ELEPHANT
WINDOWS & DOORS

G MAX Window System Installation Guide

Elephant G Max Aluminum Window System

Fixed · Casement · Awning (Crank / Push-Out) · Push-Out French Casement · Tilt-Turn

Water management sequence per ASTM E2112-23 Method A1 and AAMA 2400-21 Method A (Annex A: WRB installed first)

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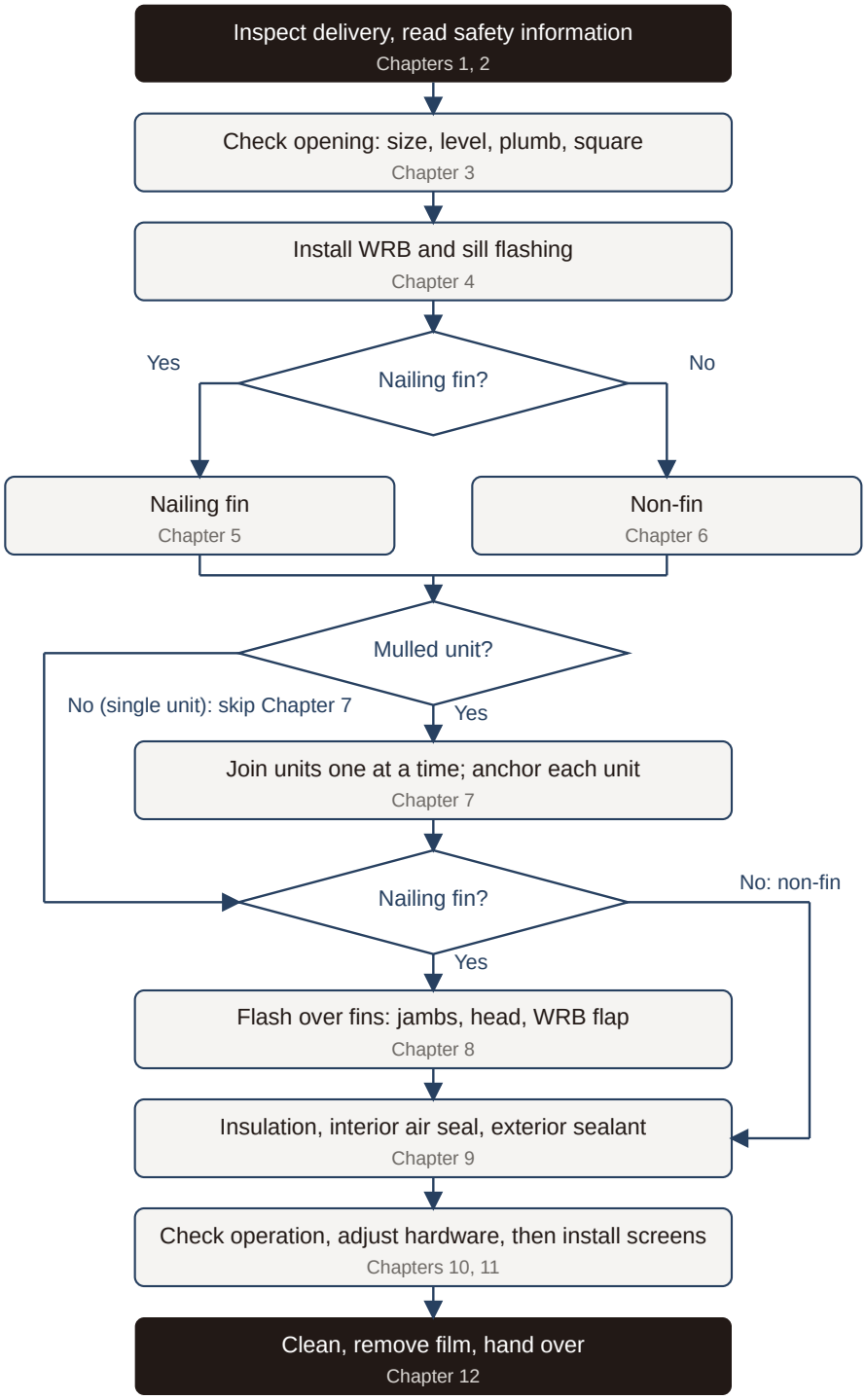
Contents

