



Product Technical Information Sheet

Microban® LVT

| | |
|---------------------------------|--|
| Construction | Solid Polymer Core (SPC) |
| Plank Finished Size (nominal) | 7.1" x 48" |
| Tile Finished Size (nominal) | 12" x 24" |
| Total Thickness | 5.0mm (nominal), includes 1.0mm IXPE attached pad |
| Wearlayer | 20mil (0.5mm) urethane with ScratchProtect® and Microban® Antimicrobial Protection |
| Edge Profile | Microbevel & Painted Bevel Style Dependent |
| Gloss Level | Low Gloss |
| Installation Type | Floating |
| Origin | Vietnam |
| Residential Warranty # of Years | Limited Lifetime |
| Commercial Warranty # of Years | 10 Year Light Commercial |

Plank Carton

| | |
|------------------------|-------|
| Pieces per Carton | 10 |
| Square Feet per Carton | 23.77 |

Tile Carton

| | |
|------------------------|-------|
| Pieces per Carton | 12 |
| Square Feet per Carton | 24.03 |

Plank Pallet

| | |
|------------------------|--------|
| Cartons per Pallet | 50 |
| Square Feet per Pallet | 1188.5 |

Tile Pallet

| | |
|------------------------|--------|
| Cartons per Pallet | 60 |
| Square Feet per Pallet | 1441.8 |



Product Performance Characteristics

| | |
|---|--|
| ASTM F 3261 Specification Rating | Class I / Type B / Grade 2 / Backing Class B |
| ASTM E-648 Critical Radiant Flux Flame Spread CRF >.045 w/sqcm | Passes as Class 1 |
| ASTM E-662 NBS Smoke Chamber Test, Smoke Value 450 or less+ | Yes |
| ASTM E 90 & E 492 6" (152mm) concrete slab with drop ceiling | STC 61 / IIC 67 |
| Static Load Limit, psi | 750 |
| ADA Guidelines | Meets or Exceeds ADA Guidelines |
| Coefficient of Friction | Coefficient of Friction \geq 0.6 rubber sensor |
| Recommended Grade Level | On, Above or Below Grade |

Coordinating Trims, Moldings & Sundries

| | |
|-----------------------|--|
| 3-n-1 Trim | Functions as a Reducer, T-Mold and End Cap / 94" |
| Quarter Round | 94" |
| EZStairs™ Stair Tread | Available to match all plank, wood look visuals / 48" |
| Top Step | Available to match all plank, wood look visuals / 48" |
| Riser | White stair riser / 47" |
| Stair Nose Fill | Recommended for EZStairs™ installations with existing square nose stair treads |



WARNING:

Do not sand, dry sweep, dry scrape, drill saw, beadblast, or mechanically chip or pulverize existing resilient flooring, backing, linking felt or asphaltic "cut-back" adhesives. These products may contain either asbestos fibers 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 non-asbestos containing material, you must presume it contains asbestos. Regulations may require that material be tested to determine asbestos content. The RFCI's Recommended Work Practices for Removal of Resilient Floor Coverings (www.rfci.com) are a defined set of instructions which should be followed if you must remove existing resilient floor covering structures.

Phenix Microban LVT Collection Warranty & Floor Care

PHENIX MICROBAN LVT COLLECTION WARRANTY

Immediately after installation:

- Keep traffic light during the first 24 hours
- Avoid scrubbing or washing the floor for 48 hours after installation

Limited Lifetime Warranty for Residential Use:

Phenix warrants that Microban LVT will be free from manufacturing defects following the date of the purchase under normal household conditions* and will not: wear-out**, fade, stain, delaminate or gap***.

* Normal household conditions mean the daily activities commonly associated with residential use and includes that the floor will not stain from human or animal urine, vomit or feces.

** For the purposes of the Limited Lifetime Warranty for Residential Use, "wear-out" means complete loss of the Phenix wear layer so that the printed pattern or design of the floor is altered.

*** A gap is defined as: A gap bigger than the thickness of a business card (>10 mils) and longer than the short side of a business card (<2").

Limited 10 Year Warranty for Commercial Use

Phenix warrants that Microban LVT will be free from manufacturing defects, and for a period of 10 years following the date of purchase, under light commercial use*, will not discolor from mold, mildew or alkali.

