinets over the floating floor as it will restrict movement.
- When using flooring from two or more cartons, make sure pattern and run numbers found on the carton are the same.
- Install flooring from several different cartons to achieve a random appearance.

TOOLS AND MATERIALS

- Steel hand roller
- 100-pound, 3-section, steel roller
- Chalk line
- Carpenter square
- Sharp utility knife and replacement blades (tile cutter optional)
- Cutting board
- Tape measure
- Pencil

PREPARING THE AREA

- Move all furniture, appliances, and fixtures from the room.

SUBFLOOR INFORMATION

The existing subfloor type and condition, preparation involved, cost and replacement ease, are all important considerations when selecting the best installation method for a particular job. The chart below provides a list of common subfloors and requirements for floating and fully adhered installation methods.

Subfloor Surface	Specification
Suspended Wood subfloor over joists or trusses up to 19.2" OC over 18" of well-ventilated air space	Single layer Sturd-I-Floor rated panel 23/32" or heavier, or double layer construction, minimum 1" thick.
Wood panel underlayment	Plywood and other hardwood veneer panels, oriented strand board, NPA rated particle board. The surface must be smooth and structurally sound.
Concrete, on, above and below grade	ASTM F1869 - MVER not to exceed 5 lbs. /1000 ft ² /24 hrs. ASTM F2170 – Relative Humidity not to exceed 80%.
Lightweight Concrete or Gypsum Topping with a minimum 100 lb. dry density and minimum 3000 psi compression rating	Must be smooth, dry and in sound condition. Repair all cracks, holes and damaged areas.
Radiant Heated Floors	The temperature of the floor should be limited to 70°F (21°C) for 48 hours before, during and 48 hours after installation. There after the temperature should be raised gradually to the desired temperature. The maximum floor temperature should not exceed 85°F (29°C).
Existing Resilient Flooring and Tile	Must be single layer of flooring, fully adhered and in good condition. Do not install over heavy cushioned or cushioned backed flooring or tile installed below grade.
Ceramic, Marble and Granite	Tile must be well bonded. Grind high spots and fill low areas and grout joints to a smooth, flat surface with a latex modified Portland cement underlayment.
Patching Compound	Portland cement-based compound such as Mapei Plani-Patch, Ardex Feather Finish or equal.

SUBFLOOR PREPARATION

All subfloor surfaces must be clean, dry, smooth, and structurally sound. The surface should be free of contaminants or reagents that can interfere with adhesion or cause discoloration to the floor such as paint, wax, oil, grease, solvent, adhesive residue, curing and parting compounds, sealers and surface hardeners on floors that are to be directly bonded to the subfloor only. Floating installations over UnderFlor and UnderFlor Acoustic can be installed over paint, dry adhesive residue, wax, curing and parting compounds, sealers and surface hardeners.

Deviations in the flatness of the subfloor cannot exceed 1/16" in 1' or 3/16" in 10'. Regardless of the installation method, all surface imperfections should be leveled with a Portland cement-based patching compound. Gypsum-based patching compounds are not recommended.

Wood floors must be structurally sound and free of movement with at least 18" (46 cm) of well-ventilated air space below. An effective vapor barrier laid on the ground surface must be used in a crawl space. Do not install flooring over wood subfloors laid directly on concrete or over sleeper construction laid over concrete subfloors. Sand joints smooth and set fasteners 1/32" (.8 mm) below the surface. Fill joints wider than 1/32" (.8 mm) when bonding flooring directly to the subfloor or over 1/8" on floating floors installed over UnderFlor or UnderFlor Acoustic. Rough, weathered or damaged subfloor panels must be sanded smooth or covered with a suitable underlayment panel. Always follow underlayment manufacturer installation recommendations.

Congoleum will not assume responsibility for claims related to subfloor problems regardless of the underlayment or subfloor material used.

