

SEALCRAFT

Architectural Window Systems

STANDARD PROCEDURE

No. I-170

Window Installation Instructions
Hung Window with Exterior Attached Pan System

Examined, Accepted and Approved

By: D. Ray Van Ness

Title: President

Date: May 29, 2008

1.0 INTRODUCTION:

- 1.1 The purpose of this standard procedure is to establish the procedures required for the successful installation of Seal Craft window systems, utilizing attached type panning and interior trim systems, typically called for on retro-fit / remodeling projects, which require the existing perimeter frame to remain in place, but be encapsulated.
- 1.2 Attached panning is an accessory system that allows for the installation of windows into an opening where certain framing elements needed to be covered or “panned over” allowing them to match the new window. Exterior panning is an installation system that adds exterior width, height and depth to a window. Window installations that incorporate panning will typically require the use of interior trim to complete and complement the interior perimeter of the installation and also match the new window.
- 1.3 The guidelines set forth herein are based on standard industry practices and Seal Craft specific recommendations coupled with our understanding of typical job site conditions and requirements.
- 1.4 We do not purport to address all of the safety problems that may be associated with its use. It is the responsibility of whoever uses this procedure to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use.

2.0 INSTALLER QUALIFICATIONS AND RESPONSIBILITY:

- 2.1 The window installation subcontractor should be an experienced mechanic in the field with at least five continuous years of successful experience installing similar window systems into projects of similar scope, magnitude and design.
- 2.2 The basic function of the window installation subcontractor is to ensure that all windows are installed per the approved manufacturers written instructions and job specific Shop Drawings as approved by the Architect or Owner’s Representative.
- 2.3 The window installation subcontractor shall be responsible to ensure that all openings are correctly prepared and ready to accept new window units. Any problems found should be reported to the General Contractor or approving authority promptly and the window installation should not be initiated until all opening deficiencies are corrected.
- 2.4 The window installation subcontractor shall then be responsible to ensure that all windows are properly installed, adjusted and ready for use by the Owner, with the exception of final glass washing, which is to be preformed by the pre-occupancy clean-up subcontractor.

3.0 RESPONSIBILITIES:

- 3.1 The window installation subcontractor is responsible to gain a full and complete understanding of pertinent information relating to his/her scope of work including but not limited to this document, approved submittals, shop drawings, working construction drawings, project specifications and job site requirements.
- 3.2 The window installation subcontractor is responsible to train his/her workforce in proper material handling, erection and safety procedures, and pursuant with and including OSHA and Prime Contractor safety requirements.
- 3.3 Window installation subcontractor shall ensure that a qualified window installation superintendent is designated and on site during all window installation activities.
- 3.4 To provide all sealants, caulk, fasteners, shims, backer rod, bond breaker and/or equipment and machinery as required by this Project and sufficient qualified workmen to perform the installation professionally, safely and on time.
- 3.5 To ensure that all materials are of the type and quality required for this Project and that they are safely stored and protected prior to and during installation.

4.0 DUTIES:

- 4.1 The window installation subcontractor shall attend all required job site progress and safety meetings.
- 4.2 Maintain open communication and foster a harmonious relationship with General Contractor and other related trades.
- 4.3 Receive all window material shipments, verifying quality and quantity and that those products are fit for installation, immediately reporting any deficiencies directly to Seal Craft as well clearly listing any such problems the Bill of Laden.
- 4.4 General Contractor is responsible to ensure that rough openings are dimensionally accurate, plumb, square, true and not obstructed, allowing window installer free access to each opening.

5.0 PANNING INSTLATION PROCEDURES:

- 5.1 Ensure that all windows are installed in accordance with ASTM E 2112. The following step-by-step instructional procedure is provided for the convenience of the installing subcontractor.
- 5.2 Attached pan frames are shipped to the job site K.D. and cannot be successfully shipped or stored, when assembled, without damage. The assembly of each pan takes less than five minutes and is the job site responsibility of the window installer.

- 5.3 Arrange the window frame and pan members on a worktable with the head, sill and pre-punched jambs oriented per the installation detail.
- 5.4 Install #8 x 1" assembly screws (provided) through the pre-punched assembly holes located at each corner and into the screw port of the head, jamb or sill (four corners). The pan is assembled onto the perimeter of the front face of the window frame. This may require that two workers act as a team with one holding parts in place while the other installs the assembly screws.
- 5.5 Apply an ample amount back seal of the specified sealant to the unexposed (back side) of the pan frame corner joinery.
- 5.6 Inspect all openings scheduled for window installation for accuracy of dimension and squareness. Field trim the pan's outer flange as needed for proper fit to opening prior to installation.

