

## Lamboo® LambooFusion™ Decking Installation and Maintenance Guidelines



**LAMBOO®**

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## **INSTALLATION GUIDELINES:**

All information provided within this document is to be used as reference only. It is required under the LambooFusion™ Limited Warranty that a trained professional install the LambooFusion™ Decking products. All products should be installed according to local building codes. Failure to do so could lead to personal injury and affect decking performance and void the product warranty.

## **TOOLS REQUIRED:**

LambooFusion™ decking products can be installed with common building tools used in the building industry. All tools should be used according to the applicable manufacturers' instructions. The following are basic tools required for installation:

- Cordless Drill (18v or greater recommended)
- Chalk Line
- Carpenter Square
- Tape Measure
- Miter Saw
- Jig Saw
- Hand Router
- All Proper Protective Equipment (PPE) (i.e., safety glasses, gloves, etc...)

It is important to use sharp tool bits and blades when making cuts into the Lamboo® Fusion™ decking or other parts of the decking sub-structure. Avoid wearing loose clothing when using tools which spin at high RPMs.

**IMPORTANT:** The following information provides additional “Do’s” and “Don’ts” when installing and using the LambooFusion™ Decking products:

- It is not recommended to use rubber or vinyl mats directly on the surface of the decking. This causes water to be trapped and may create discoloration on the decking surface.
- If face fastening the decking, be sure to pre-drill prior to installing fastener.
- Static electricity may occur naturally.
- Do not cantilever products more than 1/2”.
- Color and grain patterns are utilized to mimic real wood and will promote variations in finished color due to the various angles and impression depths left by embossing the materials. These variations are not considered defects.
- LambooFusion™ Decking products are not meant to be mounted directly to the ground or concrete. A sleeper should be used with a minimum height of 1-1/2”. The sleeper should be mounted to the concrete with the appropriate fasteners where the decking product will be mounted to the sleepers either by face fastening or using the hidden decking clip system.
- Roof Top Decks
  - All framing and sub-structures must be securely attached to the building prior to installing the decking materials. Do not use adhesives to attach framing to the building or roof structure and NEVER ATTACH DECKING TO A FLOATING FRAME OR SUB-STRUCTURE.

- It may be necessary to shim deck boards in order to keep the deck surface level with the framing/sub-structure.
- Attaching rigid blocking between framing members at frequent intervals should also be incorporated to help limit sub-structure movement.
- Proper drainage and air flows must be considered with a minimum sleeper height of 1-1/2" and an 3/16" gap between deck boards.
- If using composite sleepers; solid composite material, treated wood, pavers, or other rigid material must be used as shims with a spacing from one shim to the other being on 8" to 9" spacing. Composite sleepers/joists require more support when elevated above the concrete.
- Do not install decking or composite based materials in temperatures below 45° and above 90° Fahrenheit.
- Keep composite decking out of direct sunlight prior to installation as this will cause heating and expansion of the materials.
- **Excessive Heat Warning**
  - The LambooFusion™ Decking will generate high surface temperatures during certain parts of the day when directly exposed to sunlight, fire, or reflection of sunlight onto the decking surface. It is recommended that shoes or other foot coverings be used when high UV (sunlight) and temperatures greater than 90°F is expected.
  - The LambooFusion™ Decking should also not be installed where low-emissivity (Low-E) glass is used. Low-E glass is designed to prevent heat gain within a structure and can cause unusual heat build-up on exterior surfaces. Excessive heat build-up greater than normal exposure limits could potentially cause several issues not covered by warranty, including but not limited to sagging, bowing, warping, discoloration, excessive expansion/contraction, and accelerated weathering.
  - It is recommended to use shading devices over areas of high use to help avoid any discomfort to human and animal's feet from hot surface(s).
- **Construction Debris**
  - Keep decking surfaces clear of unnecessary clutter and build-up of waste and drop materials. Unused or scrap deck boards if not handled correctly could damage installed deck board surfaces.
  - Do not use the decking as a work surface.
  - **IMPORTANT:** Do not allow dust from concrete, landscape blocks, rock, or other masonry products to accumulate on the decking surface. If any dust should occur, it should be cleaned immediately. Failure to do so may cause surface staining that is not covered by warranty.

