



Installation Guide for:

decorative frp panels

standard frp panels

frp ceiling panels

laminated frp panels

DISCLAIMERS

(PLEASE READ)

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.

FACTORY MUTUAL APPROVAL

The only frp panel that is Factory Mutual Approved is Fire-X Glasbord® FM Class A by Crane Composites, Inc.

To meet FM compliance, the panels must always be installed with mechanical fasteners and no adhesive. See FM report J.I. No. 2B2A2.AM dated 12/20/99.

Safety Instructions

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.

TOOLS NEEDED

- Circular saw with fine tooth carbide tipped saw blade
- Swivel-head 18 gauge shears (Figure 3, Page 8)
- Drywall Roto-Zip®
- Trowel with 5/16" x 3/16" x 1/4" "V" (Part #R50TROWEL) if using Titebond adhesive, otherwise use trowel recommended by adhesive manufacturer
- Laminate roller (Part #R50ROLLER)
- Jig-Saw

MATERIALS NEEDED

- Decorative, Standard, Laminated wall panels and/or Ceiling panels
- Nylon Drive Rivets or Non-Corroding Fasteners (optional)
- Seam Finishing: choice of moldings or color matched caulk
- Silicone Sealant (for installation in high moisture areas)
- Soap and water for clean-up (Latex or Polymer adhesives)
- Mineral spirits for clean-up (Solvent-based adhesives)
- Saw horses
- Plywood larger than panels
- Rags
- Sandpaper or PaperTiger® Wallpaper Removal Tool for roughing up wall
- Safety equipment (goggles & mask)
- Tape measure
- Utility knife
- Six-penny finishing nails
- Painter's tape
- Carbide tipped laminate cutter
- Adhesive Appropriate for Substrate
 - frp Latex-based adhesive for standard drywall
 - Solvent-based frp adhesive or advanced polymer adhesive for moisture resistant or other non-porous substrate (please contact Franklin Adhesive or other adhesive manufacturer for recommendations for adhesives to be used on substrates other than standard drywall. Franklin Technical Support - 1.800.347.4583)

STORAGE

Panels should be stored indoors on a solid, flat, dry surface. 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. Store all standard and decorative frp panels inside. Optimum storage conditions are 60° to 75° (16°C to 24°C) and 35% to 55% relative humidity (Figure 1).

BEFORE INSTALLATION / PRE-CONDITIONING

Before beginning the installation, the installer must determine that the environment of the jobsite meets or exceeds all requirements specified in the installation guide. Prior to installing, remove the packaging and allow the panels to acclimate to the room temperature and humidity for 24 hours for standard frp and 48 hours for decorative frp. Acclimation temperature range should be 60°F to 75°F (16°C to 24°C) and relative humidity should be 35% to 55%. Ideally, both the room temperature and humidity during acclimation and installation should be the same as the final operating conditions.

INSTALLATION CONDITIONS

Installation should not begin until building is enclosed (windows and doors are installed), permanent heating and cooling equipment is in operation, and residual moisture from plaster, concrete, or terrazzo 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%.

WALL PREPARATION

Walls should be flat and even. Remove high spots and fill in low spots prior to beginning installation. Remove wallpaper, soluble or loose paint, and other foreign matter that may interfere with the adhesive bond. The wall substrate must be dry and free from dirt, dust, and grease.

PAINTED OR PRIMED SURFACES

Painted surfaces will not allow solvent-free or solvent-based adhesives to dry. Consequently, they will not achieve full bond strength. Painted surfaces must be perforated with a Tiger Wallpaper Removal Tool to rough up the wall. If you do not have that available, surfaces must be gouged with a minimum 20 grit heavy sandpaper to break the moisture barrier of the paint. All loose paint, dirt and residue must be removed prior to installation.

NEW GYPSUM BOARD OR DRYWALL

New drywall should not be painted or primed. Tapered joints need only a fill and taped coating using a setting joint compound. A finish coat is not necessary or desirable. Any extremely uneven areas should be filled. Remove all drywall dust.

UNEVEN SURFACES

Installation over uneven surfaces will result in little or no adhesion to the wall substrate, therefore bubbling due to air pockets will form behind the panel. High and low spots should be leveled to provide an even wall surface.

