

# SERIES 4000 FIXED WINDOW INSTALLATION



Let's Shine.

**IMPORTANT INFORMATION: WHETHER IT BE LOCATION OR INSTALLATION TYPE, NOT ALL WINDOW TYPES CAN BE INSTALLED IN ALL AREAS OR WALL CONDITIONS. CONSULT YOUR LOCAL BUILDING CODE DEPARTMENT FOR ANY REGULATIONS OR CODES THAT WILL AFFECT YOUR PROJECT.**

## GENERAL OVERVIEW

Windows are not to be used in any manner other than their intended use, and never for scaffolding, work benches, or shelving materials, etc. Report any damage or missing items to Boyd Aluminum and the freight carrier immediately.

**NOTE:** Check all materials at the time of delivery.

## STORAGE AND PROTECTION

- Practice safe material handling and distribution.
- Do not drop, drag, or walk on packaged or boxed materials.
- Always stack windows with correct directional stickers on all packages in the proper orientation.
- If packages are wet or contaminated by other work site products, remove from contaminated packaging and repackage.
- Store in a safe, dry location; secure in place to protect from wind or other potential threats if needed.

## CLEANING WINDOWS

- Cement, plaster, acid, and petroleum cleaners can be harmful to finishes on windows.
- Extended use of duct tape, masking tape, or similar products is not recommended. These products may also damage finishes.
- For cleaning of *anodized aluminum surfaces*, refer to AAMA 609.1-85 Voluntary Guide Specification for Cleaning and Maintenance of Architectural Anodized Aluminum.
- For cleaning of *painted aluminum surfaces*, refer to AAMA 610.79 Voluntary Guide Specification for Cleaning and Maintenance of Painted Aluminum Extrusions and Curtain Wall Panels.

**DOWNLOAD:** Complete cleaning instructions can be downloaded at: [menards.boydaluminum.com/uploads/files/BoydCareandCleaning.pdf](https://menards.boydaluminum.com/uploads/files/BoydCareandCleaning.pdf)

## CONSTRUCTION AND JOB SITE NOTES

- All materials need to be inventoried to be certain everything required for installation is accounted for.
- Materials need to be installed plumb, level, and true for units to operate properly.
- Work from project-defined benchmarks like center column lines, finished floors, or wall openings as defined by the architectural drawings and/or the shop drawings.
- Isolation of dissimilar materials (like aluminum and uncured concrete) needs to be prepared for. Use a heavy bituminous paint, zinc chromate coating, or approved equal to isolate incompatible materials.
- All sealants need to be compatible with all windows and surrounding materials. The glazing contractor, general contractor, or owner are responsible for supplying compatible sealants. Sealants are always required to be tooled into the opening crevices. Take care to protect the window units from tooling damage. Painter's masking tape works extremely well for protection and straight lines. Remove as soon as the desired finish is achieved. Excess will generally need to be removed or cleaned.
- Protection and cleaning of materials are the responsibility of the glazing contractor, general contractor, or owner. (Reference AAMA documentation for care and maintenance.)
- Compliance with all federal, state, and local building codes is the responsibility of the architect, contractor, and customer to interpret for the window products used on the project. Boyd Aluminum is only a material supplier.
- Blocking, anchors, sealants, flashing, and fasteners to the surrounding conditions should be defined on the shop drawings, and they are normally the responsibility of the glazing contractor. Due to variable opening conditions, window sizes, and building location requirements, fasteners should be determined by the project architect, glazing contractor, or your local code department.
- Boyd Aluminum is the material supplier of the window product defined in the drawings and contract documents. Only fasteners and accessories within the system are supplied.
- Due to changing window parameters and evolving product lines, Boyd Aluminum reserves the right to change detailing and documentation without notification.

