



ACRE™ BY MODERN·MILL

A WORLD BEYOND WOOD

SIDING

TRIM BOARDS

DECKING

SHEETS

MILLWORK

PRODUCT GUIDE





VERTICAL SIDING & CHAIRS
Austin, TX

PRODUCTS USED:
ACRE Sheets, ACRE Adirondack Chairs

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BUILD BETTER WITH ACRE

Modern Mill is leading the way toward a more sustainable future, one tree-free board at a time. Our award-winning building material, ACRE, is the ideal alternative to wood for countless exterior and interior applications. It's beautiful, easy to work with, easy to care for and better for the environment. ACRE is strong, water-resistant and guaranteed not to rot or splinter. ACRE is a sustainable choice that doesn't sacrifice performance.

RESPONSIBLE, SUSTAINABLE AND LOCAL

We use discarded rice hulls that would otherwise go to landfills, and we embrace a zero-waste manufacturing process. ACRE products are free of phenolic plasticizers such as bisphenol A, formaldehyde, and adhesives. ACRE is 100% recyclable and can be used to form new products at our manufacturing facility in Mississippi, USA.



CEILING PANELS
Miami, FL

PRODUCTS USED:
ACRE Trim Boards

Features and Benefits of ACRE

WORKS LIKE WOOD - BUT BETTER!

Paintable and stainable. No primer necessary

Easy to route, cut and sand in the field with regular wood working tools

Easy on tools. Minimal melting or static-charged dust

No harmful dust or residue

Pre-drilling not required. Screws and nails will not mushroom

Uniform texture throughout and finish-ready, no need to seal or treat ends or cut edges

NATURAL BEAUTY

Genuine warm look and feel of wood

Natural-looking grain

Endless finish options with water-based paints or stains. See Coatings Guide for important information

Thermoform for folded corners, curves and creative shapes

Digitally print directly on ACRE's surface



UNMATCHED DURABILITY

100% resistant to water, weather, rot and pests - even termites!

Guaranteed not to splinter or rot

Smooth screw application close to edges, and into sides without splitting

Suitable for ground and water contact

Sturdy, resists breakage and job site damage

Debris from cutting will fall and brush off surfaces and clothing (less static cling than traditional PVC)

Easy on tools when routing, cutting and screwing

Strong screw and nail retention. Superior bond with a wide range of glues and construction adhesives

No special maintenance or cleaning methods needed

Virtually no moisture absorption so paint lasts longer than on wood

Less expansion and contraction than competitive PVC products

Lightweight, yet strong and straight

Be sure to consult installation guides and reference materials before working with ACRE products.

ACRE Siding



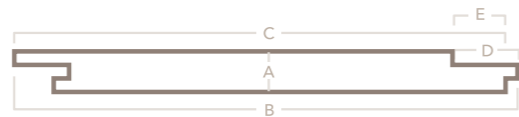
Wrap your home in the eco-friendly beauty and durability of ACRE Siding.

SIDING PRODUCTS

- Shiplap Siding
- Board and Batten Siding

Shiplap Siding

SHIPLAP SIDING PROFILE DETAILS



Nominal Size	Actual Thickness (A)	Actual Width (B)	Reveal (C)	Tongue (D)	Gap (E)	Lengths
1"x6"	3/4"	5-7/16"	4-1/2"	1-3/16"	1/4"	12', 16', 20'
1"x8"	3/4"	7-3/16"	6-1/4"	1-3/16"	1/4"	12', 16', 20'
1"x10"	3/4"	9-3/16"	8-1/4"	1-3/16"	1/4"	12', 16', 20'

- Locking tongue and groove application for a flat and straight install
- Allows for blind fastening with no need for filling holes or extra finishing steps
- Match the finish on your shiplap siding with complementary ACRE trim, decking and porch boards

Board & Batten Siding

BOARD & BATTEN RECOMMENDATIONS

Board Options 1/2" or 3/4" thickness | Sanded or Embossed

Batten Options 1" x 2", 1" x 3", 5/4" x 2", or 5/4" x 3"

