



INSTALLATION GUIDELINES

Mannington Crown Collection

GENERAL INFORMATION

Contact Mannington Commercial Technical Services for guidance about subfloor testing and installation recommendations. Technical Services can be reached Monday to Friday, 8:00 a.m. to 5:00 p.m. EST at 800.241.2262 ext 3.

These installation specifications are for **Mannington Crown Collection**. All recommendations are based on the most recent available information. All instructions and recommendations must be followed for a satisfactory installation. You may also visit our website manningtoncommercial.com for recent updates or helpful videos and installation.

1. Mannington Crown Collection is impervious to water.
2. Mannington will not be responsible for any problems related to mold or mildew, indoor air quality or structural subfloor issues due to excess moisture.
3. Mannington Crown Collection does not need to be acclimated if HVAC is up and operating and material is within 15°F difference from storage to install.
4. Acclimating flooring is considered best work practice. The room and flooring should be allowed to adjust in constant temperatures between 55°F and 90°F for 48 hours prior to and during installation. Temperature of the room should not go below 55°F.
5. Mannington Crown Collection should not be exposed to temperatures greater than 140°F.
6. To allow for structure movement for flooring to float freely, a 1/4" expansion is recommended with no pinch points.
7. Open room area is not to exceed 100 L.F. in either direction. For larger rooms, additional expansion will be needed:
 - For 0-50 ft. use 1/4"
 - For 50-75 ft. use 5/16"
 - For 75-100 ft. use 3/8"



8. Install flooring only after the job-site has been cleaned and cleared of other trade apparatus that may damage a finished installation.
9. Mix and install product from several different cartons to achieve maximum variation.
10. Mannington Commercial does not recommend mixing dye lots. Predetermined and approve natural breaking points such as doorways or in areas where dye lot changes would be less noticeable and out of the main focus areas. Always get prior approval and sign off from the owner before proceeding Mannington does not warranty the visual aesthetics where mixed dye lots are merged.
11. All subfloor/underlayment patching must be done with a non-shrinking water resistant high quality Portland cement patching compound.
12. As a general rule for any new installation, existing adhesives from previous installations should always be scraped flat and thoroughly encapsulated with an approved sealant prior to installing new flooring.
13. Never install Mannington Crown Collection over residual asphalt-type ("cutback") adhesive. Residual asphalt type adhesive must be completely removed by wet scraping. Encapsulate any remaining trace of adhesive residue with an encapsulating sealer or high quality Portland based patching compound.
14. Do not install under permanent structures such as cabinets.
15. Do not install over existing pad or add additional padding.
16. The locking system is designed to be installed as an angle/angle install only.

MATERIAL HANDLING & STORAGE

1. Flooring materials that are shipped in cartons must also be stored properly. Cartons must be kept squarely positioned on the pallet to prevent distortion of the contents and to be fully supported. Do not store close to exterior walls, in direct sunlight or near HVAC vents.
2. Stored cartons are to be protected from forklift and other traffic that can damage carton corners.
3. Never double-stack pallets of flooring products.
4. Immediately remove all shrink wrapping before acclimation and verify materials delivered are correct style, color and quantity. When projects are delayed and longer storage time is needed, shrink wrap should be removed from tile and tile should be un-palletized.

SUBFLOOR PREPARATION

Careful and correct preparation of the subfloor is a major part of a satisfactory installation. Although Mannington Crown Collection is installed as a "floating" floor, correct preparation of the subfloor is still a major part of a successful installation. Roughness or unevenness of the subfloor may telegraph through the new floor covering, resulting in an unsightly surface and excessive wear on high spots. All subfloors should be flat to within 3/16" (3.9 mm) in 10 ft. (3,050 mm) and 1/32" (0.8 mm) in 1 ft. (305 mm).

Wood Subfloors

1. 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 installation.

2. Mannington Crown Collection can be installed over many wood substrates that are not suitable for fully adhered products, providing they are smooth, flat, structurally sound and free of deflection. These substrates include particleboard, chipboard, flakeboard OSB. Caution: Many times, wood panel subfloors are damaged during construction. The suitability of these floors is the responsibility of the installer.
3. If the surface of the wood subfloor is not smooth, a 1/4" underlayment panel should be installed over the subfloor. Any panels selected as an underlayment must meet the following criteria:
 - Be dimensionally stable
 - Have a smooth, fully sanded face, so graining or texture 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

