

URBAN COLLECTION

Luxury Vinyl Tiles + Planks

Installation Guidelines



GENERAL

This installment document is for all Urban Collection Products: Urban 28, Urban 20, Urban 12 and Urban 8.

Contact Technical Services for guidance about sub-floor testing and installation issues not addressed in this document. Bill Neifert, Vice President of Technical Services, can be reached at 570.856.1657.

These instructions cover all fully adhered installations of To Market Urban Collection Luxury Vinyl Tile. All recommendations are based on the most recently available information. This information provides general guidelines and instructions, which must be followed for a satisfactory installation. **Note: RI, To Market G100 adhesive is required for all GCore pad backed Urban collection installations to maintain warranty.**

Installation of Urban Collection LVT is straight forward and similar to the procedures that apply to all quality resilient plank floors. Good preparation is essential for a trouble-free installation. Do not commence work until jobsite testing and subfloor preparations are finished and the work of all other trades is complete. Site conditions must comply with the relevant building codes and local, state and national regulations.

- Urban Collection LVT is recommended for use over properly prepared concrete, suspended wood, metal and other suitable substrates. Never install this product over residual asphalt type (cutback) adhesive as "bleed through" may occur.
- This product is not suitable for external installation or unheated locations.
- Flooring, adhesive, jobsite and subfloor must be acclimated to a stable condition before installation. (See Job site testing)
- Following installation, foot traffic should be minimized for 24 hours; receive no rolling traffic or heavy point loads for 48 hours and should utilize minimal wet cleaning for 5 days.
- This product should remain at a temperature between 55° - 85° F (13° - 29° C) during its service life.
- Adhesive types can have significantly different moisture tolerances, which can influence required subfloor prep as well as cure time.

MATERIAL RECEIVING, HANDLING & STORAGE

1. All floor covering products require care during storage and handling. It is important to store flooring products in a dry, temperature-controlled interior area.
2. The temperature range should be between 65° F and 85° F, and the relative humidity should be controlled and maintained between 30% to 70%.

3. Material must be conditioned on site for at least 48 hours before beginning the installation.
4. 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.
5. Stored cartons are to be protected from forklift and/or other traffic that can damage carton corners. Never double-stack pallets of flooring products.
6. Immediately remove all shrink wrapping before acclimation and verify materials delivered are correct style, color and quantity.
7. Report discrepancies immediately to To Market Customer Service at 866.772.4772. Claims after installation of products with visual defects, mixed production runs, or incorrect style will not be honored.

JOBSITE TESTING

1. Before jobsite testing, the building envelope must be sealed. Walls, roofs, windows, exterior doorways must be installed and any opening to exterior elements must be sealed.
2. The installation area and materials to be installed shall be maintained at a minimum of 65°F (18.3°C) and a maximum 85°F (29.4°C) for 48 hours before, during and for 48 hours after completion of the installation. Relative humidity level extremes should also be avoided. General recommended humidity control level is between 35 – 55 %. If a system other than the permanent HVAC source is utilized, it must provide proper control of both temperature and humidity to recommended or specific levels for the appropriate time duration.
3. Test sites must be properly prepared and protected for the duration of testing to achieve valid results.
- 4. Surface Flatness for all Subfloors: The surface shall be flat to 3/16 (3.9mm) in 10 ft. (3050 mm) and 1/32 (0.8 mm) in 1 ft (305 mm).** To check flatness, place a 10 ft straight edge, string, laser level or use another suitable method on the surface and measure the gap.
- 5. Concrete Subfloors:**
 - a. Concrete subfloors must be finished and cured; free of all sealers, coatings, finishes, dirt, film forming curing compounds, or other substances that may prevent proper bonding of the flooring materials (ACI 302.1 and ASTM F710).**
 - b. Randomly check concrete subfloor for porosity using the drop water test. Place a 1 inch diameter drop of water directly onto the concrete subfloor. If the water droplet does not dissipate within 60 to 90 seconds, the subfloor is considered non-porous.
 - c. Concrete subfloors must have a minimum compressive strength of 3000 psi. Concrete subfloors shall not consist of lightweight concrete or gypsum.