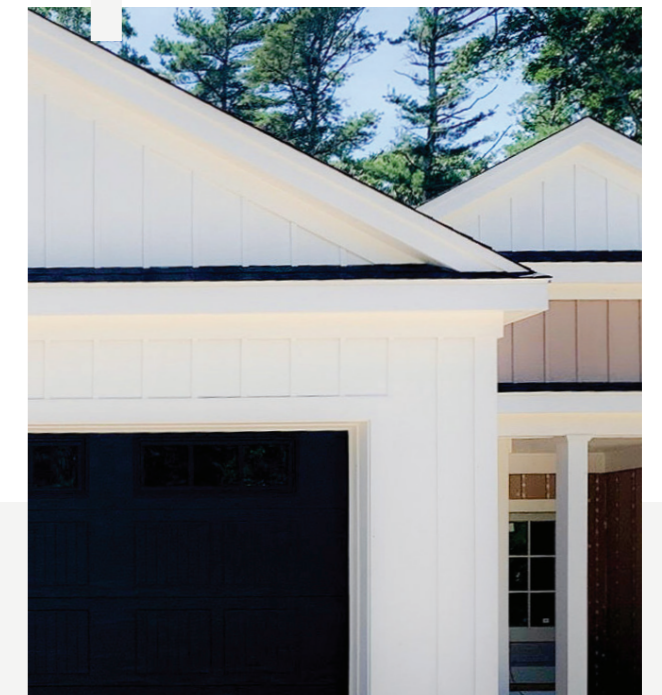
VERTICAL SIDING
Austin, TX

PRODUCTS USED:
ACRE Sheets



BOARD AND BATTEN SIDING
Massachusetts

PRODUCTS USED:
ACRE Sheets, ACRE Trim Boards

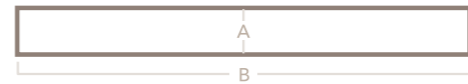


Learn more
at modern-mill.com

ACRE Trim Boards



ACRE Trim Boards add a final, beautiful touch to your projects and are a perfect material for gorgeous designs like fencing!



TRIM BOARDS PROFILE DETAILS

Product Name	Nominal Size	Actual Thickness (A)	Actual Width (B)	Lengths
ACRE 5/8" Trim	5/8" x 3",4",5",6",8",10",12",16"	0.625"	2.5", 3.5", 4.5", 5.5", 7.25", 9.25", 11.25", 15.25"	8' to 20'
ACRE 1" Trim	1" x 3",4",5",6",8",10",12",16"	0.75"	2.5", 3.5", 4.5", 5.5", 7.25", 9.25", 11.25", 15.25"	8' to 20'
ACRE 5/4" Trim	5/4" x 3",4",5",6",8",10",12",16"	15/16"	2.5", 3.5", 4.5", 5.5", 7.25", 9.25", 11.25", 15.25"	8' to 20"



Learn more
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FENCING
Hammond, LA

PRODUCTS USED:
ACRE Trim Boards

Siding and Trim Boards Comparison

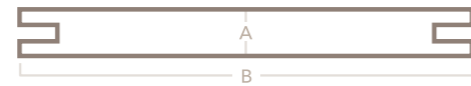
PRODUCT	WOOD	POLY-ASH	FIBER CEMENT	ENGINEERED WOOD	ACRE
Strengths	<ul style="list-style-type: none"> Natural beauty Easy to work with Biodegradable 	<ul style="list-style-type: none"> Upcycles materials Paintable Moldable and millable Durable and resistant to water, weather, pests and fire 	<ul style="list-style-type: none"> Easy to clean Durable and resistant to water, weather, pests and fire Paintable Upcycles materials 	<ul style="list-style-type: none"> Easy to clean Durable and resistant to water, weather and pests Paintable Easy to work with Upcycles waste materials 	<ul style="list-style-type: none"> Warmth and beauty of real wood Low-maintenance Durable and resistant to water, weather, pests, including termites Thermoplastic formability Infinite finishing options, including staining and painting Lightweight and easy to work with - standard woodworking tools Upcycles waste materials Industry-leading warranty Made in USA, zero-waste manufacturing
Challenges	<ul style="list-style-type: none"> High-maintenance Can be expensive Susceptible to water, weather, pests and fire Sustainable sourcing can be challenging 	<ul style="list-style-type: none"> Heavy and fragile Susceptible to denting Can create dangerous dust - requires working outside or respiratory protection Tough on tools Limited warranty 	<ul style="list-style-type: none"> Needs repainting and end treatment No ground contact Requires special tools Heavy and fragile Maximum length of 12' panels Can create harmful dust that causes silicosis 	<ul style="list-style-type: none"> Requires paint and repainting Cannot miter Cut edges susceptible to water Heavy Wood fibers make it more susceptible to moisture and fire No ground contact 	<ul style="list-style-type: none"> New building material, requires education
Aesthetics	***	*	*	**	***
Durability	*	**	*	*	***
Maintenance	*	**	**	*	***

