



Board and Batten Installation Guide



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IMPORTANT INFORMATION

The application and detail drawings in this manual are strictly for illustration purposes and may not be applicable to all building designs or product installations. All projects should conform to applicable building codes for that particular area. It is recommended to follow all building regulations and standard industry practices.

MetalMax Roofing & Siding is not responsible for the performance of the wall system if it is not installed in accordance with the suggested instructions referenced in this manual. If there is a conflict between this manual and the approved MetalMax erection drawings, the approved erection drawings are to take precedence.

Prior to ordering and installing materials, all dimensions should be verified by field measurements.

Oil canning is not a cause for rejection. Oil canning can be described as the amount of waviness found in the flat areas of metal panels. Oil canning is an inherent characteristic of light gauge cold formed metal products, particularly those with broad flat areas. There are many factors which may contribute to oil canning that MetalMax is not able to control. These factors include: misalignment of the support system, over driving of fasteners used on the panels, stress (whether inherent in the panel or induced), thermal expansion and contraction of the panel, material handling, width, gauge, length, color of panels and installation. (Reference Metal Construction Association "Oil Canning Position Paper" - Appendix A).

MetalMax reserves the right to modify, without notice, any details, recommendations or suggestions. Any questions you may have regarding proper installation of Board and Batten Panels should be directed to your MetalMax representative, (see pages 2 and 3).

Consult MetalMax for any additional information not outlined in this manual. This manual is designed to be utilized as a guide when installing Board and Batten Panels. It is the responsibility of the erector to ensure the safe installation of this product system.

SAFETY

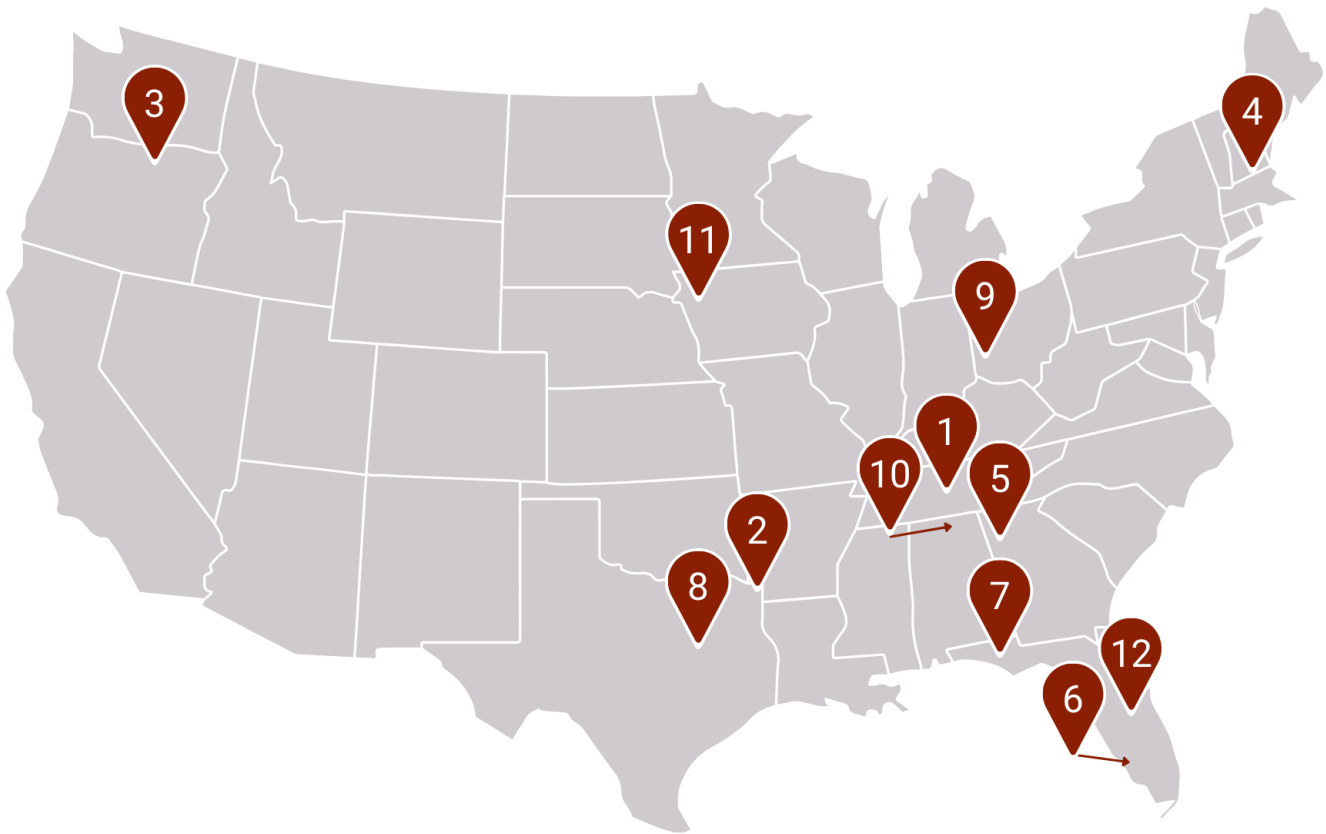
STUDY APPLICABLE OSHA AND OTHER SAFETY REQUIREMENTS BEFORE FOLLOWING THESE INSTRUCTIONS.

The installation of metal roof systems is a dangerous procedure and should be supervised by trained knowledgeable erectors. **USE EXTREME CARE WHILE INSTALLING METAL PANELS.** It is not possible for MetalMax to be aware of all the possible job site situations that could cause an unsafe condition to exist. The erector is responsible for reading these instructions and determining the safest way to install the wall system.

These instructions are provided only as a guide to show a knowledgeable, trained erector the correct parts placement one to another. If following any of the installation steps would endanger a worker, the erector should stop work and decide upon a corrective action.

Provide required safety railing, netting, or safety lines for crew members.

LOCATION MAP & CONTACT INFORMATION



1. MURFREESBORO, TN
900 Cot Joe Fulghum Dr
Murfreesboro, TN 37129
615-494-1693

4. CONCORD, NH
28 Locke Road
Concord, NH 03301
603-892-5362

7. FREEPORT, FL
3296 State Highway 20 E
Freeport, FL 32439
850-835-2532

10. ATHENS, AL
17713 US-72
Athens, AL 35611
256-232-8080

2. TEXARKANA, TX
8000 Hampton Road
Texarkana, TX 75503
903-793-2067

5. CALHOUN, GA
180 N. Industrial Blvd NE
Calhoun, GA 30701
706-383-8554

8. WACO, TX
10231 S IH 35
Waco, TX 76706
254-230-4141

11. CHEROKEE, IA
5134 Highway 3
Cherokee, IA 51012
712-321-3777

3. HERMISTON, OR
915 E. Elm Avenue
Hermiston, OR 97838
541-289-6380

6. ARCADIA, FL
6192 Florida 72
Arcadia, FL 34266
863-491-9400

9. DAYTON, OH
109 Quinter Farm Rd
Union, OH 45322
937-741-8010

12. KISSIMMEE, FL
800 E Donegan Ave
Kissimmee, FL 34744
407-935-9714

LIMITED LIFETIME SMP PAINT WARRANTY

Warranty coverage for WeatherXL™ painted panels on AZ50 alum-zinc coated steel or HDG steel (G90/G60) substrate including but not limited to:

MaxPanel, PBR Panel, PBU Panel, MaxLoc100, MaxSeam175, MaxSnap150, MaxMech150, MaxMech200, Board and Batten Panel, and MaxStrong

1. MetalMax warrants that the color-coated finish applied to its steel roofing and siding panels will not crack, check, peel or lose adhesion. *This does NOT include minute fracturing, which may occur in proper fabrication of the building parts. Failure due to substrate corrosion is excluded. This warranty does not apply to the reverse side finish of the product.*
2. MetalMax also warrants that the color-coated finish applied to its steel roofing and siding panels will not, within a period of thirty years after installation or a period of thirty years and one month after the date of shipment (whichever comes first), chalk or lose color according to the following:
 - a) Chalks in excess of ASTM D-4214 Method A number six (6) rating on horizontally installed (roofing) panels and number eight (8) rating on vertically installed (sidewall) panels, when properly maintained as described herein (*Except for Brite Red that chalks in excess of a five (5) rating on horizontally installed (roofing) panels and a number six (6) rating on vertically installed (sidewall) panels*), and
 - b) Changes color more than seven (7.0) Hunter delta-E units on horizontally installed (roofing) panels and five (5.0) Hunter delta-E units on vertically installed (sidewall) panels as determined by ASTM method D-2244 (*Except for Brite Red with color changes in excess of a ten (10) Hunter delta-E units on horizontally installed (roofing) panels and a number eight (8) Hunter delta-E units on vertically installed (sidewall) panels*). Color change shall be measured on an exposed painted surface that has been cleaned of surface soils and chalk, and the corresponding values measured on the original or unexposed painted surface. Color changes may not be uniform on surfaces that are not equally exposed to the sun and elements and MetalMax does not warrant that color changes will be uniform.
3. **DISCLAIMER OF WARRANTY:** THE EXPRESS WARRANTY STATED HEREIN IS THE EXCLUSIVE WARRANTY APPLICABLE TO METALMAX PRIME PAINTED MATERIAL ONLY, ROOFING AND SIDING PANELS. METALMAX MAKES NO WARRANTIES OR GUARANTEES, EITHER EXPRESSED OR IMPLIED, BEYOND THE FACE HEREOF INCLUDING, WITHOUT LIMITATION, WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. METALMAX SHALL HAVE NO OTHER LIABILITY WITH RESPECT THERETO. This warranty will apply to those panels refinished or replaced but only for the period of time left on the original warranty. No employee or representative of MetalMax is authorized to change this limited warranty in any way or grant any other warranty regarding the product.
4. **LIMITATION OF LIABILITY:** THE EXCLUSIVE REMEDY FOR ANY AND ALL CLAIMS ARISING FROM THIS LIMITED WARRANTY SHALL BE LIMITED TO METALMAX REFINISHING OR REPLACING DEFECTIVE PANELS OR REFUNDING THE PURCHASE PRICE OF SUCH PANELS AS METALMAX SHALL ELECT. METALMAX SHALL NOT BE LIABLE FOR ANY LOSSES, DAMAGES, OR EXPENSES, WHETHER DIRECT, INCIDENTAL, OR CONSEQUENTIAL DAMAGES. IF THE WEATHERXL™ SILICONIZED POLYESTER COATINGS FAIL TO COMPLY WITH OUR LIMITED WARRANTY, WE WILL PAY FOR THE LABOR AND THE MATERIALS REASONABLY NECESSARY TO REPAINT, REPAIR OR REPLACE, AT OUR OPTION, THE BUILDING PART SHOWING THE FAILURE. METALMAX'S TOTAL LIABILITY IS EXPRESSLY LIMITED TO THE PURCHASE PRICE OF THE METALMAX STEEL ROOFING AND SIDING PANELS.

LIMITED LIFETIME WARRANTY

5. Claims under this warranty must be made in writing to MetalMax at PO Box 331973, Murfreesboro, TN 37133 within 30 days after the discovery of the defect. The notice to MetalMax shall include adequate identification of the material involved, nature of the claimed defect, date of the installation, date of shipment and order number. Failure of the claimant to provide such information in the time provided shall be deemed as a waiver of the claimant's rights herein. MetalMax shall have an additional 30 days to inspect the MetalMax steel roofing and siding panels before any further action shall be taken.
6. MetalMax does not warrant or guarantee the interior or reversed side finish or prepainted materials used for interior application.
7. MetalMax does not warrant or guarantee claims arising from damage to panels due to exposure to salt and salt water, water spray, corrosive or harmful chemicals (whether solids, liquids or gases), airborne contaminants, hail or other agents of a similar nature. Warranty is not valid on a property located 1,500 or fewer feet from a salt water environment.
8. MetalMax does not warrant or guarantee claims arising from the following:
 - a) Damage or defects caused by acts of God, falling objects, external forces, explosion, fire, riots, civil commotion, acts of war, excessive radiation, or other similar or dissimilar occurrences beyond MetalMax's control.
 - b) Minor hairline cracking of the paint finish.
 - c) Defects or damages to the painted steel roofing and siding panels caused by handling, shipping, transit, processing, storage or installation; damage due to failure of the substrate.
 - d) Damage caused by moisture or other contamination prior to installation.
 - e) Steel shavings or minute iron particles from sawing sparks that come in contact with the painted surface.
 - f) Non-vertical panels that don't have an adequate degree of pitch so as not to allow any free standing or accumulation of standing water.
 - g) Stored or installed in a way that allows for contact with animals or animal waste.
 - h) Deterioration to the panels caused directly or indirectly by panel contact with fasteners. The selection of suitable fasteners rests solely with the buyer.
 - i) Weather uniformity under non-uniform conditions.
 - j) Unusual harmful fumes, chemically aggressive environment, foreign substances in the atmosphere, standing water or direct salt spray.
 - k) Damage due to chemically treated or wet lumber.
 - l) Where materials / items such as snow guards and solar panels are attached / adhered to the product.
9. The warranty applies to panels installed in the continental United States.
10. MetalMax extends this warranty solely to the owner, at time of installation, of the structure where the material is originally installed. In instances where the owner of any structure where the material is installed is a non-living entity, including but not limited to corporations or associations, the warranty contained in Item 1 above is limited to 40 years.
11. This warranty is not transferable and non-assignable after one year from purchase date.

40-YEAR PVDF PAINT WARRANTY

EXCLUSIVE WARRANTY

This Warranty (collectively, the "Warranty") is issued by MetalMax LLC (hereinafter referred to as "MetalMax"), to the customer identified in this Certificate (hereinafter referred to as "Customer") and applies to the finish on AZ50 Galvalume®, G90 Galvanized, or Aluminum flat sheet and coil products (hereinafter referred to as the "Product") with PVDF based coating consisting of KYNAR 5000® or Hylar 5000® resin (hereinafter referred to as the "Coating") if erected anywhere within the Continental United States including Alaska, Hawaii and Canada.

1. Subject to the provisions contained herein, MetalMax warrants that during the Forty (40) Year Warranty Period, MetalMax's COOLR stock Coatings will not chip, crack, peel, flake or check (except for such slight crazing or cracking as may occur on tightly roll-formed edges or break bends at the time of roll forming or other fabrication of pre-painted sheet or coil and which is accepted in the industry as standard). Subject to the provisions contained herein, MetalMax warrants that for Thirty (30) years from the date of installation of panels, the Coating will not chalk in excess of ASTM D-4214 method A659 number eight (8) rating when properly maintained in accordance with Valspar's printed guidelines. Will not change color more than Five (5.0) Hunter ΔE units as determined by ASTM method D-2244 when properly maintained in accordance with Valspar's printed guidelines. Color change will be measured on an exposed painted surface that has been cleaned of surface soils and chalk, and the corresponding values measured on the original or unexposed surface. It is understood that fading or color change may not be uniform, if the surfaces are not equally exposed to the sun and elements.

2. This Warranty does not apply to circumstances beyond MetalMax's control, including:

- a. Fire or other casualty or physical damage;
- b. Unusual harmful fumes, foreign substances in the atmosphere or standing water. No warranty is provided for the coating on any substrate that is subjected to sea spray or installed on a property located 1500 or fewer feet from a coastline, salt or brackish water, or any salt water environment;
- c. Improper treatment of or defects in the metal or in the fabrication or areas where items such as snow guards or solar panels are attached / adhered to the product.
- d. Intermittent or continual submersion in water or any other liquid or solid material;
- e. Damage from wind, deliberate damage, improper handling by erectors, from abrasive or chemical cleaners.
- f. Mishandled Products, e.g., ANY PRODUCT WHICH HAS BEEN ABUSED, ALTERED, MODIFIED, USED IN A MANNER NOT ORIGINALLY INTENDED, OR STORED CONTRARY TO OUR INSTRUCTIONS.

g. Stored or installed in a way that allows for poor air circulation, contact with animals or animal waste.

h. Embossing that fractures or severely stretches the film (i.e. film is diminished at the point of emboss by greater than 0.2 mils).

3. This Warranty does not cover damage or deterioration resulting from moisture contamination or entrapment or any other contamination detrimental to the coating, which occurs prior to installation of the Products, including, without limitation, contamination occurring during shipment of the Product to the jobsite or during storage at the jobsite. This Warranty does not cover failure due to corrosion of substrate.

4. EXCLUDED ATMOSPHERIC CONDITIONS

This Warranty does not apply to sheet exposed at any time to corrosive, aggressive, harmful or other abnormal atmospheric conditions, including but not limited to:

- A. Areas subject to fallout exposure to corrosive chemicals, ash, fumes, cement dust, animal waste, or it's decomposition by-products, fallout from copper, lead, nickel or silver mining or refining operations and carbon black;
- B. Conditions/circumstances where corrosive fumes or condensation are generated or released inside the building;
- C. Areas subject to water run-off from lead or copper flashing or piping or areas in contact with lead or copper or lumber containing same;

5. All Warranty work will be performed by MetalMax, or any company, dealer, contractor, applicator, or distributor selected by MetalMax. Since there may be a color variance between the replacement or repainted Product and the originally installed Product due to normal weathering (i.e. exposure to sunlight and extremes of temperature and weather) of the originally installed Products, this condition shall not be indicative of a defect.

6. NOT WITHSTANDING ANYTHING TO THE CONTRARY CONTAINED HEREIN, METALMAX'S LIABILITY SHALL NOT EXCEED THE LESSER OF THE FOLLOWING: (I) THE CUSTOMER'S LIABILITY DIRECTLY ATTRIBUTABLE TO A BREACH OF THIS WARRANTY, OR (II) THE REFINISHING OR REPLACEMENT OF THE FAILED COATED MATERIAL, OR AT METALMAX'S OPTION, REFUND OF THE PURCHASE PRICE WHICH SHALL NOT EXCEED AN AMOUNT EQUAL TO ONE HUNDRED PERCENT (100%) OF THE AMOUNTS PAID TO METALMAX BY THE CUSTOMER FOR THE PURCHASE OF THE DEFECTIVE PRODUCT. METALMAX SHALL NOT BE LIABLE FOR INJURY TO PROPERTY OTHER THAN THE FLAT SHEET AND/OR COIL PRODUCTS COATED WITH FLUOROCARBON PAINT SYSTEMS, IN THE CONDITION AND AS PURCHASED BY CUSTOMER FROM METALMAX. METALMAX, IN ALL INSTANCES, SHALL HAVE THE SOLE AND EXCLUSIVE RIGHT TO DETERMINE WHETHER OR NOT REFINISHING OR REPLACEMENT OF THE FAILED AREAS IS REQUIRED, AND TO FULFILL ITS OBLIGATION UNDER THE WARRANTY. METALMAX RESERVES THE RIGHT TO NEGOTIATE AND APPROVE ANY FINAL CONTRACT LET FOR REFINISHING AND REPLACEMENT AS THE CASE MAY BE.

7. This Warranty applies only to products manufactured by the customer within six (6) months from shipment thereof by MetalMax.

8. Claims under this Warranty must be presented by the customer to MetalMax in writing during the warranty period and within thirty (30) days after Customer becomes aware that any warranted condition has occurred. Time is of the essence and failure to give notice within the specified time shall discharge MetalMax from any obligations under this Warranty. MetalMax must be given a reasonable opportunity to do an on-site inspection to determine if there is a coating failure.

9. The laws of the State of Ohio shall exclusively govern the rights and duties of the parties to this Warranty. Any controversy or claim arising out of or related to this Warranty, or the breach thereof shall be brought before a court of competent jurisdiction in Cleveland, Ohio under the substantive and procedural laws of the State of Ohio.

10. Customer acknowledges that MetalMax is not the manufacturer or applicator of the coating warranted herein and agrees that all issues arising from or related to the exceptions set forth herein shall be determined finally and conclusively as to Customer, by the original manufacturer.

11. Due to pigment limitations, Matte Black is covered for thirty-five (35) years of film adhesion and by a number six (6) rating for chalk, and nine (9) ΔE units for fade for a period of twenty (20) years from installation. L/S Antique Black are covered by a number eight (8) rating for chalk, and five (5) ΔE units for fade for a period of ten (10) years from installation. Copper and other metallic colors have no rating available for color change.

12. This Warranty applies solely to MetalMax "inventoried stock" colors. Custom matched colors and non-inventoried items may have different Warranty terms, or not be warranted.

