

Installation and Maintenance Manual



INSTALLATION, SUBFLOOR AND UNDERLAYMENT REQUIREMENTS

Subfloors

Concrete: The concrete must be free of any curing compounds or adhesives. Even after old glued down carpet has been removed, and the subfloor has been scraped, it should NOT be assumed that the concrete is porous. Often the old adhesive has sealed the floor. A porosity test, using water, should be taken. Be aware that porous subfloors may take a different adhesive than non-porous subfloors. See Manufacturer adhesive instructions. If oil, grease, or other contaminants have deeply penetrated the concrete, and cannot be thoroughly removed, Formations cannot be installed. If latex liquid has been used to seal off old cutback adhesives, the concrete has become non-porous.

Lightweight concretes

Concretes in the lower end of this range are generally used for thermal and sound insulation fills for roofs, walls, and floors. The higher densities are used in cast-in-place walls, floors, roofs, and for pre-cast elements. The minimum density of the concrete should be greater than 90lbs per cubic foot. The minimum compressive strength should be 3,500 psi or greater. Gypsum-based concretes are not recommended. Wood subfloors: Should be standard double layer construction, with a finished thickness of at least 1" and should have 18" of well-ventilated air space underneath. Crawl spaces should be insulated and protected by a vapor barer. Do not install vinyl flooring over a sleeper type subfloor, or over plywood that is directly over a concrete slab.

Non-approved substrates

Include, but are not limited to: Oriented strand board (OSB), particleboard, hardboard, treated plywood, strip wood floors, chipboard, wafer board, Masonite, knotty plywood, glass mesh tile boards, cementitious tile backer boards, fire-retardant or preservative-treated plywood, asphalt tile, rubber tile, self-stick tile. NOTE: Any appearance or performance-related problems related to the underlayment are the responsibility of the installer and/or underlayment manufacturer. Radiant Heat: components must be a minimum of 1/2" separated from tile or plank. This is the only type of radiant heat that is approved. Subfloors should have been operational for at least 3 weeks prior to installation to drive out moisture and calibrate temperature settings. All radiant heat floors should be turned down so subfloor temperature is maintained at 65 degrees for 3 days prior to installation and kept at 65 degrees for at least 48 hours after installation to allow the adhesive to fully cure. Maximum operating temperature should never exceed 85°F. Quarry tile, terrazzo, and ceramic tile: Properly cleanse substrate using a commercial degreasing/dewaxing solution. Grind any highly polished or irregular surfaces. Fill any low spots, holes, chips and seams that may telegraph through the new flooring.

Material Handling and Storage

All Formations Plank and Tiles must be stored in a warm, dry area. Do not expose to very hot or cold temperatures. It is required that you adapt materials to jobsite conditions a minimum of 24 to 48 hours before scheduled installation. Formations Tile must be stored laying flat and cartons never on edge. Check to make sure color and lot numbers are the same on jobs requiring more than one box on tile. Mix tile from several different cartons to blend minor shade variations. Temperature: Flooring and subfloor room temperature should be between 65° and 85 ° Fahrenheit. Maintain proper temperature for 48 hours before and after installation. After that, maintain a minimum 55-degree temperature. The building's heating and air-conditioning system should be turned on at least one week before installation. Failure to follow these guidelines may result in an installation failure (i.e. flooring may expand or contract resulting in gapping). Moisture: Never install Formations vinyl wherever surface or subfloor moisture is present. Excessive moisture will cause failure. New concrete slabs must cure for a minimum of 90 days. Even existing concrete slabs can have moisture problems. To be sure, conduct a moisture test several days before installation. The installer is responsible for moisture testing. See Adhesive Manufacturers guidelines for details. MOISTURE GUIDELINES FOR THE FLOOR COVERING INDUSTRY available from the World Floor Covering Association, at 1-800-624-6880.

PH Levels

Moisture can directly affect the cure, set and bond of adhesives. On well-cured adhesives, the presence of pH values has proven to be the most significant factor in adhesive failures. It is vital that moisture be present for pH to be a factor. High pH levels are due to cement, type of aggregate, cement ratio of concrete and how well cured the concrete surface is. On new or existing concrete a pH test should be taken. A pH level above 9 is unacceptable, and the floor should not be installed.

Porosity: A non-porous substrate is one, which does not absorb water. If you are not sure whether a floor is porous or non-porous, sprinkle some water on the floor over several different areas. If the water beads up, then it's a non-porous floor. If it soaks in, it's a porous floor. Use a small amount of water for the test, and allow floor to completely dry before continuing. If a bare concrete floor is not porous, a sealer or curing compound may have been used. Such treatments should be removed before installing a new floor or underlayment, and the floor re-tested for porosity at that time.

