Pre-set Panning System

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Assembly and Installation Guidelines for

Pre-set Panning Systems

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 every possible condition, so any variances should be addressed by a design professional. These Guidelines do not address the structural adequacy on any installation and such issues 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 manufacturer(s). Sealant application details should be reviewed by the sealant manufacturer. This document does not address the connection between the window system and the building weather barrier system and should be reviewed by the waterproofing consultant. It is generally recommended that insulation be installed in all voids of thermally improved window and door systems, 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.

Pre-set Panning System

Thank you for your purchase of Graham Architectural Products. These instructions include the assembly and installation instructions for the Pre-set panning system.

Read these instructions before starting any installation. Following the attached installation instructions step by step will assure trouble free operation of the new windows.

HANDLING – SORTING – PROTECTING ALUMINUM EXTRUSIONS

Panning systems are finished products and must be protected against damage. The following precautions are recommended to assure early acceptance of your products and workmanship:

1. HANDLE CAREFULLY – DO NOT DROP. Stack with adequate separation so panning parts will not rub together.
2. Protect panning extrusions from moisture and dirt prior to installation. It is important that all pannings that are not installed are protected from direct contact with rain, snow, or ice so as to protect the finish of the product.
3. Protect from 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 or gasket material.
4. Construction debris and dirt on the panning will affect the installation of the window.
5. Prior to applying sealants, the surfaces must be cleaned and prepared as directed by the sealant manufacturer.

CAUTION – Panning systems are not to be used as ladders, scaffolds, or supports. 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)

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

Picture #5

Picture #6

Picture #7

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.

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 #8

Pre-set Panning System

Panning Assembly

Picture #9

Picture #10

L. Check the panning for square and adjust as necessary.

M. 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 #9). Repeat this process at the jamb/sill corners.

N. Wipe off the excess sealant, and then clean the corners with isopropyl alcohol (See Picture #10). Be careful not to remove too much sealant from the corners. Repeat this process at the jamb/sill corners.

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

Pre-set Panning System

Panning Assembly

Picture #11

Corner Key Panning: If the panning has corner keys rather than screws to fasten the corners, follow all of the steps in the previous instructions except for the following:

Steps D & G: Insert one end of the corner key into one of the extrusions. Then slide the other extrusion onto the other side of the corner key. Align the extrusions and tighten the corner keys (See Picture #11). *Note: One of the screws is left hand thread and the other screw is right hand thread.*

Step H: Once the all the corners are assembled, check the alignment of the extrusions. If needed, loosen the screws, re-adjust, and then re-tighten the screws.

Step J: Back-seal the outside of the panning corners, including additional sealant over the corner keys (See Picture #12)

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

Picture #12

Pre-set Panning System

Panning Installation

General Instructions

A. All materials are to be installed square, plumb, true, and level; within the maximum tolerances listed in Table 1.

B. All work should start from established bench marks and column center lines established by the architectural drawings and the general contractor.

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

D. Isolate all aluminum to be placed directly in contact with the masonry or incompatible materials with a heavy coat of zinc chromate, bituminous paint or equal.

E. All metal to metal, non-operating joints should be sealed by the installer with an approved sealant.

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. It is recommended that insulation be used between all perimeter frame members and the rough opening.

H. Make certain that all openings and the surrounding construction is in accordance with the shop drawings. If any deviation is noticed in either dimension (beyond the tolerances list in Table 1) or construction, notify the general contractor IN WRITING and resolve any differences BEFORE proceeding.

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" *See Note*	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

Table 1

Note: *Panning for hung windows can be bowed in $\frac{1}{16}$", but not bowed out.*

Pre-set Panning System

Panning Installation

A. Install continuous blocking at the (level) sill of the rough opening to support the sill panning (See Figure #2).

B. Measure the opening where the apron of the sill pan will contact the rough sill, and trim the apron of the sill pan accordingly (See Figure #2).

D. Position the panning assembly in the opening (dry fit), and check the clearances of the sealant locations. Be careful not to twist or rotate the panning during handling or installation.

E. Apply shims and/or blocking to make the panning level, plumb and square in accordance with Table 1. Shims and blocking are required at each mullion.