13. For this Warranty to apply, the Customer must retain certain records. In order for MetalMax to process a claim, we will need to be told the original coil or skid tag number.

14. THIS WARRANTY IS GIVEN AS THE SOLE AND EXCLUSIVE WARRANTY AND EXCLUSIVE REMEDY BY OR AGAINST METALMAX, AND NO OTHER WARRANTIES, EITHER EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR PURPOSES, ARE MADE, AND ANY SUCH OTHER WARRANTIES ARE EXPRESSLY DISCLAIMED. THERE ARE NO WARRANTIES THAT EXTEND BEYOND THE DESCRIPTION CONTAINED IN THIS INSTRUMENT. CUSTOMER WAIVES THE BENEFIT OF ANY RULE THAT THE DISCLAIMERS OF WARRANTY SHALL BE CONSTRUED AGAINST THE SELLER, AND AGREES THAT THE DISCLAIMERS IN THIS INSTRUMENT

SHALL BE CONSTRUED LIBERALLY IN FAVOR OF METALMAX. METALMAX SHALL NOT BE LIABLE FOR ANY SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES. METALMAX HEREBY DISCLAIMS ALL LIABILITIES FOR DAMAGES BASED ON THEORIES OF NEGLIGENCE AND STRICT PRODUCT LIABILITY. THIS WARRANTY IS EXTENDED TO CUSTOMER AND IS TRANSFERABLE AND ASSIGNABLE TO A SUBSEQUENT OWNER OF THE SUBJECT BUILDING. METALMAX WILL REQUIRE THE SUBJECT BUILDING TO BE INSPECTED BY AN AUTHORIZED METALMAX REPRESENTATIVE BEFORE ANY TRANSFER CAN TAKE PLACE. THE FEE FOR THIS INSPECTION IS AT THE OWNERS EXPENSE. THIS WARRANTY MAY NOT BE ENLARGED IN ITS SCOPE BY ANY REPRESENTATIVE, SALES PERSON, AGENT OR OTHER EMPLOYEE OF METALMAX, EXCEPT AS OTHERWISE EXPLICITLY PROVIDED HEREIN. THE CUSTOMER SHALL NOT PERMIT ANYONE TO CLAIM OR IMPLY THAT THIS WARRANTY EXTENDS OR CAN BE "PASSED THROUGH" TO ANYONE OTHER THAN THE CUSTOMER. THIS PROVISION IS A MATERIAL TERM OF THIS WARRANTY AND ITS VIOLATION OR BREACH BY CUSTOMER OR ANY OF CUSTOMER'S AGENTS OR REPRESENTATIVES, SHALL VOID AND CANCEL THIS WARRANTY FOR ALL PURPOSES. IN THE EVENT THIS WARRANTY IS TRANSFERRED OR ASSIGNED TO A SUBSEQUENT OWNER OF THE SUBJECT BUILDING, SUCH SUBSEQUENT OWNER SHALL COMPLY WITH ALL OF THE TERMS AND CONDITIONS OF THIS WARRANTY.

THE LIABILITY OF SELLER METALMAX SHALL NOT EXTEND TO PERSONAL INJURY, PROPERTY DAMAGE, LOSS OF PROFIT, DELAY OR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM THE FAILURE OF ANY PRODUCT OR COATING TO CONFORM WITH THE PROVISIONS OF THIS LIMITED WARRANTY.

METALMAX SHALL NOT IN ANY EVENT BE LIABLE TO THE CUSTOMER OR ANY OTHER PERSON OR ENTITY FOR ANY ACTIONS, CLAIMS, CAUSES OF ACTION, DAMAGES, EXPENSES AND/OR LIABILITIES ARISING FROM OR RELATED TO THE DESIGN, USE OR FAILURE OF THE PRODUCT OR COATING, FOR THE INTERRUPTION OF THE CUSTOMER'S OR ANY OTHER PERSON'S OR ENTITY'S OPERATIONS OR BUSINESS, FOR THE COST OF LABOR EXPENDED BY OTHERS ON ANY DEFECTIVE PRODUCT OR COATING OR FOR ANY SPECIAL, INDIRECT OR CONSEQUENTIAL DAMAGES WHATSOEVER OR LOSS OF PROFIT OR OTHER FINANCIAL LOSS ARISING OUT OF THE USE OR FAILURE OF THE PRODUCT OR COATING, EVEN IF METALMAX HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH ACTIONS, CLAIMS, CAUSES OF ACTION, DAMAGES, EXPENSE, LOSS AND/OR LIABILITIES, WHETHER ARISING FROM BREACH OF CONTRACT, BREACH OF WARRANTY, TORT, INCLUDING NEGLIGENCE, STRICT LIABILITY OR OTHERWISE TO ANYONE BY REASON OF THE FACT THAT SUCH PRODUCT OR COATING SHALL HAVE BEEN DEFECTIVE.

SIGNATURE:

This Warranty is not valid unless signed by an authorized employee or agent of MetalMax.

METALMAX LLC

By: _____

Name Printed: _____

Title: _____

Date: _____

"MetalMax"

Issued To: _____

For: _____

Job: _____

Color: _____

Completion Date: _____

MATERIAL HANDLING

RECEIVING MATERIAL

It is the responsibility of the installer to unload material from the delivery truck. The installer shall be responsible for providing suitable equipment for unloading of material from the delivery.

MetalMax is not responsible for any damages or shortages unless they are documented in writing and presented to MetalMax within 48 hours. A claim should be made against the carrier as soon as possible.

After receiving material:

- Check the condition of the material
- Review the shipment against the shipping list to ensure all materials are all accounted for
- If damages or shortages are discovered, it should be noted on the Bill of Lading at the time of delivery

GENERAL HANDLING

Each bundle should be handled carefully to avoid being damaged. Care should be taken to prevent bending of the panel or scratching of the finish. Whenever possible, the bundle should remain crated until it is located in its place of storage or use. If bundles must be opened, we recommend you re-crate them before lifting. To avoid damage lift the bundle at its center of gravity.

CAUTION

Improper loading and unloading of bundles and crates may result in bodily harm and/or material damage. MetalMax is not responsible for bodily injuries and/or material damages resulting from improper loading and unloading.

MECHANICAL HANDLING

Forklift - A forklift may be used for panels up to 20'-0" long. Make sure the forks are at their maximum separation. Do not transport open bundles. When transporting bundles across rough terrain, or over a longer distance, some means of supporting the panel load must be used.

Crane - A crane should be used when lifting panels with lengths greater than 20'-0". Be sure to utilize a spreader bar to ensure the even distribution of the weight to the pickup points. As a rule when lifting panels, no more than $\frac{1}{3}$ of the length of the panel should be left unsupported. Never use wire rope because this will damage the panels.



MATERIAL HANDLING (CONT.)

UNSTACKING MATERIAL

For panels over 5'-0" in length at least two people on the ends of the panel are required. Additional help will be needed for every 10'-0" in length beyond that.

Panels will arrive stacked vertically in a crate. If panels are moved out of the crate for staging, take care when unstacking to ensure panels are lifted up and not across other panels in the stack. Minimize handling of panels when unstacking and stacking to avoid damage. Be sure to wear appropriate safety equipment including clean gloves, as panel edges are sharp.

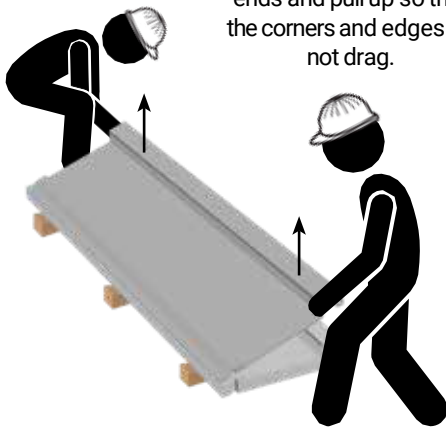
Inspect panels before lifting. MetalMax is not responsible for damage created by unstacking panels incorrectly. Dragging or sliding the panels will cause the corners and edges to scratch the paint.

Defect claims must be reported upon inspection and *before* panels are handled or installed.

Restacking – Align bottom-side edge with the stack and lay panel onto the stack.

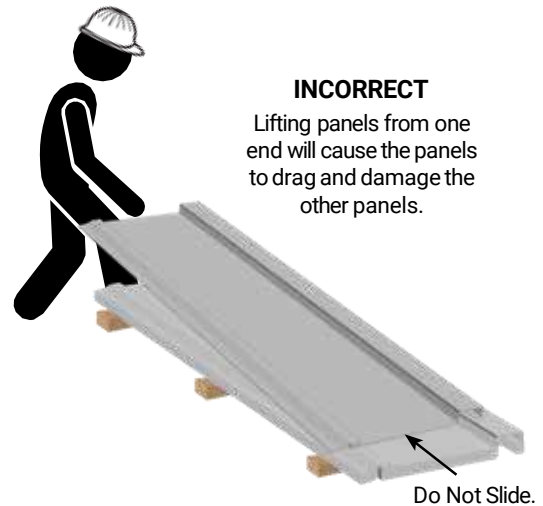
CORRECT

Lift the panels from the ends and pull up so that the corners and edges do not drag.



INCORRECT

Lifting panels from one end will cause the panels to drag and damage the other panels.

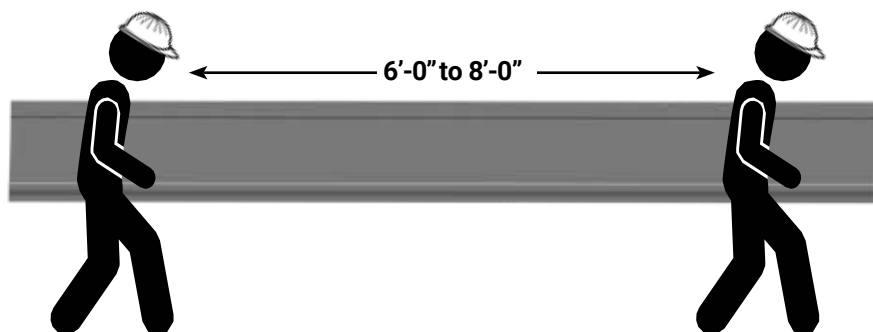


TRANSPORTING MATERIAL

Handling of individual panels should be done carefully and properly to avoid bending or damaging. Panels should be carried by grasping the edge so that the panel is vertical to the ground.

Normally, individual panels can be handled by people placed every 6'-0" to 8'-0" along the length of the panel.

The panel should not be carried horizontal to the ground as this could cause the panel to buckle or bend in the center.

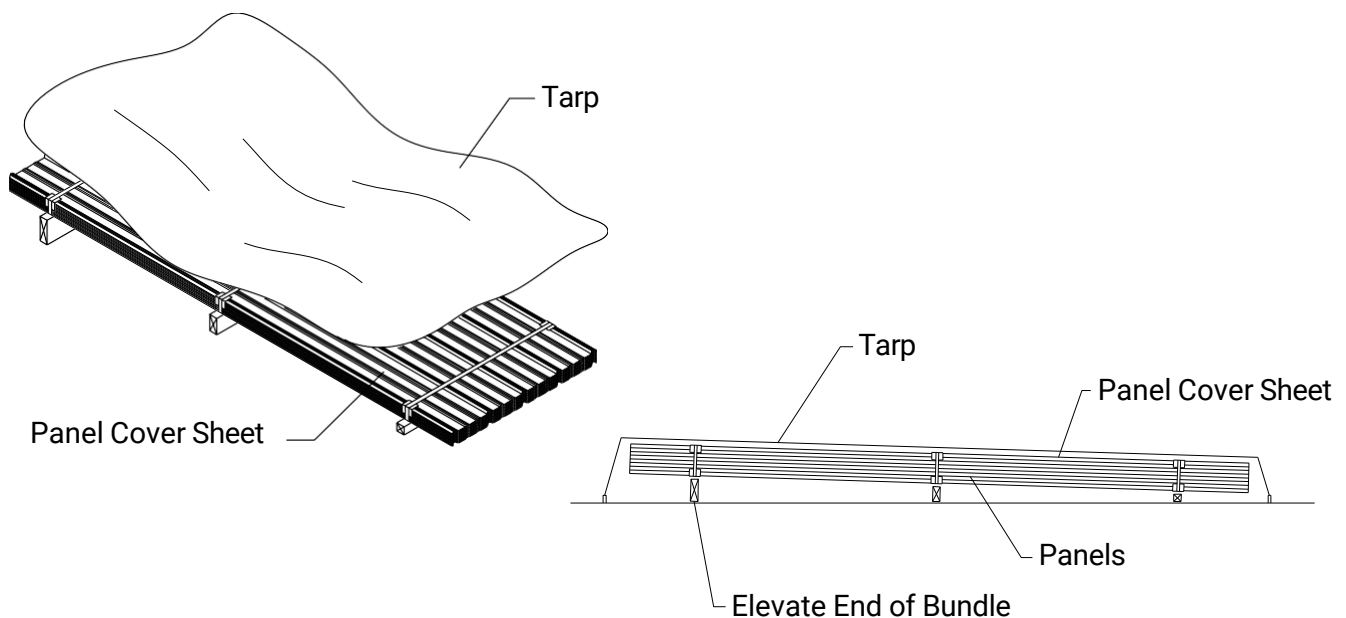


STORAGE

GENERAL

Please inspect panels for moisture accumulation. If moisture has formed, the panels should be unbundled, wiped dry, and allowed to dry completely. Once dry, carefully re-stack the panels and loosely recover allowing for ample air circulation.

Bundled sheets should be stored high enough off of the ground to allow for air circulation and prevent contact with accumulating water. Elevate one end of the bundle to allow any moisture to run off the panels. MetalMax recommends covering the bundle with a tarp. Do not use tight fitting plastic-type tarps as panel bundle covers. While they may provide protection from heavy downpours, they can also retard necessary ventilation and trap heat and moisture that may accelerate metal corrosion. If panels are to be stored in possible bad weather, we suggest they be stored inside. Extended storage of panels in a bundle is not recommended. **Under no circumstances should the panels be stored near or come in contact with salt water, corrosive chemicals, ash or fumes generated or released inside the building or nearby plants, foundries, plating works, kilns, fertilizer and wet or green lumber.**



FOOT TRAFFIC

Care of metal panels and flashings must be exercised throughout erection. Foot traffic can cause distortion of panel and damage to finish. Avoid stepping on wall panels before installation if they are staged or stored on the ground. Any foot traffic on these panels will cause damage and hinder proper installation.

REQUIRED TOOLS

Standard required tools for field installation include:

- Screw Gun(s)
- Magnetic Bits
- Metal Nibbler or Shear
- Tin Snips
- Tape Measure
- Chalk Line
- Hammer
- Rubber Mallet
- Power Drill
- Drill Bits
- Pop Rivet Gun
- Safety Goggles
- Gloves
- Ear Plugs
- Fall Protection
- Ladder(s)

WALL PREPARATION

CONDITION OF SUBSTRUCTURE

MetalMax panels are designed to be installed over open framing and/or directly over a wood substrate with synthetic building wrap. Always check with local building codes prior to all installations for any additional requirements that may be specific to your area.

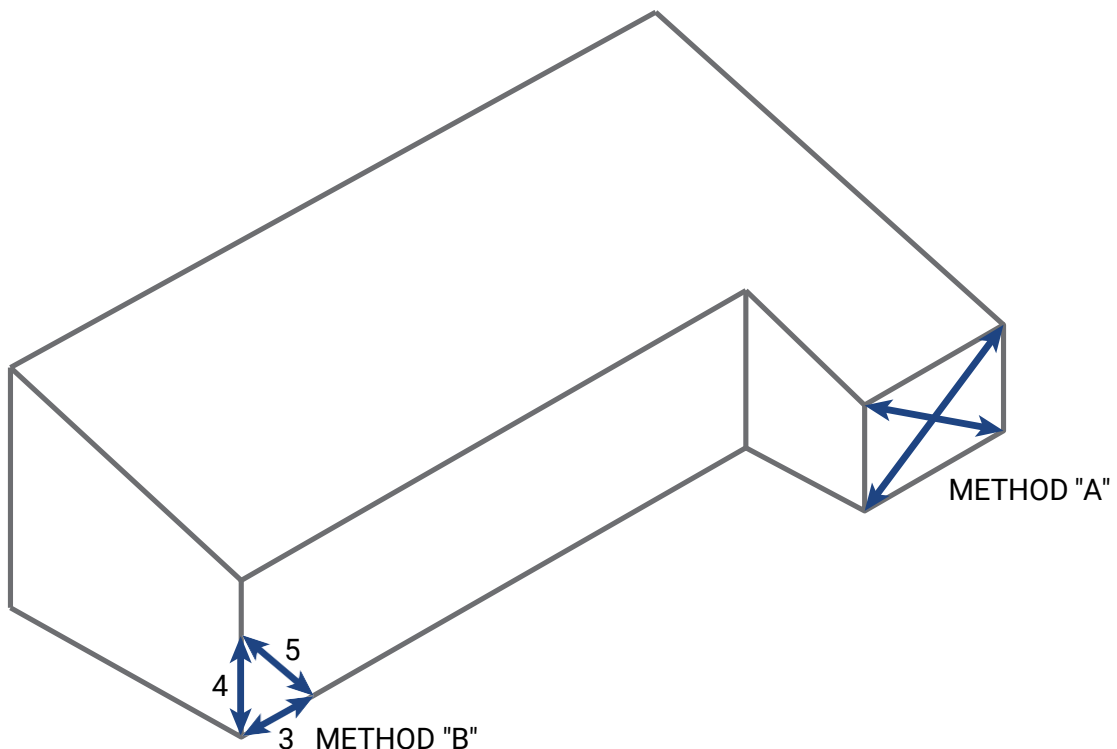
Galvalume panels should not be in contact with, or subject to, water runoff from copper, lead, or uncoated steel materials. Condensate water from air conditioning units typically contains dissolved copper. This condensate should be discharged through a plastic pipe extended beyond the edge of the roof.

The walls should be inspected for any trapped moisture or structural damage such as bowing or sagging members and warped or loose sheathing. Also make sure there are no nails or fasteners protruding from the wall framing or wood substrate which could damage the panels and impede the installation process. These areas must be repaired prior to installing new metal wall panels. Panel distortion may occur if not applied over properly aligned and uniform substructure.

Whether installing over new or existing wall, the installer should check the sheathing for squareness before installing panels. Several methods can be used to verify squareness of the structure for proper installation of the panels.

METHOD "A"- One method for checking the wall for squareness is to measure diagonally across one plane from similar points at the eave and base and obtain the same dimension.

METHOD "B"- The 3-4-5 triangle system may also be used. To use this system, measure a point from the corner along the edge of the wall at a module of three (3). Measure a point from the same corner along another edge at a module of four (4). By measuring diagonally between the two points established, the dimension should be exactly a module of five (5) to have a square corner. Multiple uses of this system may be required to determine building squareness. If the wall cannot be made square, the wall system cannot be installed as shown in these instructions.



FIELD CUTTING AND TOUCH-UP

FIELD CUTTING

Tin snips or a "nibbler" type electric tool are recommended for field cutting metal panels. Cutting the steel generates slivers or metal chips. These slivers and metal chips must be immediately removed from the panels because they will damage the finish and shorten the life of the product.

One method of preventing this problem is to flip the panels over when cutting. This allows the slivers and metal chips to be brushed from the back side and avoids damaging the paint on the top side of the panels.

When cutting metal panels and flashings, goggles must be worn for eye protection.

CAUTION

All product surfaces should be free of debris at all times. Installed surfaces should be wiped clean at the end of each work period. Never cut panels over metal surfaces. Metal shavings will rust on the surface, voiding the warranty.

TOUCH-UP PAINT

All painted panels and flashings have a factory applied baked on finish. Handling and installing panels may result in some small scratches or nicks to the paint finish. Touch-up paint is available in matching colors from MetalMax. It is recommended that a small brush be used to apply touch-up paint to those areas that are in need of repair. Touch-up paint does not have the superior chalk and fade resistance of the factory applied paint finish and will normally discolor at an accelerated rate. Aerosol paint should not be used because of the over-spray that may occur.



SPRAY PAINT



TOUCH-UP PAINT

CAUTION

Use as little Touch-up paint as possible. Paint will fade and there is no finish warranty with this product.

VENTILATION

Proper design and installation of vapor barriers and ventilation systems are important to prevent condensation and the resulting problems of moisture damage and loss of insulation efficiency.

