



## LUXURY VINYL FLOORING

CLICK-TO-LOCK INSTALLATION



**Always check STAINMASTER.COM for the latest installation, warranty and maintenance instructions. It is the responsibility of the installer to ensure that the most current documents are used during installation of STAINMASTER® PetProtect™ luxury vinyl flooring.**

### GENERAL GUIDELINES

#### 1. All cartons should be from one manufacturing lot

Inspect your shipment to ensure that all cartons are of the same lot /manufacturing run. Lot information is provided on a label at the end of the carton.

#### 2. Acclimation not required

Flooring temperature, storage environment and installation environment should have no more than 15°F temperature difference when performing installation; flooring temperature should always be greater than 50°F (10° C). If a wide variation exists, condition the flooring in the installed environment for 24 hours prior to installing. Ideal installation temperature range is 65°F to 85°F. If the flooring has been properly installed, it can cope with living temperature changes between 50°F to 100°F with minimal impact.

#### 3. Transition not required for large spaces or doorways

Not required in rooms less than 65 ft. with 5/16" expansion spacing at all vertical surfaces, door frames, cabinetry, etc. For rooms greater than 65 ft. use 1/2" expansion spacing on the perimeter. If areas with varied or inconsistent temperatures from other installed areas, utilization of t-moldings between these area/rooms is recommended to prevent issues.

Room Type	Temperature Range	Size (sq. ft.)	Longest Wall (ft.)	Expansion Gaps	Transition Strips
Indoor	50°F - 100° F	Any	< 65 ft.	5/16"	No
			> 65 ft.	1/2"	No

#### 4. Click-to-Lock Flooring is designed to be a floating floor without any objects impeding its ability to expand and/or contract.

Do not secure individual planks or tiles to the subfloor with mechanical fasteners or adhesives. Do not install cabinets or kitchen islands on top of floating floors. Wooden door frames must be undercut completely to studs and allow for 5/16" of clear expansion spacing. Metal door frames shall have flooring material scribed to the frame allowing for 5/16" expansion spacing. Door jamb moldings shall be kept 1/64" above the surface of installed flooring.

#### 5. Direct sunlight protection recommended

Direct sunlight introduces a significant change to the environment. Heat

from direct sunlight is magnified through the window, dramatically increasing the surface temperature of the flooring. Window treatment is recommended to prevent the flooring from buckling, cupping, etc. Any window treatment is suitable for preventing the significant radiant heat buildup (like window films, curtain sheers, blinds, drapes, etc.) by absorbing/deflecting some of the heat.

**6. Masland STAINMASTER® PetProtect™ WPC flooring is intended to be installed as a floating floor, however, if the installed flooring will be exposed to temperatures greater than 120°F, the \*glue-down installation method should be used. \*See Glue-Down Instructions.**

## TOOL REQUIREMENTS

- Non-marking Rubber mallet
- Brush (for joint cleaning)
- Utility knife
- Straight edge
- Remnants of plank to be “tapping block”
- Knee pads (optional)
- Other approved cutting methods: guillotine-type hardwood/laminate cutter; a VCT cutter (professional grade); a sabre saw with a fine-tooth wood cutting blade; a 12” power miter saw with a shallow.

## PREP WORK FOR CLICK-TO-LOCK

CHECKLIST	ITEM	STANDARD	WHY IT IS IMPORTANT
<input type="checkbox"/>	Same lot cartons	Ensure all boxes are from same production lot, mix panels from different boxes	Lot to lot manufacturing could have slight variations in gloss which could be visible if installed in same room
<input type="checkbox"/>	Inspect planks	Inspect joints for any damage and planks for visible concerns (like cupping, crooking, blemishes, etc...), brush all joints prior to installation	Installing products with visual defects will not perform as designed, locking mechanisms will not engage appropriately. Can prevent costly issues after installation.
<input type="checkbox"/>	Subfloor flatness	No deviations greater than 3/16" over 10' length – F32 rating	Non-flat subfloor will potentially cause planks to buckle over time; more difficult to engage drop down lock will allow vertical deflection which will cause damage to the locking mechanism
<input type="checkbox"/>	Clean subfloor	Clear of debris on the subfloor, recommend vacuum over sweeping	Any debris will eventually telegraph through the plank over time; cannot be seen after installation
<input type="checkbox"/>	Subfloor Moisture	ASTM F 2170 Concrete: <85% RH Appendix 2	Alkali salt buildup potentially causing joint issues; trapping of moisture can potentially create mold/mildew issue underneath the plank
<input type="checkbox"/>	Smooth subfloor	Repair any subfloor cracks or other surface issues	Surface issues will eventually telegraph over time.
<input type="checkbox"/>	Underlayments	None	Any uses of an additional underlayment can issue with the engaging the drop end locking system as well as stressing the joints due to compression
<input type="checkbox"/>	Appropriate Subfloor	Appendix 1	Impacts the longevity of the plank

