

# Residential Perimiflex®

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## (Perimeter-Fastened) Installation System

### For Aurora® Flex

#### General Instructions

Follow all General Installation Guidelines as described on pages 1.2 to 1.28. Mannington has designed Perimiflex-backed products specifically to be installed by perimeter-fastening only. This permits you to install these products over many types of underfloors not suitable for a fully adhered installation.

#### Perimiflex Packaging & Handling Procedures

- Always store and transport Perimiflex products rolled tightly, face-out, and secured with tape on a heavy 4" core. Rolls not wound tightly can cause buckling/bubbling problems. Never store this type of floor covering rolled face-in.
- All Perimiflex material must be rolled with interleaf paper. Failure to use interleaf paper may lead to scalloped edges. Scalloped edges make pattern matching more difficult, and can lead to buckles after installation.
- Caution must be taken to ensure the interleaf paper is not wrinkled within the roll. Wrinkled paper can cause undesirable dull impression marks. Although most impression marks will be gone in time, care must be taken to avoid their original formation.
- Never write on the Perimiflex backing with ink pens, felt-tipped markers, or waxed crayons. Also, do not use these markers on the underfloor, since they may bleed through to the face of the material. You may use a lead pencil to do any marking on the Perimiflex backing.
- Do not allow the roll to sag or bend during storage and/or transportation. Distorted materials may not lie flat. If this material is flattened or distorted during storage or transporting, do not attempt to install it. Rolling the Perimiflex material tightly around a core face-out and leaving it rolled for several hours may remove most distortion.
- Always use plywood or hardboard runways when moving appliances or heavy furniture. Use these runways even if using an appliance dolly or if the heavy objects are equipped with wheels or rollers.

## Additional Perimiflex Installation Procedures

- Do not install Permiflex-backed material over asphalt tile or asphalt-based (cutback) adhesives.
- Do not install over any loose-laid or perimeter-fastened existing floor covering.
- If it is necessary to inspect the material prior to installation, it is important to reroll the material tightly, face-out, on a 4" core.
- Keep the material tightly rolled, face-out on a core, until you have completed all preparation.
- Just prior to positioning, you may roll the material face-in to assist in the layout. This will also reduce any fullness within the product, and will help the product lie flatter.
- When you are fitting the material using pattern scribing techniques, it is very important to transcribe the material at the same temperature at which you will be installing it.
- Do not kink, fold, or stretch the material during positioning and rough-cutting.
- Allow the material to relax 15 minutes after rough-cutting.
- After net-trimming the material, tube or lap back one-half of the sheet (as if fully adhering the product). Apply adhesive, provide tack time, and gently roll or "walk" the material into the adhesive.
- If you intend to fasten the material using staples and adhesive, you may still use the "fold-back" procedure. This procedure provides one last opportunity to thoroughly sweep the underfloor and the back of the material.
- Do not force-fit the material. Undercut all doorcasings and trim. Use restrictive moldings at all edges.

## Subfloor/Underfloor Recommendations & Preparation

You can use the Perimiflex Installation System to install floor covering over many types of underfloors that are not suitable for a fully adhered installation. The system may be installed over these structurally sound underfloors:

- All American Plywood Association underlayment panels.
- Lauan (solid core mahogany) plywood panels.
- National Particleboard Association-rated grades of particleboard.
- Untempered hardboard.
- Sturd-I-Floor-rated veneered plywood, wafer, or oriented strand board (OSB).
- All veneered, OSB, chipboard, etc., underlayment panels recommended and warranted by the panel manufacturer for use as resilient flooring underlayment.
- Dry, fully cured concrete slabs on any grade.
- Any smooth or lightly embossed, well-bonded existing resilient floor covering.

## Underfloor Precautions

Although the Perimiflex Installation System allows some exceptions to underfloor preparation, it is not a “fail-proof” remedy. Consult pages 1.4 to 1.15 for General Guidelines, but for best results with Perimiflex products, follow the recommendations below.