Correctly constructed wood underfloors are not subject to moisture transmission. The commercial warranty applies only to floors installed directly on concrete subfloors.

Mold and mildew growth caused by excessive moisture as a result of flooding, plumbing and appliance leaks, and water leakage through sliding glass doors is not covered.

Definitions for Applications in terms of LVT:

| Residential | Light Commercial | Commercial |
|------------------|-------------------|--------------------------|
| Kitchen | Small Restaurant | Large Restaurant |
| Bedroom | Small Retail Shop | Large Retail |
| Dining Room | Waiting Rooms | School Classrooms |
| Recreation Rooms | Trade Rooms | Large Office |
| Foyers | | Nurses' Station |
| Bathroom | | Bathroom |
| | | Assisted Living |
| | | Hair Salon -working area |

Remedies Available to You:

If the product fails to perform as stated in the applicable Limited Warranty, Phenix will, at its option, (i) repair without charge the affected area to conform to the warranty; (ii) replace the floor without charge with another floor of equal value and/or quality; (iii) refund up to 100% of the original cost of the material. The percentage of the original cost refundable depends on the amount of time elapsed since the date of purchase:

- Within 1-2 years: 100%
- Within 3-5 years: 70%
- Year 5 until the end of the specified warranty term: 50%

If your floor was installed by a professional flooring contractor hired by you, Phenix will also pay for the professional labor cost to install your replacement floor. If Phenix repairs or replaces a plank or tile, you will be required to clear, at your expense, any items placed over the affected area subsequent to the original installation.

Warranty coverage for a replacement panel will be limited to the remaining time of the original warranty.

The costs of professional labor will be reimbursed within the approved labor charges put forth by Phenix, provided that the installation has been performed according to Phenix's installation guidelines, standard industry practices and use of approved installation materials included but not limited to proper subfloor materials, recommended adhesive(s), underlayment(s) and accessories. Labor must also be provided by a professional flooring installer and will be paid according to the following schedule:

- Within the first 2 years: 100% of labor for reinstall/repair
- Within years 3-4: 70% of labor for reinstall/repair
- Years 5-6: 50% of labor costs for reinstall/repair
- Years 7 on: No labor reimbursement provided

Limited Warranty General Terms

Phenix reserves the right to inspect any floor that is deemed by the client to be defective. Removal of the flooring prior to this inspection voids this product warranty in its entirety. Phenix, at its discretion, will send a company representative and/or third-party, independent inspector to the installation site to conduct the inspection. If it is deemed necessary, a comprehensive inspection, including the removal of flooring components, will be conducted to properly facilitate a full investigation.

Limited Warranty Exclusions and Conditions:

The Limited Warranties:

- Do not apply to “seconds” or “off-goods” grad products
- Apply only to the original purchaser and the original installation site and not transferable
- Do not cover materials installed with obvious manufacturing defects. Visual defects greater than 1cm are considered identifiable. Labor costs will not be covered when materials with visual defects greater than or equal to 1cm are installed; replacement material only will be provided
- Do not cover conditions or defects caused by improper installation, the use of improper adhesives or seam sealers, inadequate sub-flooring or improper sub-floor preparation
- Do not cover construction-related damage
- Do not cover conditions caused by improper use of maintenance, such as:
 - Loss of gloss or build-up of dulling film due to lack of maintenance or improper maintenance
 - Damage resulting from the failure to follow floor care instructions as outlined in this warranty
 - Scuffs, scratches or cuts
 - Damage or discoloration from carpet dyes, fertilizers or other chemicals
 - Staining from use of mats not labeled non-staining
 - Damage caused by burns, flooding, fires and other accidents
 - Damaged caused by abuse (i.e. dropped or dragging of heavy or sharp objects across the floor without proper protection)
 - Damage caused by caster wheels or vacuum cleaner beater bars
 - Failure to support furniture with floor protectors made of non-staining felt or non-pigmented hard plastic. Protectors must be the same diameter of the object and rest flat on the floor
- The limited warranties do not cover discoloration from heat or sunlight. A combination of heat and sunlight can cause most home furnishings to fade or discolor. For further information, please see the floor care instructions in this warranty
- Do not cover variations of color, shade or texture of the floor you purchase from those shown on samples, photographs or literature
- Do not cover discoloration from mold or from flooding, leaking plumbing or appliances, water entering through sliding glass doors or similar conditions

UNDER THE TERMS OF THESE LIMITED WARRANTIES, PHENIX WILL NOT BE LIABLE FOR INDIRECT, SPECIAL, INCIDENTAL, CONSEQUENTIAL, OR OTHER DAMAGES OF ANY KIND, NO MATTER WHAT THE CAUSE.