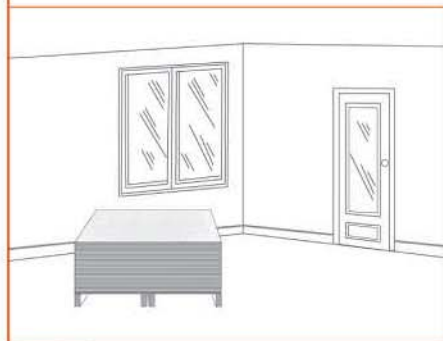


Figure 1

PRE-INSTALLATION INSPECTION

Every attempt is made to inspect panels for cosmetic and physical abnormalities prior to shipment, however 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 CCI inside sales rep 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.

The following wall conditions require additional preparation or installation techniques:

Plywood

Plywood walls must be flat and even, and warped plywood should be removed and replaced. Solvent-Free adhesive cannot be used on any installation over pressure treated or fire-rated plywood.

Concrete Block and Brick

Concrete block and brick wall surfaces are by nature uneven, and frp panels installed directly to these surfaces will likely develop loose spots, bulges and buckles. If a smooth buckle-free wall surface is required, the wall should be furred out with wood or metal studs or channels and covered with drywall or factory laminated panels. An alternate method is to install gypsum board, cement board or another appropriate substrate over the furring and then install frp panels according to the standard installation instructions. If it is the owner or contractor's preference to install frp panels directly to a concrete block or brick wall, it is recommended that the panels be installed with nylon drive rivets alone, without any adhesive. The rivet holes must be oversized and expansion joints provided. This will allow the panels to expand and contract under the rivet heads and will minimize but not eliminate buckles in the panels.

Non-Porous Surfaces

Non-porous surfaces (i.e., ceramic tile, glazed block, moisture resistant substrates, and metal panels) do not provide a good surface for adhesive bonding. General-purpose latex-based, polymer or solvent-based adhesives will not dry properly on a non-porous surface. Installation over this type of surface can be accomplished with rivets or you may contact an adhesive manufacturer for additional recommendations.

Direct Sunlight

Prolonged Direct Sunlight on panels may cause abnormal fading and/or rapid expansion depending upon amount of heat build up. Use caution in these areas.

The following special conditions require additional preparation or installation techniques:

High Humidity Rooms

Acclimate panels in the operating humidity conditions. Carefully follow the guidelines in this installation guide for expansion/contraction spacing and sealing. (see Expansion Joint Chart, pg 9). Failure to seal moisture entry points with silicone sealant can cause swelling of the substrate resulting in warping, curling, delamination or bond line separation. Use an adhesive that is recommended for high humidity conditions. Follow the adhesive manufacturer’s installation recommendations carefully. A vapor barrier (e.g. 6 mil poly sheet) may be required. *Follow the architect or owner’s specifications or check your local building codes for specific requirements. Decorative panels are not recommended for this condition.

Low Temperature Conditions

Acclimate panels in the operating temperature conditions. Carefully follow the guidelines in this installation guide for expansion/contraction spacing and sealing (see Expansion Joint Chart, pg 9). Use an adhesive that is recommended for low temperature conditions. *Follow the adhesive manufacturer’s installation recommendations carefully for trowel height and coverage. For Titebond® latex adhesive use a 5/16" x 3/16" x 1/4"V trowel (available from Crane Composites) to apply adhesive to 100% of the back of the panel. A vapor barrier (e.g., 6 mil poly sheet) may be required. Follow the architect or owner’s specifications or check your local building codes for specific requirements. Decorative panels are not recommended for this condition.

Foam Insulation

An approved thermal barrier system (e.g., gypsum board) must be used between the frp panels and any foam insulation (Figure 2). Check your local building codes for specific requirements.

Near Heat Source

Frp panels may discolor when installed behind or near a heat source which radiates temperatures exceeding 130°F (55°C), such as cookers, ovens, and deep fryers. Stainless steel is recommended for these types of areas.

Car Washes

See the last section in this installation guide for specific instructions.