1	Important Safety Information	3
2	Materials and Tools	4
3	Rough Opening Requirements	5
4	Opening Preparation and Sill Flashing	6
5	Setting the Window: Nailing Fin Installation	7
6	Setting the Window: Non-Fin Installation	9
7	Mulling Multiple Units (Mulled Units Only)	10
8	Flashing After Installation	14
9	Insulation and Sealing	15
10	Operation Check and Hardware Adjustment	16
11	Screen Installation	17
12	Care and Maintenance	19
A	Appendix: Field Glazing (Special Cases Only)	20

Read these instructions completely before you begin. The water management sequence in this guide follows ASTM E2112 Method A1: the water-resistive barrier (WRB) is installed before the window, and the jamb and head flashings are applied over the face of the nailing fin. This corresponds to AAMA 2400 Method A with Annex A (WRB first). AAMA 2400 is intended for areas of low water-penetration risk; for projects with severe wind and rain exposure, use a drainage-type installation per FMA/AAMA 100 or the project design. Do not mix steps from different installation methods. Regional practices, environmental conditions and building codes may vary and take precedence over these instructions; compliance is the responsibility of the installer, the inspector and the owner. Failure to follow these instructions may void the Elephant limited warranty. Unless marked "interior view", all illustrations are viewed from the exterior.

Installation Overview

Use the chart below to determine which chapters apply to each window. All windows require Chapters 1–4; use either Chapter 5 or Chapter 6; Chapter 7 applies to mulled units only; Chapter 8 applies to nailing fin installations only.



When to do it

Complete the Chapter 8 flashing immediately after the window is fastened, in one pass. For mulled units, wait until all units are joined and anchored.

Apply the Chapter 9 exterior sealant after the exterior finish (stucco, siding) is complete.

Special cases only

All G Max windows are glazed at the factory. For field glass replacement or oversized units shipped knocked down, contact Elephant first, then follow the Appendix.

1 Important Safety Information

Window installation is not a do-it-yourself project. G Max windows should be installed by experienced, qualified professional installers, licensed where required. Read these instructions completely before starting.

Safety and Handling

• Failure to follow these instructions may result in denial of warranty claims related to operation, performance or water penetration.

• Never work alone. Two or more people are required to lift and set the window. See the order documents for unit weights and sizes.

• Handle glass with care. Broken or cracked glass can cause serious injury.

• Wear protective equipment: safety glasses, gloves and hearing protection.

• Use caution when working at elevation, including on ladders and scaffolding.

• Use hand and power tools safely and follow the tool manufacturer's instructions.

Storage and Protection

• This product has a factory-applied finish. Protect all exposed surfaces from corrosive materials, solvents, abrasion, impact and wet packaging materials.

• Store upright in a dry location protected from the weather. Replace wet packaging immediately.

• Inspect all components upon delivery. Report any damage or missing parts to Elephant Windows & Doors within 48 hours.

• Keep operating sashes closed and locked until installation is complete.

Existing Buildings

• Homes built before 1978 may contain lead-based paint. Removing old windows can pose serious health hazards. See www.epa.gov/lead.

• Follow all federal, state and local regulations for waste disposal and recycling.

Two or more people · carry upright · sash locked



Pre-Installation Inspection

• Before installation, inspect each unit for corner distortion, gaps and blocked weep holes.
• Check the factory corner seals. If a seal is cracked or damaged, reseal it with a compatible sealant before installation.

• When fastening, make sure the nailing fin is not cracked. Seal any crack immediately.

2 Materials and Tools

Tools Required

• Tape measure, level and square (a laser level is recommended)

• Drill/driver, bits and drivers
• Caulking gun and putty knife
• Utility knife or scissors
• Hammer

Notes

• The product's rated performance depends on installation per these instructions.

• Separate the aluminum frame from concrete, masonry and preservative-treated lumber with flashing or an isolation layer. Direct contact is not permitted.

• Fasteners exposed after installation: 300 series stainless steel only. Concealed fasteners may be zinc- or cadmium-plated steel, minimum 8 µm coating (ASTM B633 / B766). Nailing fin installation: #10 × 2-1/2" screws, 12" on center, 4" from ends.