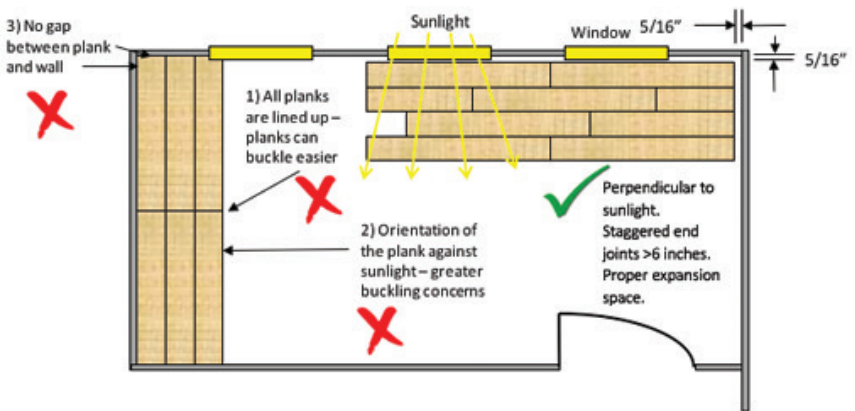
**IMPORTANT:** Improper prepping of the subfloor cannot be seen on the initial installation. Over time, any imperfections can eventually telegraph through the LVT.

## INSTALLATION

**NOTE:** Flooring can be installed in 3-season rooms up to 500 sq. ft. 3-season rooms must be fully enclosed, not exposed to any outside elements and environmental (year-round) temperatures should be within a range of -10°F to 120°F for best performance. Acclimate the flooring between 65°F to 85°F for 48 hours before install and maintain this temperature during installation. Allow 1/2" spacing against vertical surfaces and all fixed objects. Transitions must be used at doorways and spans greater than 40 lineal feet.

Room Type	Temperature Range	Size (sq. ft.)	Longest Wall (ft.)	Expansion Gaps	Transition Strips
3- Season Room	-10F - 120F	< 500 Sq. Ft.	< 40 ft.	1/2"	No
			> 40 ft.	1/2"	Yes

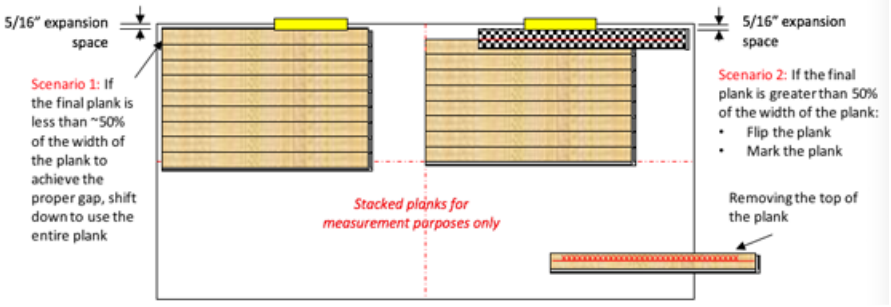
Layout - Recommend starting with wall with the longest length. Length/lay of plank should be crossing the entrance of the natural light. Illustration only.



**IMPORTANT:** Direct sunlight can heat the flooring surface temperature. This rapid excessive heat buildup can cause issues to your flooring. It is recommended using window treatments (like curtain sheers, window films, blinds, etc... to prevent the heat buildup).

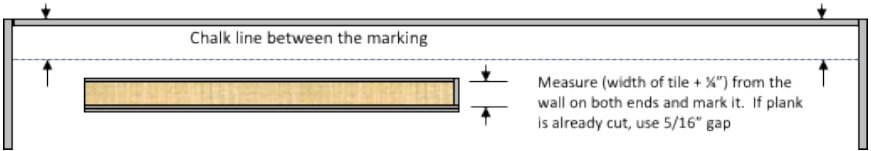
Layout - Balance the look by identifying the center. Following illustration.

**IMPORTANT:** Balance the layout of the planks to prevent narrow strips (half the width of the plank or less) at the wall. From the center of the room, lay out the planks to ensure the plank against the wall is at least wider than half the plank. If it is ~1/2 plank width, use a whole plank against the wall.