Concrete Subfloor

1. Concrete subfloors should meet requirements prescribed in ASTM F710, "Standard Practice for Preparing Concrete Floors." Concrete subfloors must be dry, smooth and free from dust, solvent, wax, grease, oil, asphalt sealing compounds and other extraneous materials. The surface must be hard, dense and free from powder or flaking. The surface of the slab should be flat to within 3/16" (3.9 mm) in 10 ft. (3,050 mm) and 1/32" (0.8 mm) in 1 ft. (305 mm).
2. The final responsibility for determining if the concrete is dry enough for installation of the flooring lies with the floor covering installer. Although Mannington Crown Collection planks are not susceptible to damage from moisture, excessive subfloor moisture can be a breeding ground for mold, mildew and fungus, all of which can contribute to an unhealthy indoor environment. The Limited Warranties do not cover discoloration from mold or flooding, leaking plumbing or appliances, water entering completely cured through sliding glass doors or similar conditions. In accordance with ASTM F1869, moisture emission from subfloor should not exceed eight lbs. per 1,000 ft² per 24 hours as measured with the calcium chloride test. If using ASTM 2170 In Situ Relative Humidity Test, relative humidity should not to exceed 90%. Mannington Commercial will not assume responsibility for floor covering failure due to hydrostatic pressure or moisture vapor emission. New concrete slabs should be thoroughly dry (at least six weeks) and completely cured.
3. Holes, grooves, control joints/saw kerfs and other depressions must be filled with a high-quality patching and leveling compound, troweled smooth and feathered even with the surrounding surface.
4. Concrete floors with a hydronic radiant heating system are satisfactory, provided the temperature of the floor does not exceed 85°F at any point. Before installing the flooring, the heating system should be turned on to eliminate residual moisture. Mannington Commercial does not recommend heated floor mats.

WARNING: ASBESTOS & SILICA - Do not sand, dry scrape, bead blast 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. Smoking by individuals exposed to asbestos fibers greatly increases the risk of serious bodily harm. Unless positively certain that the product is a non-asbestos-containing material, you must presume it contains asbestos. Regulations may require that the material be tested to determine asbestos content. The Resilient Floor Covering Institute's (RFCI) "Recommended Work Practices for Removal of Existing Resilient Floor Coverings" is a defined set of instructions addressed to the task of removing all resilient floor covering structures. These instructions should be consulted with each installation (www.RFCI.com).

Existing Floor Coverings

Mannington Crown Collection can also be installed over most existing hard surface floor coverings, provided that the existing floor surface can be made smooth.

1. Ceramic tile should be made smooth by applying a cementitious overlay such as patching or leveling compound (filling grout lines not required).
2. Existing grout lines can be laid over.
3. Existing floors should be non-cushioned, fully adhered and not exceed one layer in thickness.
4. Do not install over carpet.
5. Floor should be flat, smooth, dimensionally sound and free from deflection.

Do not install rubber flooring over any existing floor covering.

INSTALLATION PROCEDURE

Mannington Crown Collection is designed to be installed as a "floating" floor. Do not secure the planks to subfloor. Always undercut wood door jambs. Check local building code for metal doorjamb. If jamb cannot be cut, then expansion must be maintained around doorjamb. Do not install cabinets or kitchen islands on top of Mannington Crown Collection. Use care when installing wall moldings and transition strips to not fasten through the product. Mannington Crown Collection is an angle/angle installation, which provides excellent joint strength.

Layout

1. It is important to balance the layout of the plank format. Proper planning and layout will prevent narrow plan widths at wall junctures. Determine the layout to prevent having less than half a plank width or very short length pieces.
2. As with all plank products, lay the long dimension of the plank parallel to the long dimension of the work area.
3. Accurately measure the room to determine the centerline. Adjust this established line to accommodate a balanced layout, and then transpose this line to a comfortable width away from the starting wall (approximately 2' to 3' wide). Determine if the starter row will need to be cut. If the first row of planks does not need to be trimmed in width, it may be necessary to cut off the unsupported tongue so a clean, solid edge is toward the wall.
4. Position the first plank so that both the head and side seam groove are exposed. Note: The groove is the longer of the locking profile approximately 1/4". This requires installing the product from left to right in the room. Occasionally, it may be necessary to install "backwards". This may be done by sliding the grooves under the tongues and working them right to left, but this is more difficult.