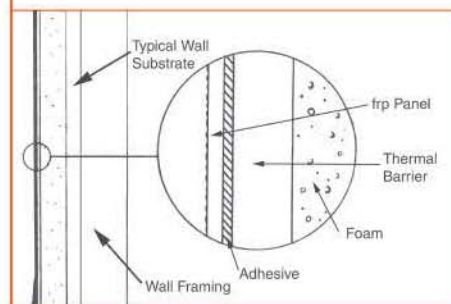


Figure 2

Pre-Installation Planning

- Pre-fit each panel before fastening and/or adhering in place.
- All cutting and drilling should be done prior to the application of adhesive.
- Preplan for cove or base molding. Frp panels should be installed so that the base molding will not restrict normal panel movement during expansion and contraction. Cut panels 1/4" short of where the base molding will extend; poured acrylic floor with built-in base cove should be in place prior to installation.
- When using rivets, pre-drill holes in the panels using a drill bit that is 1/8"-1/4" larger than the rivet. Plan ahead so that fasteners will not interfere with moldings or other wall fixtures.
- When using mechanical fasteners through frp to attach wall angles or other fixtures, pre-drill holes using a drill bit that is 1/4" larger than the mechanical fastener. Without oversizing the holes, the frp will likely have bulges and/or buckles when panel movement occurs during expansion and contraction.

Basic frp Installation Steps

1. Trim panel to fit. Oversize pilot holes if drop-in ceiling wall angle is attached to and through frp (please allow for proper expansion and contraction)
2. Cut out any fixture openings.
3. Apply adhesive to 100% of the backside of panel using a cross-hatch pattern using a trowel recommended by the adhesive manufacturer.
4. Place panel on wall, leaving appropriate room at panel joints and corners for expansion and contraction.
5. Using a laminate roller, remove air pockets by working from the middle of panel out to the leading edge.
6. Fit appropriate moldings between panels and ends leaving a minimum of 1/8" for expansion between panel and molding stem.
7. Install next panel

Without leaving required expansion/contraction room, frp panels will likely have bulges and/or buckles when panel movement occurs during expansion/contraction

Cutting Instructions

POSITION PANEL FACE DOWN ON A COVERED WORK AREA

When cutting with a circular saw, position the panel so that the saw blade enters the front side of panel first to avoid chipping or damage. (Figure 3)

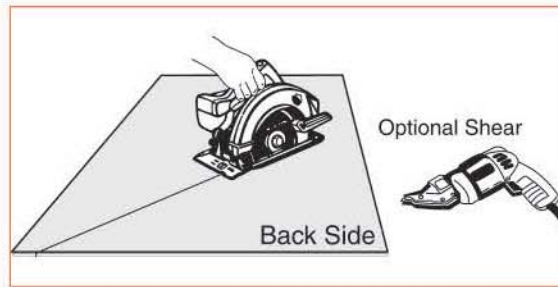


Figure 3

RADIUS CORNERS OF CUT-OUTS

Cut-Outs

The inside corners of all cut-outs must have a radius of at least 1/8" (3.2 mm). 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, use a jig saw to complete the radius cut out. Allow 1/8" (3.2 mm) clearance around all fixtures, electric boxes, piping, etc.

EXPANSION JOINT CHART

PANEL SIZE	4x8	4x9	4x10	4x12
Gap around rivets	1/8"	1/8"	3/16"	3/16"
Gap between panels and wall fixtures	1/8"	1/8"	1/4"	1/4"

Attaching to Wall

Generally, frp panels can be installed using adhesive alone, fasteners alone, or a combination of adhesive and fasteners. The method used should be determined by the room and wall conditions (see the wall conditions noted on pages 4 & 5). Check your local building codes for any restrictions or guidelines regarding approved installation methods.

Before starting, determine which seam treatment is being used. Please refer to the appropriate instructions for the type of seam treatment being used.

Moldings

Color Coordinating Caulk (not available for purchase from Crane Composites)

If you are installing ceiling panels, factory laminated panels, car washes or using mechanical fasteners, please refer to the last section of this guide.

APPLYING ADHESIVE

When adhesive is used, be sure that it is an frp-formulated product. Frp adhesives are widely available. Follow the adhesive manufacturer's recommendations for trowel style (e.g., appropriate height of adhesive bead left by trowel). It is important to apply adhesive carefully and follow all directions to prevent problems that may result from using too little or too much adhesive. 100% adhesive coverage applied to the entire back of the panel is recommended by using a "crosshatch" pattern. Adhesive should extend to all edges of the panel and should be applied directly to the back of each individual frp panel. (Figure 4) **Do not apply adhesive to wall.**