Materials Supplied by the Installer

• Composite or other non-compressible shims

• Corrosion-resistant fasteners compatible with the frame and substrate; use 300 series stainless steel fasteners in contact with preservative-treated lumber

• Flashing: self-adhered flexible flashing, minimum 4" wide (AAMA 711), and/or liquid-applied flashing (AAMA 714), e.g. ZIP System Liquid Flash, Prosoco R-Guard FastFlash or equal

• Perimeter sealant: ASTM C920 or AAMA 808.3 (AAMA 800 series), verified compatible with aluminum and adjacent materials; nominal 1/2" bead, or equivalent butyl sealant tape

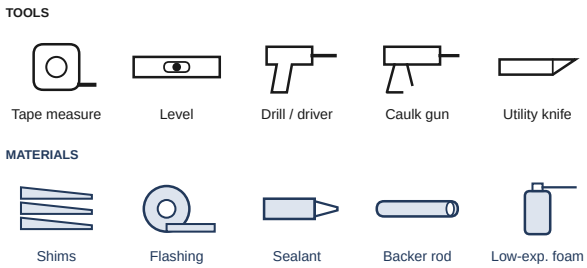
• Backer rod (foam backer material)

• Low-expansion foam insulation (AAMA 812) or fiberglass insulation

• Water-resistive barrier (WRB) per local code

Fastening

Drive screws through the pre-punched holes in the nailing fin into the wood framing (#10 × 2-1/2" screws; minimum 1-1/2" embedment, or as required by the project and local code). Set the drill/driver to a low torque setting and stop when the screw head is snug against the fin. Do not bend, dent or crack the fin. Clutch settings vary by brand, so no specific setting is given.



3 Rough Opening Requirements

1. The rough opening (RO) should be 1/2" wider and 1/2" taller than the outside frame size; i.e. frame size = RO minus 1/2" in width and height.

Frame depth is 4.21" (4.92" for push-out units with folding screen or side-mounted stainless steel handle). From the back of the fin, the frame extends 2.96" (or 3.67") into the wall; the fin is approx. 1" wide; the fin face to the frame exterior face is approx. 1.2". Check wall thickness and exterior finish thickness against these dimensions.

2. When framing the opening, make sure the sill is level and flat and the opening is square and plumb. The framing must fully support the window and the loads transferred from the header above.

3. Measure both diagonals to check for square. The opening is square when the diagonals are within 1/8" of each other.

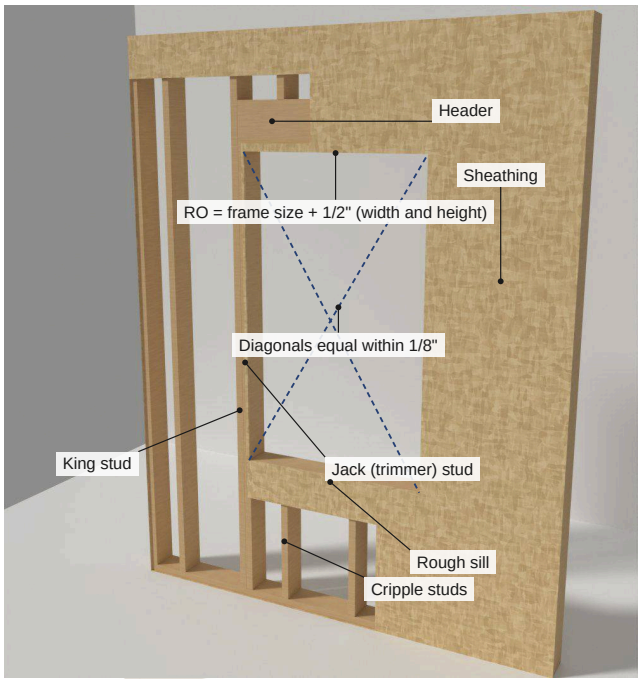
4. Before unpacking the window, confirm that the finished opening matches the size of the window ordered.

G Max Size Ranges (frame size, inches)