ACRE Decking



Experience the beauty and comfort of a wood deck combined with the unmatched sustainability and durability of ACRE Decking.

DECKING PROFILE DETAILS



Product Name	Nominal Size	Actual Thickness (A)	Actual Width (B)	Lengths
ACRE Grooved-Edge Decking	5/4" x 6"	15/16"	5.5"	8' to 20'
ACRE Square-Edge Decking	5/4" x 6"	15/16"	5.5"	8' to 20'

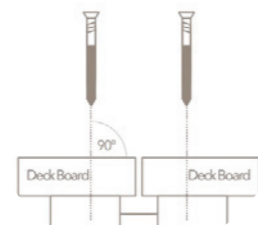
- Choose from our Embossed or Sanded profiles
- ACRE Decking comes in both grooved-edge and square-edge profiles to fit your installation preference

INSTALLATION

Face fasten with our square edge profile.

Or use our recommended fastening systems on our grooved edged profiles.

- CAMO Fasteners EdgeClip
- EdgeXClip (for diagonal pattern installations)

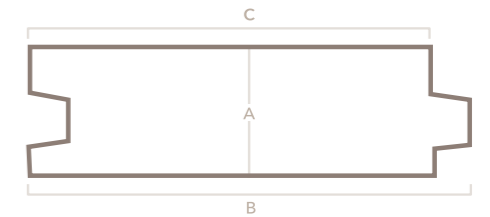


ACRE Porch Boards



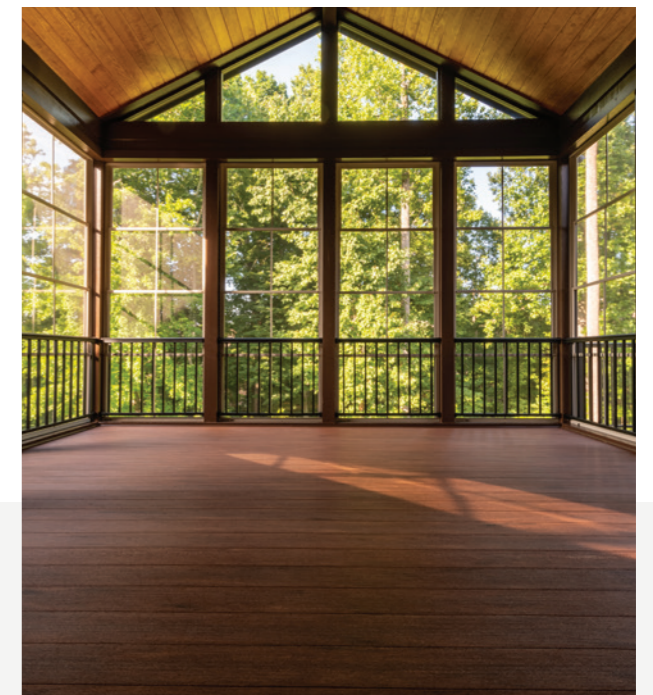
ACRE porch boards come in a classic sanded-smooth profile with a tight tongue-and-groove system for minimal gapping between boards.