### First Panel Installation

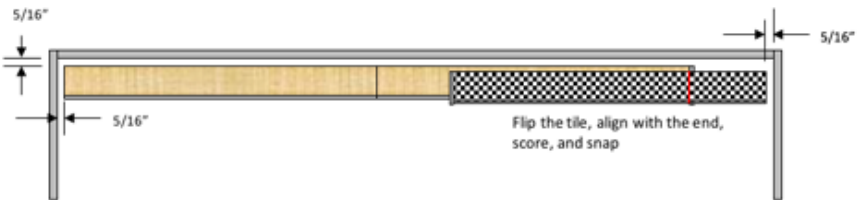
- Starting at the left upper corner of the room, work from left to right
- Chalk a line that is  $\frac{1}{4}$ " wider than the width of the full plank from the dry layout. If the plank is already cut, use  $\frac{5}{16}$ " gap.



- If the plank is not cut, then the lip of the plank needs to be trimmed on the first plank row against the wall

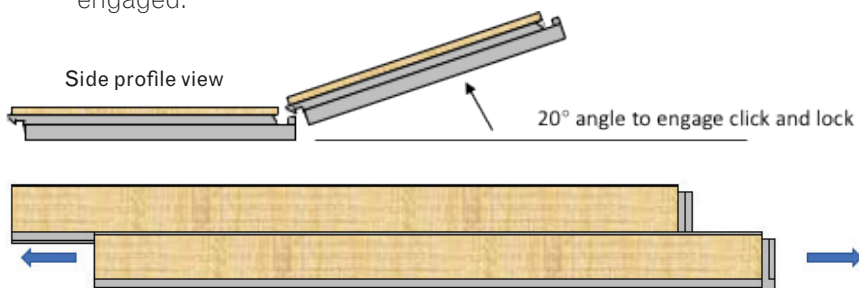


- Install the 1st plank and use spacers to ensure proper  $\frac{5}{16}$ " gap (use multiple spacers) between the wall and LVT to allow for expansion.
- Add the second plank, following the chalked line
- Drop the end over the 1st plank over hang
- Fasten the planks / tiles together by firmly pressing down with your thumb along the seam to vertically align the edges the planks together. Engage the ends with the use of a rubber mallet by striking 1" from the end for optimal impact.
- Cutting the last plank to finish the row
  - Flip the plank and score against the last plank on the floor. Make sure to have  $\frac{5}{16}$ " gap from the wall. If the plank is smaller than 6", you must trim the previous plank.
  - Using a metal straight edge as your guide, cut the plank using the utility knife. It may require a few repetitions to score the plank. After scoring, bend the plank to get a clean break. Flip the plank over and install the cut piece.

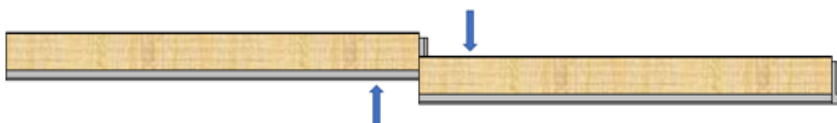


**IMPORTANT:** Inspect the cut plank to ensure the break was smooth and even. It may require shaving the backing to keep it smooth and even. Make sure there is no debris at the joints. Note: this method of cutting may lead to more cracks and breaks in the backing close to the score line, which will require use of a new plank.

- Install the 2nd row of planks
    - Use the remaining piece of the plank from the first row to start the second row (the end joint must be at least 6" from the previous end joint)
    - Install plank into the 1st row by angling the plank 20°
- The plank should be able to slide with no hinderance if properly engaged.



- Slide in the next plank to the first plank of the 2nd row while still tilted
  - Drop the end over the 1st plank over hang
  - Engage the ends with the use of a rubber mallet by striking 1" from the end for optimal impact.
  - If you need to tap the plank to get better engagement with the 1st row, please use a scrape piece of plank – DO NOT use a tapping block (it will damage the locking mechanism)
  - It is critical to keep these two rows straight and square, as they are the “foundation” for the rest of the installation. Check for squareness and straightness often.
- You should not feel any gaps, raised edges between the planks
    - If it is necessary to replace an installed plank during the installation the best method is to replace the whole row.
    - It is not recommended; however, you can try to separate the 2 attached planks (end to end), slowly slide the plank out to separate. Do Not bend planks to separate the ends – it will damage the locking mechanism.