Concrete floors must be constructed, finished and cured in accordance with the latest guidelines of the American Concrete Institute (ACI) 302 Guide for Concrete Floor and Slab Construction and ASTM F710 "Standard Practice for Preparing Concrete Floors to Receive Resilient Flooring". The concrete slab must be protected from ground moisture with an effective and intact vapor retarder. Moisture vapor emissions must not exceed 5-lbs. /1000 ft.²/24 hrs when tested with anhydrous calcium chloride test kits in accordance with ASTM F1869 or be greater than 80% RH (relative humidity) when tested with in situ probes in accordance with ASTM F2170. Surface pH must be between 5 and 9. Level rough or uneven surfaces, cracks and control joints with a Portland cement-based patching compound. Do not

install flooring over expansion joints or in areas with excessive moisture vapor emissions, known hydrostatic pressure problems or high alkali conditions exist.

Existing resilient floors must be single layer, fully adhered and well bonded over an approved subfloor. Remove all wax, floor finish or polish prior to installation. Use a Portland cement-based patching compound to level embossed floors. Installation over existing flooring may reduce the indentation resistance of the new floor.

Adhesive residue must be completely removed on installations where flooring will be directly bonded to the subfloor. Refer to the Resilient Floor Covering Institute (RFCI) Recommended Work Practices for procedures involving adhesive removal. Do not install new flooring over loose laid or perimeter fastened floors, soft or heavily cushioned floors, cushioned-backed flooring, self-adhered tile. Installation over existing flooring may reduce the indentation resistance of the new floor.

INSTALLATION RECOMMENDATIONS

Determine the direction that planks will be installed in the room. Normally the long direction of the plank will be installed parallel with the long direction of the room. To balance the flooring in the room, mark the center of the floor. Measure the distance from the mark to the wall. Divide this measurement by the plank width (6"). If the remainder is less than half a plank width (3"), then add 3" to the remainder to determine the width of the plank in the first row.

Example: Room width 12'-2" or 6'-1" on each side of the center mark 6'-1" (73") divided by 6" equal 12 with a remainder of 1". Since 1" is less than one half of the plank width, add 3" to the remainder for a starting plank width of 4".

Check to make sure that the joints in the finished floor offset joints in the underlayment or existing flooring by at least 2". Adjust the layout if necessary.

Lay the first row of planks along the wall starting in the left corner with the adhesive strips facing out away from the walls (Fig. 1).

Allow a 1/8" expansion gap between the edge of the planks and the wall, base cabinets and any other vertical surfaces. Remove the paper liner from the adhesive strip at the end of the first plank and secure the end of the next plank by pressing down

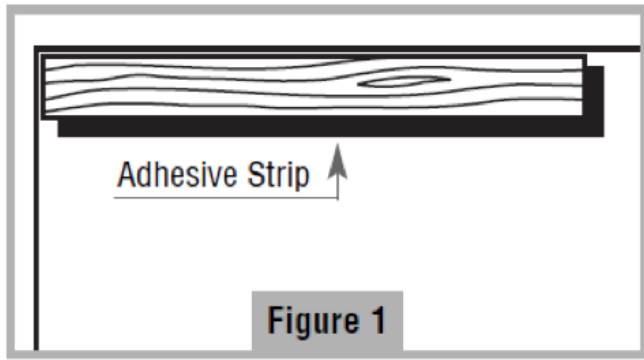


Figure 1

on the planks. Caution: The paper liner is slippery. Place it into the trash immediately after it is removed from the adhesive strip to avoid a slip hazard. Protect the exposed adhesive strip from dust and foot traffic. Do not remove the paper liner until you are ready to cover the adhesive strip with another plank. Continue to install the planks in the first row including the cut piece at the end of the row while maintaining the 1/8" gap around the perimeter. Use a steel hand roller at the joints to press the planks firmly into the adhesive strip.

Cut planks with a sharp utility knife and a straight edge or square. For more intricate cuts make a paper template of the area and transfer it to the plank.

