



FINISH YOUR PROJECTS IN LASTING BEAUTY

ACRE™ Trim Board and Dimensional Lumber
Installation Guide

ACRE™ BY MODERN·MILL



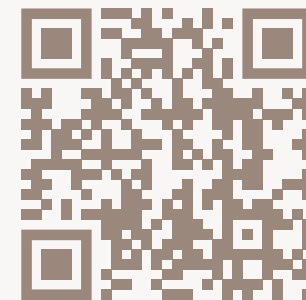
A new alternative to wood is finally here. ACRE is a sustainable, durable alternative with the look and feel of real wood. ACRE is a brand-new material that's lightweight, strong and water-resistant, guaranteed not to rot, crack or splinter. ACRE is easy to cut and accepts paint or stain.

Best of all, ACRE is made without harming a single tree, in a zero-waste environment in Fernwood, Mississippi.

MAKE ACRE YOUR FINISHING TOUCH.

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Be sure to visit our online **Tech & Training** center for informative technical videos and downloads.

www.modern-mill.com/tech_and_training



The team at Modern Mill is here to help.

For additional assistance please email us at zen@modern-mill.com or call us at (601) 869-5050.

Storage and Handling

Store ACRE trim horizontally, fully supported on a flat surface

Never place ACRE trim directly on a surface that can develop excessive heat

Store in a cool, dry place to avoid extreme heat

If kept outside, we recommend storing with undamaged pallet covers to keep it clean and protected