- Repeat as you go across the room. Always make sure to stagger the end joints so there is a minimal space of 6" from any end joint from the adjacent rows. Refer to the illustration showing a proper install at the beginning of the installation section.

### Use of Transition Strips

- Transition strips are used to provide sufficient spacing to allow for rigid core LVT to expand and contract due to temperature changes.
- Recommended use of transition strips:
  - Separate from room(s) with dramatic temperature change
  - Single floor span greater than 65 linear feet
  - Different flooring type

**IMPORTANT:** Click-to-Lock is intended to be a floating floor. DO NOT nail any moldings directly into the LVT, ensure door jams and closet frame, cabinets, etc... do not impede the floor from expanding and contracting. Moldings must have 0.01" (0.254mm) clearance. If not, it will cause the LVT to buckle over time. In case an anchor point is needed, cut an opening into the LVT to allow for movement. Wooden door frames must be undercut completely to the studs and with 5/16" expansion space. Do not use adhesives. Not recommended on stairs.

## AFTER INSTALLATION

1. Be sure planks/tiles are set, flat and have tight edges.
2. In the event that the plank/tile flooring is not the last portion of the construction project, the floor must be protected from construction traffic and damage. Utilize a reinforced fiber protective board or a heavy kraft paper (min. 60 lbs.) to cover the floor.

## MAINTENANCE TIPS

**IMPORTANT:** Using wax or non-neutral pH cleaner can impact the gloss of the LVT.

### Keeping Your Floor Clean

- Use a pH neutral cleaner
- Do not use excessive amounts of water on the LVT; a damp mop is sufficient
- Rinse the floor thoroughly and allow to dry
- Sweep, vacuum, or dust mop the floor as needed to remove dust, dirt and grit
- Clean liquid spills immediately to prevent the possibility of stains, slips, or falls
- Check STAINMASTER.com for more information on stain cleaning

### Window treatments

- Window treatments are used to deflect / absorb some of the radiant heat in direct sunlight
- Flooring exposed to this temperature can cause the flooring to buckle, stress the joints, cupping, etc.

### Preventive Care

- Use mats at all entry areas to keep dirt, sand and water off of the floor. Mats should have a non-staining back. Rubber backed mats are not recommended. Clean the mats on a regular basis.
- Protective mats must be used chairs with casters. Casters can cause the LVT to delaminate.
- All objects contacting the surface of the LVT needs to be free of debris (dirt, sand, hard substances, etc.). Excessive movement can wear through the wear layer of the LVT, damaging it permanently.
- Recommend using protective glides or felt pads on all objects contacting the surface of the LVT
- When moving heavy furniture, use protective boards or appropriate furniture movers designed for use over hard surface flooring
- Avoid use of metal or razor scrapers to clean the LVT. This will damage the protective wear layer of the vinyl flooring.

## APPENDIX 1

### APPROVED SUBSTRATES

The following are approved substrates for installation of Click-to-Lock flooring. See Appendix 2 for proper testing and substrate preparation prior to installing your STAINMASTER® PetProtect™ luxury vinyl flooring.

- **All substrates regardless of composition must be smooth and flat to within 3/16" (4.75mm) in 10 feet or achieve an "F32" rating by use of mechanical grinding/sanding or suitable Portland cement-based patching and leveling compounds.**
- Above, on or below grade concrete without hydrostatic pressure, excess moisture or alkalinity; must be fully cured and dry, free from curing compounds, sealers, etc.

- Above or on grade lightweight concrete, properly prepared and without hydrostatic pressure, excess moisture or alkalinity
- Above or on grade Gypsum concrete surfaces, properly prepared and sealed, and without hydrostatic pressure, excess moisture or alkalinity
- APA registered underlayment, sanded face exterior grade with minimum rating of C-C plugged face.
- APA registered exterior grade plywood sanded face with ratings as follows: APA A-B, A-C, B-B, B-C, C-C plugged face
- APA Approved / Rated OSB panels, minimum 23/32" thickness, properly installed. It is recommended to fully sand the surface of the OSB panels to ensure smooth, even seams and reduce the surface ridges on the panels. Contact Technical Support for guidelines.
- Properly prepared and well bonded existing resilient or hardwood floor covering, single layer only. Existing floors should not be heavy cushioned, and they should be flat, smooth, clean, dry, dimensionally sound and free from deflection. When installing over hardwood flooring, a layer of rosin paper would help avoid any issues in the future related to the hardwood coating.
- Cement Terrazzo, ceramic tile, marble – must be properly prepared
- Certain metal floors – all gaps are patched with appropriate patching compounds or leveler.
- Old adhesive residue- must be properly prepared.
- Radiant heated floors where heat does not exceed 85°F (29°C).

