

Aeratis Porch Flooring must be installed in accordance with installation instructions to maintain the product warranty. The recommendations below are, in no way, meant to supersede local or national building codes. Before installing, check all applicable building codes. This is a condensed version of the installation instructions. For specific questions or a more detailed version of our installation instructions and for complete painting instructions, please visit the Aeratis website (www.aeratis.com).

# GENERAL INFORMATION

Store Aeratis on a flat surface, supporting material every 2 feet. Aeratis Classic, Heritage or Traditions can be installed on either covered or uncovered porch applications. For best results, pay close attention to the slope and ventilation suggestions. This can help limit standing water and extend the life of your joist system.

### **TOOLS**

For cutting and ripping Aeratis Classic or Traditions, you can use a standard miter saw, circular saw, jigsaw or table saw with carbide saw blades. Standard router and router bits may be used.

### FASTENERS (NO SPECIFIC BRAND OF FASTENER IS REQUIRED) STAINLESS STEEL IS ALWAYS BEST PRACTICE

- 1. GRK #8 x 2" stainless steel trim-head screws (Pheinox $^{TM}$  RT Composite $^{TM}$ ) or the GRK #8 x 2" Climatek coated Trim $^{TM}$ Head (uses T-10 starhead bit) (For information on where to buy screws, visit www.grkfastners.com)
- 2 Simpson Strong Tie type 305 Stainless Steel (Trim-head Decking Scew 305 or 316 #6, 7, or 8).
- Pneumatic flooring nailer with T or L barbed cleat nails (best practice to use a construction adhesive if your are using a pneumatic nailer) 2" stainless steel is best practice.
- Pneumatic flooring stapler 2" 15 gauge 1/2" crown stainless steel flooring staples
  - \* Please note, you cannot use a hand held pneumatic stapler, framing gun or finish nailer. Aeratis is too dense and the nails may not penetrate the material nor does it have the holding power needed for exterior flooring.

#### **PREPARATION**

Aeratis recommends leaving a 1/4" gap where the product meets any wall, column or vertical surface. Leaving a gap will allow spacing for the porch/home to settle or move with the changing of temperature/weather. When Aeratis porch flooring is fastened to a wood joist, it should be installed in a well ventilated application creating continuous airflow around the joist. FAILURE TO DO SO, CAN ACCELERATE THE DECAY OF YOUR WOOD JOIST. If your installation is a waterproof install, make sure you completely seal up any gaps where your Aeratis boards meet structures using a clear, paintable 100% silicone product.

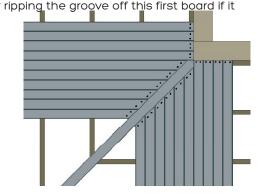
Aeratis porch flooring must be properly supported with structural blocking and framing under columns and porch posts to prevent sagging and possible structural failure over time. Also, make sure all joist are flush with one another. If one joist is higher or lower than others, it may be reflected in the porch surface.

Install Aeratis porch flooring on joists no greater than 16" on center (10" on center for stair applications). Installing Aeratis perpendicular to the boules is recommended to help promote water runoff. If you are looking to make your.

Starter anchor dicular to the house is recommended to help promote water runoff. If you are looking to make your installation waterproof, you should run the Aeratis boards perpendicular to the house. By doing so, you will promote rather than restrict water runoff. It is best practice to slope Aeratis 1/4" per foot away from the house to enable wind-blown rain to run off the porch faster than it weep between the boards. To assist in reducing the water from weeping between the boards, we recommend adding a bead of paintable, 100% clear silicone caulk in the groove just before inserting the tongue into the groove and securing to your substrate.