- Note: Some states or provinces do not allow the exclusion or limitation, or exclusion may not apply to you

THERE ARE NO IMPLIED WARRANTIES, INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, EXTENDING BEYOND THE TERMS OF THESE LIMITED WARRANTIES.

- Note: Some state and provinces do not allow limited on how long an implied warranty lasts, so the above limited may not apply to you

EXCEPT AS SET FORTH HEREIN, THERE ARE NO EXPRESS WARRANTIES MADE BY PHENIX COVERING THIS PRODUCT.

- This warranty gives you specific legal rights, and you may have other rights which vary from state to state in the U.S. or province to province in Canada

PHENIX MICROBAN LVT COLLECTION FLOOR CARE

- Use doormats outside each entrance to your home to prevent dirt, sand, grit or other substances such as oil, asphalt and driveway sealer from being tracked onto your floor. Use mats labeled non-staining on your floor.
- To minimize staining from asphalt tracking, we suggest you use latex-based driveway sealer on your driveway.
- **Close your curtains or blinds where extreme sunlight hits the floor. Like with all floor coverings, protect the finished installation from exposure to direct sunlight. A combination of heat and sunlight can cause most home furnishings to fade or discolor. Avoid exposure to direct sunlight for prolonged periods. During peak sunlight hours, the use of blinds or drapes is recommended. Prolonged direct sunlight can result in discoloration and excessive temperatures may cause floor expansion (which may cause buckling) or delamination.**
- Support furniture with wide-bearing, non-staining floor protectors. The protectors should be at least one-inch in diameter, made of non-pigmented hard plastic, and rest flat on the floor. Non-staining felt protectors are also acceptable. Caster with a minimum of ¾" flat surface width or floor protectors are recommended for all movable furniture. Make sure any metal protectors are rust-proof. Replace your narrow dome furniture rests with wide-bearing ones.
- If you need to move heavy furniture and/or appliances across the floor, always use strips of wood or hardboard runways to protect the floor. Always use runways even if you have an appliance dolly or even if heavy objects are equipped with wheels or rollers.
- Sweep your floor regularly (at least once per week).
- Prevent stains by wiping up spills immediately.
- Occasional cleaning with Mannington UltraClean™ (lightly misted) and a microfiber mop (or cloth) or mopping with Mannington Award Series® Rinse-Free Cleaner is recommended when dirt builds up and sweeping alone is not sufficient. Use a solution of 2 to 3 capfuls of Award Series® Cleaner (or clear, non-sudsy ammonia) in one gallon of warm water. Use of more than the recommended amount of cleaning solution may leave a dulling film. Do not use soap or detergent products as they will leave a dulling film. Rinsing is not required when using Mannington Award Series® Rinse-Free Cleaner, but if time permits, rinsing will provide the best care.
- Phenix Microban LVT is a low-gloss floor; use polish or "mop and shine" products only if you wish to make the floor shiny.
- After several applications of polish for a high-shine floor, an occasional stripping and reapplication of polish may be necessary. We recommend the use of Mannington Award Series® Heavy Duty Cleaner and Stripper. After thorough cleaning, rinsing and drying, we recommend applying Mannington Award Series® High-Gloss Polish to restore the shine. Do not use wax. Do not buff. High traffic areas may require more than one application of polish. Allow polish to dry "tack-free" between coats.

For complete instructions regarding the proper use of Mannington floor care products, refer to the package labels.

Caution: Phenix LVT floors can be slippery when they become wet. Use extreme caution when walking on a wet floor.

The overall stain resistance of Phenix Microban LVT is excellent, and most spills will wipe off quickly and easily with a clean, white cloth. Removing certain substances may take a little extra effort, as outlined in the chart below.

- Start with the first step listed.
- Only do steps necessary to resolve the problem.
- Always use a clean, white cloth for wiping up stains and turn it frequently to avoid spreading the stain.
- Rinse with clean water and allow area to dry between steps.
- If stain removal causes a change in gloss level, apply polish per recommended guidelines.

