GRAHAM
ARCHITECTURAL PRODUCTS

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Assembly and

Installation Guidelines for

Wrap-Around Panning Systems

Approved 01/27/2025

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Installation Guideline Disclaimer

This document contains general installation guidelines for Graham Architectural products and does not address each particular condition or installation. Shop drawing installation details may vary from these Guidelines as these Guidelines do not address each particular condition so any variances should be addressed by the design professional. These Guidelines do not address the structural adequacy on any installation, and such should be addressed by a design professional. Anchorage to existing or proposed wall conditions are not addressed in this document. Sealant compatibilities and application details should be reviewed by the sealant manufacturers. This document does not address the interface between the window system and the buildings weather barrier system and should be reviewed by the waterproofing consultant. It is generally recommended that insulation be installed in all voids created in the installation of a thermally improved system, but the application of insulation in wet areas needs to be addressed by the design professional and the particular type of insulation may need to be specified.

These instructions include the assembly and installation instructions of the Wrap-Around Panning System. If the panning was pre-attached at the factory, bypass the Panning Assembly Instructions. Read these instructions before starting any installation.

Receiving, Handling, and Storage

The proper receiving, handling and storage of Graham products is critical to the performance of the products throughout their service life. Abuse of the products during these processes will affect their appearance. Even if the effects are not immediately noticed, they could surface later in the life of the product. The following are precautions that need to be followed.

Wrap-Around Panning

Receiving, Handling, and Storage

Receiving: Prior to receiving a shipment, ensure that there is an adequate location to receive the products and enough manpower and equipment to off load the products.

- Most trucking companies allow a 3-hour off-loading time and will charge a detention fee if the truck is not off-loaded within that time period. That should be considered when determining the location where the truck will be off-loaded and how much manpower will be needed to complete the process.

- Ensure that the storage location is close to the off-loading area. The product storage area must meet the requirements listed in the "Storage" section below.

Handling: HANDLE CAREFULLY – DO NOT DROP.

- Be careful handling panning. More than one person will be needed to move each package of panning.

- Do not use clamps to lift panning.

- If the panning is pre-attached to the window, be careful not to bend the legs of the panning. Leave corner protectors attached until the window is ready to be installed.

Storage:

- The storage location for any finished products must be cordoned off to prevent damage from other trades, such as moving equipment.

- Limit stacking of five (5) packages before alternate support is given.

- Protect products completely from moisture and dirt prior to installation. It is important that all products that are not installed, are protected from direct contact with rain, snow, or ice so as to protect the finish of the product.

- Storing the products in the building is preferred, as long as they are not in a high traffic area.

- Protect all products from paint, weld spatter, construction debris, cement, plaster, terrazzo, and other construction materials, which include, but are not limited to, alkali-based materials or caustic cleaners. This must be removed immediately to prevent damage to the finish of the aluminum.

- Panning is packaged in shrink-wrap; this wrap cannot be on the product for more than 90 days from the date of manufacturing. Otherwise, it will be very difficult to remove protective wrap from the panning finish.

CAUTION – Stacks of panning are not to be used as ladders, scaffolds, or supports. Damage to any products from any construction activity will void the product warranty for the products in question.

Note: *Copies of these instructions can be downloaded from www.grahamwindows.com/architectural-resources/technical-information/*

Wrap-Around Panning

<u>Panning Assembly</u> *(If not attached at the factory)*

A. Choose the window that is going to have the panning applied and then locate the panning for that window mark. Lay out all of the parts and the fasteners.

   Note: *It's recommended to remove the sash if operable window.*

B. Lay the window on sawhorses or a flat surface with the exterior side facing down, supporting the frame several inches off the work surface so the panning can be attached.

C. If any mullions are to be used, the windows will need assembled with the mullion(s), and the mullions sealed prior to the panning being applied to the frame.

   Note: *3-piece mullions are typically not used with wrap-around panning. They are typically used with pre-set panning.*

D. Clean all the areas that are going to be sealed with isopropyl alcohol, and dry with clean dry rag prior to applying sealant.

