By starting the installation of your LVT - Herringbone flooring, you are agreeing that you have read and understand all Owner/Purchaser/Installer requirements and responsibilities, and are aware that deviating from the instructions and recommendations in this installation guide may result in voiding the product's warranty. Please ensure you read this installation guide carefully and follow instructions when installing your flooring.

- It is the sole responsibility of the Owner/Purchaser/Installer, prior to installation, to verify that the area/environment planned for installation is suitable for LVT flooring and meets all local building codes and that all subflooring is dry, sound, flat and clean and meets or exceeds all industry standards; as well as the recommendations listed herein. The manufacturer and distributor accept no responsibility for product failure extending from or related to failure to meet job area/environment and subflooring requirements.
- The Owner/Purchaser/Installer assumes full responsibility for the final inspection of this product.
 Inspection should be done prior to installation and should include: color, factory finish, milling
 and/or locking system damages. If the product is not acceptable, **DO NOT** install it. Contact your
 supplier immediately for assistance. This LVT warranty **DOES NOT** cover materials with visible
 defects after they are installed.
- This product may be installed over a radiant heating system, the system must an imbedded type (circulating or electric) and be a minimum of 1/2" (12mm) below the subfloor installation surface and never in direct contact with the LVT flooring. Temperature must **NEVER** exceed 29° C (85° F) and changes in temperature settings must be gradual. It is the responsibility of Owner/Purchaser/Installer to confirm the suitability of the radiant heating system for use with this product. The selection and use of any radiant heating system is the choice and sole responsibility of the Owner/Purchaser/Installer.
- Certain condominium and other multi-unit type building associations and/or owners may have
 floor covering acoustic performance requirements that may exceed the acoustic performance
 levels of this product, thereby requiring that a supplemental acoustical underlayment is required.
 When installing this product in condominiums or other multi-unit type buildings, it is the sole
 responsibility of the Owner/Purchaser/Installer to ascertain if this product meets their acoustic
 performance requirements prior to its installation.

1. IMPORTANT HEALTH WARNING

If you wish to remove previously installed resilient flooring, please note the following: Your existing resilient flooring, backing, lining felt, asphalt cut-back adhesives or other adhesives MAY contain asbestos fibers and/or crystalline silica. DO NOT grind, chip, sand, drill, saw, bead-blast or pulverize this material in any way; either by hand or by machine. Avoid creating dust when working in contact with these materials. The inhalation of dust from these materials is a known cancer and respiratory tract hazard. The wearing of an approved dust mask suitable for this type of dust is recommended. Unless you are absolutely certain that the resilient flooring you are removing is a non-asbestos material, you must assume that it contains asbestos. Local regulations may require that the material be tested by an approved laboratory or agency for asbestos content and, if confirmed, regulated removal / disposal of the material may be required. For more information, please refer to the current edition of the Resilient Floor Covering Institute (RFCI) publication: "Recommended Work Practices for Removal of Resilient Floor Coverings" (www.rfci.com).

2. INSTALLATION TOOLS AND ACCESSORY REQUIREMENTS

Tools:

- Tape measure
- Pencil
- Chalk line
- Crosscut power saw
- 3M Scotch-Blue™ 2080 Tape
- Rubber mallet
- 10mm (3/8") spacers or shims
- LVT flooring pull bar

- Straight edge or ruler
- Utility knife & sharp blades
- Tapping Block
- Tape Measure
- Hammer
- Safety Glasses
- Broom and dust pan

3. BEFORE STARTING INSTALLATION

When calculating flooring square footage requirements, allow between 10% to 20% waste depending on the size of the area being installed for waste, cuts, future needs and replacements. Smaller areas will have a larger waste factor.

LVT Herringbone is waterproof and does not require acclimatisation, though it is still recommended to store and install the material in an environment that has been acclimated to acceptable living conditions.

4. PREPARATION OF SUBFLOORS

Floating installations may be made over subfloors including: Concrete and Plywood. WE DO NOT RECOMMEND installing over an existing floor.