Safety Cautions

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

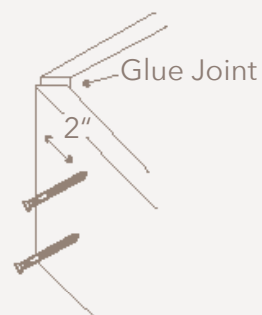


Fastening, Expansion & Contraction

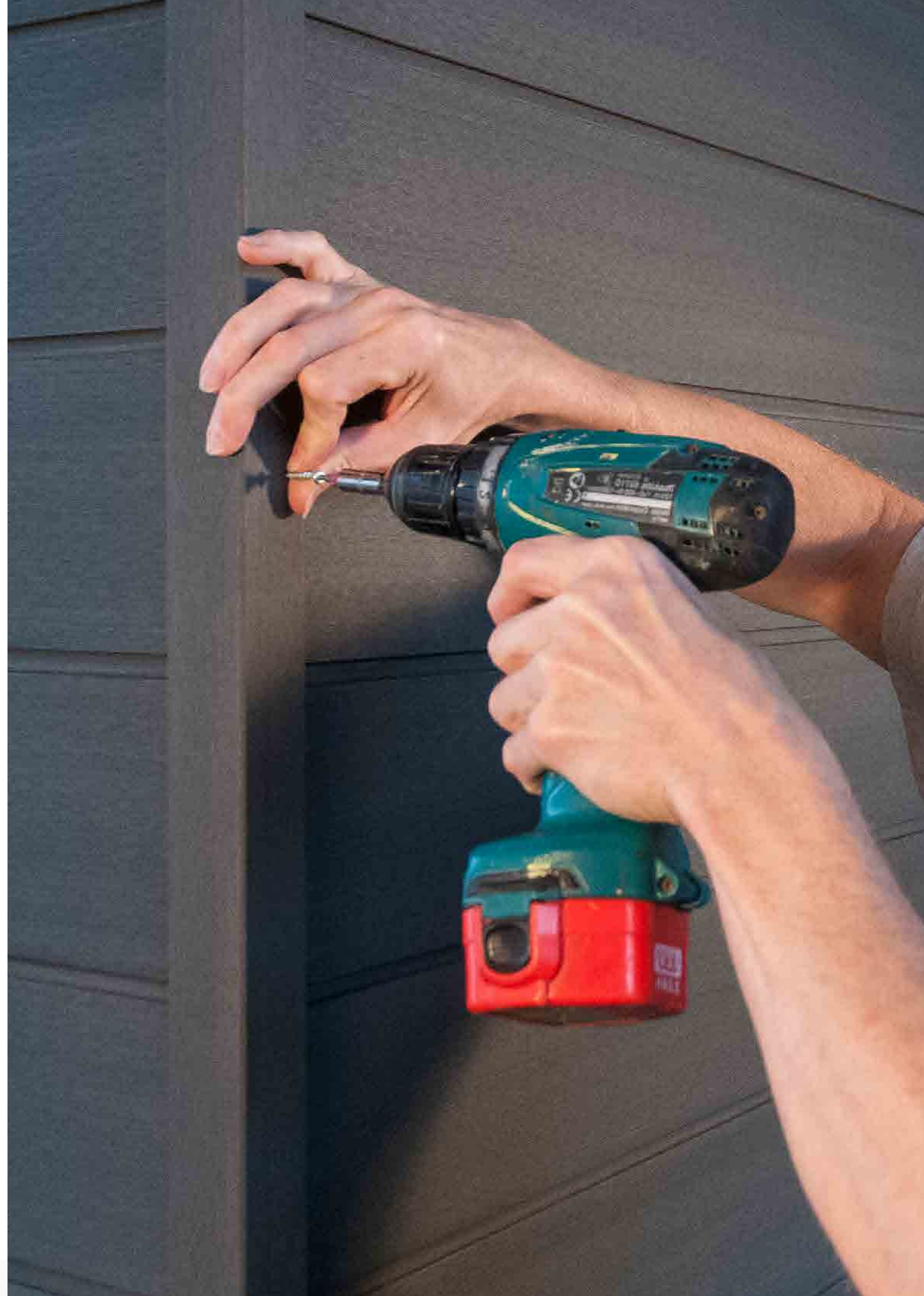
FASTENING

- Standard wood working tools (saws, router bits, drills, etc.) are compatible with ACRE trim
- ACRE accepts screws and nails easily with a flush finish. We recommend using fasteners that are weather-resistant such as stainless steel or hot-dipped galvanized
- Use screws or nails designed for trim applications
- Staples, small brads and wire nails cannot be used
- Fasteners utilized should be long enough to penetrate the solid substrate a minimum of 1 ½"
- All fasteners must hit a solid framing member
- Similar to wood, use two fasteners per every framing member of trim board applications
- Number of fasteners is dependent on-board length. Please see chart below for recommendations:

TRIM BOARD FASTENING SCHEDULE	
BOARD WIDTH	FASTENERS/WIDTH 16" O.C. MAX.
4" - 6"	2
8" - 10"	3
12"	4



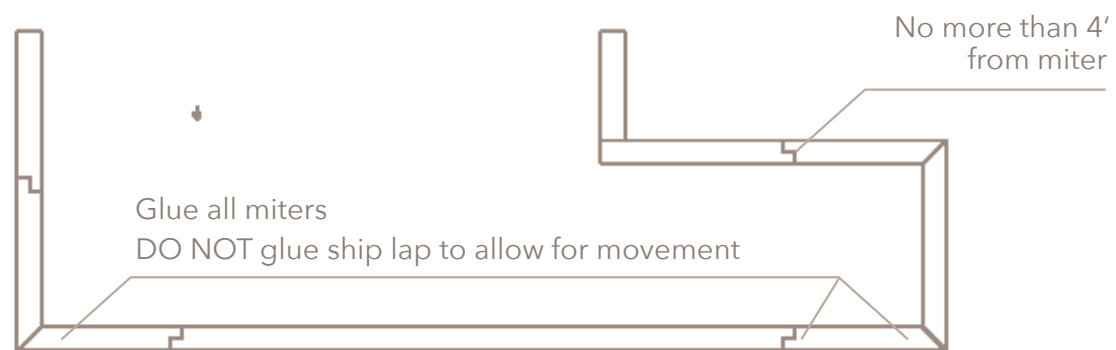
- Fasteners must be installed no less than 3/8" or more than 2" from edge of board
- There must be two fasteners on each side of board joint (scarf, miter, etc.)
- Pneumatic nail guns can be used. Air pressure should be adjusted based upon gun, temperature, substrate, etc.