- d. **Moisture Testing: Perform either the preferred In-situ Relative Humidity (RH) Test (ASTM F2170) or the acceptable Moisture Vapor Emission Rate (MVER) Test (ASTM F1869). For acceptable moisture limits please refer to the specifications of the adhesive of choice.**
 - e. Alkalinity: Must test surface alkalinity (ASTM F710). A 7.0 to 9.0 pH is acceptable.
6. Wood Subfloors and underlayment panels shall have the moisture content tested using a suitable wood pin meter. Readings between the wood subfloor and underlayment should be within 3% and have a maximum moisture content of 14% or less.

MOISTURE SUPPRESSANT SYSTEM

Concrete subfloors that exceed adhesive specifications will require a Moisture Suppressant System. Due to complexities associated with moisture vapor transmission, emissions and movement of soluble salts (alkalinity) in concrete subfloors, we do not offer, recommend, or warranty a specific solution for excess moisture in concrete slabs. However, there are many companies that offer solutions with warranties for excess moisture in concrete slabs.

To Market suggests that you reference the current ASTM F710, "Standard Practice for Preparing Concrete Floors to Receive Resilient Flooring". Contact one or more of the following or other moisture suppressant system suppliers for assistance:

VersaShield 800.576.1636

Ardex 724.203.5000 www.ardex.com

Koester American Corp. 757.425.1206 www.koesterusa.com

SUBFLOOR PREPARATION

Concrete

Careful subfloor preparation is vital for an excellent floor appearance and good tile/plank adhesion. The subfloor must be smooth, firm, flat, clean, dry, free from defects, and fit for purpose. A suitable smoothing compound should be used to ensure that no irregularities show through to the surface of the finished floor. In all cases, the subfloor must meet the moisture and pH requirements before installation.

Below and On-grade concrete subfloors must have a suitable vapor retarder properly installed directly beneath the slab. Always follow manufacturers' written recommendations for the use and installation of their appropriate surface preparation materials.

1. Record and file site conditions, test results and any corrective action(s) taken. It is important to maintain this documentation throughout the warranty period.
2. Subfloor must be clean (free of dirt, sealers, curing, hardening or parting compounds or any substance that may stain or prevent adhesion), smooth, flat, sound, fit for purpose and free of movement, excessive moisture and/or high alkalinity.
3. Slick surfaces such as power troweled concrete shall be abraded or profiled to allow for a mechanical bond between the adhesive and subfloor.
4. Remove existing resilient floor covering; remove all residual adhesive, paint or other contaminants following RFI recommended work practice. The use of adhesive removers or solvents in the abatement or removal of existing or old adhesives is prohibited and may void any warranty.

5. WARNING: ASBESTOS & SILICA - Refer to the current Resilient Floor Covering Institute (RFCI) document "Recommended Work Practices for Removal of Existing Resilient Floor Coverings" for guidance (www.RFCI.com).

6. Perform corrective actions necessary for elevated moisture or high alkalinity conditions.
7. Surface Flatness for all Subfloors: The surface shall be flat to 3/16" (3.9mm) in 10 ft. (3050mm) and 1/32" (0.8mm) in 1 ft (305mm) Bring high spots level by sanding, grinding etc. and fill low spots. Smooth surface to prevent any irregularities or roughness from telegraphing through the new flooring.
8. Leveling and Patching:
 9. a. For concrete subfloors, use only highquality Portland cement based materials (minimum 3000 psi compressive strength according to ASTM C109). Mix with water only, do not use latex. Caution: Do not lightly skim coat highly polished or slick power troweled concrete surfaces. A thin film of floor patch will not bond to a slick subfloor and may become a bond breaker, causing flooring to release at the interface of the subfloor and patching material. If in doubt, perform a bond test prior to commencing with the installation.