- The underfloor must be smooth and dry.
- You must remove all dirt, wax, vinyl dressings, dust, or other substances. This is especially important in areas where you will apply adhesive.
- Patch any gaps or cracks with Mannington MVP 2023 or a quality cementitious patching compound.
- Completely remove any wood stain, solvent, or oil-based spills. You can cover small stains with aluminum foil to prevent stain-through of the resilient.
- All fasteners must be secure and set flush with the surface of the underfloor.
- All existing resilient floor coverings with surface irregularities, unevenness, or deep embossing must be covered with underlayment or Mannington MVP 2023 with latex additive. Otherwise, they must be completely removed.
- All ceramic tiled floors must be overlaid with a quality patching compound (see page 1.15). Always allow the patching compound to cure fully prior to the installation of Perimiflex products.

## Cutting & Fitting

Keep the Perimiflex material tightly rolled face-out until you have prepared the underfloor. Remove all baseboard quarter round or moldings from the perimeter of the work area. Undercut door trims and casing with a jamb or hand saw so you can tuck the material underneath.

Once the material is unrolled, completely install it in less than two hours. This ensures the material will retain its full contractibility, and will remain flat and tight after installation.

## Seamless Installation

If seams are not required, follow the steps outlined on page 2.4 under the One-Piece (Seamless) Installation, but use the appropriate adhesive for Perimiflex products. Remember, fasten the perimeter only, using the correct staples, adhesives, or combination as required.



**NOTE:** Lap or tube material back on itself and resweep the underfloor before fastening the product. Gently roll or “walk” the material back into position. It may be necessary to retrim the material to eliminate a force-fit.

## Seam Cutting & Seam Sealing

### Seamed Installation

When the work area requires two or more pieces of material, you must complete the seaming steps before fastening the perimeter of the material. Make seams in the Perimflex Installation System using the “straightedge and butt” method.



**NOTE:** The “straightedge and butt” seaming procedure requires you to use a straightedge to trim the selvage edges of the sheets. The pattern is brought into match and the edges butted together. A short straightedge (like the leg of a framing square) often makes following the grout line easier.

### Straightedge & Butt Method

“Reverse” or “Do Not Reverse” sheets as instructed. (See page 1.16 for instructions and pages 7.2 to 7.9 for product pattern matching requirements.) Position the new seam at least 4” from any seam or tile lines in existing resilient flooring and 6” from underfloor joints. If the job requires seaming, follow these steps:

Weight the first piece of material to avoid shifting. Using a straightedge as a guide, cut the seam on one shoulder of the grout line, leaving the pattern or grout line on the sheet. When cutting seams over an existing resilient floor, protect the existing flooring from knife cuts.



Position the material in the room, aligning the pattern squarely with the walls. Match the pattern at the seam line.



Cut off the grout on the second sheet, remembering to cut on the shoulder of the grout line.



Put the seams together and place masking tape over the seam in several places to hold it in place.



Cut and fit the material to the room.



Fold back both seam edges and sweep underfloor where adhesive will be applied – the seam line and the perimeter of the room. Apply a 6" wide band of Mannington V-61 adhesive centered on the seam line. Using 1/4" tape, explained on pages 1.22 and 1.23, eliminates adhesive contamination of the seam line.



After applying the adhesive down the seam lengthwise, scrape the adhesive in the other direction (perpendicular). This will help prevent having too much adhesive in the seam. Allow the adhesive to tack-up prior to laying down the resilient sheets.



Remove the 1/4" masking tape and lay one sheet into the adhesive. Roll the edge of the sheet vinyl with a hand floor roller.



Working from the center of the seam, carefully position the second piece of resilient into alignment.



You can stretch or compress the material by using the handle of a screwdriver to bring the pattern into match. Use masking tape to hold the pattern in place on one side of the screwdriver.



Take the screwdriver out of the seam and begin to work the seam with your hands to correctly position the design elements.



Roll the seam with a hand roller. Leave the masking tape in place to secure the material while fitting and fastening the perimeter of the material. Also leave the masking tape in place for a minimum of one hour to allow the adhesive to set. Remove the tape just prior to seam sealing.