## **PLANNING YOUR DECK LAYOUT:**

It is recommended to consult with your installer to determine sizes and quantities required for your finished deck. When determining final quantities, it is recommended to add at least 5% to 10% contingency to allow for cutting, trimming, loss, and best appearance.

Other considerations when laying out your new deck:

- LambooFusion™ decking is a two-sided product. Due to various surface options, the decking surface can be; 3D wood embossed, textured scrape, pin stripped, or wide grooves.
- When determining final surface finish, it is recommended to use the textured scrap as the backside of the deck board. This provides the flattest surface when mounting the decking to joists. If other facing options are used as the backside of the deck board, shims are recommended to create stability.
- Optimal joist spacing is 12" O.C. Joist spacing should never exceed 12" O.C. 12" O.C. spacing will create a more rigid feel.
- Installing solid wood blocking between each joist will also help create a more rigid and stable deck sub-structure and help with overall performance of the finished deck.

### **FRAME AND SUB-STRUCTURE INSTALLATION:**

The frame/sub-structure should be installed per local building codes and specifications. Joist spacing should not exceed 12" on center (O.C.) with a minimum ground clearance of 1-1/2" for adequate ventilation. If installing decking diagonally, 10" joist spacing is required. If decking is used for stair treads, a gap of 1/4" to 1/2" between each deck board is recommended. Stair stringers should be spaced no more than 12" O.C.

### **EXPANSION AND CONTRACTION:**

The LambooFusion™ Decking products will have some expansion and contraction due to changes in temperature. The expansion and contraction encountered may result in slight gaps, which may be noticed at the ends of boards or in splice joints. Fastening the deck boards according to the Installation Guidelines will help minimize issues due to expansion and contraction.

It is important to keep decking products stored in cool areas prior to installation. Decking exposure to direct sunlight prior to installation will cause the materials to build-up heat and expand causing the boards to lengthen.

