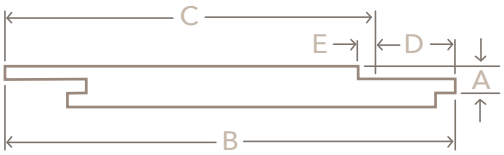
ACRE™ BY MODERN-MILL

SHIPLAP SIDING

ACRE Shiplap Siding is a sustainable, durable alternative with the genuine look and feel of real wood. ACRE is lightweight, strong, water-resistant and guaranteed not to rot or splinter.

ACRE is easy to cut, fasten without pre-drilling, rout, thermoform and accepts paint or stain without primer.

Best of all, ACRE is made without harming a single tree, in a zero-waste environment in the U.S.A. ACRE helps protect your home and our world.



SHIPLAP SIDING PROFILE DETAILS

Nominal Size	Actual	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

AESTHETIC

ACRE Grain 

Embossed 

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

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 crack
- 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

SUSTAINABLE INNOVATION

- Made in the U.S.A.
- 100% tree-free
- Upcycled natural fibers from discarded rice hulls, a rapidly renewable resource
- Free of phenol, formaldehyde and adhesives
- Zero-waste manufacturing
- 100% recyclable

FIRST TIME USING ACRE PRODUCTS?

Visit our website for important Tech & Training Resources including our Coatings Guide.

ACRE contains PVC and requires coatings with a light reflective value (LRV) of 55 or greater to avoid heat build up or changes to physical properties.

Consult with Modern Mill for more information.

EXTREME HEAT WARNING

Be aware of excess heat on ACRE surfaces such as but not limited to fire, direct or reflective sunlight, reflective sunlight from energy-efficient window products. Low-emissivity (Low-E) glass can harm ACRE products because Low-E glass products are designed to prevent passive heat gain within a structure and can cause unusual heat build up on exterior surfaces from sunlight reflection. The extreme rise of surface temperatures can create an environment which exceeds normal exposures and may create scenarios which can cause ACRE products to melt, sag, warp, discolor, expand and contract beyond acceptable tolerances or accelerate weathering.

MODERN·MILL

www.modern-mill.com
601-869-5050

2023.11

PRODUCT DETAILS

INTRODUCTION

The material here provides installation guidelines for the Urban Concrete® Panel System by Urban Concrete®. Urban Concrete®'s ultra-lightweight panel was inspired by the architectural need to provide an alternative to "cast in place" methods. The aesthetic, surface characteristics, and weight savings make our GFRC panels ideal for a wide variety of applications, providing a leading alternative for concrete design elements that are non-structural. Urban Concrete® Panel System features interior/exterior applications for commercial and residential purposes — benefiting the client with low maintenance, customizability, and easy installation of contemporary design panels. Create various design styles: panels can be cut and installed in any direction and pattern. The guidance and instructions in these documents generally apply to the Concrete® Panel System. They are not intended to replace the specifications and instructions supplied by a qualified Architect or Designer for your project. The Architect or Designer is responsible for using Urban Concrete® Panel System in compliance with local laws, building codes, and other requirements on moisture management, energy efficiency, or structural integrity.

IMPORTANT

Failure to follow Concrete® Panel System written installation instructions and comply with applicable building codes may violate local laws, affect building envelope performance, and may affect warranty coverage.

Failure to comply with all health and safety regulations when cutting and installing this product may result in personal injury. Before installation, confirm you are using the correct product instructions by visiting the website or calling 1-250-681-0913.

If you are a specifier or other responsible party for a project, ensure the information in these specifications is appropriate for the application you are planning and that you undertake the specific design and detailing for areas that fall outside the scope of these specifications.

MATERIAL

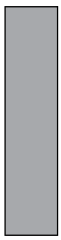
MATERIAL DESCRIPTION

What is GFRC panel?
GFRC panels are comprised of composite glass fiber concrete skin that is mechanically attached by flexible steel pins to a sturdy steel frame or wood structure.

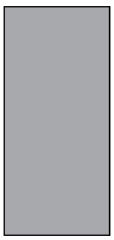
What is GFRC made of?
GFRC stands for Glass Fiber Reinforced Concrete. It is a composite comprised of Portland cement, fine aggregate, water, acrylic co-polymer, alkali resistant glass fiber reinforcement and additives.

