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RIGID CORE ANGLE/DROP	Lofterra™, Studio™, Wayne Parc™, Wayne Parc Reserve™, XL Ashton™, XL Cyrus™, XL Prescott™, XL Studio™, XL Trecento™
HYBRID RIGID CORE ANGLE/ANGLE	Smithcliffs™
HYBRID RIGID CORE ANGLE/DROP	Shorecliffs™
LOOSE LAY LVT	Kallum™
GLUE DOWN LVT	Katavia™, Glenridge™, Wilmont™, Nove™, Nove Plus™, Nove Reserve™, Acclima™
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ENGINEERED WOOD TONGUE & GROOVE HERRINGBONE	McCarran Herringbone™
STAIR TREAD	Standard and Wrapped
TRIMS	LVT/HRC/WOOD

INSTALLATION	SERIES
ADHESIVES	LVT Universal Pressure Adhesive, Concrete Prime, Adhesive Encapsulator, LVT High Moisture Adhesive, Engineered Wood Adhesive

PRE-
INSTALLATION

PRE-INSTALLATION REQUIREMENTS

GENERAL COMPLIANCE

- Read and follow all installation, care, maintenance, site-condition, subfloor, adhesive, acclimation, expansion-space, and moisture-testing requirements. Failure to do so may void warranty coverage.
- A flat, suitable subfloor, proper moisture testing, required expansion space, and for floating applications unrestricted floating floor movement are mandatory.
- MSI supplies the product only. The owner, purchaser, installer, contractor, builder, and/or design professional are responsible for product suitability, jobsite conditions, substrate conditions, code compliance, and proper installation.
- Inspect all material before installation. Do not install product that appears incorrect, damaged, defective, inconsistent, questionable, or unsuitable. Installation constitutes acceptance of all visible conditions. If any issue is discovered before or during installation, stop immediately and preserve the product and jobsite conditions until MSI has a reasonable opportunity to inspect.
- MSI is not responsible for labor, removal, reinstallation, disposal, freight, access, or related costs for flooring installed with visible defects or conditions discoverable before or during installation.
- MSI does not warrant installer workmanship, substrate performance, jobsite conditions, moisture, building movement, non-approved materials, or other non-MSI site components.
- Each installation setting is unique. The owner and installer are responsible for consulting a qualified flooring professional, licensed contractor, design professional, moisture-testing professional, or other appropriate professional when site conditions, substrate conditions, product suitability, moisture conditions, installation method, building-code requirements, or use classification are uncertain. MSI is not responsible for installation decisions or site-condition determinations.
- The owner is responsible for reviewing the full warranty and following the Care & Maintenance Guide. Failure to follow required care and maintenance instructions may affect or void warranty coverage.

REQUIRED INSTALLATION RECORDS

Before installation, the installer must complete and retain installation records sufficient to verify compliance with MSI's Installation Instructions. MSI may request these records when evaluating a warranty claim; failure to provide them may limit or preclude coverage. At minimum, records must include:

- Product name, color, style, size, quantity, carton labels, lot numbers, and purchase information.
- Photographs of cartons, labels, product layout, substrate, jobsite conditions, and completed installation.
- Subfloor flatness measurements and correction records.
- Moisture-test results, including test method, test locations, test dates, readings, and the person or company performing the test.
- Jobsite temperature and relative-humidity readings before, during, and after installation.
- Acclimation or conditioning records, if applicable.
- Adhesive, primer, moisture barrier, underlayment, patch, leveler, and trowel information, if applicable.
- Expansion-space measurements and transition-molding locations.
- Confirmation that fixed objects, cabinets, islands, built-ins, heavy fixtures, trims, moldings, and transitions do not restrict movement of floating floors.

ENVIRONMENTAL & SAFETY WARNINGS



WARNING: Drilling, sawing, sanding, or machining wood products can expose you to wood dust, a substance known to the state of California to cause cancer. Avoid inhaling wood dust or use a dust mask or other safeguards for personal protection. *For more information go to www.P65Warnings.ca.gov/wood*

- **Wood Dust Warning:** Drilling, sawing, sanding, or machining wood products can expose you to wood dust, a substance known to the state of California to cause cancer. Avoid inhaling wood dust or use a dust mask or other safeguards for personal protection. Applicable to Hybrid Rigid Core, Waterproof Wood, and Engineered Wood products.

- Asbestos Warning:** Do not mechanically chip or pulverize existing resilient flooring, backing, lining felt, asphaltic "cutback" adhesives, or other adhesives. Unless positively certain the previous product is non-asbestos containing, you must presume it contains asbestos.
- Minnesota Formaldehyde Regulation (Engineered Wood):** These building materials emit formaldehyde. Eye, nose, and throat irritation, headache, nausea and a variety of asthma-like symptoms have been reported. Reduced ventilation may allow formaldehyde to accumulate; high indoor temperatures and humidity raise formaldehyde levels.
- Sunlight:** In rooms with direct sunlight, the use of blinds, shades, or drapes during peak hours is recommended to avoid prolonged direct sunlight periods.

SITE & AREA PREPARATION

- Remove all furniture, appliances, and fixtures from the room.
 - Remove all existing binding strips or other restrictive molding from doorways, walls, etc.
 - Undercut wood door casings where possible so that flooring can be slid under them.
- For Engineered Wood:** Undercut 1/16" higher than the thickness of the flooring plus the underlayment.
- Areas to receive flooring should be adequately lit during all phases of the installation process.
 - The building envelope must be complete and exterior doors and windows installed before the delivery of materials.
 - All work involving water or moisture (e.g., painting, plumbing, etc.) must be completed prior to flooring being delivered.

EXPANSION SPACES & MAXIMUM SPANS

- Rigid Core:** Requires a 1/4" (6mm - 8mm) expansion gap around the perimeter and fixed objects. Transition moldings must be used at doorways and in any span greater than 40' in any direction.
- Hybrid Rigid Core:** Requires a 3/8" (9mm) expansion gap. Installations spanning greater than 50 feet in length or width must have a T-molding installed. Doorways of less than 4 feet must always have a T-molding or other transition molding.
- Waterproof Wood:** Requires a 1/2" (10mm) expansion gap. Installations spanning greater than 40 feet in length or width must have a T-molding installed. Doorways of less than 4 feet must always have a T-molding or other transition molding.
- Engineered Wood:** The expansion gap must be equal to the thickness of the product (e.g., 3/8", 1/2", 5/8"). For floating installations, doorways or archways 48" or less require a T-molding, and rooms larger than 26'x33' are required to use a T-molding break.
- Looselay LVT:** Product can be loose laid and net fit in areas under 20'. Areas larger than 20' in any direction require perimeter glue or full spread and a 1/8" expansion gap.

EXISTING FLOORING, UNDERLAYMENT & BELOW-GRADE RULES

- Carpet:** Installation over carpet is prohibited across all products and will void the warranty.
- Existing Hard Surfaces:** Installation over existing hard surfaces (wood, non-cushioned vinyl/linoleum, ceramic/porcelain tile) is generally permitted if the floor is intact and secured. Grout lines in excess of 1/16" must be filled with a Portland based skim coat/leveler.
- Prohibited Substrates:** Existing perimeter glued resilient vinyl and rubber tiles are unacceptable and must be removed. Do not install Engineered Wood over solid or engineered flooring attached directly to concrete.
- Underlayment Limits:** Do not install over multiple layers of underlayment (Applies to Rigid Core, Hybrid Rigid Core, and Waterproof Wood).
- Approved Underlayments:** If an additional underlayment is required beyond what is already attached to the product, an MSI approved underlayment must be used.
 - Use **Abatec** for all floating applications.
 - Use **Mititec** for all glue-down applications.
- Below Grade & Crawl Spaces:** Hybrid Rigid Core and Waterproof Wood installed below grade must not have a sump pump or floor drains. For Engineered Wood, basements and crawl spaces must be dry; a 6-mil black polyethylene membrane is required to cover 100% of the crawl space earth, with 18" clearance and perimeter vent spacing equal to 1.5% of the total square footage.

SUBFLOOR FLATNESS LIMITS

- Rigid Core & Waterproof Wood:** Subfloors must be flat to 1/8" per 6' (3mm per 0.92 meter).
- Hybrid Rigid Core:** Subfloors must be flat to 3/16" per 10' (5mm per 3 meters).
- Loose lay LVT:** Subfloors must be flat within 3/16" in a 10' radius and within the equivalent of 1/32" in 12".

- Glue down LVT:** Subfloors must be flat within 3/16" in a 10' radius and/or 1/8" in a 6' radius.
- Engineered Wood:** Subfloors must be flat to 3/16" per 10' (5mm per 3 meters) and/or 1/8" in a 6' radius (3mm in 2m).

SUBFLOOR MOISTURE LIMITS & CONCRETE PREPARATION

- Concrete Preparation:** Concrete must be dry, smooth, and free from dust, solvent, paint, wax, grease, asphalt sealing compounds, or oil. New slabs must cure for at least 60 days. Concrete must be constructed according to ACI's 302.2 Guide to avoid highly corrosive hydrostatic pressure and high alkalinity.
- Testing Method:** An RH test using in situ Probes (ASTM F2170) is necessary and preferred over calcium chloride testing (ASTM F1869).
- Rigid Core, Waterproof Wood, Loose lay LVT, & Glue down LVT Limits:** If hydrostatic pressure is over 90% RH, moisture mitigation (6-mil poly film or MSI underlayment) or an MSI adhesive designed for up to 95-99% RH (MS007 or MS009) must be used.
- Hybrid Rigid Core Limits:** If hydrostatic pressure is over 80% RH, moisture mitigation (6-mil poly film or MSI underlayment) or an MSI adhesive designed for up to 95% RH must be used.
- Engineered Wood Limits:** The moisture content of a concrete subfloor must show <75% RH. Wood subfloors and flooring must be below 12% moisture content (pin meter), and the flooring must be within 4% of the subfloor moisture content.
- Lightweight Concrete:** Acceptable for LVT/Rigid if it has a minimum density of 90 lbs. per cubic foot and is primed with MS003. **Exception:** For Engineered Wood glue-down applications, lightweight concrete (less than 3,000 psi, powders easily, or dry density < 100 lbs) is not permissible and must be installed via the floating method.

WOOD SUBFLOOR STRUCTURAL REQUIREMENTS

- General:** Must be structurally sound and installed following APA recommendations. Nail or screw loose/squeaking areas; fasteners must be flush. Do not install over fire-retardant or preservative treated plywood.
- Rigid Core, Hybrid Rigid Core, Waterproof Wood:** Use standard APA rated subfloors.
- Loose lay LVT & Glue down LVT:** Wood subfloor panels/Double-layered APA rated plywood should be a minimum of 1" or thicker and free of vertical deflection.
- Engineered Wood:** Maximum 3/16" vertical deflection. Joist spacing of 16" up to 19.2" on center requires minimum nominal 3/4" (23/32") CDX EXP 1 plywood or OSB. Spacing >19.2" up to 24" requires minimum 7/8" CDX EXP 1 plywood or OSB. Solid Wood Subfloors (for glue/staple) must be minimum 3/4" thick, max width 6", installed at a 45° angle to the floor joists.

Radiant Heat Systems

- Rigid Core & Waterproof Wood:** Only Hydronic radiant heat is allowed. Minimum 3/8" separation from product. Five days prior to install, reduce temp to 65°F. Max operating temp 85°F (29°C). Raise temp gradually (5°F per hour) after install.
- Hybrid Rigid Core:** Can be installed over 1/2" embedded radiant heat. Minimum 1/2" separation. Turn heat off 24 hours before, during, and 24 hours after install. Room temp must be 60-80°F during install. Max operating temp 85°F (30°C).
- Loose lay LVT:** Max surface temp 85°F. Three days prior, lower to 65°F. 24 hours after install, gradually increase in increments of 5°F only.
- Engineered Wood:** Hydronic or electric embedded/mats allowed. System must be operated for at least 2 weeks prior. Set to 65-72°F prior to install. Max surface temp 80°F (27°C). Raise 2°F every day. Do not use area rugs over the radiant heated floor.
- Warnings:** Electric heating mats that are not embedded into the subfloor are not recommended for Rigid Core, Waterproof Wood, or Hybrid Rigid Core and will void the warranty.

ACCLIMATION & CLIMATE CONTROL

Rigid Core, Hybrid Rigid Core & Waterproof Wood

- Acclimation:** Not required under proper conditions. If exposed to temperatures <40°F or >95°F, or humidity <35% or >70%, condition for a minimum of 12 hours by spreading unopened cartons (not stacked) in the installation room.
- Climate Control (Rigid Core & Waterproof Wood):** Maintain between 65-85°F for the life of the product. For vacation homes, temperatures between 55-95°F are permitted at least 48 hours before and during installation; thereafter, maintain between 40-95°F and 35-70% humidity.
- Climate Control (Hybrid Rigid Core):** Maintain between 65-78°F and 35-70% humidity during installation and for the life of the product.

