GENERAL INFORMATION

These installation instructions are for Mannington Commercial Reset Recycled Rubber Tile & Sheet products. All recommendations are based on the most recent available information. The information on this sheet provides general guidelines. All instructions and recommendations must be followed for a satisfactory installation.

- 1. The floor covering, adhesive, and room temperature must be kept at a minimum temperature of 65°F or warmer for at least 48 hours before, during and 48 hours after installation.
- 2. Install Mannington Commercial Reset only after the job site has been cleaned and cleared of other trade apparatus that may damage a finished tile installation.
- 3. Always check to assure the pattern number is correct and lot numbers are the same on all products. Material should be delivered to the job site in its original, unopened packaging with all labels intact. Roll material should always be stored lying down. Storing rubber on end will curl the edges resulting in permanent memory of the material. All edges with memory curl must be straight edge cut before installation. Do not store rolls higher than four rolls or for more than six months. Material should only be stored on a clean, dry, smooth surface.
- 4. Inspect all materials for visual defects before beginning the installation. No labor claim will be honored on material installed with visual defects. Verify the material delivered is the correct style, color, and amount. Any discrepancies must be reported immediately before beginning installation.
- 5. All subfloor / underlayment patching must be done with a non-shrinking water resistant Portland cement patching compound such as Mannington MVP-2023
- 6. Never install Mannington recycled rubber products over residual asphalt-type (cut back) adhesive. Mechanically remove all traces of old adhesives, paint or other debris by scraping, sanding or scarifying the substrate. Do not use solvents.
- 7. Mannington Reset (except Interlocking tiles) is to be adhered with Mannington Commercial MR-710 single component urethane adhesive or MR-725 two-part urethane adhesive.

SUBFLOOR INFORMATION

Careful and correct preparation of the subfloor is a major part of a satisfactory floor covering installation. Roughness or unevenness of the subfloor will telegraph through the new floor covering, resulting in an unsightly surface and excessive wear on high spots. Proper subfloor preparation and suitable underlayment installation are essential for a trouble-free job.

A. Wood Subfloors

1. GENERAL

All wood floors must be suspended at least 18" above the ground. Adequate cross-ventilation must be provided and the ground surface of a crawl space must be covered with a suitable vapor barrier. Wood subfloors directly on concrete or installed over sleeper construction are not satisfactory for the installation of Mannington Reset flooring products.

Wood plank or strip flooring sub floors must be covered with a minimum 1/4" or heavier underlayment rated panel to assure a successful finished flooring installation.

2. UNDERLAYMENT

Many times wood panel subfloors are damaged during the construction process or are not of underlayment grade. These panels must be covered with an approved underlayment. Underlayment panels are intended to be used to provide a smooth surface on which to adhere the finished floor covering. It must be understood that underlayment panels cannot correct structural deficiencies.

Particleboard, chipboard, construction grade plywood, any hardboard and flakeboard are not recommended as underlayment. All have inadequate uniformity, poor dimensional stability and variable surface porosity. Mannington Resilient Floors will not accept responsibility for adhered installation over these subfloors.

In all cases, the underlayment manufacturer or underlayment installer is responsible for all underlayment warranties.

3. UNDERLAYMENT REQUIREMENTS

Panels intended to be used as underlayment should be specifically designed for this purpose. These panels should have a minimum thickness of ¼". Any panels selected as an underlayment must meet the following criteria:

- Be dimensionally stable
- Have a smooth, fully sanded face so the graining or texturing will not show through
- Be resistant to both static and impact indentation
- Be free of any surface components that may cause staining such as plastic fillers, marking inks, sealers, etc.
- Be of uniform density, porosity and thickness
- Have a written warranty for suitability and performance from the panel manufacturer or have a history of proven performance

Any unevenness at joints between panels must be sanded to a level surface. Gaps between panels, hammer indentations and all other surface irregularities must be patched with MVP 2023 Underlayment.