SPACING

All frp panels have expansion characteristics due to changes in humidity and temperature that must be accounted for during installation with proper spacing around panel edges and around fixtures attached to the panel/wall. Adequate space must be allowed for panel expansion and contraction. For a 4' x 8' panel, a minimum gap of 1/4" is required at the top and bottom of each panel and 1/8" between panels. More room will be required for longer panels. It is recommended that panels do not exceed 48" in width and 12' in length to aid in ease of installation and ensure a satisfactory finished installation. See the frp panel Expansion Joint Chart for appropriate spacing at ceiling, floor and between panels. **When a moisture resistant installation is required, Silicone sealant should be applied in all moldings around all panel edges, fastener, and fixtures.**

MOLDINGS

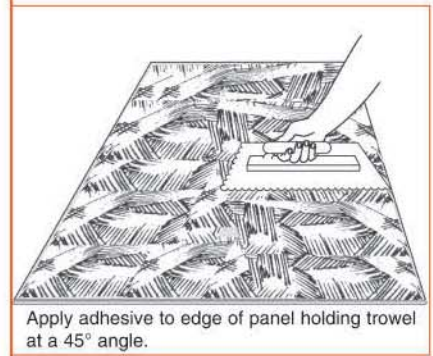
One-piece moldings with expansion control guides or two-piece moldings are available for installation with standard frp wall panels. Panels are inserted into the one-piece molding opening, while both parts of the two piece molding are installed on top of the panel (Figure 5). Panels beneath the two-piece molding should maintain the recommended expansion spacing. **Installations requiring additional abuse resistance should use the heavy-duty corners and batten strip.**

(Figure 6) *Installation of panels over 12 feet long is not recommended.*

EXPANSION JOINT CHART

PANEL SIZE	4x8	4x9	4x10	4x12
Gap at ceiling	1/4"	1/4"	3/8"	3/8"
Gap at floor	1/4"	1/4"	3/8"	3/8"
Gap between panel and center of 1 piece molding	1/8"	1/8"	3/16"	3/16"
Gap between panel and center of 2 piece molding	1/4"	1/4"	3/8"	3/8"
Gap between panel when not using molding *	1/4"	1/4"	3/8"	3/8"

* For tile-look decorative panels, use a six penny nail for joint spacing.



Apply adhesive to edge of panel holding trowel at a 45° angle.

Figure 4

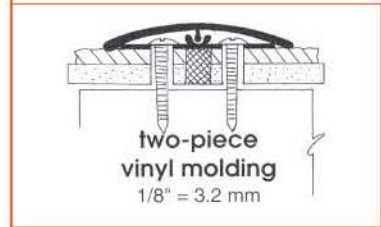
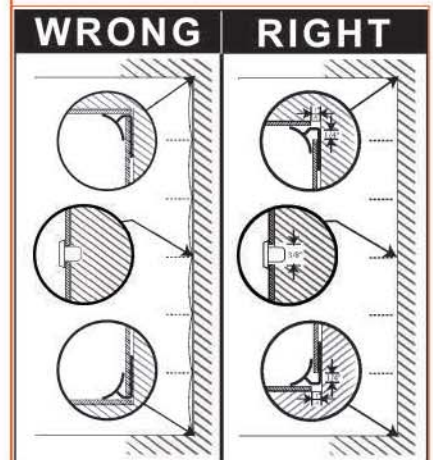


Figure 5

CUTTING

ATTACHING TO WALL



WRONG: No clearance at ceiling and floor; fastener holes are tightly fit (same size as fastener).
RIGHT: Adequate clearance at wall and floor. Over-sized fastener holes.

RESULT: When the room is put into operation, an increase in temperature and/or humidity may cause normal panel expansion. Since the panel fits too tightly, there is no place for it to expand. It is likely that the panel will bulge between fasteners.

RESULT: Panel will expand normally and stay flat. Sealant will absorb the movement and a proper seal will be retained.

Figure 6

THIS PAGE INTENTIONALLY LEFT BLANK

USING MOLDINGS

1. Start in an inside corner. Mark plumb line 48-1/8" (1.2 m) from corner. The first panel should be set true with a plumb line.

NOTE: If the panel is supplied with a protective tack film, leave film on during installation. Peel back tack film approximately 1/2" (12.7mm) for easy insertion into moldings. Remove film after installation

2. Apply 100% adhesive coverage to the entire back side of the panel using a "crosshatch" type pattern. (Figure 4). Place panel against wall and align leading edge with plumb line.

NOTE: Failure to spread adhesive to the edge of the panel and failure to provide proper molding spacing may result in curling or bubbling as environmental conditions fluctuate.