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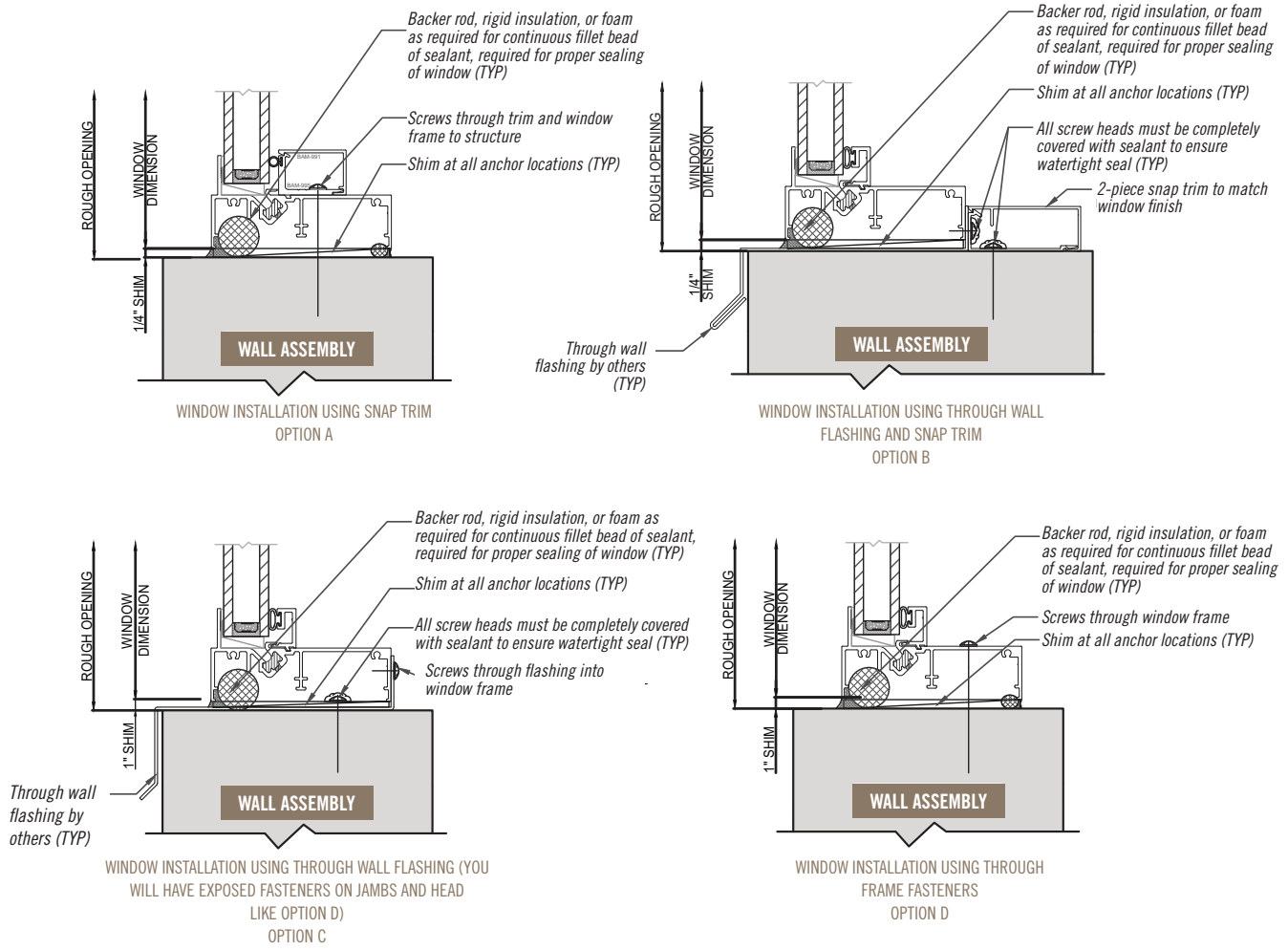


FIGURE 1.0

## CHECK CONTRACT DOCUMENTS AND SHOP DRAWINGS

- Understand and clarify any field verify notes and approvals of architectural and shop drawings. Get familiar with the products needed for installation of the project.
- Installation instructions are intended to be a reasonable guideline for the installation of window units and trims, based on common conditions. Conditions on a project vary, and deviations and/or special instructions should be defined in the shop drawings. See *Figure 1.0* for installation options.
- Check to be certain these installation instructions are compatible with the project conditions and will not compromise the window units or surrounding products' installation or warranty.