SUBFLOOR INFORMATION continued

- **SUBFLOOR** B. Concrete Subfloors
 - 1. Concrete subfloors must be dry, smooth and free from dust, solvent, paint, wax, grease, oil, asphalt sealing compounds and other extraneous materials. The surface must be hard and dense, and free from powder or flaking.
 - 2. New concrete slabs must be thoroughly dry (at least six weeks) and completely cured. Curing agents, surface hardeners and other additives may cause adhesive bonding failure. These should be removed by sanding or grinding.
 - 3. All concrete slabs must be checked for moisture before installing material. The final responsibility for determining if the concrete is dry enough for installation of the flooring lies with the floor covering installer.

Mannington Reset products must never be installed where excessive moisture emissions may exist. Moisture emission from subfloor cannot exceed 3 lbs. per 1,000 sq. ft. per 24 hours as measured with the calcium chloride test performed according to ASTM F1869 or 75% Relative Humidity measured according to ASTM F 2170. Mannington will not assume responsibility for floor covering failure due to hydrostatic pressure or moisture vapor emission.

- 4. Holes, grooves, expansion joints and other depressions must be filled with MVP 2023 Latex Underlayment (or equivalent) and trowelled smooth and feathered even with the surrounding surface.
- 5. Concrete floors with a radiant heating system are satisfactory, provided the temperature of the floor does not exceed 90°F at any point. Hot spots in the radiant heated floors can cause installation problems, so it is recommended that the system be turned off before installation.

C. Existing Resilient Floor Coverings

To achieve maximum product performance, Mannington Commercial rubber flooring must not be installed over existing resilient floor coverings. In the rare cases where removal of the existing resilient floor covering is not an option, the existing flooring must be covered with MANNINGTON MVP 2023 used as an Embossing Leveler or other appropriate porous underlayment.

Note: Consult Mannington's Professional Installation Handbook or the Recommended Work Practices brochure from the Resilient Floor Covering Institute for specific instructions on removal of old resilient floor covering.

INSTALLATION

Sufficient light is essential. Lighting conditions must be bright enough to observe color consistency, registration and seaming quality during dry fit inspection.

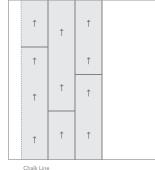
A. Reset Rubber Sheet

Should be installed by a trained professional flooring installer with experience installing rubber flooring. Assume that the walls that the rolls will abut are not perfectly straight or square.

NOTE: Mannington Reset Recycled Sports flooring is manufactured from recycled materials. Slight variance in shade and color chip dispersion is normal. It is the installer's responsibility to inspect all products to insure the correct style, thickness, and color. Any moderate to severe discrepancies should be reported immediately before beginning the installation.

- 1. All Mannington Reset rolls must be unrolled and installed in the same direction. See Diagram 1.
- 2. Each roll is marked on the side of the core with red or orange paint. This is an aid to identify a given roll's installation direction.
- 3. Laying rolls in the opposite direction will cause color variations between the rolls.
- 4. Roll material is stretched slightly during the manufacturing process. At the job site, the installer should unroll all cuts and allow Reset to relax overnight. A bare minimum of two hours is required. Shaking the material once it is unrolled can help it to relax.

Diagram 1.