Thoroughly clean the seam cut of all adhesives, dirt, etc., before sealing the seam. It is also important to thoroughly remove any residue on the face of the material caused by the tape. Seal all seams with appropriate Mannington seam sealer (see pages 1.24 and 1.25 for directions and page 6.2 for the Sealers Chart). When inserting the VST applicator tip into the seam cut it is crucial the seam sealer be applied the full depth of the cut.



## Fastening Perimiflex Products

The Perimiflex Installation System only requires fastening the perimeter of the material. This allows the material to contract and bridge many underfloor irregularities, and to remain tight and flat to provide a smooth appearance.

### Staples

When the underfloor is wood, staples are the preferred fasteners. Staples should have at least a 1/2" crown and be of sufficient length to secure material to the underfloor. Staple length should be the longest that can be fully seated (3/8" to 1/2"). Space staples every 2" around the perimeter.

If the job requires a combination of staples and adhesives, complete the adhesive areas first.

Position all staples close enough to the wall so they can be covered by a restrictive molding (e.g., quarter round, shoe molding, rubber/vinyl cove base, etc.).

## Adhesive Recommendations & Application

The Perimiflex Installation System makes use of one type of adhesive:

### V-61 Adhesive

- V-61 is a water-based, latex adhesive for use over porous and non-porous floors, any approved suspended wood underlayments, concrete underfloors, and existing resilient floors that are free of all foreign matter and meet the requirements outlined in the General Guidelines section.
- You may clean fresh adhesive smears with a damp cloth. Dried adhesive can be removed with mineral spirits.
- Do not allow the adhesive to freeze.
- Maximum coverage per quart for V-61 is 110 lineal feet (33.5 m) in a 3" wide (7.6 cm) band.

### Adhesive Application

The entire underfloor should be thoroughly cleaned prior to installation. Remove all dust, dirt, dressings, or waxes that will prevent good adhesive bond. Thoroughly strip existing resilient floors using a solution of ammonia and water or a floor stripper.

Apply V-61 adhesive in a 3" wide band around the perimeter of the room, and around any pipes, fixtures, or floor registers using the appropriate size notched spreader.

Do not apply excessive adhesive.

At all seams, apply adhesive in a 6" wide band centered on the seams. Adhesive spread must be uniform and consistent with no skips or misses.



Provide tack or open time when using V-61 adhesive. Open time is always dictated by underfloor porosity and atmospheric conditions. Do not allow the adhesive to “skin over” before laying the material into the adhesive. As with full-spread installations, you must roll the material into the adhesive.

## Flash Coving Perimiflex Products

You may flash cove all Mannington products using the Perimiflex Installation System with traditional flash coving techniques. Follow the general steps outlined on pages 1.26 to 1.28.

To avoid any sharp bends or creases in the material, Mannington recommends using a wooden cove stick at the floor/wall line to support the resilient. You must securely fasten the cove stick to the wall and/or underfloor so it will not pull loose when the Perimiflex material contracts. The adhesive should be fully spread on both the cove stick and the wall, using a small brush to ensure thin, uniform coverage.

We achieve best results when using pattern scribing techniques to fit the material. It is important that the Perimiflex materials are rolled face-out until ready to transcribe the pattern. You must transcribe the pattern and cut, fit, and fasten the material into the work area within 2 hours. It is important to transcribe the material at the same temperature as the jobsite.

To fill outside corners when flash coving, you can achieve the best results by using “boot”-type plugs. Seal all inside and outside corners with the appropriate Mannington seam sealer. You may apply seam sealer to inside and outside corners using a “cotton swab.”

## Finishing & Maintenance

Cover all exposed edges using a restrictive molding such as cove base, wood moldings, or quarter round. Apply a bead of silicone or latex caulk around bathtubs, shower stalls, and toilets. Leave Mannington Maintenance and Warranty literature with the customer. These are available from your Mannington Distributor.



