

# LVT-PLANK INSTALLATION INSTRUCTIONS

**ATTENTION:** Before you start, read this bulletin and other applicable literature pertaining to the installation of modular LVT/ Plank flooring. Any topics not specifically covered in this bulletin should be directed to AtlasMasland's Technical Services Center at 1-800-633-0468.

**BEFORE STARTING INSTALLATION INSECT FOR:** concealed damage, manufacturing defects and shipping errors (example: wrong color, style, etc.)

WARRANTY: AtlasMasland specifically excludes claims involving resilient flooring installed with visible defects.

**NOTE:** Should other trades perform work in areas where resilient flooring has been installed, the installer and/or general contractor assumes total liability for damage and deterioration, including wear, soiling, staining, and abrasion. Failure to provide adequate protection until occupancy may void all warranties.

**CONDITIONING:** Areas to receive resilient flooring must be fully enclosed with permanent HVAC set at uniform temperature range between 65°F to 85°F and maintained following the installation. Locate the material on-site at least 24-48 hours prior to installation.

# JOB SITE CONDITIONS

**pH:** Sub-floor readings should be between 7.0-9.0. If the pH is outside these parameters contact the General Contractor to correct the condition.

**RELATIVE HUMIDITY in SUB-STRATE:** Determined by the ASTM-F-2170-09 "Relative Humidity in situ Probe Test should not exceed 85%."

CONCRETE: Should be allowed to cure for 90-120 days and must be properly sealed.

**SUB-FLOOR:** Should be sound and free of oil, grease, paint, and any other foreign substance that may inhibit adhesion. Surfaces must be smooth and level before installing modular LVT/Plank.

**PATCH & LEVELERS:** Cracks and unleveled sub-floors should be corrected with approved latex fortified Portland cement based patch, or leveling compound, such as Armstrong S-180, Ardex Feather Finish, or Mapei Plani Patch.

### OLD ADHESIVES

**OLD PRESSURE-SENSITIVE:** Modular Flooring Adhesive can be applied directly over existing pressure sensitive adhesive providing the existing PSA is PVC compatible. Other pressure sensitive adhesives must be scraped and sealed with Encapsulate Primer before applying Modular Adhesive.

**OLD MULTI-PURPOSE:** Thoroughly scrape all trowel ridges to create a level surface, then seal with Encapsulate Primer and allow to fully dry before applying Modular Adhesive.

### ADHESIVES

ENCAPSULATE PRIMER\* COVERAGE: Approximately 140-160 sq. yards per 4-gallon pail.

\*Please note Encapsulate Primer is designed to encapsulate existing adhesive and will not correct moisture emission issues.

**SWEEPING:** Sweep or vacuum the entire area before applying adhesive. Do not use sweeping compounds; they often contain oily residues which can inhibit the adhesive bond.

ADHESIVE REQUIREMENT for 3mm Glue Down: Modular/LVT Pressure Sensitive Adhesive or Modular Aerosol Adhesive.

**MODULAR/LVT PSA APPLICATION:** Apply the adhesive with a 1/16" X 1/32" X 1/32" U-Notch trowel. Approximate spread rate is 880 to 1040 square feet per 4-gallon pail. Apply the adhesive in a thin uniform layer over the entire surface of the floor. Allow the adhesive to tack so that there is no transfer to the touch, this will ensure proper bonding.

**AEROSOL ADHESIVE APPLICATION:** Shake can well before use. Point can downward and press the side of the nozzle tip as you slowly walk back and forth. Around the perimeter, hold the can approximately 12 inches above the sub-floor to avoid over spray and for open areas 20-30 inches. Approximate coverage will be 140-150 square feet per can. Allow adhesive to tack so that there is no transfer to the touch to ensure proper bonding. Open working time for the adhesive should not exceed 4 hours.

ADHESIVE REQUIREMENT for 5mm Free Lay Products: AtlasMasland Premium Spray Adhesive.

