

CRANE

Composites

frp Fiberglass Reinforced Panels

INSTALLATION GUIDE for self adhered frp wall panels



GLASBONDTM
SELF ADHESIVE FRP

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DISCLAIMER

PLEASE READ ALL INSTRUCTIONS BEFORE BEGINNING INSTALLATION

These guidelines are provided in good faith to help prevent installation problems caused by common errors. The manufacturer and/or distributor of the product bears no responsibility for installation actions taken or not taken. There are many nuances of installation that are assumed to be general construction knowledge to an experienced installer; such nuances are not included in these instructions. Rather, these installation guidelines are strictly recommendations and are not intended to serve as a step-by-step, foolproof installation checklist. Selection of an experienced FRP installer is the sole responsibility of the project owner and architect. Crane Composites does not accept any responsibility for job failure resulting from or associated with improper job site environmental conditions.

SEE OUR MOST CURRENT SDS AT CRANECOMPOSITES.COM/SDS.HTML PRIOR TO WORKING WITH OUR PRODUCTS

INTRODUCTION

This installation manual includes materials and installation procedures for the GLASBOND Self-Adhered FRP Wall System. GLASBOND meets the requirements as a Class C wall finish under the ASTM-E84 Standard Test Method for Surface Burning Characteristics of Building Materials. Designed to enhance installation speed, GLASBOND greatly reduces installation time and clean up with its prefabricated adhesive backing. See our installation video at cranecomposites.com/install for additional assistance.

GLASBOND SELF-ADHERED HYGIENIC WALL PANEL SYSTEM

Material Components

GLASBOND WALL PANELS

- Glasbord® FRP skin
- Pressure sensitive adhesive backing w/ release liner.

GLASBOND TRIMS (2-piece peel + stick division bar, end cap, and inside corner*)

- Use exclusively for all GLASBOND panel installations. Not designed for use with standard 1-piece Glasbord trims.
- Back plate with pressure sensitive adhesive backing.
- Face plate snaps into back plate to finish.
- *Standard PVC outside angels are compatible.

INSTALLATION CONSIDERATIONS

Safety Information

WHEN CUTTING OR DRILLING, ALWAYS WEAR PROTECTIVE GLASSES OR GOGGLES AND A FACE MASK WHICH COVERS THE FACE AND MOUTH. Itching due to glass fibers may be avoided by the use of barrier creams on exposed skin areas. Hearing protection is also recommended when using power tools.

Delivery, Storage + Handling

Panels and accessories should be stored indoors on a solid, flat, dry surface other than the floor. Ideally, materials should be stored in original packaging. Do not stack on concrete floor or any other surface that emits moisture. Lay panels flat with proper support on the ends of panels. Do not stand panels on edge. Avoid standing or walking across panels when stacked, as they may slide.

All FRP panels must be stored inside. Optimum storage conditions are 60° to 75° (16°C to 24°C) and 35% to 55% relative humidity.

Forklifts are recommended to move pallets – ensure pallets are fully banded before moving. Move one pallet at a time. 7'+ forks are recommended when moving from pallet ends. Enter the pallet from the open end opposite the OSB corner bracing, to avoid panel shifting.



Site Conditions

For product-specific characteristics, limitations, and environmental conditions, refer to relevant product TDS and material SDS available at cranecomposites.com.

Determine whether the environment of the job site meets or exceeds all requirements specified in this installation guide prior to installation. Remove packaging and allow the panels to acclimatize at room temperature and humidity for ≥24 hours. Acclimation temperature range should be 60°F to 75°F (16°C to 24°C) and relative humidity of 35% to 55%. Ideally, both the room temperature and humidity level during acclimation and installation should be the same as the final operating conditions.

Ideally, installation should not begin until the building is enclosed (windows and doors are installed), permanent heating and cooling equipment is in operation, and residual moisture from plaster, concrete, or tile work has dissipated.

Installation temperature range should be 60°F to 75°F (16°C to 24°C) and relative humidity range should be 35% to 55%.

FRP panels will discolor when installed behind or near a heat source which radiates temperatures exceeding 130°F (55°C) – i.e. cookers, ovens, deep fryers etc. Stainless steel is recommended near these appliances.

Substrate Conditions + Preparation

GLASBOND has been tested over unprimed/unpainted Type-X drywall and Mold & Moisture Resistant Drywall. Installation over alternative substrates is at the risk of the installer and not advised.

The wall substrate must be dry to the touch and free from dirt, dust, and grease. Remove any foreign matter that may interfere with the adhesive bond. DO NOT use any liquid cleaners or water.

Walls should be relatively flat and even. Remove high spots and fill in low spots prior to beginning installation. Installation over uneven surfaces may result in air pockets forming behind the panel.

Tapered drywall joints need only a fill and taped coating using a setting joint compound (level 1-4 at most). A finish-coat is not necessary or desirable.