5. Install the second plank in the row by angling the end tongue into the end groove of the first plank. Be careful not to bend the corner of the plank. It is important to know that all structures expand and contract, as well as hardwood and laminate products. For this reason, it is recommended to maintain an expansion gap of approximately 1/4" from the wall. Then cut a plank to length to start the second row. Stagger the end seam at least 6" to 8" from the first plank.
6. Install the first plank in the second row by inserting the long side tongue into the groove of the plank in the first row. This is best done with a low angle of the plank. Do not flat install planks.
7. Install the second plank in the second row by inserting the short end tongue tightly into the previously installed plank end groove. Align the plank so the long side tongue tip is positioned just over the groove lip of the plank in the first row. Working from the end seam, with a low angle, slide the long tongue into the groove of the adjoining plank. Finesse and slight pressure is required to seat the tongue into the groove. You will feel the tongue lock into the groove.
8. Work across the length of the room, installing planks along the wall in the first row and then aligning the planks in the second row. It is critical to keep these two rows straight and square, as they are the "foundation" for the rest of the installation. Check squareness and straightness often.
9. Cut the last plank in the first row to fit approximately 1/4" short of the end wall. Planks may be cut with a saw or guillotine type cutter, such as Bullet Tools Mega Shears. Often times the remainder of this plank may be used to start the third row.
10. Continue installing planks, being certain to maintain a random appearance and offset end seams by at least 6" to 8". Maintain a 1/4" expansion space at all fixed vertical surfaces. Check to be certain all planks are fully engaged, if slight gapping is noticed, the gap can be tapped closed by using a scrap of flooring and a tapping block.
11. When fitting under door casings, toe kick, etc., the plank must be modified using a small block plane. Remove a thin layer from the groove to allow tongue and groove to be flat fitted while keeping the integrity of the tongue and groove. After checking the fit, apply a thin bead of MCS 42 seam sealer on the groove, then slide planks together to seal the joint tight. Wipe any excess sealer off the surface. If necessary, a flat pull bar may be used to assist in adjoining the modified planks. When fitting around obstacles or into irregular spaces, Mannington Crown Collection can be cut easily and cleanly using a multi tool or jigsaw. It is often beneficial to make a cardboard template of the area and transfer this pattern to the plank.

FINISHING THE JOB

Protect all exposed edges by installing wall molding and/or transition strips. Use caution to prevent the fasteners from securing the planks to the subfloor. Do not allow the floor to become pinched. Caulk along tubs, toilet bowls, etc. Consideration for transitions should be made at substrate changes, room to room environment changes, complicated layouts, subfloor elevation or room size over 50 ft. in length or width.

Like with all floor coverings, protect the finished installation from constant exposure to direct sunlight. See Cautions & Miscellaneous for details.

REPAIRS

Mannington Crown Collection is tough and durable; however, if a plank becomes damaged, it can be replaced. If the damaged plank or tile is along the perimeter of the room, the easiest technique is to just disconnect the planks until the damaged plank is removed. Replace the material and reassemble the planks. If it's impractical to just disconnect and reassemble the flooring, the following procedure should be used:

1. Using a circular saw and or a multi-tool saw, cut out and remove the center of the damaged piece, leaving approximately a 1" strip attached to the surrounding material.
2. Carefully cut back from the corners of the plank to the inside edge.
3. Remove the edges by wiggling the cut plank out from the tongue and groove of the surrounding pieces.
4. Prepare the replacement plank by removing the leading edge of the tongue profile on the long side and the end of the plank, being careful not to damage the decorative surface. Also, remove the bottom of the groove on the short end side by cutting on an angle. Once the plank is prepared, install groove into tongue to test the fit. Once you check the fit, you are now ready to fully install.
5. Position the replacement piece by engaging the groove into the tongue of the adjoining material. "Hinge" the prepared replacement plank into position.
6. Slightly lift the prepared side of the plank, apply a thin application of Mannington MCS 42 Seam Sealer onto the three exposed seams, carefully position plank into place and wipe excess from surface.
7. Use a hand roller to assist in aligning the edges into position.
8. Weigh down the replaced plank for at least 15 minutes, until the sealer secures the material.

CAUTIONS AND MISCELLANEOUS

1. Furniture should be moved onto the newly installed floor using an appliance hand truck over hardboard runways.
2. Heavy furniture should be equipped with suitable non-staining, wide-bearing casters or protectors. Non-staining felt protectors are recommended for table and chair legs to help prevent scratching.
3. It is recommended to avoid exposure to direct sunlight for prolonged periods. A combination of heat and sunlight can cause fading, discoloration or thermal expansion in most commercial furnishings. If the area will receive constant direct UV exposure, you may want to consider utilizing window treatments or use a glue down product with appropriate adhesive.
4. Use entryway or mat systems outside each entrance to prevent dirt, sand, grit and other substances from being tracking onto the floor.
5. Use mats labeled "non-staining."