Wooden subfloors: plywood, OSB or boards must be flat. High and low areas exceeding 1/8" per 6' or 3/16" in 10' must be corrected. Sand down high areas, fill low areas.

Concrete: most concrete subfloors (slabs) are not flat and must be leveled before installation. In all cases, verify the subfloor using an 8' long straightedge to locate high and low areas. Low areas should be filled with a self-leveling compound per manufacturer's recommendations. Voids and bumps in the subfloor may prevent your floor's locking system from locking securely and may damage or weaken the locking system.

• Sweep or vacuum your subfloor immediately prior to installation ensuring there is no debris or grit on the subfloor, as it will interfere with proper product installation. Verify your subfloor is dry and clean.

Check to ensure your subfloor is completely smooth. Nail and screw heads must be countersunk. Sand any protrusions including joints/seams between subfloor sheets. Check your subfloor structure to ensure there are secure nails or screws every 12" (30cm) along the joists and 6" (15cm) along bearing supports and seams. This will help to avoid squeaks and warping of the subfloor. You must replace any delaminated, swollen, or damaged subfloor sections.

• NOTE: Avoid installation over subfloors with excessive flex or deflection. The installation of XRP flooring will not reduce any flex or deflections in the subfloor. Excessive subfloor deflection may damage the locking system and cause it to fail.

5. NEW SUBFLOOR INSTALLATION

Install the subfloor perpendicular to floor joists in staggered rows so that joints between adjacent sheets do not line up. 3/4" (19mm) plywood is recommended for 16" and 19.2" center joists. For floors with joists exceeding 19.2" centers, a minimum subfloor thickness of 1-1/4" (32mm) is recommended. Nail or screw the subflooring every 6" (150mm) along joists to avoid squeaking and warping of the subfloor.

6. INSTALLATION INSTRUCTIONS

This product includes an attached thermo-acoustic under-pad: The attached pad provides the following benefits: It will reduce footfall noise transfer to rooms that are below and adjacent to the area where the floor is installed. Additionally, in basement and on-grade concrete slab installations, it will provide a thermal break from the slab and provide you with a warmer floor.

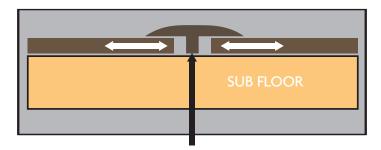
7. USE OF A SUPPLEMENTAL ACOUSTIC UNDERPAD

If required by your condo association, this product may be installed over a supplemental layer of 3mm or 6mm (1/8" or 1/4") acoustic cork underlayment. **DO NOT** install this product over other types of underpads, soft, rough, non-flat, uneven or other non-approved surfaces, doing so will damage the locking system and void the product warranty.

8. WALL JAMB AND DOORWAY PREPERATION

Remove all trim, baseboards and quarter rounds. Identify them on their reverse side for reinstallation. Remove doorway thresholds, which may or may not require reinstallation. For door casings, you will need to notch the bottom of the casing with a saw or chisel so that the LVT can slide freely beneath it. To make a straight cut easily, lay a handsaw flat on a piece of scrap flooring as a guide. If the installation is multi-room and rooms are separated by a doorway, each room should be separated by a T-moulding which will be installed as a threshold between the 2 rooms/areas. Install as noted in **Figure 1**.

Figure 1.



Use adhesive to fasten the T-moulding to the sub floor. Do not glue it to the flooring. Leave a 6mm gap between the planks and each side of the T-moulding to allow for expansion.

9. COMMERCIAL INSTALLATION AND GLUE-DOWN INSTALLATIONS

For commercial installations, the LVT floor must be glued down using an approved full-spread vinyl floor adhesive. In all cases, follow adhesive manufacturer's instructions.

For large area residential installations with large south or west facing windows and patio doors, gluedown installation is recommended using an approved full-spread vinyl floor adhesive.