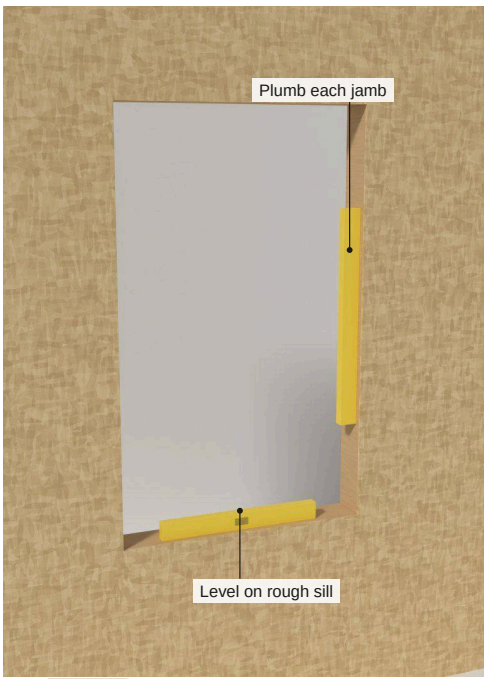
Type	Width	Height	Recommended (W × H)
Crank-out casement	18–48	18–80	20–42 × 27–72
Push-out casement	18–48	24–80	20–42 × 27–72
Crank-out awning	18–72	20–72	20–60 × 20–60
Push-out awning	24–72	18–72	27–60 × 20–60
Push-out French casement (unit)	36–96	24–80	40–84 × 27–72
Tilt-turn	18–48	22–80	20–42 × 24–72
Fixed	14–144	14–144	W > 83: H ≤ 100; W > 100: H ≤ 83

Width and height cannot both be at their maximum: when one exceeds the recommended range, the other may not exceed its recommended maximum. Order drawings govern.

Thermal movement of large units: aluminum expands approx. 13×10^{-6} in/in/°F; a 12 ft wide unit moves approx. 0.19" over a 100 °F temperature change. A standard 1/4" joint per side with Class 25 sealant is adequate only up to approx. 8 ft wide; for wider units use Class 50 perimeter sealant (up to approx. 16 ft) or enlarge the opening joint to suit the movement. If the opening does not meet these conditions, correct it before continuing.



Typical rough opening



Check plumb, level and square

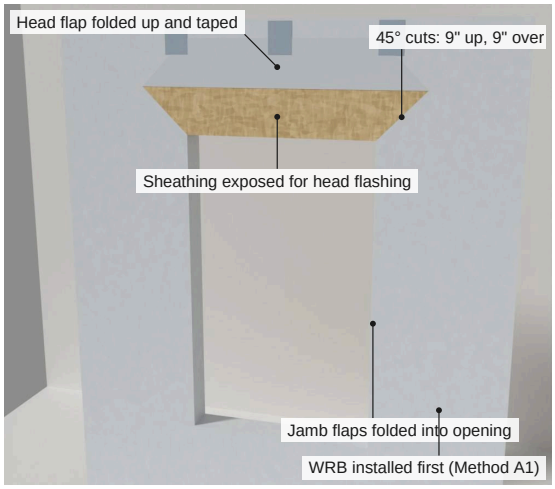
4 Opening Preparation and Sill Flashing

Prepare the Water-Resistive Barrier (WRB)

1. Install the WRB before the window. At the opening, cut horizontally along the head and the sill, then cut vertically down the center of the opening (modified I-cut).

2. Fold the WRB at the jambs and sill into the opening, fasten it, and trim the excess.

3. At each upper corner of the head, cut diagonally outward at 45°: measure 9" up and 9" out from the corner to mark the cut. Flip the head flap up and tape it temporarily.



WRB preparation

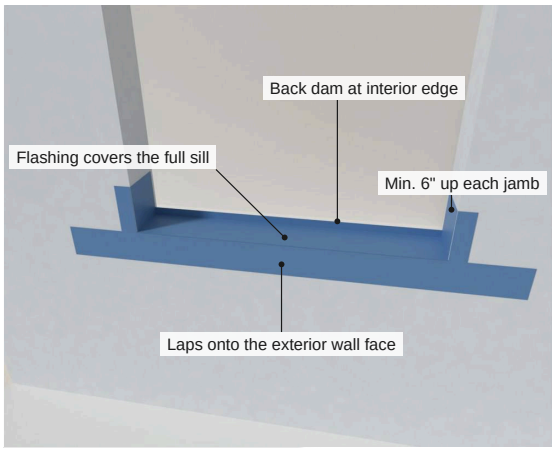
Sill Flashing: Performance Requirements

Flash the sill by either method below, per the flashing manufacturer's instructions and AAMA 2400. The sill flashing must:

• Cover the entire sill, turn up at least 6" at each jamb, and lap onto the exterior face of the wall

• Form end dams at both ends and a back dam at the interior edge, using turned-up flashing or a continuous sealant bead; slope to the exterior where possible

• Be continuous with sealed corners and no voids; keep the drainage path to the exterior open



Two acceptable sill flashing methods

Method A: Self-adhered flashing (AAMA 711)

Apply flexible flashing over the entire sill and up both jambs. Work from the center toward the corners; use stretchable flashing or preformed corners, then roll the entire surface with a J-roller.