Loose lay LVT

- Acclimation:** Not required if the product temperature is between 45-115°F. If exposed outside this range for >1 hour, acclimate for a minimum of 48 hours by spreading out the cartons (crisscross stack max three high if necessary).

•**Climate Control:** Control room temperature between 45-115°F for 48 hours before, during, and 48 hours after installation. After installation, maintain a room temperature between 55-95°F.

Glue down LVT (Non-Acclima)

•**Acclimation & Climate Control:** Condition subfloor, flooring, and adhesive at a constant 65-85°F for 48 hours prior to, during, and 48 hours after installation. Maintain a room temperature between 55-95°F thereafter.

Glue down LVT (Acclima)

•**Acclimation:** Not required if product is between 30-120°F. If exposed outside this range for >1 hour, acclimate for a minimum of 48 hours.

•**Climate Control:** Control room temperature between 30-120°F for 48 hours before, during, and 48 hours after. Maintain between 55-95°F thereafter.

Engineered Wood

•**Acclimation:** Minimum 72 hours prior to installation. Stack with at least 4" airspace under cartons, remove plastic wrap, and open ends of cartons.

•**Climate Control:** HVAC must be operating for a minimum of 5 days prior to arrival. Maintain 65-75°F and 35-55% relative humidity prior to, during, and for the life of the product.

Stair Treads (Wood)

•**Acclimation:** Minimum 10 days prior to installation.

•**Climate Control:** Maintain 65-75°F and 35-55% relative humidity.

REQUIRED TOOLS & ADHESIVES

•**General Tools (Applicable to most installations):**

- Safety glasses and dust mask/respirator
- Tape measure and pencil
- Utility knife, scraper, and straight edge ruler or T-square
- Saws (Circular saw, jig saw, miter saw, table saw, handsaw, or hole saw)
- Broom or vacuum
- Adhesive tape / low adhesion painter's tape

•**Required Expansion Gaps/Spacers:**

- 1/4" spacers (Rigid Core)
- 3/8" spacers (Hybrid Rigid Core)
- 1/2" spacers (Waterproof Wood, Rigid Core, Engineered Wood Floating)
- 5/8" spacers (Engineered Wood)

•**Floating / Click-Lock Specific Tools:**

- Soft-faced (rubber) mallet
- Profiled tapping block
- Pull bar
- Starting row wedges

•**Glue-Down & Loose lay Specific Tools:**

- Appropriate adhesive trowel (e.g., 1/16" x 1/32" x 1/32" for LVT)
- Floor rollers: 100-pound 3-section roller (LVT) or 75 lb. smooth roller (Engineered Wood)
- Chalk line
- In Situ probes (ASTM F2170) and concrete moisture meter
- Carpenter square and cutting board
- Heat gun (Glue down LVT plank repairs)

•**Wood-Specific Tools (Engineered Wood, Waterproof Wood):**

- Wood pin moisture meter
- Odorless mineral spirits and clean white cloth/towel
- Putty knife, plastic scraper, and pry bar/trim puller
- Thick felt protectors
- Engineered wood flooring stapler (Staple Down Engineered Wood)
- Laser level (Engineered Wood Herringbone)

•**Stair Tread & Trim Specific Tools:**

- Angle gauge, angle finder, or tread tool
- Urethane construction adhesive & caulk gun
- Finishing nailer / 18-gauge brad nailer
- Drill, wood glue, clamps, and fine-grit sandpaper
- Work gloves

•**Approved Adhesives:**

MSI

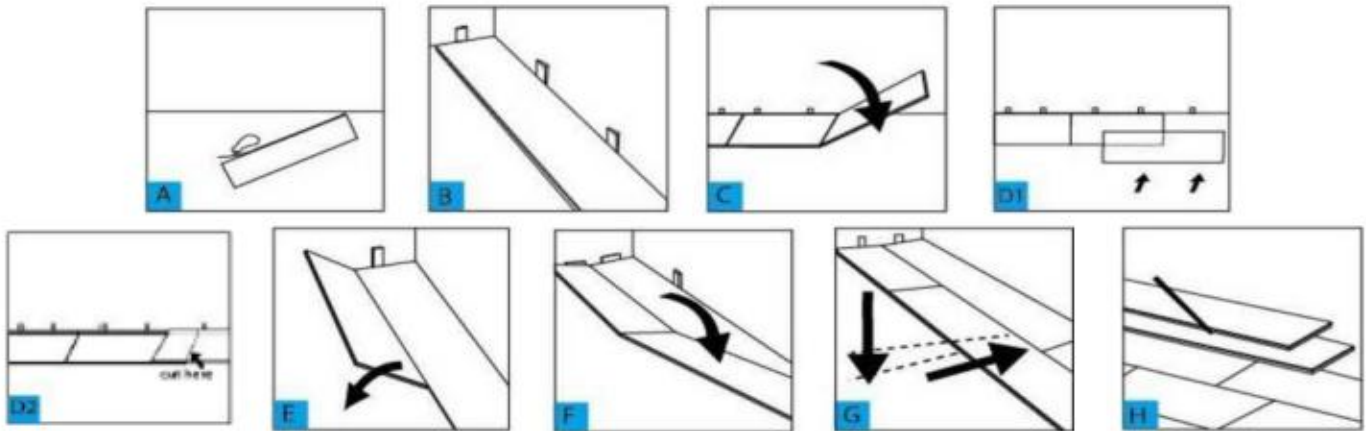
- *LVT / Resilient*: MS001, MS007, or MS009.
- *Engineered Wood*: MS011 Engineered Wood Adhesive.

INSTALLATION INSTRUCTIONS

RIGID CORE INSTALLATION

INSTRUCTION

RIGID CORE ANGLE/ANGLE INSTRUCTION



Note: Thicker products may require progressively firmer, repeated mallet tapping to fully engage the locking system. Confirm each plank is flush and properly locked before continuing installation.

•Remove the tongue (on the long side) from the first row of planks. This will ensure that the decorative surface of the flooring is under the finished trim when installed. Use a utility knife to score through the tongue several times until it easily snaps off (Figure A).

Note: The first row of planks may need to be trimmed lengthwise for a better fit at the end of the installation. Measure the room and divide by the width of the plank. If there is a remainder of less than 2", the first row will need to be trimmed by that amount.

•Starting in the left hand corner, place the first plank with its' trimmed side towards the wall. Use spacers along all walls to maintain a minimum expansion gap of 1/4" (7-8mm) between the walls and the flooring (Figure B).

•Attach the ends of the first plank and the second plank by lifting the second plank and inserting the tongue on the short side into the groove of the first plank and lowering it into place. Line up edges and corners carefully (Figure C).

Using a sharp utility knife and a straight edge, score a line on the top surface of the plank. The plank should split on the score line with little effort. Use saw to cut plank to size.

Note: The end pieces must be longer than 8". This may require cutting a plank to start a row depending on the size of the room.

•Begin the next row with the cut piece from the previous row, creating the necessary stagger. This piece should be a minimum of 8" (20cm) long and the joint offset from the previous row should be at least 10" (26cm) apart. To attach, tilt the plank you are installing slightly upwards (about 15-25°), insert its tongue into the previous row's groove, and lower it into place. The plank will click into place with light pressure (Figure D).

•Install the second plank in the second row by inserting the short end tongue into the previously installed plank's groove. Align the plank so that the long side tongue tip is positioned just over the groove lip of the plank in the first row (Figure E). Working from the end seam, at a low angle, insert the long tongue into the groove of the adjoining plank. Very little force is required to fit the tongue into the groove. You should be able to feel the tongue lock into the groove (Figure F). Continue locking each piece into place, short side first and then long side.

Note: Studio and XL Studio may require firmer repeated mallet tapping to fully engage the locking mechanism.

Confirm short ends are flush and properly locked before continuing installation.

- To fit the last row, lay a plank on top of the previous row. With the plank against the wall, mark a line down the length of the plank and cut the planks accordingly (Figure H).

- Door Frames and heating vents also require expansion room. Cut the planks to the correct length. Place the cut plank next to its actual position, use a ruler to measure the areas to be cut out and mark them. Cut out the marked points allowing the correct expansion distance on each side. T-molding is suggested in all doorways.

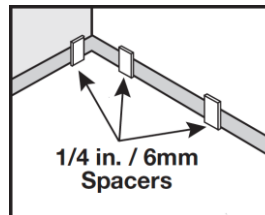
- You can trim doorframes by turning a panel upside down to use as a height guide. Using a handsaw, cut door frames to the necessary height so that planks slide easily under them.

- To finish the perimeter of the room, install quarter round molding using finishing nails. Nail quarter round directly into the baseboard not the flooring

RIGID CORE ANGLE/DROP INSTALLATION

1 INSTALLING FIRST ROW

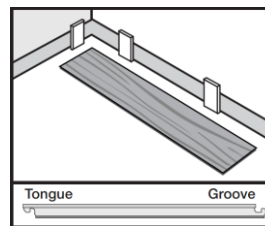
Set spacers to allow a minimum gap of $\frac{1}{4}$ " (6mm) around the perimeter of the subfloor for movement or product expansion. Do not remove the spacers until the installation is complete. The expansion gaps should be covered by molding.



2 Measure the length of the room in inches. Divide it by the length of the planks. If the resulting number is less than 8", you will need to cut your first plank accordingly to avoid having planks that are less than 8" on the opposite end of the room.

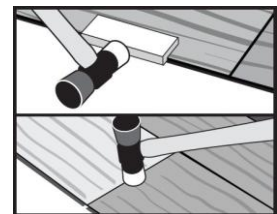
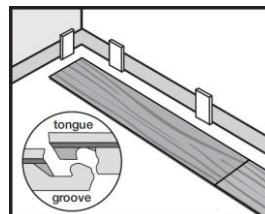
Note: To cut a plank, simply measure and mark the plank. Then, use a straight edge and utility knife to score and snap. You will also need to back-cut the under pad on the bottom of the plank. If you have difficulty using this method, you can use a jig saw, circular saw or miter saw.

3 Installation should start in a left-hand corner and proceed from the wall with the tongue facing the wall. Position the first plank 6" (15.2cm) from the starting wall but not up against the spacers. The entire row will be moved against the spacers in a later step.



4 Interlock the next plank at the end joint of the first plank by inserting the tongue into the groove of the adjoining planks.

Square the joints by tapping the long edge with the profiled tapping block and soft-faced hammer. Next, lightly tap down on top of the plank at the short joint with the soft-faced hammer. Continue this method to finish the first row.



Cut the last piece of the row to fit, and allow for the $\frac{1}{4}$ " (6mm) expansion gap (if you have not already done so). Install as above.

5 INSTALLING SECOND AND REMAINING ROWS

Cut the first plank of the second row to

two-thirds its length or make sure there will be at least an 8" (20.3cm) stagger between end joints. Angle the long tongue edge of the plank into the long groove edge of the first plank. Drop and lock the end joints together.

Make sure there are no gaps and, if necessary, tap along the long groove edge using the soft-faced hammer and profiled tapping block to ensure a tight fit. Do not tap the short end into place if the long joint is not properly engaged, as doing so can cause damage to the tongue and groove.

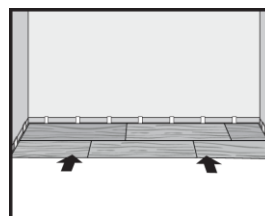
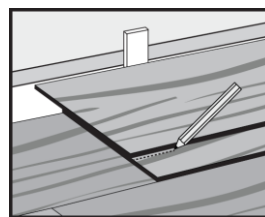
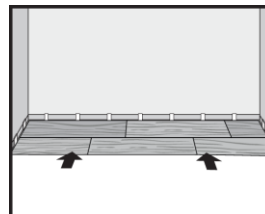
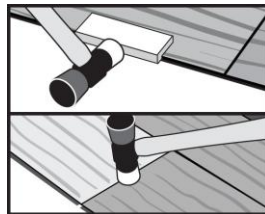
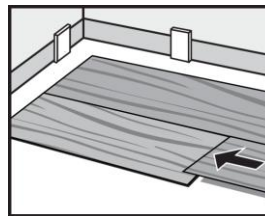
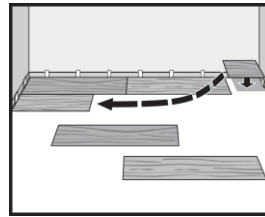
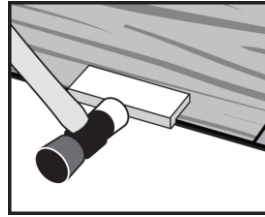
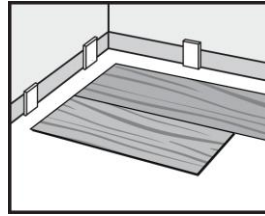
Note: When starting a new row, you can use the cut piece from the previous row, as long as it is more than 8" (20.3cm) and the stagger between seams still is greater than 8" (20.3cm)

- 6** Attach the second plank by connecting the long side to the first row and sliding it up to the short end of the first plank. Check that the long joints of the planks are properly engaged and then press the short joint into place with your fingers.
- 7** Continue to square the joints by tapping the long edge with the profiled tapping block and soft-faced hammer. Then, lightly tap down on top of the plank at the short joint with the soft-faced hammer. Continue installing the remainder of the row in this fashion.
- 8** After installing the last piece of the second row, slide the entire assembly against the spacers on the starting wall, maintaining the required 1/4" (6mm) expansion gap.