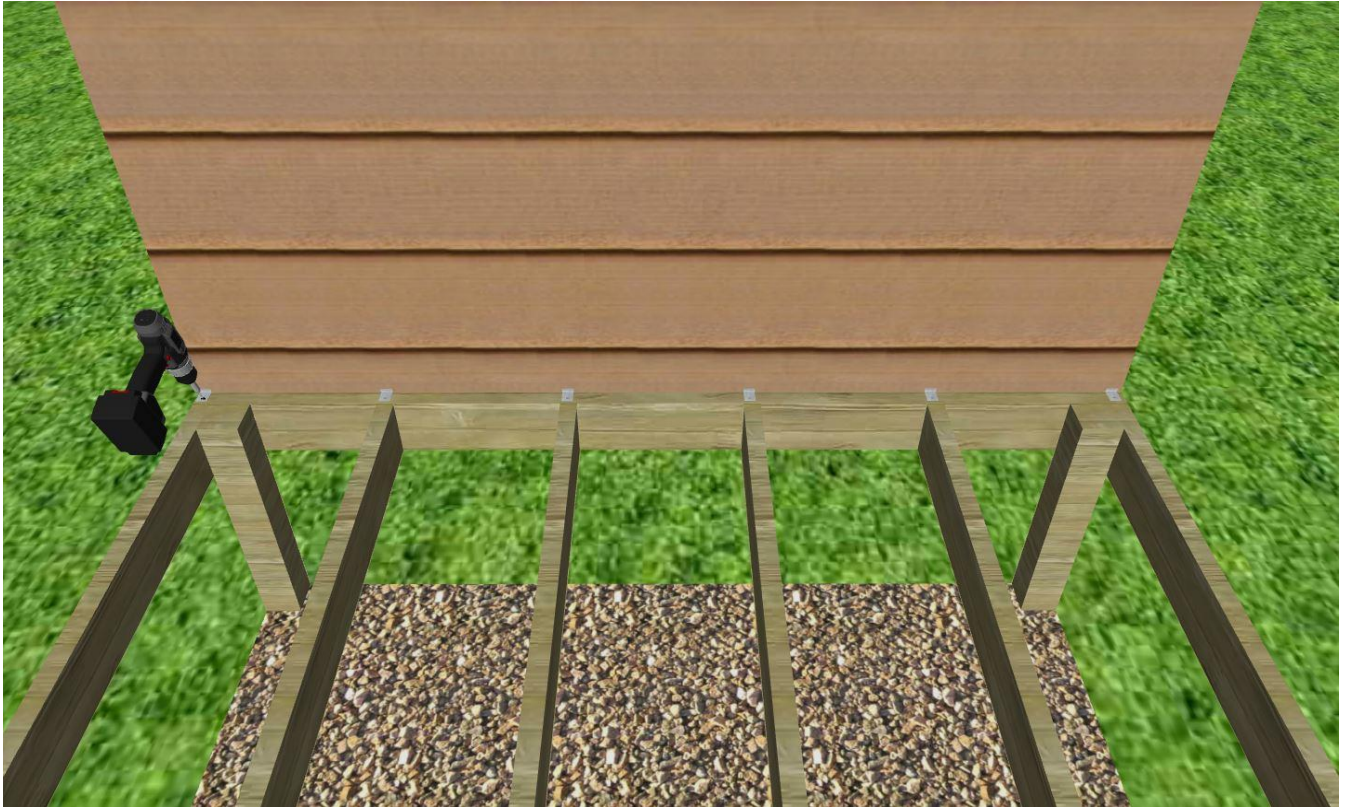
It is recommended that all butt joints are spaced at least 3/16" a part. If face fastening the decking, allow for an 3/16" to 1/4" gap from side to side of the deck boards. When face fastening, install fasteners 1/2" in from the end of the board and at least 3/4" from the long edge of the deck board.

### **FASTENERS:**

- It is recommended that high-quality fasteners be used based on the following specifications:
  - o Stainless Steel or Composite Decking Screws
  - o Minimum Screw Size: #8
  - o Face Fastening Screws Minimum Length: 2-1/4"
- Fasteners should drive at least 1" to 1-1/4" into the solid framing below the deck board.
- Avoid using flat head screws. Trim head screws typically provide better results. Always sample the type of fastener in a scrap piece of decking prior to using for final installation.
- For installation near coastal areas with a high salt content in the air, use stainless steel fasteners with a minimum alloy of 316 stainless steel.

**Hidden Fastener System:**

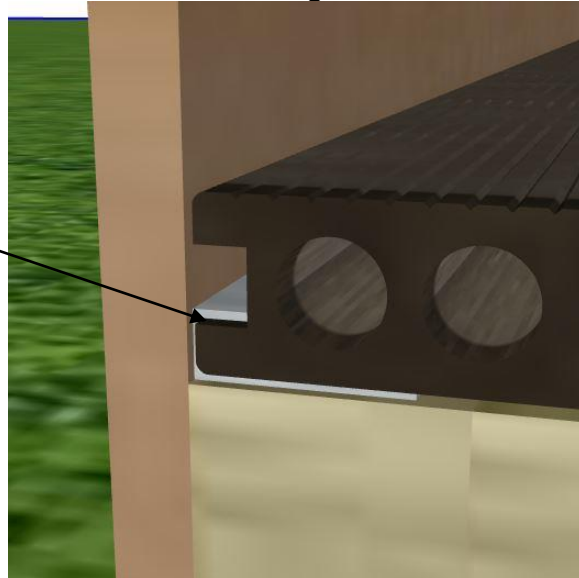
- Reference the following instructions and diagrams for installing the hidden fastener decking system. (Note: This is the preferred system for installation). The following information is for reference only and all work should be performed by licensed professionals.
1. Install Starter clips next to the wall. Be sure to keep starter clips even and true. Using a 3/16" shim to space the clips from the wall is recommended for proper water drainage.