### INSTALLATION

Square your first board to the house and fasten into place (you may want to consider ripping the groove off this first board if it is going to be exposed). If you are using screws to fasten Aeratis to the joist, insert the screw just above the tongue at a 450 angle or less and counter sink the screw a minimum of 1/16" into the material NOTE: If the tongue cracks, you are putting too much pressure on the tongue and you should reduce the angle of your screw. Take the next Aeratis plank, line-up the groove to the tongue and slide into place. Make sure the boards are completely snug together and then fasten to the joist If you are using a pneumatic nailer, it is best practice to us a joist adhesive such as Titebond (Heavy Duty Construction Adhesive). NOTE: To reduce weeping water, use paintable,100% silicone caulk in the groove before sliding into place. Also, your fastener must be completely counter sunk into the material. The tongue and groove must be completely clear of all debris for each board to go together completely. It is best practice to leave an overhang between 2" to 3 1/2" to keep water further away from your foundation.



## CORNER APPLICATIONS

It is recommended that you run one or two Aeratis boards from the corner of the house off the edge of the porch, then butt all other boards to the angled board. It is best practice to face screw theses boards and fill the holes with DAP blend stick filler. When securing the miter joints in a waterproof installation, the but ends should be glued to your angled board and 100% silicone caulk should be used in between the tongue and grooves.

As you are installing, please keep in mind we are providing the best case scenario's to allow for the settling and movement of your framing material and structure.

## **ACCLIMATION**

Store Aeratis porch flooring in the environment in which the product is going to be installed for a minimum of 24 hours prior to installation. (NEVER leave the protective film exposed to light and UV longer than 24 hours. The film can potentially cause some discoloration. For prolonged exposer to UV and moisture if stored outside improperly. If you are going to have the boards stored outside, turn the top row of boards over to have the protective film face downward.) It is also best practice to use KDAT (Kiln dried after treating) joist or provide ample amount of drying time for the joist prior to installation. It is common for treated wood to be deliver moist or even wet. As these joist dry, they may shrink. Shrinking can manifest itself in the visual appearance of the porch floor in the form of gapping. To reduce the risk of Aeratis shrinking or unsightly joints appearing at butt joints, it is best practice to lay all the Aeratis boards out on your structure or flat surface and allow them to reach an ambient temperature in addition to using dried wood joist.

### MITER JOINTS & BUTT JOINTS

Secure miter joints and butt joints with screws and use only an Aeratis approve HOT PVC glue. This will help eliminate gapping in the event of settling or change over time in framing structure. Face screws can be avoided if glue is used and two trim head screws are used at the joint at a 45 degree angle pulling the two boards together.

### TRIM

Attach the desired trim piece using Aeratis approved HOT PVC GLUE and a trim head screw every two feet. It is always best practice to allow your trim pieces and your fascia to be in direct sunlight uncovered and un-stacked for 24 hours prior to cutting and installing.

#### FASCIA

Install Aeratis fascia by using trim head screws, fastening through the board into the substrate. PVC glue can be used on the ends of the boards to secure the joints. Screws should be used every 12 inches in both the top and bottom of the fascia in an alternating pattern. Make sure the screws are placed at least 1/2" away from the outside edge.

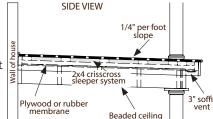
#### WRAPPING UP

If you have any residue or spills on your porch, we recommend the cleaner Goo Gone • to help remove these items. Sometimes during the course of installation, scuff marks or marks from shoes can be left on the surface of the product. We recommend using 0000 steel wool and Murphy's oil soap, rubbing the affected area lightly with long strokes following the grain.

### PROTECTIVE FILM

Remove the protective film upon installation. Direct exposure to UV rays can have an adverse affect on the PROTECTIVE FILM. If the film is left on the porch floor it can effect the appearance of your porch floor or require additional steps to remove the film and any residue left on the porch surface from the protective film. As you are installing the Aeratis boards,

you should peel back and or remove the protective film. Do not wait until the end of the project unless it is in a covered application and you have to paint. Leaving the protective film on longer than 24 hours can result in unsightly residue left behind from UV damage to the protective film. Your Aeratis porch has sufficient UV inhibitors for direct sunlight exposure. The protective film does not and should not be left on in direct sunlight applications nor should it be left on the board in or after rain.



## SECOND STORY/WATERPROOF INSTALLATION

Before you begin your installation please check will all local building codes an insure that all requirements are met. These instructions are going to begin at the point of installing the joist for your second story or water proof porch installation.