- Interior or exterior application
- Weight 3.5lbs/sq ft
- Standard Thickness: 0.5in (1/16" – 3/16" tolerance)
- Noncombustible

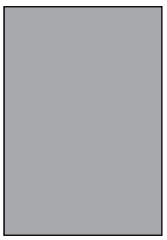
SIZES
12"X72"



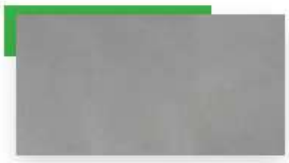
SIZES
24"X72"



SIZES
36"X72"



BOARD FORM
Combines the rustic grain and texture of natural wood telegraphed onto the surface of the concrete. The final result exhibits a recognizable wood grain finish resembling natural wood.



CLASSIC
The Classic finish delivers a clean, modern, smooth look to any surface.

MOUNTAINEER
The Mountaineer finish is a distinctively beautiful concrete surface that showcases porosity and patina you would find in naturally aged concrete.

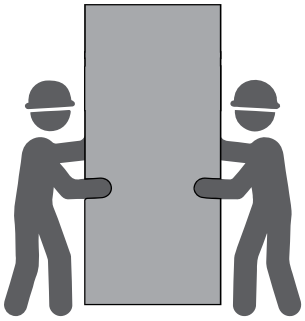
CABLE
An industrial look with imitation cone ties in each corner. The holes emulate the holes left behind after wooden forms and steel rod support were removed from conventional "cast-in-place."

CUSTOM
Customized veneers can be tailored to many sizes, shapes, textures, and colors to meet your specifications.

Premium panels are available in 3 colours.

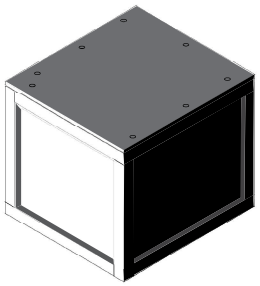
TRANSPORTATION AND STORAGE

TRANSPORTATION
Urban Panel weighs 3.5lbs./sq ft. A 3 ft x 6 ft panel weighs 63 lbs; we recommend that two people carry and install panel products. Workers should hold the panel near each end and along the edge (vertically). Carry panels on their side, not flat. Corners and edges are fragile before installation.



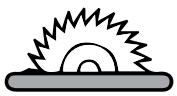
Panel should not be rolled-off or dumped-off of the truck or delivery vehicle during delivery to the job site. We recommend using a forklift to offload material or unloading by hand.

STORAGE
The panel should be stored flat and kept dry in its original packaging in a garage, shed, or in some other covered area protected from the weather whenever possible. Keep the product covered on a pallet off the ground; never store in direct contact with the ground. Panels should always be covered from moisture and rain. Water or moisture between stacked panels will cause etching or staining of the face of the panel. Panels must be kept dry and clear of any water/moisture.



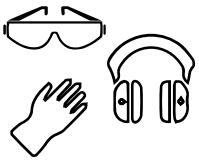
TOOLS AND EQUIPMENT

CUTTING TOOLS



CARBIDE BLADE FOR CONCRETE

PROTECTION TOOLS



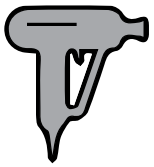
PPE REQUIRED TOOLS

FASTENERS

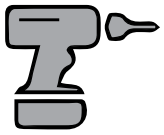
EXPOSED FASTENERS FOR WOOD
2" x 0.189"x 0.472"
10-12 SS, T20W Torx Pan Head #8 GRK or equivalent
FOR STEEL
1.25"X0.189" T20W Torx Panhead

COUNTERSUNK FASTENERS FOR WOOD
1 5/8" x 0.39"
316 SS, bulge head square drive
FOR STEEL
1 5/8" x 0.39" 410 SS, bulge head #2 square drive

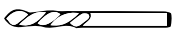
OTHER TOOLS



PNEUMATIC FINISH PIN NAILER
To Steel furring only



DRILL



DRILL BIT

T-20 TORX
For exposed fasteners

#2 SQUARE
For Countersunk fasteners

INSTALLATION PROCESS

WALLS AND CEILINGS

WALL PREPARATION
Structural attachment of furring, as the fastening substrate, is the design professional's responsibility. Design alternatives such as attachment to structural horizontal girts must maintain the minimum Urban Panel fastener schedule requirement. Before installing the panel, review and comply with all local building codes and regulations regarding wall construction.

Do not install siding over questionable wall construction. Irregularities in framing may become visible in the finished application. To minimize the effect of unevenness, shim the wall as necessary.

Structural Sheathing & Non-Structural Sheathing
Install pressure treated furring over plywood, OSB, or other approved rigid sheathing. Furring must be attached to structural framing to withstand all applicable loads.