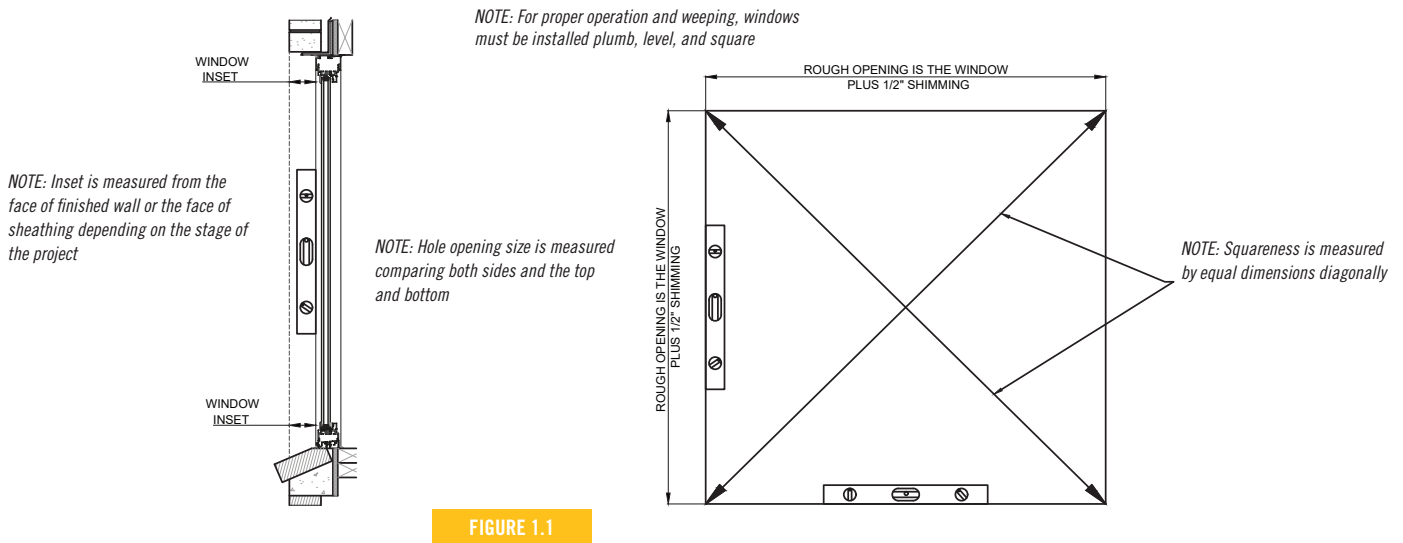
**NOTE:** Local codes, then shop drawings, should take precedence and define project-specific product and installation.

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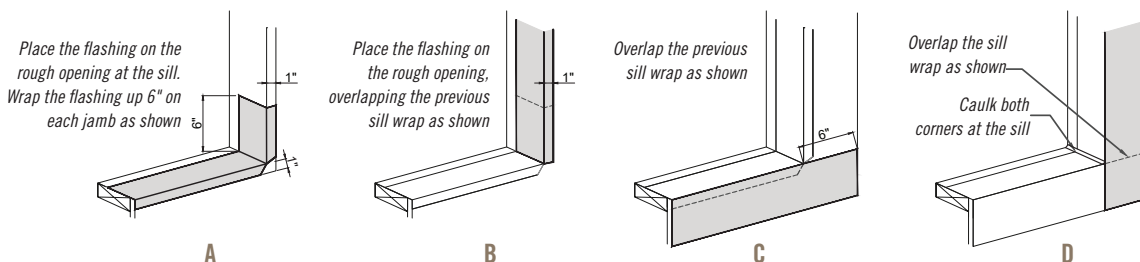
## STEP 1: INSPECT THE OPENINGS

- Verify that the rough opening sizes and locations match the architectural and shop drawings. Verify window unit sizes that are received. They should typically be  $\frac{1}{2}$ " smaller than rough openings.
- Identify any high points on the sill openings. Using a level and string line, follow *Figure 1.1* to find any out of square or out of level places, as this will be important when installation begins. Any damage to the sill or opening structure will need to be fixed before installation can begin.