All panels should be inspected for any defects prior to installation. The installer assumes all responsibility for full inspection of product before installation. If panels are not acceptable, contact your Customer Service Representative (CSR) immediately. Do not install panels of unacceptable or questionable quality. Crane Composites, Inc. will not be responsible for installation or removal costs of unacceptable panels.



Required Tools

- Laser Level
- Tape Measure
- Chalk Line
- Marker
- Laminate Roller (CCI Part #R50ROLLER)
- Double cut Metal Shear/nibbler (16-ga)
- Tin snips
- Rubber Mallet
- Utility Knife
- Step Stool
- 2 sawhorses, plywood or OSB panel work surface (4' x 10')
- Wood or drywall shim/spacers
- Pole sander, fine grit sanding pads, broom

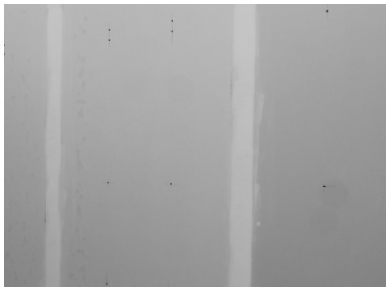
INSTALLATION

Quick Steps Information

1. Setup tools/equipment/materials/jobsite prep
2. Prepare the wall (remove dust/debris; clean/dry)
3. Set laser lines, measure for fit
4. Measure / cut panel
5. Remove release liner backing
6. Position panel on wall, adjust as needed, hand-press
7. Roll panel to remove air and initiate pressure sensitive adhesive
8. Install division bar back plate (repeat steps above for panel 2)
9. Apply finish cap to division bar
10. Jobsite takedown & cleanup

Prepare the Wall

- Avoid excessive compound and remove any dirt, dust, or debris.
- Wipe down substrate with a clean and dry towel or broom.
- Set laser or caulk line for vertical plumb line, as a guide.



Inside Corners & Large Openings

- Install Back Plates of all Inside Corners and End Caps, for detailing around door frames, windows, and other large openings
- Cut/miter Back Plates to size, peel back blue release liner and hand-press into place

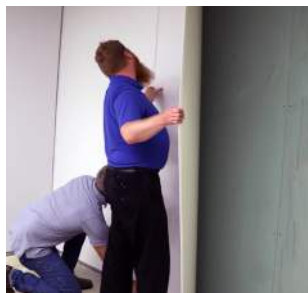
Prepare the Panel

- Lay the GLASBOND panel on sawhorse/plywood table, finished side down.
- Trim the panel to length with proper sizing for expansion and contraction.
- Cut out fixture openings with radius corner, to avoid stress cracking.
- Working from the 4' edge, evenly and completely peel off the release liner at a 180° angle. A 3-4" diameter cylinder (cardboard or PVC) can help roll up the release liner and keep it contained for easy disposal. Avoid crumpling the used liner to minimize volume within trash receptacles.
- Embossed (pebbled) panels should be installed in a uniform orientation, with fire rating sticker at the bottom of the panel. Installers should avoid alternating the orientation, to ensure compliance with HACCP certification.



Attaching to Wall

- Start in a corner and work left to right.
- Place the panel in position, allowing for adequate spacing around perimeter. Use a scrap piece of wood or drywall to shim panels off the floor.
- Firmly push on the wall by hand, smoothing out any uneven areas. If the panel is out of position, simply pull back and reapply as needed.
- Once in place, use a laminate roller to initiate uniform pressure by rolling down and out toward the panel edge.
- Consider flexing the panel to a vertical bow, curling towards the pebbled side. Apply leading edge first at a 45° angle to gain alignment and control, before laying the rest of the panel on the substrate. This can limit premature adhesive contact, reducing the need pull away and reposition.



Install Trim Back Plate

- Peel off a few inches of the blue release liner on the back plate of the GLASBOND Trim division bar.
- Starting at the top, slide the non-adhesive side under the installed panel past the gray “landing zone” leaving a gap for expansion.
- Once the back plate is plumb to the panel, remove the remaining blue release liner.
- Push the division bar back plate down firmly, applying uniform pressure throughout.



