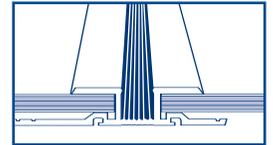
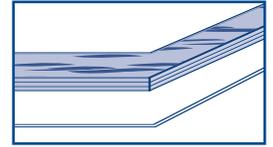
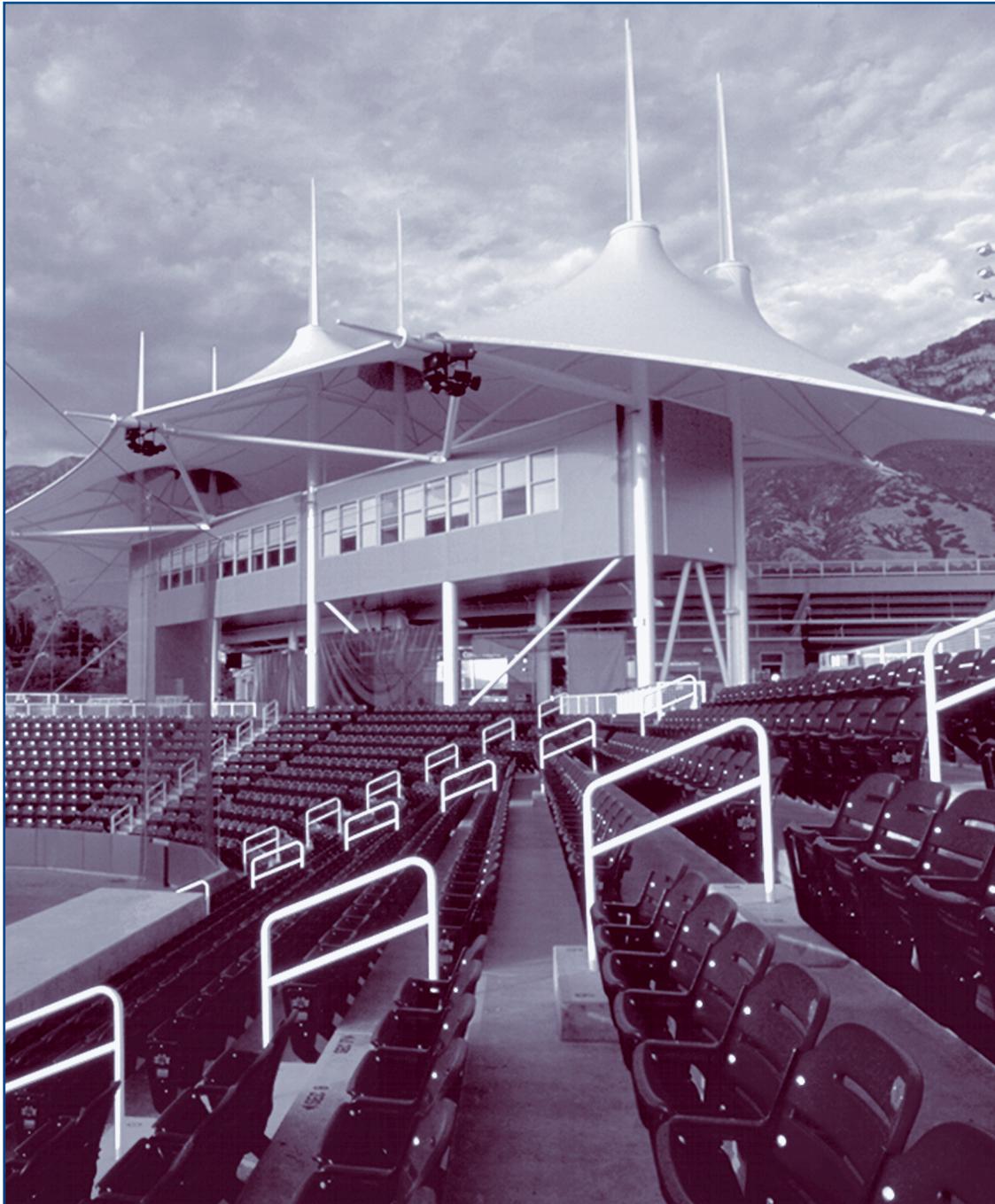


Installation Guide for Omega-Ply® Aluminum Faced Building Panels

OMEGA-PLY® INSTALLATION



Laminators has complete installation guidelines for a variety of applications.

When installing our panels on Clip and Caulk, Rout and Return, One-Piece, Tight-Fit Molding or Two-Piece, Snap-Fit Molding installations call 1-877-OMEGA77 to request the appropriate installation guide.