## STEP 2: PREPARE THE OPENINGS

- Using self-adhesive flashing to waterproof the window opening, cut two (2) horizontal flashing tape pieces 12" longer than the opening. Place flashing tape along the sill (A) to overlap around 1" of the exterior building wrap material or condition, and 6" up the jambs. Slit a 1" tab at the center of each corner so the 1" tabs will bend at 45 degrees along the exterior surface.
- Place flashing tape (B) over the inside overlapping first tape by 1". See *Figure 1.2*.
- Cut two (2) more flashing tapes equal to the opening height. Apply them up each side, overlapping the exterior surface 1". Repeat step 1 at the top of the window.
- Place flashing tape that overlaps the exterior lap from the starting flashing from step 1 above. See *Figure 1.2* (C) below. Repeat at the sides then the top.
- Seal the corners and staple the tape if needed to hold them in place.
- Using the architectural drawings or shop drawings, establish a window face line at the head, jambs, and sill. This sets the inset distance into the wall location from the exterior wall face. See *Figure 1.1*.
- Attach the head flashing in location as shown on the shop drawings.
- After determining the sill location, install the sill flashing per the shop drawings, making sure to seal the screw heads. Apply sealant along the ends of the flashing where the window will be located.



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## STEP 3: PREPARE FOR INSTALLATION

- Inspect the window joints, confirming that they have not been broken loose by the dynamics involved in shipping and handling.
- Use appropriate compatible shimming, blocking or use manufacturers frame filler primarily at the anchor points commensurate with the anchor locations and requirements of the project.
- There are various ways to anchor windows. Always follow local codes for anchoring windows; if not covered by local or county jurisdictions, typical anchoring for all type installations would be 6" from the top and bottom of the side's rails, 6" from the sides on the top rail, and 12" apart along the balance of the window. See *Figure 1.3*.