10. INSTALLATION TOOLS AND ACCESSORY REQUIREMENTS

The following adhesives are approved for use with this product:

- TAYLOR Signature Series Dynamic 2098.
- TAYLOR 2091 Tuff-Grip: Transitional adhesive, it is releasable for 2-3 days then permanent.
- TAYLOR MS+ Resilient: Permanent.
- MAPEI ECO-360: When wet lay it is permanent; Dry lay is releasable.
- MAPEI ECO-373: When wet lay it is permanent; Dry lay is releasable.
- MAPEI Ultrabond ECO 810: Wet lay it is permanent; dry lay it is pressure sensitive.
- DRITAC 5000 Firm Set: Pressure sensitive.
- DRITAC ECO-5500: Pressure sensitive.
- TEC Vinyl Composition Tile Adhesive #7047495023.

11. BASEMENT AREA INSTALLATION

LVT flooring is not a waterproofing system, any pre-existing moisture water infiltration or flooding problems should be corrected prior to installation. Do not install over concrete slabs with a history of being wet or damp, keeping in mind that a slab that appears dry now, may be wet or damp seasonally. If installation is over new concrete, it must be a minimum of 60 days old and be fully cured.

12. HIGH AND LOW TEMPERATURE INSTALLATION

This product may be successfully installed in these types of areas by gluing the product down using only one of the previously noted approved adhesives. The use of any other type of adhesive in these types of conditions is not permitted and will void the product warranty. Follow all adhesive manufacturer's instructions. Glue-down installation area temperature limitations must not exceed the following temperature range on a year-round basis: 20°F to 90°F (-18°C to 32°C), installation in areas where the temperature will exceed this range will void the product warranty.

13A. IMPORTANT GENERAL TIPS FOR INSTALLING LVT FLOORING

- Commercial installations require the use of transition moldings between installation areas, doorways, hallways, etc.. Refer to Figure 1.
- Squeaks are caused when the subfloor separates from the joist or moves. This happens when there are temperature and humidity changes or when new construction "settles". When the subfloor moves up and down on a pulled nail or incompletely set screw, it causes the subfloor to squeak. If you install LVT flooring over existing ceramic tiles, skim coat the grout lines with a floor leveling compound and fill or repair any damaged or cracked tiles. Carefully inspect your subfloor and replace any nails that are not completely secure. Close adherence to installation instructions can minimize the risk of squeaks; however, there is no guarantee or warranty that your floor will not squeak.
- Note: It is recommended that your subfloor is screwed down rather than nailed down.
- Color variation in different dye lots should be evenly distributed in your room. To achieve this, draw planks from a minimum of 3 boxes and multiple pallets at a time. Set aside any Planks that have blemishes for use in less visible areas. Plank design variation should also be distributed evenly throughout your room to ensure that planks with a similar design are not adjacent to one another. Install usable cut pieces in closets, adjacent to walls or in other less visible areas.
- Verify locking profile is free of any contamination including: debris, grit, milling chaff or other material; remove any contamination before installing. Also verify that the locking profile was not damaged during shipping or handling. Any pieces with damaged profiles should not be installed in main traffic areas; discard or install in a closet or non-traffic area.
- The preferred method of cutting planks is to use a sharp utility knife; when using this method, you must make a deep score and snap off the end of the plank. Note that you must also cut the attached under-pad as well as the same point where you scored the topside of the plank.
- If you are installing the floor over a crawl space, the crawl space must be a minimum of 18" high and have a plastic vapor barrier installed that completely covers the soil; additionally, the crawl space must be adequately ventilated.