Over 40 years of delivering quality products & innovative solutions



www.LaminatorsInc.com

Tech support: 1-877-OMEGA77

Substrate and Framing

Prior to installation, the installer **MUST** verify that the framing and substrate are in compliance with all architects' specifications.

Inspect BOTH primary and secondary wall framing to verify that all girts, angles, channels, studs and sheathing and other structural panel support members and anchorage have been installed within the following tolerances:

1/4" in any 20' length vertically or horizontally

1/2" in any building elevation

Inspect sheathing to verify that sheathing joints are supported by framing and that installation is within flatness tolerances. These surfaces must be even, smooth, sound, clean and dry. If the substrate or framing is not within architectural specifications, the installer must submit a written report to the General Contractor listing conditions that are detrimental to the installation of panels. Do NOT proceed with installation until unsatisfactory conditions have been corrected.

Summary of Installer Responsibility

The Panel Installer assumes total responsibility for all components of the panel installation including, but not limited to attachment to sub-construction, panel-to-panel joints, joints between panels and dissimilar material, and the joint seal associated with panel system.

Installation Supplies & Accessories

See page 7 to be sure you are using materials that have been tested and approved by Laminators for use with Omega-Ply panels. Inventory all materials and accessories to ensure that all materials are available on-site. Call Tech Support if you need additional recommendations.

Receiving and Storage

Examination: Upon receipt of materials, perform a thorough examination to identify any damage that may have occurred during shipping.

Storage: Panels are to be stored horizontally on pallets with a positive slope for drainage of water and should be covered with watertight and ventilated materials. *Standing water will damage panel finish.*

No more than 1500 pounds should be stacked on one pallet. Depending on panel size, this should be fewer than 50 panels at 30 pounds per panel and less than 2-1/2' high. Do not stack other materials on or in contact with panels to prevent staining, denting, or other damage. Storage temperature must not exceed 120°F (49°C).

Omega-Ply panels are manufactured with a slight concave bow to assist in bonding the center to studs and furring. Panels must be kept stacked and weighted to retain the bow during storage.

Laminators' warranty does not cover water damage caused by improper storage or installation. Inspect panels on delivery, then store them on skids 8" above the ground. Place a breathable cover over them and store them in a ventilated space under roof.

If wet panels are discovered, uncrate them and dry them with towels to prevent wood rotting, paint attaining or aluminum corrosion.

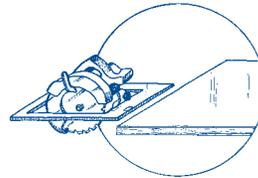
Panel Handling

Use clean work gloves to avoid hand injury from any sharp edges and to prevent smudging of the prefinished surfaces. Although panels are shipped with protective masking on both sides, always lift one panel completely off the next to prevent scratches. Do not slide one panel across another.

Protect panels from construction hazards. Good construction practice provides for panel protection and cleaning in the contract documents. Normally these are the general contractor's responsibility. Temporary protection may be required if welding, cutting, sandblasting, or other potentially damaging construction activities are scheduled nearby.

Cutting the Panels

Omega-Ply panels are designed to be cut to size on the job site. Even if the panels have been received cut to size, it may be necessary to do some minor trimming to account for areas of an elevation that may be out of square. To cut Omega-Lite panels, use a circular saw with a sharp, carbide-tipped blade – (40-tooth minimum). Do not remove the protective masking from the panel face. After cutting, use a screwdriver or deburring tool (see page 7) to remove burrs or sharp edges from the panels.



Carbide-tipped blade (40 tooth min.) recommended

Safety tip: Wear safety glasses when cutting! Wear gloves when handling cut edges!

Ventilation is Important

The wood or exterior gypsum board of the substrate must be protected and ventilated. Trapped moisture can cause major damage in a short time. When mounting over exterior gypsum or masonry, use steel strapping or hat channels to separate panels from the structure for good air circulation.

Flashing

Laminators can supply flashing materials made from 0.32"(0.813 mm) aluminum sheet painted to match the adjacent panel system or surface.

Use proper flashing technique when installing flashing with panels.

Complete product specifications can be downloaded from our architectural web site www.LaminatorsInc.com or you can request them by fax at 215-721-1239.

Omega-Ply® Building Panels

Available in many attractive colors, smooth or stucco finish, economical Omega-Ply® panels provide a decorative accent for fascias, soffits, and storefronts. Its high impact-resistant plywood or hardboard core and aluminum facing make it the strongest panel we manufacture. It can withstand high wind and structural loads. Step-by-step installation instructions should be followed to obtain desired results with an Omega-Ply System.