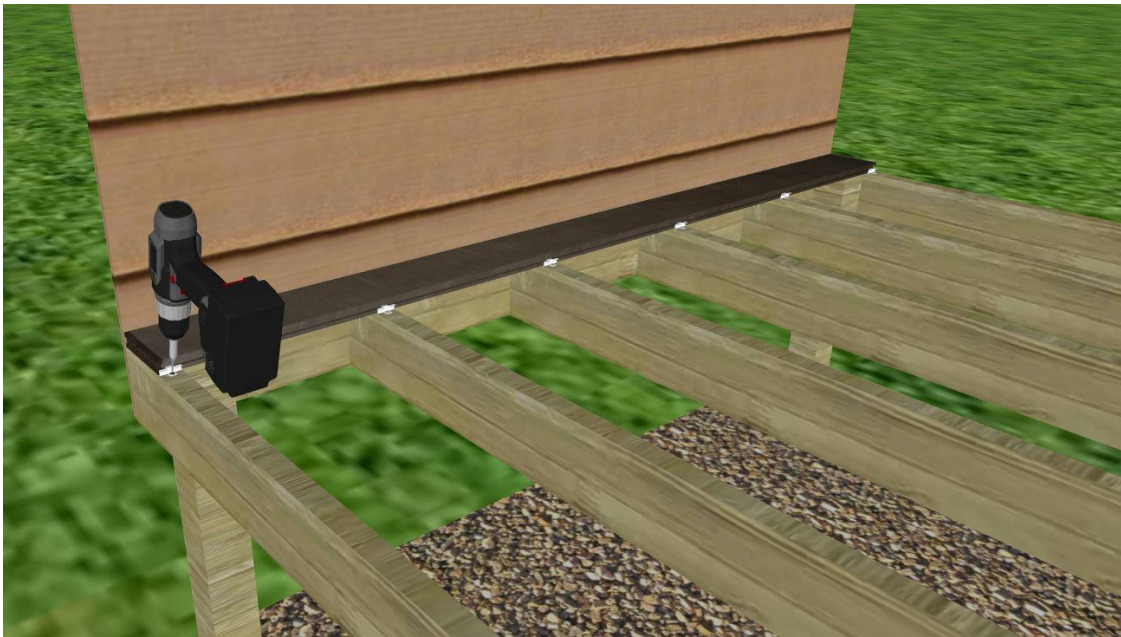
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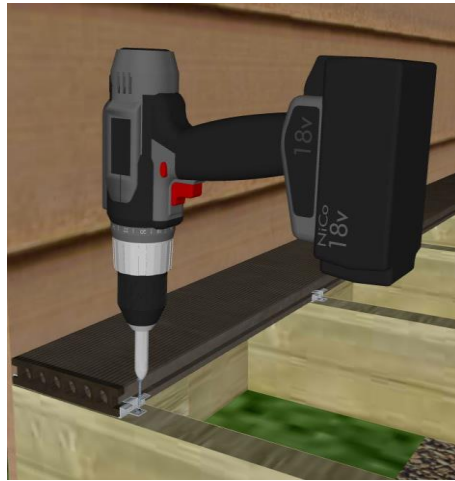
2. Install the first piece of decking by securing the groove part of the deck board into the starter clip. Be sure that the end of the piece is flush with the outer joist. This will ensure that the rim board sits flush against the end of the decking.

