

A WHOLE NEW WAY TO WELCOME

ACRE™ Porch Board Installation Guide

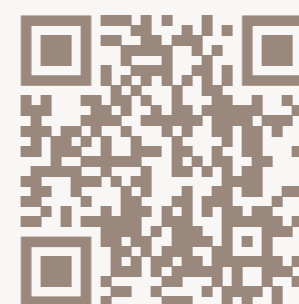
ACRE™ BY MODERN·MILL

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A new alternative to wood is finally here. ACRE is a sustainable, durable alternative with the look and feel of real wood. ACRE is a brand-new material that's lightweight, strong and water-resistant, guaranteed not to rot or splinter. ACRE is easy to cut and accepts paint or stain. Best of all, ACRE is made without harming a single tree, in a zero-waste environment in Fernwood, Mississippi.

GET READY FOR A WHOLE NEW WAY TO WELCOME.

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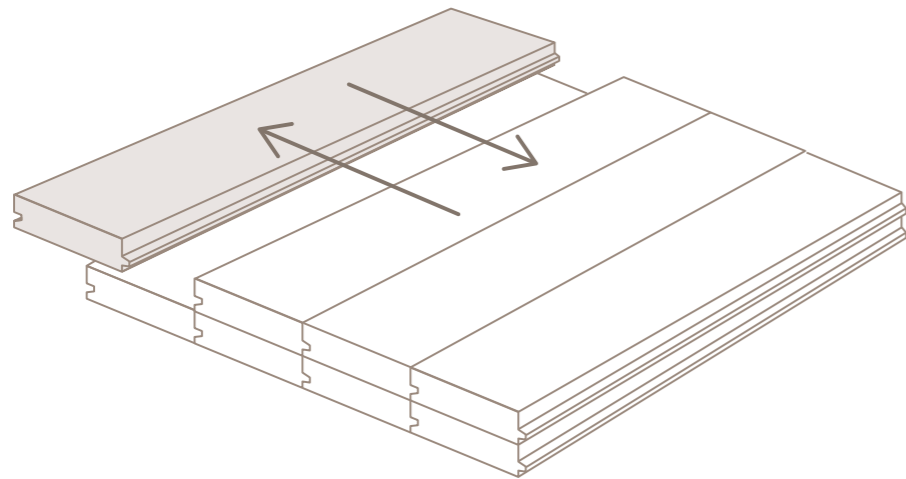
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Storage and Handling

- Store ACRE Porch Boards horizontally, fully supported on a flat surface
- Do not place ACRE Porch Boards directly on a surface that can develop excessive heat
- Store in a cool, dry place
- We recommend storing with pallet covers to keep it clean and protected
- ACRE Porch Boards are packaged interlocked. Pull boards across the row and not straight down
- Acclimate ACRE to the temperature it will be installed at for at least two hours before processing. During installation, keep ACRE at a consistent temperature



Safety

- Wear safety glasses and appropriate personal protective equipment (PPE) for job site conditions
- Follow proper safety practices for using all power tools and any job site equipment



Getting Started

TOOLS YOU WILL NEED



Circular Saw



Tape Measure



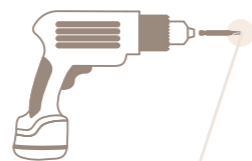
Outdoor rated,
Minimum #7 x 2-1/4 in,
trim head, 305 stainless
steel screw