13B. IMPORTANT GENERAL TIPS FOR INSTALLING LVT FLOORING

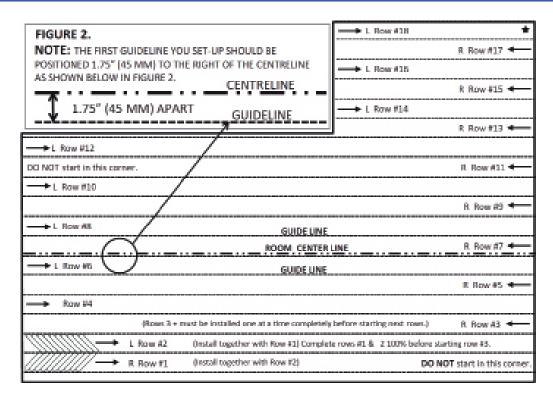
- Do not tap directly on the ends or the sides of planks. When using a tapping block, use a regular hammer. If you need to remove a plank, carefully lift up the plank you wish to remove, as well as the previously installed plank and slide it out laterally so not to damage the locking mechanism.
- If any end-seams resist fully closing tight & flush, the use of a rubber mallet will assist in fully locking the ends of planks together. Firmly tap the surface of the plank you are installing along the end-seam to close the seam 100%.
- Do not install lengthwise across distances that exceed 40 feet (12M) or widthwise across distances that exceed 40 feet (12M) if the distances exceeds these limitations. If installing in an area that is larger than 40 feet (12M) in either width or length, the floor must be glued down using one of the approved adhesives noted previously.
- It is recommended that adjoining hallways, rooms and other areas are separated by using a T-molding type transition trim. **Refer to Figure 1**.
- Room and product temperatures must be between 65°F and 85°F (18°C and 29°C) when installing LVT flooring. When installing in areas where temperatures will exceed these limitations, the floor should be glued down using one of the previously noted approved full spread type vinyl adhesive. Contact your dealer for a current list of manufacturer approved adhesives.

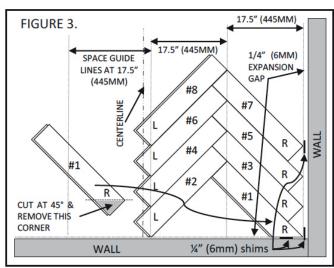
14. GETTING STARTED

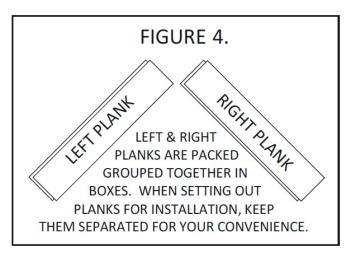
• When installing your herringbone LVT floor, your initial set-up and planning of the room is key to a successful installation. For the optimal appearance of the floor, herringbone floors should be centered along the length of the main body of the room so that the cut pieces on both sides are the same size and the floor symmetrical. Follow the room set-up example shown in

Figure 2:

- First measure and mark your installation area's centerline using your chalkline. Next, measure out from the centerline and mark out each of your guide rows using your chalkline, off-setting by 1.75" (45mm) from the center line.
- Each herringbone row is 17.5" wide (445mm) wide when measured "corner to corner" of the visible surface of the planks as shown in Figure 3: Use this measurement to plan out and mark where your guide lines will be made using your chalkline. Note that all of your measurements must be very precise, straight and square. Mark all of your guide lines before starting the installation.
- Note that your exterior guide lines along the walls must be 1/4" (6mm) from the walls on all sides, as well as along any other vertical surfaces. This space serves as an expansion gap to allow the floor to expand and contract daily/seasonally as indoor temperatures change.
- Note that you can only start your floor installation of either of the 2 opposing corners shown in Figure 2. DO NOT start installing in a different corner or any other position or row in the room. The special locking mechanism of LVT Herringbone planks requires a sequential installation of the planks row-by-row as shown in Figure 2. Refer to Figure 2 for further reference when planning your starting point and row installation sequence. In Figure 2, we have shown a typical living room & dining room area; note how the installation starts in the lower left corner following the longest wall. The alternate starting corner is noted in the opposite corner with a *, however, this is not recommended since this is the smaller area of the installation. It is always best to follow the longest wall as shown in Figure 2.
- Note that there are 2 differently milled herringbone planks in each box, **12 RIGHT and 12 LEFT**; you can easily identify them with their different profiles as shown in **Figure 4.** When opening boxes, set out planks in separate piles of LEFT and RIGHT planks to make installation more convenient. Each row will use only LEFT or RIGHT planks as shown in **Figure 2**. You cannot mix them per row.