Install piece firmly into the Starter clip



3. Secure opposite side of the deck board with the hidden clips and fasteners.

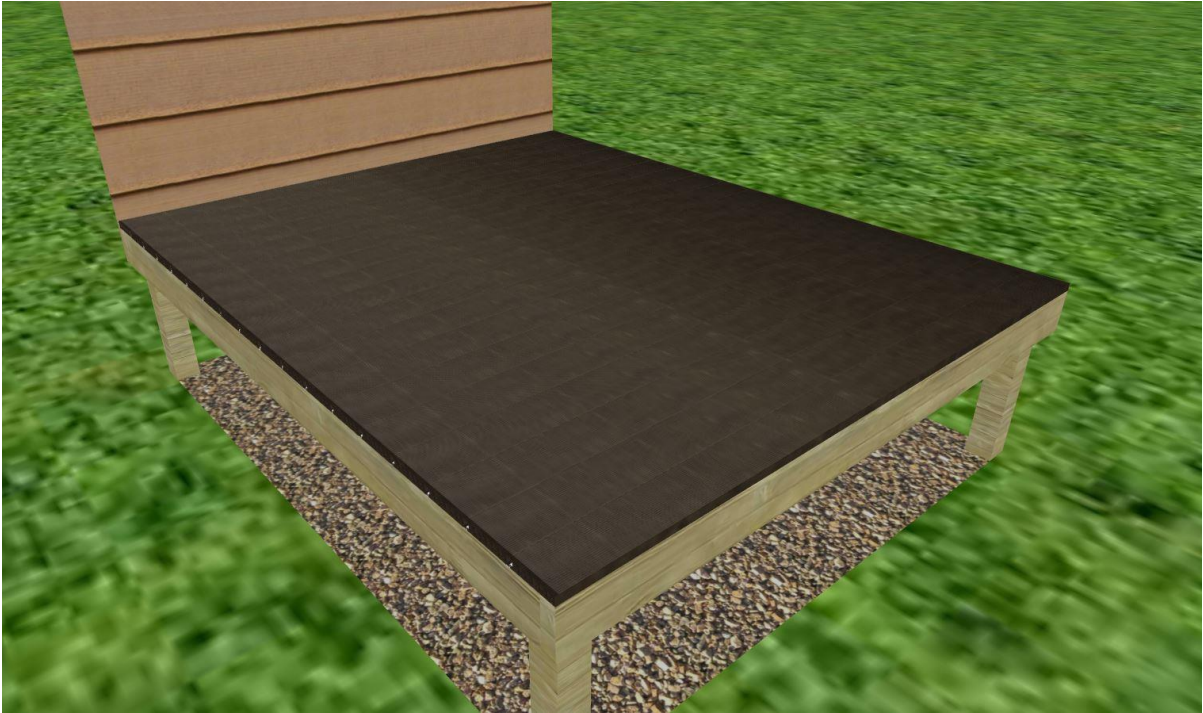




Be sure that the drill is angled approximately 90° to the solid joist when attaching the hidden clip. Be sure the clip is pushed snug to the deck board, then fasten to the joist.

4. Slide the next deck board into the clips fastened to the previous board. Continue installing deck boards until all required amount of deck boards are installed.



