BEFORE YOU BEGIN INSTALLATION:

Please read all the instructions before you begin the installation. Improper installation will void your warranty. Always check with your dealer, distributor or online at www.FlooringOneSource.com for the latest version of these instructions and product warranty.

Check all carton labels to ensure that the colors, size and run/lot numbers match. Installing flooring from different long numbers can result in differences in shading, texture, gloss and coloring.

General:

This product has a pre-attached underlayment; using additional underlayment will void the warranty and can cause excess deflection which will damage the locking joints. There is no laboratory testing data for sound reduction that supports use of additional acoustic underlayment to further reduce impact sound or sound transmission through the flooring.

The flooring planks will not be damaged by exposure to water, however, the finished floor is not a complete waterproof installation and is not to be used as a moisture barrier. Clear standing water on the flooring as soon as possible. Water left unattended under the flooring with anything organic on the substrate can create a situation where mold and bacteria can be promoted. Failure to add a 6 mil poly-film moisture barrier over the substrate will void the warranty. Use of additional padded underlayment will void the warranty . Any damage to the flooring or the surrounding structures from mold is not covered under the product warranty. Use of a 100% silicone sealant around the perimeter can aid in keeping surface water from migrating under the flooring around the perimeter. Do not install flooring over carpet or any other type of soft surface flooring.

- Install flooring in interior areas only with the interior temperatures maintained with properly operating HVAC between 0°F (-18°C) and 125°F (52°C).
- Use window coverings or UV rated films to limit sun exposure during peak sunlight times. This will help create a more stable temperature and prevent flooring from thermal degradation.
- Master Designs Drop Lock Flooring does not need to be acclimated, however if the boxes were stored over 2 hours in extreme temperatures (under 50°F [10°C] or over 100°F [40°C]) within the 12 hours before the installation, acclimation is required. In this case, place cartons (stacks of 5 high max.) in installation area at service temperature for at least 8 hours in unopened package before you start the installation.
- Service temperatures must be maintained consistent between 60°F to 85°F (15°C to 29°C) before and during installation. Gradually increase/decrease service temperature to the normal operating temperature of the area after installation.
- Always use oversized (minimum 2" diameter) hard plastic or nylon floor protectors for heavy objects or objects with high point loads (high PSI at bottom of leg/support). Castor chairs should have minimum 2" diameter wheels.
- For the best result, make sure to always mix planks from several cartons at a time; mixing the planks during the installation to balance the pattern and colors.
- Expansion spacing of 1/4" (6mm) where flooring abuts all vertical surfaces, including walls, columns, jambs, etc. These gaps will be covered with trim moldings after the floor is installed. Tip: When installing around pipes, drill the holes 1/2" (12mm) larger than the diameter of the pipes.
- Installation areas greater than 65 lineal feet (4200 sqft.) should have a 1/2" expansion space around the perimeter. For floor surfaces exceeding 6400 square feet (600sq m) and/or lengths exceeding 80 linear ft (25m), use expansion moldings at openings less than 6 feet and increase expansion gaps to ½" (12mm).
- Maintaining a distance from heat sources such as fireplaces, wood stoves, furnaces, etc. of at least 18" with ensure a
 stable installation and limit damage to the flooring. Excessively low or high temperatures may cause this product to
 expand or contract and lead to visual defects of the floor that will not be warranted.
- Inspect your subfloor before you begin. It must be dry, clean, flat and smooth prior to installation; all substrates must be or made to be flat to 3/16" (5mm) within a 10ft (3m) span with cementitious leveling compounds.

- The flooring planks will not be damaged by exposure to water, however, the finished floor is not a complete waterproof installation and is not to be used as a moisture barrier. This product is also not to be installed in areas that have a risk of excess water exposure or flooding such as commercial showers, saunas, pools or outdoor areas.
- Do not install cabinets, islands or fixed objects on top of the flooring; flooring should be butted to these with proper expansion spacing.
- Undercut all doorjambs leaving 1/64" space above the flooring surface. Do not fasten wall moldings and/or transition strips to the planks or directly through flooring to the subfloor.
- Master Designs planking is best when installed the length direction of the planks parallel to the main light direction.
- Inspect each individual plank one by one before installation. No claims on surface defects will be accepted after installation; defects greater than 1" (1cm) are considered identifiable and should be culled.
- Failure to add a 6 mil poly film moisture barrier over the substrate will void the warranty.
- Use of additional padded underlayment will void the warranty .

Substrates

All subfloors / substrates regardless of type shall be structurally sound, clean and free of any surface contaminant, dry, flat and smooth prior to installation. Substrate flatness requirement for all Master Designs flooring is an F32 rating (3/16" in 10 lineal feet) or 1/8" in 6 lineal feet when measured; if necessary, flatness should be achieved by mechanical grinding or sanding or use of a cementitious leveling compound.

For substrates / subfloors not listed below consult your dealer or distributor prior to installation.