Concrete Block (CMU) Walls
Follow local building codes for water-resistive barrier requirements. Attachment of furring direct to block requires suitable widths to accommodate joint and fastener locations. If shimming of furring cannot re-establish a suitable flat plane, then furring may be installed on horizontal girt secured to CMU.

Continuous Foam Insulation Sheathing
Where foam sheathing is used, furring must be secured to the framing structure and by design specifications to manage dead loads and traverse loads of the system.

CEILINGS
Space joists, rafters, and fasteners must be a maximum of 24" (600 mm) O.C. Fasten panels perpendicular to joists to ensure that stress is distributed crosswise.

CUTTING

CUTTING PANELS
Measure and cut panels square and plumb with a tolerance of (+/-)1/16 in
NEVER grind or cut with a power saw indoors. NEVER dry sweep dust; use wet dust suppression or vacuum to collect dust.

For best performance when cutting, use a circular saw with a continuous diamond concrete blade. When cutting panels, use a “track saw guide” to prevent the face of the panel from being scratched.

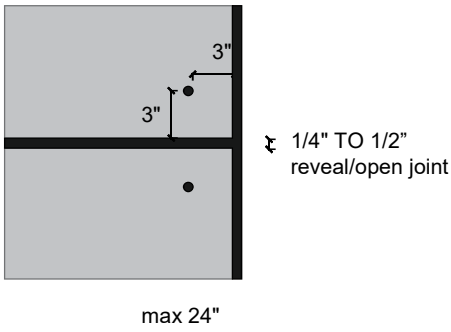
The pattern layout can be achieved using: a Snap ‘blue’ chalk line grid over panels, a peg board template, and T-square to make markings.

SILICA WARNING:
DANGER: inhaling dust from the product may cause cancer. Causes damage to the lungs and respiratory system through prolonged or repeated inhalation of dust from the product. Refer to the current product Safety Data Sheet before use.

ATTACHMENT TECHNIQUES

EXPOSED FASTENING

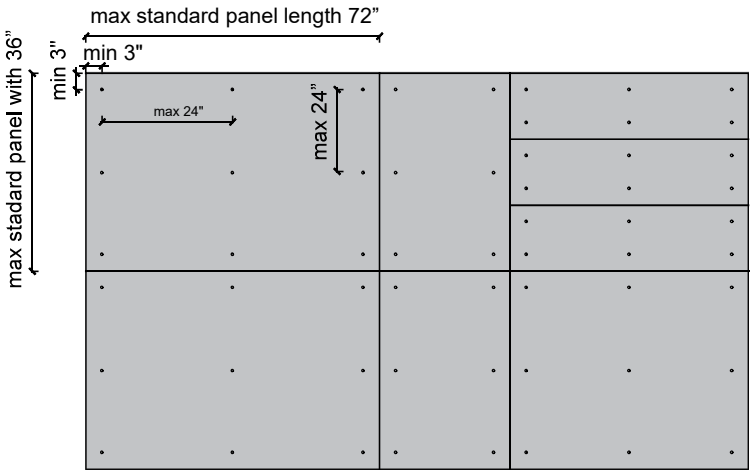
- Drive fasteners perpendicular and snug to siding and framing.
- Fasteners position may be no closer than 3" in from panel edge.
- Do not over-drive panel screws or drive at an angle. Fastener heads should fit snug against siding (no air space). Adjust fastening tools accordingly.
- If the fastener breaks, add a fastener near to site and use a cementitious compound to fill the hole.
- For exposed fastening, Pre-drill a larger hole. Pre-drill holes that are 5/64" (2 mm) larger than the diameter of the screws that will be used.



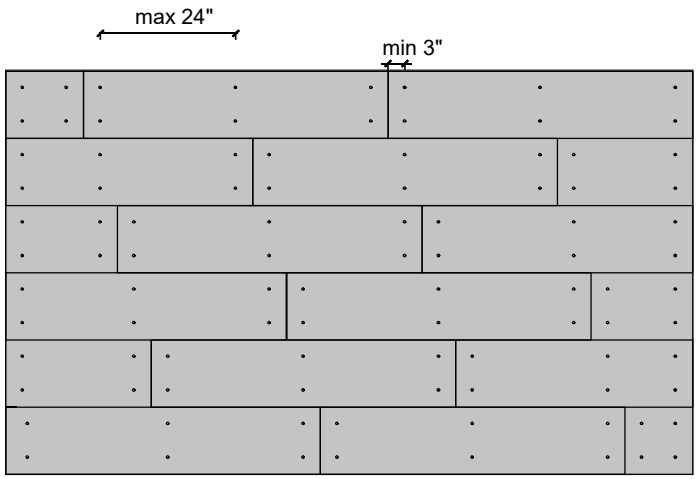
Max spacing between screws 24" (609 mm)