Caution: Use extreme caution when using a knife to avoid injury. Always keep fingers and hands away from the cutting path. Keep children and pets away from the work area.

Lay the second row starting in the left corner with a plank cut 2/3 the length or about 24" (Fig. 2).

Place the cut end against the wall. Remove the paper liner from the installed plank in the first row and place it in the trash. Lay the plank by holding one end up while positioning the other end and edge into the adhesive strip against the previous laid plank to achieve a tight joint. Insert the planks at a low angle to the floor and do not slide planks together. If adjustments are required, lift the plank off the adhesive strip and reposition it. Complete the second row including the cut piece at the end of the row. Continue to use a steel hand roller to secure the planks in the adhesive strip and level the joints.

Start the third row with a plank cut to 1/3 the length; about 12" (Fig. 2). There after maintain a random layout with end joints staggered by at least 8". Always put the cut end against the wall.

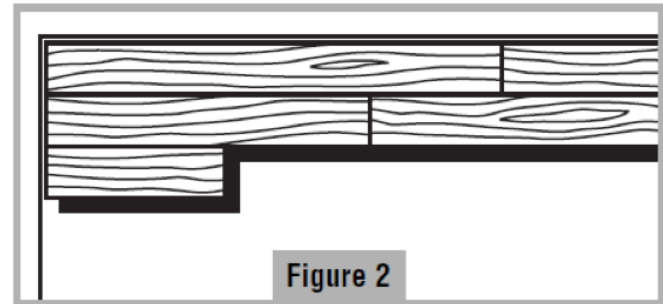


Figure 2

Plan the layout to avoid using small pieces (less than 6") at the ends of each row. Remaining cut pieces, 6" or longer, from each row can be used as starters in the next row. Once you have completed 3 or 4 rows, it is easier to work from on top of the installed plank.

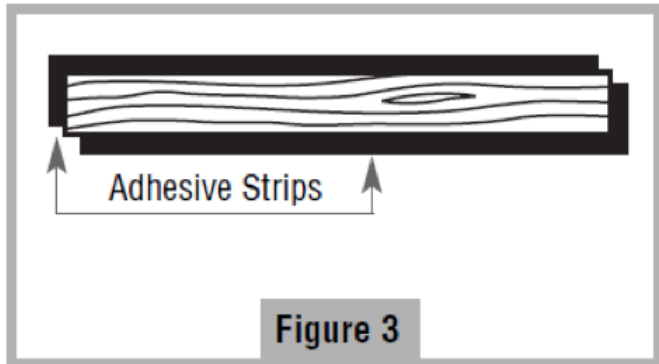
Continue to install the planks by laying each plank in place without sliding it. Make sure the joints are laid together tight; if necessary, lift the plank and re-position it to close any open joints.

Measure the space between the last whole plank and the wall and subtract 1/8". Mark the plank and place it over a cutting board. Carefully score the top surface of the plank, release liner and adhesive strip where it will be cut. Bend the plank at the score mark until it breaks. Cut the tape on the bottom side at the score mark to separate the pieces. Install the plank with the cut end against the wall.

After completing the installation roll the entire floor in both directions with a 100 pound 3-section steel roller. Use a steel hand roller to secure the edges and ends in the adhesive strip and level the joints.

Intricate Room Layouts– Some installations with multiple rooms, closets, intricate layouts or alcoves may require changing the direction of the planks. This can easily be done in one of two ways. Use CF910 Film (3" wide x 9" lineal feet per roll) and cut the exact amount of film that you need. Or remove the adhesive strips from a plank and place them along the edge and end of the plank where the direction will change. Carefully position the

adhesive strip centered along the edge and end of the plank without overlapping the strips. When done correctly, the plank(s) will have an adhesive strip on both edges and ends (Fig. 3). Continue to install planks in the opposite direction as required.