3. Insert a division bar on the first panel up to expansion control guide and continue installing panels. The free edge of the molding or division bar may be tacked in place if preferred before installing next panel.
4. Use a laminate roller to ensure all air pockets are removed between the panel and the wall and to ensure a good bond between the panel and the wall. Start in the top corner of the panel away from the leading edge. Begin rolling down and out towards the panel edge without a molding. (Figure 7)

NOTE: If using cap at the top or bottom of panel, slide it completely on to panel. When not using cap at top and bottom, leave 1/4" (3.2 mm) gap for expansion. If a moisture resistant installation is required, Silicone sealant should be applied in all moldings and around all panel edges, fasteners and fixtures.

5. Install the last panel on the first wall as stated above, but with no corner molding on the leading edge. The first panel on the new wall will receive a corner molding, thus completing the corner transition.
6. Slide the next panel into the division bar. Repeat process working in one direction around the room.

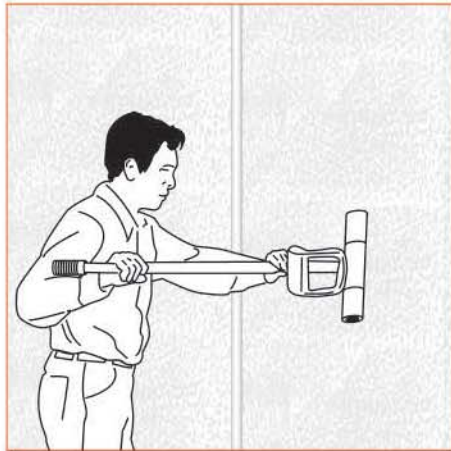
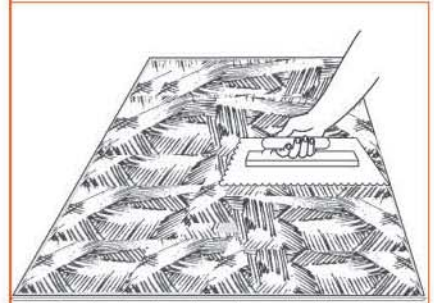


Figure 7



Apply adhesive to edge of panel holding trowel at a 45° angle.

Figure 4

USING COLOR COORDINATING CAULK

Caulk not available for purchase from Crane Composites

1. Start in an inside corner. Mark plumb line 48" (1.2 m) from corner. The first panel should be set true with a plumb line.

NOTE: If panel is supplied with a protective tack film, leave film on during installation.

2. Apply 100% adhesive coverage to the entire back side of the panel using a "crosshatch" type pattern. Place panel against wall and align leading edge with plumb line. Use caution so that adhesive does not seep into the gap between the panels.*

NOTE: Failure to spread adhesive to the edge of the panel may result in curling of panel edges and bubbling as environmental conditions fluctuate.

3. Use a laminate roller to ensure all air pockets are removed between the panel and the wall and to ensure a good bond between the panel and the wall. Start in the top corner of the panel away from the leading edge. Begin rolling down and out towards the leading panel edge. (Figure 7)

4. Hammer six-penny finishing nails against the panel leading edge two feet on center. This will maintain proper spacing between panels. **Leave nails in place until adhesive sets up (per manufacturer's instructions) and then remove.

5. Prepare the joints for caulking.

- If panel has tack film, leave in place.
- If panel does not have tack film, place painter's tape on each side of the seams that are to receive caulk.

6. Fill the 1/8" (3.2 mm) gap between the panels with caulk, making sure that the gap is completely filled. Push tube in the direction of travel. Wet your finger and smooth bead if necessary.

7. After smoothing bead, allow caulk to dry before removing tack film or painter's tape.

** If using a cap at the top or bottom of panel, slide it completely on to the panel. When not using a cap at the top or bottom, leave 1/4" (3.2mm) gap for expansion.

** If a moisture resistant installation is required, Silicone sealant should be applied in all moldings and around all panel edges, fasteners and fixtures.

IMPORTANT—NOTES REGARDING TILE LOOK PANEL INSTALLATION

1. For proper alignment of the horizontal score lines, create a level line from the highest area of the floor.
2. Plan your panel layout so that the seams of the panels are not directly over the seams of the substrate. Avoid positioning joints close to inside or outside corners.
3. Keep tack film on during installation to protect the panels—peel back approximately 1/2" for easy installation into trims.