Example of fastening layout with

Panels layout



Staggered layout

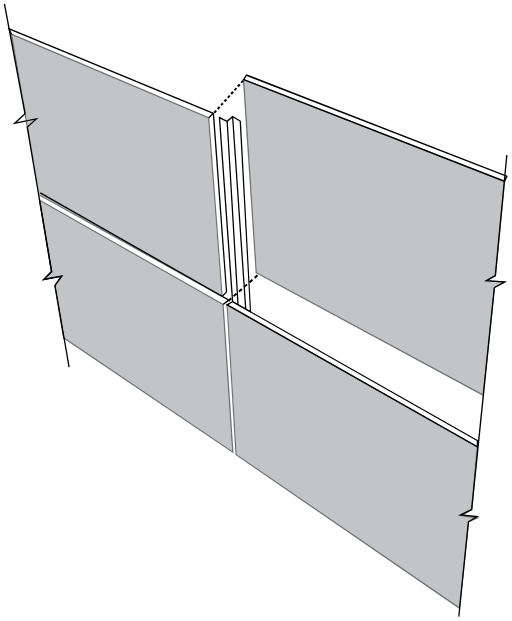


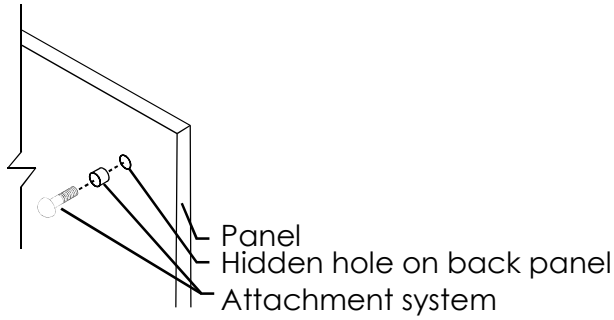
NOTE: The configurations shown above are for illustrative purposes only.
Fastener schedule must meet configuration minimums as prescribed in the wind load tables applicable to your project.

CONCEALED ANCHORING SYSTEM

Surface mounting by stainless steel screws. Opt for a touch-sensitive finish with flared screws or with round head screws. Fasteners are required at 600mm (24" O.C.) intervals.

Recommended attachment system:
- Gridworx https://gridworxwalls.com/
- Keil System http://keilanchor.com/





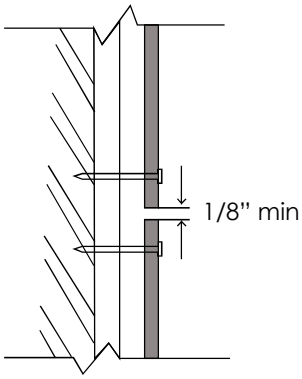
ADHESIVE FASTENING

- Ensure panels are free from dust.
- Use a generous amounts of PL Fast Grab or M1 Polyether Adhesive-Chem Link or Stronghold Foam Adhesive.
- Use 2"x2" Plywood with screw thru middle for applying/holding the panel on the wall.
- Use color matched silicone at joint. Recommended Mapesil-T by Mapei or equivalent.

PANEL JOINT

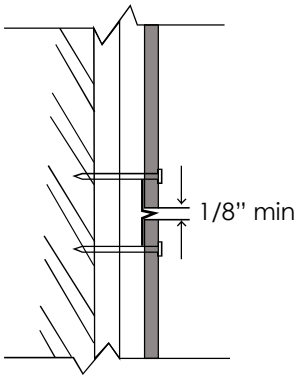
Always leave a space for expansion. Leave a minimum space of 1/8" to 1/2" (3mm to 13mm) between panels. If a flexible adhesive sealant is used, leave a minimum space of 1/16" (2 mm) along the width and along the length of the panels.

Open Joint



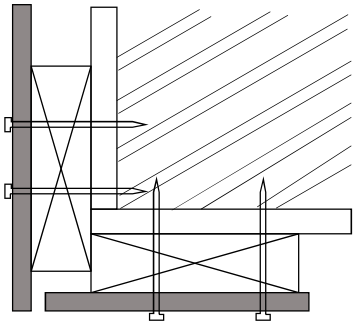
Leave a minimum space of 1/8" (3 mm) between panels.