continued

- INSTALLATION 1. Begin by determining the vertical center of the area to be installed. Snap a chalk line. Snap two additional chalk lines 24" out from either side of the original chalk line. This is the guideline for the first 48" wide roll. Insure that the flooring is laid so that any curl is facing down. This will prevent the ends from curling up.
 - 2. Placing the roll end against the wall, unroll the first piece over the prepared area. Maneuver the rubber to lay precisely within the two chalk lines by tapping with a mallet and the wood block. Allow the cuts to relax in position for a minimum of two hours. Twenty-four hours is preferred. If the length of the rubber roll exceeds the length of the floor, use a straight edge and utility knife to trim the excess length, leaving an extra inch for the final cut (see cutting tips).
 - 3. Repeat steps above for remaining rolls. For subsequent roll placement, chalk lines can be used to define the areas of installation, but is not as crucial as with the initial piece. To insure a tight fitting seam when butting one roll up to another, overlap the seam by 1/8". Working from one end, work the overlapping roll down into the seam. If a gap appears, lift the roll and overlap the roll to before the gap and repeat the process. If rippling appears on the far side of the overlapping roll, remove this by stretching the material by pulling or a kicking motion. Always insure a tight fitting seam prior to applying adhesive. Prior to curing, the adhesive will not have enough grab to fix a misaligned seam. Never apply tape to the surface of the flooring as it may leave a residue on the surface when removed.
 - 4. After the room has been laid out and allowed to fully acclimate to the room and floor temperature, trim the roll lengths as required for an exact fit. Beginning with a roll aligned along a front edge or wall; pull the roll back half of its length. Apply adhesive as described below. Lay the flooring back down being careful not to form any air pockets. Repeat for the other half of the roll and move on to adjacent rolls. When laying the other rolls, be sure to overlap the seams by 1/8" and force the overlap into the seam. Be careful not to allow the overlapping part to touch the adhesive first. Thoroughly roll the floor with a 100# roller to assure bonding of the rubber to the adhesive. A hand roller is suggested for the seams. Be careful not to shift the roll while rolling. Rolling should be done again at 30 and 60 minutes after initial placement of the roll into the adhesive. Roll in both directions, width and lengthwise to insure maximum contact.
 - 5. MR-710 adhesive should be applied thinly and evenly with 1/16" x 1/16" x 1/16" square notched trowel. Clean up excess and tools with mineral spirits, but don't allow mineral spirits to contact rubber. Any adhesive coming up through seams should be cut away. Allow 48 hours curing time for the adhesive before traffic is on the floor. If using MR-725 two-part urethane adhesive apply the adhesive with a 1/16" x 1/16" x 1/16" square notch trowel.

B. 18" x 18" Square Edge Tiles

Refer to Subfloor and Installation requirements before beginning.

- 1. Inspect all tiles for visual defects including shade variances prior to beginning installation. No labor claim will be honored on material installed with visual defects or shade variations. Any discrepancies must be reported immediately before beginning the installation.
- 2. Reset tiles must also be installed in the same direction. (Directional markings stamped on the bottom of the tiles must point in the same direction.)
- 3. Measure the width of the area to be covered.
- 4. Mark the center of the area at two points, one at each end.
- 5. Snap a chalk line, line #1, through these two points.
- 6. Determine the center point of the chalk line.
- 7. Using a Carpenter's square or another method, snap a second chalk line, line #2, perpendicular (at 90°) to the first line. The lines should intersect at their centers.
- 8. The area to be covered is now divided into quarters. Begin the installation at the center of the area, where the two lines intersect. Reset tiles must be installed in the same direction. (Directional markings stamped on the bottom of the tiles must point in the same direction.)

NOTE: To lay in an ashlar configuration, snap a third chalk line parallel to line #2 and perpendicular to line #1. The distance between line #2 and line #3 should be half the width of the tile (9 or 18 inches).

- 9. After the above procedure is performed, begin application of MR-710, Mannington's recommended one-component moisture-cured polyurethane adhesive or Mannington's MR-725 two-part urethane adhesive. Apply MR-710 to the substrate using a 1/16" \times 1/16" \times 1/16" square-notched trowel. Apply MR-725 to the substrate using a 1/16" \times 1/16" x 1/16" square-notched trowel.
- 10. Take care not to spread more adhesive than can be covered with flooring within 30 minutes. The open time of the adhesive is 30-40 minutes at 70°F and 50% relative humidity.
- 11. Place the first, tile A, into the wet adhesive making sure that the edges are precisely placed along the chalk lines and where they intersect. Press firmly on the tiles to remove any curls or entrapped air. See diagram 5. Reminder: Arrows on bottom of tiles must point in the same direction.
- 12. Lay whole tiles from left to right along chalk line #1 up to the wall on the opposite side of chalk line #2. The last tile will likely have to be cut to fit against the wall.



continued

- INSTALLATION 13. Do not allow MR-710 or MR-725 to cure on your hands or the flooring. Wipe off excess adhesive with a rag dampened with mineral spirits. Cured adhesive is very difficult to remove from hands. We strongly suggest wearing gloves when using MR-710 or MR-725.
 - 14. Continue this process with each row until you reach the wall across from chalk line #1.
 - 15. Go back and fill in gaps between the two original chalk lines and the wall on those two sides.
 - 16. If some seams are gapping, hold them together temporarily with painter's or masking tape. Do not use duct tape as it will leave a residue on the floor. Remove the tape after the adhesive has developed a firm set. It may be necessary to weigh down some seams.
 - 17. Roll a 100 lb. roller over the floor within 45 minutes to ensure a proper transfer of adhesive. Overlap each pass of the roller by 50% of the previous pass to ensure that the floor is properly rolled. A hand roller is recommended at the seams.
 - 18. Keep traffic off the floor for a minimum of 24 hours. Floor should be kept free from rolling loads for a minimum of 48-72 hours. Foot traffic and rolling loads can cause permanent indentations or disbonding in the uncured adhesive and cause tiles to shift.