USES OF FASTENERS

Nylon drive rivets, or corrosion resistant screws are appropriate fastener options. If rivets or fasteners are used, panels should be predrilled using a drill bit that is 1/8" to 1/4" larger than the fastener. During installation, holes only slightly larger than the fastener should be drilled into the substrate through the pre-drilled holes in the panel and prior to any adhesive application (Figure 8). Apply silicone sealant prior to inserting rivets or fasteners.

The recommended fastening frequency is 16" on center both horizontally and vertically. Space perimeter holes at least 1" to 1-1/2" from panel edge when using one piece moldings and stagger holes of abutting panels. When using two piece moldings put perimeter holes 1-1/2" to 2" away from panel edge (Figure 6, Figure 9).

PANEL INSTALLATION FINISHING

- Adhesive residue may make panels appear stained and will collect dirt. Clean panels thoroughly prior to leaving the jobsite.
- Remove any adhesive residue upon completion of the job. To remove latex-based adhesive, clean with a non-abrasive cotton cloth and warm water. If necessary, use a mild, non-abrasive detergent. For best results, change water and cleaning rags frequently. For clean-up with solvent based adhesives, use mineral spirits or acetone to remove residue (Figure 10).

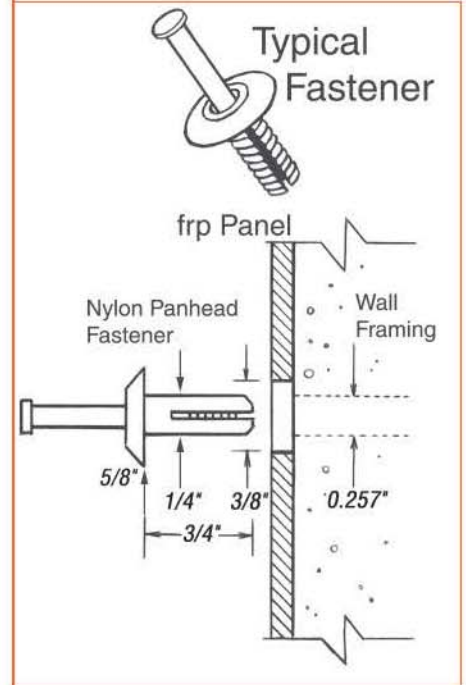
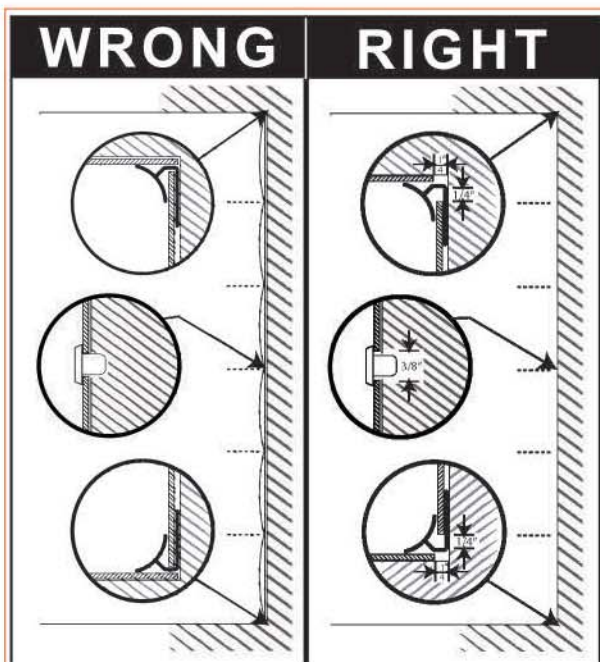


Figure 8



WRONG: No clearance at ceiling and floor; fastener holes are tightly fit (same size as fastener).

RESULT: When the room is put into operation, an increase in temperature and/or humidity may cause normal panel expansion. Since the panel fits too tightly, there is no place for it to expand. It is likely that the panel will bulge between fasteners.

RIGHT: Adequate clearance at wall and floor. Over-sized fastener holes.

RESULT: Panel will expand normally and stay flat. Sealant will absorb the movement and a proper seal will be retained.