PORCH BOARD PROFILE DETAILS



Actual Thickness (A)	Actual Width (B)	Reveal (C)	Lengths
15/16"	3-5/16"	3"	10', 12' and 16'

- Locking tongue and groove application for a flat and straight install



Learn more
at modern-mill.com

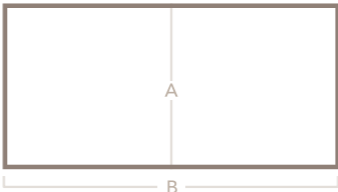
Decking Comparison

PRODUCT	WOOD	POLY-ASH	COMPOSITES	ACRE
Strengths	<ul style="list-style-type: none"> Natural, stainable beauty Pleasant feel underfoot Easy to work with Affordable cost upfront Biodegradable 	<ul style="list-style-type: none"> Low-maintenance Resistant to weather and rot Upcycles waste materials 	<ul style="list-style-type: none"> Low-maintenance Resists water, weather, fire and rot Upcycles waste materials Lighter weight Can be shaped 	<ul style="list-style-type: none"> Warmth and beauty of real wood Low-maintenance Durable and resistant to water, weather, pests, including termites Barefoot-friendly even in the sun Slip-resistant Thermoplastic formability Stain or paint without primer Lightweight and easy to work with Upcycles waste materials Industry-leading warranty Made in USA, zero-waste manufacturing
Challenges	<ul style="list-style-type: none"> High-maintenance Exotic woods are expensive Susceptible to water, weather, pests and fire Can split, crack, gray and decay Can be slippery when wet Sustainable sourcing is challenging 	<ul style="list-style-type: none"> Looks and feels synthetic Cannot be stained Uncapped edges absorb water Very hot in the sun Heavy Susceptible to fading, graying, stains and scratches 	<ul style="list-style-type: none"> Looks and feels synthetic Cannot be stained Requires special tools Susceptible to fading 	<ul style="list-style-type: none"> New building material, requires education
Aesthetics	***	**	**	***
Durability	*	***	***	***
Maintenance	*	***	***	***

ACRE Sheet Goods



Suited for a wide range of applications, ACRE sheet goods are the perfect medium for executing your ideas. This revolutionary material can be cut, curved, shaped and molded to fit countless applications, both exterior and interior.



SHEET GOODS PROFILE DETAILS

Product Name	Thickness (A)	Width (B)	Lengths
ACRE 1/4" Sheet Good	1/4"	4'	8' to 20'
ACRE 3/8" Sheet Good	3/8"	4'	8' to 20'
ACRE 1/2" Sheet Good	1/2"	4'	8' to 20"
ACRE 5/8" Sheet Good	5/8"	4'	8' to 20'
ACRE 3/4" Sheet Good	3/4"	4'	8' to 20'
ACRE 1" Sheet Good	1"	4'	8' to 20"

**ACRE Sheet Goods are available sanded on both sides or embossed on one side



If your project requires a more lightweight option, ask your Modern Mill representative about our ACRE FLEX™ product line.

Event Build

THE HEINEKEN® GREENER BAR AT FORMULA 1
Miami, FL

Sheet Goods Comparison

PRODUCT	HIGH DENSITY POLYETHYLENE (HDPE)	PVC	TRADITIONAL COMPOSITES	ACRE
Strengths	<ul style="list-style-type: none"> Low-maintenance, Long lasting Resists corrosion High strength Durable and resistant to water, weather and pests 	<ul style="list-style-type: none"> Low-maintenance Durable and resistant to water, weather and pests Resists water, weather, fire and rot Thermoplastic formability Lighter weight (if foamed) Can be shaped, molded and milled 	<ul style="list-style-type: none"> Paintable Easy to work with Upcycles waste materials High Strength 	<ul style="list-style-type: none"> Warmth and beauty of real wood Low-maintenance Durable and resistant to water, weather, pests, including termites Thermoplastic formability Stain or paint without primer Upcycles waste materials Industry-leading warranty Made in USA, zero-waste manufacturing
Challenges	<ul style="list-style-type: none"> Heavy Expensive Sensitive to stress cracking High coefficient of thermal expansion Difficult to bond Looks and feels synthetic Inventory position with colors 	<ul style="list-style-type: none"> Looks and feels synthetic Cannot be stained Susceptible to fading Inventory position with colors 	<ul style="list-style-type: none"> Requires maintenance Cut edges susceptible to water Cannot be stained Wood fibers make it more susceptible to fire and moisture 	<ul style="list-style-type: none"> New building material, requires education
Aesthetics	★	★★	★★	★★★★
Durability	★★	★★	★	★★★★
Maintenance	★★★	★★	★	★★★★

If your project requires a more lightweight option, ask your Modern Mill representative about our ACREFLEX™ product line.