- 9** Install remaining rows, one row after the other, and maintain the required 8" (20.3cm) stagger throughout the install. Tap and square each plank as in step 7.

10 INSTALLING THE LAST ROW

Most often, the entire length of the last row will need to be cut so that it is narrow enough to fit the remaining space. Cut the first plank of the last row to length (if necessary to follow stagger pattern). Place directly on top of the previously installed row. Then, take another plank and place it against the wall on top of the plank to be cut for width. Mark the plank (length-wise), cut to size. Remember to allow for the 1/4" (6mm)



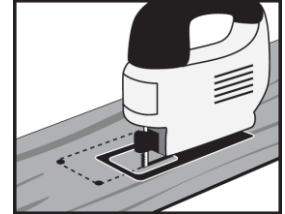
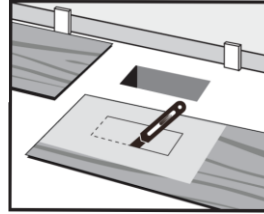
expansion gap against fixed objects.

- 11 Install the plank with the cut side always facing the wall. Use a pull bar to lock the long edges together. Do not use the pull bar on the short edges.

Continue to cut and install remainder of the planks in the last row.

FITTING AROUND IRREGULARLY SHAPED OBJECTS

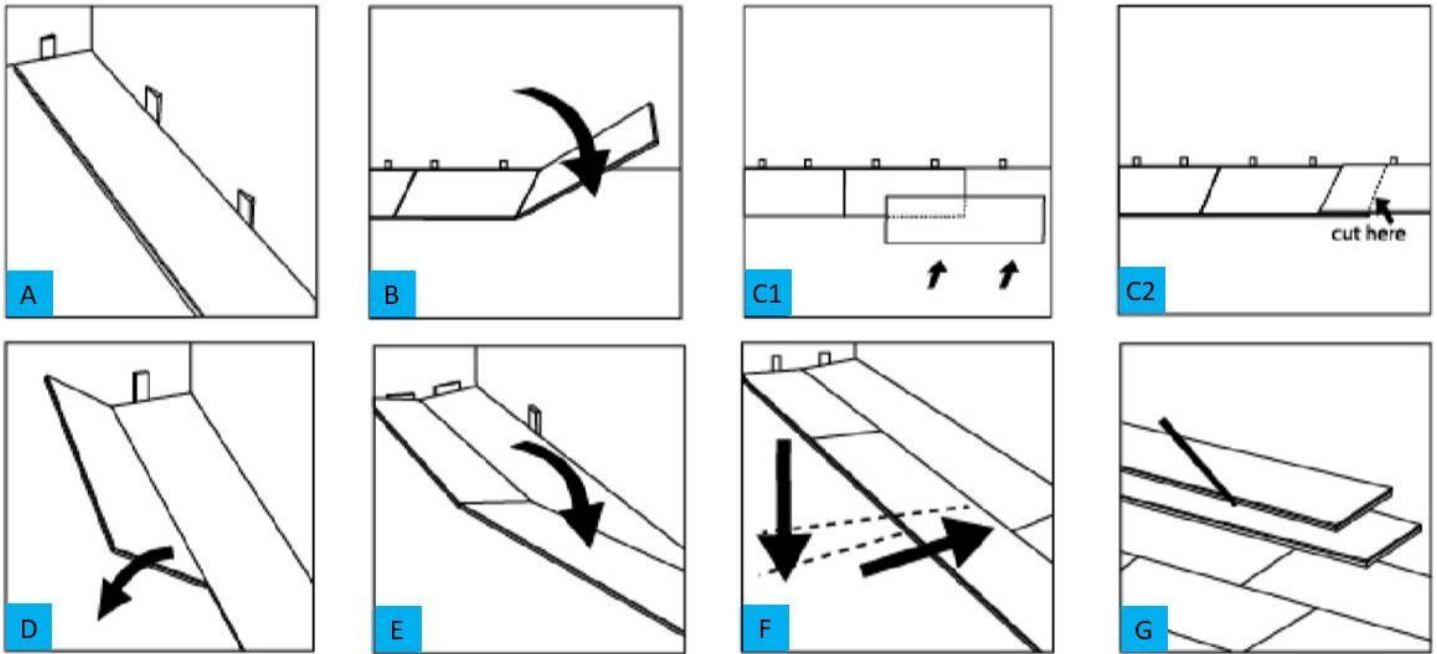
Make a template to fit around pipes or irregular shaped objects. Place the pattern upon the plank and trace. Cut along the trace lines using a utility knife or jig saw, and lay plank. Alternatively, a hole saw can be used when cutting planks that are to fit around pipes.



Note: Be sure to leave a minimum of $\frac{1}{4}$ " (6mm) expansion space around all fixed objects, cabinetry, and metal door jambs

HYBRID RIGID CORE INSTALLATION INSTRUCTION

HYBRID RIGID CORE ANGLE/ANGLE INSTRUCTIONS



- Starting in the left hand corner, place the first plank 3/8" (9mm) from the wall. Use spacers along all walls to maintain an expansion gap of 3/8" (9mm) between the walls and the flooring (Figure A).
 - Attach the ends of the 1st plank and the second plank by lifting the 2nd plank and inserting the tongue on the short side into the groove of the first plank and lowering it into place. Line up edges and corners carefully (Figure B).
 - Continue along the wall until you reach the last full plank, connecting each plank in manner described above. To fit the last plank, turn plank over (face down). Place the plank in the corner so the tongue on the short end touches the 3/8" spacer from the adjacent wall. Measure overlap between the installed plank and the last plank (Figure C1 & C2).
- Use saw to cut plank to size. If cutting with a jig saw, the decorative surface should be turned down. If cutting with a hand saw, the decorative surface should be face up.
- Note: The end pieces must be at least 12". This may require cutting a plank to start a row depending on the size of the room.**
- Begin the next row with the cut piece from the previous row, creating the necessary stagger. This piece should be a minimum of 12" (30cm) long and the joint offset from the previous row should be at least 12" (30cm) apart. To attach, tilt the plank you are installing slightly upwards (about 15-25°), insert its tongue into the previous row's groove, and lower it into place. The plank will click into place with light pressure (Figure D).
 - Install the second plank in the second row by inserting the short end tongue into the previously installed plank's groove. Align the plank so that the long side tongue tip is positioned just over the groove lip of the plank in the first

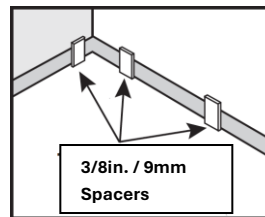
row (Figure E). Working from the end seam, at a low angle, insert the long tongue into the groove of the adjoining plank. **Very little force is required** to fit the tongue into the groove. You should be able to feel the tongue lock into the groove (Figure F). Continue locking each piece into place, short side first and then long side.

- To fit the last row, lay a plank on top of the previous row. With the plank against the wall, mark a line down the length of the plank and cut the planks accordingly to obtain the required width (Figure G). Insert this cut board against the wall. The last row should be at least 2" (50mm) wide. The spacers can then be removed.
- Door Frames and heating vents also require expansion room. Cut the planks to the correct length. Place the cut plank next to its actual position, use a ruler to measure the areas to be cut out and mark them. Cut out the marked points allowing the correct expansion distance on each side. T-molding is suggested in all doorways.
- To trim doorframes, turn a panel upside down to use as a height guide. Using a handsaw, cut door frames to the necessary height so that the planks slide easily under them.
- To make holes for pipes, measure the diameter of the pipe and drill a hole that is 7/8" (20mm) larger into the plank. Saw the plank into two pieces perpendicular to the length and bisecting the previously drilled hole. Then lay the pieces in place around the pipe.
- To finish the perimeter of the room, install quarter round molding using finishing nails. Nail quarter round directly into the baseboard not the flooring.
- Do not install over multiple layers of underlayment.

HYBRID RIGID CORE ANGLE/DROP INSTRUCTIONS

1. INSTALLING FIRST ROW

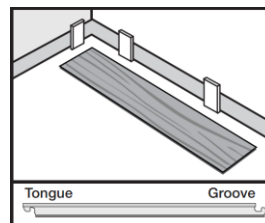
Set spacers to allow a minimum gap of 3/8" (9mm) around the perimeter of the subfloor for movement or product expansion. Do not remove the spacers until the installation is complete. The expansion gaps should be covered by molding.



- Measure the length of the room in inches. Divide it by the length of the planks. If the resulting number is less than 8, you will need to cut your first plank accordingly to avoid having planks that are less than 8" on the opposite end of the room.

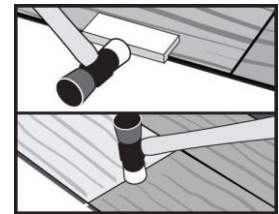
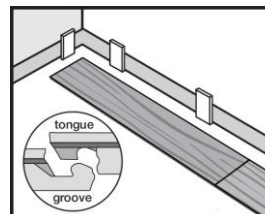
Note: To cut a plank, simply measure and mark the plank. Then, use a straight edge and utility knife to score and snap. You will also need to back-cut the under pad on the bottom of the plank. If you have difficulty using this method, you can use a jig saw, circular saw or miter saw.

- Installation should start in a left-hand corner and proceed from the wall with the tongue facing the wall. Position the first plank 6" (15.2cm) from the starting wall but not up against the spacers. The entire row will be moved against the spacers in a later step.



- Interlock the next plank at the end joint of the first plank by inserting the tongue into the groove of the adjoining planks.

Square the joints by tapping the long edge with the profiled tapping block and soft-



face hammer. Next, lightly tap down on top of the plank at the short joint with the soft-faced hammer. Continue this method to finish the first row.

Cut the last piece of the row to fit and allow for the 3/8" (9mm) expansion gap (if you have not already done so). Install as above.

5. INSTALLING SECOND AND REMAINING ROWS

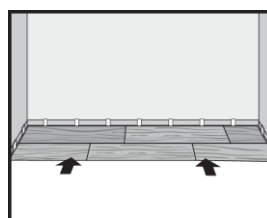
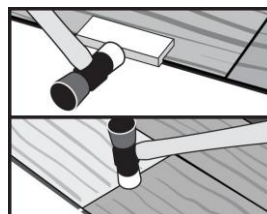
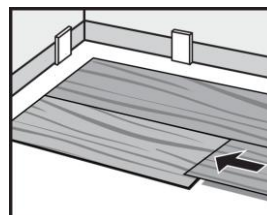
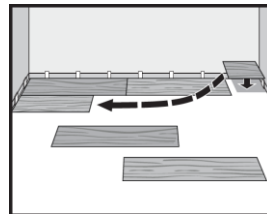
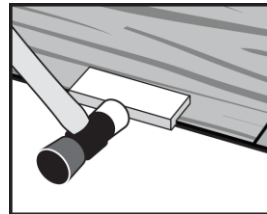
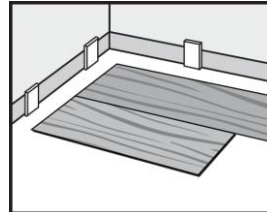
Cut the first plank of the second row to two-thirds its length or make sure there will be at least an 8" (20.3cm) stagger between end joints. Angle the long tongue edge of the plank into the long groove edge of the first plank. Drop and lock the end joints together.

Make sure there are no gaps and, if necessary, tap along the long groove edge using the soft-faced hammer and profiled tapping block to ensure a tight fit. Do not tap the short end into place if the long joint is not properly engaged, as doing so can cause damage to the tongue and groove.

Note: When starting a new row, you can use the cut piece from the previous row, as long as it is more than 8" (20.3cm) and the stagger between seams still is greater than 8" (20.3cm)

6. Attach the second plank by connecting the long side to the first row and sliding it up to the short end of the first plank. Check that the long joints of the planks are properly engaged and then press the short joint into place with your fingers.
7. Continue to square the joints by tapping the long edge with the profiled tapping block and soft-faced hammer. Then, lightly tap down on top of the plank at the short joint with the soft-faced hammer. Continue installing the remainder of the row in this fashion.
8. After installing the last piece of the second row, slide the entire assembly against the spacers on the starting wall, maintaining the required 3/8" (9mm) expansion gap.
9. Install remaining rows, one row after the other, and maintain the required 8" (20.3cm) stagger throughout the install. Tap and square each plank as in step 7.