AtlasMasland requires an 18" band of adhesive be applied at doorways and around the entire perimeter of the installation area. Grid gluing is also required, apply a 12" band of adhesive across the width direction for every 25 linear feet of the installation. Hold the can approximately 12 inches above the sub-floor to avoid over spray.

## LAYOUT

**ROOM SQUARENESS:** Check the installation area for square, then strike a chalk line parallel to an outside wall across the center of the room. Strike another chalk line perpendicular to the first line also across the center of the room creating four quadrants. Slightly adjust the lines as needed to avoid any small fill pieces around the perimeter. Align modular flooring to these lines as they will assist in keeping the product uniform and square across the room. During the installation, mix material from multiple cartons. This procedure will create a random natural appearance and blend minor color variations. For 5 mm Free Lay products leave a 1/8" gap between the material and wall. This gap will be covered with base molding.

**INSTALLATION:** The first module/plank should be placed in one of the corners where the chalk lines bisect at the center of the room. Continue the installation placing the modules along the chalk line parallel with the outside wall and install the adjacent modules snugly. Repeat this procedure for the neighboring quadrants until the room is completed.

**CUTTING:** The modules can be cut by measuring, then scoring with a utility knife and snapping or by using a tile cutter. Exercise caution when cutting the modules so that the arrows on the cut piece will correspond with adjacent modules. Cutting the tiles to full will create compression, which can cause doming, or buckling of the LVT. Roll the floor immediately after the area is complete with a 75-100 lbs. roller to insure proper adhesion.

**TRANSITION AND TERMINATING AREAS:** Appropriate transition moldings are required to avoid damage to the module/plank. Damaged modules/planks at transition or terminating areas are not manufacturing defects.

Heavy Kraft or Cardboard may be used as post-installation protection to avoid damage by other trades. Regardless of installation method do not use self-adhering plastic products. These products can leave adhesive residue on the surface of the LVT and will attract soiling and possibly cause discoloration. USE OF THESE PRODUCTS WILL VOID ALL WARRANTIES.

**POST INSTALLATION:** Do not walk, place furniture, appliances, or other items in the space for a minimum of 24 hours. Do not slide or roll heavy items across the floor without adequate protection. Always use a hand dolly or air ride appliance moving device when positioning heavy objects into space. Damp mopping is allowed after 24 hours. Do not begin wet maintenance for at least 5 days after the installation is complete. Use window coverings to protect the floor from fading under direct sunlight.

## CLEANING AND MAINTENANCE

**Initial maintenance:** Wait 5 days after the installation is completed and thoroughly clean the floor using a neutral pH cleaner. If necessary, a slow (175 rpm) buffer can be utilized with a white non-abrasive pad to remove heavier deposits.

**Daily and Weekly maintenance:** Sweep, vacuum or dust mop the floor as needed dust, loose dirt and grit. In high traffic areas this may be a daily or twice daily procedure. Use only vacuums that do not have bristle beater bars or metal heads. Remove liquid spills immediately to prevent the possibility of stains, slips or falls. Damp mop the floor as needed to remove dirt and stains. Soft bristle can also be used on embossed surfaces.

After market finishes are not necessary, however, some customers may desire these finishes to help protect the wear surface on the LVT.

For specific questions or installation instructions not addressed in this bulletin contact AtlasMasland Technical Services: 1-800-633-0468