Before You Start	Inside Front Cover
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Caulking the Panels	2
Preparing the Wall	3
Installation	4 - 6
Tools and Accessories	7 - 8
Tools and Accessories Available from Laminators	8
Code of Quality	Inside Back Cover

Omega-Ply Panel Maintenance

For scratches and rub-marks:

Omega-Ply touch-up paint and re-paint instructions are available from Laminators. For larger paint repairs, call Laminators for standard paints designed for aluminum surfaces available at paint stores.

Keep harsh solvents away from finish:

Panel finishes are resistant to most but not all solvents and chemicals. If in doubt, call Laminators for compatibility charts. You can safely use mineral spirits to remove uncured sealants and paints.

Routine cleaning:

Omega-Ply panels should be washed periodically to keep them bright. Plain water and a clean cloth are all you need to remove ordinary dirt buildup. A mild, non-abrasive household detergent with a clean-water rinse can be used for more stubborn stains. Solvents such as alcohols, mineral spirits, naphtha, turpentine, and xylene can be applied with a soft cloth. Never soak panels in solvents.

Panels with metallic paint finishes:

The protective masking on the face of each panel should be left in place until work is complete on any given area of an installation. However, to help ensure good color uniformity, periodically remove the masking from half of a panel (peel masking upward from the bottom of the panel) to check for color, paint defects, scratches and dents.

On panels with metallic finishes, a good color match is much more difficult to achieve. In this case, two adjoining panels should be periodically checked by removing the masking from half of two panels as the installation progresses. The masking should then be taped back over the panel to protect it.

Should any defects be found, stop work immediately and call Laminators for assistance.

When installing panels with metallic finishes, it is very important that the directional arrows on the panel masking are oriented in the same direction.

Color variation is a characteristic of Aluminum composite panels with metallic paint finishes. Laminators Incorporated DOES NOT warrant a color match for these panels.

