Pre-set Panning System

GRAHAM
ARCHITECTURAL PRODUCTS

1551 Mount Rose Avenue

York, PA 17403-2909

(717) 849-8100

Assembly and
Installation Guidelines for
Pre-set Panning

Approved 01/27/2025

GRAHAM
ARCHITECTURAL PRODUCTS

Pre-set Panning System

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 installation of the pre-set panning system and the installation of windows into the panning system. Read these instructions before starting any installation.

Receiving, Handling, and Storage

The proper receiving, handling and storage of window products is critical to the performance of the products throughout their service life. Abuse of the products during these processes will affect their operation and 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.

Pre-set Panning System

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

• 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.

• Keep the products wrapped until they are stored in their final location for cutting and assembly.

Storage:

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

• Do not stack packages on top of each other.

• Be careful when opening packages to not damage the finish of the panning.

• Protect packages 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 panning 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.

• If the products have been wrapped in a transparent plastic protective 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.

• Prior to applying sealants, the surfaces must be cleaned and prepared as directed by the sealant manufacturer.

CAUTION – Installed pannings (or window or door) openings are not to be used as construction entrances, unless adequate protection to the sill and jambs is provided. 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/*

Pre-set Panning System

Panning Assembly

A. Gather the parts required for the opening and ensure all of the required parts are present. Lay out the parts of the panning system on a large flat area, that will protect the finish of the parts. (See Picture #2).

B. Clean all the areas that are going to be sealed with isopropyl alcohol, and dry with clean rag prior to applying sealant (See Picture #1).

C. Profile the bottom end of the jamb panning with silicone-based sealant (See picture #3).

D. Fasten the sill to the jambs with the #6 Phillips head screws provided by Graham, however, do not tighten the screws (See Picture #4). If corner keys are used instead of screws, see Step L.

E. If panning clips are being used, they will need inserted in the ends of the head panning.

Note: *White sealant used for illustration purposes. Color matched sealant should be used*

Picture #1

Picture #2

Picture #3

Picture #4

Pre-set Panning System

Panning Assembly (Continued)

F. Profile the top ends of the jamb extrusions with a silicone-based sealant. In addition, seal the ends of the exterior leg of the head panning (See Picture #5).

G. Insert the assembly screws into the attachment holes and start to tighten the corner screws. If corner keys are used instead of screws, see Step L.

H. Before fully tightening the assembly screws, make sure the corners are lined up. Tighten all of the assembly screws.

I. Back-seal the inside of the panning corners (See Picture #6).

J. Back-seal the outside of the panning corners, including additional sealant over the screw threads and the screw heads (See Picture #7)

K. Attach the stainless-steel panning clips in the pre-punched holes (See Picture #8). If the holes are not present, drill holes 6" from each corner and 18" on center.

Note: *White sealant used for illustration purposes. Color matched sealant should be used.*
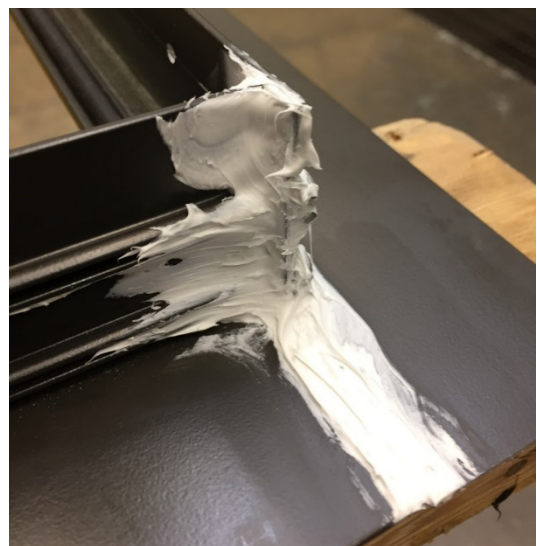

Picture #5

Picture #6

Picture #8

Picture #7

GRAHAM ARCHITECTURAL PRODUCTS

Pre-set Panning System

Panning Assembly (Continued)

L. 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.

    L1. After the corners are profiled with sealant, insert the corner keys into the tracks of the panning (See Picture #9).