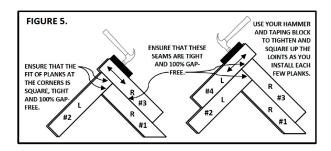






15A. STARTING THE FIRST ROW

- Starting your first row started is simple; position and lock **right and left** planks together in the sequence shown in **Figure 3**. This will form a double row **(row #1 will use RIGHT planks only and row #2 will use LEFT planks only)** in the form of an "inverted V". Position and lock each plank in place exactly following the numbered sequence shown.
- Use the next plank to help to precisely align the previous plank; this will make installation faster and more accurate. For example: plank #3 will help you to exactly align plank #2, plank #4 will help you to exactly align plank #3 and so on. Refer to **Figure 5** for visual reference.
- It is very important to ensure that when you lock planks together that they are perfectly tight and square to each other. There cannot be any small gaps whatsoever; use your tapping block as shown in **Figure 5** to tighten up any gaps and keep planks square at 90°.
- Once you have the first 8 planks locked together, shift and position the block of 8 planks to exactly follow and be aligned with your starting row guide lines. Be certain to leave the 1/4" (6mm) expansion gap as shown in **Figure 3**.
- Place 6mm (1/4") spacers or shims every approx. 8 planks to help keep your floor from shifting as you install it as shown in **Figure 3**. Planks must never be in direct contact with any wall, cabinet or other vertical surface.
- Continue to install your starting row; **after each 8 planks**, stop and check that all of your planks are 100% tightly locked together and that there are no gaps. Also check that both rows are following your chalk lines exactly and not deviating from them whatsoever. If needed, gently shift your rows of planks so that you are exactly following your 2 chalk lines.
- You must fully install your starting double starting rows #1 & #2 100%, **DO NOT** commence to install any other rows or parts of the floor until your starting double row is 100% completed, perfectly straight and free of any gaps.



15B. STARTING THE FIRST ROW

- You are now ready to start row #3 which will only use **RIGHT** format planks.
- With the exception of rows #1 & #2, all even # rows will start on one side of the room and all odd # rows will start on the opposite side of the room as shown in **Figure 2**.
- When installing each plank in rows # 3 onward, use your tapping block & hammer to tighten up each plank as you go; a firm tap will ensure all small and hard to see gaps are eliminated and that each plank is perfectly square at 90° to the previous row. Never tap a plank directly with a hammer or other object, you risk damaging the locking profiles, always use your tapping block.
- As mentioned earlier, **after each 8 planks in all rows**, stop and check that all of your planks are 100% tightly locked together and that there are no gaps.
- After row #3 is 100% complete, start row #4 and install it 100% following all steps previously mentioned. Continue installing all remaining rows completely one-at-a-time until all rows are 100% finished except for cut rows.
- Note that you may use a rubber mallet to tap on the surface of planks to help set them into place.

16 CUTS AND DETAILS

- Now that you have all of the main body of the floor installed, you are ready to start to install your cut rows and fill in your "triangle" shaped openings at each end of the room.
- Installing your cut plank sections requires the use of a vinyl seam sealer to secure them in place; it is quick and easy to use. Follow the seam sealer manufacturer's recommendations and precautions; always

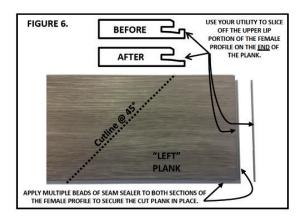
immediately wipe away any excess seam sealer and clean the area with a clean damp paper towel. Use only one of the following approved vinyl seam sealers:

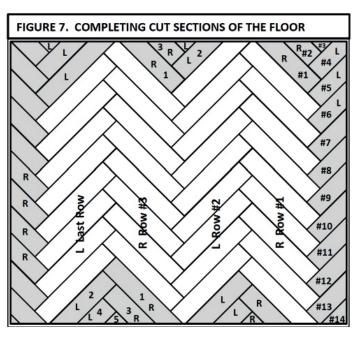
- Tarkett DT-65 Vinyl Seam Sealer (recommended)
- Mohawk M7 Universal Seam Sealant
- IVC Flex Seam Mohawk M7 Universal Seam Sealant
- IVC Flex Seam
- Lepage 100% Multi-purpose glue

The procedure to fill in each of the remaining cut areas of the floor is different; follow the procedures as noted below for each area:

16A. CUT ROW ALONGSIDE ROW 1 WHERE INSTALLATION STARTED

- 1. You will only use "LEFT" planks for this entire cut row, refer to Figure 7.
- 2. Mark your cut-line on the plank at 45° so that when installed, you maintain the required 1/4" (6mm) expansion gap, refer to **Figure 6.**
- 3. Measure carefully and cut the plank to the required size.
- 4. Using your utility knife, carefully trim off the outer lip of the female profile from **ONLY** the end of the cut plank so that it can be easily inserted into the floor; refer to in **Figure 6.**
- 5. Apply a bead of vinyl seam sealer to both of the female profiles as shown in Figure 6.
- 6. Insert the cut plank into the floor so that it fits tightly.
- 7. Immediately and thoroughly wipe up any excess seam sealer that may bleed through from the seams using a clean paper towel.
- 8. If necessary, secure the cut sections with a small piece of blue or green painter's tape until the seam sealer sets and dries.





16B. CUT ROW ALONGSIDE THE LAST ROW WHERE INSTALLATION FINISHED.

- 1. Depending on the direction of your last row, you will use only either "LEFT or RIGHT" planks for this entire cut row, refer to Figure 7. For example: if your last full row used LEFT planks, your cut row will RIGHT planks.
- 2. Regardless of the direction of your last row, the planks when cut to 45°, will quickly and easily drop into place using the same method as installing a regular row of planks.
- 3. Mark your cut-line on the plank at 45° so that when installed, you maintain the required 1/4" (6mm) expansion gap.
- 4. Before inserting the cut planks, apply multiple beads of vinyl seam sealer to **both** of the female profiles of the existing planks in the floor where the cut plank will fit.
- 5. Immediately and thoroughly wipe up any excess seam sealer that may bleed through from the seams using a clean paper towel.
- 6. If necessary, secure the cut sections with a small piece of blue or green painter's tape until the seam sealer sets and dries.

16C. TRIANGLE OPENINGS AT BOTH ENDS OF THE ROOM

- 1. Filling in the open triangle areas will use **both "LEFT or RIGHT"** planks, refer to **Figure 7** to see the order of installing each area.
- 2. As you install each plank, you will alternate between the methods A & B above since installed planks will alternate between "LEFT or RIGHT" planks.
- 3. To minimize waste, depending on the length of cut plank needed, use previously cut planks where possible.
- 4. Mark your cut-line on the plank at 45° so that when installed, you maintain the required $1/4^{\circ}$ (6mm) expansion gap.
- 5. Before inserting the cut planks, apply multiple beads of vinyl seam sealer to both of the female profiles of the existing planks in the floor where the cut plank will fit.
- 6. Immediately and thoroughly wipe up any excess seam sealer that may bleed through from the seams using a clean paper towel.

16C. TRIANGLE OPENINGS AT BOTH ENDS OF THE ROOM

7. If necessary, secure the cut sections with a small piece of blue or green painter's tape until the seam sealer sets and dries.