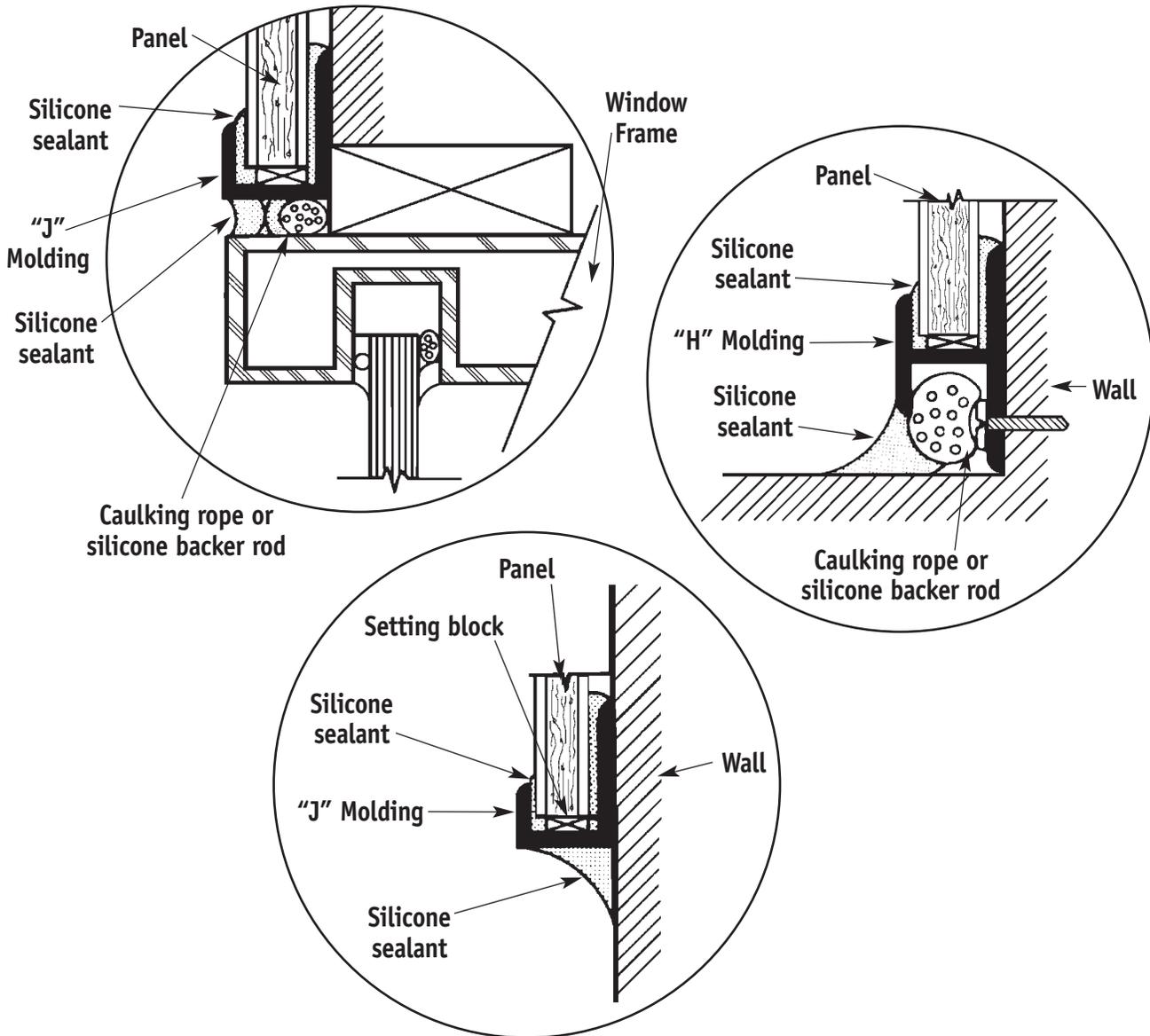
CAULKING THE PANELS

Tech Support: 1-800-523-2347

Pay special attention to caulking instructions. Omega-Ply cores are water-absorbent; water causes the core to swell, rot, and corrode the aluminum face leading to panel failure. If you have any questions about proper installation procedures, call Laminators for knowledgeable, personal service.

Water problems can be prevented by careful caulking. *Please follow instructions!* When caulking inside tight moldings/extrusions use "self-healing" sealants, such as butyl or solvent-based acrylic types. **Do not use elastic, rubber-forming sealants (such as urethanes, silicones or latex) in moldings/extrusions with woodcore panels — they leak!**

Cleanup is easy with mineral spirits and a non-marking scraper. Where moldings meet walls, door frames, and windows, fill the gap with elastic, rubber-forming sealants, such as silicones, urethanes, polysulfides, and latexes. Where needed, use a bond-breaker back-up, like caulking rope or silicone backer rod, as shown below.



Self-healing sealants should be used at the joints of frame members and glazing stops.
Rubber-forming sealants should be used between moldings and adjacent building materials.



Prepare the Wall for Panel Installation

Lay out the wall to be covered so that the joints work in your favor. Put the edges where long, straight cuts would fall, such as next to windows or doors. Pick a corner or the edge of a window or door as a starting point, measure accordingly, then snap the lines. Set chalk lines to establish verticals, then view the entire wall.

Ensure Panel Drainage

In installations more than the height of one panel (8'), vertical and horizontal moldings will cross paths. It is important that vertical, Reveal "H" moldings not be blocked, because they carry drainage down the panel wall.

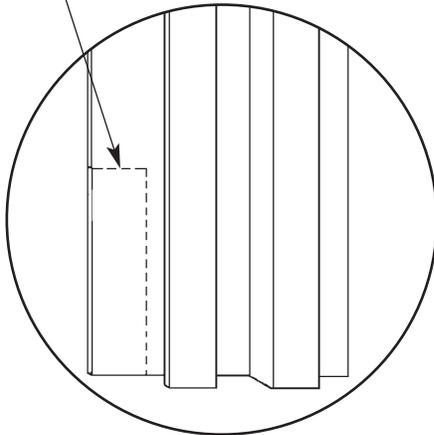
To ensure that no blockage occurs, "H" moldings should be installed in a continuous, uninterrupted descent from top to bottom.

We recommend in installations more than 8' high that horizontal moldings be cut into lengths and fitted between the vertical moldings.

The dotted line shown in the drawing indicates an area where two moldings will intersect. This area must be cut away so that after installation, moldings will sit on the same plane. An area approximately four square inches should be adequate for the entire intersection. Use tin snips to cut the area to be removed. Using sheet metal pliers (duck bill vice grips), bend the material up and down until the piece snaps off.

Improved drainage and cavity ventilation can be achieved by overlapping vertical extrusions with horizontals. Run vertical moldings through, and abut horizontals for the best expansion/contraction control. Measure and cut the first panel as necessary to obtain a true vertical edge.

