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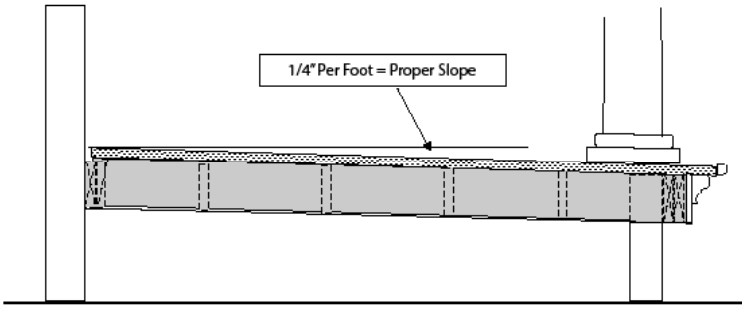
Aeratis Waterproof Installation Guide

WATERPROOF INSTALLATION - INSTALLATION VIDEO AVAILABLE AT AERATIS.COM

CREATING A WATERPROOF SPACE

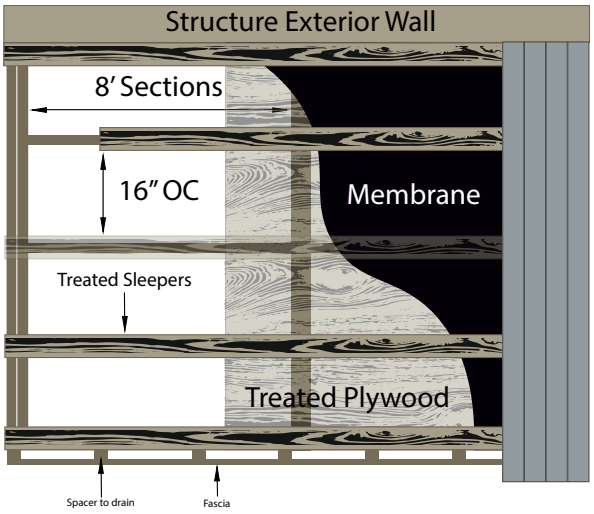
Aeratis boards installed over a joist system will not create a waterproof environment. To create a waterproof application, the installation must included, plywood, membrane and if space allows, a sleeper system. Keep in mind, the use of a waterproofing membrane critical. The membranes that are recommended within these instructions have been tested are have proven to create long lasting waterproof spaces. Deviation from these instructions can cause the results to vary. A couple of items to note: Using a sleeper system over the membrane allows the installer to utilize a flooring nailer during the installation. If the Aeratis boards are installed directly over the recommended membrane a minimum of a 3" screw must be used. All Aeratis boards must be fastened to the substrate with a span no greater than 16" OC. Use of the proper fastening system and creating proper slope are critical to creating a successful waterproof installation. Butt joints should **never** be used in a waterproof application.



BOARD DIRECTION

It is required to run the Aeratis boards perpendicular to the structure in a waterproof installation. Plan your framing or sleepers accordingly. If there is no room for sleepers, make sure you plan your framing or blocking to accommodate for a perpendicular installation. On wrap-around porches or when turning a corner, it is required to install one or two boards at an angle from the corner of the porch and then miter all boards into this "Breaker Board". The breaker boards should be free of any butt-joints. The first breaker boards must be fastened on the tongue and the groove side with #7 2" trim head screws. The boards do not have to be face screwed. You can fasten the breaker boards every 16 inches by putting a fastener at a 45° angle on the tongue and grove side of the initial or lone board.

Perpendicular Installation



SLOPE

When installing Aeratis in any application it is highly recommended to slope the framing so the Aeratis boards are sloped 1/4" per foot. When creating a waterproof space it is imperative to maintain a 1/4" per foot continuous slope in the direction you want the water to flow. If you do not keep the slope continuous and there are either low or high spots in the framing, standing water can occur.