Figure 6

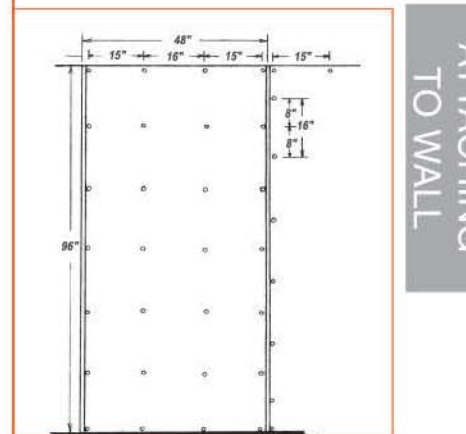


Figure 9



Figure 10

Ceiling Panel Installation

LAY-IN CEILINGS

For lay-in ceiling grid systems, in order to avoid unacceptable deflection, purchase factory pre-cut ceiling panels. Wall panels may be more flexible than ceiling panels and should not be cut into ceiling panel sizes (2' x 2' or 2' x 4') at the jobsite.

To install ceiling panels, lay into ceiling grid. Trim as necessary to accommodate lighting or other fixtures.

Always leave a 1/8" gap between panel and grid or fixture to allow for normal panel expansion and contraction. Frp grid systems may require specially sized ceiling panels. See the frp grid system installation guide.

Do not attach ceiling grid through top of panels.

GLUE-UP CEILINGS

To glue up and rivet full-size panels to a solid ceiling substrate, follow the instructions for wall panel installation. To ease handling, panel size should be limited to 4' x 8'. Mechanical fasteners must be used on ceiling installations.

Car Wash Installation

Using frp panels that have been factory laminated to fluted polypropylene is the ideal solution for lining the interior walls of a car wash, with its high moisture environment. The expansion and contraction due to thermal changes and extended exposure to moisture can, however, cause any frp panel product to expand.

Bulging from expansion can be minimized if panels are installed properly. The key to a satisfactory installation in such a high moisture environment is to provide adequate clearance around fasteners, moldings, pipes, and junctures so the panels are free to expand and contract. As little as 1/64" change in length can cause bulging if there is no clearance for a panel to expand. **NOTE: Bulging of panels in a car wash installation is not cause to consider the panels defective.** In general, follow the wall panel installation instructions within this guide.

Additionally, the following guidelines will aid in completing a satisfactory high moisture installation.

1. Limit panel length to 8 ft.
2. Install panels vertically.
3. Acclimate panels to the ambient temperature and moisture conditions for a minimum of 48 hours prior to installation.
4. Install panels leaving a minimum of 1" space at both the floor and ceiling junctures.
5. Use mechanical fasteners (metal or nylon drive rivets). Always oversize the fastener holes. Do not use adhesive.
6. Install wall-hung equipment and signs with standoffs (washers) between the substrate wall and equipment, making certain that the standoffs are thick enough to expand and contract. Drill panels 1/4" diameter larger than the standoffs (Figure 11).
8. Caulk and seal all edges to keep water from getting behind the panels (Figure 11).

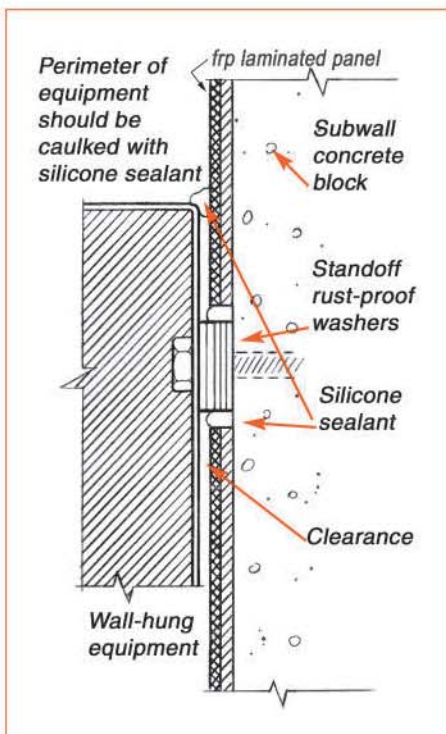


Figure 11

Factory Laminated Panel Installation

Laminated panels may be installed following the frp panel installation instructions. Laminated panels are commonly installed directly over a steel or wood studded wall. Stud spacing is recommended to be 16" or less on center. Stud spacing should be planned so that panel edges will occur on stud centers. Laminated panels should not be installed over C-Channel aluminum studs, as the aluminum may not be strong enough to resist any movement in the paneling should expansion or contraction occur.