Install the Next Panel



Finish Trim

- Starting at the top of the wall, lightly tack the face plate into the base with a rubber mallet.
- Using a laminate roller, fully snap the division bar in place by rolling top to bottom.
- You will hear an audible “clicking” sound when it is fully secured into the back plate.
- Apply surface mount Outside Angles as needed, peeling blue release liner from inside edge and pressing into place



Cutting, Fastening + Spacing

- GLASBOND panels can be cut with most standard woodworking tools. To avoid dust accumulation, electric or manual shears are recommended.
- Position panel face down on a clean, flat work area.
- When cutting with a circular saw or angle grinder, position the panel so that the blade enters the back side of panel first to avoid chipping or damage.
- The inside corners of all cut-outs must have a $\geq 1/8"$ (3.2 mm) radius. Failure to radius corners may result in stress cracking. For pilot holes, a $1/4"$ (6.36 mm) diameter router bit or drill bit may be used – a jig saw can complete the radius cut out. Allow $1/8"$ (3.2 mm) clearance around all fixtures, electric boxes, piping, etc.
- Adequate space must be allowed for panel expansion and contraction. For FRP panels, a minimum gap of $1/4"$ is required at the top and bottom of each panel. Between the panels should have a minimum of $\geq 1/8"$.
- When a moisture resistant installation is required, silicone sealant should be applied in all moldings around all panel edges, fasteners, and fixtures.
- We recommend dry-fitting cut panels on the wall before liner is released, to ensure proper sizing and fit.

Expansion Joint Chart

	Recommended
Gap at Ceiling	1/4"
Gap at Floor	1/4"
Gap Between Panel and Center Molding	1/8"
Gap Around Rivets	1/8"

BEST PRACTICES, TIPS, RECOMMENDATIONS

- The adhesive in GLASBOND relies on pressure to properly bond to the surface. Once fixed, adhesive should be patted firmly to ensure contact with the surface.
- The adhesive can be re-positioned for better alignment, provided no pressure is applied and it is done immediately.
- To reposition, peel the panel backward, then remove and reapply. Avoid sliding the panel across the substrate. Limit repositioning to ≤2 attempts per panel.
- Consider flexing the panel to a vertical bow, curling towards the pebbled side. Apply leading edge first at a 45° angle to gain alignment and control, before laying the rest of the panel on the substrate. This can limit premature adhesive contact, reducing the need pull away and reposition.
- Ensure air is expelled from behind the panel by rolling down and out toward the panel edge. Apply uniform roller pressure to the entire panel surface to achieve permanent bond.
- Once pressure is applied the panel can no longer be repositioned or removed without damage. Do not use panels that have removed the drywall paper facing upon repositioning. Full bond of the adhesive onto the substrate typically takes between 24-72 hours, depending on ambient temperature.
- Use a 4" diameter PVC pipe to roll up the release liner as you are removing it from panel. Avoid crumpling the liner to save space on the job and in disposal.
- Use 3-point laser level to achieve plum, level, square.
- Use a scrap piece of wood or drywall on the floor immediately in front of wall for pre-positioning and leveling the GLASBOND panel, prior to adhering it to the wall substrate.
- Peel just the initial 3'-5" of liner off of the division bar backer and position the trim vertically against the wall substrate, before stripping the liner entirely for permanent adhesion. This helps control the plumb line of the trim back plate.
- Leave a 1/8" space between panel and division bar center post to allow for expansion and contraction of the FRP panel.
- Note the "landing zone" printed visual markers on the division bar backer to aid in proper panel spacing.
- Use a miter shear hand cutter to ensure angle accuracy of trim cuts.
- Do not adhere GLASBOND panels to dusty or greasy substrates.
- Do not use a wet towel to wipe the substrate (surface must be dry).
- Do not adhere GLASBOND to substrate and try to slide it laterally for repositioning.

FOR QUESTIONS OR CONCERNS, PLEASE CONTACT:
Crane Composites Customer Service Department
1.800.435.0080 | 1.815.467.8600

FLAME SPREAD AND SMOKE DEVELOPMENT RATINGS

The numerical flame spread and smoke development ratings are not intended to reflect alleged hazards presented by Crane Composites products under actual fire conditions and this product has not been tested by Crane Composites except as set forth below. These ratings are determined by small-scale tests conducted by Underwriters Laboratories and other independent testing facilities using the American Society for Testing and Materials E-84 test standard (commonly referred to as the "Tunnel Test").

CRANE COMPOSITES PROVIDES THESE RATINGS FOR MATERIAL COMPARISON PURPOSES ONLY. Like other organic building materials (e.g. wood), panels made of fiberglass reinforced plastic resins will burn. When ignited, FRP may produce dense smoke very rapidly. All smoke is toxic. Fire safety requires proper design of facilities and fire suppression systems, as well as precautions during construction and occupancy. Local codes, insurance requirements and any special needs of the product user will determine the correct fire-rated interior finish and fire suppression system necessary for a specific installation. We believe all information given is accurate, without a guarantee. Since conditions of use are beyond our control, all risks are assumed by the user. Nothing herein shall be construed as a recommendation for uses which infringe on valid patents or as extending a license under valid patents. www.astm.org/Standards/E84.htm.

A global leading provider of resilient wall and ceiling coverings. Kemlite® was established in 1954 and the company changed names to Crane Composites in 2007. Crane Composites is headquartered in Channahon, IL and all our products are manufactured in the United States. We work with hundreds of distributors, ensuring our products are easily accessible and readily available to our customers.

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