E. Apply a continuous bead of color matched or clear sealant in the panning pocket/hook of the head and jamb pannings. (See Picture #1 & Figure #2)
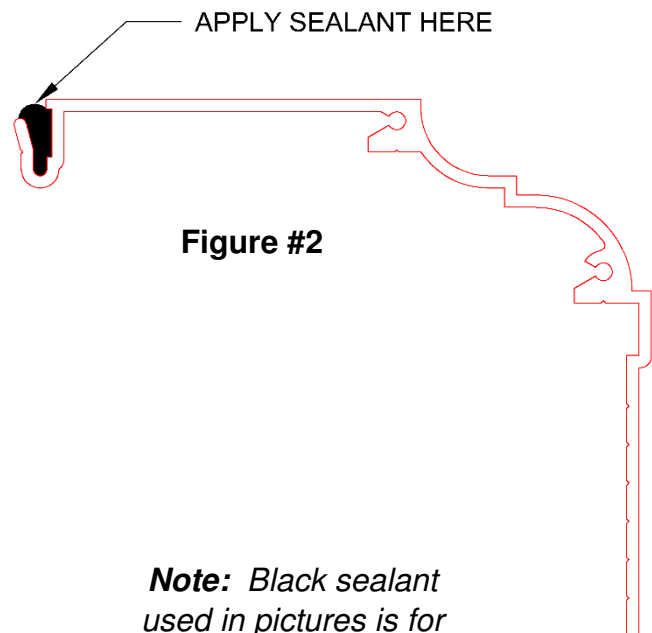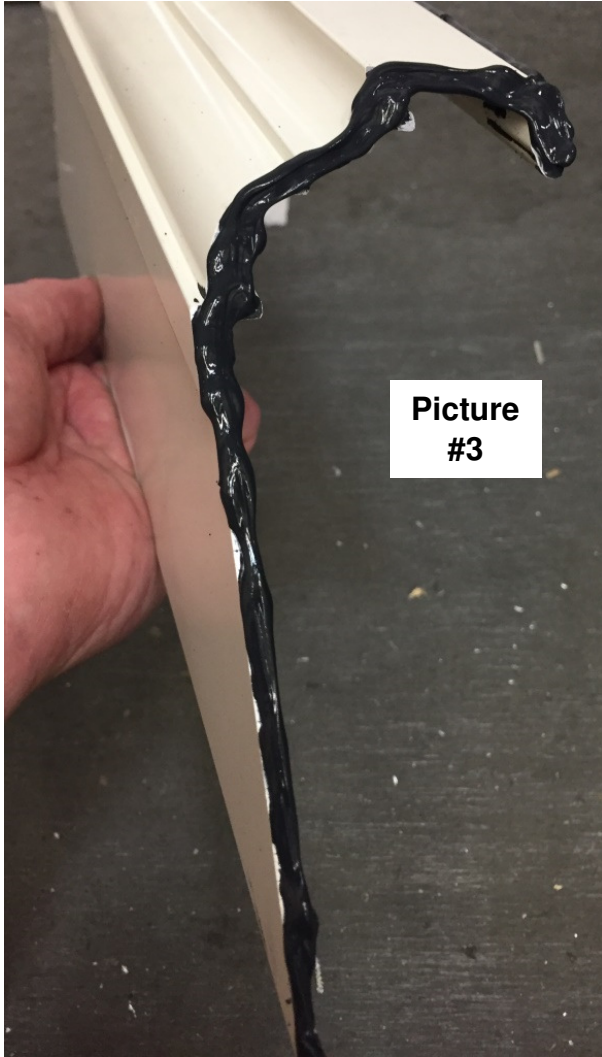

Picture #1

APPLY SEALANT HERE

Figure #2

Note: *Black sealant used in pictures is for illustrative purposes*
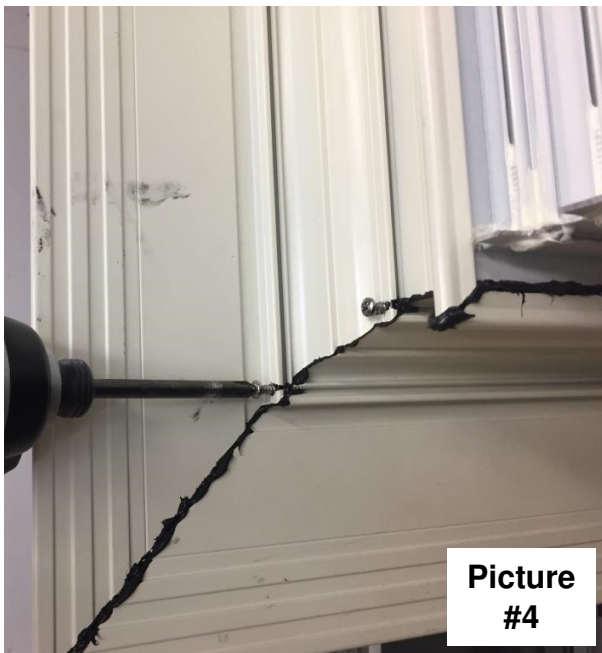
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Wrap-Around Panning