FLOOR CARE

Maintenance Chart

| Stain/Problem | Recommendation |
|---|--|
| Food, Beverages | If a substance is gummy, scrape off with a dull knife. Clean using Mannington UltraClean™ and a soft nylon pad or soft bristle brush. Saturate a clean, white cloth with bleach* solution, cover stain and allow to stand for no more than 1 hour. |
| Tar, Oil, Asphalt, Paint (Oil Based) | Scrape excess substance off with a dull knife. Clean using UltraClean™ and a soft nylon pad or soft bristle brush. |
| Scuffs, Marks, Scratches | Wipe with a clean, white cloth dampened with light fluid, painter's naphtha or isopropyl alcohol**. |
| Minor Cuts, Burns | Limit traffic over damaged area, cover with masking tape, contact your retailer or Phenix for advice. |
| Rust | Clean using Mannington Award Series® Heavy Duty Cleaner and Stripper and a soft nylon pad or soft bristle brush. Saturate a clean, white cloth with bleach* solution, cover stain and allow to stand for no more than 1 hour. |
| Lipstick, Antiseptics | Scrape off excess with dull knife. Clean using Mannington UltraClean™ and a soft nylon pad or soft bristle brush. Wipe with a clean, white cloth dampened with lighter fluid, painter's naphtha or isopropyl alcohol. If more cleaning is necessary, saturate a clean, white cloth with bleach* solution, cover stain and allow to stand for no more than 1 hour. |
| Crayon, Ink, Hair Dye, Permanent Marker | Clean using Mannington UltraClean™ and a soft nylon pad or soft bristle brush. Wipe with a clean, white cloth dampened with light fluid, painter's naphtha or isopropyl alcohol**. |
| Fading, or Discoloration, Thermal Expansion | To limit amount of heat directed on the floor, close curtains or blinds where extreme sunlight hits floors or apply a thermal UV film. |

CAUTION:

* Please follow directions listed on the container.

** Lighter fluid, painter's naphtha and isopropyl alcohol are flammable liquids. Please follow precautions listed on the container.

Phenix SPC Installation Guidelines

GENERAL INFORMATION

These installation specifications are for all Phenix SPC flooring products. All recommendations are based on the most recent available information. All instructions and recommendations must be followed for satisfactory installation. You may also visit Phenix.com for recent updates.

- Although acclimation is not specifically required, best installation practice recommends that the product be installed close to intended occupied service temperature, generally a target of 70°F (21°C), but at least between 55°F (13°C) and 100°F (38°C).
- Phenix SPC products are recommended for three season rooms and seasonal homes over concrete substrate. Installer must provide at least 5/8" (16mm) expansion.
- Phenix SPC products are not recommended where the floor might experience temperature extremes beyond -20°F (-29°C) or greater than 150°F (65°C). Occupied use temperature range is assumed to be between 55°F (13°C) and 100°F (38°C).
- Phenix SPC products can be installed up to 50' x 50' (15.2m x 15.2m) or total of 2500sq ft (232.3 sq m) with a 1/4" (6.4mm) expansion. Larger areas must provide a 3/8" (16mm) expansion up to 100' x 100' (30.4m x 30.4m).
- Install Phenix SPC products only after the jobsite has been cleaned and cleared of other trade apparatus that may damage a finished installation.
- Mix and install product from several different cartons to achieve desirable plank variation.
- All subfloor/underlayment patching must be done with a non-shrinking, water-resistant, high-quality Portland cement patching compound.
- Structural subfloor requirements must meet local building codes as well as Phenix criteria. For concrete subfloors, conformance to ASTM F 710 and for panel underlayment, conformance to ASTM F 1482.
- Phenix SPC products are designed to be installed at an angle/angle installation only.