# Installation Instructions for AtlasMasland Quiet Down Rigid Core LVT

- This floor is intended for interior use only and is suitable for above-grade, on-grade and below-grade applications. However, this floor should not be installed in locations where the substrate beneath the building structure is exposed to the elements.
- This floor is a floating floor and should be allowed to expand and contract freely. It must not be glued, nailed, or fastened to the substrate in any way. Install permanent cabinets, vanities, island counters and similar items first, then fit the floor around them, leaving a space for expansion and contraction. Fill expansion spaces around potentially wet areas with premium waterproof 100% silicone caulk. Always remove standing water, pet urine and other liquids promptly.
- Direct sunlight may cause this floor to fade or the joints to separate. Protect floor from direct sunlight using window treatments or UV tinting on windows. This floor is not recommended for use in sunrooms.
- This floor is a waterproof floating floor, but it should not be used to seal an existing floor from moisture. This floor cannot inhibit the growth of mold or prevent structural problems associated with, or caused by flooding, excessive moisture, alkalis in the subfloor, or conditions arising from hydrostatic pressure. Regardless of location, always remove standing water, urine and other liquids promptly. Moisture issues should be addressed and corrected at the job site prior to installation.

# **Pre-Installation Guidelines**

# **EVALUATING THE SITE**

# Exterior Conditions

Damage caused by water and high humidity should be addressed prior to installing the floor.

- Examine the driveway and landscaping surrounding the building. Be sure that they slope and direct water away from the foundation.
- Inspect gutters, down spouts and drains for blockage. Remove clogs caused by leaves, dirt and debris, allowing runoff to flow freely away from the foundation.
- Check crawl spaces for cross-ventilation air vents equaling at least 1.5% per 100 square feet of floor space. Crawl spaces should measure a minimum of 18 inches high and should be insulated according to the latest building code requirements. The ground should be covered with a minimum 6-mil vapor barrier.

# **Interior Conditions**

Moisture issues should be addressed and corrected at the job site prior to installation.

- Examine the installation site for leaky plumbing, including leaks from water heaters, dishwashers, washing machines, or any other water-bearing fixtures or pipes.
- Inspect substrates for level. They must be sturdy, sound, and flat within 1/8" in a 6foot radius, or 3/16 of an inch within a 10-foot radius. The substrate should not slope more than 1 inch per 6 feet in any direction.
- AtlasMasland recommends testing concrete substrates for relative humidity, moisture and pH before installing the floor. Test results should not exceed 85% relative humidity (RH). The Calcium Chloride Test for moisture should be no more than 8lbs per one-thousand square feet in 24 hours MVER (Moisture Vapor Emission Rating), and pH tests for alkalinity levels should register between 7 and 9.
- AtlasMasland recommends checking wood substrates for moisture. Obvious signs of moisture issues include warping, peaking, degradation of the integrity of the substrate, rusted fasteners, and rusted floor registers. Even if obvious signs are not present, the material should be tested using a wood moisture meter; moisture levels should not exceed 14%.

ATTENTION: Mold and mildew grow only in the presence of moisture. Moisture issues should be addressed and corrected at the job site prior to installation. Please visit www.epa.gov/mold for information about safely preventing and removing mold, mildew and other biological pollutants.



# Identification of Substrate

# APPROVED SUBSTRATES

This floor is suitable for use over a wide variety of substrates.

### Concrete

This floor is waterproof, but moisture issues should be corrected at the job site before installation begins to prevent serious damage to the subfloor and surrounding structure, and to discourage the growth of mold and mildew. Concrete substrates should be prepared in accordance to the most current version of ASTM F710 (Standard Practice for Preparing Concrete Floors to Receive Resilient Flooring). Concrete substrates must be sturdy, sound, and flat within 1/8 of an inch within a 6-foot radius, or 3/16 of an inch within a 10-foot radius. The substrate should not slope more than 1 inch per 6 feet in any direction. Moisture and alkalinity tests should be performed on all concrete substrates regardless of grade level or age of slab. Perform either ASTM F2170 In-Situ Relative Humidity (RH) test or ASTM F1869 Calcium Chloride Moisture Test (MVER: Moisture Vapor Emission Rating). Perform pH test per ASTM F710 to determine alkalinity of the slab. RH Test results should not exceed 85% relative humidity. The Calcium Chloride Test for moisture should measure no more than 8lbs per onethousand square feet in 24 hours MVER, and pH tests for alkalinity levels should register between 7 and 9. Electronic meter testing is not considered a replacement for a Calcium Chloride Test or Relative Humidity Test. All moisture tests should be conducted prior to installation to ensure that moisture is at recommended levels. Follow current ASTM F710 guidelines. Masland highly recommends that substrate moisture and pH testing be conducted by an ICRI (International Concrete Repair Institute) tier 2 certified technician.