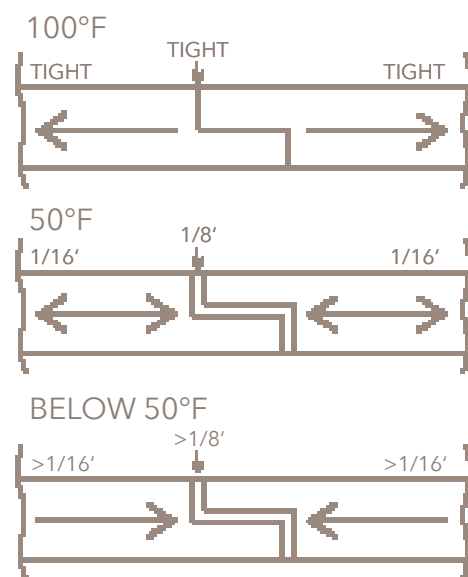
Painting & Adhesives

EXPANSION & CONTRACTION

- Properly fastening ACRE Trim Boards & Dimensional Lumber according to guidelines above will minimize expansion and contraction
- When properly fastened, allow 1/8" per 18 feet of ACRE Trim Boards & Dimensional Lumber for expansion and contraction
- When gaps and / or joints are glued on long runs of Trim Boards & Dimensional Lumber, allow expansion/contraction at the end of the run
- When joining boards in areas such as under eaves on fascia, a shiplap joint is recommended with exception of corners (a mitered corner will give the best appearance)
- We recommend all miter joints be glued with appropriate adhesive. Do not glue ship lap to allow for movement



- Expansion and contraction may be an issue on longer "runs" (rake, fascia, frieze) comprised of three or more 18' boards. Short lengths (around windows for example) can and should be built with tight joints.
- Based on temperature at time of installation (see chart below) create a gap between boards and follow fastening guidelines as outlined above.



- We recommend an exterior grade water soluble paint or stain as a protective coating to resist fading and for easier cleaning. Choose a product with an LRV value of 55 or greater or see our Coatings Guide for approved darker colors.
- Applying a finish on site can enhance the look of the product to compliment the exterior cladding and provide easier maintenance by making cleaning easier
- ACRE can be finished with water-based oils, stains and paints. Choose finishes based on application and environmental needs
- Edge treatment is not necessary. Exposed edges can be finished to provide a seamless appearance
- ACRE can be bonded with a variety of different adhesives for example PVC cement or adhesives designed to work with PVC. Modern Mill uses Oatey PVC cement on our Fernwood Adirondack chair <https://www.oatey.com/products/cements-primerscleaners/cements>
- The glue joint should be fastened on each side of the joint to allow adequate bonding time
- For best results, surfaces to be glued should be smooth, clean and in complete contact with each other
- To bond ACRE trim to other substrates, various adhesives may be used. Consult adhesive manufacturer to determine compatibility.





Thermoforming

- With application of heat, you can bend, mold and manually shape ACRE trim
- Be sure to test a small amount before full application
- Radius will depend on board thickness. If the radius is too tight, the surface may tear
- Allow sufficient time for heating
- Sufficient heating (approx. 1-1.5 minutes per mm board thickness)
- Temperature approx. 250oF
- Hold (lock) - time at temperature approx. 3-4 minutes
- Cooling down, approx. 1-1.5 minutes per mm thickness
- ACRE can be thermoformed using a vacuum press
- Heat blankets, convection ovens, radiant ovens, heaters, or heat guns may also be used
- A mold may be required or helpful for deep shapes
- Modern Mill assumes no liability, for any harm or damage to persons, product, or property related to thermoforming

Care & Cleaning

- We recommend an exterior grade water soluble paint or stain as a protective coating to resist fading and for easier cleaning
- ACRE is resistant to mildew, fungi and pests
- For regular maintenance and cleaning, a hose or power washer may be used to remove any dirt or debris
- If using a power washer, we do not recommend high pressure washing
- Make sure to test the setting for the power washer to ensure it will not damage the surface of the trim
- We recommend using a wide fan tip and standing at least 6' away
- Do not use any acids or harsh chemicals to clean ACRE trim

Repair & Patching

- If ACRE trim is ever damaged, it can be repaired as you would patch or repair wood
- Standard wood filler or putty can be used to patch any gouges or voids
- Sand the wood filler once cured and re-finish the area being repaired

Frequently Asked Questions

DO I NEED TO PAINT/FINISH ACRE TRIM?

ACRE trim can be used in its natural state, unfinished as the properties of the material are water-resistant and resistant to rot, mildew, mold, and termites. The option to finish the material provides additional design options to match adjacent cladding, as well as provide improved stain resistance and make cleaning easier.

IF I DECIDE TO PAINT OR STAIN ACRE TRIM, WHAT ARE THE REQUIREMENTS?

You can finish ACRE with any water-based paint, stain, or sealer. If you choose to paint make sure the coating has a Light Reflective Value (LRV) above 55% or see our website for approved coatings for darker colors and technical assistance.

HOW DO YOU CLEAN/MAINTAIN ACRE TRIM?