Picture #3

Panning Assembly (continued)

F. Profile the ends of the head panning extrusion with sealant. Some pannings require corner clips. If supplied, insert them at this point. (See Picture #3)

G. Slide the panning pocket/hook over the exterior leg of the window frame and line up the head/jamb corners of the panning. Then attach the jambs to the head panning with #6 x 3/4" PH screws. (See Picture #4)

H. Profile the bottom end of the jamb panning extrusions with sealant. (See Picture #5).

Picture #5

Picture #4

Note: *Black sealant used in pictures is for illustrative purposes*
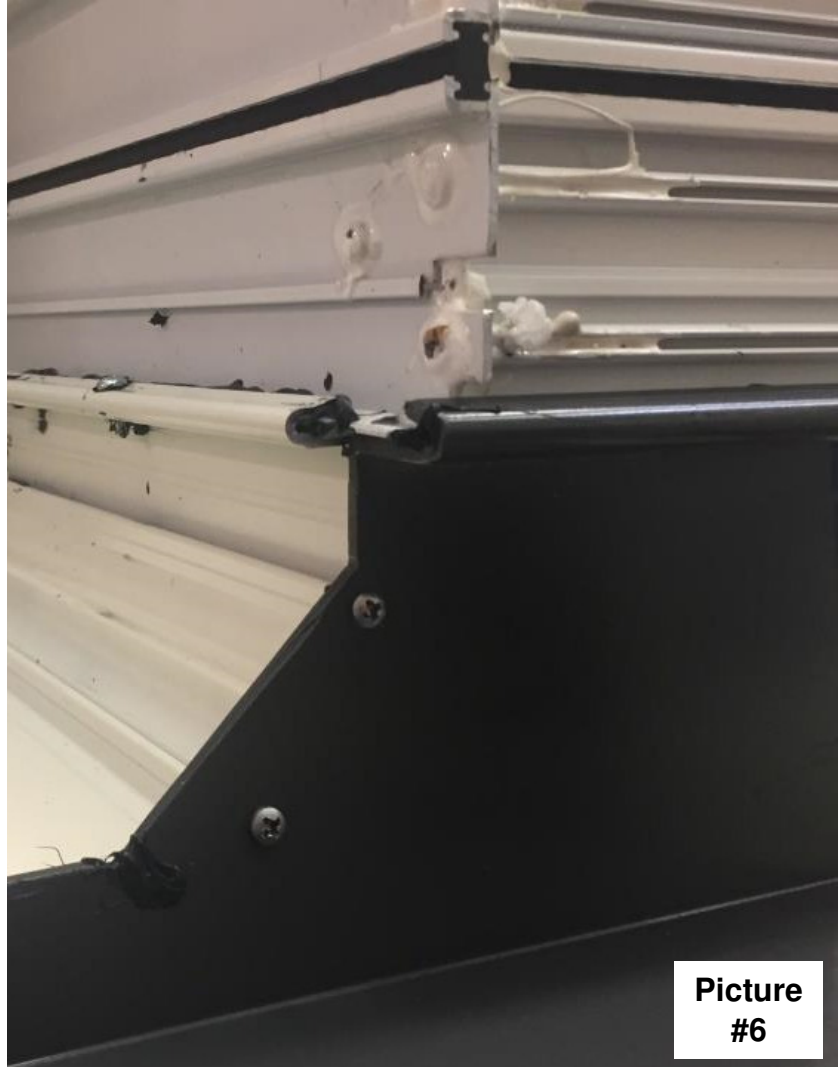
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Wrap-Around Panning

Panning Assembly (continued)

I. Apply a continuous bead of color matched or clear sealant in the sill panning pocket/hook.

J. Slide the panning pocket/hook over the exterior leg of the window sill, and line up the jamb/sill corners of the panning. Then screw the sill to the jamb pannings with #6 x 3/4" PH screws (See Picture #6).