WOOD

Wood subfloors require an underlayment (double layer construction) with a minimum total thickness of 1" (25 mm). Use minimum 1/4" (6 mm) thick APA rated "underlayment grade" plywood with a fully sanded face or other underlayment panel that is appropriate for the intended usage. Install and prepare panels and seams according to the manufacturers' instructions. Also, refer to ASTM F 1482 Standard Practice for Installation and Preparation of Panel Underlayment to receive Resilient Flooring.

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

Panels intended to be used as underlayment should be specifically designed for this purpose. These panels should have a minimum thickness of 1/4" (6mm) and must meet the following criteria:

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

Any unevenness at the joints between panels must be sanded to a level surface. Gaps between panels, hammer indentations, and all other surface irregularities must be filled and sanded.

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, OSB, flake-board and wafer board are not recommended as underlayment. All these products, have inadequate uniformity, poor dimensional stability, and variable surface porosity. To Market 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.

INSTALLATION PROCEDURES

Before commencing installation, ensure the following are satisfactorily completed.

Acclimation: The installation area and materials to be installed shall be maintained at a minimum of 65°F(18.3°C) and a maximum of 85°F (29.4°C) for 48 hours before, during entire install, and for 48 hours after completion. Relative humidity level extremes should also be avoided. General recommended humidity control level is between 35 – 55 %. If a system other than the permanent HVAC source is utilized, it must provide proper control of both temperature and humidity to recommended or specific levels for the appropriate time duration.

Flooring Materials: Confirm quantity of Urban Collection LVT and adhesive are sufficient for area to be installed. Check tile for visual defects before installation. Installation of flooring acknowledges acceptance of materials. Report discrepancies immediately to To Market Customer Service at 866.772.4772. Claims regarding installation of product with visual defects or of an incorrect style will not be honored.

Expansion joints, isolation joints, or other moving joints are incorporated into concrete floor slabs to permit movement without causing random cracks in the concrete. These joints must be honored and not be filled with underlayment products or other materials, and floor coverings must not be laid over them. Expansion joint covering systems should be detailed by the architect or engineer based upon intended usage and aesthetic considerations.

Surface cracks, grooves, depressions, control joints or other non-moving joints, and other irregularities shall be filled or smoothed with high quality Portland cement based patching or underlayment compound for filling or smoothing, or both. Patching or underlayment compound shall be moisture, mildew, and alkali-resistant, and shall provide a minimum of 3000 psi compressive strength after 28 days, when tested in accordance with ASTM C109 or ASTM C472, whichever is appropriate.

Subfloor Preparation: Make sure all surfaces to be covered are completely clean, dry and smooth and that all necessary subfloor preparation has been properly completed and documented.

Inspect Substrate: Perform final acceptance inspection of substrate.

Adjacent Surfaces Protection: Protect adjacent work areas and finish surfaces from damage during product installation.

Flooring Protection: Urban Collection LVT should be the last material installed to prevent other trades from disrupting the installation and adhesive set-up or damaging the floor.

Start of flooring installation indicates acceptance of current subfloor conditions and full responsibility for completed work.

To Market products have arrows imprinted on the back. Lay all arrows pointing in the same direction. To Market Global Urban LV comes in plank and tile formats and can be laid out to run either parallel or diagonal to the room or primary wall.

Tiles should be installed running in the same direction, either (block or staggered). If design decision calls for quarter turning the tiles, arrows should alternate: one tile with arrows north/south, next tile, east/west, then north/south again.

Plank flooring should have end joints offset by at least 6" and staggered to create a random appearance that avoids alignment of end joints. (All arrows must point in the same direction).