Condensation occurs when moisture laden air comes in contact with a surface temperature equal to or below the dew point of the air. This phenomenon creates problems that are not unique with metal buildings; these problems are common to all types of construction.

The underside of the metal roof on a typical metal building (no attic) should be protected from condensation by insulating with a faced insulation. This should reduce the potential of condensation forming on the underside of the panels.

On buildings that have an attic space or are being retrofitted with a metal roofing system, vents should be placed at both the eave and peak of the roof in order to prevent a buildup of moisture (humidity) in the attic space.

CARE AND MAINTENANCE

Though factory applied pre-painted finishes are very durable and will last many years, eventually it may be desirable to thoroughly clean or repaint them.

Dirt pickup may cause apparent discoloration of the paint when it has been exposed in some dirt-laden environments for long periods of time. In areas of strong sunlight, slight chalking may cause some change in appearance. A good cleaning will often restore the appearance of these buildings and render repainting unnecessary. An occasional light cleaning will help maintain a good appearance.

In many cases, simply washing the building with plain water using a hose or pressure sprayer will be adequate. In areas where heavy dirt deposits dull the surface, a cloth or soft bristle brush and solution of water and detergent ($\frac{1}{3}$ cup of laundry detergent per gallon of water for example) may be used. This should be followed by an adequate rinse of water. Do not use wire brushes, abrasives or cleaning tools which will damage the coating surface.

Mildew may occur in areas subject to high humidity but is not normally a problem due to the high inherent mildew resistance of the baked finish that is used. To remove mildew along with the dirt, the following solution is recommended.

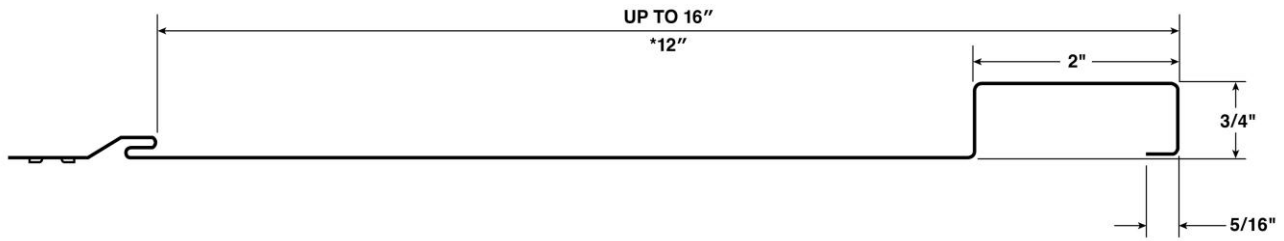
- $\frac{1}{3}$ cup detergent (Tide® or equivalent)
- $\frac{2}{3}$ cup trisodium phosphate (Solex® or equivalent)
- 1 quart of 5% sodium hypochlorite solution (Clorox® or equivalent)
- 3 quarts of water

Strong solvents and abrasive type cleaners should be avoided. Most organic solvents are flammable and toxic and must be handled accordingly. When using a solvent, consult maintenance professionals and label instructions for proper handling and disposal of washings. If required, a mild solvent such as mineral spirits can be used to remove caulking compounds, oil, grease, tars, wax and similar substances. Use a cloth dampened with mineral spirits and apply only to areas which are contaminated. Follow up the use of this mild solvent with detergent cleaning and rinsing.



PANEL PROFILE

12-16" Coverage



* Florida Specific

Profile	Coverage	Gauge	Finish
	16"	24	Acrylic-Coated Galvalume® (ACG)
	16"	24	PVDF Painted
	16"	26	Acrylic-Coated Galvalume® (ACG)
	16"	26	SMP
	* 12"	* 24	* PVDF Painted
	* 12"	* .032 Alum.	* PVDF Painted
	* 12"	* .040 Alum.	* PVDF Painted

Length

Lengths under 5'-0" are available with some cutting restrictions. Maximum recommended panel length is 15'. Longer panels require additional consideration in packaging, shipping, and erection. Please consult your MetalMax branch for recommendations.

Fasteners

The fastener selection guide should be consulted for choosing proper fasteners for specific applications. Quantity and type of fastener must meet necessary loading and code requirements.

Materials

Steel Grade 50 per ASTM A 792 (24 gauge)
 Steel Grade 50 per ASTM A 792 (26 gauge)
 * .032 Aluminum
 * .040 Aluminum

Finish

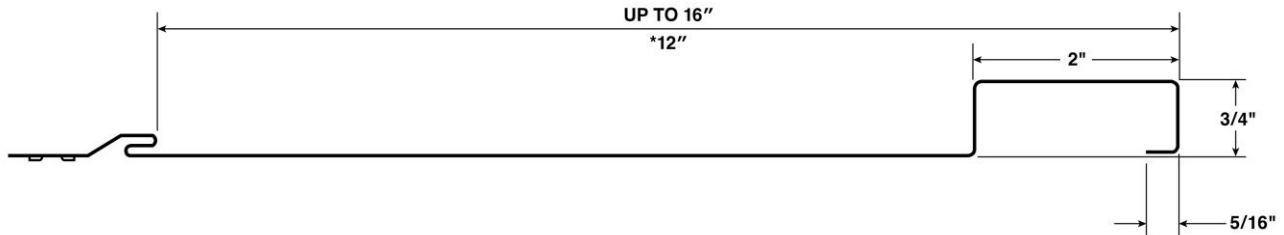
Acrylic Coated Galvalume® (ACG) / ASTM A792 - AZ55
 Pre-painted Galvalume / ASTM A792 - AZ50
 PVDF (Kynar 500 or Hylar 5000®)
 SMP
 Textured SMP Options
 Differential appearance of Acrylic Coated Galvalume roofing materials is not a cause for rejection.

Support Materials

Steel Framing – 18 gauge or thicker
 Plywood – 1/2" or thicker
 OSB – 7/16" or thicker
 Lumber – 1x or thicker

DESIGN INFORMATION

PANEL PROFILES



* Florida Specific

PANEL OVERVIEW

- Finishes: PVDF, Acrylic-Coated Galvalume®, and SMP
- Corrosion Protection: AZ55 per ASTM A 792 for unpainted Galvalume®
AZ50 per ASTM A 792 for painted
Gauges: 26, 24 ga standard
* .032 / .040 Aluminum within 1,500' of salt water
- 12-16" panel coverage, 3/4" rib height
- Panel Length: Minimum: 5'-0"; Maximum: 15' recommended
- Concealed-fastened wall system
- Traditional Board and Batten rib on 12-16" centers

TESTING AND APPROVALS

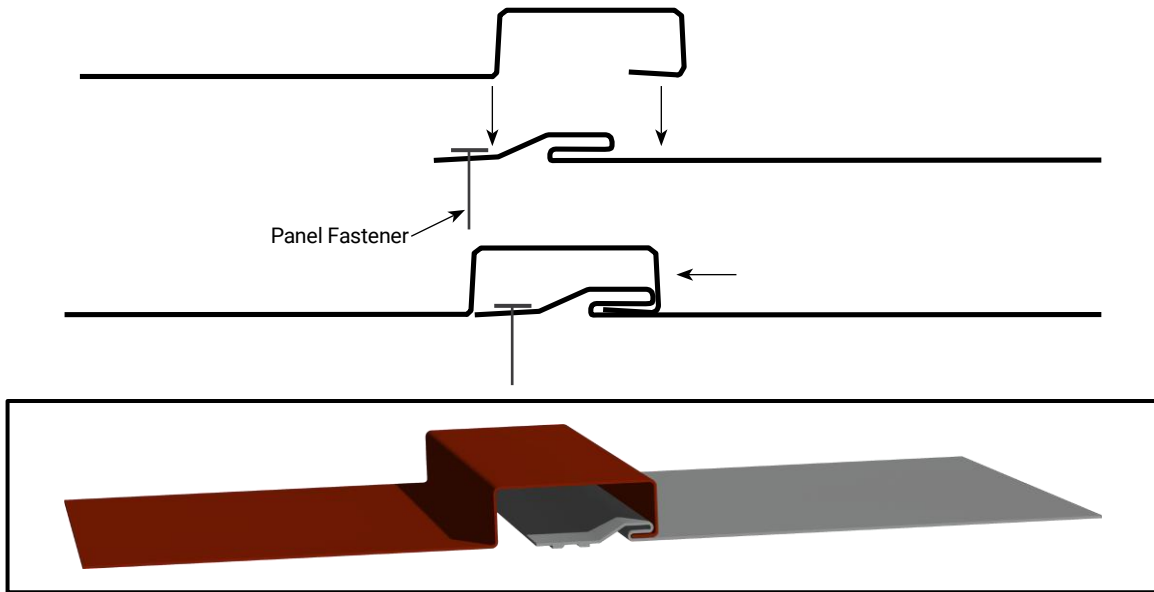
- Florida Product Approvals (24 gauge at 12" on-center or * .032 / .040 Aluminum)

FASTENING INFORMATION

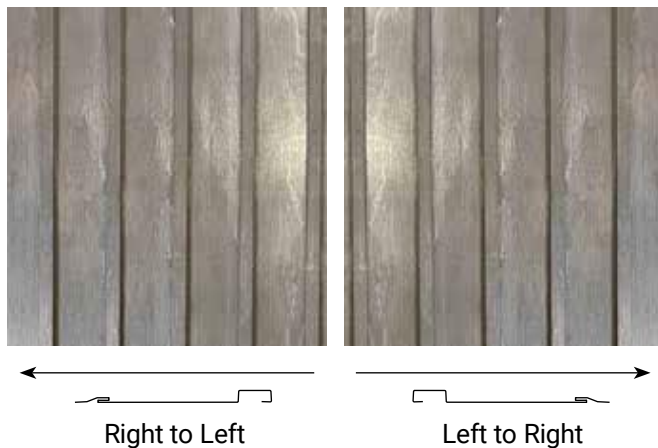
- Overdriven fasteners will cause panel distortions.
- Fasteners should extend 1/2" or more past the inside face of the support material.
- Thick supports (ex. 1/2" steel) may require predrilling of holes for screws.
- Panel Fastener:
 - Attaching to Wood:
 - #10-12 x 1" Pancake Head Wood Screw
 - Attaching to Steel:
 - #10-16 x 1" Pancake Head Driller
- Trim Fastener:
 - 1/4"-14 x 7/8" XL Stitch Screw
 - 1/8"-3/16" Pop Rivet

DESIGN INFORMATION

PANEL ATTACHMENT



VERTICAL INSTALLATION



HORIZONTAL INSTALLATION



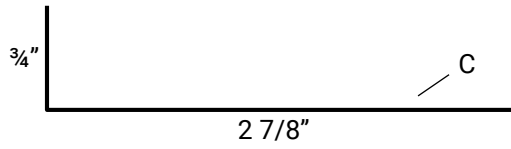
LOAD TABLES

SECTION PROPERTIES								ALLOWABLE UNIFORM LOADS, psf For various fastener spacings									
Ga	Width in	Yield ksi	Weight psf	Top In Compression		Bottom In Compression		Inward Load					Outward Load				
				Ixx in ⁴ /ft	Sxx in ³ /ft	Ixx in ⁴ /ft	Sxx in ³ /ft	2'	3'	4'	5'	6'	2'	3'	4'	5'	6'
				24	10	50	1.66	0.0442	0.0538	0.0410	0.0783	43	36	29	22	14	58
24	12	50	2.00	0.0635	0.0799	0.0550	0.0966	43	36	29	22	14	58	47	29	18	13

- Theoretical section properties have been calculated per AISI 2016 'North American Specification for the Design of Cold-Formed Steel Structural Members'. Ixx and Sxx are effective section properties for deflection and bending.
- Allowable load is calculated in accordance with AISI 2016 specifications considering bending, shear, combined bending and shear and deflection. Allowable load considers the 3 or more equal spans condition. Allowable load does not address web crippling, fasteners, support material or load testing. Panel weight is not considered.
- Deflection consideration is limited by a maximum deflection ratio of L/180 of span.
- Allowable loads do not include a 1/3 stress increase for wind.

FLASHING PROFILES

JAMB SUPPORT



GAUGE

FINISH

LENGTH

24
24

ACG
PVDF

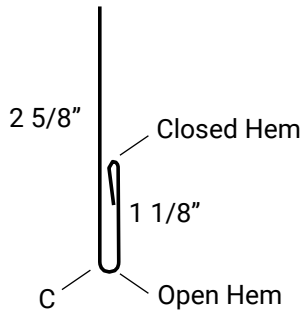
16"
16"

26
26

ACG
PVDF

16"
16"

PANEL STARTER



GAUGE

FINISH

LENGTH

24
24

ACG
PVDF

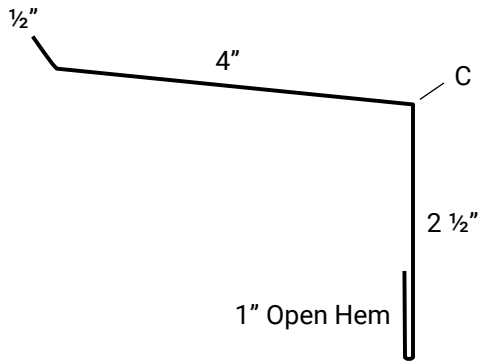
16"
16"

26
26

ACG
PVDF

16"
16"

SILL/JAMB TRIM



GAUGE

FINISH

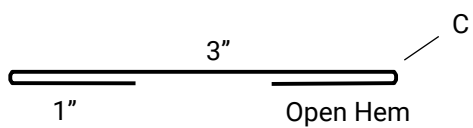
LENGTH

24
24
26
26

ACG
PVDF
ACG
PVDF

16"
16"
16"
16"

REVEAL TRIM



GAUGE

FINISH

LENGTH

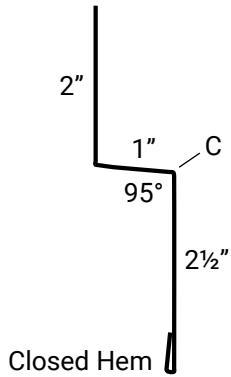
24
24
26
26

ACG
PVDF
ACG
PVDF

16"
16"
16"
16"

FLASHING PROFILES

TRANSITION TRIM



GAUGE

24
24
26
26

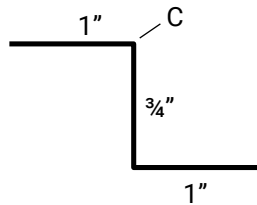
FINISH

ACG
PVDF
ACG
PVDF

LENGTH

16"
16"
16"
16"

Z-CLOSURE



GAUGE

24
24
26
26

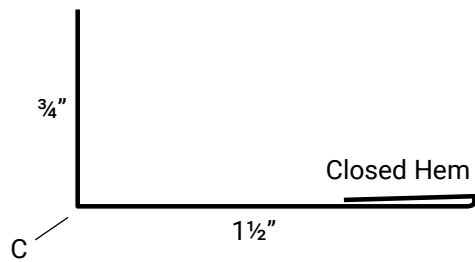
FINISH

ACG
PVDF
ACG
PVDF

LENGTH

16"
16"
16"
16"

MITER TRIM



GAUGE

24
24
26
26

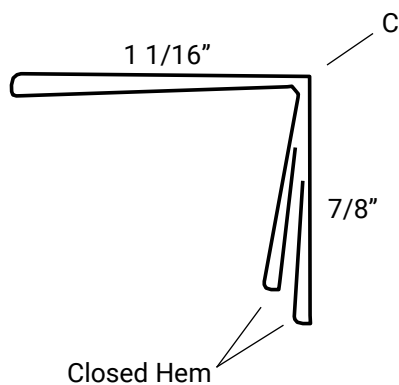
FINISH

ACG
PVDF
ACG
PVDF

LENGTH

16"
16"
16"
16"

OPENING TRIM



GAUGE

24
24
26
26

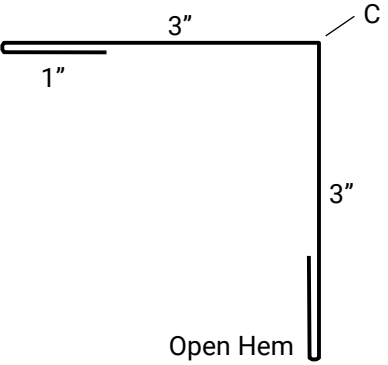
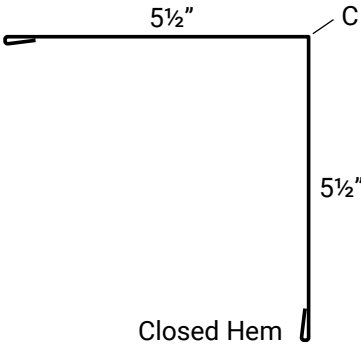
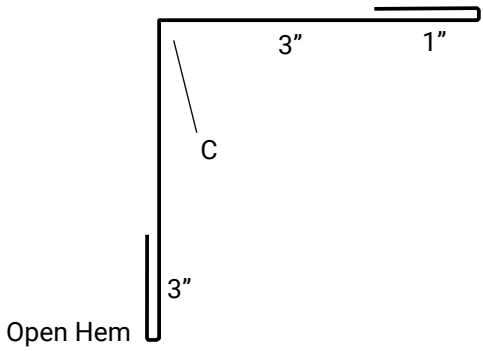
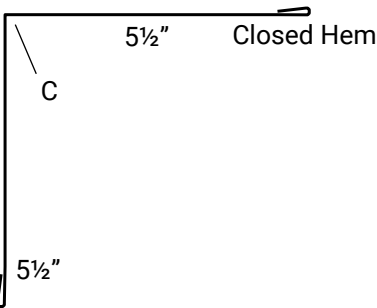
FINISH

ACG
PVDF
ACG
PVDF

LENGTH

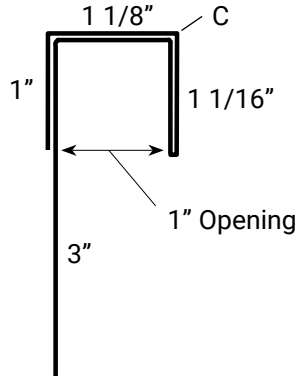
16"
16"
16"
16"

FLASHING PROFILES

OUTSIDE CORNER	GAUGE	FINISH	LENGTH
	24	ACG	16"
	24	PVDF	16"
	26	ACG	16"
	26	PVDF	16"
OUTSIDE CORNER – WIDE	GAUGE	FINISH	LENGTH
	24	ACG	16"
	24	PVDF	16"
	26	ACG	16"
	26	PVDF	16"
INSIDE CORNER	GAUGE	FINISH	LENGTH
	24	ACG	16"
	24	PVDF	16"
	26	ACG	16"
	26	PVDF	16"
INSIDE CORNER - WIDE	GAUGE	FINISH	LENGTH
	24	ACG	16"
	24	PVDF	16"
	26	ACG	16"
	26	PVDF	16"

FLASHING PROFILES

WINDOW CLOSURE



GAUGE

24
24
26
26

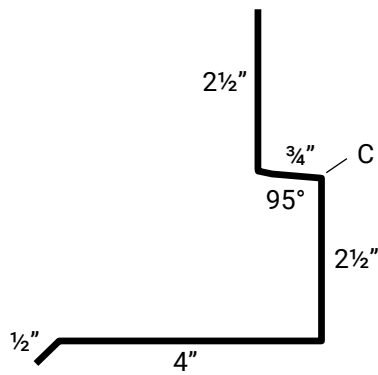
FINISH

ACG
PVDF
ACG
PVDF

LENGTH

16"
16"
16"
16"

HEAD TRIM



GAUGE

24
24
26
26

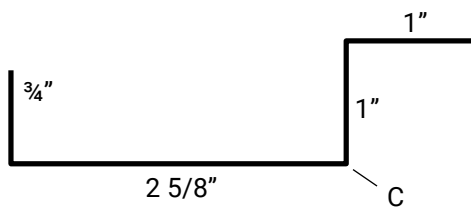
FINISH

ACG
PVDF
ACG
PVDF

LENGTH

16"
16"
16"
16"

PANEL END CLOSURE



GAUGE

24
24
26
26

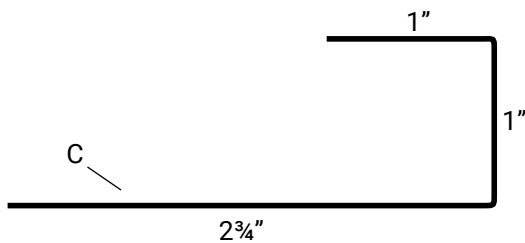
FINISH

ACG
PVDF
ACG
PVDF

LENGTH

16"
16"
16"
16"