10. INSTALLING THE LAST ROW



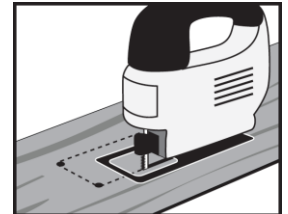
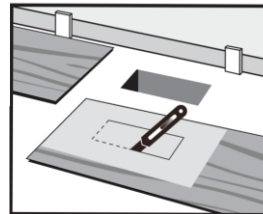
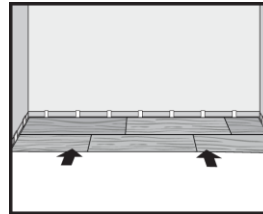
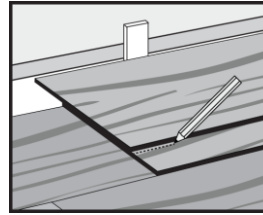
Most often, the entire length of the last row will need to be cut so that it is narrow enough to fit the remaining space. Cut the first plank of the last row to length (if necessary to follow stagger pattern). Place directly on top of the previously installed row. Then, take another plank and place it against the wall on top of the plank to be cut for width. Mark the plank (lengthwise), cut it to sizes. Remember to allow for the 3/8" (9mm) expansion gap against fixed objects.

11. Install the plank with the cut side always facing the wall. Use a pull bar to lock the long edges together. Do not use the pull bar on the short edges. Continue to cut and install the remainder of the planks in the last row.

FITTING AROUND IRREGULARLY SHAPED OBJECTS

Make a template to fit around pipes or irregularly shaped objects. Place the pattern upon the plank and trace. Cut along the trace lines using a utility knife or jig saw, and lay plank. Alternatively, a hole saw can be used when cutting planks that are to fit around pipes.

Note: Be sure to leave a minimum of 3/8" (9mm) expansion space around all fixed objects, cabinetry, and metal door jambs.



LOOSELAY LVT

INSTALLATION INSTRUCTION

- Product can be loose laid and net fit in areas under 20'. Areas larger than 20' in any direction would require either perimeter glue or full spread and require a 1/8" expansion gap.
- Use an MSI adhesive (MS001, MS007, or MS009) and follow the instructions on the adhesive.
- Results of the moisture tests will help determine which adhesive to use. For example, if the subfloor RH is 96%, then the MS009 would be appropriate as it can handle up to 99% RH conditions.

Before beginning, plan the layout such that plank/tile joints fall at least 6 inches (15 cm.) away from subfloor and underlayment joints. Find the center point in the room. Divide the room into equal quadrants by marking two perpendicular lines on the subfloor intersecting at the center point. Depending on your layout, you may also start your row along a wall. To account for walls that may not be straight, snap a chalk line.

Do not install over expansion joints.

Step 1: Apply adhesive with the recommended trowel (if applicable). Follow directions on adhesive label for open and working time. Do not exceed working time of adhesive. To ensure adhesive doesn't sit longer than working time, only spread areas with adhesive that product can be installed within the working time of the adhesive.

Step 2: Install all planks/tiles making sure each piece fits tightly to the next.

Step 3: Repeat Step 1 and Step 2 until the area is completed.

Step 4: If adhesive is used, roll once ASAP with a 100-pound, 3-section roller and roll again after 45 - 60 minutes in the opposite direction to ensure the entire installation is rolled.

After Installation,

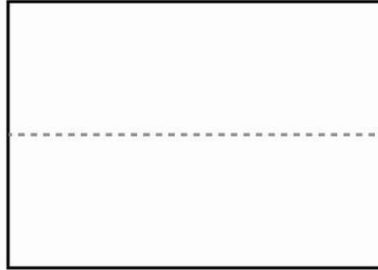
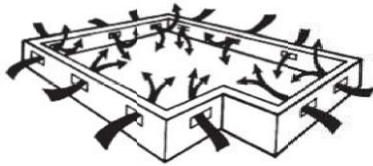
- Immediately remove any excess adhesive from the surface of the flooring using a clean white cloth dampened with water. You may also use rubbing alcohol or denatured alcohol to remove tacky or dried adhesive. Dried adhesive may be removed with a clean white cloth dampened with mineral spirits.
- Restrict to light traffic/foot traffic for a minimum of at least a FULL 24 hours. Additional time may be necessary if the installation is over a non-porous substrate.
- Install the base moldings. Use silicone caulking to seal all areas that may be exposed to surface spills (i.e. tubs, toilets, and showers).
- Restrict heavy traffic, rolling loads, or furniture placement for 72 hours after installation.
- Return appliances and furniture to the room by rolling or sliding them over strips of hardboard.
- Allow at least five days following the installation before performing wet maintenance.

GLUE DOWN LVT

INSTALLATION INSTRUCTION

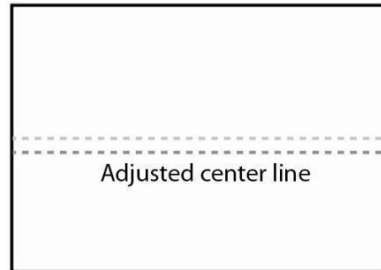
Floor Layout

First, determine the installation direction of the planks. Generally, planks are normally installed running in the long direction of the main room. Place a mark in the center of the floor at each end of the room and snap a chalk line between the marks.



Original Center Line

To avoid small narrow planks along the walls, divide the distance from the center line to the wall by the plank width (6"). If the remainder is less than 3 inches, adjust the center line one half width of a plank in either direction. This will provide a balanced layout with larger cut pieces at the wall.



Center line after adjustment

Finished Flooring Installation

Using the provided trowel adapter, spread the MSI adhesive over one half of the floor up to the center line. Do not apply excessive adhesive. Allow the adhesive to dry to tack before installing the plank (see MS001 adhesive pail label for clarifications). Allow the adhesive to dry completely to tack prior to flooring installation.

**MSI's MS007/MS009 adhesive is for commercial installations and/or installations with 90% - 99% RH in situ Probes readings, etc.*

Start installing the plank along the center line. Complete each row, including cut pieces at the wall, before proceeding to the next row. **Offset end joints by at least six inches and position planks in a random fashion, working out of three-to- four cartons for the best appearance.** Position each plank lightly against the previous one by pressing it firmly into place without sliding it. Remember to avoid small cuts of less than 6 inches at the ends of each row and place the cut ends towards the wall.

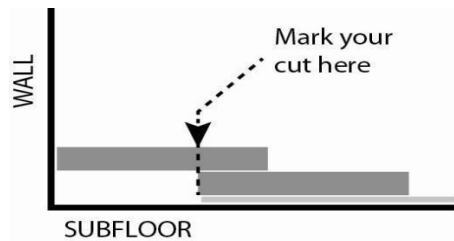
If it is necessary to adjust or remove a plank, use a heat gun to first warm the plank. Complete the opposite side of the room in the same fashion as the previous side.

Cutting a plank to fit

The last row of planks will need to be cut to fit to walls and other vertical surfaces.

Straight Cuts: place a loose plank directly over the top of the last full installed plank, making sure to line up all edges. Using a plank to measure the distance from the wall to the last installed plank, position the edge against the wall and

mark the loose plank with a pencil where it meets the installed plank at the opposite edge from the wall.



Next, place the marked plank on a cutting board. Using a carpenter square as a guide, score the pencil line carefully with a sharp knife, then break/snap (or cut) the plank along the score mark.

CAUTION: Keep fingers away from the knife blade to avoid injury. Install plank with the cut edge toward the wall.

Irregular cuts: Scribe plank to fit irregular shapes such as door trims, pipes, etc., and cut with a utility knife.

Immediately after Installation

Roll the entire floor with a 100 pound 3 section roller. Restrict to light traffic for the first 24 hours. Replace the base moldings and return appliances and furniture to the room by rolling or sliding them over strips of hardboard. Seal all areas that may be exposed to surface spills with silicone caulking.

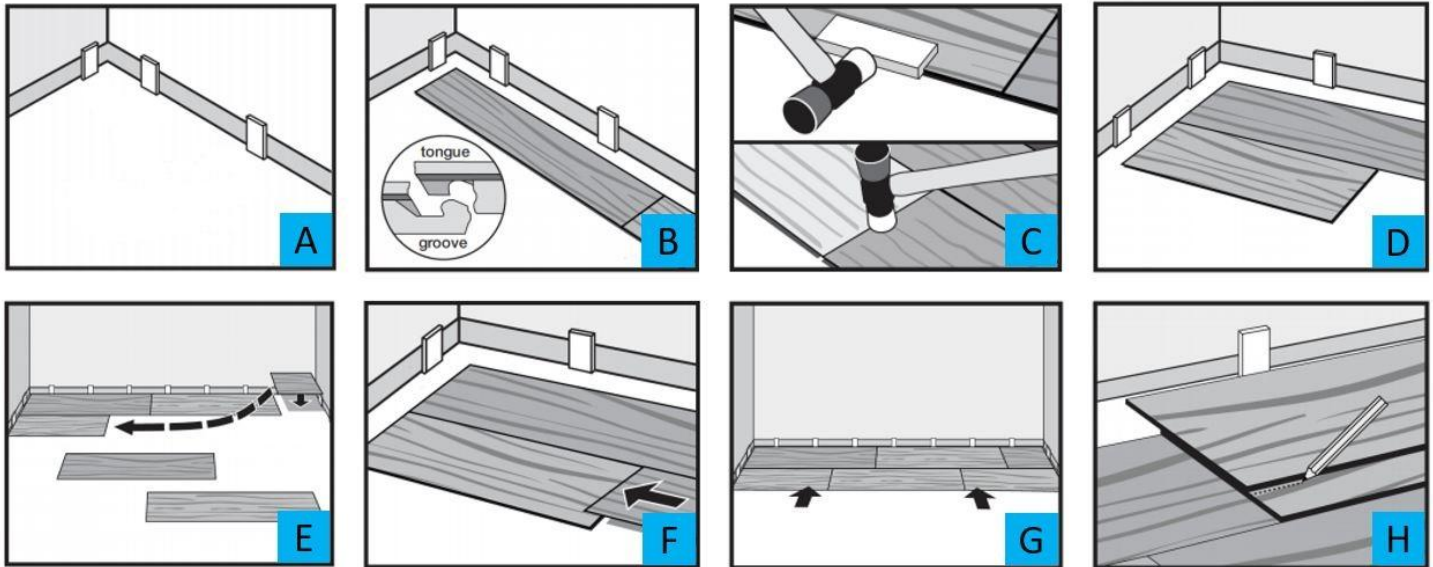
Plank repairs

- Warm the plank with a heat gun
- Using a sharp utility knife, cut through a corner of the damaged plank taking care not to cut into the subfloor below.
- Lift the end of the plank and continue heating
- As sufficient heat is provided the plank will release from the adhesive
- Lift out the entire plank and warm the exposed adhesive
- Install the new plank
- Set the new plank firmly into place with a hand roller
- The repair is complete

WATERPROOF WOOD

ANGLE/DROP INSTALLATION

INSTRUCTION



- Set spacers to allow an expansion gap of 1/2" (10mm) around the perimeter of the subfloor for movement or product expansion. Do not remove the spacers until the installation is complete. The expansion gaps should be covered by molding (Figure A).
 - Measure the length of the room in inches. Divide it by the length of the planks. If the resulting number is less than 8", you will need to cut your first plank accordingly to avoid having planks that are less than 8" on the opposite end of the room. Note: Use saw to cut plank to size. If cutting with a jig saw, the wood surface should be turned down. If cutting with a hand saw, the wood surface should be face up.
 - Installation should start in a left-hand corner and proceed from the wall with the tongue facing the wall. Position the first plank 6" (15.2cm) from the starting wall but not up against the spacers (Figure B). The entire row will be moved against the spacers in a later step.
 - Interlock the next plank at the end joint of the first plank by inserting the tongue into the groove of the adjoining planks. Square the joints by tapping the long edge with the profiled tapping block and soft-faced hammer. Next, lightly tap down on top of the plank at the short joint with the soft-faced hammer (Figure C). Continue this method to finish the first row. Cut the last piece of the row to fit, and allow for the 1/2" (10mm) expansion gap. Install as above.
 - To install the second and remaining rows, cut the first plank of the second row to two-thirds its length or make sure there will be at least an 8" (20.3cm) stagger between end joints. Angle the long tongue edge of the plank into the long groove edge of the first plank. Drop and lock the end joints together (Figure D). Make sure there are no gaps and, if necessary, tap along the long groove edge using the soft-faced hammer and profiled tapping block to ensure a tight fit (Figure C). Do not tap the short end into place if the long joint is not properly engaged, as doing so can cause damage to the tongue and groove.
- Note: When starting a new row, you can use the cut piece from the previous row (Figure E), as long as it is more than 8" (20.3cm) and the stagger between seams still is greater than 8" (20.3cm).