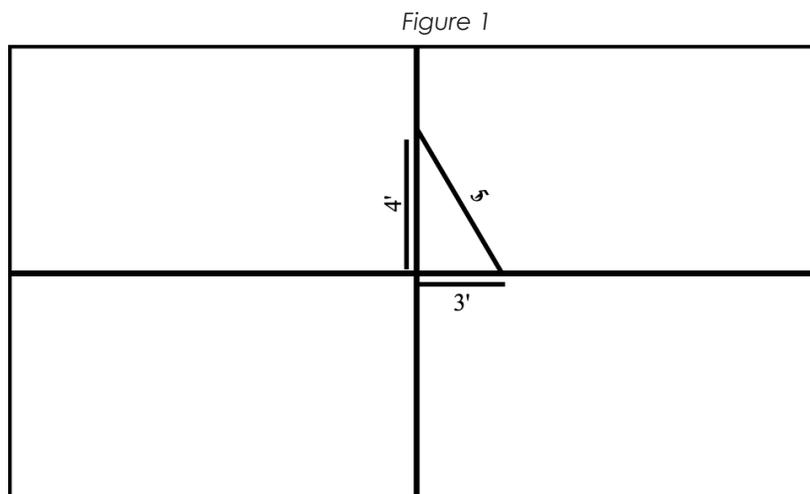
The following conditions must be given consideration when determining how the material will be installed:

1. Layout: Layout shall be specified by end user, architect or designer.
 - a. Establish center marks and determine start point to balance installation in room and have equal tile widths on opposite sides of room. This can be facilitated by dry laying tiles and marking base lines.
 - b. The room layout must be set-up so that all flooring can be installed while staying off freshly installed tiles. This will minimize tile shifting, adhesive displacement and wet adhesive from oozing up and getting onto the face of the tiles. This can be accomplished by creating work zones outlined with chalk lines to spread adhesive aligned with established base lines. Create work zones that are no wider than the installers comfortable arm reach and in multiples of the tile width.
 - c. All Installations: Spread only the amount of adhesive that can be covered within the working time specific to the adhesive being used.

When all preparatory work is satisfactorily completed, including dry fitting cut tiles (if applicable), proceed with installation. Inspect each tile for visual defects before installing. **Installation of the flooring implies acceptance of materials.**

INSTALLATION FOR SQUARE TILES

Layout of the Room for Squarely Laid Fields. To square the area to be covered, first find the center of one end of the main rectangle. Locate the same point at the other end wall. Snap a chalk line between these points to mark the center line on the floor. Then measure along this center line to find the middle of the room.

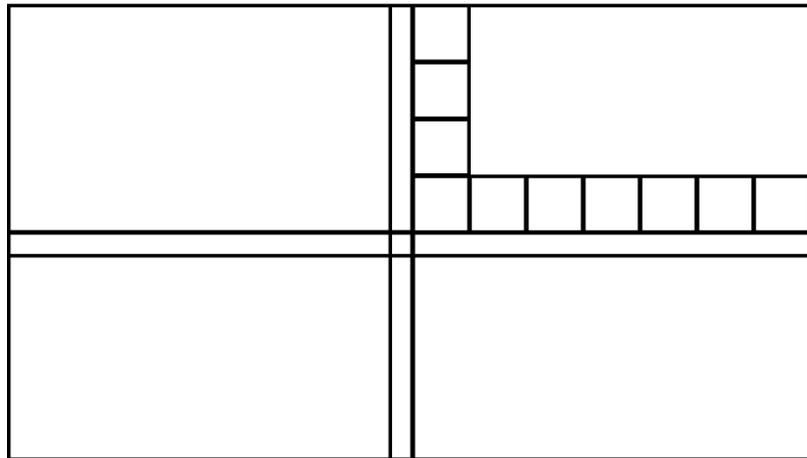


At the center point, mark off a line across the room at exactly right angles to the first line. This may be accomplished by the 3-4-5-triangle method as shown in Figure 1.