C-CLOSURE



GAUGE

24
24
26
26

FINISH

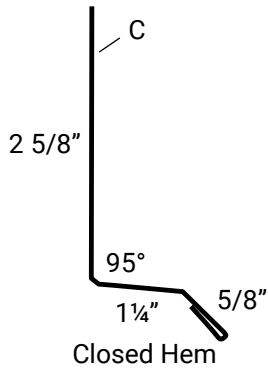
ACG
PVDF
ACG
PVDF

LENGTH

16"
16"
16"
16"

FLASHING PROFILES

BASE - VERTICAL



GAUGE

24
24
26
26

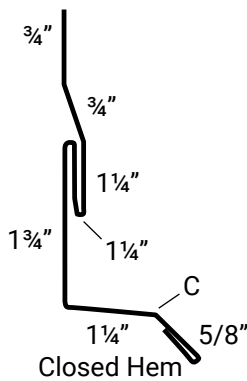
FINISH

ACG
PVDF
ACG
PVDF

LENGTH

16"
16"
16"
16"

BASE - HORIZONTAL



GAUGE

24
24
26
26

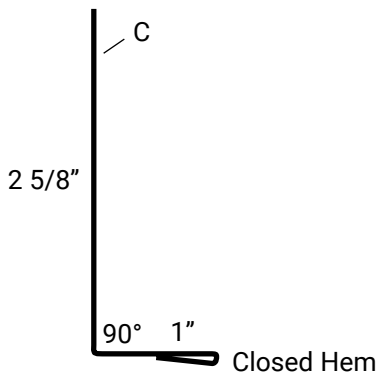
FINISH

ACG
PVDF
ACG
PVDF

LENGTH

16"
16"
16"
16"

V-LINER BASE - VERTICAL



GAUGE

24
24
26
26

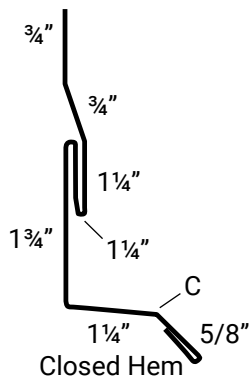
FINISH

ACG
PVD
ACG
PVDF

LENGTH

16"
16"
16"
16"

H-LINER BASE - HORIZONTAL



GAUGE

24
24
26
26

FINISH

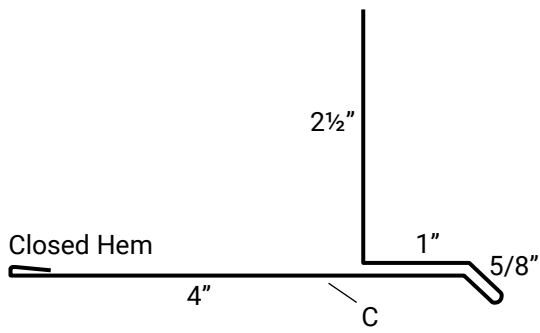
ACG
PVDF
ACG
PVDF

LENGTH

16"
16"
16"
16"

FLASHING PROFILES

SILL TO SOFFIT



GAUGE

24
24
26
26

FINISH

ACG
PVDF
ACG
PVDF

LENGTH

16"
16"
16"
16"

OFFSET CLEAT



GAUGE

24
26

FINISH

PVDF
PVDF

LENGTH

16"
16"

ACCESSORIES

PROFILE CLOSURES



SINGLE BEAD TUBE SEALANT



BUTYL TAPE

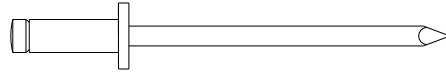


SYNTHETIC UNDERLAYMENT

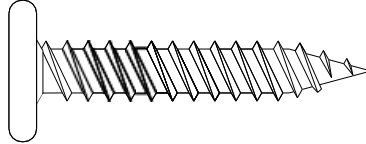


FASTENERS

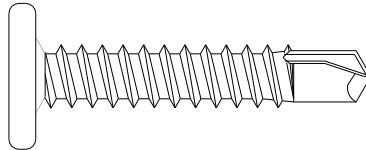
POP RIVET



PANCAKE HEAD WOODSCREW

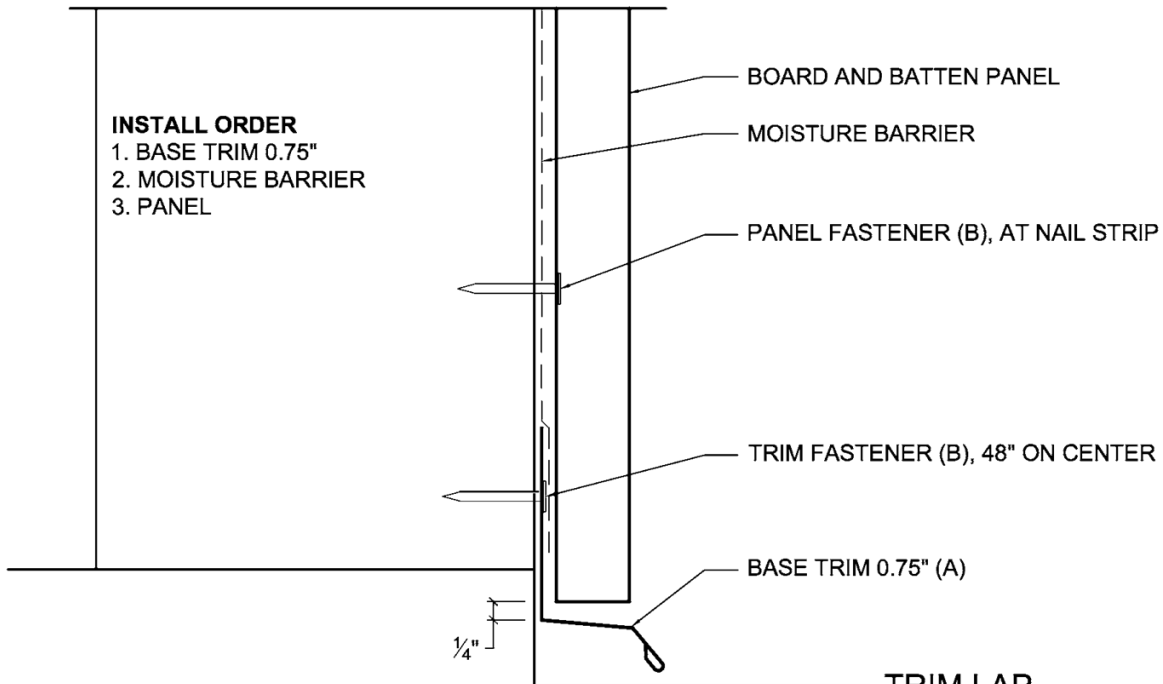


PANCAKE HEAD SELF DRILLER



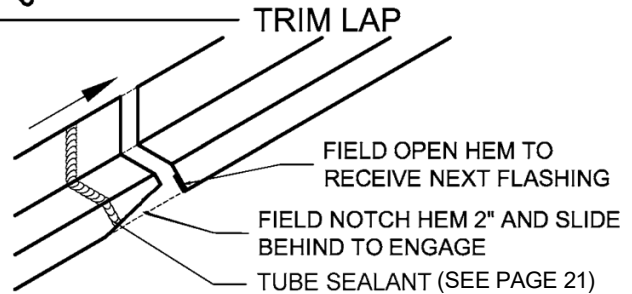
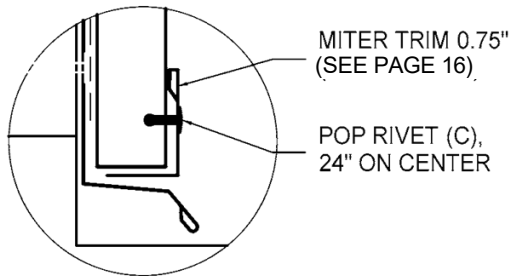
VERTICAL INSTALLATION – WALL BASE

ELEVATION VIEW



INSTALL ORDER
 1. BASE TRIM 0.75"
 2. MOISTURE BARRIER
 3. PANEL

OPTIONAL

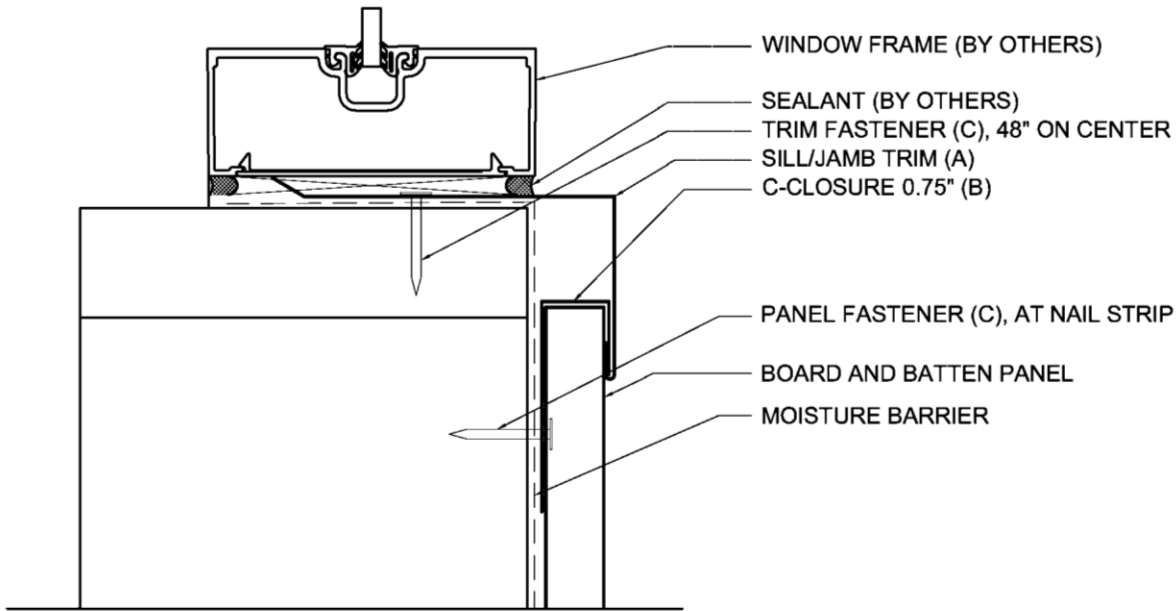


NO FASTENERS THROUGH TRIM LAP

	Part	Description	Length	Installation Information
(A)		24Ga Base Trim 0.75"	10'-2"	Install Moisture Barrier over top of Base Trim
(B)		#10-16 x 1" Pancake Head Driller	1"	For panel / trim attachment to steel framing
(B)		#10-12 x 1" Pancake Head Wood Screw	1"	For panel / trim attachment to wood sheathing or framing
(C)		1/8" x 3/8" Pop Rivet		For Sill/Jamb attachment to C-Closure and panel

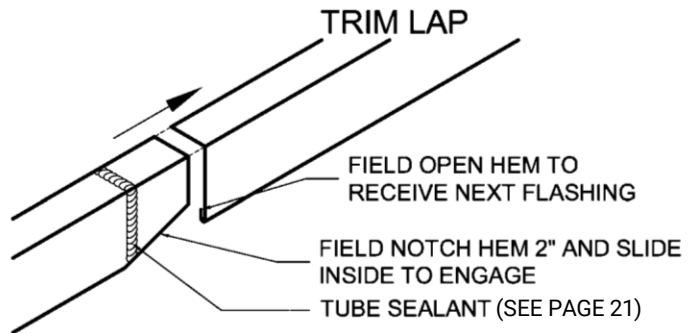
VERTICAL INSTALLATION - SILL

ELEVATION VIEW



INSTALL ORDER

1. MOISTURE BARRIER
2. C-CLOSURE 0.75"
3. PANEL
4. SILL/JAMB TRIM
5. WINDOW FRAME

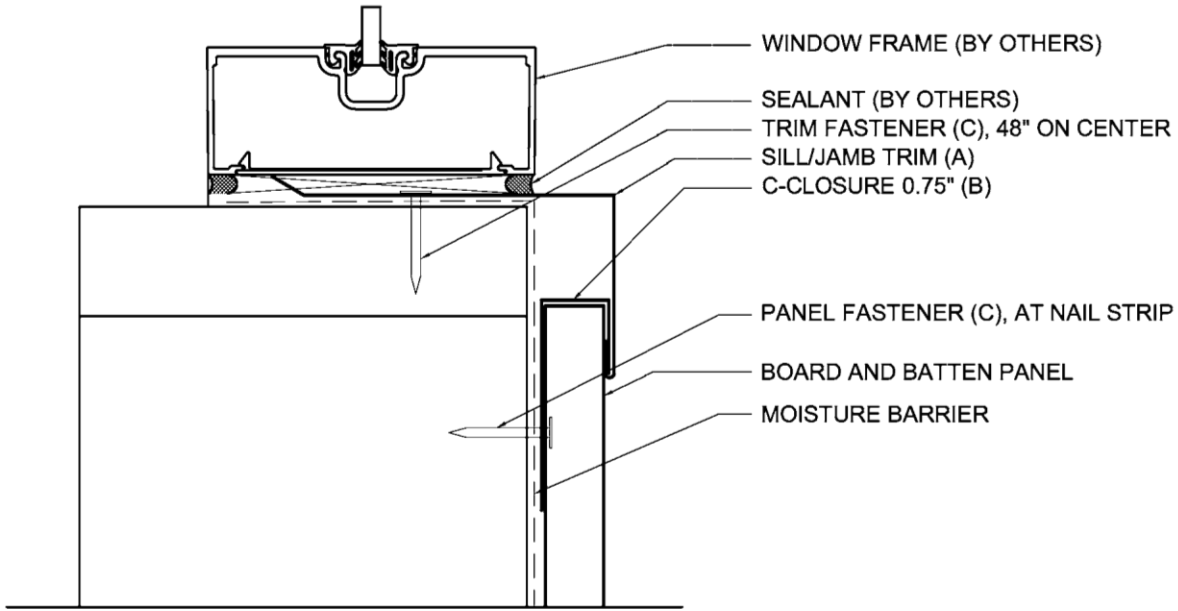


NO FASTENERS THROUGH TRIM LAP

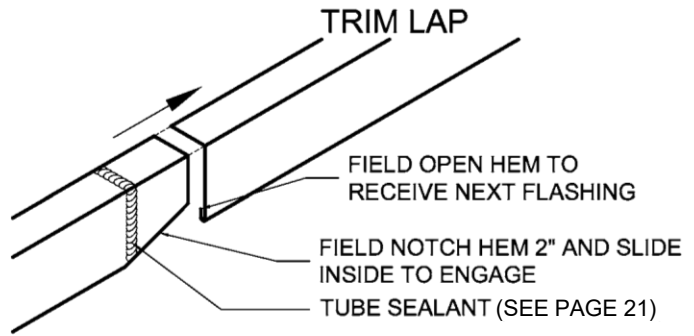
Part	Description	Length	Installation Information
(A)		10'-2"	Hook Sill/Jamb Trim onto C-Closure and fasten in place. Ensure Sill/Jamb Trim is installed with slope to allow for water drainage.
(B)		10'-2"	Install C-Closure and hook Sill/Jamb Trim over 1" leg.
(C)		1"	For panel / trim attachment to steel framing
(C)		1"	For panel / trim attachment to wood sheathing or framing

VERTICAL INSTALLATION – JAMB WITH STARTER

ELEVATION VIEW



- INSTALL ORDER**
1. MOISTURE BARRIER
 2. C-CLOSURE 0.75"
 3. PANEL
 4. SILL/JAMB TRIM
 5. WINDOW FRAME

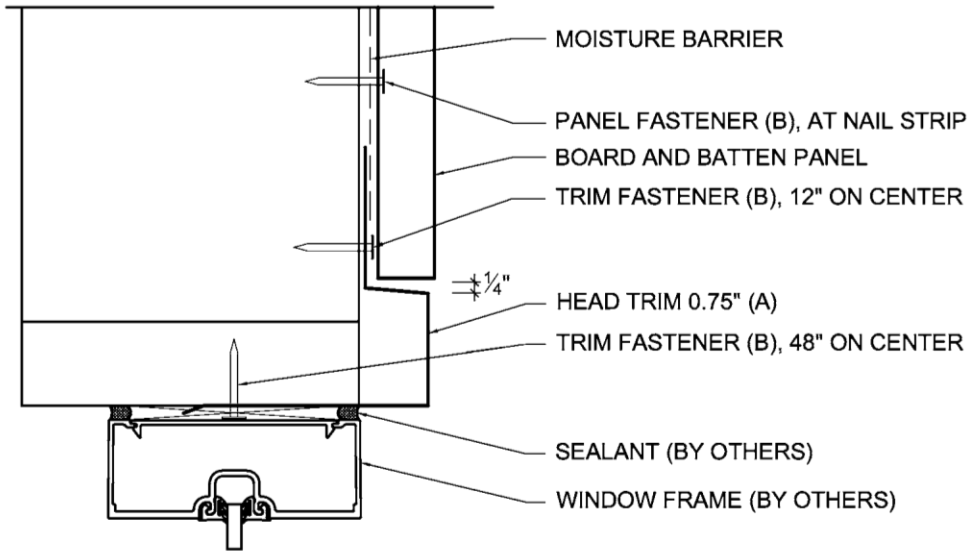


NO FASTENERS THROUGH TRIM LAP

Part	Description	Length	Installation Information
(A)	 24Ga Sill/Jamb Trim	10'-2"	Hook Sill/Jamb Trim onto C-Closure and fasten in place. Ensure Sill/Jamb Trim is installed with slope to allow for water drainage.
(B)	 24Ga C-Closure	10'-2"	Install C-Closure and hook Sill/Jamb Trim over 1" leg.
(C)	 #10-16 x 1" Pancake Head Driller	1"	For panel / trim attachment to steel framing
(C)	 #10-12 x 1" Pancake Head Wood Screw	1"	For panel / trim attachment to wood sheathing or framing

VERTICAL INSTALLATION – HEAD CHANNEL WITH RETURN

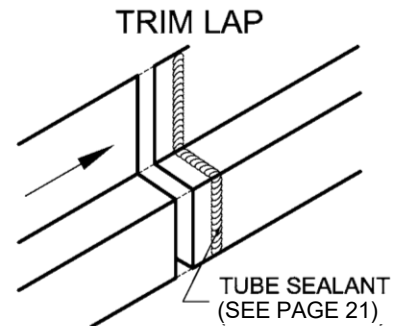
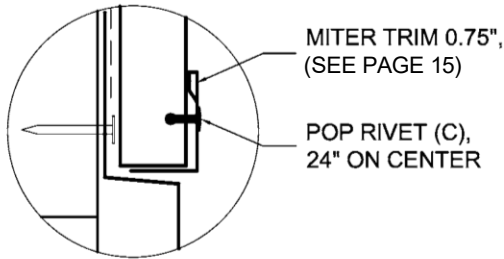
ELEVATION VIEW