Bathrooms – Only when the bathroom is installed as a separate room can the toilet be set on the planks. Always fill the gap around the entire perimeter and at fixtures with a high quality acrylic caulking to prevent water from seeping under the floor. Caulking should be used even when the perimeter will be covered with trim.

Stairs – Flooring can be installed fully adhered on stairs with UnderFlor DS100 Adhesive. Simply remove the adhesive strip from the back of the plank and trim the planks to fit. Apply the adhesive with the trowel blade adaptor provided and allow the adhesive to dry to a tack prior to installation. Cover the stair nose with a vinyl, rubber or metal stair nose molding.

IMMEDIATELY AFTER INSTALLATION

- If necessary, use lighter fluid, paint thinner or mineral spirits applied with a clean white cloth to remove scuffs marks and adhesive residue. Keep traffic off treated area for 30 minutes.
CAUTION: Lighter fluid, paint thinner and mineral spirits are flammable. Carefully read and follow cautionary information on label.
- Install the base moldings and fasten the trim to the wall not to the subfloor. Do not drive fasteners into the floor or underlayment.
- All finish trim and transition moldings must be installed so they do not bind or restrict the finished flooring from moving when expansion and contraction occurs during seasonal changes.
- Seal all areas that may be exposed to surface spills, i.e. tubs, toilet and showers with a high quality acrylic caulking.
- Return appliances and furniture to the room by rolling or sliding them over strips of hardboard.

REPAIRS

Small chips or gouges can often be repaired by filling the damaged area with a matching wax stick that is available in most home centers.

If damage is more extensive, a plank can be removed and replaced easily. To replace a damaged plank follow the procedures below:

Using a sharp utility knife cut through a corner of the damaged plank taking care not to cut into the adjacent planks. Use a putty knife and hammer if necessary to lift the corner of the plank.

After the corner is removed, carefully lift the plank off the adhesive strip. Use one hand to lift the plank and the other to hold the floor down. If necessary, use a heat gun to heat the plank along the edges over the adhesive strip. This will allow it to release more easily.

Remove the adhesive strips from the replacement plank. Install the replacement plank starting in the corner and working toward the opposite end.

Roll the replacement plank with a steel hand roller to seat it into the adhesive and level the edges.

REGULAR CARE

- Sweep or vacuum regularly to remove grit and sand that can abrade, dull or scratch your new floor. Do not use a vacuum with a beater brush, because it may damage the floor's surface.
- Wipe up spills promptly with a damp cloth or mop.
- Wash the floor with Bright 'N Easy No-Rinse Cleaner or other suitable floor cleaner.
- Do not buff the floor.

CAUTION: RESILIENT VINYL FLOORS, LIKE OTHER TYPES OF HARD-SURFACED FLOORS, CAN BECOME SLIPPERY WHEN WET. ALLOW TIME FOR THE FLOOR TO DRY AFTER WASHING. IMMEDIATELY WIPE UP WET AREAS FROM SPILLS OR WET FEET. PLACE MATS AT OUTSIDE ENTRANCES TO PREVENT WATER, SNOW OR ICE FROM BEING TRACKED ONTO THE FLOOR. IMPROPER CLEANERS, POLISHES OR FINISHES CAN ALSO CAUSE SLIPPERINESS.

CAUTION: AVOID ONE-STEP "MOP AND POLISH" PRODUCTS, DISHWASHING LIQUIDS AND OIL-BASED CLEANERS. THESE MAY LEAVE A RESIDUE WHICH CAN ATTRACT DIRT AND DULL THE FLOOR'S FINISH. AVOID CLEANERS THAT CONTAIN ABRASIVES OR SOLVENTS WHICH MAY PERMANENTLY DAMAGE THE FLOOR.

DO NOT USE STEAM CLEANERS ON RESILIENT VINYL FLOORS, THEY CAN PERMANENTLY DAMAGE THE SURFACE