SUBFLOOR INFORMATION

- Careful and correct preparation of the subfloor is a major part of a satisfactory installation. Phenix SPC products are designed for a "floating floor" installation method. Although Phenix SPC products will bridge minor floor imperfections and gaps, heavy roughness or unevenness in the subfloor may telegraph through the new floor covering.
- All subfloors should be flat to within 3/16" (4.8 mm) in 10' (3048 mm) and 1/32" (0.8 mm) in 12" (305 mm).
- Never install Phenix SPC products over residual asphalt-type (cut back) adhesive. Residual cut back adhesive should be completely removed and covered with high quality latex underlayment.
- Phenix SPC products have an underlayment pad. No additional pad is recommended.
- Radiant Heat – Concrete or wood subfloors with Hydronic radiant heating systems are the preferred system under flooring, with a minimum 1/2" over topping to insure a flat smooth installation surface. The surface temperature must not exceed 85°F. Electric and mat radiant heating systems can be used under Phenix SPC products provided they are specifically recommended and warranted by the radiant heat equipment manufacturer for that application. Heating system must not exceed 80°F and must provide a flat, smooth installation surface for the Resilient flooring product. Phenix warranties do not cover problems caused by inadequate radiant heating systems. Always check such systems as to their suitability, warranted coverage and use under SPC floating products.

Wood Subfloors

- All wood floors must be suspended at least 18" (457.2 mm) above the ground. It is important to provide adequate cross-ventilation. Cover the ground surface of a crawl space with a suitable vapor barrier. Wood subfloors directly on concrete or installed over sleeper construction are not satisfactory for installation.
- Phenix SPC products can be installed over many wood substrates that are not suitable for fully adhered products if they are smooth, flat, structurally sound and free of deflection – including particleboard, chipboard, flake board and OSB. Caution: Damage may occur on wood panel subfloors during construction. The suitability of these floors is the responsibility of the installer.

INSTALLATION GUIDELINES

- If the surface of the wood subfloor is not smooth, a 1/4" (6.4mm) 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 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

CAUTION: Wood substrates directly fastened to concrete are not satisfactory for the installation of wood floor coverings. This non-ventilated construction practice will result in deterioration of the wood substrate system and may cause problems such as underlayment joint telegraphing. Mannington will not accept claims regarding performance of our flooring products installed over this subfloor construction.

Concrete Subfloors

- 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.
- Surface of the slab should be flat to within 3/16" (4.8 mm) in 10' (3048 mm) and 1/32" (0.8 mm) in 12" (305 mm).
- New concrete slabs must be thoroughly dry (at least six weeks) and completely cured.

- All concrete slabs must be checked for moisture before installing material. Details for moisture testing can be found on our website. The final responsibility for determining if the concrete is dry enough for installation of the flooring lies with the floor covering installer. Phenix SPC products must never be installed where excessive moisture emissions may exist. In accordance with ASTM F1869 moisture emission from subfloor cannot exceed 8 lbs MVER (moisture vapor emission rate) per 1,000 sq. ft. per 24 hours as measured with the calcium chloride test or ASTM F 2170 In Situ Relative Humidity Test not to exceed 85%. Mannington will not assume responsibility for floor covering failure due to hydrostatic pressure or excessive moisture vapor emission. New concrete slabs must be thoroughly dry (at least six weeks) and completely cured. Although the 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 issues arising from flooding, leaking plumbing or appliances, water entering through sliding glass doors, presence of mold, discoloration from mold or fungi or similar conditions.
- Holes, grooves, expansion joints and other depressions must be filled with a high-quality cementitious patching & leveling compound, troweled smooth and feathered even with the surrounding surface.
- 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. Phenix does not recommend heated floor mats for Phenix SPC products.

Recommended Work Practices for Removal of Resilient Floor Coverings

WARNING: 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. RFCI's Recommended Work Practices for Removal of Resilient Floor Coverings are a defined set of instructions addressed to the task of removing all resilient floor covering structures. These instructions should be consulted with each installation. Go to www.rfci.com.

INSTALLATION GUIDELINES

Existing Floor Coverings

- Phenix SPC products can also be installed over most existing hard-surface floor coverings provided that the existing floor is well bonded, and the surface made flat and smooth.
- Ceramic tile unevenness should be made smooth by applying an overlay such as cementitious patching or leveling compound.
- Existing floors should not be heavily cushioned and not exceed one layer in thickness.
- Do not install over carpet.
- Floor should be flat, smooth, dimensionally sound and free from deflection.

INSTALLATION

- Phenix SPC products are designed to be installed as a “floating” floor. Do not secure the planks to the subfloor. Always undercut wood doorjamb. Check local building code for metal door jamb. If they cannot be cut, then proper expansion must be maintained around the door jamb. Do not install cabinets or kitchen islands on top of Phenix SPC products. Use care when installing wall moldings and transition strips to not fasten through the product. Phenix SPC products are an angle/angle installation which provides superior joint strength.