Cut away

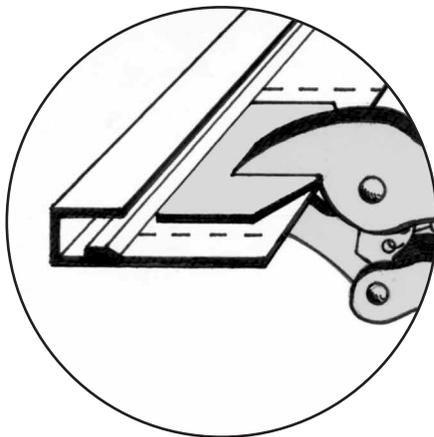


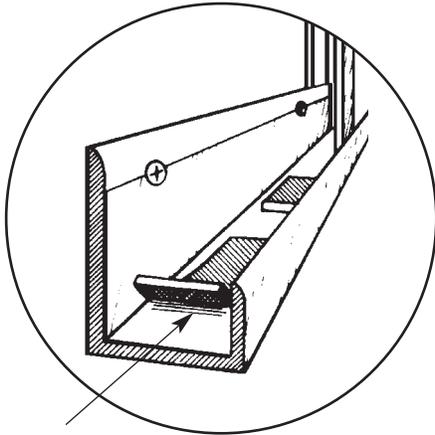
Install Furring

Trim all openings and bottom edge to roof deck or sidewalks with flashing, as appropriate, and install furring, if desired. If the wall is concrete, install furring to prevent moisture build-up. For drywall, furring should be installed with fasteners going through the drywall into structural members. If a wall is uneven, furring can be used with shims to level the surface.

Locate furring strips on center at panel joints. Space strips every 16" on center so that intermediates will provide adequate panel support when adhesive is applied. If you use gypsum board, you must use furring for strength and ventilation, and cover the gypsum with building paper. Fasteners for furring must go completely through the gypsum board and into a structural member. Panels are then anchored to the furring. Be sure to use exterior grade gypsum board.

Install furring as you go, or work ahead of panel installers. Take care to measure and space furring to leave room for caulk and trim.





2 rubber shims in bottom molding of each panel

Install Moldings

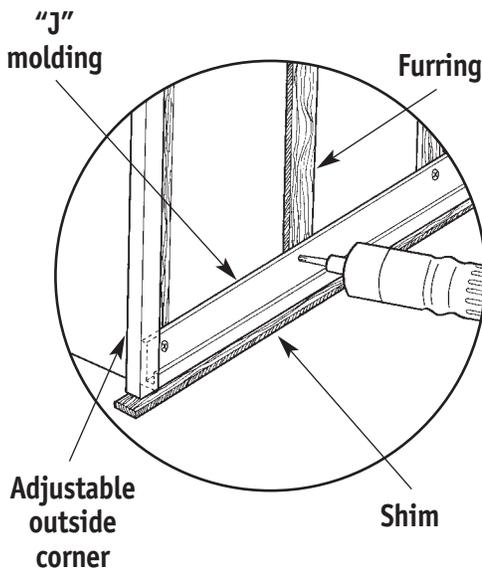
Moldings are blind-fastened, so you must make sure screws don't get in the way of panels when panels are inserted in moldings. Use 1" galvanized drywall screws, 13/4" ring-shank or screw-shank nails (galvanized, aluminum, or stainless steel). TEK screws should be used for steel framing. Install the corner or edge molding. Make sure it is plumb and true.

Establish a baseline at right angles to the corner, and install the bottom, drip-edge or "J" molding for one panel.

Shim the bottom molding off the ground or sidewalk before fastening so that moisture and salt cannot attack the molding or the panel. Don't forget to remove the shim when fastening is completed.

Measure Space For the First Panel

Measure and cut the panel to fit the space. Plan on cutting the outside corner to establish a true vertical edge.



Insert Shims in the Molding

Peel paper from the rubber shims. Place two of the shims in the bottom molding. These provide a cushion for panel expansion and a reservoir of sealant.

Carefully Caulk the Moldings

Using a silicone caulk recommended by Laminators, see page 7, run enough sealant into all moldings so that it oozes out when the panel is installed. Two 3/16" diameter beads caulk will ensure that there are no skips in the sealant. Only caulk molding for one panel at a time.

See page 2 for caulking recommendations.

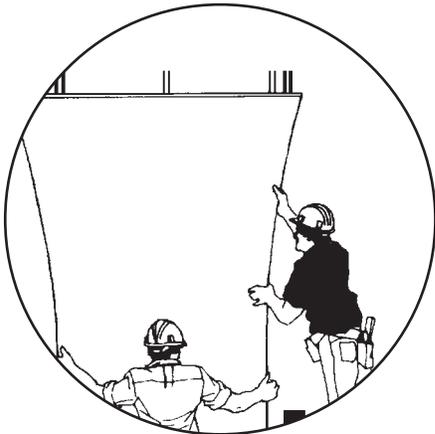


Apply Panel Adhesive

Apply a bead of panel adhesive to intermediate framing. For sheathing, apply thick daubs of a recommended panel adhesive. This will limit panel deflection caused by wind or weight. Be sure to use a Laminators' approved panel adhesive, see page 7.