    L2. 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 #10)
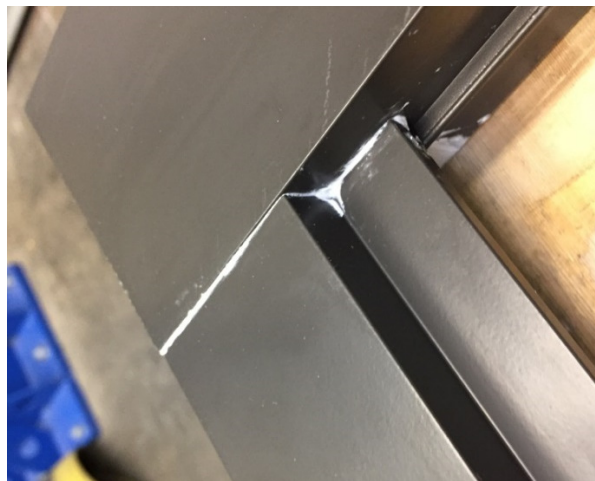

Picture #9

Picture #10

M. Check the panning for square and alignment and adjust as necessary.

N. Flip the panning assembly over and apply a small amount of sealant along the exterior side of the jamb/head miter joint and tool it into the joint. (See Picture #11). Repeat this process at the jamb/sill corners.

O. Wipe off the excess sealant, and then clean the corners with isopropyl alcohol (See Picture #12). Be careful not to remove too much sealant from the corners. Repeat this process at the jamb/sill corners.

Picture #11

Picture #12

Note: *White sealant used for illustration purposes. Color matched sealant should be used.*

Pre-set Panning System

General Installation Instructions

A. Upon delivery carefully check that all windows have been received undamaged. If any of the windows have been damaged, immediately notify your Graham Representative.

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

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			

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 (or receptor) sill. If fasteners are required to penetrate the 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 (or receptor, if used).

I. Use angles or trim and clip to attach the window to the opening.

Note: *The stainless-steel clips on the panning CANNOT be used to attach the window to the opening.*

Note: *Panning cannot support the weight of a window.*

Pre-set Panning System

Panning and Window Installation:

A. If needed, seal and attach expanders/ caulk returns to the perimeter of the panning.

B. Attach the assembled panning into the opening with approved fasteners (See Figure #13). The panning must be installed within installation tolerances (See Table #1). If a fastening schedule has not been specified, Graham Architectural recommends applying fasteners a maximum of 9 inches from each corner, and then a maximum of 18 inches apart.

C. Apply sealant to the perimeter of the panning as shown in the shop drawings (See Figure #13). Clean all bond surfaces and apply primers if needed.

D. Apply a 3/8" diameter bedding bead of sealant to the panning leg where it will meet with the window frame. Make sure to apply additional sealant at the corners.

E. Sit the sill of the window frame into the panning sill and rotate it into position. The stainless-steel panning clips will engage the frame with a clicking sound. Check that there is sealant squeeze-out between the panning and the window frame.

F. Apply a cap-bead between panning and the window frame (See Figure #13).

G. Follow the installation guidelines for the product type that is being installed.

H. If trim and clip are used, trim clips can be full length or 3" long sections. If sections are used, they will need to be lined up in order for the trim cover to snap in place.

I. The trim clip to window fastener must be a minimum of #8 x 1/2" screw, or heavier as required to meet project design loads (See Figure #13). The trim clip must be attached to the rough opening before attaching it to the window. The trim clip to rough opening fastener is dictated by the substrate. Graham Architectural recommends that the fastener is greater than, or equal to, that of the fastener used at the clip to window (as required to meet project design loads).