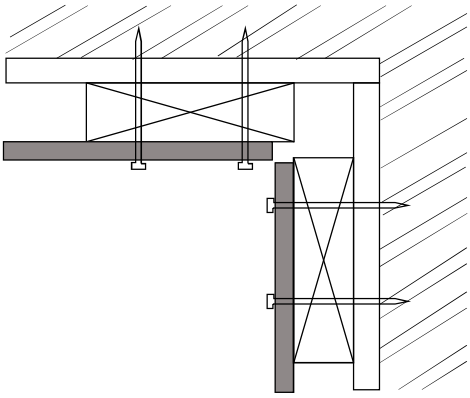
With flashing



4" to 6" flashing behind joint

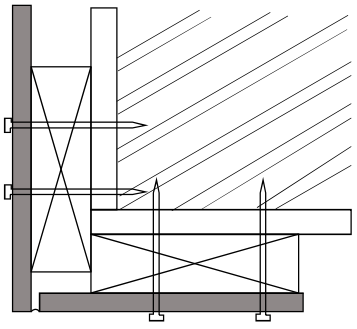
Outside / inside Corner with open joint



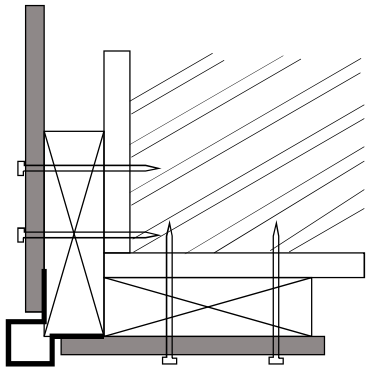


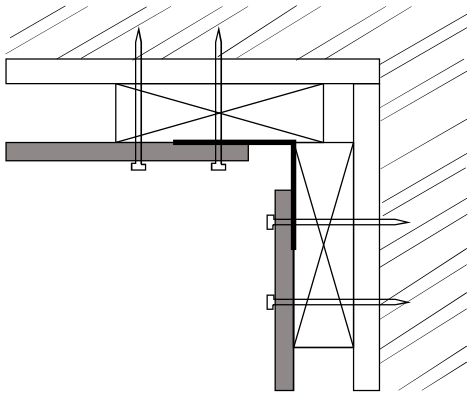
Leave a minimum space of 2 mm between panels.

Butt joint



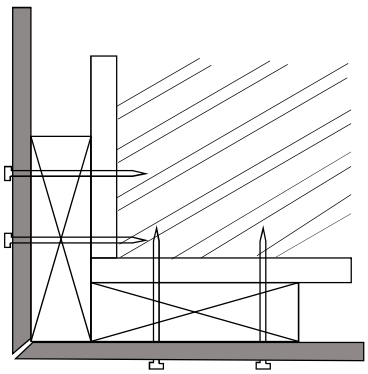
Outside / inside Corner with corner profile