Measure 4 feet toward the side wall from the center point and mark. Then measure 3 feet from the center point along the longer line and mark. The distance between these must measure exactly 5 feet. If this measurement marker does not come out at exactly 5 feet, the center crossing lines are not at a true right angle. For large rooms, multiples of the above dimensions may be used to obtain greater accuracy (6-8-10 or 9-12-15, etc.).

Dry-lay a row of tiles from the center line to the side wall to determine the space left for the borders. If the resulting border is too small, move the starting point over a half tile width so that it straddles the center line. Repeat the same procedure lengthwise of the room. (This can readily be figured out from the room dimensions without putting down the tiles if desired.)

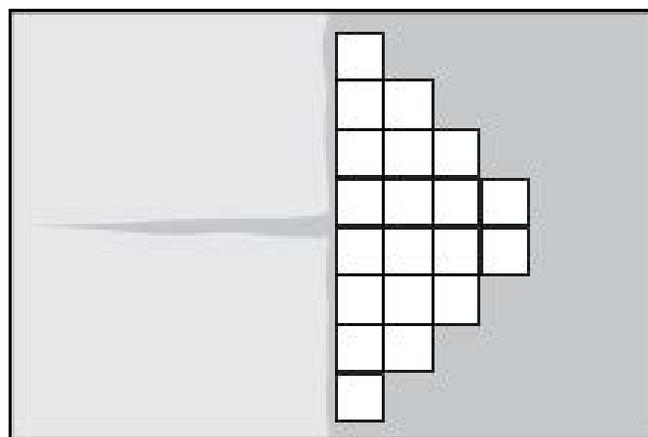
Figure 2



If it is decided to have the center row of tiles straddle either or both of the center lines, additional guidelines should be snapped on the floor $\frac{1}{2}$ tiles width on one side of either or both center lines as required. (See Figure 2)

After the border widths have been determined and the center starting lines have been snapped, spread the recommended adhesive on the center lines, leaving portions of the lines at center and near each wall uncovered as shown in Figure 3.

Figure 3



Spread the adhesive over one-half the area and after it is ready, start laying tile from the right angle formed in the center of the room by center lines. Lay toward the two corners of the room as shown. Always refer to your guide lines as you progress with laying so that any mistake can be corrected before it is too late. Sometimes it's necessary to compromise on the rightness of joints to make allowances for unevenness or waves of the sub-floor. Take care to place tile as accurately as possible without sliding them into place.

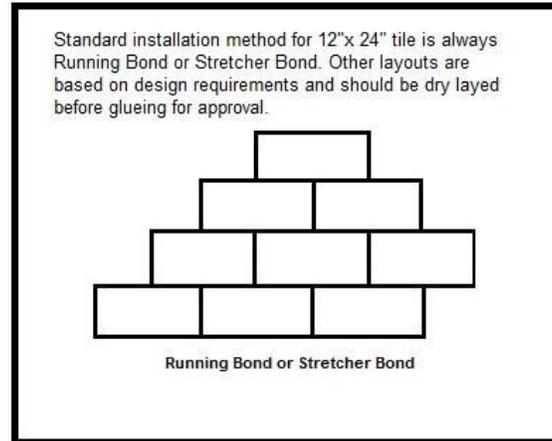
IMPORTANT: All flooring must be rolled with a minimum 100-lb roller after installation. Use a hand roller in areas not reached with a 100-lb. roller.

INSTALLATION FOR RECTANGULAR TILE

Rectangular tile is installed in the running bond or stretcher bond method shown in *Figure 4*.

After you have found the center of the room, take a tile and mark out the tile width from the center point of the wall to make sure that you do not end up with any cut piece smaller than 6" and adjust your mark at the center point of the room if necessary. Use the same measurement for the center point of the opposite wall. Proceed dry laying the tiles on half the floor for optimal cutting and minimal waste against walls or other obstructions. During dry-lay procedure, make sure that tile joints do not coincide with the joints in the subfloor. Spread adhesive on one side of the room when dry laying and cuts are complete. Begin laying tiles from the middle of the room outward in the running or stretcher bond pattern shown below.