Peel Back the Clear Masking

Don't forget to peel plastic masking back 3-6" from the edges on the front before inserting panels in the molding. Remove it completely from the back of the panel. All masking should be removed when the installation is completed. Masking should be left on no more than 2 weeks or it becomes nearly impossible to remove.

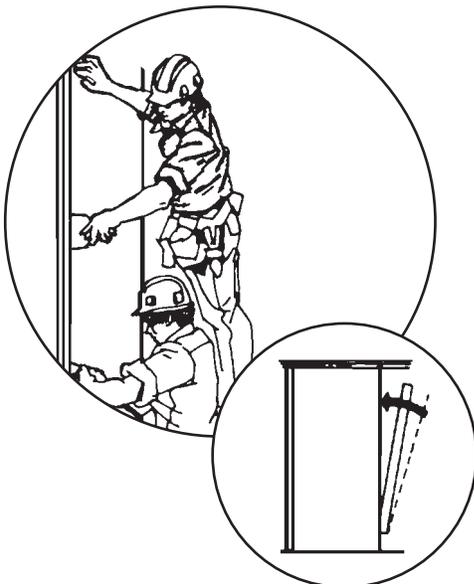


Install the Panel

Place the bottom edge of the panel into the precaulked molding. With the bottom edge in place, push the panel firmly against the wall, then pull it away. Check to be sure the adhesive contacts the panel at all points. If so, push the panel into place immediately. If not, apply more adhesive to make sure it contacts wall.

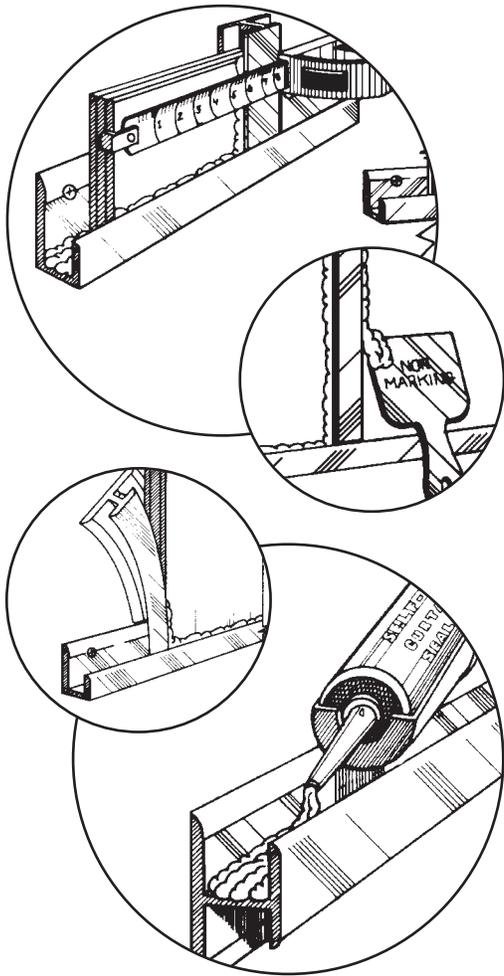
Slide the Panel Into the Edge or Corner Molding

Slide the panel sideways into the precaulked edge or corner molding. You can use wide-blade putty knives to "shoehorn" the panel into the vertical molding if needed.



Seat the Panel Securely

Seat the panel in the corner molding using a 2" x 6" taper. Hold the top of the 2" x 6" near the top of the panel edge and swing the bottom to strike the edge of the panel – or you can hold the 2" x 6" against the panel and hit it with a hammer. Using the 2" x 6" taper prevents damaging the edge of the panel.



Check Your Work

Measure to be sure the panel is fully inserted into the molding. This will ensure that panel edges stay covered as the building expands and moves over time. Look for uniform “squeeze-out” of caulk all around the panel.

If molding is required at the top of the first row of panels, caulk and attach an “H,” reveal “H,” or “J” molding along the top edge of the panel.

Clean up the Squeeze-out

Scrape any excess caulk off with a non-marking plastic scraper and clean the panel with mineral spirits.

Insert the Next “H” Molding

Fit the next vertical “H” molding. Fill the molding with caulk then install the molding over the edge of the last panel you installed. Fasten the molding as before.