SERVICES AVAILABLE TO YOU



PRODUCT

We offer technical support and product training including Lunch & Learns, product demonstrations, training and support for customer events.



MARKETING

Modern Mill supports your business with sales enablement tools including:

- Digital marketing and social media support
- Point-of-purchase and merchandising
- Samples
- Custom marketing requests



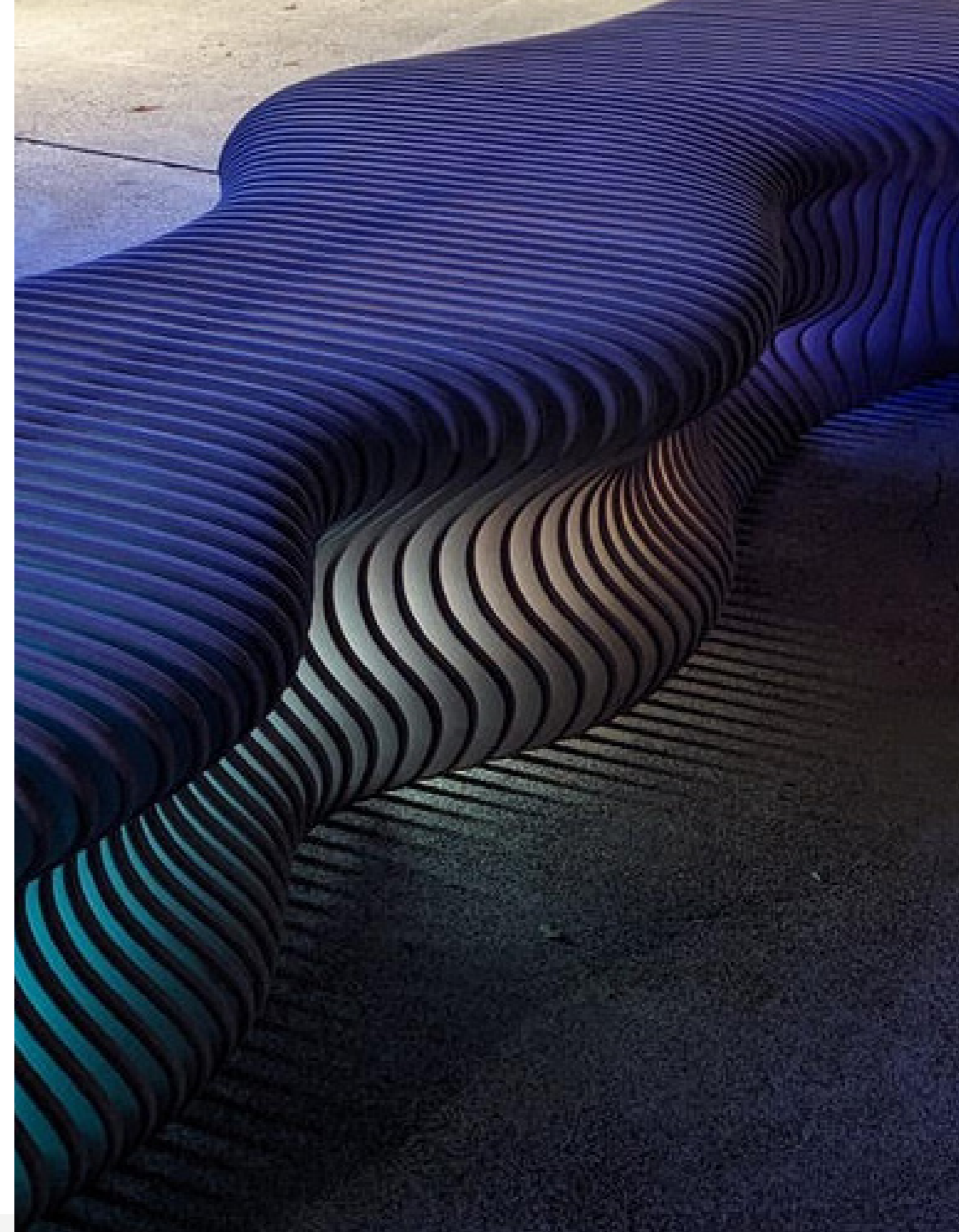
SALES

- Steady and reliable production
- Support for customer presentations and meetings
- Lead generation
- Market and trend analysis to optimize overall sales strategy