JOISTS SYSTEM

When building or modifying a joists system, make sure to check for high and low spots in the joists framing. Joists crowns should all be turned up. If the crown in the joists is

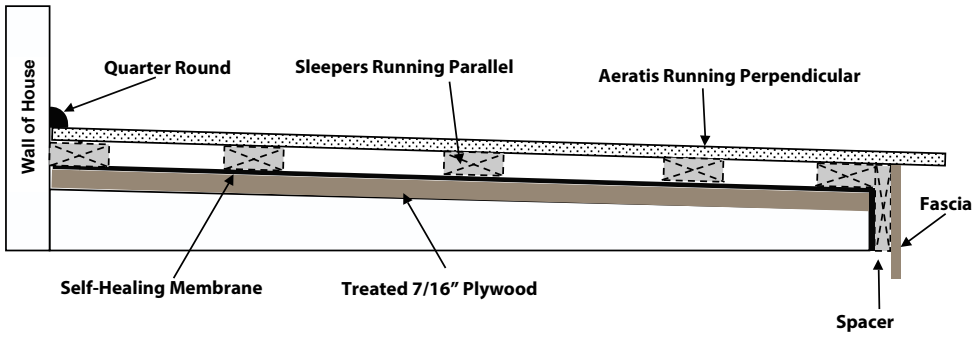
not turned up, this can create a lows spot in the framing. This will result in ponding or puddling water. Once the joists system is installed, it is best practice to use a nylon string and check for high and low spots in the framing. **REMINDER: Synthetic materials follow the joists system. Insuring your joists system is absent from high or low spots. This will create a better looking and better performing installation.** Note: the age and type of treating chemical will dictate the fastener material. It is always best practice to use stainless-steel fasteners.

PLYWOOD

When creating a waterproof installation, we require the use of 7/16" or thicker pressure treated plywood. For best results use a dryer 7/16"- 5/8" treated plywood. The main purpose of the plywood is to support the waterproofing membrane. **NOTE: your fasteners must penetrate the joists system after passing through the membrane and plywood. You will void the warranty if you only fasten Aeratis to the plywood.**

On top of the continuously sloped joists system, install the plywood using screws or staples and construction adhesive. Double check that there are no high or low spots in the plywood prior to installation of the waterproof membrane.

Waterproof Installation with Single Sleeper System



MEMBRANE

On top of the plywood, you must use a self-healing waterproofing membrane. The best performing membrane tested by Aeratis is, Grace Ice and Water Shield and Grace Ice and Water Shield HT. Also tested and performed well was Ultra HT Wind & Water Seal™. The key to the membranes recommended is, they gasket the penetrating fasteners. (It is always best to minimize the penetrations by using sleepers. However, in some cases there is no room from the top of the joists to the bottom of the door threshold). Install the membrane from the outer edge of the porch to the structural wall (the entire ledger board should be covered with the membrane if you are going to allow the water to pass behind the fascia. See Ventilation and Water Management section of waterproof installation instructions). Make sure the overlap occurs every 16" (where sleepers or fasteners will penetrate the self-healing membrane). This provides a double layer of membrane where the penetrations will occur. If possible, turn the membrane up the wall 1' to stop windblown rain from getting between where the boards meet the vertical wall. The membrane is the key to this type of installation. Make sure there are no creases or tears anywhere in the membrane.

SLEEPERS

On top of the membrane it is best to install a criss-cross sleeper system using pressure treated, ground contact rated lumber. This will create a seamless drainage system for any water than gets to the membrane. However, there is not always room to install a criss-cross sleeper system. The criss-cross sleeper system can be made up of pressure treated 2"x 4", 5/4" x 4", 5/4" x 6" or 3/4" x 4" boards.

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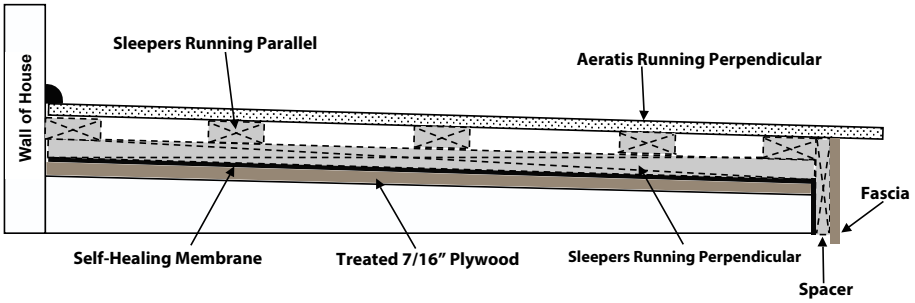
If you don't have room for a criss-cross sleeper system, you can use a single sleeper running parallel to the wall. If you use a single sleeper you must cut random channels on the bottom of the single sleepers system. The channels should be 1/2" wide and a minimum of 1/4" deep (make sure you do not dam up the water with the sleeper. DO NOT secure the sleeper to the joists through the channel. The sleeper system **must** be fastened to the **joists system** with a #10 3" screw. **Fastening the sleeper to the plywood alone will void the product warranty. Floating the sleeper or using adhesive on the sleeper alone will void the warranty. Sleepers must be fastened to the joist system with a mechanical fastener.** The use of a recommeded membrane that will gasket the fastener penetrations is essential for this istallation typle.