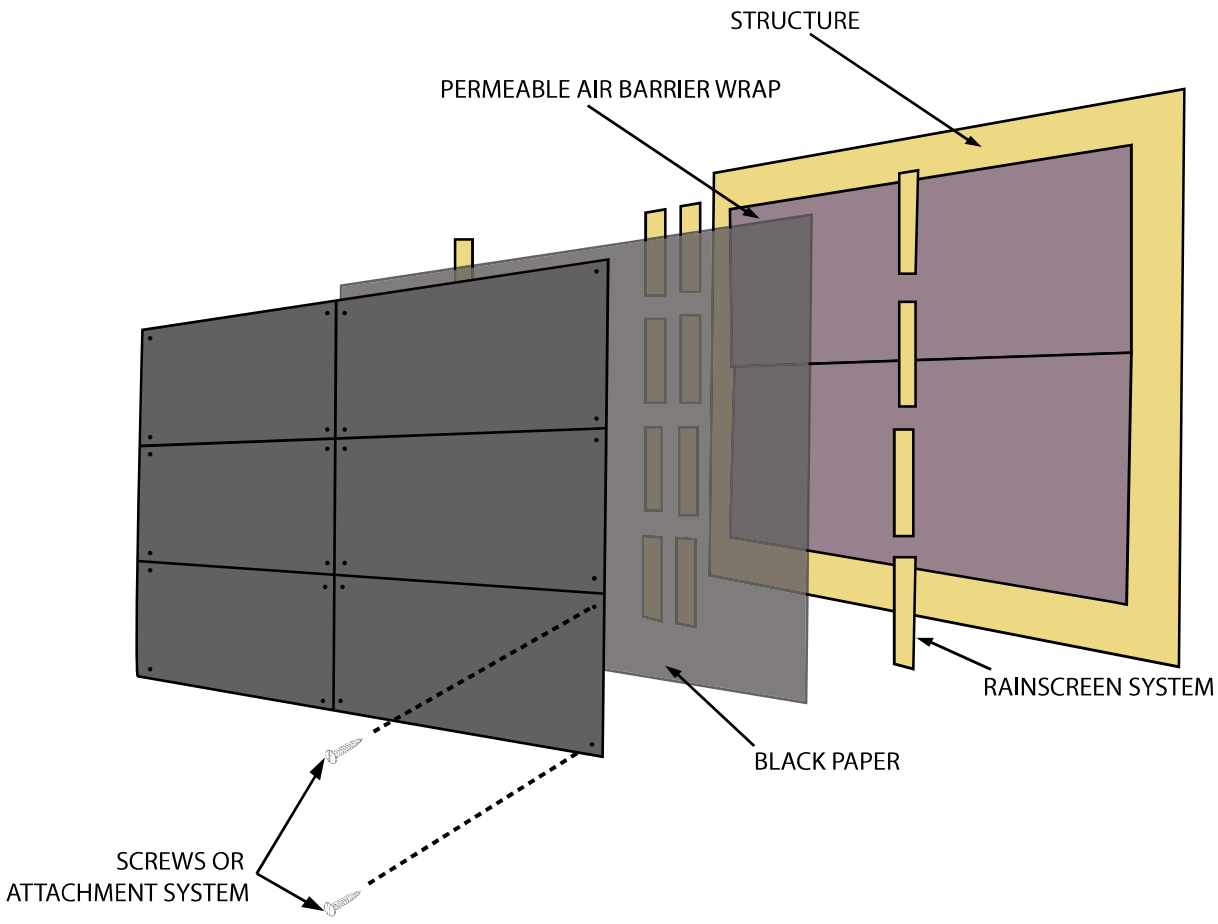


Leave a minimum space of 2 mm between panels.

