

PRODUCT DESCRIPTION

Congoleum sheet vinyl floors are manufactured on Congoleum White Shield® felt backing. All Congoleum residential felt sheet products can be installed using the Your Choice™ Installation System. This system provides you with options to install the flooring either fully adhered or perimeter fastened over qualifying wood, concrete, and existing flooring.

The fully adhered method is recommended when installing White Shield-backed products on self-covered installations, complicated layouts, and where a lot of net fitting is required, as well as all other installations where the subfloor is smooth and in sound condition.

ADHESIVE

UnderFlor 3044 is the only adhesive needed on fully adhered or perimeter fastened floors regardless of whether the subfloor is porous or nonporous.

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 Cov-

erings (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 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 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 or scraps, 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.

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 100°F (38°C). Failure to condition the materials and subfloor or maintain proper temperatures can lead to bubbling or buckling of the flooring. Congoleum will not assume liability for installation or performance failures resulting from improper temperatures.
- Always keep flooring rolled face out, wrapped tightly around a rigid core until ready for installation. Avoid distorting the flooring. Always store rolls on a continuous flat surface. Do not stack other rolls or heavy objects on flooring.

TOOLS AND MATERIALS

- UnderFlor 3044 adhesive
- SU106 or SU80 or SU92 Seam Sealer
- 1/16" x 1/32" x 1/32" U-notched trowel
- 100-pound, 3-section, steel roller
- Steel hand roller
- Chalk line
- 6' Straight edge
- Sharp utility knife and replacement blades
- Tape measure

- Pencil
- Soft bristle push broom

PREPARING THE AREA

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

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 all installation methods.

Subfloor Construction Materials	Comments	Fully Adhered	Perimeter Fastened	Notes
Wood	Double layer plywood construction, minimum 1" thick, over joists or trusses up to 19.2" (48.8 cm) on center with suitable underlayment.	Yes	Yes	Subfloor must be smooth, solid and free of movement, set fasteners below the surface.
	Single layer Sturd-I-Floor 23/32" (18 mm) or heavier installed over joists or trusses, 16" (41 cm) or 19.2" (48.8 cm) OC.	Install wood underlayment	Yes	
	Hardwood or strip wood installed over wood subfloors.	Install wood underlayment	Yes	Double layer construction maximum 3" board width
	Hardwood floors installed over concrete.	No	No	Remove hardwood and prepare concrete
Underlayment	APA underlayment grade plywood and other wood veneer underlayments that are recommended for resilient flooring.	Yes	Yes	Weather damaged or rough surface materials must be sanded smooth or covered with a recommended underlayment.
	Oriented Strand Board (OSB).	Install wood underlayment	Yes	
	NPA-rated Particleboard.	Install wood underlayment	Yes	Fill gaps wider than 1/32" (.8 mm).
Concrete	On, above and below grade level.	Yes	Yes	ASTM F1869 - MVER not to exceed 5 lbs./1000 ft ² /24 hrs when tested with anhydrous calcium chloride test kits. ASTM F2170 – Relative Humidity not to exceed 80%.
Gypsum Topping	Minimum 2000 (907kg) PSI compressive strength.	No	Yes	Must be smooth, dry and in sound condition. Repair all cracks and damaged areas. Seal with a sealer/primer recommended by the topping manufacturer. A bond test is recommended. Do not install over powdery surfaces.
Lightweight Concrete	Minimum 100-pound (45kg) density Minimum 3000 PSI (1361kg) compressive strength.	Yes	Yes	
Existing Resilient Floor	Smooth surface resilient sheet and tile flooring.	Yes	Yes	Must be single layer of flooring fully adhered and in good condition.
	Textured surface resilient sheet and tile.	Prepare with Portland cement-based patching compound or new underlayment.		
	Do not install over soft, heavy, cushioned floors, floors with a cushioned backing, asphalt tile or tile installed below grade level or floors with ScotchGard or other non-stick coating.	Remove or cover with new underlayment as appropriate.		Follow Recommended Work Practices.
	Floors containing asbestos.	No	No	
Radiant Heated Floors	Must be covered with minimum 3/4" cement topping. The maximum floor temperature should not exceed 85°F (29°C).	Yes	Yes	The temperature of the floor should be limited to 70°F (21°C) for 48 hours before, during and 48 hours after installation.
Ceramic and Stone	Ceramic, marble and granite.	Yes	Yes	Tile must be well bonded. Grind high spots and fill low areas to a smooth, flat surface with a latex modified Portland cement-based patching compound.

