# Installation: Block Frames

Before beginning any window installation, carefully review the entire "INSTALLATION INSTRUCTIONS" document. Contact the manufacturer with any questions.

Every RAM Industries window product has been designed and tested to meet or exceed industry performance and engineering standards. The key to preserving this performance is the proper installation, care and maintenance of these products. Failure to correctly install your window product may result in improper functioning and will void the manufacturer's warranty.



## WINDOW STORAGE AND HANDLING

- Care should be taken when handling or storing a window product to protect against damage.
- Do not drop or drag a window unit at the jobsite to avoid racking or damaging the window. Racking a window may compromise the factory applied joint seal in the window frame or cause the window to become out of square.
- Handle the window unit by the jambs and not the by head section.
- For temporary storage at the jobsite, all windows should be stacked in a near vertical position with the window oriented in the proper direction.
- The protective wood corner blocks supplied with the window should be kept on the frame during storage to elevate the window frame off the ground and to prevent the windows from rubbing together.
- During temporary storage, protect the windows from weather elements by storing in a dry and well-ventilated environment.

# **ROUGH OPENING PREPARATION**

- Ensure that the rough opening does not contain any dissimilar metals, which may lead to galvanic corrosion with the aluminum window frame. If a dissimilar metal is used in the rough opening framing, it must be completely isolated from the window frame.
- The rough opening for the window should be sized one-quarter inch (1/4") larger than the window size (outside measurement of the window frame) in width and height. Provide a one-eight inch (1/8") clearance around the window frame. (Note: When using a rigid sill panning product, the rough opening dimensions may have to be adjusted accordingly to account for the height of the panning.)
- The rough opening framing should be level, plumb, square and structurally adequate.
- On shapes such as round tops, eyebrow arch tops, rakes (polygons), bulls-eye (round) and octagons, make sure there is proper bracing in the rough opening framing.
- A rigid or flexible sill-panning product should be installed following the manufacturer's instructions.
- For a masonry installation, drill holes for frame anchors in the rough opening frame prior to installation of the frame.
- Place temporary shims at each corner of the rough opening where the jamb meets the sill. (Note: The shims should be a non-porous, non-absorbent and inorganic material.)

#### WINDOW PREPARATION

- Place the window product at the appropriate rough opening and remove the protective wood corner blocks from the window frames.
- Inspect each window unit for correct size, type and any hidden damage. If a problem exists, immediately report it to your distributor.
- Make sure that the operable sash is closed and locked during the entire installation process.

## **WINDOW INSTALLATION**

- Insert the window into the rough opening from the outside and rest it on the temporary shims.
- Adjust the placement of the window unit by shimming at the head, jambs and sill.
- Cross measure the window unit diagonally in both directions and adjust as necessary to achieve a level, plumb and square condition as well as an even reveal around the frame opening.
- Ensure there are no crowns and dips in the head, jambs or sill.
- Secure the full perimeter of the window unit with countersunk # 8 x 2" Flat Head Sheet Metal Screws with masonry anchors, if required, at twelve inches (12") maximum on center. In each direction from the corners, there must be a fastener within six inches (6"), but not closer than three inches (3"), to prevent frame distortion or fracture of joint seals. (Note: Operable windows require additional fasteners located within one inch (1") each side of, and in the same plane as the hinge or pivot.)
- · Seal all fastener heads during installation with compatible sealant.
- Great Care should be taken when anchoring the sill in order to ensure that an unsealed penetration is not created in a hidden cavity.

- Recheck the window unit for level, plumb and square. Check the operation of the window (if applicable) that it operates smoothly without any binding and the locks are able to engage completely.
- On the interior and exterior of the window unit, apply a backer rod and a continuous bead of appropriate sealant to the entire joint between the window frame and the building structure. Apply the sealant carefully to ensure a completely watertight seal.
- Refer to the separate "CARE & MAINTENANCE INSTRUCTIONS" regarding the proper cleaning and care required for the window frame, glass and components. (Note: The "CARE & MAINTENANCE INSTRUCTIONS" document provides important information regarding protecting the window product immediately after installation and during the building construction process.)

Refer to "AAMA Installation Masters" or applicable ASTM standards for additional detail or clarifications. Installation of RAM products must be in accordance with the standards set forth in ASTM E 2112. AAMA, ASTM and/or EIMA guidelines supercede these instructions.

The key to any window installation is preparation. Careful planning and attention to detail can help ensure the installation of a properly functioning window.