HVAC

Air conditioning is recommended whenever possible and at comfortable levels as moisture is removed constantly and this will provide for a drier atmosphere that affects the adhesion to the subfloor favorably. However in hot and humid climates the air conditioning can cause condensation in the floors so that the subfloor must have a moisture barrier beneath the slab or in the crawl space.

Subfloor Preparation

In general, all substrates must be free of contaminants such as dirt, weak concrete, grease, wax, oil, sealers, paints, curing compounds, and old adhesives. The surface

should be leveled to within 3/16 inch in ten feet; and all construction seams, expansion joints, and holes should be filled level with the surrounding surface to eliminate telegraphing of such irregularities.

Removing Old Adhesives

Old asphaltic “cut-back” adhesives can destroy new adhesive and stain Formations vinyl. These must be completely removed, encapsulated or covered with plywood underlayment. Be sure to remove adhesive in dips, joints, etc. Some previously manufactured cutback adhesives contained asbestos fibers, which are not readily identifiable. Do not use power removal devices, which can create dust. The use of solvent-based adhesive removers is not recommended. NOTE: If d-limonene (citrus-based) cleaners/removers are used (Orange All), subfloor must be thoroughly rinsed. If complete removal of old adhesives or covering them with plywood is not possible, the use of a Portland Based Leveling or Patching Compound is acceptable. Please follow manufacturer’s instructions carefully. For “Recommended Work Practices for the Removal of Resilient Floor Coverings” write to the Resilient Floor Covering Institute, 966 Hungerford Dr., Suite 12-B, Rockville, MD 20850.

Patching & Leveling

Use only Portland cement based patching and leveling compounds. Self-leveling underlayments can have very high moisture content and require longer curing time: up to 10 days. Check with a moisture meter before starting installation. Note: Adding latex to levelers will normally make the floors NON-POROUS. Test for porosity and use the non-porous adhesive instructions if necessary. Follow the manufacturer’s instructions. Do not over-water underlayment. Sand underlayment smooth after it is cured. The installer is responsible for cure times, moisture content, adhesive bonding and the structural integrity of a leveling or patch compound used. Embossing Levelers: Embossing levelers are for sheet goods with textures that could telegraph through Formations and be visible on the surface. Note: The use of levelers on sheet goods will not create a porous subfloor.

Concrete Slabs

NOTE: All concrete (new and old) must be tested. The installer is responsible for moisture testing. See Adhesive Manufacturers Guidelines for details. New concrete should cure with good ventilation at room temperatures for no less than 90 days and must be tested for moisture and pH prior to installation. Do not install where moisture, hydrostatic pressure, or alkaline conditions are evident. (See below) Concrete must be clean, dry, smooth, and structurally sound and free of paint varnish, adhesive, oil, grease, solvents and other extraneous material including curing and parting compounds, sealers and surface hardeners that will inhibit bonding. Lightweight concrete should be avoided because of its inherent weakness whenever possible grind a concrete subfloor to tolerance rather than fill. Installation failures due to the above issues are not the responsibility of Formations and warranties will not apply. Whenever questionable surfaces are involved, Formations recommends a bond test as described later in this section. Properly prepare substrate by grinding or sanding. All dust must be completely removed to ensure a strong adhesive bond. Surface irregularities will

telegraph through the tile. Allow at least 24 hours for underlayment drying before installing Formations flooring. If self-leveling underlayments are used they must fully cure before installing Formations floor tiles. Test self-leveling compound for moisture before installing. The installer is fully responsible for moisture and leveler related problems. Sealers: Formations does not endorse any concrete or floor sealers against moisture. If moisture is present, DO NOT INSTALL FLOOR. Some sealers will protect the installation against alkalinity. Some also serve as a barrier between old and new adhesives to deaden old adhesive tack, prevent plasticizer migration and seal over dust or old cutback adhesives. Most latex- and acrylic-based sealers are compatible with Formations adhesives. Apply sealers to the floor according to the manufacturer's instructions. Be sure to apply the product evenly across the entire surface of the floor. There must be no gaps in the installation. Allow sealer to dry completely before applying adhesive. **NOTE:** Raskin Industries warrants its Tile and Plank to be free of defects. The condition of a subfloor, which causes adhesion problems due to not recommended, improper, incorrectly prepared sealers, embossing leavers, patches, concrete, gypsum based products ect, becomes the sole responsibility of the installer and/or manufacturer of the particular sub-flooring product.

Existing Resilient Floors

When installing Formations floor tile where there is an existing resilient floor, it may be best to remove the present floor and prepare the structural floor for a fresh application of the Formations. If existing resilient tile and sheet vinyl floors are in good condition and thoroughly bonded to the structural floor, it may be possible to install a new Formations floor without removing the existing floor. The exception is that any tile or sheet that is a cushion construction must be removed or covered. Do not install over more than one layer of existing flooring. **Note:** The use of levelers on non-porous subfloors will not create a porous subfloor. Existing tile or sheet resilient floor must be stripped using a Vinyl Stripper to remove wax or other contamination and rinsed with clear water and allowed to dry. This is also the case when new sheet vinyl is used. Very smooth or high-gloss floors need to be lightly abraded to rough up the surface to allow proper adhesive bonding.