- Use the same spacing guide for panels and fasteners as listed in frp panel installation recommendations.
- Laminated panels may be installed without a division bar molding, but maintain a 1/8" space between panels. This space allows for normal expansion and should be filled with silicone sealant to completely seal the installation from moisture (Figure 12).
- Always seal around any moldings, fixtures or fasteners to provide moisture resistant installation.
- Laminated panels may be fastened with non-corroding nails or screws directly to wood or steel studs (minimum 25 GA.) or with nylon drive rivets to drywall, plaster, or concrete block. Install fasteners no further than 8" apart around outside edges and 12" apart on intermediate 16" centers.
- Put perimeter fastener holes 1/2" to 2" from panel edge depending upon width of molding being used.
- Fastener holes in the panel should be predrilled 1/8" larger than rivets.
- One-piece molding is available for use with standard 9/32" OSB laminated panels.
- Two-piece molding or heavy-duty batten strip and corners are available for non-standard thicknesses (Figure 5). See your frp panel distributor for availability.
- Silicone sealant should be applied in all moldings and around all panel edges, fasteners, and fixtures to provide moisture resistant installation.
- When bonding fluted polypropylene laminated panels to steel studs, or non-porous surfaces, use VHB (very high bond) 3M tape. Contact 3M for correct VHB tape.

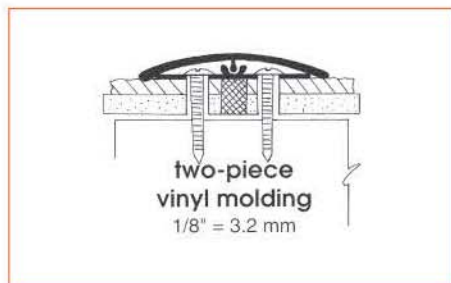


Figure 5

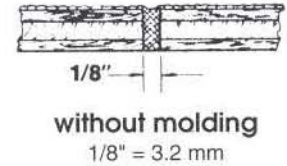


Figure 12

CEILING
INSTALL

CAR WASH
INSTALL

FACTORY
LAMINATED
INSTALL

CORPORATE HQ

Crane Composites, Inc.
23525 W Eames
Channahon, IL 60410 U.S.A.

Phone

800.435.0080
815.467.8600

Fax

815.467.8666

Email

salesbp@cranecomposites.com



Form #6876 Rev. 03 (4235) 2/09

www.cranecomposites.com

inspired by **Kemlite**
Kemlite and Fire-X Glasbord are registered trademarks of Crane Composites, Inc.
PaperTiger is a registered trademark of PaperTiger Ltd.
Roto-Zip is a registered trademark of RotoZip Tool Corporation.



**CRANE**

A Crane Co. Company

Composites

TECHNICAL DATA**7028**

Rev. 2 | 03/2009

Moisture Resistant Substrates

Moisture-resistant gypsum varies tremendously, while some of these new surfaces allow moisture to penetrate, others retard or totally prevent penetration of water or solvent. Testing by Crane Composites indicated that when water based or solvent based frp adhesives are used in conjunction with moisture resistant gypsum the adhesive ability to cure is severely compromised in the crucial first 24 hours of installation and the potential for a successful installation is greatly diminished. Franklin International and the construction trade are becoming exposed to an increasingly large number of new types of moisture resistant gypsum from the drywall industry. Given these two facts, it is recommended that Franklin International's Technical Support Department be consulted prior to any frp installation over wall substrates other than standard gypsum.

Standard gypsum is Crane Composites preferred substrate choice when installing frp wall panels. Frp offers resistance to mold, mildew, and bacteria growth and has a high impact strength, high moisture resistance, chemical resistance and stain resistance.

A moisture resistant substrate may not be necessary when an frp finish is specified. However, should a moisture-resistant gypsum be required please contact either Franklin or another adhesive supplier to review the proposed substrate and obtain a recommendation on appropriate adhesive for that type of substrate surface prior to installation.

Crane Composites will not be responsible for failed installations due to lack of adhesive bond strength between the adhesive and the substrate.

Please do not hesitate to contact:

Crane Composites Customer Care

1.800.435.0080

or

Dale Zimmerman, Franklin Technical Support

800.347.4583 | DaleZimmerman@FranklinInternational.com

**CRANE**

A Crane Co. Company

Composites