**NOTE: It is important to install the flooring as flat as possible before leaving the jobsite. This is best done by using a soft bristle push broom or a lightweight roller. You may also apply hand pressure to smooth out the flooring before fastening. Although most Perimiflex-backed products will be flat and tight within 24 to 48 hours, do not rely on the product’s contractibility to compensate for installation-related buckles.**

# Repairs

## Small Cuts

Small cuts will eventually gap open. To repair, clean and compress the material. When the cut is closed, place paper masking tape around the area. Clean dirt from the cut and apply seam sealer. Remove masking tape after 24 hours.

## Replacing Damaged Areas – Plugs

If you must replace a damaged area, follow these steps:

- Select a design element from the scrap material that matches the design to be removed from the existing resilient.
- Place wide masking tape around the damaged area to hold the floor from pulling back too much.
- Cut on the inside of the grout line if possible and remove the damaged piece. If the floor covering you are repairing is installed over existing resilient flooring, be careful not to cut too deep.
- Cut plug from scrap material.
- Lift edges of flooring and apply a band of adhesive carefully under the flooring and in patch area.
- Hold flooring up slightly with a knife or screwdriver to allow in sufficient air circulation to tack-up the adhesive.
- Put the patch piece in place and tape two sides securely.
- Slightly warm the Perimiflex flooring and pull it into place until it fits to the patch. Tape securely and roll with a hand roller.
- After ½ hour, remove the tape one side at a time. Clean any adhesive that may have squeezed into the seam by passing the back side of a hook knife through the area.
- Apply seam sealer. Cut scrap material in ½" widths and place on each side of the seam. Tape over top of these "bridges" to hold material in place while the sealer dries. Do the same procedure with "bridges" on each side of the patch and leave for 24 hours.

## Replacing Damaged Areas – Mold/Mildew Concerns

- For flood damage it is recommended that the damaged flooring material be removed. The subfloor must be allowed to thoroughly dry out. If there is any structural damage or signs of mold and/or mildew, it must be corrected prior to reinstalling resilient flooring.
- For water damage due to leaking fixtures, the source of the leak must be located and corrected. Any structural damage must be repaired and any signs of mold or residual moisture must be dealt with prior to replacing the resilient flooring in the affected area.

For additional information and precautions regarding how to properly deal with moisture and mold concerns, it is suggested to refer to the U.S. EPA website [www.epa.gov/iaq/](http://www.epa.gov/iaq/) index listing section titled Molds & Moisture. (See page 1.6).

## Repair Techniques For Buckled Perimflex Products

Buckling or bubbling of perimeter-fastened floor coverings has many causes. The most common cause of buckling is mishandling of the material. Mishandling may occur during packaging, roll cutting, or at the time of installation. It is critical to maintain the tension in the product during all phases of handling and storage. It is also important to follow proper installation procedures during each step of the installation. This ensures the material will be flat and remain flat for the life of the floor covering. **It is essential for the material to lie flat before leaving the job.** Do not rely on the product's contractibility to overcome any fullness or compression-type buckles that are evident when finishing the installation.

If a perimeter-fastened product does buckle or bubble after installation, use the repair techniques below:

- Release the material from the underfloor. Start in an area where you can easily get under the edge of the material (e.g., doorway, corner, etc.). Gently lift the material and insert a dull putty knife under the material. Work the putty knife back and forth at the adhesive line while gently lifting the material edge. Do not exert excessive force on the material. This technique works rather easily on concrete or existing resilient floors. In case of wood panel underlayments, use caution to avoid delamination of the underlayment. Applying heat to the material with a heat gun or hair dryer may make this removal procedure easier. Exercise caution to avoid scorching the face of the resilient sheet.
- Release as much of the product as necessary in the area of the room where most of the buckles occur. Use a soft-bristle push broom or a lightweight roller to push the fullness out toward the wall. Retrim the material at the wall line so it lies flat.
- Reapply Mannington V-61 adhesive. Give the adhesive sufficient open time to develop good initial tack. Open time is always determined by underfloor porosity and atmospheric conditions. Typically, the open time will be 10 to 15 minutes. Roll the flooring to ensure good adhesive bond. If you are using staples, space them every 2" around the perimeter. Be certain they are of sufficient length to penetrate the underfloor.



**NOTE: Use staples only in areas where restrictive moldings will cover them.**