Note: If corner keys are used instead of screws, see step N.

K. Check the alignment of the mitered corners and adjust as necessary.

L. Use clamps to hold the panning onto the window frame, however blocking will be needed to protect the finish of the window.

M. Attach the panning pocket/hook to the exterior leg of the frame with #8 x 1/2" PH tek screws, 6" from the corners and 18" on center. (See Picture #7)

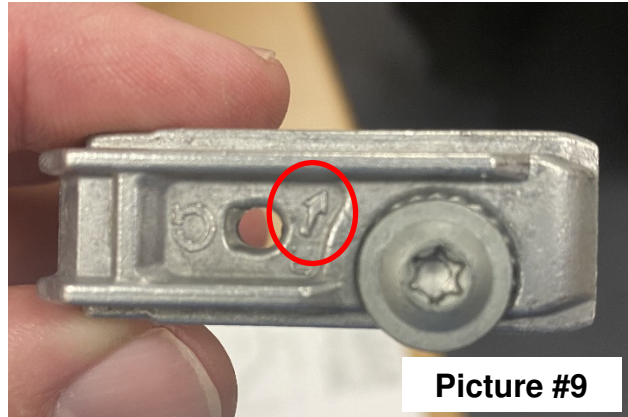*Note: Black sealant used in pictures is for illustrative purposes*

Picture #6

Picture #7
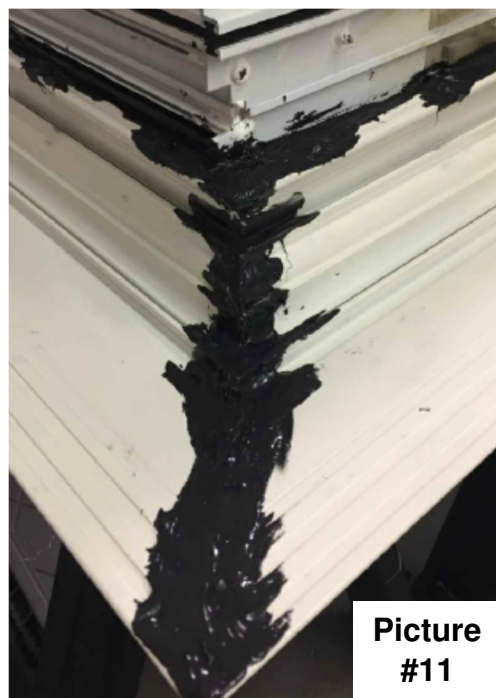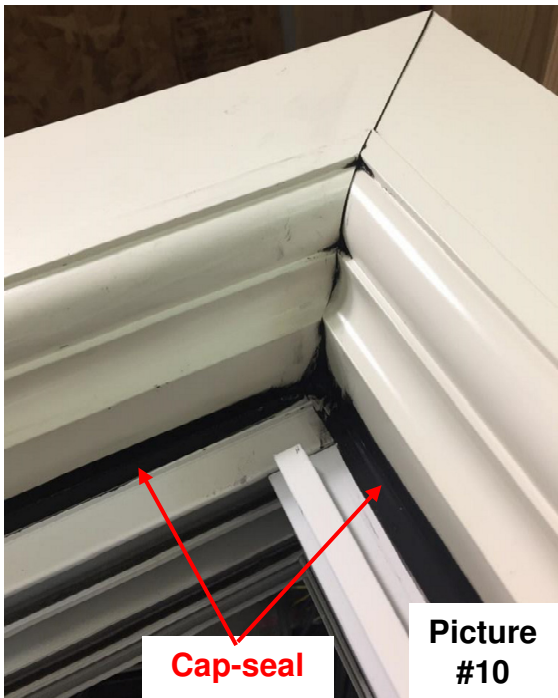
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Wrap-Around Panning

N. Some panning types will use corner keys instead of screws. The types of corner keys will vary depending on the panning, but the common types are shown here.

   a. After the corners are profiled with sealant, insert the corner keys into the tracks of the panning (See Picture #8).

   b. Make sure the corners are square and aligned, and then tighten the screws on the corner key. The corner keys have an arrow showing the direction to tighten the screws (See Picture #9)

Picture #8

Picture #9

O. Back seal the panning corners and the panning pocket/hook (See Picture #10).

P. Flip the window over and clean up sealant squeeze out at the panning corners.

Q. Cap seal the window frame to the panning (See Picture #11).

Cap-seal

Picture #10

Picture #11

Note: Black sealant used in pictures are for illustrative purposes

Wrap-Around Panning

<u>General Installation Instructions</u>

A. Upon delivery carefully check that all products have been received undamaged. If any product has been damaged, immediately notify your Graham Representative.