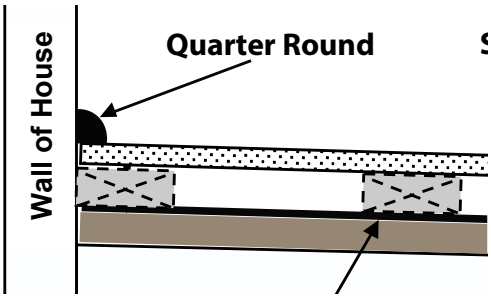


NO ROOM FOR SLEEPERS

In some cases there is no room between the joists and the threshold of the door to include a sleeper. In this case, you can install Aeratis directly to the membrane but you MUST fasten Aeratis to the joists with 3" screws. You cannot use a pneumatic flooring nailer if you are installing Aeratis directly on top of the membrane. To maintain your Aeratis warranty, you must use a 3" #7 screw and pass through Aeratis, through the membrane, through the plywood and sink the screw at least 3/4" deep into the joists. Each fastener must penetrate the joists. DO NOT fasten Aeratis to the plywood alone. Plywood is not an acceptable fastening substrate no matter the thickness or the type of plywood or exterior sheathing.

VENTILATION AND WATER MANAGEMENT

If any water gets under the Aeratis and on top of the waterproofing membrane, it is necessary to provide an escape for this water. Make sure if you are using one layer of sleepers running parallel to the structure, you create channels on the bottom of the sleepers to ensure water is not dammed up where the sleeper meets the membrane. It is critical to provide an escape for the water on the outside edge of the porch. Make sure you either provide enough over-hang to allow the water to escape or provide a way for the water to escape behind the fascia. The best method is to provide a way for the water to escape behind the fascia. This can be done by adding 1/2" blocking to the ledger board on the outside of the membrane. The 1/2" blocking should be spaced in accordance to the manufactures requirements. Once the vertical blocking pieces are installed, you can install the fascia. This method will provide an escape for the water as well as keep the fascia clean.



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INSTALLATION

If you are using a sleeper system, either a criss-cross sleeper or a single sleeper, it is best to use a flooring nailer. Please note, Aeratis boards should be installed using a pneumatic flooring nailer (staples are best practice fastener) and urethane based construction adhesive should be used on the joists. Aeratis boards can be installed using 2" #7 trim heads screws. This installation method takes much longer and does not offer the same quality installation as a pneumatic flooring nailer.

SILICONE

If installing Aeratis in a waterproof installation, it is not necessary to include silicon on the installation.

TRIM

Attach the desired Aeratis trim pieces using Aeratis approved PVC GLUE and a trim head screw every two feet. It is always best practice to allow your trim pieces and Universal Porch Plank (UPP), if used, to be in direct sunlight, uncovered and un-stacked and in direct sun for 24 to 48 hours prior to cutting and installing. Trim pieces should be installed with 2" #7 trim head screws and PVC glue. Make sure NOT to get any glue on the surface of the trim boards. Aeratis trim pieces should not be installed using a trim nail or finish nail.

Note: Aeratis boards should be installed the same direction as the desired water run-off (perpendicular).
*All products listed within the waterproof section of the Aeratis installation instructions have been tested to qualify for our recommendation. Deviation from our recommended products and/or utilizing products outside of those listed may result in the project falling short of meeting the requirements for a waterproof application resulting in it's failure to meet the minimum standards to maintain the Aeratis product performance warranty.