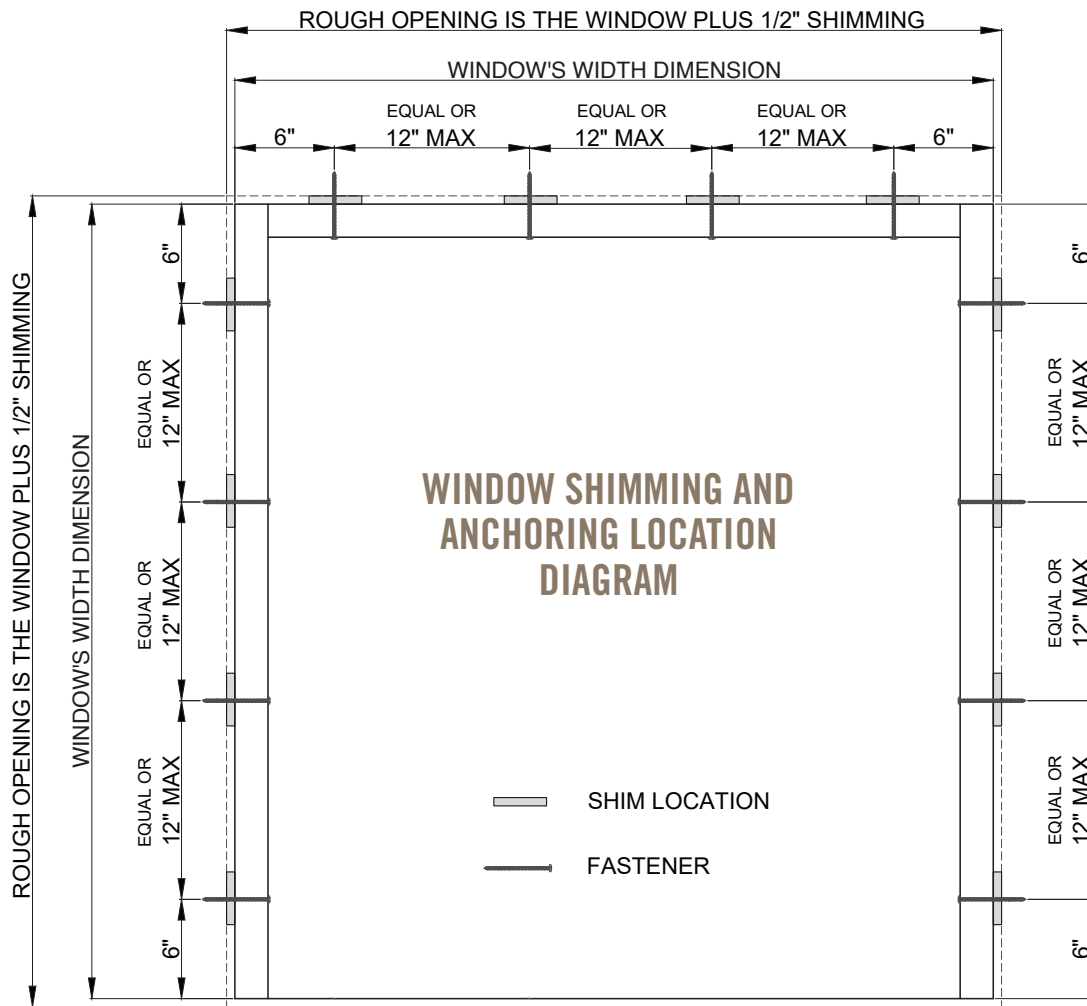


FIGURE 1.3

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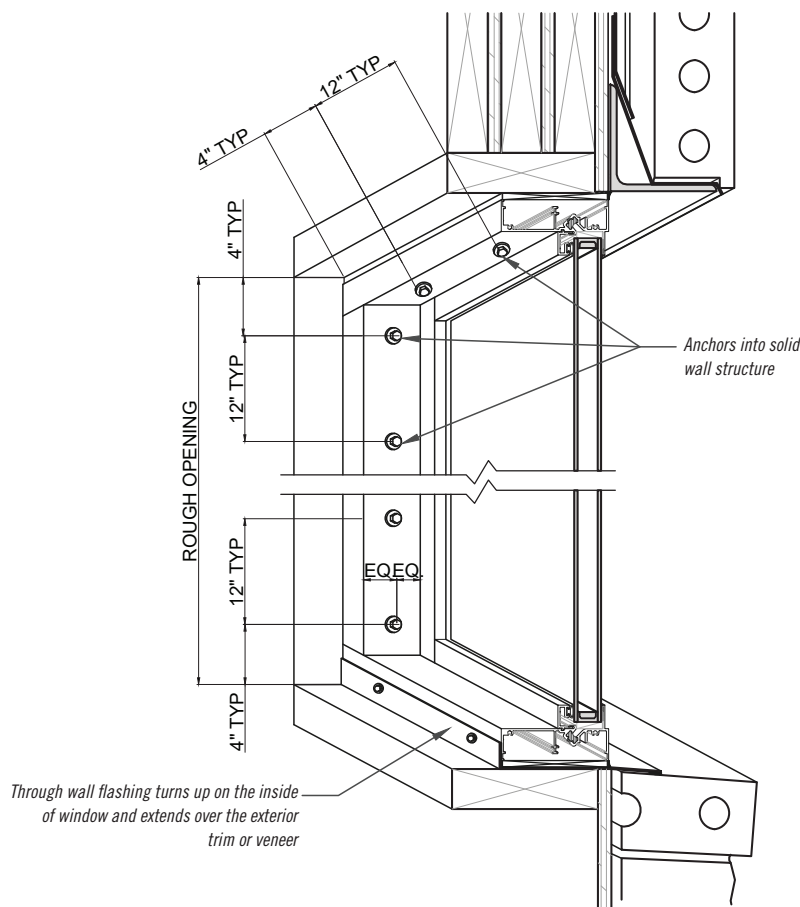


## STEP 4: ANCHOR THROUGH THE FRAME OPTION

- Perimeter anchors should never penetrate a circular window sill.
- It is recommended to use through wall flashing at the sill when possible. This reduces the possibility of penetration through caulking into the lower wall assembly. This also allows anchoring of the sill on windows over 36" in width. See *Figure 1.4*.
- Pilot drill the fastener hole in the window frame.
- Line the window up in the prepared opening, shimming as necessary. See *Figure 1.1*.
- Carefully operate windows to ensure proper movement with no binding before final anchoring.
- Fasten the window snugly, but do not tighten to the point of deforming the window frame, which would affect the operation of your new windows.