6.0 WINDOW INSTALLATION PROCEDURE:

- 6.1 To set window with panning, in most cases the entire system must be placed out through the opening, then brought back in the correct orientation, or set in place from the exterior side of the opening. Block and/or shim the window frame as required.
- 6.2 Set the window with panning in place and install anchors. Fastener types and frequencies shall be according to the project specific engineer stamped fastener calculations. The AAMA 2501-06 Voluntary Guideline for Engineering Analysis of Window and Sliding Glass Door Anchorage Systems is the appropriate standard for fastener calculations. Shim as needed.
- 6.3 Install interior trim clips, fastening the clip to the window's mainframe perimeter and to the adjacent construction. Secure clip utilizing the fastener considerations as detailed in 6.2.
- 6.4 Install interior trim covers at head, jamb and sill. Interior trim members to be square cut to a nominal tolerance to provide a finished trim with minimal gaps at corners.
- 6.5 Sealants to be as specified by architect or equal and applied around the full exterior and interior perimeter of newly installed windows. Follow sealant manufacturer's application instructions. If desired a cap seal may be applied to all window to pan, window to interior trim and interior trim to construction connections.
- 6.6 Check sash operation and make any adjustments as may be required per 7.0.

7.0 ADJUSTMENTS:

- 7.1 Ensure that all sash travel (open) to their full height without undue pressure, scrape

or noise. Check jamb track for any debris, dents or obstructions that impede proper travel, correct as necessary. In the event that a sash balance has failed, notify Seal Craft immediately for replacement part, offering the unit size and Mark number, after confirming that the balance required was not included within "Customer Care Kit" provided.

- 7.2 Confirm that hung window jambs are not spread creating excessive lateral sash movement when sash is in the open position. Measure horizontally between jambs at a point just above the sill and compare similar dimension at the midpoint of window height. Even a slight bow of the jambs (particularly on double hung windows) can cause the sash balances to lose friction and result in sash drift and poor sash operating characteristics. Jamb adjusters are located at the midpoint of each jamb (on double hung windows) and may be tightened with a Phillips head screwdriver to correct any spread at jamb conditions that may exist.
- 7.3 Ensure that sash lock(s) work as intended with appropriate amount of operating force. Confirm that sash is closing fully by checking meeting rail interlocks and upstanding sill leg for construction debris or dents and correct as necessary.
- 7.4 Inspect all exposed finished surfaces for scratches, abrasions and dents and correct. Scratches and abrasions should be wet sanded with 400 grit emery cloth, wiped clean and painted with manufacturer provided touch up paint.
- 7.5 Remove all labels or stickers from glass surface, DO NOT remove any gold AAMA labels that may have been required.

8.0 INSTALLATION TIPS:

- 8.1 Where fasteners are used at header locations; if conditions require penetrating steel lenti, ensure that masonry flashing above is not penetrated.
- 8.2 Seal Craft suggests that attached panning orders be assembled, set and caulked by at least a two-man crew. A third member may install interior trim covers and making adjustments as detailed in section 7.0 above.
- 8.3 When applying interior trim covers use a mallet and wooden block to apply pressure at the edge of part for ease of snap and to reduce the occurrence of dents.

9.0 MANUFACTURERS DISCLAIMER:

- 9.1 Seal Craft is a manufacturer of quality commercial window systems and as such is compensated for the delivery of the same, per approved shop drawings, unto the job site. Seal Craft is not compensated for, and therefore assumes no responsibility for, building design, interface of its products with other building elements or any area of accountability other than the manufacture and delivery of quality window systems as required under each contract.
- 9.2 The qualifications and procedures as set forth herein are recommendations of Seal

Craft as the manufacturer and are intended as a minimum guideline for the successful installation of its products and must be adhered to in order for the Seal Craft warranty to be in effect.

- 9.3 Upon review of the contract documents, shop drawings and manufacturers installation instructions, final architectural determination should be made as to any further requirements for flashing, sealant or any other detail that may need to be added or addressed to ensure proper interface with the new fenestration and the desired performance of the same.
- 9.4 Flashing and/or an appropriate method of sealing shall be designed as part of an overall weather resistant barrier system. It is not the responsibility of Seal Craft to design or recommend a weather resistant barrier system appropriate for each job.
- 9.5 The qualifications and procedures as set forth herein must be reviewed and approved prior to commencement of installation activities by a duly authorized and accountable owner's representative or agent.
- 9.6 Seal Craft assumes no responsibility for any liability on account of the presence or growth of black mold in any building or structure in which its window systems are installed.
- 9.7 For building construction, which incorporates EIFS; the EIFS Industry Manufacturers Association (EIMA) guidelines must be adhered to in order for Seal Craft's product warranty to be valid.
- 9.8 By stamping and/or signing or by any other means affixing a 'mark' to the submittal booklet that contains these instructions, both architect and contractor demonstrate complete agreement and accept full responsibility for these installation procedures. Further, both architect and contractor agree that the manner in which the windows are installed is beyond the control of the manufacturer and as such, Seal Craft has no responsibility for any liabilities that may arise from the improper installation of its products.
- 9.9 Should field testing be a Project requirement, installing window contractor shall cooperate fully, preparing window unit(s) as requested by the Architect and/or Independent Laboratory personnel, but in no case participate in an unofficial "garden hose tests". Any field testing shall be pursuant with the current AAMA 502 Standard and Seal Craft shall be afforded the opportunity to attend any and all such testing and given a minimum of 15 work days notice in advance of any field testing.