Method B: Liquid-applied flashing (AAMA 714)

Fill gaps larger than 1/8" first, then apply liquid flashing over the entire sill with a caulking gun or trowel and turn it up 6" at each jamb. Maintain the manufacturer's minimum wet-film thickness with no holidays, and allow full cure before setting the window.

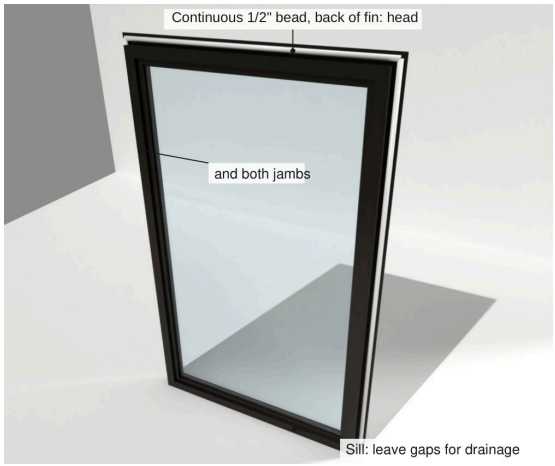
Note: A preformed sill pan is not required for G Max windows. Either method above, with end dams and a back dam, fully meets the sill flashing requirements of this guide. Where self-adhered and liquid products contact each other, verify chemical compatibility per AAMA 713.

5 Setting the Window: Nailing Fin Installation

G Max windows arrive fully assembled and glazed. Nailing fin units are also supplied with installation clips; both the fin and the clips must be fastened. For mulled units, install the first unit per this chapter, join the others per Chapter 7, and flash per Chapter 8 after all units are fastened.

CAUTION: Keep operating sashes closed and locked until the fin and all installation clips are fastened. Opening a sash early may rack the frame and prevent it from being set square.

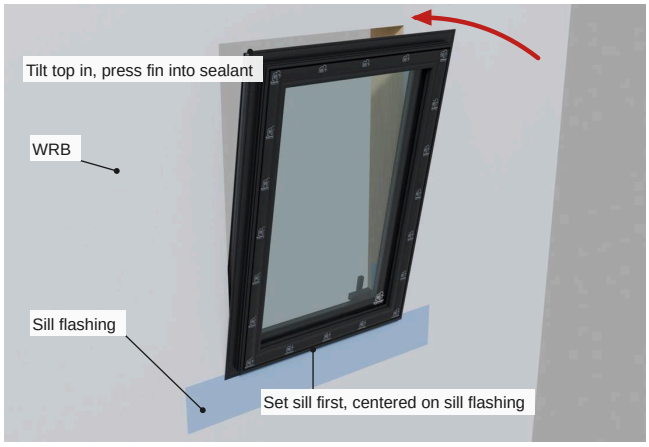
1. Apply a continuous 1/2" bead of sealant to the back of the head and jamb fins, in line with the fastener holes. Leave gaps in the sill fin bead so that any incidental water can drain.



Seal head and jambs; leave sill gaps

2. Lift the window with two or more people. Set the sill on the sill flashing first and center it, then tilt the top in and press until sealant squeezes out at the fin edge, showing a continuous seal (tool the squeeze-out flat).

Drive one temporary fastener near each upper corner and hold the window until it is secure.

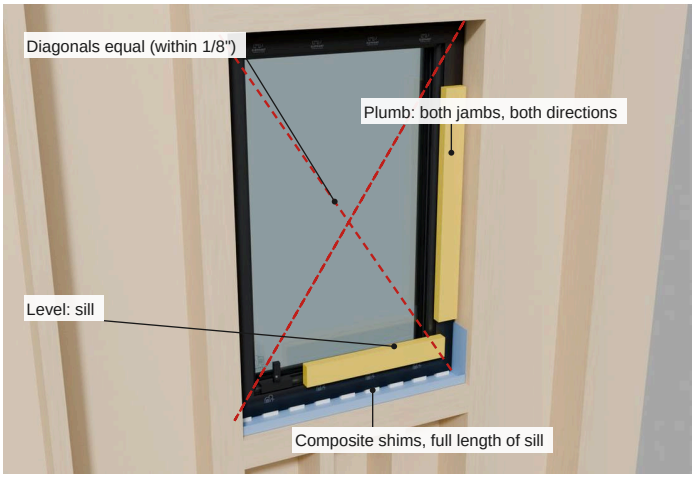


Set the sill first, then tilt the top in

3. Before fastening, adjust the window in all three directions:
- Sill level;
- Jambs plumb side to side;
- Jambs plumb in and out, frame not twisted.