Repeat the installation process until finished.

Fill all joints between moldings and adjoining construction at the ends of panel runs with silicone caulk. Cover the top of the panels with polyethylene to keep water out if flashing or a parapet is to be installed at a later date.

Remove masking from the front of the panel. Failure to do so within two weeks will make masking impossible to remove.

Don't forget to remove masking and shims when installation is complete

Liquid Nails® Heavy-Duty for Construction & Remodeling

Apply a generous amount of Liquid Nails® to the sheathing to prevent panel adhesive from drawing the panel toward the building as it dries, Gaska foam tape should be placed out in the field of the panel where it will shim the adhesive to the proper thickness away from the furring or sheathing.

There are several types of Liquid Nails®. Each Liquid Nails adhesive is specially formulated to bond to various substrates and common building materials with different construction requirements.

LN-901 Heavy-Duty for Construction & Remodeling is the only exterior version that will stick to wet and/or frozen lumber as well as metal panels.

Laminators' recommendations for sealants are developed from our field tests and compiled from years of feedback from our customers. Recommendations are based on product availability, durability and ease of application. We

suggest that the sealants build up enough strength in an overnight cure so that bubbles do not form. We supply caulk in custom colors to match our panels.

Carefully review the caulk manufacturer's literature for skin formation, tack-free time and cure times before using. Remember, your environmental condition is the biggest factor in deciding which sealant is appropriate for your project. Caulk only one joint at a time so that the caulk does not skin over before it can be tooled. Only caulk 4' to 6' at a time for a smooth finish.

It is important to only use sealants from our recommended list and to always test your sealant in the environmental conditions you are currently working in to find the one that works best. Consult with us if your caulk is not performing as expected.

Liquid Nails® is a registered trademark of Macco Adhesives

Hand Tools

Aviation or "tin" snips for cutting extrusions or flashing metal

Carpenter's circular saw (7-1/4" blade) with 40 teeth (min.) for cutting panels to size – triple chip grind (for nonferrous metal or plastic)

Deburring tool (or screwdriver) to remove burrs from cut panel edges

Disc grinder or sander (4-5") to adjust sheathing, panel, and extruded moldings for a good fit.

Fine, single-cut flat file for trueing metal edges of panels or moldings

Hammer (with crutch tip) or a rubber mallet to adjust panels

Jigsaw with sharp, 24-tooth, sheet metal cutting blade to make panel cuts

Miter saw for cutting extruded aluminum moldings

Sheet metal pliers (duck-bill vice grips) to trim moldings

Screw gun to drive self-drilling, self-tapping screws for mounting panels and extruded moldings with #2 Phillips-head tips and 1/8" quick-change drill bits

Screws *(galvanized)*

#6 x 1-1/4" bugle-head drywall or #12 phillips-head pan-head screws for securing clips into sheathing

#8 or #10 x 3/4" or longer, TEKS/3 screws to secure clips into steel studs

#6 x 1/2" and #6 x 1" Phillips pan-head, TEKS/2 screws for mounting moldings to plywood or metal

Caulking Tools

Caulking gun (11oz. or 1-quart tube) for panel adhesive

Caulking rope or backer rod; use 1/4" or 3/8" to suit job

Clean rags (24), approximately 2' x 2' in size for caulk wiping and clean-up

Masking tape (Scotch brand Safe Release Masking tape™ is recommended) 1" wide

Mineral spirits to clean caulk from panels if necessary

Plastic putty knife (1-1/2") for use with 1" masking tape to keep caulk off the panel faces, making the job easy to clean up

Utility knife to cut and trim tape

Contractor's Supplies

Furring strips or studs as needed

Gloves (clean) to handle panels

Insulation, 3/4" foam to go between furring strips

Peel-and-stick flex flashing ("Snow and Rain

flashing") for flashing building transitions and bottom edges of sheathing

Safety goggles

Rubber shims, for spacing if molding is used

Wood shims, for spacing between ground and bottom molding

Tape measure

Panel Adhesives *(Tested and Approved)*

Surebond® (1-847-843-1818)

SB-400; PS-800

Macco Adhesives (1-800-634-0015)

LN-901 Liquid Nails® Heavy-Duty for Construction and Remodeling

Franklin International (1-800-877-4583)

Titebond® construction adhesive

Silicone Sealants *(Tested and Approved)*

GE Silicone (1-800-332-3390)

Silpruf®

Silglaze® II

Dow Corning (1-800-248-2481)

(20 year warranty available)

791 Silicone sealant

795 Silicone sealant

995 Silicon sealant

Tremco (1-800-321-7906)

Spectrem® 1

Gaska Foam Tape

Gaska Tape, Inc. (1-800-423-1571)

V 710 3/16" x 1/4" x 2"

Note: Trademarks are registered by the companies noted

How Much Will I Need?