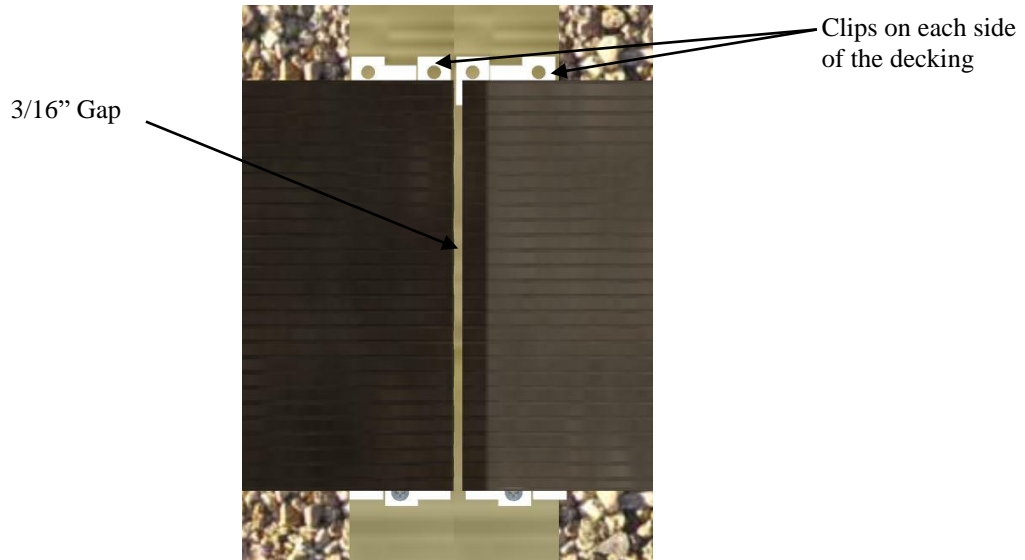


5. The final board to install may need to be rip-cut to size in order to fit on the sub-structure. The board can be cut using a portable table saw (preferred), circular saw, or hand router. Be sure to use new or sharp blades or router bits to cut the deck board.
6. Install stainless steel or composite fasteners in the rip-cut edge of the final deck board. Pre-drill the hole at a 45° angle prior to installing the fastener. Screw in stainless steel fasteners at the same spacing as the joists and be sure to counter-sink just below the surface of the deck board.



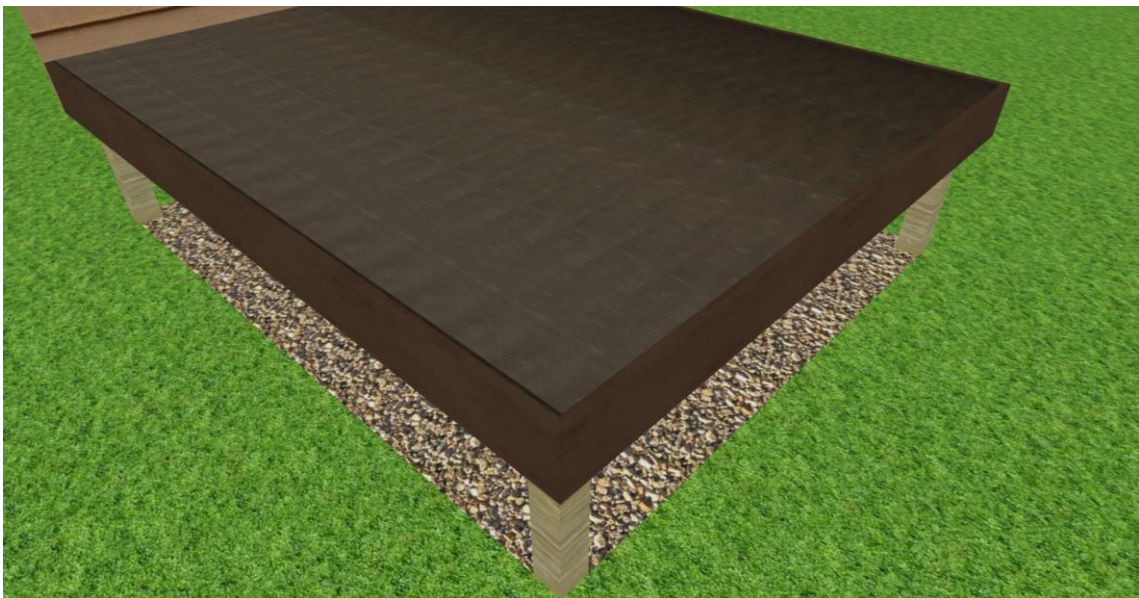


7. During installation, you may need to butt pieces together due to the span of the deck being greater than the length of decking used for the project. It is recommended to allow for an 1/8" gap where the ends of decking meet. It is also recommended to use two clips on both sides of the deck board to help control any lifting of the end of the decking board during expansion and contraction.