Measure both diagonals; they must be within 1/8" (units up to 4 ft) or 3/16" (larger units). Do not fasten until the window is adjusted.

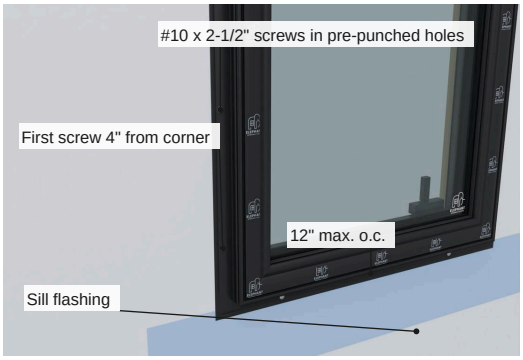
Support the sill continuously with shims along its full length. Use only high-strength composite shims (min. 1100 psi); do not use metal or wood shims.



Interior view: level, plumb, equal diagonals; sill fully shimmed

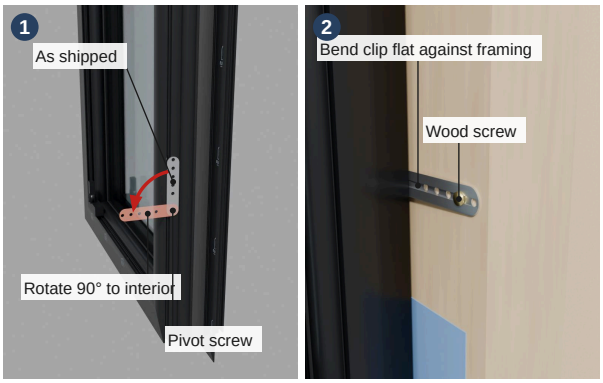
5 Setting the Window: Nailing Fin Installation (cont.)

4. The nailing fin has factory pre-punched round holes of approx. 3/16" (including the head fin; there are no slotted holes). Use #10 × 2-1/2" screws, the first 4" from each corner, 12" on center. On casements, add one screw near each hinge. Do not overdrive; the screw head should sit flat against the fin.



Fin fastening: 4" from corners, 12" o.c.

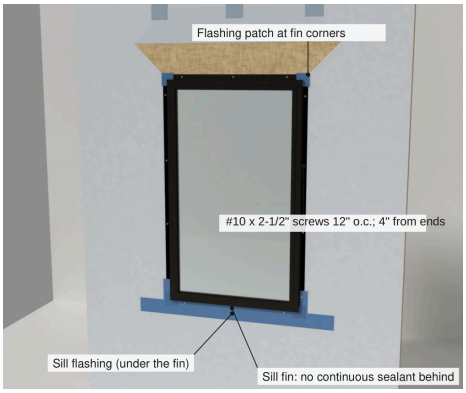
5. Nailing fin units are also supplied with installation clips, folded flat against the frame perimeter at the factory. After the fin is fastened, rotate each clip 90° from the interior so that it extends past the interior side of the frame. The clips are soft: bend each one flat against the rough-opening framing and fasten it directly with a wood screw. No shim is needed.



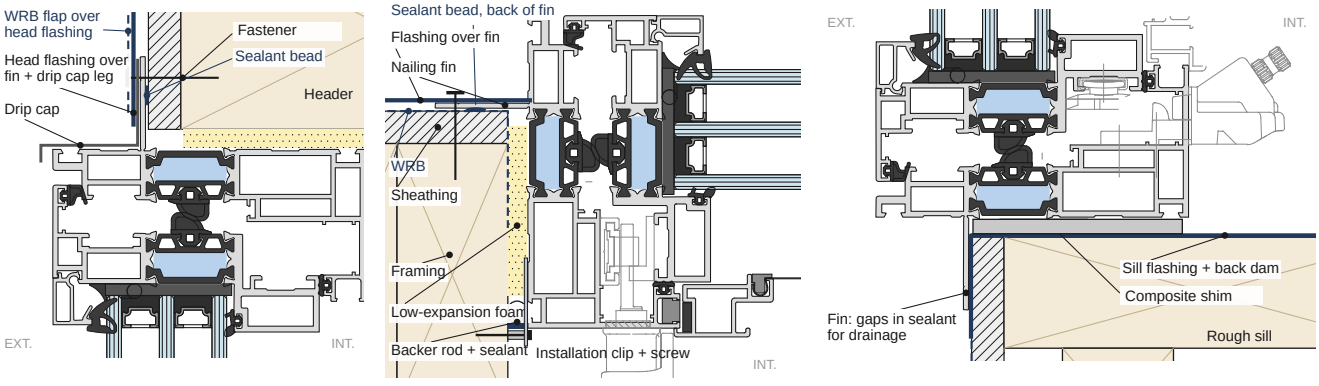
Installation clips: (1) as shipped (2) rotated 90° and fastened to the framing (interior view)