- Attach the second plank by connecting the long side to the first row and sliding it up to the short end of the first plank (Figure F). Check that the long joints of the planks are properly engaged and then press the short joint into place with your fingers.
- Continue to square the joints by tapping the long edge with the profiled tapping block and soft-faced hammer. Then, lightly tap down on top of the plank at the short joint with the soft-faced hammer (Figure C). Continue installing the remainder of the row in this fashion.
- After installing the last piece of the second row, slide the entire assembly against the spacer on the starting wall, maintaining the required 1/2" (10mm) expansion gap (Figure G).
- Install remaining rows, one after the other, and maintain the required 8" (20.3cm) stagger throughout the install. Tap and square each plank as in the previous steps.
- To install the last row, most often, the entire length of the last row will need to be cut so that it is narrow enough to fit the remaining space. Cut the first plank of the last row to length (if necessary to follow stagger pattern). Place directly on top of the previously installed row. Then, take another plank and place it against the wall on top of the plank to be cut for width. Mark the plank (length-wise), cut to size (Figure H). Remember to allow for the 1/2" (10mm) expansion gap against fixed objects.
- Install the plank with the cut side always facing the wall. Use a pull bar to lock the long edges together. Do not use the pull bar on the short edges. Continue to cut and install remainder of the planks in the last row.
- Door Frames and heating vents also require expansion room. Cut the planks to the correct length. Place the cut plank next to its actual position, use a ruler to measure the areas to be cut out and mark them. Cut out the marked points allowing the correct expansion distance on each side. T-molding is suggested in all doorways.
- To trim doorframes, turn a panel upside down to use as a height guide. Using a handsaw, cut door frames to the necessary height so that the planks slide easily under them.
- To make holes for pipes, measure the diameter of the pipe and drill a hole that is 7/8" (20mm) larger into the plank. Saw the plank into two pieces perpendicular to the length and bisecting the previously drilled hole. Then lay the pieces in place around the pipe.
- To finish the perimeter of the room, install quarter round molding using finishing nails. Nail quarter round directly into the baseboard not the flooring. Do not install over multiple layers of underlayment.

ENGINEERED WOOD

INSTALLATION INSTRUCTION

ENGINEERED WOOD GLUE DOWN INSTALLATION

Note: It is important to select the right compatible adhesive depending on the subfloor type and subfloor conditions before proceeding. To apply adhesive, follow the instructions from the adhesive manufacturer.

Warning: Whether installing through dry or wet method, be sure to follow the guidelines from the adhesive manufacturer.

Failing to follow the adhesive manufacturer's instructions could void your floor's warranty.

Proper ventilation within the room must be provided. A fan may be helpful.

ENGINEERED WOOD WET LAY INSTALLATION

1. Select a starter wall. It is recommended to start the installation along an exterior wall as it is more likely to be straight and square with the room. Measure out from the wall the width of two flooring planks plus the plank thickness, mark each end of the room and snap your chalk line.
2. Spread adhesive from the chalk line to the starter wall using the recommended trowel size for the adhesive. It is important to use the correct trowel at a 45° angle to get the proper spread of adhesive applied to the subfloor and produce a proper and permanent bond. Improper spread can cause poor bonding which can lead to loose planks or hollow spots in the installation.

NOTE: It is best to change the trowel every 2,000 to 3,000 square feet, or sooner as needed, due to wearing of the teeth. If spreading adhesive with worn teeth improper bonding can occur.

3. Install the first row of starter planks with the tongue facing the starter wall making sure to align the planks before securing. Alignment is critical and can be achieved by securing a straight edge along the chalk line. If installing over wood subfloor alignment can also be achieved by top nailing the first row with finishing nails. If installing over concrete, adjustable spacers can be used to achieve proper alignment. These additional measures prevent slippage of the planks that can cause misalignment.

NOTE: Most walls are not straight and therefore the planks along the wall may have to be scribed and cut to fit in order to maintain a consistent expansion space. Try to maintain at least 2" on the scribed plank.

4. Once the starter rows are secure, spread 2-1/2 to 3 feet of adhesive the length of the room. Never lay more adhesive than can be covered in approximately 1 hour or the specified open time of the adhesive. Place tongue into groove of plank and press firmly into adhesive. Never slide the planks through the adhesive. Use a tapping block if necessary to fit planks tightly together at the sides and ends. Clean any adhesive off the surface immediately before it cures using a clean white cloth with mineral spirits.

NOTES:

- Never work on top of the flooring when installing.
 - Never hit/tap the flooring planks with a mallet directly. Use a tapping block instead.
5. Once the flooring has been installed, go back to the start of the install to remove the straight edges and spread adhesive on the remainder of the open subfloor. Keep in mind that the planks close to the wall may have to be scribed and cut to fit due to the wall not being straight.

NOTE: Light foot traffic is allowed 12 hours after install, but wait 24 hours after the installation to remove the painters tape (low adhesive for delicate surfaces). After the tape is removed you can clean any adhesive residue by using mineral spirits and a clean white cloth/towel.

Finishing Touches

Re-install / install any transition pieces, reducer strips, T-molding, thresholds, base boards and/or quarter rounds needed to achieve transition and cover the edges of any gaps along the wall.

NOTE: Trims and moldings should be nailed into the wall or subfloor, NOT THE FLOORING.

Heavy furniture and appliances should not be rolled over the floor. Use plywood or appliance lifts if needed. Thick felt pads should be used on legs of furniture to prevent damage to the flooring.

ENGINEERED WOOD STAPLE DOWN INSTALLATION

Thickness	Fastener Gauge	Side Spacing	End Spacing
3/8"	20 gauge staple not less than 1-1/2" in length	4"-6"	1"
1/2", and 5/8"	18 gauge staple not less than 1-1/2" in length	4"-6"	1"

This engineered wood floor can be installed over wood subfloors with exception of Parquet or Masonite. If stapling the floor down, it is necessary to use the proper type of flooring stapler that is compatible for the thickness of the engineered wood flooring that is being installed.

TIP: In order to reduce squeaking and other noises created by the opposing floors, in addition to the ground cover that is mandatory in the crawlspace, a 15 lb. felt or rosin paper can be installed over the subfloor prior to the installation of the engineered wood flooring.

When installing the flooring apply a bead of tongue and groove wood flooring adhesive to the bottom side of the groove, to help lock the tongue and groove profile in place. This helps to reduce the likelihood of movement of the tongue and groove, which can contribute to squeaking and other noises underfoot.

Steps for staple down install:

1. From the ends of your starting wall, measure out the width of the plank plus plank thickness* and mark both ends. Where possible, lay the flooring at 90° angles to the floor joists. Make a chalk line along the starting wall using the marks you made.

**Expansion gap must be left along walls and fixed objects for this flooring. The expansion gap space should be equal to the thickness of the product. E.g. if you are installing a 1/2" thick engineered wood flooring, the expansion gap should be 1/2", if the flooring being installed is 5/8" thick the expansion gap should be 5/8", etc.*

2. With the groove side of the planks facing the wall, place the planks along your chalk line. Use brad or small finishing nails to secure the first starter row along the wall. Nails should be 1 to 2" from the ends and every 4 to 6" along the side.

Note: The nails should be below the surface of the floor (not sticking up). You can fill the holes with wood filler that blends with the flooring that is being installed. It is also best to place the nails in a dark grain in the board. The baseboard or quarter round will cover the nails around the perimeter after the install is complete.

3. For the next two rows blind nail at a 45° angle through the tongues of the engineered wood floor. You can pre-drill holes for the nails to make this easier, or use a brad nailer with 1" to 1-3/8" brads to avoid the need to pre-drill. Nail 1 to 2" from the ends and every 4 to 6" along the sides.
4. Continue the installation using an engineered wood flooring stapler with recommended staples. Stapling should be done 1 to 2" from the ends and every 4 to 6" along the edge tongues.

TIPS:

- It is recommended to initially set the compressor between 80 and 85 PSI and adjust the pressure as needed to properly set the fastener. The pressure should not be too high such that the nails go through or break the tongues, and not too low such that the nails stick out from the surface.
- Improper stapling/nailing can cause squeaks and/or surface dimpling of the floor.
- Since adjustments may be necessary to provide the right penetration of the nail or staple in the nail/staple pocket it is recommended to use scrap flooring to find the right tooling calibration.
- Always use flooring installation tools with the factory designed floor plate attached to ensure proper fastener penetration angle.

ENGINEERED WOOD FLOATING INSTALLATION

Space preparation:

- Undercut door casings 1/16" higher than the thickness of the flooring being installed + underlayment thickness.
- Install Abatec™ underlayment per guidelines on www.msisurfaces.com. Underlayment other than Abatec™ is not recommended as excessive pad compression/compaction is a common cause of seam failure.
- Expansion gap needs to be left along all walls and fixed objects. The expansion gap should be equal to the thickness of the flooring being installed.
- Doorways or archways 48" or less are required to have T-Molding.
- Rooms larger than 26'x33' are required to use a T-molding break.

NOTE: Glue will still be required for floating installation. A compatible engineered wood tongue and groove glue must be placed on every plank along the topside of the groove and bottom side of the tongue for the full length of the sides and ends. Only apply approximately 3/32" bead of glue, don't fill the groove with glue or it will be difficult to close the seam and will result in a loose fit.

Steps for floating installation:

1. Use wooden wedges as spacers to establish the proper expansion gap from the wall (which is equal to the flooring plank thickness). It will be necessary to work from right to left and the first plank should be a full length board laid in the right hand corner of the room. The first row should start by facing the groove of the long side against the wall (which means the groove side will be firmly against the wood wedges).
2. After the first plank is down, apply the glue to the short side along the topside of the groove (which will be the first plank that is already down) and the bottom side of the tongue (which will be the second plank). Slide the end tongue of the second plank into the end groove of the plank already down.
3. Continue this method until the first row is complete, cutting the last plank to also account for the expansion gap. The row must be straight, square, and tightly together (use a tapping block where necessary) in order to establish the alignment for the rest of the floor. Planks may require scribing and cutting to fit any wall curve/irregularities.
4. Start on the second row, ideally using a leftover plank from the first row cut to minimize wastage. End joints on adjoining rows should be offset by no less than 6". Align the plank and lock the side into place against the first plank in the first row (the new second row will have the plank grooves going into the tongues of the flooring already down in the first row). Keep in mind that locking together the tongue and groove requires the same method of adding glue to the tongue and groove as mentioned above. Be sure to use a tapping block to tap the planks together to make sure they are snug. Continue to lay the planks in this manner.

Note: For the final row you will likely need to cut the planks along the length of the planks so that the width fits in the space (accounting for the necessary expansion gap at the wall). Also a pull bar should be used to ensure the final row is tight to the second to last row.

Tips:

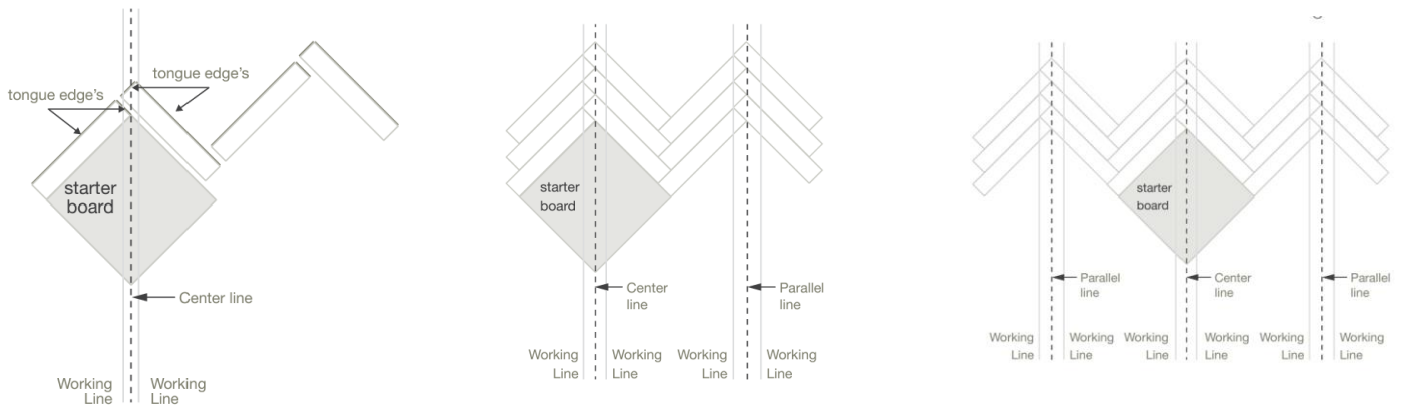
- Stretch tight and stick low adhesion delicate surface painters tape across every 3 to 5 rows of planks approximately 2' apart from one another to hold the floor in place while the glue sets. Remove the tape within 24 hours and clean any leftover adhesive residue with a clean white cloth and mineral spirits.
- If any glue squeezes out of the seam and gets on the planks, allow it to dry for 15 minutes and lightly scrape it away with a plastic scraper or putty knife.
- Do not allow the glue to dry on the face of the flooring as it will be very difficult to clean off without scratching the surface.