J. The fastening schedule will generally be determined by a structural engineer. If a fastening schedule has not been specified, Graham Architectural recommends applying fasteners a maximum of 9 inches from each corner, and then a maximum of 18 inches apart. (Note: Recommended fastening does not apply to projects that have blast mitigation or hurricane requirements)

K. When installing trim clip fasteners, make sure not to twist the frame.

L. The head, jamb and (if used) the sill 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 it.
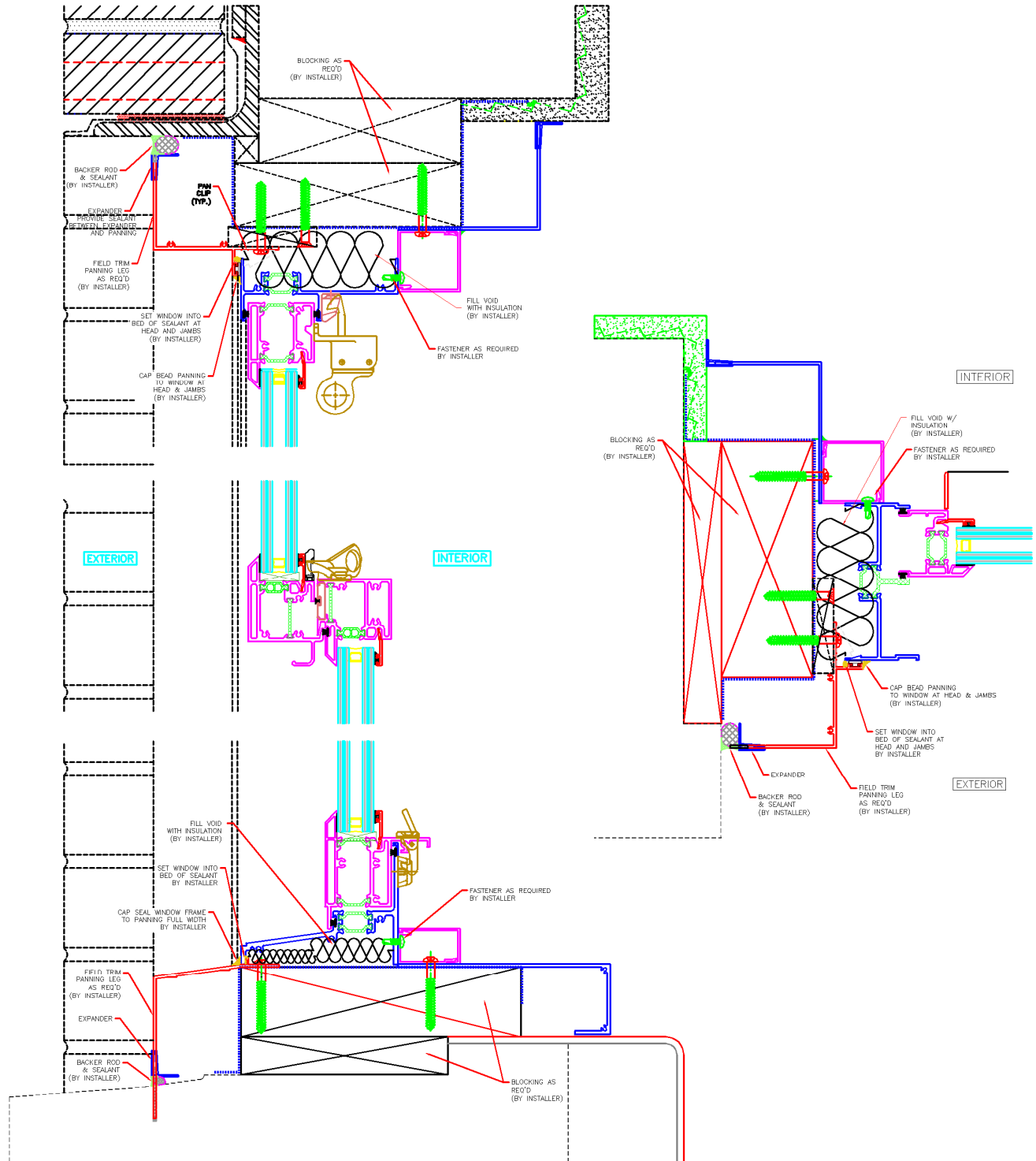
Pre-set Panning System

Figure #13 – Installation Drawing Example