# **INSTALLING YOUR JOIST**

The perfect 2nd story or waterproof installation consists of joist installed at 16"OC, 1/2" or 3/4" pressure treated or marine grade plywood, a waterproofing membrane (Grace Ice and Water Shield HT or equivalent... for a equivalent, you must be able to penetrate the membrane while it still maintains it's warranty), 5/4" PT pine decking or Douglas fir strips for a sleeper system and your Aeratis boards. Variations of this installation will be discussed later to help accommodate for spacing issues. If you have the ability to plan ahead and can make space for the perfect installation, make sure you leave enough space from top of the joist to the bottom of any outward opening doors for all the materials listed above (no less than 4-5/8").

Before you begin, make sure you measure from the threshold down to the top of our your joist. The ideal amount of space is 4-5/8" inches (from the threshold to the top of the joist, this allows room for using 3/4" plywood, waterproof membrane, criss-cross 2" x 4" pressure treated sleeper system and your Aeratis boards). If you do not have this much space available we will cover how to install with a smaller amount of space below.

Once you have the proper measurement and have allotted for the space needed for the perfect install, begin your installation by installing your joist 16" OC. Your joist can be installed either parallel or perpendicular to the structure. You can make this decision based on your individual needs. Make sure you allow for proper slope away from the structure. We recommend 1/4" per foot on structures less than 13 feet deep and 1/8" per foot on structures deeper than 13 feet. Once all the joist are installed at 16"OC you can begin installing the plywood over the joist. It is best practice to use a pressure treated T8G plywood when possible. If T8G is not available then a standard square edge plywood will work. Begin by fastening your plywood down to the joist by using a construction adhesive on the joist and fastening the plywood down with screws or staples (check with the wood treater for the best type of screws to use to fasten down the plywood to the PT joist).

### **MEMBRANE**

Once the plywood is installed, the next step is the membrane. Begin installing the peal and stick membrane from the outside edge of the porch. Follow the installation instructions of the membrane. Once you get to the edge of the house, make sure you turn and run the membrane up the house as far as possible (this will depend on how deep your porch is... if the porch is only 5 feet deep, make sure you go at least 2 feet up the vertical surface of the wall to stop water penetration). If your wall is brick, make sure you use the proper flashing and seal up the transition between wall and floor to stop water penetration.

### **SLEEPERS**

Select a sleeper thickness based on your project. Keep in mind, if you use a sleeper less than 7/16" your fasteners could pass through the sleeper and penetrate your membrane. Sleepers are typically either 3/4", 5/4" or 1-1/2". Next step will involve your sleepers. Your first or bottom row of sleepers should run perpendicular with the walls of the house. They should be spaced at 16" OC. Each sleeper should be anchored to a joist every 16 inches. The second row of sleepers should be run parallel to the wall crossing the bottom row of sleepers creating a criss-cross or X. This will allow any water that penetrates the T&G flooring to easily run out from under the sleeper system. Keep in mind, you may want to cut grooves on the bottom of your sleepers to keep from damming water.

### NO ROOM FOR SLEEPERS?

If you do not have room for 2 sets of sleepers or a criss-cross sleeper system, you can simple use one sleeper. You will want to run your single sleeper system parallel to the house. On the bottom of the sleeper, you will want to cut notches or channels in the bottom of the sleepers every 12 to 16 inches. This will allow the water to run under the sleeper and escape out of the soffit vent area. If you do not have room for one row of sleepers, you can fasten Aeratis directly over the Grace Ice and Watershield HT product. If you are fastening directly to the membrane, you MUST make sure that each fastener penetrates Aeratis, the membrane, the plywood and the joist (3-1/4" screws should be used). Fastening Aeratis to the plywood alone may not be sufficient for your long-term waterproof application. Also, in this case, it is highly recommended that you use a 1/8" bead of 100% paintable silicone in the groove at the time of install (wipe up any silicone that squeezes out. It will not bond to Aeratis but can be a visual distraction to the project).