Figure 4

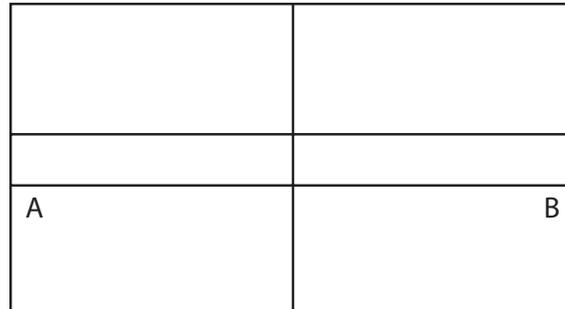


IMPORTANT: All flooring must be roller with a minimum 100-lb roller after installation. Use a hand roller in areas not reached with a 100lb roller.

INSTALLATION FOR PLANK

Find the center point of the room. Strike a line. Obtain a true 90° angle by using a carpenter's square. Strike a second line which will divide the room in to four equal parts. Measure the distance from the center to the wall, parallel to the direction of the plank. Divide the measurement by the width of the plank. If less than half remains as the border plank, adjust the point to compensate. This will create a larger area along the wall and reduce the chance of having to cut a small sliver of flooring to place along the wall.

Figure 5



Carefully place the first piece of plank at the junction of the chalk lines. See *Figure 6*. Continue to lay the planks, making sure each is flush against the chalk line and tight against the adjoining plank. Make sure the plank is well seated into the adhesive, paying special attention to the edges. Lay in a pyramid fashion, *Figure 7*, or a row by row fashion shown in *Figure 8*.

Figure 6

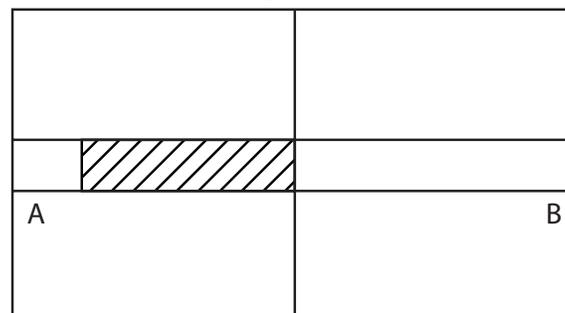


Figure 7

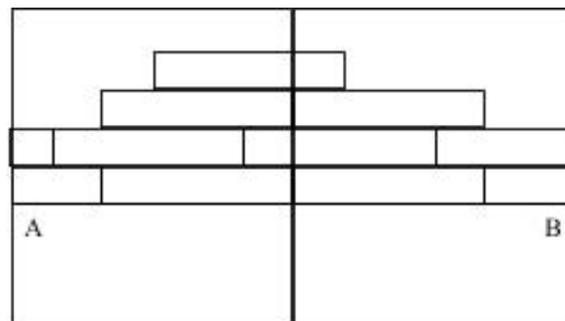
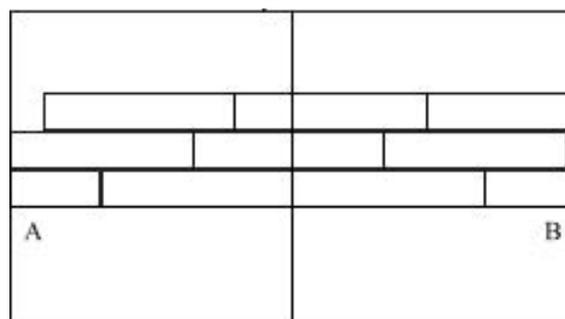
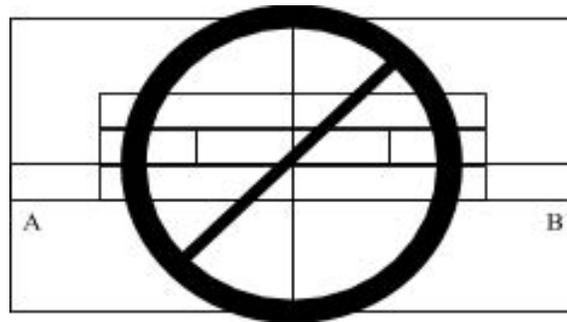