ACRE trim can be cleaned using water and/or a mild detergent. If using a pressure washer, we recommend using a wide fan tip and standing a minimum of six feet away. Do not utilize a high pressure setting.

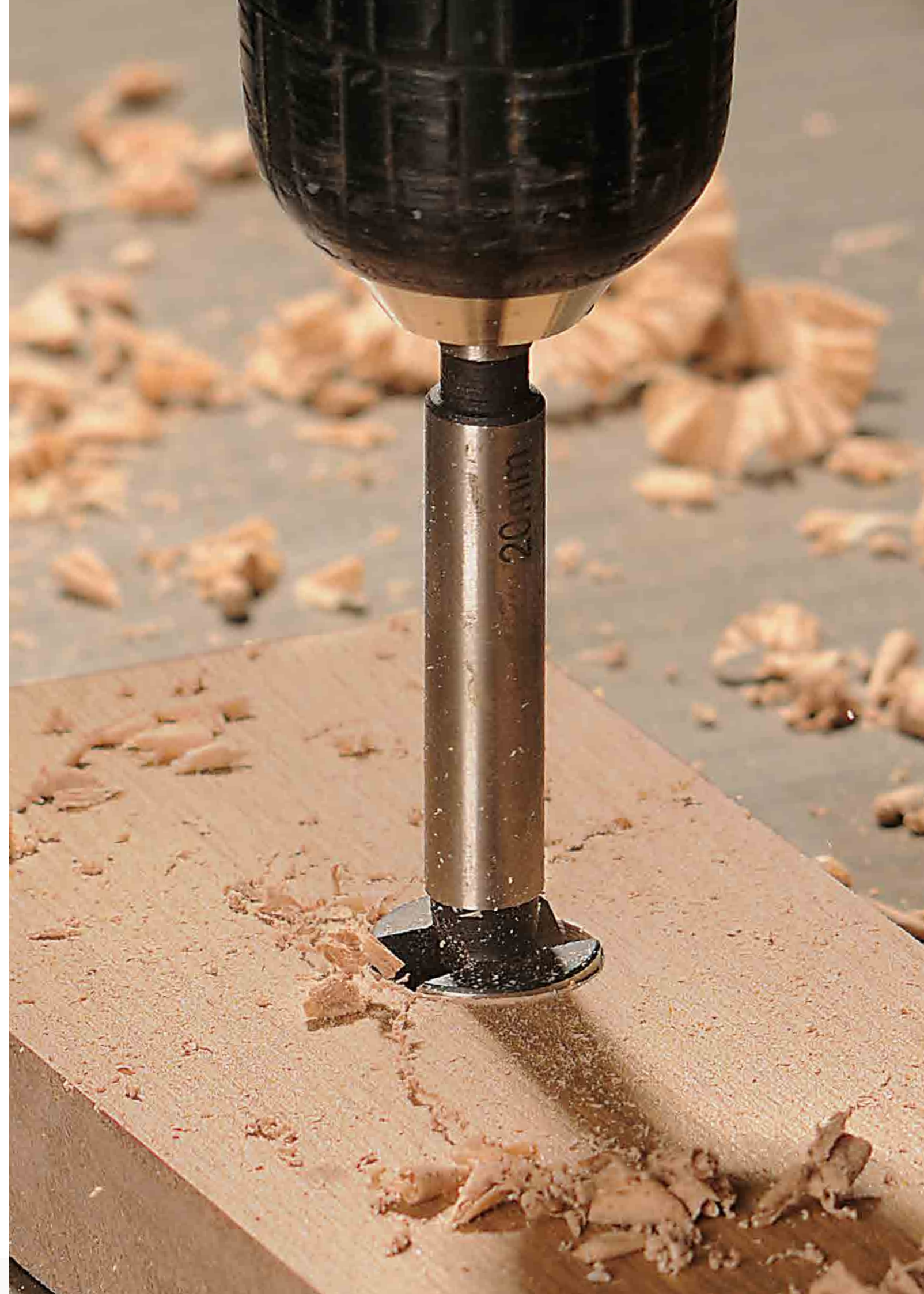
CAN ACRE TRIM BE USED IN STRUCTURAL APPLICATIONS?

ACRE trim should never be used in structural applications. Fasteners utilized should be long enough to penetrate the solid wood substrate a minimum of 1 ½"



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It's better building,
one tree-free board at a time.

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