### PARALLEL VS PERPENDICULAR

It is always best practice to make sure your Aeratis boards are run perpendicular to the structure (make sure the boards are running the same direction as the desired direction of run-off water.) Running the boards PARALLEL WILL NOT VOID THE WARRANTY. However, if you are running the boards parallel, you will want to make sure you pay close attention to acclimation. If you are installation Aeratis parallel to the structure, you are required to glue all butt joints with the Aeratis approved glue. Make sure you order the PVC glue at the same time you order your Aeratis boards. YOU WILL HAVE TO SQUARE THE ENDS OF EACH BOARD BEFORE INSTALLING IN AN APPLICATION USING BUTT JOINTS. Failure to address butt joints properly can result in gapping. If you have questions about the right way to secure a butt joint see the installation video at Aeratis.com. Do not install Aeratis boards parallel in a waterproof installation. The boards need to run the direction you want the water to flow.

### FASTENING FOR WATERPROOF INSTALLATION

It is best practice to use both fasteners and joist/sleeper adhesive for a waterproof install. Insure that you do not leave any gaps between boards. Use a urethane based adhesive for connection between Aeratis and the joist/sleeper system. It is not required but it is best practice to use a stainless steel fastener. This is more important in a waterproof installation.

### **SHEDDING WATER**

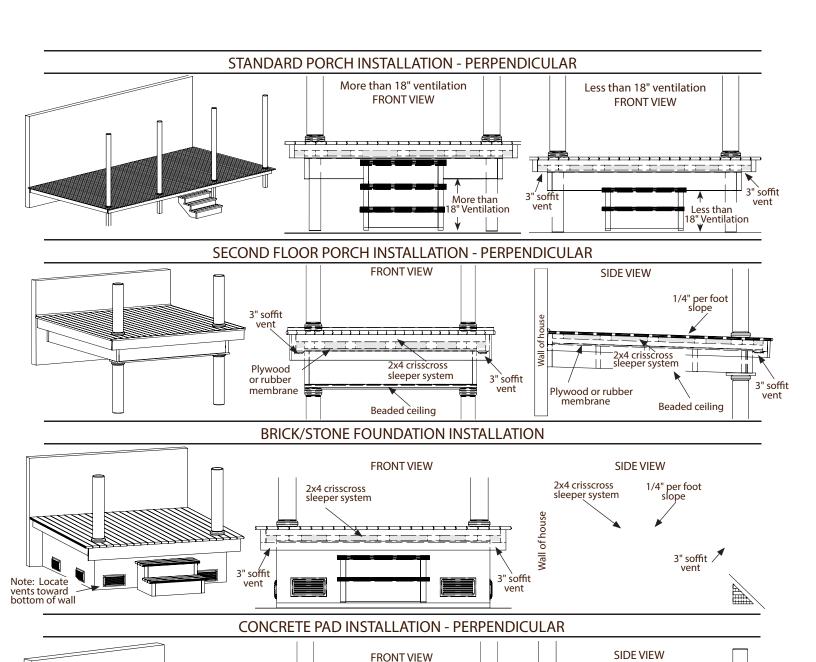
Make sure you account for water getting under your Aeratis boards and on top of your membrane. Your membrane, if installed properly will keep the water out of your living space. Insure you provide a way for the water to exit the area and that you are not damming up any water.

### VENTILATION

It is best practice to ventilate your wooden structure. Keep in mind, wood is an organic material and is subject to deterioration under overly wet or dry conditions. If your joist are kept too wet or moist, the holding power of the fasteners could be compromised. If the wood is kept too dry, dry-rot can occur and your fasteners can fail.

# **INSTALLATION QUESTION**

If you have any question whether or not your specific application will be warranted, you can fill out our pre-installation warranty on the Aeratis.com website. If your installation is not approved, a member of our staff will contact you with suggestions of how to modify your install so it is completely warranted.



2x4 crisscross sleeper system

Concrete pad

Plywood or rubber membrane

3" soffit

of house

Wall

vent

1/4" gap

& quarter

soffit

2x4 crisscross

Concrete pad

1/4" per foot slope

3" soffit

Plywood or rubber membrane