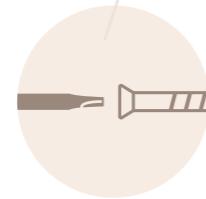
Safety Glasses



Fascia Installation



Cordless drill
with appropriate
fastening bits

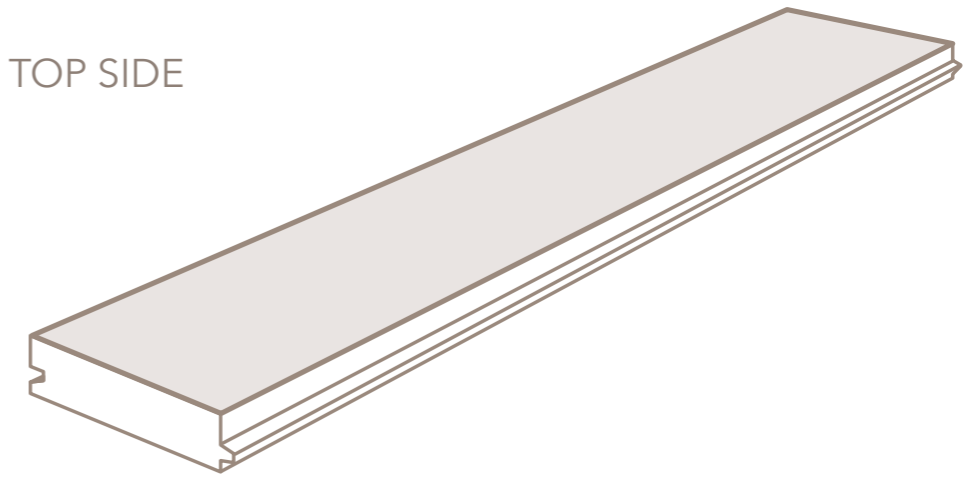


ACRE Fascia is a non-structural covering for rim joists, risers, and stringers. Install screws at a maximum 12 inch (304.8 mm) apart, having at least three screws across the face at each interval. Fasteners utilized should be long enough to penetrate the solid substrate a minimum of 1 1/2". We recommend using stainless steel screws or exterior ring shank nails. Fascia should always be installed UNDER Porch Board edges / ends.

ACRE Porch Board

- ACRE Porch Board is a 1 sided product. Porch Boards are to be installed with the chamfer side up for more grip using fasteners.

TOP SIDE



- Porch boards can be stained, painted, or left natural.

ACRE products require coatings with an LRV value 55 or greater. LRV 55 on ACRE yields an HBU of <60°F on a horizontal surface. Note that there are different HBU measurements for horizontal [Figure 2] and vertical [Figure 3] surfaces.

See our Coatings Guide on [modern-mill.com](https://www.modern-mill.com) for more information.

Porch Board Dimensions

ACTUAL

15/16" x 3-5/16" x 10'

15/16" x 3-5/16" x 12'

15/16" x 3-5/16" x 16'



Installation Preparation

JOIST LOCATION

- Prior to installation. Be sure that all joists are level and structurally sound. Ensure that there are no nails or screws protruding.
- Proper joist spacing is required. Joist spacing must not exceed 16" on center.
- We recommended 12" on center joist spacing for maximum rigid feel
- Do not exceed 12" joist spacing when installing any diagonal pattern.
- As joists are installed, run a string line to ensure that the tops of the joists are in plane, as ACRE Porch Boards will conform to the contour of the joists to which it is attached. It may be necessary to shim or plane joists, due to size variations in lumber. Be sure to sort and exclude any extremely crowned joists or lumber material.
- Install solid wood blocking between each joist, placed in rows at maximum every 4' to 6' within the structure using exterior grade screws.

STAIRS

- ACRE Porch Boards may be used for stair treads.
- Install stair stringers at a maximum of 8" on center

DRAINAGE

- ACRE Porch Boards are designed to be tightly butted together. Ensure proper slope for water drainage.

Expansion and Contraction

- ACRE Porch Boards undergo a degree of linear expansion with changes in weather or seasons. Expansion and contraction is most significant where extreme temperatures may exist.
- Fasten Porch Boards as soon after cutting as possible to minimize expansion and contraction.
- Whenever possible, use shorter lengths as splitter / divider boards in continuous runs of boards.
- For best results, keep porch boards as cool as possible during attachment. IF attaching during high heat, larger gapping should be expected. See chart below.
- Securely fasten board ends, splices and abutments directly into framing using two screws. Position the screws at or within 1/2" of each board end or joint and 3/4" from the side of the porch board.
- Framing/sub-structure must be securely attached to ground footings or building structure.
- No floating substructures should be used in any application with ACRE Porch Boards

For end-to-end joints (butt joints) use the following guidelines for installing at various temperatures:

35 Degrees (F) and under	1/16 inch / 1.6 mm
36-89 Degrees (F)	1/32 inch / 0.8 mm
90 Degrees (F) and above	0 inches / 0 mm

Painting, Staining or Finishing ACRE products.

Pro tip: Apply stains or clear coats on the ground before installation.

Coat ACRE with manufacturer recommended water-based paints, stains or sealers.

If you choose to paint ACRE, use a coating with a Light Reflective Value (LRV) above 55%.

Pay close attention to our approved coatings for darker colors.



Follow this QR code to read our Technical Bulletin on coatings and heat using ACRE.