Quarry Tile, Terrazzo Ceramic Tile

Properly cleanse substrate using a commercial degreasing/dewaxing solution. Grind any highly polished or irregular surfaces. Fill any low spots, holes, chips and seams that may telegraph through the new flooring. Test for porosity and use the appropriate adhesive application method. Bond tests are required.

Moisture and PH Testing

A moisture test should be done several days before installation. The installer is responsible for moisture testing. Formations recommends all concrete subfloors (new and old) be tested using Calcium Chloride Test ASTM F1869. Please check Adhesive Manufacturers guidelines for acceptable levels and RH probe use and limits. Concrete subfloors must have moisture barriers installed under the slab and be determined, through testing, to be dry and not subject to water absorption. For more information about moisture problems and moisture testing, refer to MOISTURE GUIDELINES FOR

THE FLOOR COVERING INDUSTRY available from the World Floor Covering Association, at 1-800-624-6880

Bond Test

To determine if a subfloor is compatible to adhesive used, or to determine if the porous or non-porous adhesive application method is required, use this test: Using the flooring and adhesive suitable for the subfloor, install a 2'x2' section following the recommended installation procedures. Select areas next to walls, columns, or other light traffic areas. Tape the perimeter with duct tape to prevent edge drying of the adhesive. After 48 hours, the adhesive should be dry and the flooring should be difficult to remove. Note: the adhesive is dry at this point – but not cured. Full cure and maximum bond does not occur for 6-8 days. On large installations, tests should be taken every 50 feet. Bond testing may take some time to complete, but the cost and time involved in a floor failure are considerably more.

General

For best results, the room temperature in the area of installation must be 65-85° F for 48 hours before, during, and after installation. Flooring must be acclimated in the room they are to be installed in for a minimum of 24 to 48 hours prior to installation. Be sure to use Formations tiles of the same color lot for best color matching. Mix tile from several different cartons to blend minor shade variations. If the Formations Tile or Plank has directional arrows follow accordingly if not lay tile and planks keeping the embossing of the product flowing in the same direction. Note: All Warranties and guarantees regarding the suitability and performance of any products, if not supplied by Formations, rests with the material manufacturer or the installation contractor and Not with Raskin Industries. Install following standard methods of measuring and laying out and cutting Vinyl flooring. Leave an expansion gap of at least 1/4 inch covered by molding. Stagger Planks do not align end Joints next to each other and work out of 3 cartons and mix tile or planks. If there is an arrow on back of material please follow direction on back. Roll Floor with 100 LBS roller. Follow all instructions and specifications supplied with your adhesive. Please visit RFCl.com for additional information on Resilient flooring installation if needed.

Alpine Collection – Pattern #'s: FAP-6002 / 6003

The below disclaimer is only for pattern #'s: FAP-6002 and 6003 – Alpine Collection

Beautiful rustic designs with 3 complimentary color variations that feature moderate to strong shading and color, all in 1 carton; this is intended to create a more natural characteristic.

DISCLAIMER FOR ALL COLLECTIONS

All products have minimal to moderate variation in shading and color is standard and is intended to create a more natural characteristic.

Product must be shuffled prior to installation, work with a minimum of 3 cartons. Show to consumer before installation to approve the shading variation.

Maintenance

The type or frequency of traffic on your Tile or Plank will determine the frequency of maintenance needed. The color of the floor will have some bearing on how much care may be necessary. Regular adherence to an effective maintenance program should include: Thorough dirt and grit regulation, Prompt removal of spills and stains, Protection of the floor surface The most effective part of any floor maintenance program is the simplest: sweep, dust mop or vacuum DAILY, or more frequently if needed.

INITIAL MAINTENANCE UPON

COMPLETION OF THE INSTALLATION

Sweep or vacuum thoroughly and remove any adhesive residue from surface. Raskin's Adhesive / Scuff Remover or Mineral Spirits can be used. Do not wash floor for at least 48 hours after installation. Lightly damp mop with a Raskin's Neutral Cleaner or Raskin's No Rinse Cleaner. Remove any scuffs and excessive soil by careful scrubbing. Certain types of rubber heel marks may be removed by rubbing with a cloth dampened with Raskin's Adhesive / Scuff Remover. All traffic and furniture should stay off the floor for at least 24 hours to allow the adhesive to dry. Do not wash any installation for 48 hours. In order to prevent indentations and scratches, provide glass, plastic or other non-staining cups with flat under surfaces not less than 2" in width for the legs of heavy furniture or appliance. Equip swiveled-type office chairs and other rolling furniture with broad surface non-staining casters at least 2" in diameter. Remove small diameter buttons from the legs of straight chairs and replace with metal glides that have bearing surfaces not less than 1" in diameter. Protect your floor against burns. Burns from the glowing end of a cigarette, matches, or other extremely hot items can damage Formations floors. Do not flood floor, subject to frequent standing water, or use in high moisture areas.