# **Radiant Heat**

Radiant heating systems must be cast ½-inch below the surface of the concrete slab, and should be operating at least 2 weeks before installing this floor. Set the temperature of the radiant heating system to 68°F 48 hours before, during, and 72 hours after installation. The temperature of the radiant heat floor may be increased gradually 72 hours after installation, but the surface temperature should never exceed 85°F. Contact the manufacturer of your radiant heating system for further recommendations.



## Plywood, OSB, Particleboard & Chipboard

Wood substrates must be A.P.A. approved with a minimum grade of "BB" or "CC". They must be sturdy, sound, and flat within 1/8 of an inch within a 6-foot radius, or 3/16 of an inch within a 10-foot radius. The substrate should not slope more than 1 inch per 6 feet in any direction. AtlasMasland recommends performing moisture tests prior to installation to prevent serious damage to the subfloor and surrounding structure, and to discourage the growth of mold and mildew. Moisture readings should never exceed 14% for plywood, OSB, particleboard and chipboard substrates. If moisture readings exceed 14%, it is advisable to correct moisture issues at the job site before installing this floor.

# Tile, Terrazzo, Asbestos Tile, Resilient Tile, Non-Cushion Sheet Vinyl, and Metal

Existing floors must be firmly attached to the structural floor. They must be sturdy, sound, and flat within 1/8 of an inch within a 6-foot radius, or 3/16 of an inch within a 10-foot radius. The substrate should not slope more than 1 inch per 6 feet in any direction. When installing this floor in commercial settings, fill in grout lines on ceramic tiles, terrazzo, quarry tiles and similar floors with cementitious leveling and patching compound.

# NON-APPROVED SUBSTRATES

Remove the floors noted below and remove old adhesive before installing this floor. Encapsulate adhesive and cutback residue.

- Carpeting/Carpet Pad
- Cushion Back Sheet Vinyl
- Engineered Hardwood Over Concrete
- Floating Floors
- Hardwood Over Concrete
- Parquet Over Concrete
- Sleeper Substrates

NOTE: Various Federal, State and Local government agencies have established regulations governing the removal of in-place asbestos-containing material. If you contemplate the removal of a resilient floor covering structure that contains (or is presumed to contain) asbestos, you must review and comply with all applicable regulations. Do not sand, dry sweep, dry scrape, drill, saw, bead blast, or mechanically chip or pulverize existing resilient flooring, backing, lining felt, asphalt "cut-back" adhesive, or other adhesive. These products may contain asbestos fibers and/or crystalline silica. Avoid creating dust. Inhalation of such dust is a cancer and respiratory tract hazard. Smoking by individuals exposed to asbestos fibers greatly increases the risk of bodily harm. Unless positively certain that the product is a non-asbestos containing material, you must presume it contains asbestos. Regulations may require that the material be tested to determine asbestos content. The RFCI's Recommended Work Practices for Removal of Resilient Floor Covering are a defined set of instructions addressed to the task of removing

all resilient floor covering structures. For further information, visit the Resilient Floor Covering Institute website at www.rfci.com.





# **Preparation of Job Site**

Careful preparation is the key to outstanding results. All Trades must be finished before installing this floor.

- Install Permanent Exterior Doors and Windows
- Turn on HVAC at Least One Week Prior to Installation Room temperature should be maintained between 50°F and 100°F at least 48 hours prior to installation.
- Allow all other Trades to Finish
- Perform Recommended Moisture and pH Tests
  See the "Identification of Substrate" section of this manual for further information about suggested tests.
- Level Uneven Surfaces

Fill large cracks and voids with cementitious leveling and patching compound. Substrates must be sturdy, sound, and flat within 1/8 of an inch within a 6-foot radius, or 3/16 of an inch within a 10-foot radius. The substrate should not slope more than 1 inch per 6 feet in any direction.