SUBFLOOR INFORMATION

The 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.

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 perimeter fastened installations. Rough, weathered or damaged subfloor panels must be sanded smooth or covered with a suitable underlayment panel. Always follow underlayment manufacturer installation recommendations.

Flooring installed directly over single layer wood subfloors present a higher risk for joint telegraphing, protruding nail heads or fasteners and bottom up staining from paint overspray, spills, subfloor construction adhesive, coated fasteners or other contaminants.

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 Portland cement-based patching compound to level embossed floors. Do not install new flooring over loose laid or perimeter fastened floors, soft or heavily cushioned floors, cushioned-backed flooring, flooring containing asbestos, self-adhered tile, tile installed below grade level, or products with ScotchGard or other non-stick coatings. 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 use solvent or liquid adhesive removers to remove old adhesive residue. These products can have a damaging effect on the new floor and adhesive.

INSTALLATION RECOMMENDATIONS

Prepare the subfloor and determine the desired layout of the flooring. When using adhesive, periodically check the trowel for wear, particularly on concrete floors. Worn trowels should be replaced. The use of the correct adhesive and proper application is critical for a quality, trouble-free installation. Excessive amounts of adhesive will result in increased indentation or telegraphing. Insufficient coverage, caused by spreading too thin or using worn trowels, will prevent proper adhesion of the flooring. Pre-cut the floor covering to fit the room allowing extra length and width (generally 3" or 7.6 cm) for fitting. When seams will be required, additional flooring must be added to match the design. Position the material in the room allowing enough flooring to fit into doorways, closets, alcoves, etc. Be certain that the design has been aligned squarely with the walls in the room.

One Piece Installation | Fully Adhered Method

Use UnderFlor 3044 Adhesive for all fully adhered installations. Unroll the flooring using care to prevent distortions and position it squarely in the room to achieve the best design layout. NOTE: In long narrow areas or in more intricate room layouts, place a string over the grout line and check to make sure the

floor is straight and not bowed. Adjust the flooring to remove bow if necessary.

Make relief cuts down to the floor/wall juncture at inside and outside corners.

Allow the flooring to relax and flatten. If necessary, use a soft bristle push broom to remove any distortions or air pockets. Cut the flooring in with a sharp utility knife where it meets the wall at all areas that will be covered with trim. In areas where the flooring will be cut net and no finished trim will be installed, leave some excess and only cut after the flooring has been set into adhesive. Do not fit the floor tight to walls or other vertical surfaces.

To adhere the floor, lap or tube back one-half of the sheet using care to avoid creasing or bending it. Apply 3044 Adhesive with the recommended trowel over the exposed subfloor and in a straight line up to the edge of the sheet. The adhesive should be applied at a rate of 200 to 250 sq. ft. (18.6 m² – 23.2 m²) / gallon. Do not allow adhesive to dry, flooring must be set into wet adhesive within 15 to 20 minutes of application.

Start in the center and carefully push the flooring back into the adhesive without lifting it, to avoid trapping air underneath. Immediately and prior to foot traffic, roll the floor in both directions with a 100 pound (45kg) three-section steel roller starting from the center and working out toward the edges. Repeat this process on the other half of the sheet.

Perimeter Fasten Method

Unroll the flooring using care to prevent distortions and position it squarely in the room to achieve the best design layout. Make relief cuts down to the floor/wall juncture at inside and outside corners.