ENGINEERED WOOD HERRINGBONE INSTALLATION

- **IMPORTANT:** Precision is the key when installing Herringbone hardwood flooring. Verify measurements and frequently check row alignment to ensure the pattern is laid accurately and evenly. Installing Herringbone flooring requires a high degree of technical ability and should be only performed by qualified professional installers.
- Herringbone flooring must be installed using glue down method only.
- Herringbone should be installed using a line of one run of left tongue plank and one line of right tongue plank with either side of a determined line from the center of the room/area using a laser along the desired center point of the installation.

- Herringbone floors require that a section of left tongue and right tongue is dry-laid prior to installation in order to establish the alignment for the left and right. A working line is then drawn either side of the center in order to keep the alignment of the herringbone pattern.
- Flatness of the subfloor is critical when dealing with a herringbone installation.
- Adhesive will allow pieces to slip when sideways pressure is applied for some time after open time has elapsed. Use a releasable blue tape to prevent slippage. For the same reason, no heavy furniture or activity should be allowed on the finished floor for a minimum of 24 hours

Herringbone Working Lines:



Installer should use this section to record pre-installation moisture content readings. This completed form along with at least one carton end label, receipt of purchase, and the floor care maintenance instructions should be provided to the owner for their records.

WOOD SUBFLOOR

Date:

Installation company:

Moisture readings taken by:

Moisture Content:

% average moisture content of subfloor
 % average moisture content of hardwood
 % Difference between subfloor and flooring

CONCRETE SUBFLOOR

Date:

Company performing concrete moisture readings:

Moisture readings taken by:

Test Method Used:

Calcium Chloride (*ASTM*
F1869) RH (*ASTM*
F2170-02)1869
Electronic Meter

Moisture Readings:

STAIR TREAD INSTALLATION

INSTRUCTION

1. Remove spindles from your staircase if they sit on top of the existing tread. Remove all existing flooring (e.g., carpet), staples, adhesives, or debris from the stairs. Ensure each stair surface is clean, flat, and dry. Remove any existing flooring (e.g. carpet), staples, or glue from your stairs.
2. Address the existing bullnose: The necessary action depends on your tread type. For Standard Treads: Cut off and remove the existing bullnose from each step of your staircase. For Wrapped-Nose Treads: Leave the existing bullnose intact (this tread is designed to wrap around it).
3. Clean the new tread: Check the back side of the new stair tread nose and remove any excess loose film material left over from the manufacturing process, if it exists.
4. Install risers: Skip if not using coordinating risers. If a coordinating riser is needed, cut it to size and cut off the locking clicks. Starting at the bottom step, lay strips of adhesive on the back of the riser approximately every 6". Press into place and hold with painter's tape (remove this tape before installing the tread on the next step). Note: The bottom of the next riser will sit on top of the previously installed stair tread, so the height of subsequent risers may need to be cut down compared to the first one.
5. Measure the step: Starting at the bottom step, measure the width and depth of the stair using a tape measure and an angle gauge. If steps are not perfectly square, use a tread tool or angle finder for accurate angles. (Note: The depth measurement needs to include the thickness of the riser installed in the previous step).
6. Cut the tread: Using a miter, table, or circular saw, cut the tread to the required size and angle with the décor side facing up. Applying painter's tape along the cut line can help prevent edge chipping during cutting.
7. Dry fit the tread: Place the tread onto the step to confirm a snug and proper fit before applying any adhesive. If you notice pressure is needed to keep the tread nose flush to the riser, check the back side of the tread nose again for any excess loose film and cut it off using a utility knife (running it across the length of the back of the nose).
8. Apply adhesive: Technique varies slightly by tread type. Using a caulk gun, apply a 1/4" bead of urethane construction adhesive approximately 1" from the edges, then fill the middle area in a serpentine pattern spaced about 1.5" apart. For Wrapped-Nose Treads: Apply additional adhesive directly inside the bullnose area of the stair tread to ensure a secure bond over the existing stair nose.
9. Position the tread: Hover the tread over the step approximately 1" away from the riser, press down, and slide it firmly into place against the riser. Apply firm pressure across the entire surface of the stair tread to ensure proper adhesion.
10. Secure the tread: Fasten the tread along the back edge near the riser using an 18-gauge finishing/brad nailer set to 100 PSI (using 1.5" nails). Place the nails about 1/2" from the riser and space them approximately 4" to 12" apart. The nails should also be kept 3.5mm (about 0.14") in from the ends of the tread. This prevents movement while the adhesive cures.

LVT/HRC TRIMS

INSTALLATION INSTRUCTION

OVERLAPPING STAIR NOSE INSTALLATION

Overlapping stair noses are used to finish the end of a step.

1. Install the flooring leaving a 1-1/4" space from the end of the step for the step nose installation.
2. Measure the width of the step and cut to length.
3. Apply a generous bead of construction adhesive along the underside of the stair nose.
4. Carefully roll the stair nose into place against the front of the step. Press down firmly over the entire stair nose.
5. For added security, use finishing nails

END CAP INSTALLATION

End caps are used to fill the gap between the floor and carpet, hearths or against sliding doors.

1. Install the flooring leaving a 1-1/8" gap between the two doors for the end cap installation.
2. Measure and trim to fit.
3. Center the track between the flooring leaving a 1/4" spacing between the track and door planks. Screw track to sub floor (or glue down with construction adhesive).
4. Starting at one end, press the molding into the track inching along the length of the molding.

FLUSH STAIR NOSE INSTALLATION

Flush Stair noses are used to finish the end of a step.

1. Install the flooring leaving a 1 5/8" space from the end of the step for the stair nose installation.
2. Measure the width of the step and cut to length.
3. Apply a generous bead of construction adhesive along the underside of the stair nose.
4. Carefully roll the stair nose into place against the front of the step. Press down firmly over the entire stair nose.
5. For added security, use finishing nails.

FLUSH STAIR NOSE EASED EDGE INSTALLATION

Flush stair noses are used to finish the end of a step.

1. Install the flooring leaving a 1 5/8" space from the end of the step for the stair nose installation.
2. Measure the width of the step and cut to length.
3. Apply a generous bead of construction adhesive along the underside of the stair nose.
4. Carefully roll the stair nose into place against the front of the step. Press down firmly over the entire stair nose.
5. For added security, use finishing nails.

SURFACE REDUCER INSTALLATION

Surface reducers are used to fill the gap between floors of unequal heights.

1. Install the flooring leaving a 1-1/8" gap between the two doors for the surface reducer installation.
2. Measure and trim to fit.
3. Center the track between the flooring leaving a 1/4" spacing between the track and floor planks. Screw track to sub floor (or glue down with construction adhesive).
4. Starting at one end, press the molding into the track inching along the length of the molding.

T-MOLDING INSTALLATION

T-Moldings are used to fill the gap between floors of equal heights.

1. Install the flooring leaving a 1-1/4" gap between the two floors for the t-molding installation.
2. Measure and trim to fit.
3. Center the track between the flooring leaving a 1/4" spacing between the track and floor planks. Screw track to sub floor (or glue down with construction adhesive).
4. Starting at one end, press the molding into the track inching along the length of the molding.

QUARTER ROUND INSTALLATION

Quarter round is used to cover the expansion gap between the floor and the wall.

1. Measure and trim to fit.
2. Leaving a 3/8" space between flooring and the wall, cover the gap with quarter round molding.
3. Secure with finishing nails.

MULTI PURPOSE TRIM INSTALLATION

Multi Purpose trims are used to fill the gap between floors of equal/unequal heights.

1. Install the flooring leaving a 1-1/8" gap between the two floors for the installation.
2. Draw a line down the center of the space between floors. Drill 1/4" holes along the line, approximately 15" apart.
3. Slide plugs into the slot on the transition and align with the pre-drilled holes.
4. With a rubber mallet, hammer the plugs into the holes until flush.

WOOD TRIMS INSTALLATION

INSTRUCTION

T-MOLDING INSTALLATION

1. A space of 1-1/4" between the two adjoining floors is necessary to properly install the molding. This is to allow for the expansion of space.
2. Lay the T-Molding in place to determine proper fit.
3. To attach the T-Molding between an existing flooring and the hardwood floor, apply a 1/4" bead of construction adhesive to the top edge of the existing flooring.
4. To attach between two hardwood floors apply the 1/4" bead to the top edge of one side of the hardwood only.
5. Seat the molding in place allowing for a minimum of 1/4" overlap on the wood flooring.
6. Make sure to allow for the expansion space between the T-Molding and the flooring.
7. When installing over a wood sub-floor, use finish nails to secure the T-Mold.
8. When installing over concrete, use a heavy-duty construction adhesive to secure T-Mold.

FLUSH STAIR NOSE EASED EDGE INSTALLATION

1. When used on a stair step, the Stair Nose molding should cover and overlap the riser.
2. When used on a step-up to another room, the Stair Nose molding becomes the starting "edge" of the floor. Because of the interlocking of the molding with the floor, the Stair Nose molding should be installed first.
3. Once the molding is in place, the interlocking floor can be installed.
4. Moldings should be installed using adhesive and screw type fasteners or nails.

SURFACE REDUCER INSTALLATION

1. To attach molding pre-drill and nail in appropriate 6"-to-8"-inch intervals.
2. Do not nail less than 2" - 3" from the ends of either side.
3. To attach molding using glue, apply glue to the front edge of the molding.
4. Apply one or two 1/4" beads of construction adhesive to the sub-floor and seat the molding in place.

QUARTER ROUND INSTALLATION

1. Secure the quarter round using a finishing nail and always attach to the wall to allow for proper expansion and contraction of the floor.
2. Leaving a 1/2" space between the flooring and the wall, cover the gap with quarter round molding.
3. Be sure when nailing, that you do not go at a downward angle so as to avoid hitting the flooring and causing it to get into a bind.
4. Measure the distance you will require the molding to cover.
5. Double check your measurement before cutting.
6. Trim the piece of molding to this exact length.
7. Always "dry-fit" any molding to determine if you have made the correct cut.

END CAP INSTALLATION

1. When installing the new flooring ensure there is sufficient expansion space up-to the door sill.
2. Choose a molding which allows the leg to sit securely on the floor while the overlap touches the surface of the flooring.

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3. If you cannot purchase the precise fit required, you can use a table saw to adjust to the thickness of the molding being installed or “build-up” leg of threshold if it is too short using some “wood stock” to shim up.
4. Measure the distance you will require the molding to cover. Double check your measurement before cutting.
5. Trim a piece of molding to this exact length. Always “dry-fit” any molding to determine if you have made the correct cut.

STAIR TREAD RETURN INSTALLATION

1. Start by measuring the width and length of your stair tread.
2. Then mark the side where the return will go.
3. If you’re using a stair tread with return that hasn’t been pre-assembled, mark the angles for your miter cuts clearly.
4. Using a miter saw, cut both the stair tread and the return piece at a 45-degree angle. This allows the two pieces to fit together in a clean, flush seam.
5. A sharp blade is key here.
6. Apply wood glue to both cut edges. Be sure to use a strong, high-quality wood glue designed for trim or stair applications.
7. Press the return piece into place so the mitered edges line up perfectly.
8. Use clamps to hold the pieces together while the glue dries.
9. Wipe off any excess glue immediately with a damp cloth.
10. Once the glue has dried fully (typically after a few hours), sand the joint carefully using fine-grit sandpaper. Always sand in the direction of the wood grain for a smoother finish.

ADHESIVE INSTALLATION

INSTRUCTION

MS001/MS009 LVT Universal Pressure Adhesive

Overview: A solvent-free, aggressive-tack adhesive for non-vinyl-backed modular carpet tile, LVT, vinyl plank/sheet, VCT, and fiberglass-reinforced vinyl sheet. Releasable for carpet tiles; permanent bond for LVT and sheet flooring.

Usage: Strip any cutback or asphalt-based adhesive residue completely before starting. Once flooring is placed, roll it in both directions right away with a 3-section roller (75–100 lb. for MS001, 75 lb. for MS009) to lock in full contact.

Climate Requirements: HVAC must be in operation. Maintain floor/room temperature at 65°–85°F and humidity at 45–65% for 48 hours prior to, during, and continuously after installation.

MS001 Substrate Limits: Approved over bare concrete up to 90% RH and a pH of 8.0-10.0.

MS009 Substrate Limits: Approved over bare concrete up to 99% RH and a pH of 12.0 or less.

Porous Substrate Application: Allow 10–20 minutes open time (flash-off) before placing flooring. Working time is up to 4 hours after flash-off.

Non-Porous Substrate Application: Allow 30–60 minutes to become dry to the touch (little to no transfer to the finger). Working time is up to 4 hours after drying. Do not install flooring into wet adhesive.

Carpet Tile Application: Spread with a trowel or paint roller and let it dry completely before placing tiles, about 30 minutes, depending on humidity and temperature for a releasable installation.