**The following are NOT approved substrates for installing Click-to-Lock flooring:**

- Foam, rubber, cork or other soft underlay pad.
- Rubber, cork or asphalt tiles.
- Textured or cushion backed resilient flooring.
- "Sleeper" floor systems.
- Plywood floors that have been installed directly over a concrete slab.
- Luan and mahogany-type plywood panels.
- Masonite™ or other hardboard underlayment.
- CCA (pressure treated), oil treated or other coated plywood.
- CDX or other plywood with knots or open defects.
- Underlayment made of pine or other soft woods.
- Paint, wax, oil, grease, residual adhesive, mold, mildew, and other foreign materials that might prevent flooring from natural movement.
- Other uneven or unstable substrates.

## APPENDIX 2

### SUBSTRATE PREPARATION

**Although this flooring is not susceptible to damage from moisture, excessive subfloor moisture is an ideal breeding ground for mold, mildew, fungus and mites - all of which can contribute to an unhealthy indoor living environment. If excess moisture is found in the substrate proper remediation steps should be taken prior to installation.**

All substrates must be properly prepared and tested according to the following guidelines.

#### Concrete Subfloors

1. Concrete substrates should be properly prepared according to the latest revisions of ASTM F710, Preparing Concrete Floors to Receive Resilient Flooring and ACI 302.1R-15, Guide to Concrete Floor Construction.
2. All concrete substrates, regardless of grade or age of slab, must be properly tested using one of the methods outlined below for warranty to apply. Acceptable test method is the ASTM F 2170 and ASTM F1869. Testing shall be conducted according to the relevant ASTM documentation and instructions of the manufacturer of the testing equipment. Consult Technical

support for RH values greater than 85% or MVER 5 lbs./1,000 sqft./24 hrs.

3. Concrete Alkalinity / pH Test shall be conducted in accordance with ASTM standards. Acceptable level of pH in the substrate is between 7 and 10.

### **Gypsum and Lightweight Cellular Concrete Substrates**

1. Gypsum and Lightweight Cellular Concrete Substrates shall be per ASTM F2419 or F2471 respectively.

2. Contact Dixie Group at 800-633-0468 ext. #6 for instructions over gypsum and lightweight concrete substrates.

### **Wood Subfloors**

1. All wood substrates should be prepared according to the latest revision of ASTM F1482 Installation and Preparation of Panel Type Underlayments to Receive Resilient Flooring.

2. Wood panel subfloor construction shall be a minimum of 1" in total thickness.

3. Panels designed as suitable underlayment shall be at a minimum ¼" in thickness, dimensionally stable, fully sanded face to eliminate grain texture or show through, and have a written manufacturer's warranty and installation instructions. Panels shall be installed according to manufacturer's instructions regarding stapling pattern, sanding and filling of joints, and acclimation to installed environment. Where not specified consult ASTM 1482 or the relevant document from the American Plywood Association.

### **Existing Resilient Flooring**

1. Existing resilient flooring must be single layer only, thoroughly stripped of all wax, floor finish, dirt and other contaminants. Be firmly bonded to the substrate, flat and smooth with no curling edges or loose seams. Must not be of a cushion back, loose-lay, or perimeter bonded floor.

### **Old Adhesives**

1. Adhesive residue shall be properly prepared by hand scraping, mechanical scraping or grinding be used as a primary means of removing old adhesive residue. Black cutback/asphalt adhesives shall only be scraped by hand to remove any loose patches, trowel ridges and puddles so that only a thin residue layer remains. Residues shall be properly covered using a Portland based patching compound properly mixed with the manufacturer's recommended latex/acrylic additive. Do not use chemical adhesive removers.

### **Other substrates**

1. Ceramic, porcelain, marble and granite tiles are suitable and must be properly bonded with intact grout joints and free of cracks or loose tiles. Surface of tile and grout joints should be free from sealers, coatings, dirt and contaminants. Properly prepare the surface of tiles by grinding any high areas and using a suitable Portland-based leveling compound and primer to fill in all low areas.

2. For any subfloors or substrates not listed please contact Dixie Group. Any surface deemed unsuitable should be covered with an approved ¼" wood underlayment or suitable Portland-based cement leveler or patching compound. Always follow the manufacturer's recommended practices when covering an existing substrate.

**Contact Dixie Group, PO Box 2007, Dalton, GA 30722 or call 800-633-0468 ext. #6 for any questions.**