Mitered joint

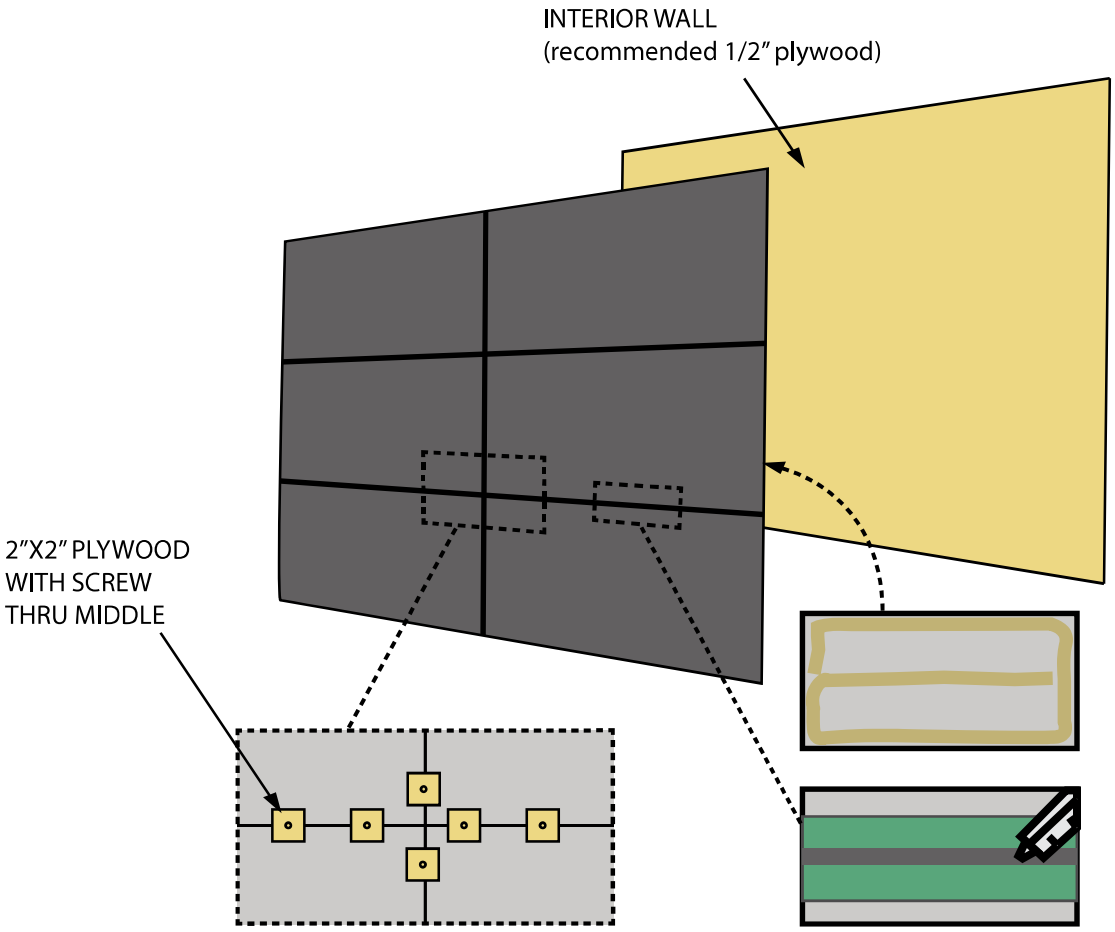


INSTALLATION - exterior



1. Prepare existing framing and sheathing. Level and plumb, tolerance within 1/8" over 8'.
2. Plan your panel layout, consider full panel size while paying attention to the desired joint space between each panel. Reveal size is based on preference (typically a 1/4" to 1/2" is used). Behind the reveal use color match flashing or black flashing (3" - 5" width).
3. Predrill holes in panel 2 mm larger than the diameter of the screw being used, 3" form the edges and approx 24" from each other.
4. After drilling holes and any cutting of a panel - brush off the face from any/all dust before securing to substrate. When cutting use a track saw guide to prevent the panel from being scratched.
5. Place the panel with 2 screws adjusting unit level, then install the remaining screws.
6. When it is raining the assembly of an open tent cover, is recommended to ensure dry working conditions.

INSTALLATION - interior



1. Ensure the back of the panels are free from dust.
2. Plan your panel layout; consider full panel size while paying attention to the desired joint space between each panel (recommended 1/8").
   When cutting panels, use a track saw guide to prevent the panel from being scratched.
3. Place a 1/8" diameter screw through the center of a 2"x2" piece of plywood. You can also use a Trim Head Screw or other material that allows for a narrower seam between the panels. Maintain a minimum space of no less than 1/16" for substrate movement.
4. Apply a generous amount of PL FAST GRAB or M1 Polyether Construction Adhesive Chem Link to the back of the panel. Stronghold Foam. Adhesive can also be used, purchased from Urban Concrete®'.
5. Place the panel with 2 screws, adjust the unit level, install more screws, and block as needed. Install the panels maintaining 1/8" space between panels.
6. Install masking tape to gather any excess sealant, and apply color-matched silicone (Recommended Mapei Mapesil-T or equivalent). Ensure that the panel edges are clean and dry. Remove any dust with a brush and a dry cloth before the application of the flexible adhesive sealant.

http://www.urbanconcretedesign.com/

Showroom (Klad)
+1 250.681.0913

info@klad.ca

KOHLER®

Home Generators

RCL *Generators*

24–60 kW

RELIABLE HOME AND BUSINESS STANDBY POWER

Exceptionally powerful, surprisingly quiet. Whatever the size of your home or business, there's a reliable RCL generator to match.

Durability and Reliability

Every KOHLER RCL generator undergoes rigorous durability and reliability testing, ensuring longevity. The heavy-duty liquid-cooled engine performs exceptionally well during long runs in extreme heat conditions. Additionally, the aluminum powder-coated enclosure is designed to withstand harsh weather conditions

Premium Warranty

You get our 2,000-Hour Five-Year Premium Limited Warranty, covering parts, labor, and dealer travel for the full warranty period. Optional extended warranties are also available.

Quiet Operation

RCL generators are equipped with patented sound innovations, including an automotive-style cooling system that operates at different speeds and highly engineered fiber insulation. These features work together seamlessly to maintain a noise level equivalent to a normal conversation during the weekly exercise routine. As a result, the generators are incredibly friendly to the surrounding neighborhood.

Premium Power

RCL generators provide excellent digital voltage and frequency regulation, working together to create a voltage response equal or better than the utility that keeps your smart appliances and electronics running optimally without failure.

Innovative Design and Installation

Kohler RCL generators are designed to blend seamlessly into your surroundings. The aesthetically pleasing cashmere enclosures are among the smallest in their class for 30, 38, and 60kW models. Their compact size, combined with a certified 18" offset from your home, allows for installation flexibility while seamlessly blending into your space.

Get Connected

Get your generator Internet-connected to get peace of mind in the palm of your hand. Whether you're home or on the go, Kohler's mobile app will let you monitor your generator system anytime from anywhere and get instant updates via text or email.