16B. MAINTENANCE OF YOUR LVT FLOORING

- Regular vacuuming and periodic cleaning of your LVT floor will protect its beauty and lasting finish. More frequent attention is recommended in high traffic areas, as well as near exterior and garage entrances. For a thorough cleaning, use specially formulated vinyl or hardwood flooring cleaning products and a micro-fiber mop available at most hardware and flooring retailers. Use as per manufacturer's recommendations. You may also damp mop your LVT floor using warm water with a small amount of dishwashing or other mild liquid soap.
- Do not use cleaning products which contain surfactants or which leave a residue. Use of these products will leave a dull film on your floor and may void product warranty. Before using any cleaning product, test it first on a small, less visible area of the floor.
- Place small non-slip mats or rugs at all exterior or garage entrances to the home to protect the floor from dirty shoes, boots etc. This will remove loose dirt and debris from shoes. Clean rugs and mats on a regular basis. For nonslip area rugs, consult a reputable floor covering vendor.
- Do not use polishing products. The use of these products may leave a dull residue and may void your warranty.
- Do not use abrasive products, bathroom cleaning products, ammonia based products, wax based polishes/cleaners, acrylic finishes, acidic or vinegar based solutions, oil soaps, detergents, chlorine based products, bleach, solvents or any type or polishes. The use of these products may permanently damage the finish of your floor and may void the warranty.
- Keep your pet's nails trimmed, especially larger dogs, as their nails may scratch the floor. Note that pet nails from medium to larger sized dogs may leave minor marks on the surface of this floor due to the floor's finish abrading the pet's nails; this is normal is not considered as damage to the floor.
- Clean spills immediately to prevent them from running between the cracks. Small spills should be cleaned up with a lightly dampened cloth and a small amount of dishwashing soap.

- Do not roll or slide furniture or appliances with castors across the floor. Castors may damage the floor's finish. Carefully and safely lift and move the object into place. To minimize possible wear and damage, felted furniture leg coasters are recommended under furniture legs. Install felt floor protectors under furniture legs to avoid scuffing or scratching. Clean or replace felt protectors on a regular basis to remove built up grit that may have become embedded. Chairs with castors must be fitted with only barrel (roller) type castors and have a protective mat or carpet placed under the chair in the area where the chair moves.
- High heels with missing heel lifts can cause denting to LVT floors. Damage resulting from any footwear is specifically excluded from this warranty.
- Minor damage or gaps can be repaired using vinyl seam sealer available from your local hardware or flooring supplier. Follow manufacturer's instructions. Save all leftover planks for unforeseen needs of plank replacement in the event of damage.

 Important facts:
- Do not install LVT over any type of soft underlay like foam, carpet or other soft, rough, uneven or non-flat surfaces.
- Direct exposure to sunlight from large windows and patio doors can cause the surface of the floor to exceed the product installation temperature limitations; in south to west exposure rooms with multiple and/or large windows or patio doors, it may be necessary to install blinds or drapes. Rapid temperature change (heat from direct sunlight) may cause floor to temporarily expand in these areas.
- LVT floors are designed for indoor use only and are not approved for any type of exterior use; installation outdoors will void product warranty.
- If the floor is to be installed in a home with rolling loads from a wheelchair (manual or electric) or other heavy rolling loads, the floor must be glued down.

CLICK LVT - HERRINGBONE FINISHING TOUCHES...

- If you are fitting your LVT around pipes, first mark the position of the pipe in the board you're using with a pencil. Then carefully drill a hole in this position and make two angled cuts with a saw. These cuts should form a wedge from the edge of the board to the hole which can then be removed. Fit the board around the pipe and then reattach the wedge with glue behind the pipe so the plank looks intact.
- You can then use matching scotia beading and doorbars to cover expansion gaps and blend the new floors in with your existing walls and joining rooms, creating a professional and seamless finish.
- Any spare planks or cuttings should be kept if possible in case any repairs are needed to be made in the future.

DISCOVER THOSE PERFECT FINISHING TOUCHES...



Pipe Covers



Profiles



Skirting Boards



Scotia Beading