Wood

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*. Acceptable wood panels are:

APA registered underlayment or APA Exterior grade plywood with sanded face exterior grade with minimum rating of B-C plugged face. APA Rated OSB, properly installed with the face fully sanded to ensure seams are even and the face is free of ridges.

Wood panel subfloor construction should be a minimum of 1" in total thickness. Panels designed as suitable underlayment over unacceptable substrates shall be at a minimum ¼" in thickness, dimensionally stable, fully sanded 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.

Concrete:

Concrete substrates shall be according to the latest version of ASTM F710, *Preparing Concrete Floors to Receive Resilient Flooring* and ACI 302.1R-15, *Guide to Concrete Floor Construction*.

All concrete substrates, regardless of grade or age of slab, must be properly tested for moisture per ASTM F 2170 or ASTM F1869. Follow the ASTM test method and the instructions of the manufacture of the test equipment. RH values should be maximum 85% or MVER 6 lbs./1,000 sqft./24 hrs.

Concrete Alkalinity / pH Test shall be conducted in accordance with ASTM F710; the level of pH in the substrate should be ≥ 7 and ≤ 10 .

LW Concrete:

Gypsum and Lightweight Cellular Concrete Substrates shall be per ASTM F2419 or F2471, be clean, dry, flat and smooth as stated above. If leveling is necessary use leveling compounds compatible with the Gypsum or LW concrete subfloor. Moisture testing should be conducted according to F2419 or F2471; acceptable values when using ASTM F4269 are less than 30 of the indicated scale on the meter.

Existing F/C:

For existing hardwood or engineered wood floor surfaces, it is recommended to repair any loose boards or squeaks before you begin the installation and ensure the surface is flat. Existing wood floors should be dry and well ventilated under the flooring. Do not install over glue-down hardwood or engineered hardwood over concrete substrates.

Existing resilient flooring must be single layer only and well bonded to the substrate with no bubbles or open seams. The resilient floor must not have a cushion back, be loose-laid or perimeter bonded only.

Adhesive residue shall be properly prepared by hand scraping, mechanical scraping (non-cutback residue ONLY) or properly covered using a Portland based patching compound properly mixed with the manufacturer's recommended latex/acrylic additive. Chemical adhesive removers shall not be used. Consult the REMOVAL OF RESILIENT FLOOR COVERINGS before installation.

Most tile (ceramic, porcelain, etc.) surfaces are acceptable for use as a substrate. Surface should be flat (no-ledging) and grout joints less than ¼" are acceptable without leveling. Unlevel floors or wider grout joints should be prepared by grinding any high areas and using a suitable Portland-based leveling compound per the manufacturer's recommendations to fill in any low areas.

In-Floor Radiant Heat

Flooring can be installed over most radiant heat systems. Radiant heat systems must have a minimum of 1/2" (12mm) separation from the product and be fully embedded in a cementitious leveling compound. Before installing over newly constructed radiant heat systems, operate the system at maximum capacity to force any residual moisture from the cementitious topping of the radiant heat system. Lower temperature of substrate to a maximum of 70°F (21°C) 24 hours before installation.

Once the installation has been completed, the heating system can be turned on and increased gradually the normal service temperature is attained. Maximum operating temperature should never exceed 85°F (29°C) and use of an in-floor temperature sensor is recommended to avoid overheating.

Refer to the radiant heat system's manufacturer recommendations for additional guidance.

TOOLS AND SUPPLIES REQUIRED:

Shop vacuum with proper bag and filtration; utility knife with blades; carpenter's or speed square; chalk line; safety glasses & dust mask; white rubber mallet (or non-marring type); jig saw or small circular saw; knee pads. Moldings and transition strips as required for the installation.

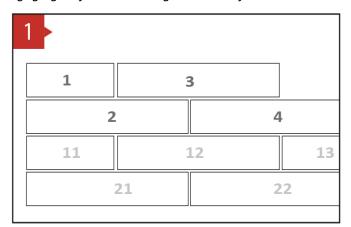
Do not use tapping blocks or other types of laminate or hardwood flooring tools as these may cause damage to the locking mechanism if improperly used.

Installation

- Flooring has the best visual when balanced in the room. Determine the center of the room and measure from the center line to the starting wall to determine if the first row should be cut. Divide this measurement by the width of the planks and if the board width of the first / last row is less than ½ of the plank width, adjust the width of the first row to be installed. In narrow hallways, it is recommended to install the floor parallel to the length of the hall.
- Calculate the room surface prior to installation and plan an extra 10% of flooring for cutting waste.
- After thoroughly cleaning the subfloor, you should begin laying the planks from left to right. Always be sure to leave a 1/4" (6mm) expansion gap at walls and between fixtures, such as pipes and pillars, stairs, etc. Use spacers along the starting walls to maintain this gapping.
- Check all locking mechanisms for debris or cracks before installing planks. Failure to do so can result in a loose joint and will compromise the integrity of the installation.
- Ensure joints are at least 8" apart and all pieces are no less than 12" in length.