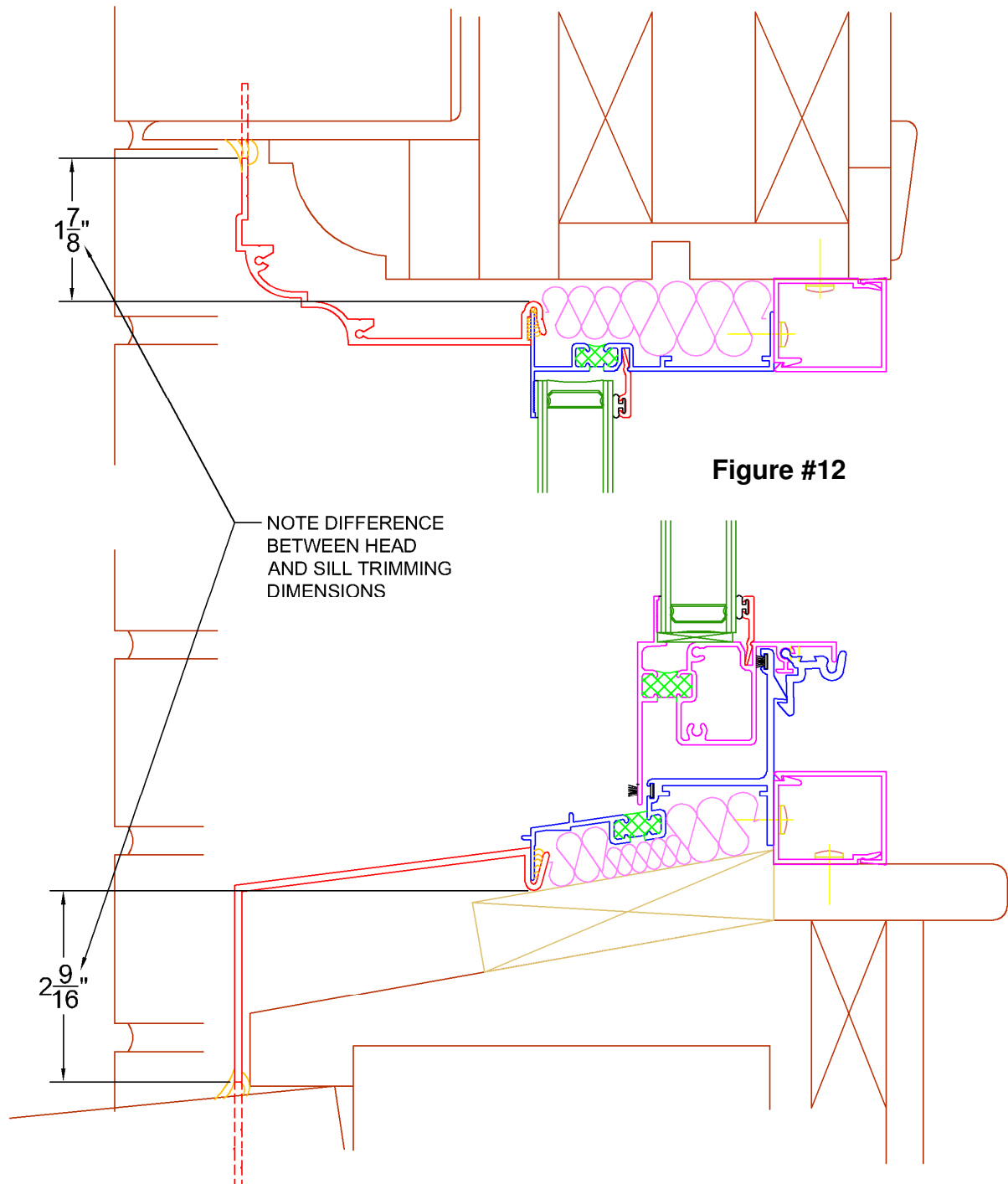| Table #1	Installation Tolerances (+/- Target)		
	Inches/ foot	Inches Maximum	Method of Measurement
Level (Horizontal Measurement)	1/32"	1/8"	Measure sill using level
Plumb (Vertical Measurement)	1/32"	1/8"	Measure jambs using level or plumb bob
True (In Plane Measurement	1/32"	1/8"	Attach strings across corners. Measure where they cross
Extrusion Straightness	1/64"	1/16"	Measure with straight edge.
Square (Diagonal Measurement)	N/A	1/16"* 1/8"**	Measure diagonal corners (Difference/2)
* Openings up to 20 sq. ft. **Openings 20 sq. ft. and over			