Allow the flooring to relax and flatten. If necessary use a soft bristle push broom to remove any distortions or air pockets. Cut the flooring in with a sharp utility knife where it meets the wall at all areas that will be covered with trim. In areas where the flooring will be cut net and no finished trim will be installed, leave some excess and only cut after the flooring has been set into adhesive. Do not fit the floor tight to walls or other vertical surfaces.

After fitting the floor to the room and flattening all distortions, fasten the entire perimeter with 3044 adhesive or staples (on wood floors only). If using a combination of adhesive and sta-

ples, complete the adhered areas first.

3044 Adhesive is required under all seams, at net fitted areas, in front of cabinet toe spaces, at fixtures and floor vents and all vertical surfaces.

Fastening the Perimeter with Adhesive:

To secure the perimeter with adhesive, carefully pull the edge of the flooring back one to two feet using care to avoid creasing it. Apply a 4" (10.2 cm) band of adhesive along the perimeter, at floor vents and any cutouts using the recommended trowel. Set the flooring in to wet adhesive within 15 to 20 minutes while pushing any roll distortions or fullness out toward the perimeter. Thoroughly roll the adhered area with a steel hand roller before the adhesive sets up. Repeat the process to adhere the entire perimeter.

Staples can also be used in lieu of adhesive to fasten the perimeter in areas where trim will be installed on installations over wood subfloors. The minimum staple size is 1/2" (12.7 mm) crown with a 3/8" (9.5 mm) leg. Use the longest staple length that can be seated tightly to the floor surface. Staple every 3" (7.6 cm) along the wall, 1/4" (6.4 mm) away from the edge of the sheet. After the floor has been fastened, install trim to cover staples.

SELF-COVING

- Self-coved installation must be fully adhered.
- Do not perimeter fasten self-coved installations.
- Use a cove stick with a minimum 1 1/8" diameter.
- Use UnderFlor 3044 adhesive to adhere flooring to the walls and seal all corners and seams with the appropriate seam sealer.

Multiple Sheet Installation

When installing two or more separate pieces of sheet vinyl flooring, it will be necessary to seam them together. All seams in Congoleum resilient sheet products must be adhered directly to the subfloor below the seam and sealed. Seam sealer fuses the wearlayer of the seamed sheets together and locks soil and water out. Place seams in the least conspicuous and least traveled area in the room a minimum of 6" (15.2 cm) away from parallel underlayment joints and seams or joints in existing sheet flooring or tile.

Matching Designs

- Each pattern has both an actual and economy design match to provide options for producing the best overall pattern

and seam appearance. The economy match may not repeat exactly but it generally matches very well and it is great for fill pieces and less conspicuous areas, while an actual match may be more appropriate for a highly conspicuous area.

- Every sheet after the first to be installed must include the length of the design match to ensure that the pattern lines up correctly. Example: A 15' x 22' room, using a 12' wide design that has a 54" pattern match will need two pieces of flooring. The first piece should be 15'3" long, and the second should be (15' 3" + 54") = 19' 9" long.
- When estimating flooring, add 3" (7.6 cm) to the length of the room dimension for the first sheet and 3" (7.6 cm) plus the design match for all other sheets.
- Always install sheets in the order they were cut from the roll, starting with the first sheet.
- Do Not Reverse Sheets - Seam opposite edges together.
- Take great care in aligning the pattern to obtain the best visual appearance.

Seaming Procedure

All seams must be cut using the overlap and double cut method. The straight edge and butt and recess scribe method will not produce an acceptable seam.

Install the first sheet leaving 12" (30.5 cm) un-adhered along the entire length of the seam (fully adhered floors). Position the second sheet in the room, overlap the selvage edges and carefully match the design.

Adhere the second sheet leaving 12" (30.5 cm) un-adhered at the seam for a total dry zone of 24" (61 cm).

Place a 3" (7.6 cm) wide strip of scrap flooring under the entire length of the seam.