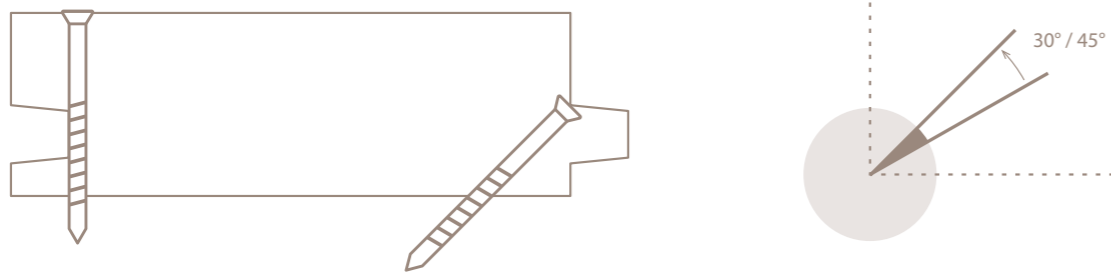
Installation

To have fasteners last as long as ACRE Porch Boards, use a high-quality fastener that meets the following specifications:

- Stainless Steel; alternatively, exterior galvanized fasteners can be used
- Minimum Screw Size: #7
- Minimum Screw Length: 2"
- Be sure the screw that are driven into the tongue of the board and seat 1/16" into the surface above the tongue to allow complete insertion of the next board

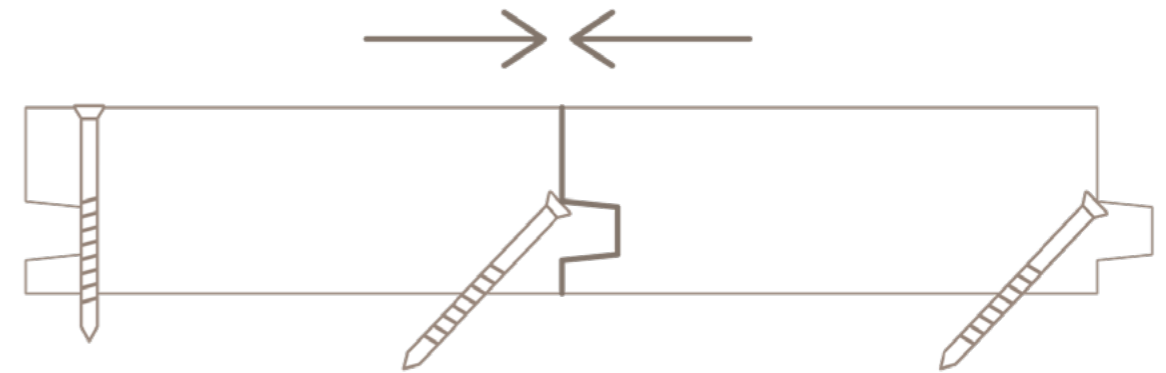
INSTALLING THE STARTING BOARD

- Install the starting board with the grooved edge against the house. If installing perpendicular to the house, install the starting board at the outside edge of the porch.
- Attach the starter board by installing fasteners down through the board at the edge nearest to the groove.
- Then attach to each joist by driving a fastener in a 30° to 45° angle as shown in the diagram



INSTALLING THE REMAINING BOARDS

- Install the next board by inserting the grooved edge over the exposed tongue on the starting board installed in the previous step.
- Ensure that the board is fully inserted and boards are tightly joined together.
- After the board is completely seated, drive fasteners into each joist by driving a fastener in a 30° to 45° as shown in the previous step.
- Ensure the board is tight to the joist to mitigate any irregularities in the porch installation.
- Continue to add boards until the outer edge of the porch is reached.
- Ripping off the tongue may be required for the end piece. Use a table saw or circular saw as needed.
- Attach the last board by face fastening through the top or toe fasten along the outer edge.



Care and Cleaning

- For easier care and cleaning, we recommend coating your ACRE Porch Boards with an exterior grade water soluble paint or stain and protective coating. See coatings guide for more detail.
- Avoid the use of rubber-backed mats, tarps, or landscape items.
- Be mindful of products which contain chemicals that may alter the appearance of ACRE Porch Boards.
- To clean ACRE products use a gentle all-purpose cleaner such as Simple Green® with a natural all fiber brush.
- Follow manufacturer instructions on all cleaning products. Test first on an inconspicuous area of the porch to ensure the surface remains undisturbed.
- Do not use traditional composite deck cleaners. ACRE is made from natural fibers and PVC / polymers. Use gentle cleaning products as recommended.
- As with any walking surface take caution in icy or wet weather conditions.
- For ice removal, most products containing calcium chloride can be used without damage to the deck / porch surface. These products may leave a white residue which can be cleaned using the cleaning guidelines above.
- Metal shovels or plastic shovels with a metal edge may damage the surface of your ACRE Porch and are not recommended for clearing snow or ice from the porch surface.
- To remove rust stains, use household cleaners such as Krud Kutter.



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one tree-free board at a time.

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