Remove Floor Moldings

Quarter round and wall base should be carefully removed before installation begins. It will be used to conceal the expansion space once the job is finished.

- Fill Grout Lines Refer to "Residential and Commercial Installation Requirements".
- Remove Non-approved Substrates
- Remove or Encapsulate Old Adhesive
  Old adhesives must be scraped up and left so that
  no ridges or puddles are evident and all that remains is a thin,
  smooth film. Then, encapsulate residue.
- Undercut Wood Door Casings

Wood door casings should be undercut so that the floor will fit neatly beneath them, concealing the expansion space. Position the plank on the substrate against the door casing. Lay the handsaw flat against the scrap plank and carefully cut the door casing to the height of the plank.

Cut Around Metal Door Casings

Do not cut metal door casings. Cut the floor around them, leaving the appropriate expansion space. After installation, fill the space with a coordinating premium waterproof 100% silicone caulk.

• Clean Up the Job Site

Remove all debris, sweep and vacuum the subfloor. Smooth, non-porous floors should be damp-mopped after vacuuming and allowed to dry thoroughly before installing the floor. All dust must be removed prior to installation.

# CHECK LOT NUMBERS AND DATE OF MANUFACTURE

Locate the lot number on the short end of each carton and verify that all of the material for your job is from the same lot. Minor shade variations within the same lot number contribute to the natural look of the floor. To avoid noticeable shade variations, do not install material from different lots across large expanses.

To determine date of manufacture, locate the lot number on the short end of the carton. It is the eight-digit number separated by decimal points beginning with the two-digit day, then the two-digit month, and finally the four-digit year.

> Lot Number/Date of Manufacture 20.12.2015 DAY.MONTH.YEAR





# **Residential and Commercial Installation Requirements**

# **RESIDENTIAL INSTALLATION**

## COMMERCIAL INSTALLATION

Acclimation Requirements	Not Required*	48 hours
Transition Requirements (T- Mold) for Large Spaces	Not Required	Required in rooms greater than 100' in either direction
Transition Requirements (T-Mold) Doorways/Thresholds	Not Required	Required
Perimeter Expansion Requirements	1/4" around perimeter walls & heavy fixed objects such as cabinetry	3/8" around perimeter walls & heavy fixed objects such as cabinetry**
6 Mil Polyfilm Vapor Barrier	Not Required	Not Required
Separate Underlayment Required?	No - This flooring includes pre- attached underlayment	No - This flooring includes pre- attached underlayment
Installing Over Existing Ceramic Tile Floor	Filling Grout Lines Not Required (Follow Subfloor Flatness Tolerances)	Filling Grout Lines Required
Installing Over Radiant Heat	Approved – Substrate surface temperature not to exceed 85°F	Approved – Substrate surface temperature not to exceed 85°F
Glue Down Installation	Not Required/Not Recommended	Not Required/Not Recommended
Subfloor Flatness Tolerances	3/16" in 10' or 1/8" in 6' Slope no more than 1" in 6'	3/16" in 10' or 1/8" in 6' Slope no more than 1" in 6'
Subfloor RH/MVER Recommendations	85% RH/8lbs MVER	85% RH/8lbs MVER
3-Season/Non-Climate Controlled Environments	Not Recommended	Not Recommended
Optimal Interior Environmental Conditions	50°- 100°F / 40% - 60% RH	50°- 100°F / 40% - 60% RH
"Waterproof" Defined	Structural integrity of flooring will not degrade due to contact with moisture/ water***	Structural integrity of flooring will not degrade due to contact with moisture/ water***

\*This flooring is more dimensionally stable than typical floating wood or vinyl based flooring products. Acclimation of the flooring for residential applications is generally not required. However, flooring subjected to extreme hot or cold conditions can cause the material to become too flexible or rigid, making the material difficult to install and potentially causing damage to the locking system. Optimum material temperature range for installation is 50°– 100°F.