Layout

- It is important to balance the layout of the plank format. Proper planning and layout will prevent narrow plank widths at wall junctures. Determine layout to prevent having less than half a plank width or very short length pieces.
- As with all plank products, lay the long dimension of the plank parallel to the long dimension of the work area.
- 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' (609.6 mm) to 3' (914.4 mm) 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.
- 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 3/16" (4.8 mm). 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.

- 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, including hardwood and laminate product. An expansion gap of approximately 1/4" (6.4 mm) from the wall is recommended. Then cut a plank to length to start the second row. Stagger the end seam at least 6" (152.4 mm) from the first plank.
- 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 the low angle of the plank. Do not install Phenix SPC planks flat.
- 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. Use of finesse and slight pressure is required to seat the tongue into the groove. You will feel the tongue lock into the groove.
- 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.
- Cut the last plank in the first row to fit approximately 1/4" (6.4 mm) short of the end wall. Planks may be cut with a saw or guillotine type cutter such as Bullet Tools Mega Shear. Often the remainder of this plank may be used to start the third row.
- Continue installing planks, being certain to maintain a random appearance and offset end seams by at least 6" (152.4 mm). Maintain a 1/4" (6.4 mm) expansion space at all fixed vertical surfaces. Make sure 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. It is always work practice to use a Mannington Laminate Tapping Block (Order Code TPBK801155 - single or case of 25) to lightly tap rows as you install to ensure they are fully engaged in the locking system.
- When fitting under door casings, toe kick etc. plank must be modified using a small block plane. Remove a thin layer from the tongue 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 Mannington MSS 20 seam sealer (to order call 877-845-9884 and use order code 186869) 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, Phenix SPC 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 of Phenix SPC products by installing wall base and/or Phenix LVT matching moldings. Use caution to prevent the fasteners from securing the planks to the subfloor. Do not allow the floor to become pinched. Considerations for transitions should be made for substrate changes, room to room environment changes, complicated layouts and subfloor elevation. Caulk along tubs, toilet bowls, etc. using 100% silicone caulk.
- After 48 hours, damp mop to remove residual surface dirt. Follow appropriate maintenance schedule using Mannington Ultraclean or quality rinse free cleaner.

REPAIRS

- Phenix SPC products are tough and durable; however, if a plank becomes damaged it can be replaced.
- If the damaged plank 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 is impractical to just disconnect and reassemble the flooring, follow this procedure:
 - Using a circular saw and or a multi-tool saw, cut out and remove the center of the damaged piece, leaving approximately a 1" (25.4mm) strip attached to the surrounding material.
 - Carefully cut back from the corners of the plank or tile to the inside edge.
 - Remove the edges by wiggling the cut plank out from the tongue and groove of the surrounding pieces.
 - Prepare the replacement plank by removing the leading edge of the tongue profile on the long side and the end of the plank. Careful not to damage the decorative surface. Remove the bottom of the groove on the short end side by cutting on an angle to remove. Once the plank is prepared, install groove into tongue to test the fit. Once you check the fit is correct you are now ready to complete the install.
 - Position the replacement piece by engaging the groove into the tongue of the adjoining material. "Hinge" the prepared replacement plank into position.

- Slightly lift prepared side of plank and apply a thin application of MSS 20 (to order call 877-845-9884 and use order code 186869) onto the three exposed seams and carefully position plank into place, wipe excess from surface.
- Use a hand roller to assist in aligning the edges into position.
- Weight the replaced plank for at least 15 minutes until the sealer secures the material.

CAUTIONS AND MISCELLANEOUS

- Furniture should be moved onto the newly installed floor using an appliance hand truck over hardboard runways.
- 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.
- Like with all floor coverings, it is best to protect Phenix SPC installation from exposure to direct sunlight. A combination of heat and sunlight can cause most home furnishings to fade and discolor. Avoid exposure to direct sunlight for prolonged periods. During peak sunlight hours, the use of blinds or drapes is recommended.
- Oil or petroleum-based products can result in surface staining. Do not track asphalt-driveway sealer or automobile-oil drips onto the Phenix SPC product.
- Use rugs or mats labeled "non-staining" that provide a manufacturer warranty.