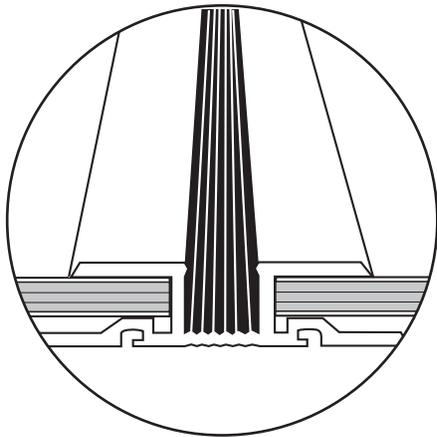
For every 100 square feet of Omega-Ply panels you will need:

- 3 tubes silicone sealant
- 2 tubes panel adhesive
- 1 roll Gaska Foam Tape

Available Direct from Laminators Incorporated

Call 1-877-OMEGA77 to order.

Omega-Ply Moldings:



If you plan to use 2-Piece moldings for installation of Omega-Ply panels, please call Laminators to discuss the special procedures required for their installation.



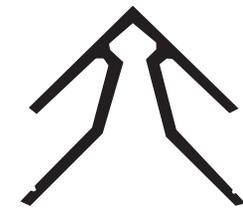
"H" molding
Part #4705



"J" molding
Part #4715



Inside corner (drip cap)
Part #4276



Adjustable (bendable outside corner)
Part #4735



Reveal Molding
Part #5014

Fabrication Supplies Available from Laminators Incorporated

Color-matched sheet metal for flashing

Color-matched soffit vents 3/4" diameter

Panel adhesive

LN-901 Liquid Nails® for heavy-duty construction and remodeling

Color-matched caulk

Dow Corning caulk

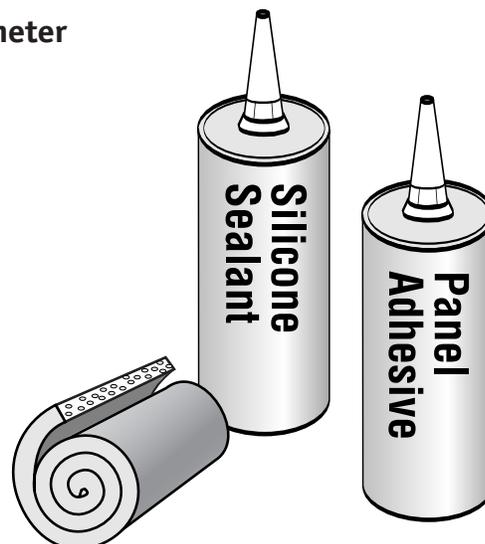
995 Silicone sealant

Tremco

Spectrum® 1 silicone sealant

Gaska foam tape

V 710 3/16" x 2"



Can Anyone Install Omega-Ply® Panels?

Our installers work in several areas of construction trade specialities:

- Wall cladding
- Glass and glazing
- Sheet metal
- Roofing contractors
- Carpentry
- Metal fabricators

What is a Factory Authorized Installer?

Factory authorized installers have signed the Laminators Code of Quality.

What is the Laminators Code of Quality?

The Code of Quality represents an installers' commitment to:

- Ensure that ALL tradesmen on a given project understand and strictly adhere to the contents of this guide.
- Maintain regular communication with the general contractor and architect to ensure that all pre-existing conditions as well as the finished job are consistent with the approved drawings.
- Have all shop drawings approved and signed by the architect and general contractor prior to beginning installation. Any mid-job plan modification **MUST** be approved and signed by the architect and the general contractor.
- Guarantee all workmanship for a period of not less than one year.

www.LaminatorsInc.com

Visit our web site for standard CAD details.

Download the architectural details you need.

Call tech support if you can't find what you're looking for, or for installation assistance.

Support Materials

Available from Laminators to help with your installation requirements:

Call **1-877-OMEGA77** or visit **www.LaminatorsInc.com**

Laminators' warranty is limited to the panel construction only and does not apply to panel fabrication, storage or installation.



WARNING!

**FAILURE TO
FOLLOW THESE
GUIDELINES
WILL VOID YOUR
WARRANTY!**

For technical and installation support, call

1-877-OMEGA77

or visit www.LaminatorsInc.com