Cut the seam with a sharp utility knife along a 6' long steel straight edge. Hold the knife at a 90° angle from the floor and apply sufficient pressure to cut through both sheets in a single pass. Use caution to avoid cutting into the subfloor surface.

Cut the seam in the center of the embossed line when seaming designs with grout lines that are wider than 5/32" (4 mm). Cut the seam up on the shoulder of the grout line in the land area when seaming designs with narrower grout lines. Remove the selvage edges and scrap piece.

Repeat this procedure for each subsequent sheet or fill piece.

Adhering the Seam

Fully Adhered Floors:

Turn the seam edges back and apply 3044 adhesive over the entire dry zone. Adhesive can be applied with a 1/16" x 1/32" x 1/32" (1.6 mm x .8 mm x .8 mm) U-notched trowel. Flooring should be set into wet adhesive, or within 15 to 20 minutes of application.

Lay the floor into the adhesive using extreme care to prevent scraping or squeezing adhesive into the seam cut. If this should occur, lift the edges of the sheet and clean any adhesive from the edge with a clean damp cloth and reposition the sheets. Roll the seam area with a 100-pound (45 kg), three-section steel roller and level the seam edges with a steel hand roller.

Perimeter Fastened Floors:

Turn one seam edge back and mark the seam location on the subfloor with a pencil using care to avoid writing on the edge of the sheet.

Fastening the Seam with Adhesive:

Use a trowel to apply an 8" (20.3 cm) band of adhesive centered over the pencil line. Flooring should be set into wet adhesive, or within 15 to 20 minutes of application.

Lay the seam edges into the adhesive lightly and check to make sure the seam is properly aligned with no gaps. Adjust if necessary. Roll the seam with a steel hand roller to level the edges and embed the backing into the adhesive.

Sealing Seams

Seal all seams before leaving the job using the recommended Seam Sealer. Remember to pre-treat all seams in Scotchgard and SDS finishes with the 3M® green pad included in the SU106 kit prior to applying seam sealer. Refer to the seam sealer label for detailed instructions. Keep traffic off seams for a minimum of 16 hours or until fully cured.

REPAIRS

Surface cuts and punctures are easily repaired by applying the recommended seam sealer to the damaged spot. More extensive damage can be repaired by replacing the damaged area with a patch.

Obtain a matching piece of flooring material. Cut a section of the floor slightly larger than the damaged spot. Remove complete design units when possible.

Position the replacement piece directly over the damaged area and accurately match the design.

Secure the replacement piece with tape on all sides.

Use a sharp utility knife and steel straight edge to cut the seams on all sides of the repair piece.

Cut the seam in the center of a grout line or in a dark color of the floor if possible.

Hold the utility knife at a 90° angle to the floor and cut through both pieces in a single pass.

Remove all damaged material and adhesive residue.

Apply 3044 adhesive with the recommended trowel in the opening and set the repair piece into the adhesive while it is still wet. Take care not to get adhesive on the edges of the flooring.

Seal the seams with the recommended seam sealer following label instructions. Allow to dry for 24 hours

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.
- 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.

PREVENTIVE CARE

- Make sure furniture legs have large surface, non-staining floor protectors.
- Replace small, narrow metal or dome-shaped glides with smooth, flat glides that are in flat contact with the floor. Glides should be equipped with self-adhesive felt pads to avoid scratching the surface of the floor. The pads should be checked periodically for grit and wear and replaced when necessary.

- Heavy furniture or appliances that are not moved often should be equipped with flat, non-staining composition furniture casters or cups of appropriate size – available square from 1 1/2" to 2 5/8" and round from 1 3/8" to 1 5/8".
- Mobile appliances and furniture should be equipped with easily swiveling casters. They should be at least 2" in diameter with non-staining hard rubber treads at least 3/4" wide. Do not use ball-shaped casters; they can damage the floor.
- Place mats at outside entrances to prevent dirt grit and soil from being tracked onto your floor.

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.
- Do not apply wax, floor finish, or polish to floors with 3M ScotchGard or Stain Defense System coatings.

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.