INSTALL ORDER

1. HEAD TRIM 0.75"
2. MOISTURE BARRIER
3. PANEL
4. WINDOW FRAME

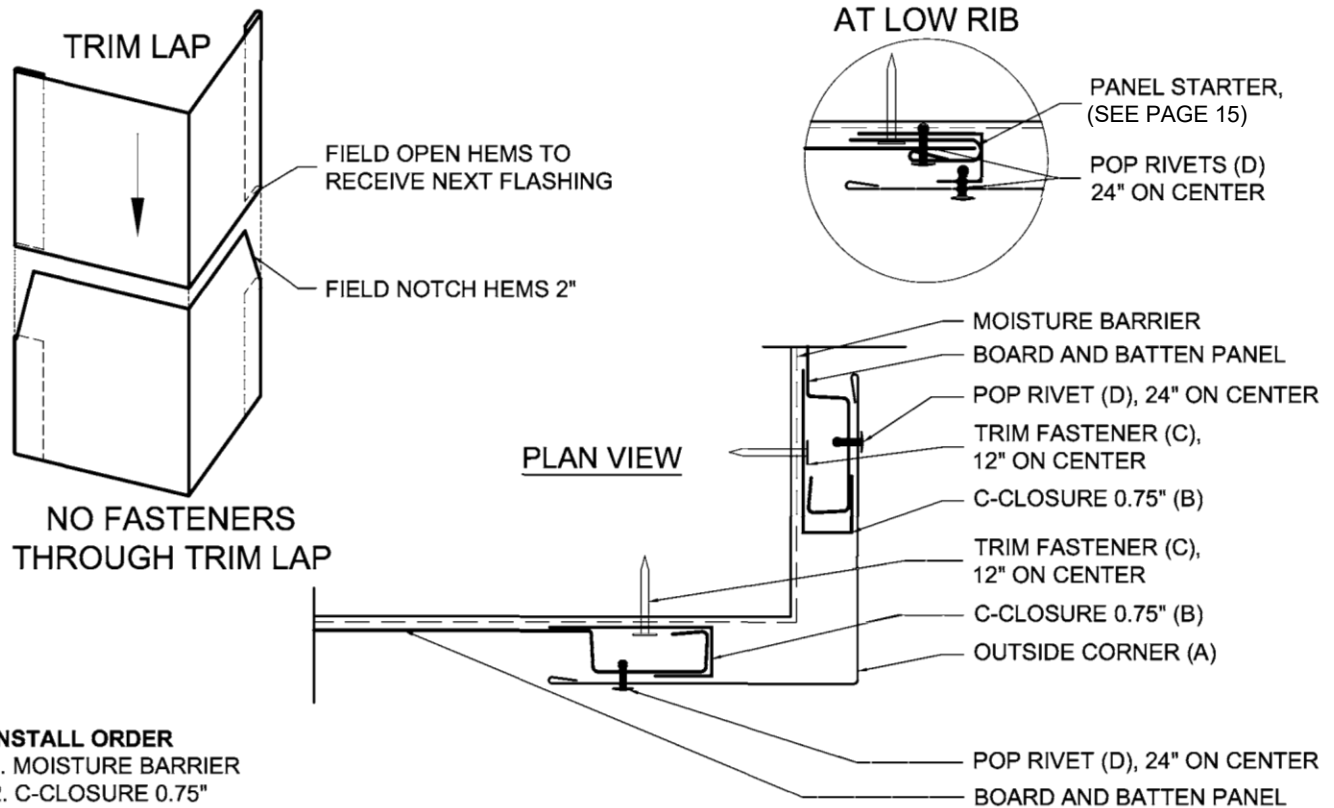
OPTIONAL



**NO FASTENERS
THROUGH TRIM LAP**

	Part	Description	Length	Installation Information
(A)		24Ga Head Trim	10'-2"	Install Head Trim and fasten in place with Moisture Barrier over the top of the Head Trim. Ensure Head Trim is installed with slope to allow for water drainage.
(B)		#10-16 x 1" Pancake Head Driller	1"	For panel / trim attachment to steel framing
(B)		#10-12 x 1" Pancake Head Wood Screw	1"	For panel / trim attachment to wood sheathing or framing
(C)		1/8" x 3/8" Pop Rivet		For Sill/Jamb attachment to C-Closure and panel

VERTICAL INSTALLATION – OUTSIDE CORNER

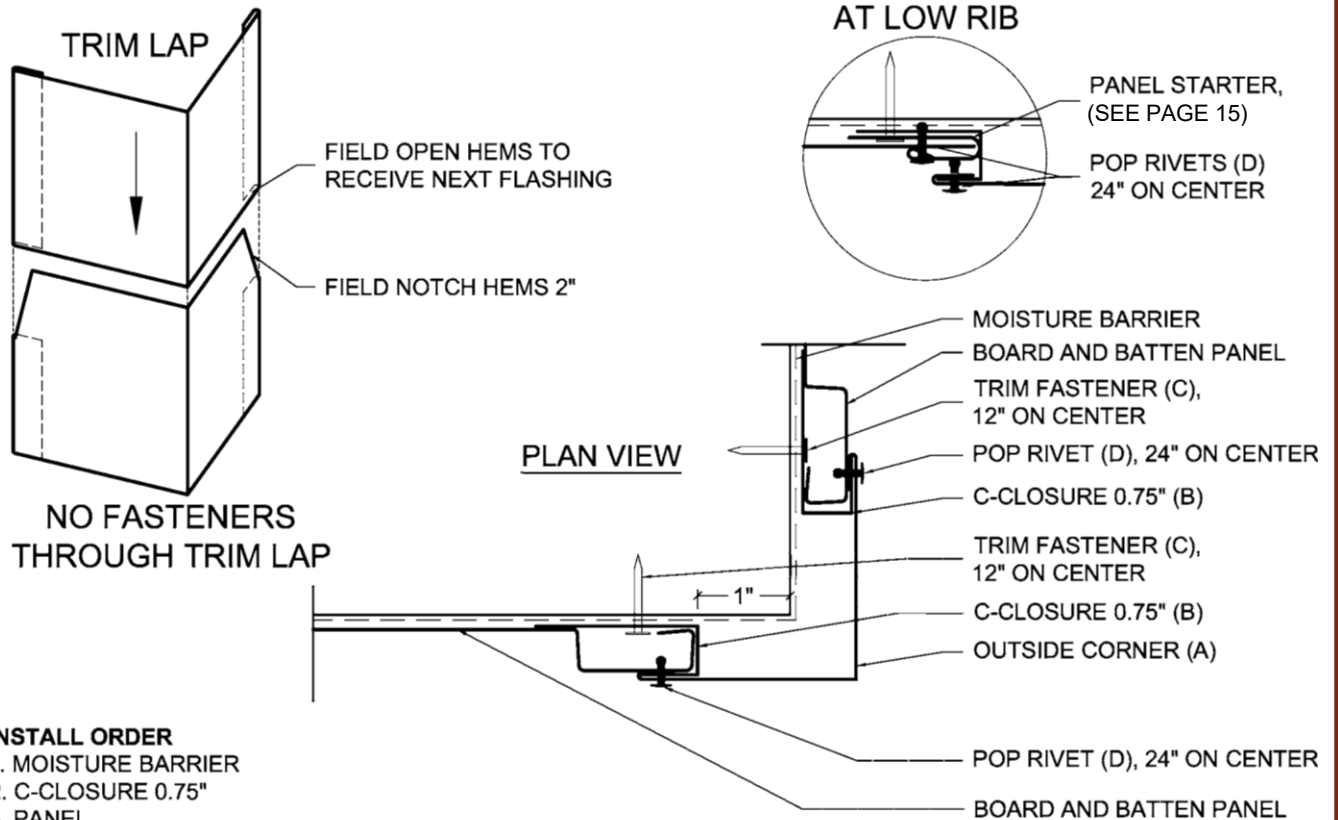


INSTALL ORDER

1. MOISTURE BARRIER
2. C-CLOSURE 0.75"
3. PANEL
4. OUTSIDE CORNER
5. C-CLOSURE 0.75"
6. PANEL

	Part	Description	Length	Installation Information
(A)		24Ga Outside Corner Wide	10'-2"	Apply Outside Corner to panels. Pop Rivet each panel rib.
(B)		24Ga C-Closure	10'-2"	Install C-Closure to start panel.
(C)		#10-16 x 1" Pancake Head Driller	1"	For panel / trim attachment to steel framing
(C)		#10-12 x 1" Pancake Head Wood Screw	1"	For panel / trim attachment to wood sheathing or framing
(D)		1/8" x 3/8" Pop Rivet		For Sill/Jamb Trim attachment to Z-Closure

VERTICAL INSTALLATION - OUTSIDE CORNER WITH STARTER



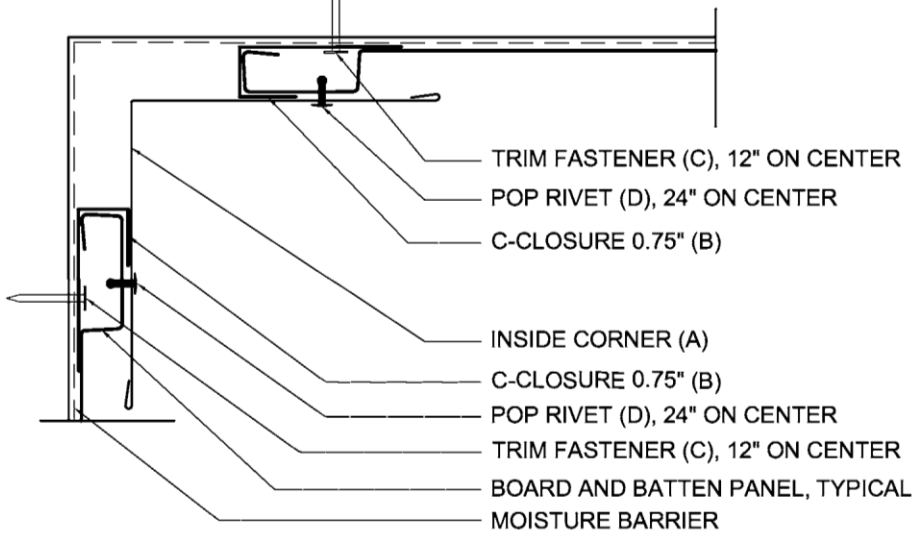
INSTALL ORDER

1. MOISTURE BARRIER
2. C-CLOSURE 0.75"
3. PANEL
4. OUTSIDE CORNER
5. C-CLOSURE 0.75"
6. PANEL

Part	Description	Length	Installation Information	
(A)	<p>3"</p> <p>1" Open Hem</p> <p>1" Open Hem</p> <p>3"</p> <p>C</p>	24Ga Outside Corner Wide	10'-2"	Hook Outside Corner around C-Closures. Pop Rivet to panel and C-Closures
(B)	<p>1"</p> <p>1"</p> <p>2 3/4"</p> <p>C</p>	24Ga C-Closure	10'-2"	Install C-Closure to start panel.
(C)		#10-16 x 1" Pancake Head Driller	1"	For panel / trim attachment to steel framing
(C)		#10-12 x 1" Pancake Head Wood Screw	1"	For panel / trim attachment to wood sheathing or framing
(D)		1/8" x 3/8" Pop Rivet		For Outside Corner attachment to C-Closures

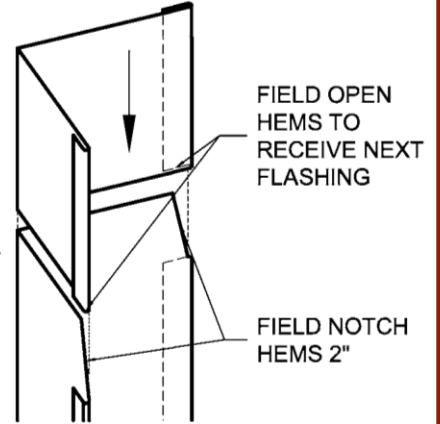
VERTICAL INSTALLTION – INSIDE CORNER

PLAN VIEW



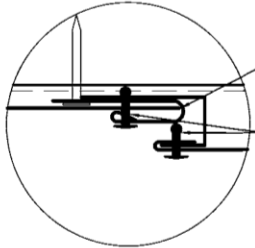
C-Closure 0.75", 24 Ga
 C-Closure 0.75", 0.032"

TRIM LAP

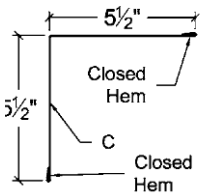
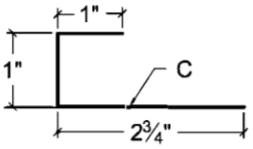
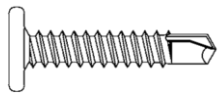
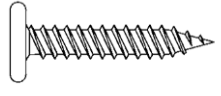



NO FASTENERS THROUGH TRIM LAP

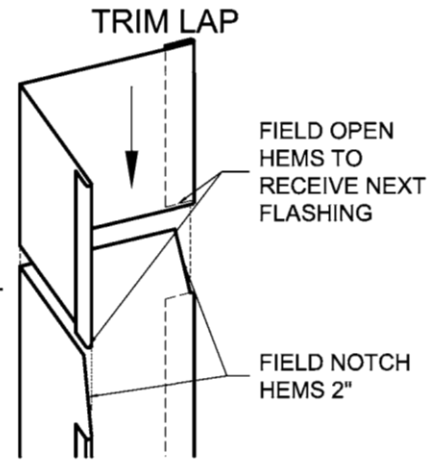
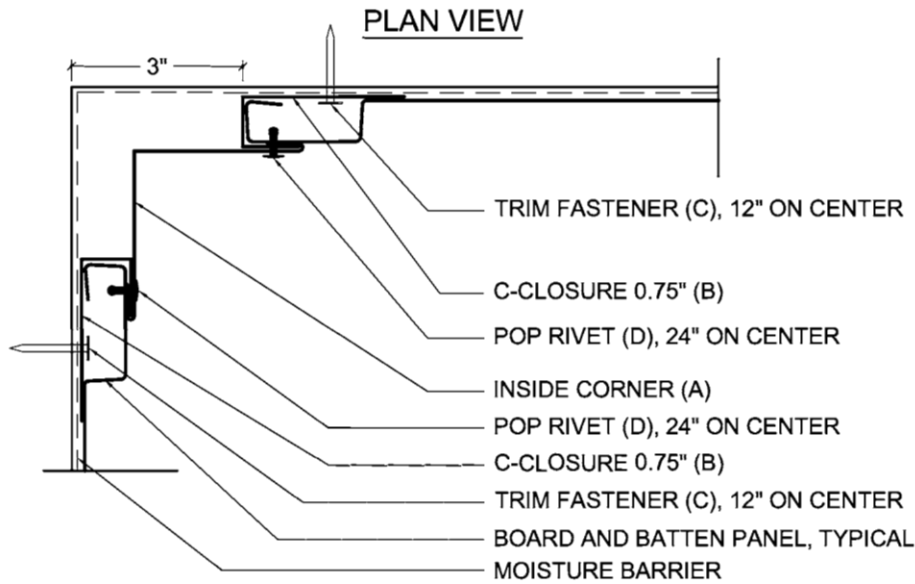
AT LOW RIB



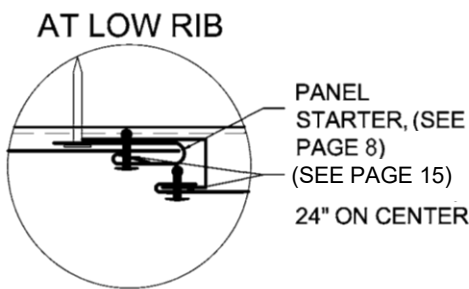
- INSTALL ORDER**
1. MOISTURE BARRIER
 2. C-CLOSURE 0.75"
 3. PANEL
 4. INSIDE CORNER
 5. C-CLOSURE 0.75"
 6. PANEL

Part	Description	Length	Installation Information
(A) 	24Ga Inside Corner Wide	10'-2"	Apply Inside Corner Trim to panels. Pop Rivet to each panel rib.
(B) 	24Ga C-Closure	10'-2"	Install C-Closure on each side of corner.
(C) 	#10-16 x 1" Pancake Head Driller	1"	For panel / trim attachment to steel framing
(C) 	#10-12 x 1" Pancake Head Wood Screw	1"	For panel / trim attachment to wood sheathing or framing
(D) 	1/8" x 3/8" Pop Rivet		For Inside Corner attachment to panels

VERTICAL INSTALLATION – INSIDE CORNER WITH STARTER



NO FASTENERS THROUGH TRIM LAP



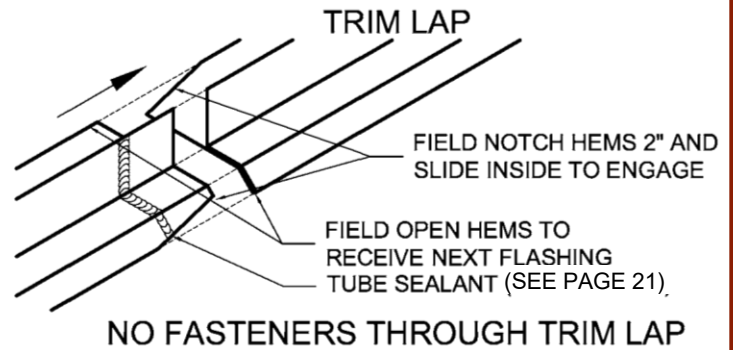
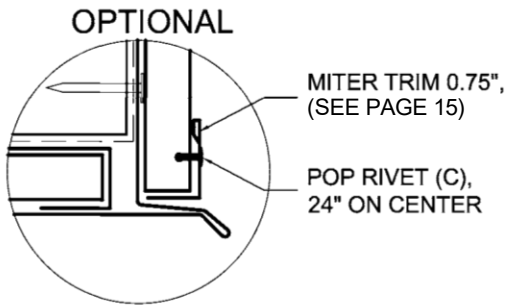
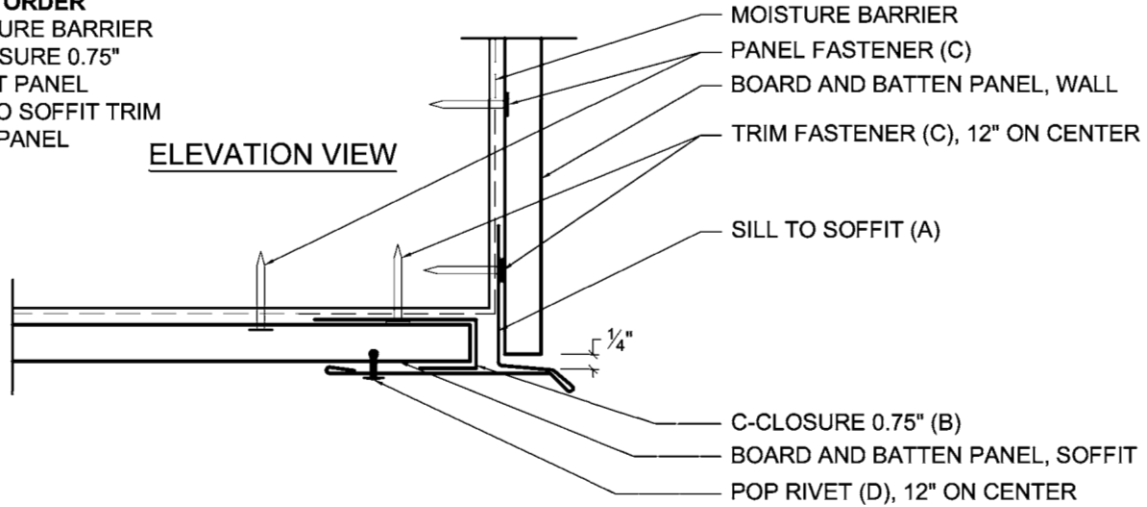
- INSTALL ORDER**
1. MOISTURE BARRIER
 2. C-CLOSURE 0.75"
 3. PANEL
 4. INSIDE CORNER
 5. C-CLOSURE 0.75"
 6. PANEL

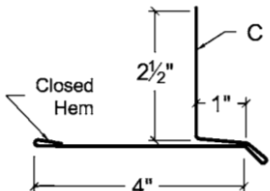
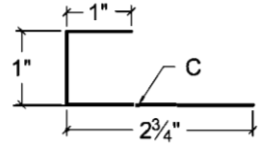
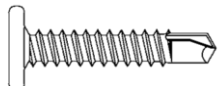
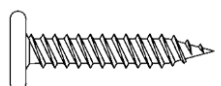
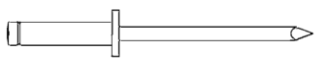
Part	Description	Length	Installation Information
(A)	24Ga Inside Corner Wide	10'-2"	Hook Inside Corner Trim around C-Closures. Pop Rivet to closure trims and panel 24" on center.
(B)	24Ga C-Closure	10'-2"	Install C-Closure on each side of corner.
(C)	#10-16 x 1" Pancake Head Driller	1"	For panel / trim attachment to steel framing
(C)	#10-12 x 1" Pancake Head Wood Screw	1"	For panel / trim attachment to wood sheathing or framing
(D)	1/8" x 3/8" Pop Rivet		For Inside Corner attachment to C-Closures