B. The sill will need adequate support. The sill must be level in accordance with Table #1.

C. All work should start from established benchmarks and column center lines established by the architectural drawings and the general contractor.

D. The sequence of installation should be coordinated with the job superintendent, so delays are prevented.

E. It is not recommended to drill through the window sill. If fasteners are required to penetrate the window sill; sealant must be applied in the pre-drilled hole first. Drill the hole, clean out the drill shavings/debris, clean around the hole area, apply sealant in the hole, install the fastener, and then seal over the fastener head.

F. Be aware of allowable edge distance requirements for the fasteners into the substrate, especially when the substrate is masonry. Refer to the fastener manufacturer's instruction for proper usage.

G. Seal the exterior in accordance with the shop drawings.

H. Insulate between the window frame and the rough opening.

I. The frame will need blocking and/or shims around the perimeter of the window frame to support the window frame. The sill will need continuous blocking to support the weight of the window. The panning is not designed to support the weight of the window.

J. Follow the installation instructions for the particular window type that is being installed. The following are instructions which apply when installing these products with this panning system.

Wrap-Around Panning
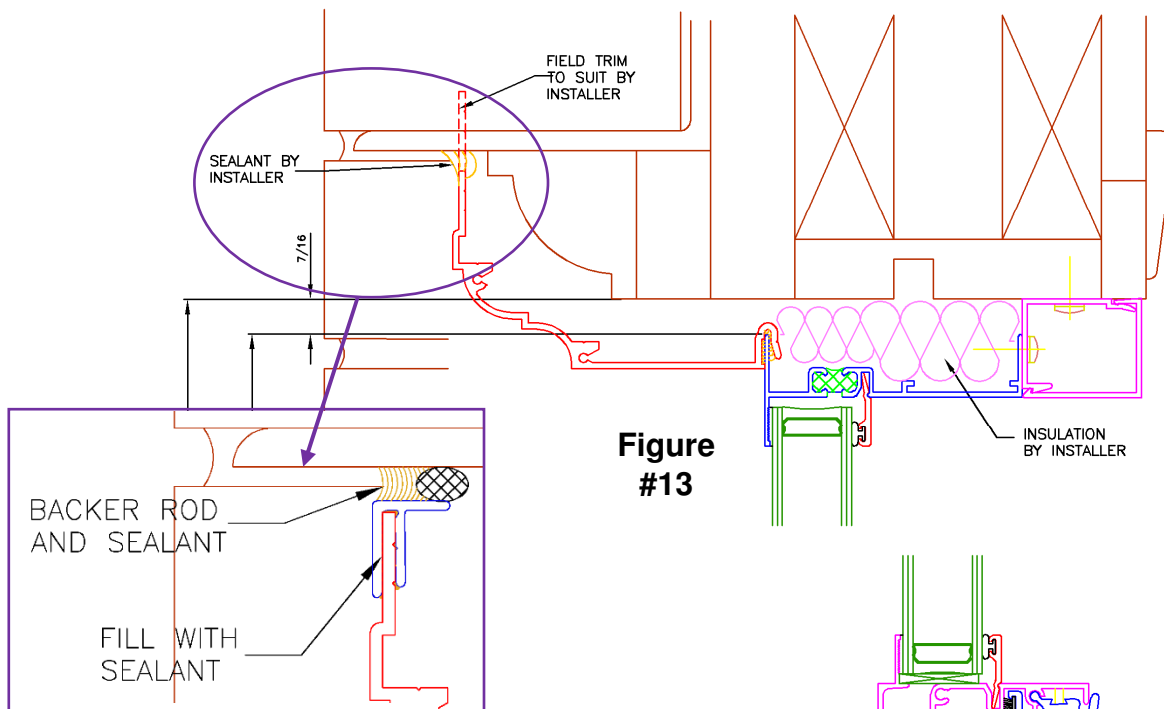
Panning/Window Installation

A. Measure the opening and trim the exterior legs of the panning to fit the opening. Note that the head and sill trimming dimensions may be drastically different depending on the design of the rough sill (See Figure #12).