- **ALERT:** Failure to properly align the end joint and attempting to force planks together while they are out of alignment will result in permanent damage to the end joint
- To cut the plank, use a utility knife and ruler. With the top side of the plank facing up, use the utility knife to score the plank, using the ruler as a straight edge. The knife will not go through the surface but will make a deep cut. It may be necessary to cut along the same line several times to achieve a deep enough cut. Then, while holding one side of the plank down with one hand, lift the plank from the other side of the cut using your other hand. Lift close to the cut line so that bending does not occur. The plank will split along the cut line. For ease of installation, cuts may be made using a laminate or vinyl flooring cutter.
- To cut and lay the last row: position a loose board exactly on top of the last row installed. Place another board on top, with the tongue side touching the wall. Draw a line along the edge of this boards, to mark the first board. Cut along the edge of this board to mark the first board. Cut along this line to obtain the required width. Insert this cut board against the wall. The last row should be no less than ½ of the planks' actual width. The spacers can then be removed.

NOTE: If you notice both planks are not at the same height or are not locked together well, please follow the disassembling instructions below. Disassemble and check if any debris is stuck inside the lock is obstructing the planks from properly engaging. Before continuing ensure the joint has not sustained any damage and replace any damaged planks.



ESTABLISH STAGGER AND ALIGN TOOLS

Products should be staggered in brick-laid pattern, stagger equal to half of a plank. Tools needed: planks, underlayment, spacers, soft-faced hammer



INSTALL 2 PLANK



INSTALL 1 PLANK

It is very important that the first row is installed straightly. To realize this, installation alternates back and forth between rows one and two, for the first two rows only. Start with a small plank (1) and position this plank close to the wall.

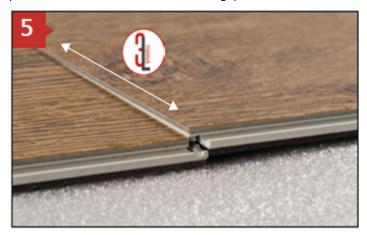


ENGAGE 3 PLANK ON LONG SIDE

Take another long plank (3). Repeating the previous step, insert the long side of plank 3 into the long side of plank 2. Then slide

Now select a long plank (2). Using the Click4U angle system, angle the long side of plank 2 on to the long side of plank 1. Drop plank 2 to lock. Make sure there are no gaps.

plank 3 to your left until the short side is in contact with the short side of plank 1.



ENGAGE 3 PLANK ON SHORT SIDE (Part I)

Using the 3L TripleLock one piece drop-lock system, drop the short side

of plank 3 onto the short side of plank 1.



ENGAGE 3 PLANK ON SHORT SIDE (Part II)

Using a soft rubber mallet slightly tap the joints on the short side to secure. This ensures 3x locking.



FINISH ROWS 1 AND 2

Continue alternating planks on rows 1 and 2 to avoid misalignment. From row 3 onwards, installation does not require alternating rows. Install one row after the other by starting with angling on the long side, sliding until the short sides are in contact and then locking the short side.



SECURING PLANKS

As you go, don't forget to use a soft rubber mallet on the short sides to secure the locking



FINALIZE FLOOR Finished? Remove spacers and cover gaps with a trim

MAINTENANCE:

Mop up any spills and excessive liquids immediately; the liquid can migrate to the subfloor and make the surface of the finished flooring slippery and unsafe.

Sweep or vacuum daily using soft bristle attachments. For heavier soil removal use of a neutral pH cleaner is recommended; do not use multi-surface cleaners, bleach, heavy abrasives or cleaners that are not pH neutral. Single use wet floor pads are acceptable. Soft white bristle brushes or pads can be used for heavier soil removal.

Master Designs flooring has a urethane finish and does not require any wax, oils or after-market finishes to be applied to the surface of the flooring. If a finish is desired please contact your dealer or distributor for complete instructions.

Residential steam mops are permitted on Master Designs. Use at lowest power with a suitable soft pad and keep the steamer in motion when in use. Refer to the steam mop's manufacturer instructions.

All entryways and exits must have a non-rubber backed mat in place to remove debris and heavy soils, contaminants from shoes.

Furniture should have proper floor protective pads (nylon or felt) installed on the bottom of all legs; this is especially true for any moveable furniture. Replace protective pads every 6 months or as needed due to damage or buildup of debris.

Heavy objects and furniture should not be slid or dragged across the floor surface without use of suitable floor moving pads or covering the finished flooring with hardboard or plywood.

DISASSEMBLING:

To disassemble the flooring start by lifting the whole row of planks delicately at an angle and lay flat once disconnected. Do not disturb the end joints as this can crack and damage the core material. To separate the plank end-joints, slide them apart gently while keeping the planks flat on the substrate. If planks do not separate easily gently tap the joint together with the rubber mallet to reseat the joint and then slide apart as above.



DISASSEMBLING THE LONG SIDE

Lift up the entire row in the same angle as you did during installation, then slide the rows apart.



DISASSEMBLING THE SHORT SIDE

Disassemble the row by sliding apart the planks on the short side.

For more information, including Warranty and Care Guide, please contact your distributor.