VERTICAL INSTALLATION – SILL TO SOFFIT

INSTALL ORDER

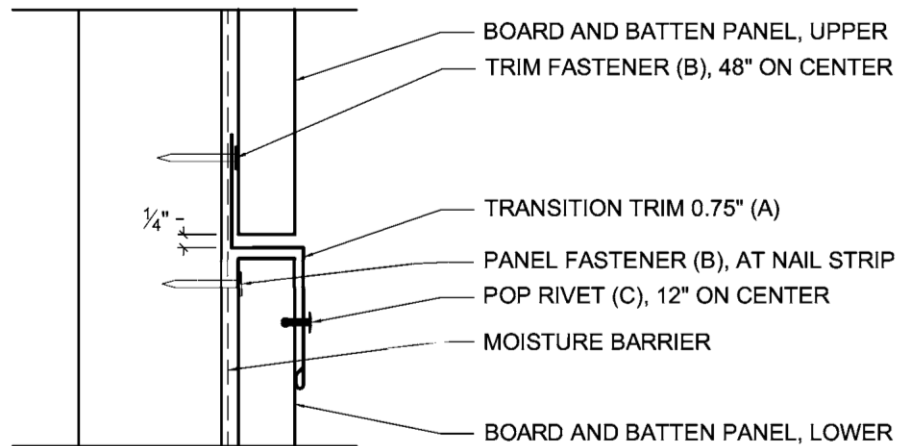
1. MOISTURE BARRIER
2. C-CLOSURE 0.75"
3. SOFFIT PANEL
4. SILL TO SOFFIT TRIM
5. WALL PANEL



Part	Description	Length	Installation Information
(A) 	24Ga Sill to Soffit	10'-2"	Locate against Soffit panel and wall. Fastener to Soffit panel and Wall.
(B) 	24Ga C-Closure	10'-2"	Install C-Closure to start panel.
(C) 	#10-16 x 1" Pancake Head Driller	1"	For panel / trim attachment to steel framing
(C) 	#10-12 x 1" Pancake Head Wood Screw	1"	For panel / trim attachment to wood sheathing or framing
(D) 	1/8" x 3/8" Pop Rivet		For Sill to Soffit trim attachment to Soffit panel

VERTICAL INSTALLATION – HORIZONTAL PANEL TRANSITION

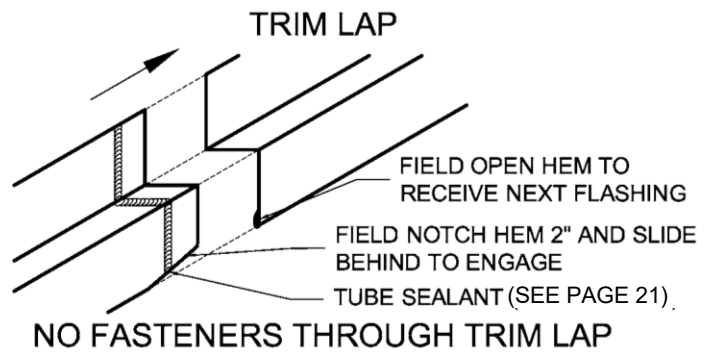
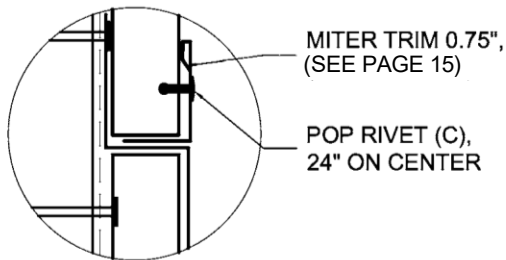
ELEVATION VIEW



INSTALL ORDER

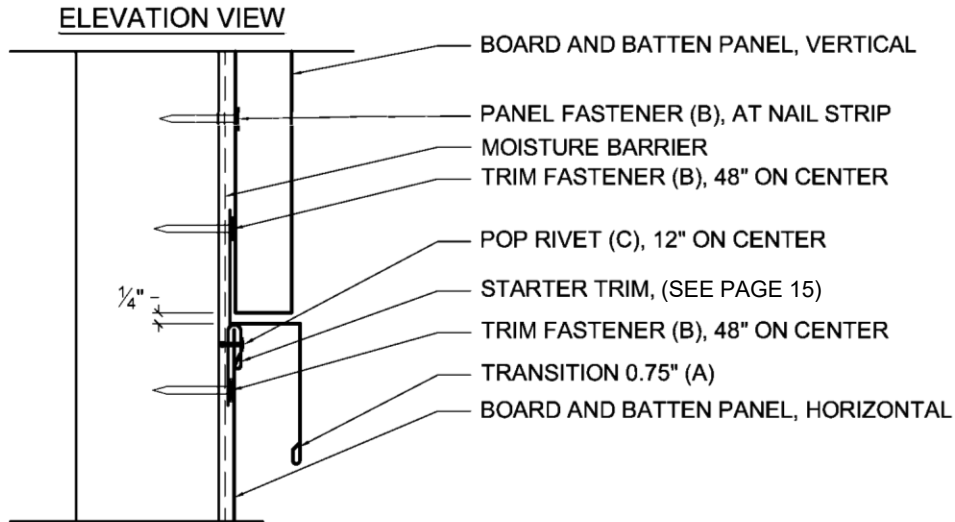
1. LOWER PANEL
2. TRANSITION TRIM 0.75"
3. UPPER PANEL

OPTIONAL



Part	Description	Length	Installation Information
(A)	 24Ga Transition Trim	10'-2"	Install Transition Trim over lower panel and attach with Pop Rivet at Outside Closure.
(B)	 #10-16 x 1" Pancake Head Driller	1"	For panel / trim attachment to steel framing
(B)	 #10-12 x 1" Pancake Head Wood Screw	1"	For panel / trim attachment to wood sheathing or framing
(C)	 1/8" x 3/8" Pop Rivet		For trim attachment to panel

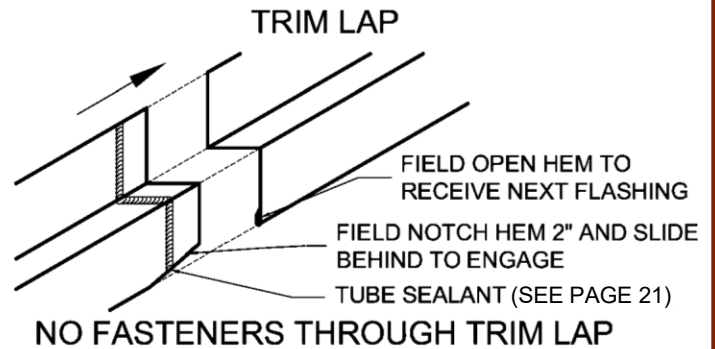
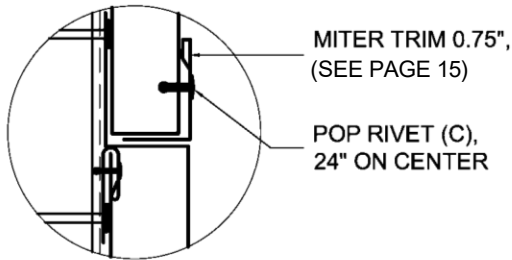
VERTICAL OVER HORIZONTAL INSTALLATION – HORIZONTAL TRANSITION



INSTALL ORDER

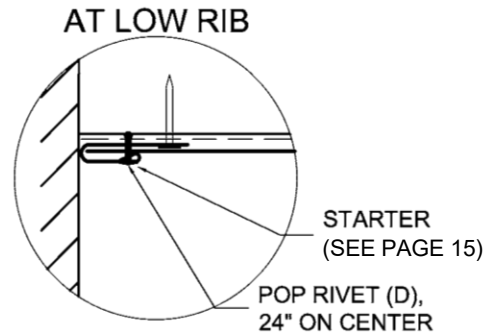
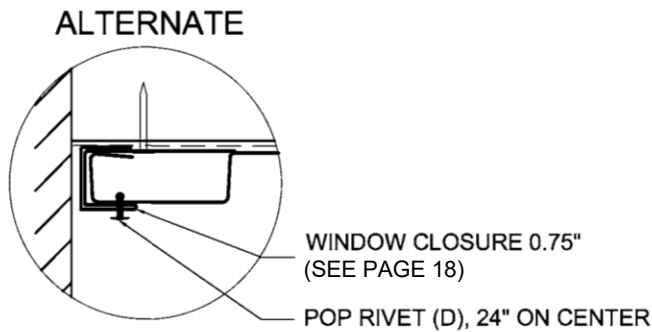
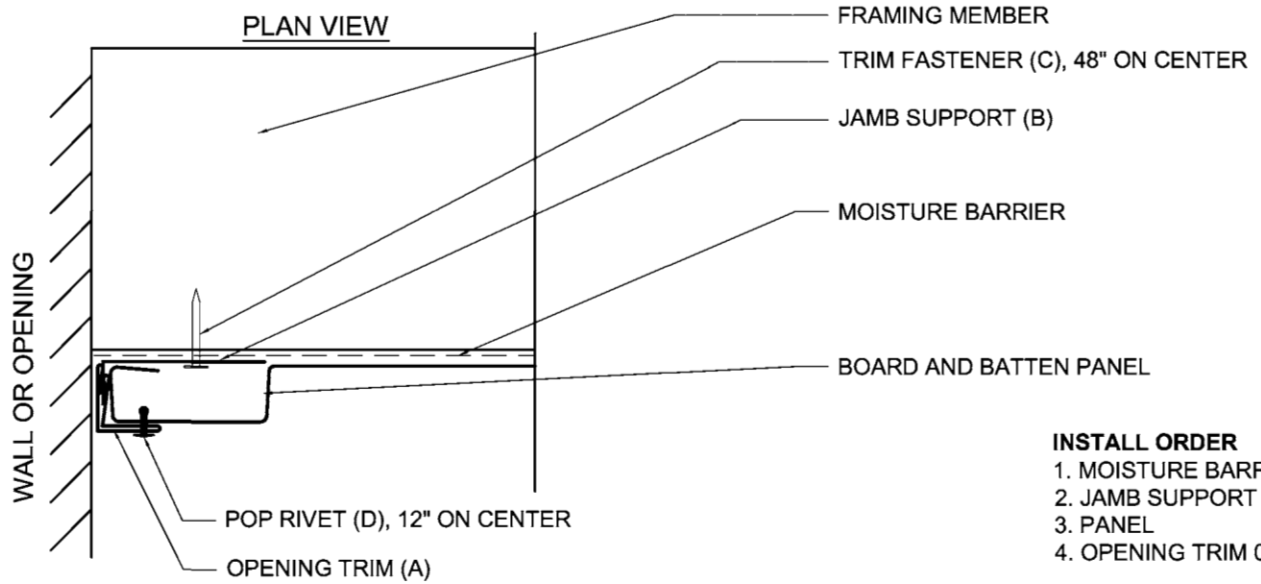
1. STARTER TRIM
2. LOWER, HORIZONTAL PANEL
3. TRANSITION 0.75"
4. UPPER, VERTICAL PANEL

OPTIONAL



	Part	Description	Length	Installation Information
(A)		24Ga Transition Trim	10'-2"	Install Transition Trim over horizontal panel and attach with Pop Rivet.
(B)		#10-16 x 1" Pancake Head Driller	1"	For panel / trim attachment to steel framing
(B)		#10-12 x 1" Pancake Head Wood Screw	1"	For panel / trim attachment to wood sheathing or framing
(C)		1/8" x 3/8" Pop Rivet		For Trim attachment to Panel

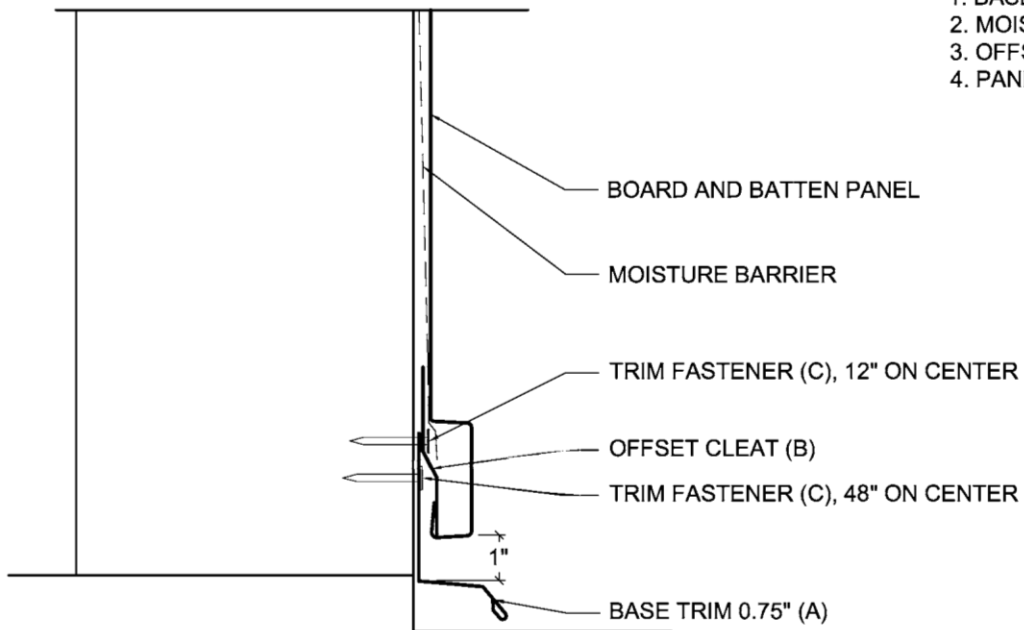
VERTICAL INSTALLATION – PANEL END



Part	Description	Length	Installation Information
(A)	 24Ga Opening Trim	10'-2"	Engage Opening Trim onto Jamb Support. Attach to panel with Pop Rivets. Sealant may be needed at adjacent wall.
(B)	 24Ga Jamb Support	10'-2"	Jamb Support and Opening Trim can ease the installation of panels as opposed to using C-Closures at both ends of a panel.
(C)	 #10-16 x 1" Pancake Head Driller	1"	For panel / trim attachment to steel framing
(C)	 #10-12 x 1" Pancake Head Wood Screw	1"	For panel / trim attachment to wood sheathing or framing
(D)	 1/8" x 3/8" Pop Rivet		For trim attachment to panel

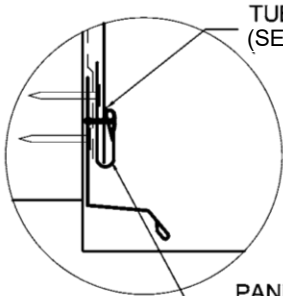
HORIZONTAL INSTALLATION – WALL BASE

ELEVATION VIEW



- INSTALL ORDER**
1. BASE TRIM 0.75"
 2. MOISTURE BARRIER
 3. OFFSET CLEAT
 4. PANEL

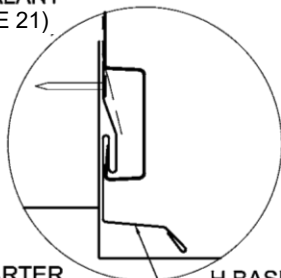
AT LOW RIB



TUBE SEALANT
(SEE PAGE 21)

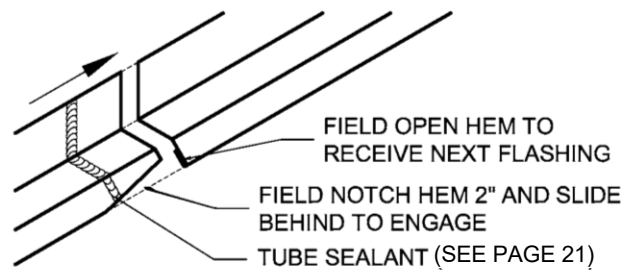
PANEL STARTER
(SEE PAGE 8)

ALTERNATE



H BASE 0.75"
(SEE PAGE 12)

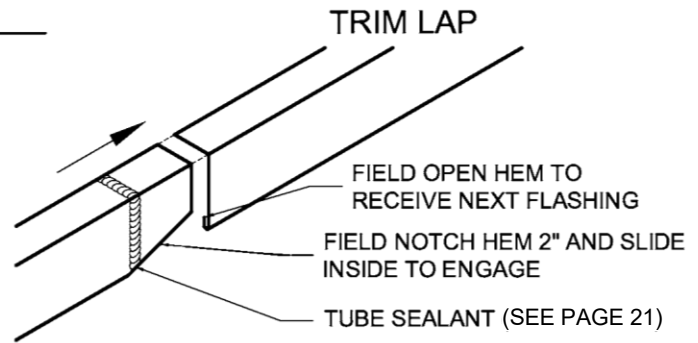
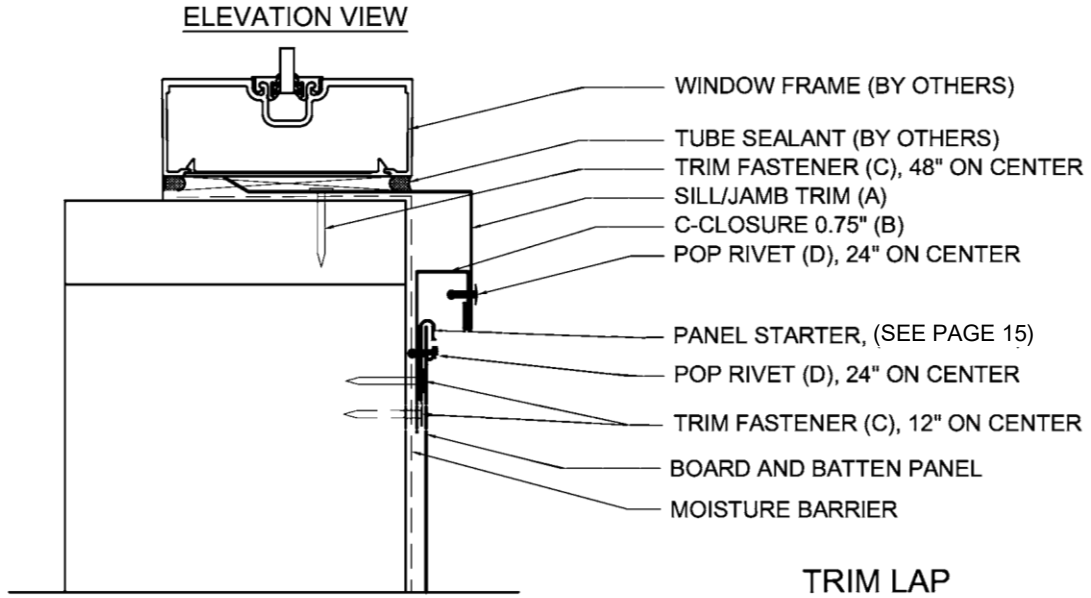
TRIM LAP



NO FASTENERS THROUGH TRIM LAP

Part	Description	Length	Installation Information
(A)		10'-2"	Install Moisture Barrier over top of Base Trim
(B)		10'-2"	Install Offset Cleat, located so panel will hook onto 1" leg of Offset Cleat
(C)		1"	For panel / trim attachment to steel framing
(C)		1"	For panel / trim attachment to wood sheathing or framing