B. Due to moving, assembly and cutting the panning, the back-seals at the panning corners will need to be re-sealed. (See Picture #10)
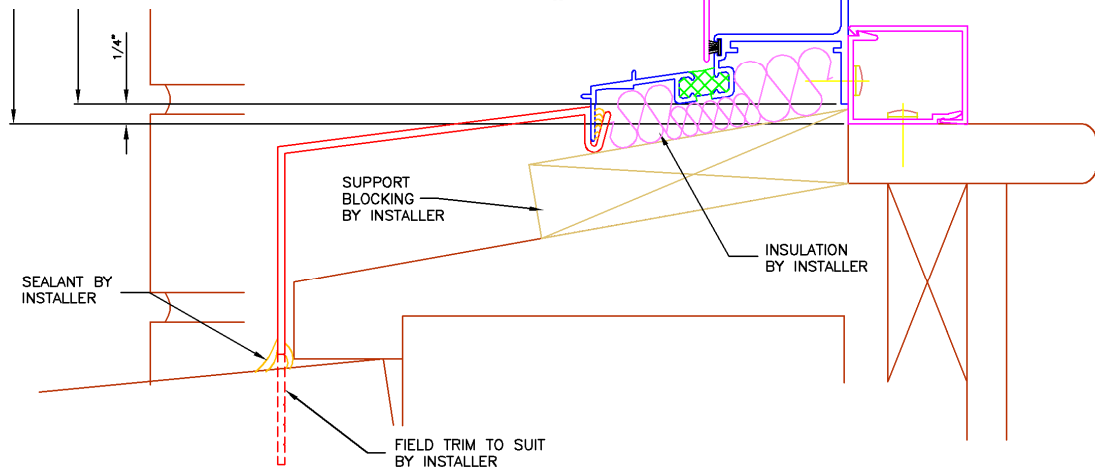
$1\frac{7}{8}$"

Figure #12

NOTE DIFFERENCE
BETWEEN HEAD
AND SILL TRIMMING
DIMENSIONS

$2\frac{9}{16}$"

Wrap-Around Panning

C. Dry fit the window frame/panning into the opening to help position the trim clip locations. Check the window for plumb and level. Anchor the trim clips to the opening as required by the shop drawings or fastener calculations.

D. If required, attach caulk returns to the cut edges of the panning. The caulk returns will need sealant in the track prior to attaching (See Figure #13).

E. Insert the window frame/panning from the exterior and attach it to the trim clips. Apply blocking and/or shims to the perimeter to straighten and square the frame prior to applying each fastener.

FIELD TRIM TO SUIT BY INSTALLER

SEALANT BY INSTALLER

7/16

Figure #13

INSULATION BY INSTALLER

BACKER ROD AND SEALANT

FILL WITH SEALANT

Alternate sealing with caulk return

Figure #14

SUPPORT BLOCKING BY INSTALLER

INSULATION BY INSTALLER

1/4"

SEALANT BY INSTALLER

FIELD TRIM TO SUIT BY INSTALLER

Panning/ Window Installation (Continued)

K. If needed, add shims or blocking to straighten the jambs.

L. Check the window for square, level and plumb while fastening the window to the trim clips. Apply the fasteners as required by the structural calculation.

M. Seal the exterior perimeter of the panning to the rough opening as shown in the shop drawings.

N. Insulate between the rough opening and the head, jambs and sill. The insulation material should be water repellant (hydrophobic) (See Figure #15)

O. The trim covers are field cut to size. Snap trim covers on using a rubber mallet, or a block of wood with a hammer. Be careful not to dent or scratch the finish on the trim cover when installing them.

P. For operable windows, install the sash, if they were not installed prior.

Alternate sealing with caulk return

Figure #15

Blocking or shims as needed

INSULATION BY INSTALLER

FIELD TRIM TO SUIT BY INSTALLER

1/2

WINDOW WIDTH

OPENING WIDTH

SEALANT BY INSTALLER

FILL WITH SEALANT

BACKER ROD AND SEALANT

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