	24 kW	30 kW	38 kW	48 kW	60 kW
Model Number	24RCLA	30RCLA	38RCLC	48RCLC	60RCLB
Rated Power LPG/NG	24/21	30/30	38/38	48/48	60/58
Voltage @ 60 Hz Single-Phase	120/240	120/240	120/240	120/240	120/240
Amps LPG/NG @ 240 V Single-Phase	100/88	125/125	159/159	200/200	250/242
Engine/Alternator RPM	1800	1800	1800	1800	1800
Three-Phase Available	Yes	Yes	Yes	Yes	Yes
Engine	2.2 L	2.2 L Turbo	2.2 L Turbo	6.2 L	6.2 L
	37 HP	64 HP	64 HP	103 HP	103 HP
	KOHLER KG2204 Naturally Aspirated	KOHLER KG2204T Turbo	KOHLER KG2204T Turbo	KOHLER KG6208 Naturally Aspirated	KOHLER KG6208 Naturally Aspirated
	In-Line 4	In-Line 4	In-Line 4	V-8	V-8
	Hydraulic Valve Lifters	Hydraulic Valve Lifters	Hydraulic Valve Lifters	Hydraulic Valve Lifters	Hydraulic Valve Lifters
Peak Motor Starting kVA at 240 V (35% Dip for Lower Voltages)	37	44	74	113	144
Fuel	LPG/NG	LPG/NG	LPG/NG	LPG/NG	LPG/NG
Engine Cooling	Liquid-Cooled	Liquid-Cooled	Liquid-Cooled	Liquid-Cooled	Liquid-Cooled
Fuel Pressure Requirement (in H2O)	5-11	5-11	5-11	5-11	5-11
Enclosure	Powder-Coated Corrosion- Resistant Aluminum	Powder-Coated Corrosion- Resistant Aluminum	Powder-Coated Corrosion- Resistant Aluminum	Powder-Coated Corrosion- Resistant Aluminum	Powder-Coated Corrosion- Resistant Aluminum
Single-Point Sound Output dBA at 23 Ft (During Exercise/ Normal Operation)*	52/60	52/60	52/60	61/61	61/61
Dimensions (Inches)	74 x 33 x 46	74 x 33 x 46	74 x 33 x 46	90 x 33 x 47	90 x 33 x 47
Digital Voltage Regulation	+/- 1.0%	+/- 1.0%	+/- 1.0%	+/- 1.0%	+/- 1.0%
Excitation	PowerBoost- Non-Brushed Wound Field with Aux Winding	PowerBoost- Non-Brushed Wound Field with Aux Winding	PowerBoost- Non-Brushed Wound Field with Aux Winding	Fast Response PMG	Fast-Response PMG
Warranty	Five-Year Premium Limited	Five-Year Premium Limited	Five-Year Premium Limited	Five-Year Premium Limited	Five-Year Premium Limited
18-Inch Reduced Setback	Yes	Yes	Yes	Yes	Yes
Mossy Oak Patterns	No	No	No	No	No
Kohler Color Options	No	No	No	No	No

*Single-point sound levels are the lowest of eight points measured around the generator. Sound levels are measured at the front of the generator. Actual sound levels may vary based on installation parameters.

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ZombieBox – Standby Generator Enclosures

The world's first and ONLY, patented, portable noise control system for generators and outdoor power equipment. Our rugged and durable barriers can be assembled in minutes and deployed easily to reduce the noise intensity and volume of most standby generators by up to 50%

- Interlocking panel design withstands the elements
- 22 gauge galvanized steel construction
- Mounting brackets sold separately – for secure anchoring
- **No Tools** required for setup - **No Permits** required for installation

Sound Pressure Level (SPL) Decibel (dB) Reduction Testing:

125Hz to 8kHz | Weight: A | Range: 40-70 dB, 60-90 dB | Ambient Baseline: 43 dB

**Independently replicated ASTM E596-96 procedures - actual dB varies with generator, configuration, load and environmental factors. Sound levels taken from four point logarithmic average @ 23 ft. (Generac methodology minus ZBox 8 dB capability) Sound levels taken from other distances and points of the enclosure may vary depending on installation parameters*

Specifications & Performance	Kohler HSB 12-20kw	Generac HSB 16-22kw	ZombieBox Barriers
Unit Weight (lbs.)	420/535	406/448	**56 lbs. ea.**
Dimensions (LxWxH)	48x27x29	48x25x29	**6x4 or 4x4**
Voltage / Hz	120/240/60	120/240/60	**NA**
Construction	Alum./Galv.	Alum./Galv.	**Galvanized**
Sound Output Levels in dB(A)*	67	67	**59**

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