HORIZONTAL INSTALLATION - SILL

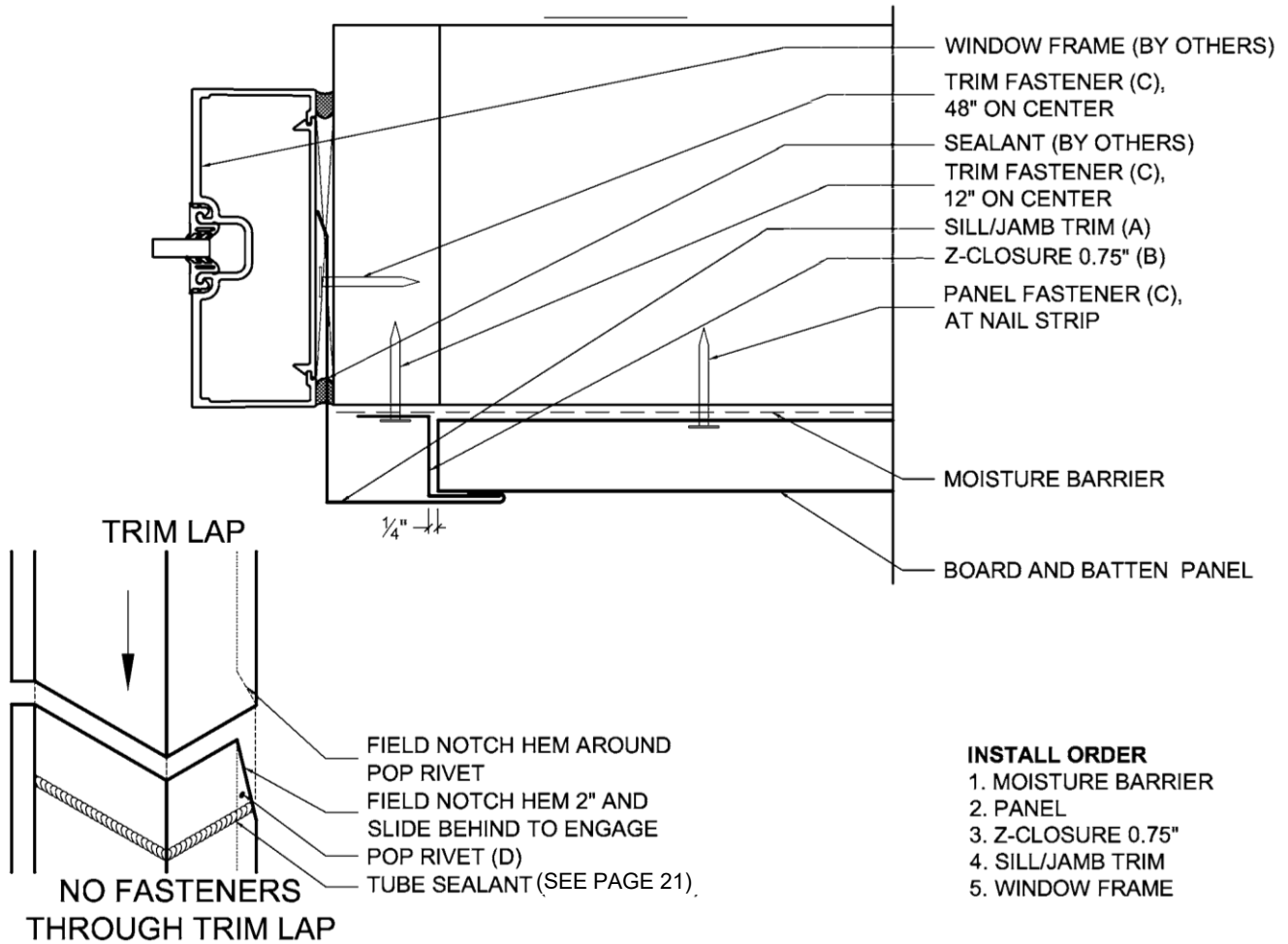


- INSTALL ORDER**
1. MOISTURE BARRIER
 2. C-CLOSURE 0.75"
 3. PANEL
 4. SILL/JAMB TRIM
 5. WINDOW FRAME

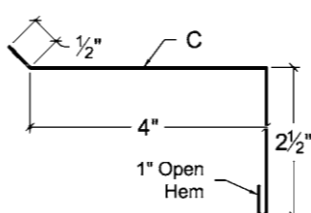
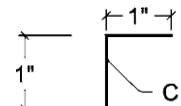
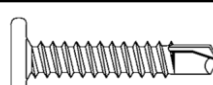
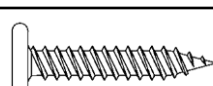
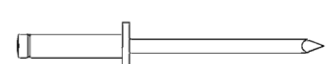
NO FASTENERS THROUGH TRIM LAP

	Part	Description	Length	Installation Information
(A)		24Ga Sill/Jamb Trim	10'-2"	Hook Sill/Jamb Trim onto C-Closure and fasten in place. Ensure Sill/Jamb Trim is installed with slope to allow for water drainage.
(B)		24Ga C-Closure	10'-2"	Install C-Closure and hook Sill/Jamb Trim over 1" leg.
(C)		#10-16 x 1" Pancake Head Driller	1"	For panel / trim attachment to steel framing
(C)		#10-12 x 1" Pancake Head Wood Screw	1"	For panel / trim attachment to wood sheathing or framing
(D)		1/8" x 3/8" Pop Rivet		For Sill/Jamb attachment to C-Closure and panel

HORIZONTAL INSTALLATION – JAMB WITH STARTER



- INSTALL ORDER**
1. MOISTURE BARRIER
 2. PANEL
 3. Z-CLOSURE 0.75"
 4. SILL/JAMB TRIM
 5. WINDOW FRAME

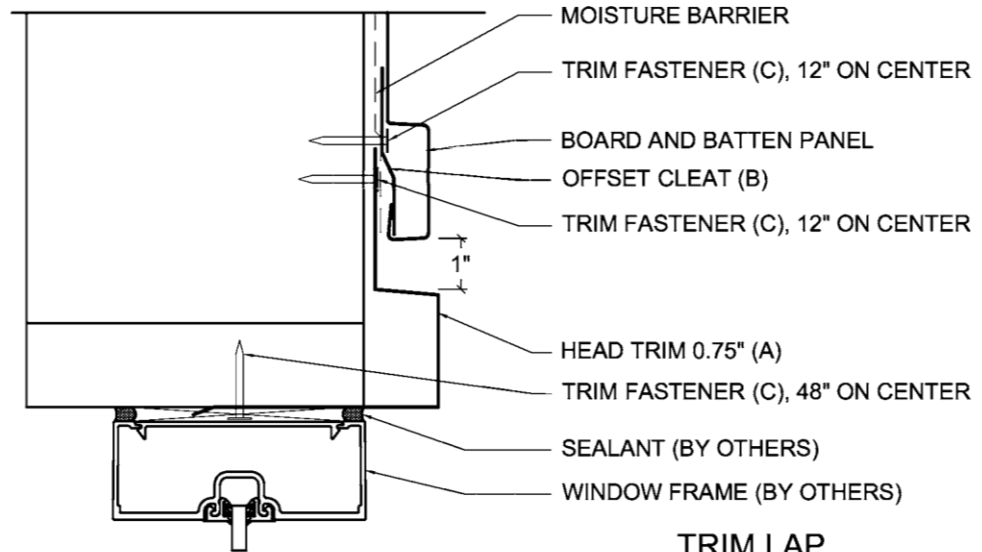
Part	Description	Length	Installation Information
(A) 	24Ga Sill/Jamb Trim	10'-2"	Hook Sill/Jamb Trim onto Z-Closure and fasten into place.
(B) 	24Ga Z-Closure	10'-2"	Install Z-Closure and hook Sill/Jamb Trim over 1" leg.
(C) 	#10-16 x 1" Pancake Head Driller	1"	For panel / trim attachment to steel framing
(C) 	#10-12 x 1" Pancake Head Wood Screw	1"	For panel / trim attachment to wood sheathing or framing
(D) 	1/8" x 3/8" Pop Rivet		For Sill/Jamb Trim attachment to Z-Closure

HORIZONTAL INSTALLATION – HEAD CHANNEL WITH RETURN

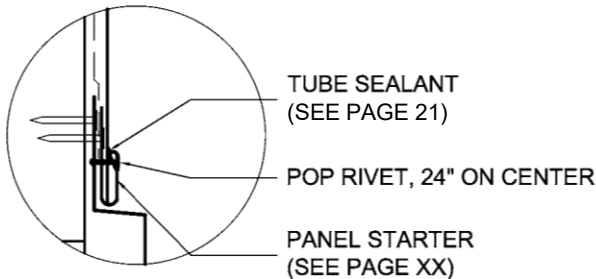
INSTALL ORDER

1. HEAD TRIM 0.75"
2. MOISTURE BARRIER
3. OFFSET CLEAT
4. PANEL
5. WINDOW FRAME

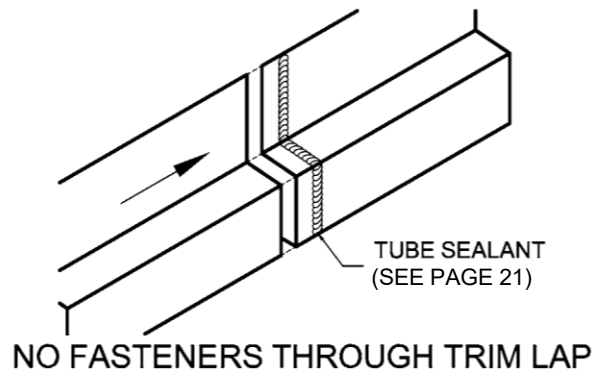
ELEVATION VIEW



AT LOW RIB

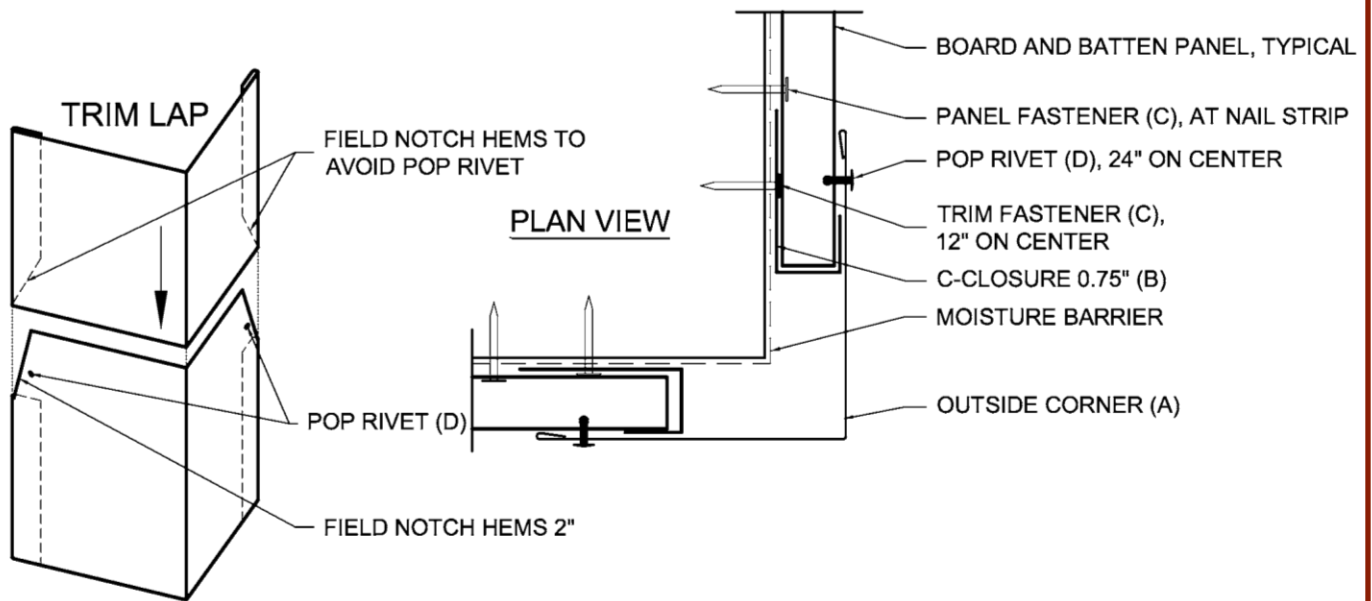


TRIM LAP



	Part	Description	Length	Installation Information
(A)		24Ga Sill/Jamb Trim	10'-2"	Install Moisture Barrier over top of Head Trim and fasten in place. Ensure Head Trim is installed with slope to allow for water drainage.
(B)		24Ga Offset Cleat	10'-2"	Install Offset Cleat. Hook panel onto 1" leg of Offset Cleat
(C)		#10-16 x 1" Pancake Head Driller	1"	For panel / trim attachment to steel framing
(C)		#10-12 x 1" Pancake Head Wood Screw	1"	For panel / trim attachment to wood sheathing or framing

HORIZONTAL INSTALLATION – OUTSIDE CORNER



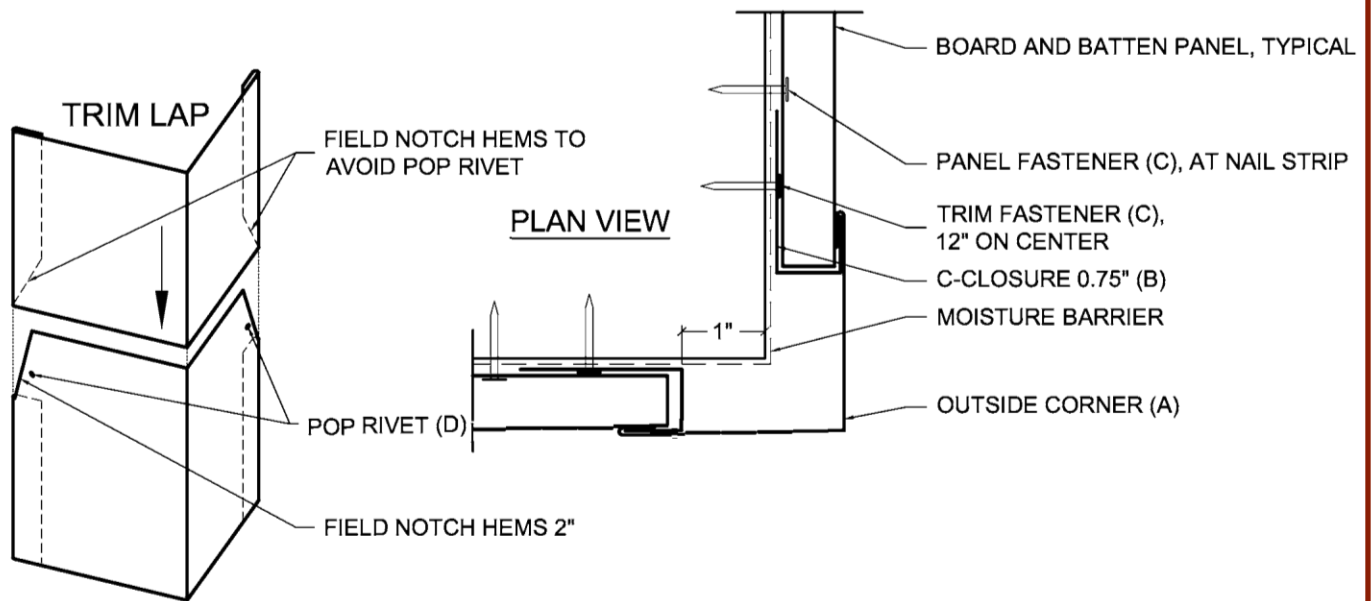
NO FASTENERS THROUGH TRIM LAP

INSTALL ORDER

1. MOISTURE BARRIER
2. C-CLOSURE 0.75"
3. PANEL
4. OUTSIDE CORNER
5. C-CLOSURE 0.75"
6. PANEL

	Part	Description	Length	Installation Information
(A)		24Ga Outside Corner Wide	10'-2"	Apply Outside Corner to panels. Pop Rivet each panel rib.
(B)		24Ga C-Closure	10'-2"	Install C-Closure before panel. An alternate is to use Z-closure to ease panel installation.
(C)		#10-16 x 1" Pancake Head Driller	1"	For panel / trim attachment to steel framing
(C)		#10-12 x 1" Pancake Head Wood Screw	1"	For panel / trim attachment to wood sheathing or framing
(D)		1/8" x 3/8" Pop Rivet		For Outside Corner attachment to C-Closures

HORIZONTAL INSTALLATION – OUTSIDE CORNER WITH STARTER



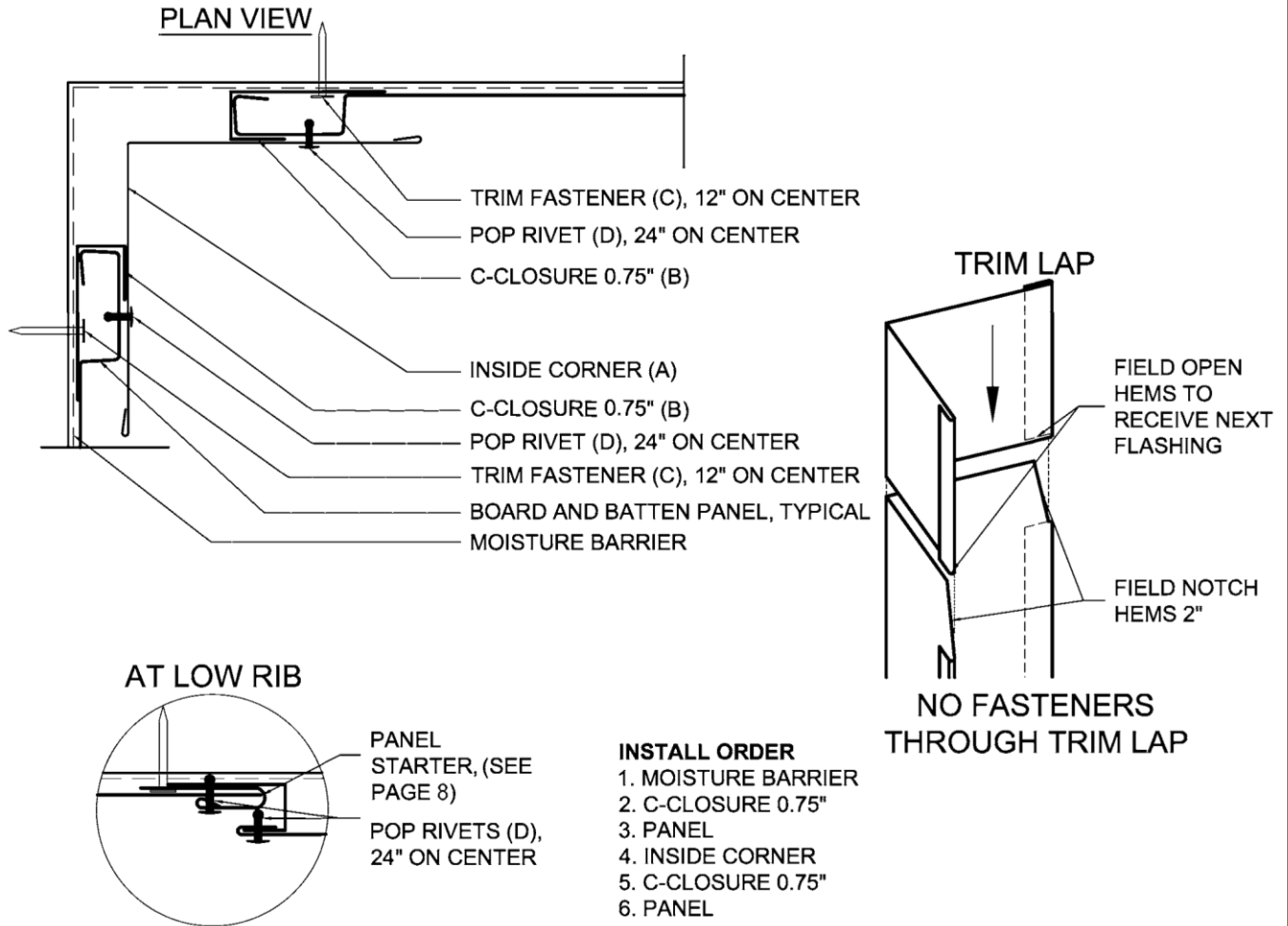
**NO FASTENERS
THROUGH TRIM LAP**

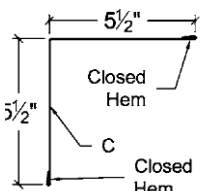
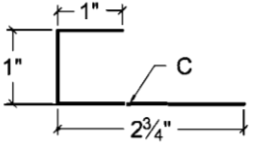
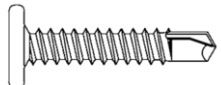
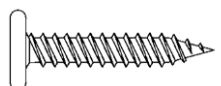
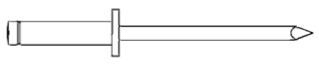
INSTALL ORDER