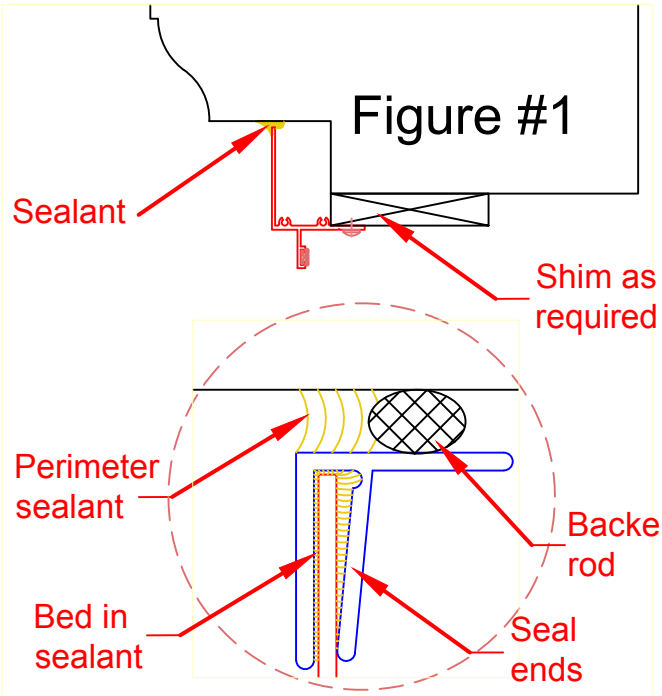
F. Apply fasteners through the panning into structural members. The fastening schedule will generally be determined by a structural engineer. If a fastening schedule has not been specified, Graham Architectural recommends applying fasteners a maximum of 9 inches from each corner and then a maximum of 18 inches apart

G. If the gap between the panning edge and the rough opening is more than $\frac{1}{4}$", a caulk return is recommended, along with appropriately sized backer rod (See Optional Sealant Detail #1). If the gap is less than $\frac{1}{16}$", bond breaker tape is recommended where the panning edge meets the rough opening (See Optional Sealant Detail #2).

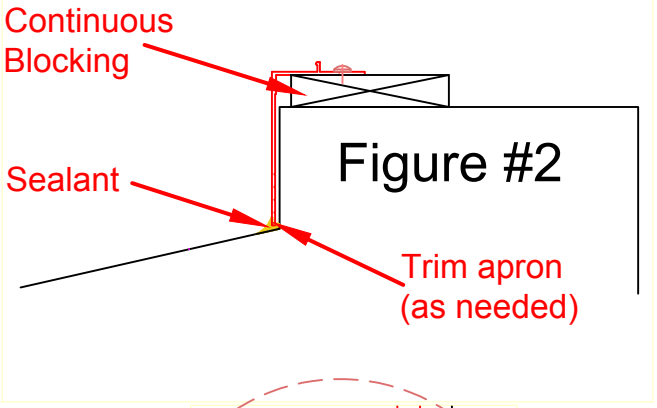
H. Clean the sealing surfaces, and prime (if necessary). Apply sealant around the perimeter and tool the sealant*.

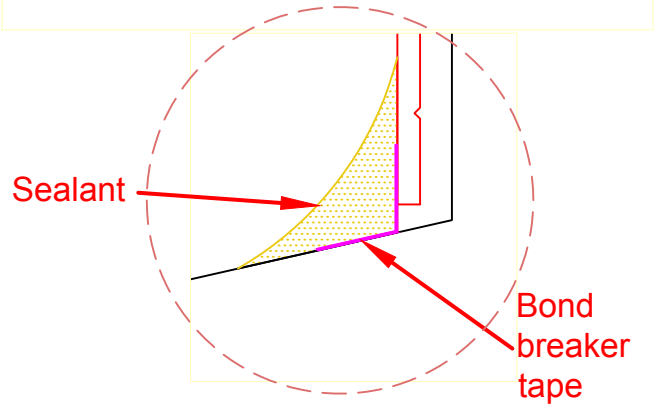
I. It is recommended to re-seal the interior corners of the panning at this time.

** Note: Contact the sealant manufacturer for proper application techniques.*



Optional Sealant Detail #1





Optional Sealant Detail #2

Pre-set Panning System

Window Installation

A. Follow the installation instructions for the particular window or door type that is being installed.

B. Prior to installing the window, apply a bead of sealant where the exterior leg of the sill will meet the sill pan (See Figure #4). Apply a continuous back-seal along the panning gasket that ties into the sealant bead at the sill. (See Figure #3).

C. From the interior, set the window onto the sill panning, and rotate the window into place. Listen for the spring clips to click onto the frame. Make sure there is squeeze out of the back-seal.

D. Blocking will be needed to ensure that the jambs are straight.

E. Attach the trim clips to the interior perimeter of the rough opening.

F. Make sure the window is level, plumb and square in accordance with Table 1. Attach the trim clips to the frame of the window with #8 x 1/2" (min.) screws (not supplied by Graham). The fastener spacing is generally determined by a structural engineer. If a fastening schedule has not been specified, Graham recommends applying fasteners a maximum of 9 inches from each corner and then a maximum of 18 inches apart.

G. Insulate between the rough opening and the frame. The insulation material should be water repellant (hydrophobic) (See Figure #3)

H. Cap seal the window to the panning joint around the exterior perimeter of the window frame.

I. 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 covers when installing them.