6. After the fin and all clips are fastened, open and close each sash to confirm smooth operation and even margins, then lock it. If operation is not smooth, check square and shims first; if needed, release the affected screws and clips, adjust, and refasten.

7. Seal all fin joints and corner joints, any cracks caused by fastening, and every fastener head that penetrates the fin or flashing. Then apply an L-shaped self-adhered flashing patch at each fin corner. Fasten interior trim on one side only.



Seal fin joints; L-shaped patches at corners



HEAD **JAMB** **SILL**

G Max crank-out casement, nailing fin installation details

6 Setting the Window: Non-Fin Installation

Non-fin installation applies to recessed openings, masonry construction and replacement projects that do not use a nailing fin. Water management details for complex recessed openings are the responsibility of the project architect or engineer.

1. Prepare and flash the opening per Chapters 3 and 4. A non-fin window has no fin to shed water, so before setting the window, also flash the jambs and head and wrap the flashing into the opening, lapped shingle-fashion. Where the aluminum frame will contact concrete, masonry or treated lumber, make sure an isolation layer is in place.

2. Set the window into the opening, sill first. Center it, then check level, plumb and square (equal diagonals).

3. Support the sill continuously with shims along its full length. At each through-frame screw, place a solid, non-compressible shim so that the frame is not pulled out of line when fastened. The installation clips are soft: bend them flat against the framing and fasten directly, no shim needed. Use only high-strength composite shims; do not use metal or wood shims. Keep adequate edge distance for anchors in the substrate.

4. Select the anchoring method by window type:

• Installation clips: for operating and fixed windows, on all four sides. The clips are mounted on the frame perimeter; rotate them out against the interior side of the opening and fasten with fasteners suited to the substrate: wood screws into wood framing, concrete screws or anchors into concrete and masonry.

• Through-frame: head and jambs only; screws pass through the frame into the structure. On fixed windows, fasten through the pre-drilled holes under the interior glazing bead (as in Chapter 7). Do not fasten through the sill; use installation clips.

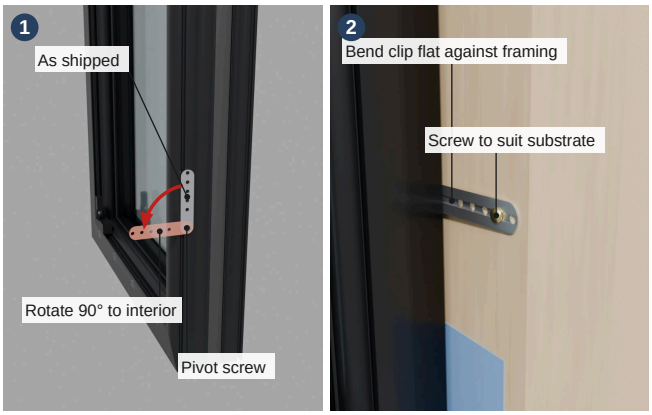
• Crank-out casements: installation clips on all four sides; no through-frame fastening.

Anchor spacing 12"–16", 3"–10" from corners.

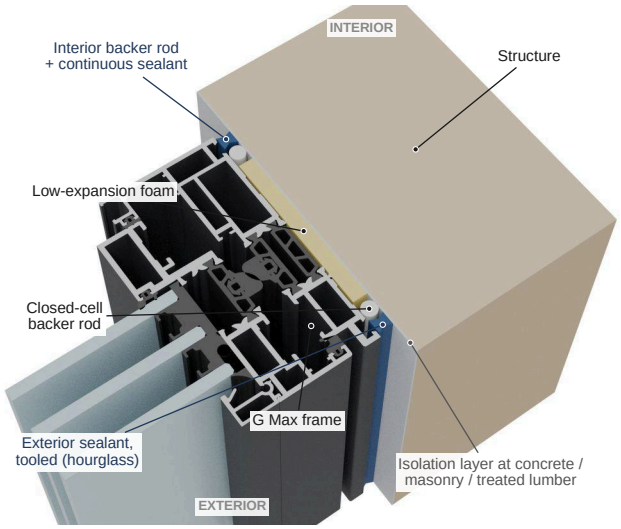
5. Seal through-frame screw heads with compatible sealant and snap the glazing bead back in (do not strike the glass). After anchoring, open and close each sash to confirm smooth operation.