SERVICE

We offer exceptional customer service experiences ensuring you have the information and support you and your customers need. Count on regular engagement with Modern Mill's Leadership team.



Furniture /
Event Build

LUMINOUS WAVEFORMS BY PHIL SPITLER
Northern, CA

PRODUCTS USED:
ACRE Sheets

Product Expectations

Installation Guides

ACRE contains PVC. It's important to familiarize yourself with its spacing requirements, coatings and all installation guidelines. This will ensure ACRE products perform as designed and to expectations.

- [Trim Boards](#) - [Decking](#)
- [Shiplap Siding](#) - [Porch Boards](#)
- [Board & Batten](#) - [Coatings Guide](#)

Coating & Finishing

Be sure to follow ACRE's [Coatings Guide](#) before painting or staining ACRE. This is a critical and important step, especially with outdoor applications for ACRE to perform as expected and avoid heat build up, gapping, warping or other issues.

ACRE products generally will not gray like natural woods in exterior applications. However, color may fade over time with increased UV exposure, therefore uv-resistant clear coat can help resist fading and make for easier cleaning and care.

Movement

ACRE has less movement than most synthetic and composite building materials. ACRE will expand and contract as environmental (temperature) conditions change. Refer to the proper product installation guide to ensure the best product performance to minimize expansion and contraction.

Heat Retention

ACRE products are generally cooler to the touch than most synthetic or traditional composites. Coatings will affect product performance, including heat retention, therefore it's important to read the [Coatings Guide](#) and use manufacturer approved coatings and finishes.

Fasteners

ACRE can be joined with commonly available fasteners. We do not recommend brad or finish nails. It is important to select the most appropriate fastener in accordance with the application. Be sure to follow the recommended fastening pattern and appropriate length exterior fastener solutions as described in [Installation Instructions](#).

Storing and Handling

We recommend keeping ACRE in a cool, dry spot. Please acclimate ACRE products prior to installation.

Adhesives

We recommend utilizing a PVC glue or cement, polyurethane glue or construction adhesives. We do not recommend wood glue.

Stains and Cleaning

ACRE products can be stained by certain foods, drinks, and chemicals. Clean up any stains or dirt as quickly as possible and keep areas clean from debris. Soap and water, or a product like Simple Green® can clean most stains. In some cases, light sanding may be required.

Surface Marring (Scuffs), Light Surface Damage

Like wood, ACRE might endure some dings, dents, or marring on the job. Most light surface damage can be removed by simply sanding ACRE lightly with 120 grit paper on a pole or block sander in the direction of the grain. If staining, we do not recommend the use of an orbital or palm sander as this can affect the ACRE grain structure.

Some dings and dents can even be removed by applying heat from a heat gun to the surface, but be careful not to burn the surface. If you do burn the surface, this can typically be resolved by lightly sanding with 120 grit sandpaper. Please note, less than 120 grit sandpaper may scratch the surface and affect the finish when stain is applied.

Environmental Impact

ACRE by Modern Mill is made from upcycled rice hulls in a zero-waste manufacturing facility in the U.S.A. ACRE is tree-free, and free of phenol, formaldehyde and adhesives. Contact us at zen@modern-mill.com to learn about options for recycling.

Warranty

ACRE products have a limited lifetime guarantee to be free from material defects that are a result of the manufacturing process, rotting or splintering as a direct result of the manufacturing process, or by normal use and service provided conditions described in all installation materials and technical guides are met. Visit our website to learn more: modern-mill.com/warranty

WE'RE HERE TO HELP

Be sure to visit our online [Tech & Training](#) center for informative technical videos and downloads.





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