Figure 8



This *Figure 9* diagramed layout for installation is NOT approved. The use of cut pieces anywhere other than at walls or fixed objects is not proper procedure. Use only full pieces when installing material in the center of the room. Please refer to the previous diagrams for best installation layout practices based on the product you are installing.

Figure 9



Fitting the Border

Measure the distance from the last plank in the row to the wall. Mark the plank and cut it against the mark. Lay the plank in place, making sure that the cut edge is against the wall.

Fitting Around Irregular Objects

Make a pattern out of heavy paper to fit around pipes and other irregularities. Place the pattern on the plank, trace cutting along the trace lines.

IMPORTANT: All flooring must be rolled with a minimum 100-lb roller after installation. Use a hand roller in areas not reached with a 100-lb roller.

ADHESIVES:

To Market requires **G100 Adhesive** for the installation of Urban Collection products. Only our recommended adhesive should be used. Other adhesives may not provide adequate performance and could result in a failure. Call Technical Services with any questions you may have regarding adhesives at 570.856.1657.

To determine compatibility and porosity of the subfloor we strongly recommend a bond test. Install a 2'x2' section of flooring, following installation procedures, in a light traffic area for 48 hours. Inspect for good adhesion, which should make it difficult to remove.

IMPORTANT NOTE: To Market **G100 Adhesive** is specifically formulated to be fully compatible with backings, chemistry and to maximize the performance of our products. Using substitutes or failing to use our R99 Adhesive as recommended can cut short product life, cause installation failure and/or lead to a chemical reaction such as hydrolysis, which will permanently damage the backing and **will void all applicable warranty coverage. Contact Technical Services at 570.856.1657 with any questions of adhesive compatibility.**

G100 Adhesive: Premium Resilient LVT/LVP Adhesive is solvent free and formulated for indoor use only with the installation of dimensionally stable Luxury Vinyl Tile and Plank and vinyl backed resilient sheet flooring. This high strength adhesive is designed for installations over porous and non-porous substrates when tested in accordance with **ASTM F-1869 Calcium Chloride at (10) lbs maximum MVER, ASTM F-2170 95% maximum Situ Relative Humidity and 9pH.** For best results, install at 70°F (+/-5°) and 50% Relative Humidity.

Spread adhesive using the recommended trowel size: Porous Substrates use 1/16"x1/16"x1/16" square notch for 125-150 sqft per gallon coverage. Non-Porous Substrates use 1/16"x1/32"x1/16" U-notch for 200-260 sqft per gallon coverage. Refer to G100 adhesive pail on site to familiarize yourself with this adhesive.

Note: DO NOT INSTALL if concrete subfloors exceed 10lbs MVER as determined by the Calcium Chloride MVER test (ASTM F-1869) or 95% RH as determined by the In-Situ Relative Humidity test (ASTM F-2170). These should be considered having excessive with regards to moisture emissions and may require the installation of a moisture mitigation system. Contact Technical Services for assistance at 570.856.1657.

To Market Global will not assume responsibility for floor covering failure due to hydrostatic pressure or moisture vapor emission. The final responsibility for determining if the concrete is dry enough for installation of the flooring lies with the floor covering installer. **CAUTION: Temperature directly affects adhesive working and setting times. Warmer temperatures shorten working times and colder temperatures lengthen working times of adhesive. Follow instructions on container for proper application.**

Adhesive Application: Follow the instructions on the adhesive labels.