1. MOISTURE BARRIER
2. C-CLOSURE 0.75"
3. PANEL
4. OUTSIDE CORNER
5. C-CLOSURE 0.75"
6. PANEL

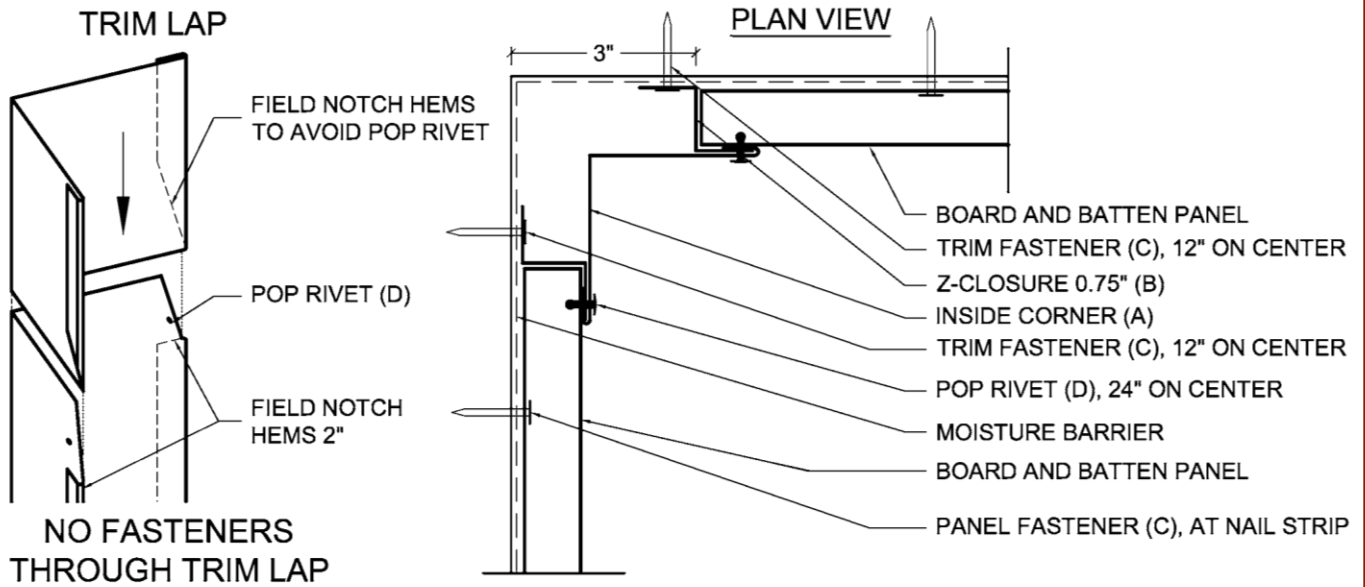
Part	Description	Length	Installation Information
	24Ga Outside Corner Wide	10'-2"	Hook Outside Corner around C-Closure, pull C-Closure into place. Pop Rivet to C-Closures under trim lap.
	24Ga C-Closure	10'-2"	Install C-Closure before panel. An alternate is to use Z-Closure to ease panel installation.
	#10-16 x 1" Pancake Head Driller	1"	For panel / trim attachment to steel framing
	#10-12 x 1" Pancake Head Wood Screw	1"	For panel / trim attachment to wood sheathing or framing
	1/8" x 3/8" Pop Rivet		For Outside Corner attachment to C-Closures

HORIZONTAL INSTALLATION – INSIDE CORNER

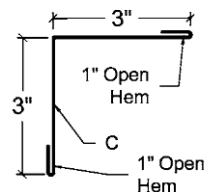
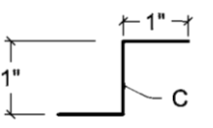
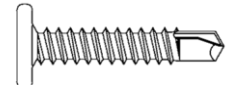
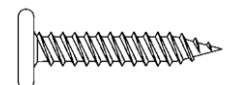
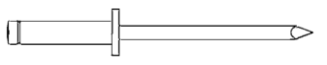


Part	Description	Length	Installation Information
(A) 	24Ga Inside Corner Wide	10'-2"	Apply Inside Corner Trim to panels. Pop Rivet to each panel rib.
(B) 	24Ga C-Closure	10'-2"	Install C-Closure on each side of corner.
(C) 	#10-16 x 1" Pancake Head Driller	1"	For panel / trim attachment to steel framing
(C) 	#10-12 x 1" Pancake Head Wood Screw	1"	For panel / trim attachment to wood sheathing or framing
(D) 	1/8" x 3/8" Pop Rivet		For Inside Corner attachment to panels

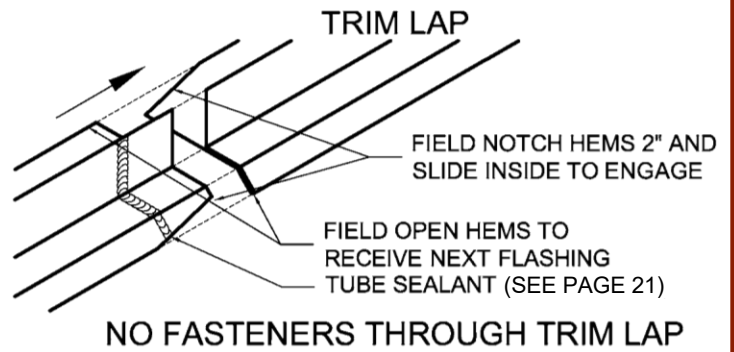
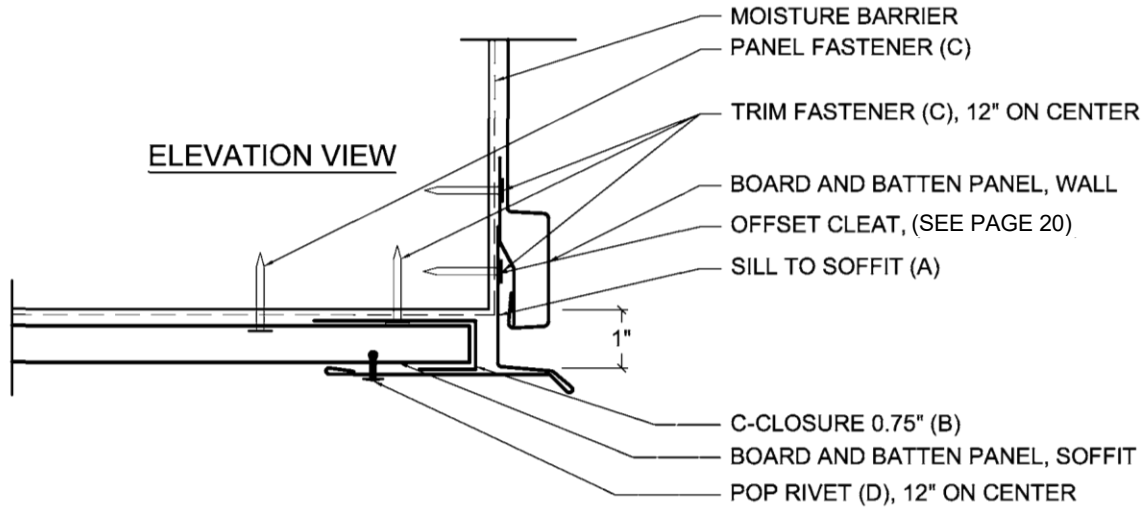
HORIZONTAL INSTALLATION – INSIDE CORNER WITH STARTER



- INSTALL ORDER**
1. MOISTURE BARRIER
 2. Z-CLOSURE 0.75"
 3. PANEL
 4. INSIDE CORNER
 5. Z-CLOSURE 0.75"
 6. PANEL

	Part	Description	Length	Installation Information
(A)		24Ga Inside Corner Wide	10'-2"	Hook Inside Corner around Z-Closures into place. Pop Rivet to Z-Closures under trim lap.
(B)		24Ga C-Closure	10'-2"	Install Z-Closure on each side of corner.
(C)		#10-16 x 1" Pancake Head Driller	1"	For panel / trim attachment to steel framing
(C)		#10-12 x 1" Pancake Head Wood Screw	1"	For panel / trim attachment to wood sheathing or framing
(D)		1/8" x 3/8" Pop Rivet		For Inside Corner attachment to Z-Closures

HORIZONTAL INSTALLATION – SILL TO SOFFIT

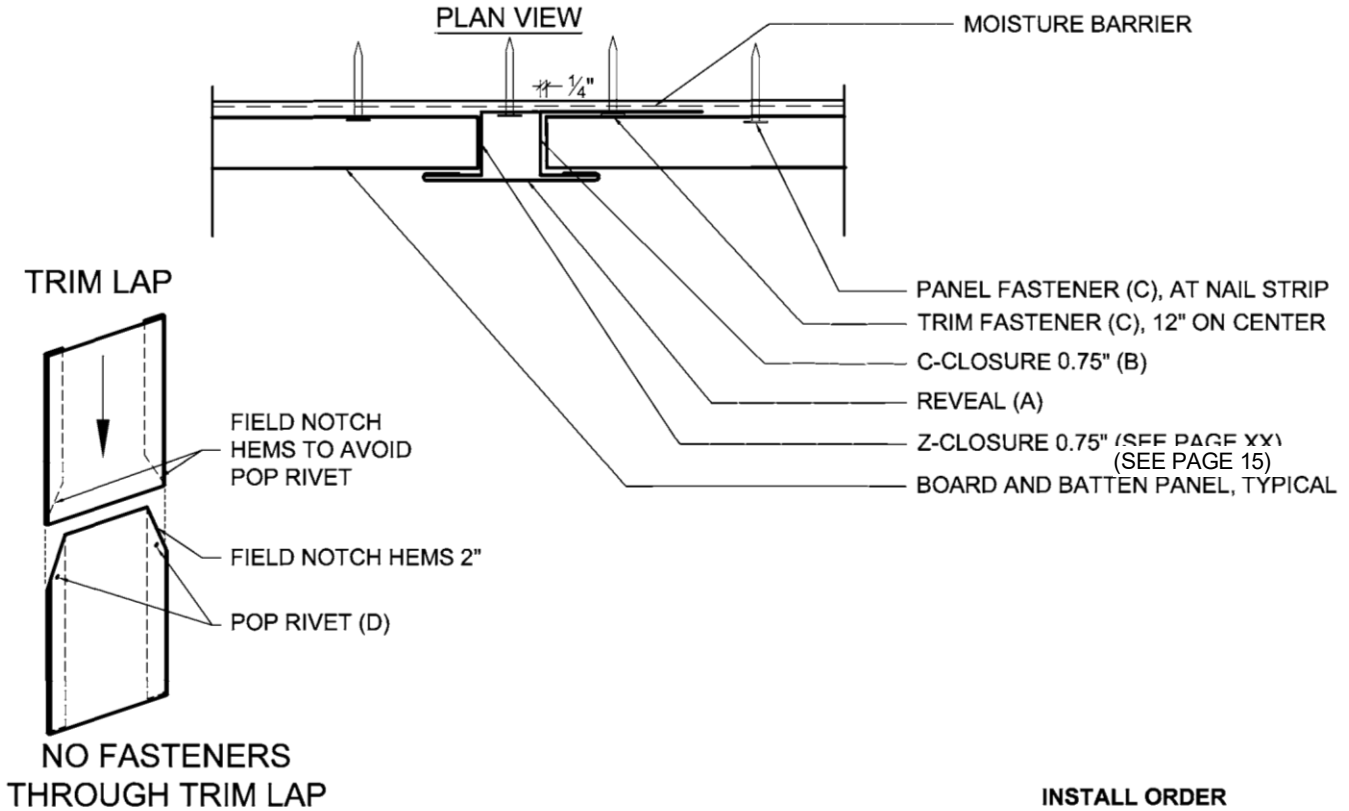


INSTALL ORDER

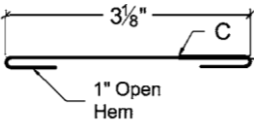
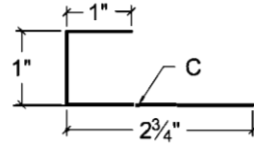
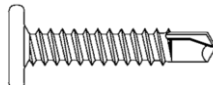
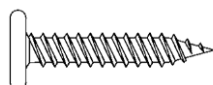
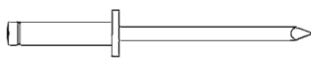
1. MOISTURE BARRIER
2. C-CLOSURE 0.75"
3. SOFFIT PANEL
4. SILL TO SOFFIT
5. OFFSET CLEAT
6. WALL PANEL

Part	Description	Length	Installation Information
(A)	24Ga Sill to Soffit	10'-2"	Locate against Soffit panel and wall. Fastener to Soffit panel and Wall.
(B)	24Ga C-Closure	10'-2"	Install C-Closure to start panel.
(C)	#10-16 x 1" Pancake Head Driller	1"	For panel / trim attachment to steel framing
(C)	#10-12 x 1" Pancake Head Wood Screw	1"	For panel / trim attachment to wood sheathing or framing
(D)	1/8" x 3/8" Pop Rivet		For Sill to Soffit trim attachment to Soffit panel

HORIZONTAL INSTALLTION – VERTICAL PANEL TRANSITION

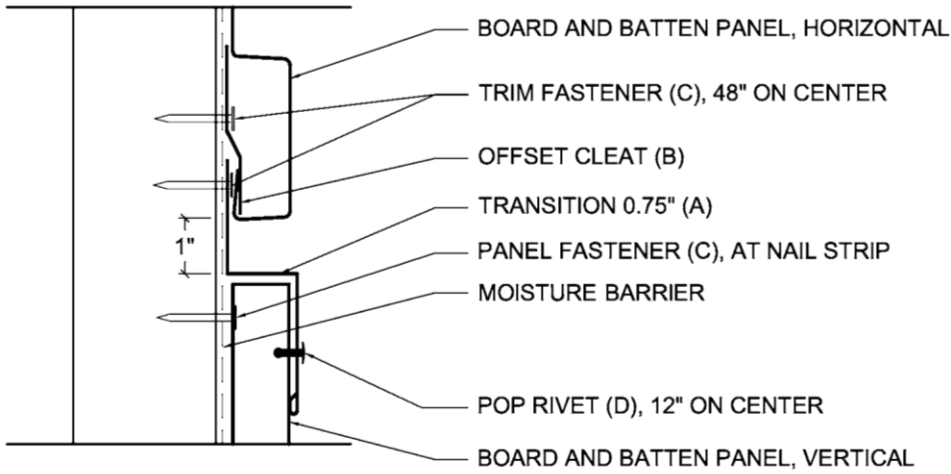


- INSTALL ORDER**
1. MOISTURE BARRIER
 2. PANEL
 3. Z-CLOSURE 0.75"
 4. REVEAL
 5. C-CLOSURE 0.75"
 6. PANEL

	Part	Description	Length	Installation Information
(A)		24Ga Reveal Trim	10'-2"	Hook Reveal on Z-Closure and engage C-Closure. Pop Rivet to Closures at trim lap.
(B)		24Ga C-Closure	10'-2"	Install C-Closure to restrain Reveal. Leave 1/4" gap between end of panels and back of C-Closure.
(C)		#10-16 x 1" Pancake Head Driller	1"	For panel / trim attachment to steel framing
(C)		#10-12 x 1" Pancake Head Wood Screw	1"	For panel / trim attachment to wood sheathing or framing
(D)		1/8" x 3/8" Pop Rivet		For Reveal attachment to Closures at trim lap

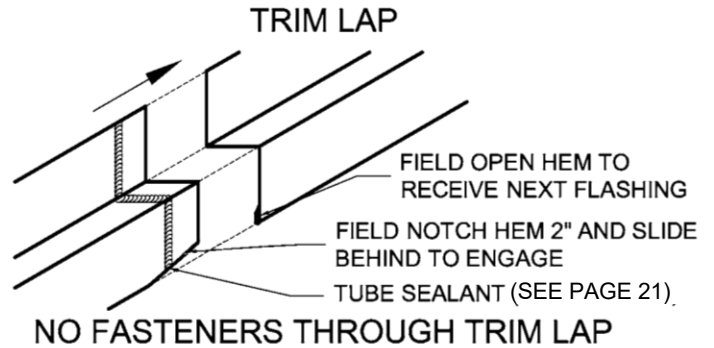
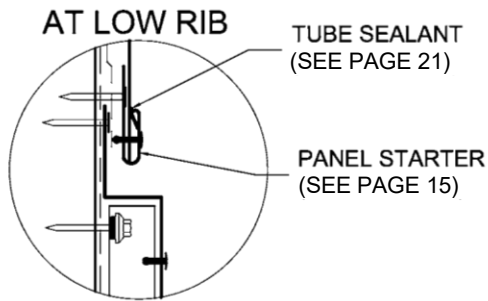
HORIZONTAL OVER VERTICAL INSTALLATION – HORIZONTAL TRANSITION

ELEVATION VIEW



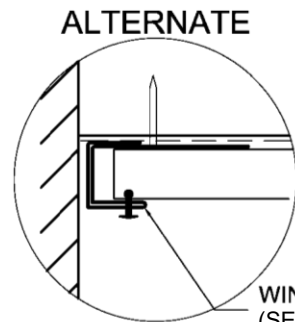
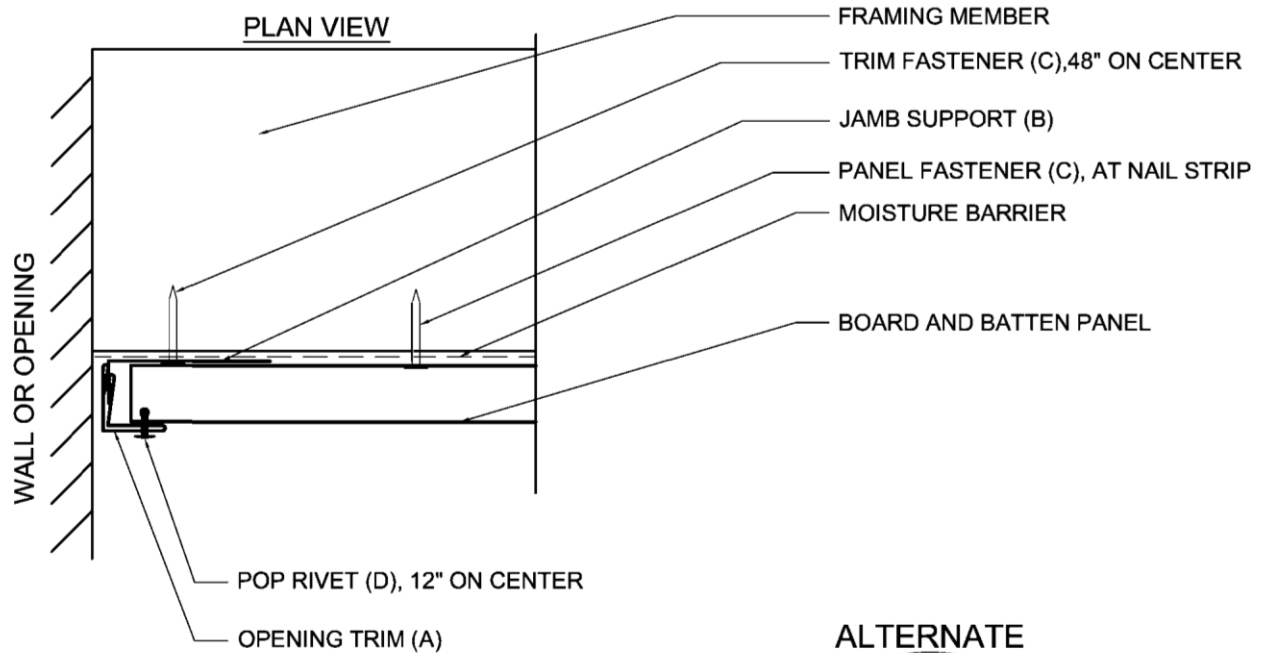
INSTALL ORDER

1. LOWER, VERTICAL PANEL
2. TRANSITION 0.75"
3. OFFSET CLEAT
4. UPPER, HORIZONTAL PANEL



	Part	Description	Length	Installation Information
(A)		24Ga Transition Trim	10'-2"	Install Transition over vertical panel and attach with Pop Rivet.
(B)		24Ga Offset Cleat	10'-2"	Hook panel onto 1" leg of Offset Cleat.
(C)		#10-16 x 1" Pancake Head Driller	1"	For panel / trim attachment to steel framing
(C)		#10-12 x 1" Pancake Head Wood Screw	1"	For panel / trim attachment to wood sheathing or framing
(D)		1/8" x 3/8" Pop Rivet		For Transition Trim attachment to Panel

HORIZONTAL INSTALLATION – PANEL END



- INSTALL ORDER**
1. MOISTURE BARRIER
 2. JAMB SUPPORT
 3. PANEL
 4. OPENING TRIM 0.75"

Part	Description	Length	Installation Information
(A)		10'-2"	Engage Opening Trim onto Jamb Support. Attach to panel with Pop Rivets. Sealant may be needed at adjacent wall.
(B)		10'-2"	Jamb Support and Opening Trim can ease the installation of panels as opposed to using C-Closures at both ends of a panel.
(C)		1"	For panel / trim attachment to steel framing
(C)		1"	For panel / trim attachment to wood sheathing or framing
(D)			For trim attachment to panel