**NOTE:** Anchor Through the Frame Option has exposed fasteners.

**NOTE:** Always check window operations after anchoring corners.



## WINDOW WITH ANCHORS THROUGH FRAME

FIGURE 1.4

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## STEP 5: ANCHOR WITH SNAP TRIM OPTION

- It is recommended to use through wall flashing at the sill when possible. This reduces the possibility of penetration through caulking into the lower wall assembly. This also allows anchoring of the sill on windows over 36" in width. See *Figure 1.4*.
- Drill pilot holes in the snap trim base.
- Line the window up in the prepared opening, shimming as necessary. See *Figure 1.3*. Fasten the trim clip to the substrate and the window and seal the heads. See *Figure 1.0* for typical sill details.
- Reinstall the trim caps.
- Do not fasten to ceiling supports, drapery tracks, or other building components other than the intended rough opening substrate.
- Do not force the window into the opening; if it does not fit, it is probably the wrong window for the opening.
- Window should be anchored to allow for appropriate expansion and contraction of building movement.
- Before sealing the perimeter, mask the window face and insert the backer rod.
- After appropriately cleaning and priming the window and rough opening substrate per sealant manufacturer's instructions, seal all openings.

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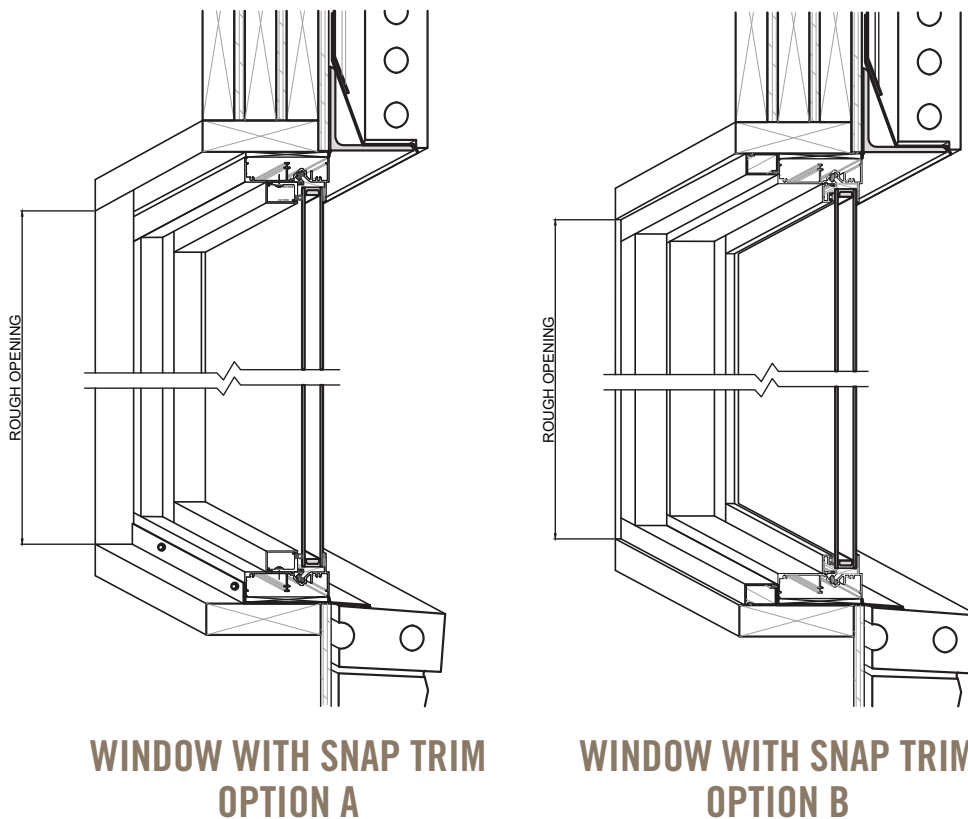


FIGURE 1.5

*Windows, Patio Doors, Storefront Doors, and Stock Lengths by Boyd.*

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