Post-Installation: Roll immediately in both directions with a 75 lb., 3-section roller. Restrict foot traffic for 24 hours. No heavy traffic, rolling loads, or furniture for 72 hours. Wait 5 days before wet cleaning.

Limitations: Don't let either product freeze and avoid chemically cleaned substrates or any cutback adhesive residue. MS001 also rules out treated plywood. For MS009, mandatory bond test, no outdoor or below-grade jobs, and no PVC-backed carpet tile.

Use Over: Bare concrete on or above grade (no hydrostatic moisture/pressure), steel, terrazzo, and APA-approved plywood. Vinyl-backed and non-vinyl-backed modular carpet tile, LVT, LVP, resilient sheet vinyl, VCT, fiberglass-reinforced sheet vinyl, and carpet cushion (to substrate) as approved flooring types

Cleanup: Use a clean, wet cloth to clean up adhesives while it's still wet. Dried adhesive may require an appropriate solvent.

Trowel: Use a U-notch trowel with tiny grooves (1/16"×1/32"×1/32") to spread the adhesive for LVT, plank, and sheet flooring. It covers about 220–260 sq. ft. per gallon. For carpet tile on MS001, you can also use a flat trowel or a roller instead, which covers more ground at 350–400 sq. ft. per gallon.

Adhesive Working time: Up to 4 hours after drying.

MS003 LVT Concrete Primer

Overview: An acrylic floor preparation solution that improves porous substrates, protects against alkalinity, and prevents over-absorption of adhesives.

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Usage: Substrate needs to be clean, dry, and within the stated RH/pH range, with old adhesive ridges removed and the surface left smooth. One coat goes on, then it's left to dry.

Climate Requirements: Maintain floor/room temperature at 65°–95°F and humidity at 10–65% for 48 hours prior to, during, and after installation.

Substrate Limits: Use on concrete substrates up to 85% RH and a pH of 8.0–12.0.

Application: Apply one coat evenly using a 3/8" nap roller (350–400 sq. ft. per gallon) or sprayer (400–500 sq. ft. per gallon using an overlap pattern).

Limitations: Do not use to encapsulate cutback adhesive residues. Cannot be used as a moisture sealer. Not recommended for use with polyurethane-based adhesives.

Use Over: APA-approved flooring-grade plywood, or above grade concrete, acoustical concrete, and floor patch.

Cleanup: Clean spills with soapy water. Dried residues may require the use of a solvent cleaner. Containers must be kept tightly closed when not in use.

Dry Time: Allow a minimum of 4 hours to dry, or until completely hardened to the touch.

MS005 LVT Adhesive Encapsulator

Overview: High-strength acrylic encapsulator that seals over leftover cutback and pressure-sensitive adhesive residue once it's been scraped down mechanically.

Usage: Old adhesive must already be scraped down to a bare, flat residue (no solvents) before this goes on. The floor needs to be clean and free of contaminants, and any patching gets a bond test first.

Climate Requirements: Store and apply indoors between 65°–95°F.

Substrate Limits: Use on concrete substrates up to 85% RH and a pH of 8.0–10.0. Must be applied to a solid surface; soft adhesives or excess residue will cause failure.

Application: Apply one coat evenly with a 3/8" nap paint roller (315–360 sq. ft. per gallon). Keep the roller wet with material.

Limitations: Not recommended for covering oil, grease, paint, or marker stains (these must be mechanically removed). Do not use in combination with polyurethane-based adhesives or any other sealer/encapsulant.

Use Over: On or above grade concrete, APA-approved plywood, old cutback stains, and pressure-sensitive adhesive residue.

Cleanup: Clean spills with soapy water. Dried residues may require the use of a solvent cleaner. Containers must be kept tightly closed when not in use.

Dry Time: Allow a minimum of 4 hours to dry, or until completely hardened to the touch.

MS007 LVT High Moisture Adhesive

Overview: A high-strength, high-shear adhesive for LVT, solid vinyl tile, cork, non-PVC carpet tile, and vinyl sheet flooring. Ideal for demanding commercial environments.

Usage: Cutback or asphalt-based residue needs to be fully removed before starting. Roll the installation in both directions with a 75 lb., 3-section roller immediately after the flooring is placed.



Climate Requirements: HVAC must be in operation. Maintain floor/room temperature at 65°–85°F and humidity at 45–65% for 48 hours prior to, during, and continuously after installation.

Substrate Limits: Approved over bare concrete up to 95% RH and a pH of 11.0. (Not for outdoor use, below-grade installations, or PVC-backed carpet tile).

Porous Substrate Application: Allow 10–20 minutes open time (flash-off). Working time is up to 2 hours after flash-off.

Non-Porous Substrate Application: Allow approximately 30 minutes to become dry to the touch (little to no transfer to the finger). Working time is up to 2 hours after drying. Do not install flooring into wet adhesive.

Post-Installation: Roll immediately in both directions with a 75 lb., 3-section roller. Immediate occupation and use are permitted. Wait 5 days before wet cleaning.

Limitations: Don't let it freeze. Bond test is required before every job, and any cutback adhesive stains need to be fully removed first. No outdoor use, no below-grade installs, and avoid chemically cleaned substrates.

Use Over: Bare concrete on or above grade (no hydrostatic moisture/pressure), steel, terrazzo, and APA-approved plywood.

Cleanup: Use a clean, wet cloth to clean up adhesives while it's still wet. Dried adhesive may require an appropriate solvent.

Trowel: Use a U-notch trowel with tiny grooves (1/16"×1/32"×1/32") to spread the adhesive for LVT, plank, and sheet flooring. It covers about 220–260 sq. ft. per gallon.

Working time: 120 minutes.

MS011 Engineered Wood Adhesive

Overview: A one-component, moisture-cure urethane adhesive and moisture-vapor-control membrane for engineered hardwood flooring. (Not for use beneath solid wood flooring or in areas with hydrostatic pressure).

Usage: Follow the flooring manufacturer's and NWFA's guidance for acclimation, layout, and verifying moisture-vapor content with a meter, including expansion relief around the perimeter.

Climate Requirements: Slab temperature must be between 50°–95°F during installation. Higher humidity accelerates curing; colder/drier conditions prolong it.

Substrate Limits: Approved for concrete exceeding 99% RH. Concrete must have a surface profile (CSP) of 1-3. Maximum floor variation is 3/16" in 10 feet.

Application: Use a "wet-lay" method. Spread adhesive with the appropriate trowel and install flooring immediately. 100% substrate coverage and transfer is required for moisture protection.

Plywood Over Concrete Application: Score 3/4" exterior-grade plywood sheets on the backside every 8" to 10" (cutting half the thickness) to prevent warping. Set plywood into wet adhesive and allow it to fully cure before nailing flooring.

Post-Installation: Tape boards together to prevent sliding and roll the floor (test factory finishes first to ensure tape removal does not cause harm).

Special Cleanup: Clean wet adhesive from prefinished flooring immediately with adhesive remover or mineral spirits, then dry buff. Clean tools before the urethane cures.

Limitations: Below-grade use is limited to engineered hardwood only, with a vapor barrier required under on/below-grade slabs. Not for use on wet, dusty, glassy, or sealed substrates, over perimeter-bonded flooring, or in hydrostatic-pressure zones; the membrane only blocks moisture coming from below it, not leaks or pressure from the sides or top.

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Use over: Concrete, plywood, OSB, well-bonded vinyl, terrazzo, ceramic tile, cement patches/underlayments, dry above-grade gypsum, and recycled rubber underlayment.

Cleanup: As you work, immediately clean any adhesive from prefinished flooring with adhesive remover or mineral spirits (be careful not to harm finish), then dry buff with a nonabrasive towel. Immediately clean all tools and equipment with adhesive remover or mineral spirits before material cures.

Working time: 180 minutes.

LIMITED WARRANTY

LIMITED WARRANTY

MSI warrants that the products listed in this document will be free from manufacturing defects for the period specified for each product. The warranty period begins on the date of purchase or the date of delivery to the original purchaser, whichever is earlier, unless a different start date is required by applicable law. A defect means a manufacturing condition that causes the product to fail to conform to MSI's published specifications during the applicable warranty period. For the duration of the applicable warranty period, the flooring surface will not wear through under normal use. To constitute warrantable wear-through, the wear must be readily visible, must result from normal residential foot traffic, and must cover an area of at least one (1) square inch per occurrence. Reduction in gloss, sheen, or surface luster, and changes in surface texture, do not constitute wear-through and are not covered. For products with a wear layer, this includes wear through to the decorative layer. For wood products, wear-through is defined as complete loss of the wood veneer, exposing the underlying core material. This warranty applies only to interior, climate-controlled installations and does not apply to outdoor areas, wet areas, areas subject to standing water, or areas outside the required temperature and humidity ranges, and is valid solely for the original purchaser in the original installation, for the stated warranty duration. For purposes of this limited warranty, "residential" means an interior, climate-controlled, owner-occupied dwelling used solely as the original purchaser's private residence. Residential use does not include any property, unit, room, area, or installation that is rented, leased, licensed, subleased, used for transient occupancy, used as a short-term rental, vacation rental, timeshare, Airbnb/VRBO-type rental, hotel, motel, dormitory, assisted-living facility, student housing, employee housing, model home, builder/spec home, or other income-producing or non-owner-occupied use, regardless of whether the property is otherwise designed or zoned for residential occupancy. Any rental, lease, transient, commercial, institutional, multi-user, or business-related use is excluded from residential warranty coverage. "Light Commercial" means an interior, climate-controlled installation in a non-industrial setting that is subject only to limited, low-intensity pedestrian foot traffic and normal maintenance, as determined by the actual use of the space and not merely by the type of building in which the product is installed. Light Commercial use may include private offices, small professional offices, limited-use conference rooms, small boutiques, small retail showrooms, and similar low-traffic areas. Light Commercial use does not include heavy or continuous public traffic; common areas; corridors; lobbies; entryways; elevators; stairs; schools; healthcare facilities; restaurants; bars; food-service areas; grocery stores; fitness facilities; airports; transportation facilities; industrial areas; warehouses; salons or other areas exposed to chemicals; areas subject to rolling loads, carts, casters, chairs without proper floor protection, equipment, pallet jacks, dollies, or other concentrated loads; areas exposed to excessive moisture, standing water, grease, heat, direct sunlight, or abnormal wear; or any other use that exceeds ordinary low-intensity pedestrian foot traffic. "Commercial" means any installation or use that is not Residential, including without limitation any rental, leased, licensed, transient, business, institutional, public-use, income-producing, multi-user, or non-owner-occupied application. The warranty is non-transferable. No dealer, retailer, installer, contractor, sales representative, employee or other person is authorized to modify, expand, or waive this limited warranty, make any additional warranty on MSI's behalf, or bind MSI to any representation not stated in this document.

NAME	THICKNESS (MM)	WEAR LAYER (MIL or MM if specified)	RESIDENTIAL LIMITED WARRANTY (YRS)	RESIDENTIAL LIMITED DENT- PROOF WARRANTY	RESIDENTIAL LIMITED PET- PROOF WARRANTY	LIGHT COMMERCIAL LIMITED WARRANTY	COMMERCIAL LIMITED WARRANTY
Ashton™ / XL Ashton™	4.4	6.0	25	X	X	X	X
Ashton 2.0™	4.4	12.0	LIFETIME	X	X	6	X
Cyrus™ / XL Cyrus™	5.0	12.0	LIFETIME	X	X	10	X
Trecento™ / XL Trecento™	5.0	12.0	LIFETIME	X	X	10	X
Andover™ / Cyrus 2.0™ / Laurel™	5.0	20.0	LIFETIME	X	X	15	10
Prescott™ / XL Prescott™	6.5	20.0	LIFETIME	YES	X	20	15
Woodhills™	7.0	1.2 MM	LIFETIME	X	X	20	15
Laurel Reserve™	8.0	22.0	LIFETIME	YES	X	25	20
Studio™ / XL Studio™	9.0	30.0	LIFETIME	YES	X	30	25
Lofterra™	8.0	22.0	LIFETIME	YES	X	25	20
Wayne Parc™	10.0	22.0	LIFETIME	X	X	25	20
Wayne Parc Reserve™	12.0	30.0	LIFETIME	X	X	30	25
Katavia™	2.0	6.0	15	X	X	X	X
Glenridge™ / Acclima™	2.0	12.0	25	X	X	6	X
Wilmont™	2.5	20.0	LIFETIME	X	X	15	10
Kallum™	5.0	20.0	LIFETIME	X	X	25	20
Nove™	2.0	6.0	15	X	X	X	X
Nove Plus™	2.0	12.0	25	X	X	6	X
Nove Reserve™	2.5	22.0	LIFETIME	X	X	20	15
Smithcliffs™	X	X	LIFETIME	X	YES	15	10
Shorecliffs™	X	X	LIFETIME	X	YES	20	15
Kelmore™	X	1.2 MM	25	X	X	5	X
Ladson™	X	2.0 MM	30	X	X	5	X
McCarran™ / McCarran Reserve™ / McCarran Herringbone™	X	4.0 MM	LIFETIME	X	X	10	X

***Dent Warranty:** Under normal residential household use, the product will resist indentation greater than 2mm. This warranty excludes dents, gouges, chips, cracks, scratches, or surface damage caused by sharp objects, heavy objects, narrow heels, cleats, furniture legs, rolling loads, appliances, tools, dropped objects, abuse, accidents, or improper use.