C. INSTALLATION Interlocking Tile

Reset Interlocking Tile does not require any specialty tools.

Step 1 - Decide Tile Layout

Reset Interlocking Tile may be laid in straight rows and columns. Another option is to lay the tile in an "Ashlar" or brick pattern by offsetting either the rows or the columns by 50%. In other words, the tile can be laid "point to point" or in the offset "Ashlar" method. There is some locking benefit to the offset "Ashlar" brick pattern.

Step 2 - Snap Center Lines

Begin by measuring the length and width of the room. Divide the distances as measured in inches by the width of the tile. This will result in the number of full tiles plus a partial tile. Snap a center line for the width of the room such that the partial tile on either side of the room is no less than 6" wide. Repeat this for the length of the room.

Step 3 - Lay Tiles

Place the first tile at the center of the room where the two lines you snapped in Step Two intersect. Place the tile such that the inside of the dovetail is aligned to both the width and length line. Refer to Step One for proper tile orientation. Place the second tile on the opposite side of one of the lines.

Align the dovetail patterns and press together with your thumbs. Complete the process by hitting the seam area with a rubber mallet.

The third tile may be positioned either with the inside of the dovetail aligned to the other line aligning with one of the tiles, or such that 1/2 of the tile locks with the first tile and 1/2 locks with the second tile.

Continue laying tiles in all directions until there is not enough room to lay any more full tiles within the space to be filled. There should be a space of at least 6" on all four sides of the room.

Step 4 - Trim to Fit Room

Beginning in one corner, first measure from the wall to the inside dovetail pattern at each end of the tile. Then measure from the corner of the wall to the center of the edge of the tile. Position the tile such that the corresponding edge will align to the edge to be fitted and trim to fit the space from the corner to the center of the tile and to the wall or edge. Maintain a 1/4" gap between the edge piece and the wall to allow for expansion. Save the remaining piece to fit to the opposite wall. Continue around the room, measuring and fitting each piece and allowing for a 1/4" gap for expansion. Finish with molding or 1/2" quarter round molding.

CUTTING TIPS

Here are tips on cutting Reset Rubber Interlocking Tile. This procedure works best when using a non-retractable utility knife. When using a utility knife, be sure to keep the blades sharp to aid in the cut, and help reduce the possibility of injury due to dull blades.

- 1. Mark the mats you will need to cut with chalk or a chalk line.
- 2. Put your straight edge on the corresponding marks you have made on the mats.
- 3. Holding the straight edge firmly and score the mats two or three times.
- 4. Pull the mat close to the score line, lift & bend the mat toward you. The score line will "break open."
- 5. Make several more passes with the knife, working down the established cut until the cut is complete.

If a tile is damaged it should be replaced. With the interlocking tile, it will be easier to cut out the center of the tile so that you can get your hand under the tile and work the "tabs" loose. Fit the replacement tile over the adjoining tiles and lock into place.



INSTALLATION continued

With a fully adhered tile, it is important to remove as much residual adhesive as possible after removing the damaged tile. Apply a thin film of the appropriate adhesive to the bottom of the replacement tile. Use a hand seam roller to secure the tile into the adhesive and to bring the tile edges into position with adjoining tiles.

If the Reset sheet flooring is damaged it is necessary to cut a "plug" to replace the damaged area. Accurately cut a square of replacement material and position it over the damaged area. Carefully trace cut the repair plug to remove the damaged area. Once the damaged area is cut and removed, remove as much residual adhesive as possible. Apply a thin film of the appropriate adhesive to the back of the repair piece and carefully position. Roll the area with a hand seam roller to bring all edges into proper position.