ROUTINE COMMERCIAL MAINTENANCE

Formations Tile and Plank will perform commercially provided a sound maintenance program is followed. Light daily sweeping, dust mopping or vacuuming will prevent dirt and grit particles from being ground into the surface of the tile. Non-rubber, non-staining walk off mats should be used to control the amount of dirt and grit reaching the floor. The mats should be as wide as the doorway and thick enough to trap dirt and should be cleaned on a regular basis. Frequent light mopping will prevent the floor from becoming heavily soiled and will remove most spills and stains. The amount and type of traffic will dictate the frequency of washing. Wash the floor by damp mopping with Raskin's Commercial Cleaner diluted with warm water.. If the floor receives hard use and becomes extremely dirty, as in heavily commercial installations, an occasional scrubbing may be necessary. This can be accomplished by using a low speed buffer 300 RPM or less with a redscrubbing-type (polyester or nylon) pad. Spray the floor with Raskin's Commercial Cleaner and work the solution over the floor using the buffer and the scrubbing pad. Once this is accomplished, remove the dirty residue by damp mopping with clear water or with a wet vacuum.

STAIN REMOVAL

To remove stubborn spots or stains from tiles/planks, always begin with mild cleaners, such as Raskin's Neutral Cleaner or Raskin's No Rinse Cleaner. If this fails to remove stain, use Mineral Spirits. Do not use harsh solvents, such as Acetone, or lacquer thinner, as these type products can permanently soften and damage the surface. For extreme staining, (paints, permanent markers, dyes) try applying fingernail polish remover containing Acetone (not straight Acetone) applied to soft cloth and rubbing. Any damage resulting from use of pure solvents IS NOT covered by the warranty. Always test stronger cleaning agents on sample pieces or in unnoticeable areas first before attempting on affected areas.

SCUFFING AND SCRATCHING

Although Formations tiles/planks are resistant to scuffing and scratching, surface damage can occur with hard enough use, or if floor is improperly maintained. If damage occurs, try using Raskin's Scratch Remover spray bottle or hand buffing the spot with 0000 steel wool, using a solution of mineral spirits. If damage is deep, try using 000 steel wool Raskin's Scratch Remover will mask minor scratches and scuffs; For "Spot" repairs only – not to be used as a floor coating.

RASKIN'S GORILLA FLOORS MAINTENANCE PRODUCTS

- **Raskin Scratch Remover**
 - This product is designed to improve the appearance of resilient floor surfaces; Scratch Remover masks minor scratches and scuffs. For use in high traffic areas, under furniture or whenever gloss has been affected by wear or abrasion. Available in 22 oz spray bottle
- **Raskin Commercial Buffable Neutral Cleaner (Concentrate)**
 - This product is a specially formulated cleaner and restorer which deposits a buffable film after cleaning. During cleaning this product quickly and easily removes soil and residue from spills such as soft drinks, etc...this product is phosphate free. Available in 1 quart and 1 gallon bottles
- **Raskin Neutral Cleaner (Concentrate)**
 - This product is a cleaner concentrate formula specifically for damp mopping and maintaining resilient plank and tile flooring. This no-rinse formula does not leave a haze or residue which as a dulling effect. This product is phosphate free. Available in 1 quart and 1 gallon bottles
- **Raskin No-Rinse Neutral Cleaner**
 - This product is a neutral cleaner ready-to-use formula specifically for maintaining resilient plank and tile flooring. This no-rinse formula does not leave a haze or residue which has a dulling effect. This product is phosphate free. Available in 22 oz spray bottle
- **Raskin Black Scuff Remover**
 - This product removes daily scuff marks from black heels marks, etc.. Available in 22 oz spray bottles.

- **Raskin MicroCare Cleaning Mop**

- Picks up moisture and dirt, leaving floors clean with no dulling scratches'
- 360° rotating head and telescopic handle for hard-to-reach areas
- Conforms to the surface of your floor
- Frame folds towards the pole for easy storage
- The cleaning pads are durable, machine washable and reusable for up to 200 times
- Lightweight but extremely durable aluminum mop with end caps to protect furniture and baseboards
- Use Raskin No-Rinse Neutral Cleaner for wet cleaning, spray on pad or directly on the floor. Follow directions on bottle.

www.raskinind.com

1-855-3Raskin