\*\*If installing floor in an environment that has a length greater than 100', a T-Molding should be utilized to separate the floor into two (2) separate sections.

\*\*\*\*While the floor is Waterproof, it is not intended for use as a moisture mitigation system.

WARNING: Only installation techniques described in this installation guide are warranted. AtlasMasland does not warrant installations involving custom cutting, such as 45-degree mitered corners and serpentine edges. Please refer to the warranty for complete warranty details and exclusions.



# Installing the Floor

### SET SPACERS

Create the required expansion space between the perimeter planks and the wall using spacers. Place spacers equaling the thickness for required expansion between plank and wall on short and long ends

of plank. Do not remove them until the installation is complete.

### INSTALL FIRST PLANK

Position the first plank against a spacer a few inches from the starting wall.

# • ESTABLISH PROPER STAGGERING

Maintain a minimum 6-inch end-joint stagger from row-to-row through-out the entire installation. Tile products should be staggered in a bricklaid pattern with stagger equal to ½ of a tile. Installation alternates back and forth between rows one and two, for the first two rows only.

# FIRST PLANK SECOND ROW

Cut the first plank in the second row to one-third its length before installing it. Insert the long tongue edge of the plank into the long groove edge of the first plank. Make sure there are no gaps.

Tap along the long groove edge using a tapping block.

### SECOND PLANK SECOND ROW

Insert the long side, then slide the plank until the short tongue touches the short groove edge on the first plank of the second row. Press the joint into place with your fingers and tap the short joint

with a lightweight Dead Blow Hammer. Square the joint by tapping the long edge of the plank using a tapping block.

# SECOND PLANK FIRST ROW

Select a full plank and position the long groove edge into the tongue of the second plank in the second row. Press, tap and square as before. Repeat the same installation pattern until you reach the opposite wall and cannot install another full plank.

### • INSTALL THE LAST PIECES OF ROWS 1 AND 2

Cut to fit, maintaining the expansion gap. Install as before. Move the entire assembly against the spacers on the starting wall.

# • INSTALL REMAINING ROWS

Install the remaining material, one row after the other. Always press, tap and square as you go, and maintain the required stagger throughout the install.

### • INSTALL THE LAST ROW

Cut the final row of planks to fit along the wall. Use a pull bar to lock the long edges together. Do not use the pull bar on the short edges.

# • FINISH THE JOB

Remove spacers. Cover expansion space with quarter round or other trim, being sure not to trap or pin down the floor.



# ROUTINE CARE & MAINTENANCE

- Sweep, dust mop or vacuum daily. Do not use vacuums with any type of beater bar assembly.
- Lightly damp mop with cleaner. Remove excess soil by carefully scrubbing with a soft nylon brush or magic eraser sponge and a cleaner.
- Remove scuffs using a cleaner and a soft nylon brush or magic eraser sponge.
- Heavily soiled floors may require an occasional deep cleaning using a cleaner and a low-speed buffer not exceeding 300 RPM. Fit the buffer with a red or white scrubbing pad and work the solution over the floor. Remove the dirty residue by damp mopping with clear water.
- Remove standing water, pet urine and other liquids promptly. Follow with a cleaner.

# **PREVENTIVE CARE**

- Use non-staining, walk-off mats at all outside entrances.
- Use flat glides at least 2" in diameter under furniture legs to prevent indentations and scratches.
- Use broad surface non-staining casters at least 2" in diameter on rolling furniture.
- Do not use vinegar, polishes, waxes, oil soaps, abrasive cleaners, harsh detergents, "mop and shine" products or solvents.
- Do not expose to direct sunlight for prolonged periods.
- Do not use steam cleaners.
- Do not flood floor or subject to standing liquids, including pet urine.