***Waterproof Warranty:** The product will resist surface swelling from ordinary household spills and routine cleaning when liquids are cleaned in accordance with the Care & Maintenance instructions. This warranty does not cover damage from flooding, leaks, standing water, hydrostatic pressure, moisture beneath the floor, mold/mildew, subfloor damage, wall damage, water intrusion around the perimeter, or water left in contact with the flooring beyond the time periods stated in the Care & Maintenance instructions.

***Petproof Warranty:** the floor will resist staining caused by pet stains. Stain resistance minimizes permanent stains for the warranty period, so long as the Original Purchaser adheres to the required protocols as outlined in the Care & Maintenance guide. Accidents need to be cleaned up promptly upon discovery and should not be allowed to be in contact with the flooring for over 24 hours. Prolonged exposure to the accidents will result in progressively greater difficulty in their removal. Damages beyond staining of the floor-covering product is not covered. This warranty covers stain resistance only. It does not cover scratches, gouges, odor, seam penetration, subfloor contamination, microbial growth, urine intrusion below the flooring, damage from pet claws or teeth, or damage from repeated or prolonged exposure.

What is NOT Covered by this Warranty (item list is not exhaustive)

- Visible Defects Installed: Material with visible defects, damage, or appearance objections that is installed. Installation constitutes acceptance of the material's appearance and visible condition. The installer and Original Purchaser must inspect all material before installation and must not install material with visible defects; MSI's sole obligation for material rejected before installation is replacement of the rejected material.
- Products sold as seconds, closeouts, clearance, cabin grade, off-grade, discontinued, non-standard, or "as-is" are sold without any warranty of any kind.
- Improper Installation: Material that is not installed in accordance with the Installation Instructions is not a manufacturing related defect. Installer workmanship is not warranted.
- Does not cover labor, removal, reinstallation, freight, disposal, or any other access or replacement costs.
- Damage due to improper maintenance as per Care & Maintenance Guideline.
- Damage resulting from use of detergents, chemicals, paints, dyes, improper mats, fertilizers, or other similar materials.
- Damage caused by rolling, point, and/or heavy loads, including but not limited to chairs, high heels, appliances, or other objects are not covered by the warranty.
- Damage caused by moving appliances or heavy furniture without protecting the floor. Always protect flooring by using protective covering when moving heavy objects.
- Damage or scratches resulting from accidents, casualty events, abuse or improper usage (including damage from pet claws or teeth, urine, etc.). Accidents, abuse, and improper usage are defined as, but are not limited to damage caused by: casters on furniture, rotating beater bars on vacuum cleaners, burns, cuts, impact from heavy and sharp objects – e.g. narrow or spike heels, cleats, etc., as well as, damage resulting from unprotected furniture legs. Chairs, sofas, or furniture with castors must be fitted with soft rubber wheels and have an adequate protective mat or protective castor cups to prevent rolling load damage.
- Damage caused by leaks.
- Construction damage.
- Installation-related errors or damage including improper conditioning of jobsite and flooring materials, when necessary, and/or poor subfloor performance or failure.
- Fading, discoloration, or other damage due to excessive temperatures or sunlight. Radiant heat must not exceed 85°F (29°C) and be approved by the manufacturer for the use of their product with resilient vinyl flooring applications.
- Problems or damage due to excessive moisture or hydrostatic pressure from the sub-floor.
- Discoloration caused by use of vinyl, latex, or rubber-backed floor mats. Note: some synthetic backed carpets contain latex in the manufacturing process that may discolor vinyl. Always use mats marked as "non-staining".
- Discoloration caused by rubber pads, rubber wheels, rubber tires, rubber rollers, automotive tires, etc.
- Flooring installed on stair is excluded from warranty coverage.
- Installation of residential product in a commercial environment.
- MSI products are not warranted against any noise nuisances, including but not limited to squeaking, popping, or crackling. Some noise is possible with any installed flooring.
- Acts of God / casualty: flooding, fire, earthquake, hurricane, storm, sewage backup, plumbing failure, appliance leaks, standing water, or water intrusion from any source other than ordinary household spills.
- Moisture/mold/remediation: mold, mildew, odor, microbial growth, subfloor damage, wall damage, remediation, testing, lodging, loss of use, or indoor-air-quality claims.

- Installation over non-approved substrates: particleboard, cushioned vinyl, multiple floating floors, sleeper systems, improperly bonded tile, contaminated slabs, gypsum underlayment unless approved, or substrates not meeting MSI specs.
- Unapproved site conditions: lack of permanent HVAC, temperature/RH outside required range, sunrooms or three-season rooms unless expressly allowed, excessive heat, direct sunlight, thermal expansion, or failure to use blinds/UV protection.
- Post-installation movement restrictions: cabinetry, islands, built-ins, heavy fixtures, wall partitions, or other fixed objects installed on top of floating floors unless the product is fully adhered and the installation method permits it.
- Maintenance violations: steam mops, wet mopping, abrasive cleaners, ammonia/bleach/oil/wax/polish, rotating beater bars, rubber-backed mats, furniture without pads, metal/plastic casters, unprotected rolling loads.

If the product fails to perform as stated in this warranty, MSI reserves the right to inspect the product or have it inspected by an MSI-commissioned inspector. MSI must be given a reasonable opportunity to inspect the product before any repair, replacement, or disposal. Only inspection reports prepared by an MSI-commissioned inspector will be valid for warranty-claim purposes. If the product is determined to be defective, MSI reserves the right, at its option, to repair or replace the defective area with the same color, design, and grade product, if available. If the product is unavailable or discontinued, MSI reserves the right to select and supply similar material. MSI's liability under any theory of liability, whether contract, tort, strict liability, or otherwise, shall be limited to the sole and exclusive remedy of replacement of the defective goods FOB MSI facility or, at MSI's option, refund of the purchase price of such defective goods. This warranty does not cover any other costs, incidental damages, or consequential damages, including loss of use of the property, loss of profits, replacement of subfloors or underlayment, trim moldings, disconnecting or reconnecting appliances, moving furniture, or any other losses deemed incidental by MSI. If repair or replacement of a section is deemed necessary, all items must be cleared from the affected area. The cost or effort associated with removing those items will not be credited or reimbursed. MSI's obligation for replacement product or refund is prorated based on the time elapsed from the warranty start. Proration applies to refunds and to the value of replacement material supplied. Warranty coverage for any replacement flooring is limited to the remaining portion of the original warranty. Original Purchaser must submit any warranty claim to MSI in writing within thirty (30) days after the defect or condition is first discovered or reasonably should have been discovered, and in all cases within the applicable warranty period. With the claim, Original Purchaser must provide proof of purchase, evidence that all payment obligations have been satisfied, product identification, photographs or videos, and any supporting tests. Failure to provide timely written notice shall bar the claim to the fullest extent permitted by law. Prior to installation, the installer and purchaser acknowledge that the subfloor, moisture conditions, HVAC conditions, and product appearance have been inspected and accepted. The installer is solely responsible for site conditions, substrate preparation, moisture testing, acclimation, installation, and post-installation compliance. MSI must be given a reasonable opportunity to inspect the product, installation, subfloor, and surrounding conditions before any repair, replacement, alteration, removal, or disposal. Failure to preserve the product and installation conditions may result in denial of the claim to the extent MSI's ability to inspect the claim is impaired. Original Purchaser must preserve the product, the installation, and the surrounding site conditions, and must take reasonable steps to prevent further damage, until MSI's inspection is complete or MSI confirms in writing that no inspection is required. Failure to preserve the product and installation conditions, failure to mitigate further damage, or repair, alteration, removal, or disposal of the product before MSI's inspection shall result in denial of the claim to the extent MSI's ability to evaluate the claim is impaired. Failure to follow the procedures in this document may result in voiding some or all of the warranty. Original Purchaser acknowledges and agrees that the foregoing conditions and limitations are an essential basis for Original Purchaser's agreement with MSI. Completion of MSI's warranty claim process is a condition precedent to commencing any legal action or arbitration arising from or relating to this limited warranty. To the fullest extent permitted by law, any such action or arbitration must be commenced within one (1) year after MSI's final written claim decision or, if no claim is submitted, within one (1) year after the defect was or reasonably should have been discovered — and in no event later than one and a half years (1.5) years after the cause of action accrued, whichever period expires first, or within the minimum period required by applicable law if longer. Original Purchaser's failure to commence an action or arbitration within the applicable period shall be deemed a waiver and time bar of any and all claims against M S International, Inc. Some jurisdictions do not allow the exclusion or limitation of incidental or consequential damages, or limitations on how long an implied warranty lasts, so the above limitations or exclusions may not apply to you. This warranty gives you specific rights, and you may also have other rights, which vary from state to state.

Samples, displays, printed materials, digital assets, room scenes, and replacement materials are illustrative only. Variations in color, shade, gloss, grain, texture, veining, embossing, plank-to-plank variation, edge designs, and lot-to-lot variation are normal and are not defects.

If any provision of this Limited Warranty is held invalid or unenforceable, the remaining provisions will remain enforceable to the fullest extent permitted by law, and the invalid provision will be modified only to the minimum extent necessary to make it enforceable.

MSI

MSI shall not be liable for any failure or delay in fulfilling its warranty obligations due to causes beyond its reasonable control, including but not limited to acts of God, natural disasters, pandemics, severe weather, or unavoidable supply chain disruptions.

This warranty shall be governed by California law, without regard to conflicts-of-law principles, except where applicable law requires otherwise. Any permitted legal action must be brought exclusively in the state or federal courts located in Orange County, California, unless prohibited by applicable law.

All inquiries concerning the above may be sent to: M S International Inc. 2095 N Batavia St, Orange, CA. 92865
For additional information about this product collection, please refer to www.EverLifeLVT.com or contact the dealer.

CARE & MAINTENANCE

CARE AND MAINTENANCE

ENGINEERED WOOD, LVT,

HRC

MSI flooring is designed for easy maintenance and long-term performance. To help preserve the floor's appearance and maintain warranty coverage, please follow the care instructions below.

REGULAR MAINTENANCE

- Dust-sweeper, broom, and/or vacuum on the correct hard surface setting can be used for daily maintenance.
- Clean spills immediately with mild, PH-neutral flooring cleaner and a clean white cloth; dry the floor immediately.
- When necessary, apply mild, PH-neutral flooring cleaner to the cleaning cloth, not directly to the floor. Keep cleaning covers clean.
- Do not pour water or any liquid directly on the floor or use an excessively wet mop that will puddle or leave excessive moisture on the planks. Dry immediately.
- Use only mild, neutral-pH cleaners. Do not use wet/damp mops, steam mops, spray cleaners, detergents, oil soaps, wax, polish, bleach, ammonia, solvents, abrasive cleaners, steel wool, scrubbers, buffers, jet mops, or rotating beater bars.
- Never use floor polish or floor cleaning wax.
- Never use rotating beater bars, scrubbers, jet mops, steam mops, buffers, etc.
- Liquids and spills must be wiped dry immediately.
- Never slide heavy furniture across the floor.
- Maintain interior, climate-controlled conditions; floor coverings react to their environment.
- Maintain indoor relative humidity and temperature levels as specified in the Pre-Installation and Installation Guide for each respective product.
- Heating Season (Dry): A humidifier is recommended to prevent excess shrinkage due to low humidity levels. Wood stoves and heating devices tend to create very dry conditions.
- Non-Heating Season (Wet): An air conditioner, dehumidifier, or periodically turning on your heating will help to maintain humidity levels during summer months.
- Use floor protectors under furniture and chairs, protective mats at entrances, and plywood or Masonite when moving furniture or appliances.
- Do not slide or roll heavy objects across the floor.
- Keep pet nails trimmed and avoid spiked heels or shoes that may damage the floor.
- Use curtains, blinds, or drapes to limit UV exposure and reduce fading.
- To protect flooring from scratches, area rugs or mats are recommended, especially in exterior doorway areas to prevent gravel and dirt from tracking onto the floor. However, area rugs should not be used over engineered wood installed with radiant heating systems.
- Use felt pad protectors on chairs and furniture to prevent scratches.
- Replace plastic or metal casters on chairs with non-staining, soft polyurethane wheels and lift instead of sliding heavy objects across the floor.
- If there are stubborn residues or gunk that get on the flooring surface, use mild cleaners designed to be safe on the type of flooring being cleaned. Ensure the surface is completely dry.