1. Use a trowel with appropriate notch size. Do not use worn trowels.
2. Spread adhesive evenly with proper trowel held at 60° angle avoiding skips or voids and excessive adhesive application.
3. Only spread sufficient adhesive that can be covered within the adhesive working time and allow to dry to the touch before installing tiles or planks. The dry time to touch will depend on temperature and humidity. Follow label instructions.
4. Install rows to chalk line making sure tiles/planks are precisely aligned with chalk line and adjacent tiles.
5. If tiles/planks shift, use releasable painters tape diagonally over seams to keep tiles tight and aligned. REMOVE TAPE AS SOON AS TILE IS SET. DO NOT ALLOW TAPE TO REMAIN ON TILE LONGER THAN 8 HOURS.

6. The floor must be rolled in both directions using a 100lb 3-section roller. Roll floor as soon as conditions permit, then roll floor again 90 degrees to the first direction within 1 hour. To Market **G100 Adhesive** will not transfer 100% to the backing of the tile/plank. Be sure not to exceed the manufacturer's recommended working time on the label.
7. Clean excess adhesive as you install before it's allowed to dry. Use a soapy clean soft cloth to remove wet excess adhesive.
8. Clean up all debris as you work.
9. Wait 24 hours for normal foot traffic and wait 48 hours for point and rolling loads after installation.
10. During first five days minimize heavy wet cleaning to allow adhesive to fully set.

Special Considerations:

Radiant Heat: Urban Collection LVT can be installed over Radiant heating (hydroponic) systems. There must be at least 1/2 inch of separation between the radiant heat source and the flooring. The maximum temperature of the subfloor surface must not exceed 85°.

Before installing flooring products over newly constructed radiant-heating systems, operate the system at maximum capacity for at least 8 hours to force any residual moisture from the cementitious topping of the radiant-heating system. Then set the thermostat to a comfortable room temperature for the installation. For existing systems, the system must be switched off for a minimum of 48 hours before, during and 48 hours after flooring installation.

Direct Sunlight: Installations in areas where there is heavy, direct sunlight exposure for long periods of time should utilize window treatments.

Protecting New Installations: New installations must be protected while the adhesive cures. Early foot traffic, point or rolling loads can cause adhesive displacement or breaking of the bond between the adhesive and the tile or substrate.

ROUTINE MAINTENANCE

To get your new floor looking its best, and to keep it that way, To Market recommends the following initial maintenance procedures. For detailed recommendations, see the To Market Maintenance Instructions, which can be found on the website under Specifications/Urban Collection.

Use non-staining matting system at exterior doors that is appropriate for soil load and weather conditions.

Use appropriate floor protectors, glides and wheels and do not drag or slide heavy objects across the surface of the floor.

Do not use abrasive cleaners that can scratch the floor surface or detergent cleaners that leave a residue.

Day 1

- Stay off the new floor. Minimize traffic.

Day 2 to Day 4

- Dust mop, sweep or vacuum the floor to remove loose dirt and grit.
- Lightly damp mop floor (assure mop is well wrung out) with properly diluted Neutral pH cleaner solution.

Day 5

- Choose from multiple routine maintenance options to suit individual site requirements, i.e. traffic, environment and use of space.

MAINTENANCE PRECAUTIONS AND SAFETY INFORMATION

Effective maintenance includes promptly removing all spills and then thoroughly cleaning with a diluted neutral cleaner or cleaner/maintainer solution. Failure to establish an effective routine maintenance program will not only detract from the appearance of the floor but may shorten its useful life.

Contact To Market Customer Service for recommended maintenance products at 866.772.4772.

SAFETY FIRST: Before commencing work, put out signs or safety cones to warn that cleaning is in progress. A slippery floor can cause accidents. This can be caused by poor maintenance, surface contamination, spills or when the floor is wet. All hard floors can be slippery when wet. Ensure the floor is clean and dry before resuming use. **Use warning signs in commercial areas when performing maintenance or cleaning spills.**

Please contact To Market Technical Services with any questions before proceeding with any part of the installation.

Bill Neifert, Vice President, Technical Services

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