**NOTE:** In some instances, an additional joist board may need to be attached to the primary joist in order to accommodate where butt joints are required.

8. After all decking has been installed, it is time to install the rim boards. The rim boards can be provided as solid composite materials or hollow (chambered) materials. Discuss rim board sizing with a Lamboo technical specialist to determine sizing and type of rim board for your project.



Rim boards can be installed with stainless steel fasteners (preferred) or composite deck screws. Holes can also be counter-sunk and plugs can be used to fill them.

For deck boards that are gapped near the rim board or wall, a 30° mitered cut on the bottom of the board at each end is required to allow any water that may penetrate into the chambers to drain (see following picture showing the mitered cut):



#### **Diagonal Installation:**

- When decking is located in a corner of the house, start with small triangular pieces of decking in the corner and work your way out.
- Offset the clip  $\frac{1}{2}$ " to the right of center line of the joist so the screw will not exit the side of the joist when attached.

#### **Replacing Deck Boards:**

- Make two (2) parallel cuts down the center of the board to be replaced, then remove the center piece.
- Use a small pry bar to remove the remaining deck pieces.
- Using a reciprocating saw, remove the tabs on the side of the deck board with screw heads showing.
- Position new board in place and drive onto remaining tabs.
- Once the board is set into position, secure the loose edges with hidden clips, stainless steel fasteners, or composite decking screws.

### **Storage & Handling:**

- Store LambooFusion™ Decking products on flat level surfaces.
- Store decking materials in a cool, shady area prior to installation. Storing materials in direct sunlight prior to installation could cause materials to build-up heat and expand.
- Do not stack bundles over 4 units high.
- Always leave factory applied protective wrap. If materials are to be stored outside, cover with a non-translucent material.
- Use care when handling materials with forklifts, lulls, skid steers, and other material handling equipment.
- Avoid storing materials in enclosed spaces that may exceed 120°F.

### **Warranty:**

Lamboo offers limited consumer and commercial warranties on its LambooFusion™ Decking products. For residential applications, there is a fifteen (15) year limited warranty and for commercial applications, there is a ten (10) year limited warranty. For more detailed information in regards to the LambooFusion™ Warranty, please reference the LambooFusion™ warranty found on our website at [www.lamboo.us/warranties](http://www.lamboo.us/warranties).

### **Care & Maintenance:**

- Avoid the use of rubber-backed mats, tarps, pool toys, and other non-porous items for an extensive period of time as these items may discolor the decking surface.
- Be sure to clean any chemicals such as sunblock, insect repellent, candle wax, or other chemicals that may come into contact with the decking materials immediately to avoid any chemical reactions or discoloration of the decking.
- Use typical cleaners found in the market for composite decking materials. Decking materials can be easily cleaned with the use of a power washer set to the lowest setting (1,200 psi) and the user must start at least 18 inches away from the surface and work their way in until materials show signs of cleaning and no scarring occurs.
  - o NOTE: It is recommended to test cleaners and power washing strength on scrap materials prior to using on finished products.
- Ice and Snow
  - o As with any walking surfaces, the decking materials may become slippery in winter weather. Take caution when walking on decking during these conditions.
  - o For ice removal, most products containing calcium chloride can be used. Avoid using harsh or aggressive chemicals.
  - o Do not use metal shovels or shovels with sharp metal edging on the decking materials. This will cause damage to the decking surface.

### **Contact Information:**

Thank you again for purchasing our amazing products and if you have any questions about Lamboo's composite decking or siding materials in regards to installation, maintenance, or other questions, please contact us by phone at (866) 966-2999 or by email at [sales@lamboo.us](mailto:sales@lamboo.us).



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