6. At the exterior perimeter, insert closed-cell backer rod approx. 1/3 larger than the joint width, then apply a continuous bead of sealant between the frame and the structure, approx. half the joint width deep (min. 1/4"). Tool it flat with no voids.

CAUTION: Keep the exterior drainage path at the sill open. Do not seal the sill weep holes.



G Max installation clips are mounted on the frame perimeter on all four sides; rotate them out at installation and fasten to the opening.



Perimeter backer rod and sealant

Anchors under the glazing bead

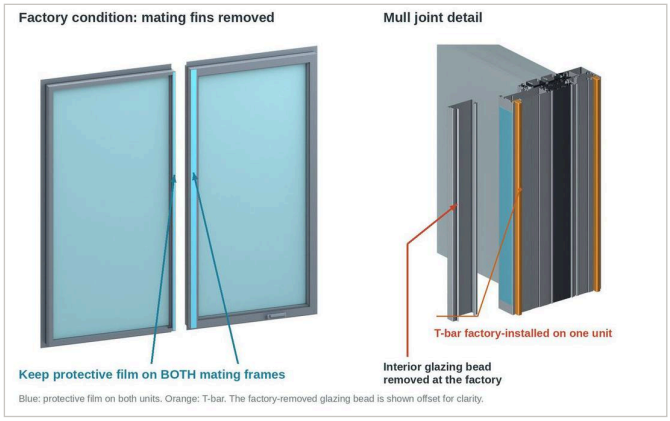
On fixed windows fastened through the frame, the pre-drilled holes at the head and jambs are covered by the interior glazing bead: remove the interior bead, anchor through the holes, then snap the bead back in (as in Chapter 7). Do not remove the glass. Do not fasten through the sill; use installation clips.

7 Mulling Multiple Units (Mulled Units Only)

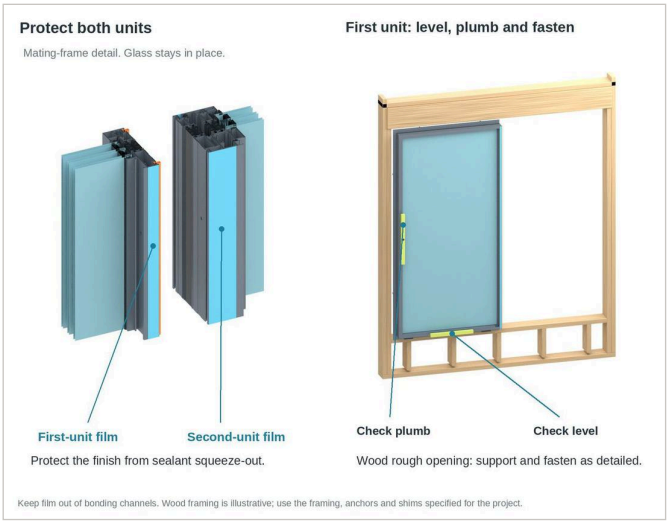
Single units do not require mulling; skip this chapter: nailing fin units continue with Chapter 8, non-fin units with Chapter 9. This chapter covers G Max units joined side by side with a factory-inserted T-bar. Level, plumb, square and fasten the first unit before joining the second; complete the flashing over the fins only after all units are joined and anchored (Step 11 and Chapter 8).

Also refer to the G Max Field Mulling Guide (elephant-windows.com, Installation Instructions page) and the project drawings.

Load path: The T-bar only locates the units and assists sealing; it does not carry sash or unit weight. All vertical loads are transferred to the structure through setting blocks and the fasteners and anchors specified on the installation drawings.



Factory condition: fins removed at the mating side, T-bar pre-inserted in one unit



Keep protective film on both units; set, level and fasten the first unit

01 Check factory preparation. Verify unit numbers, configuration and sizes, and inspect frames, glass and components for damage. The fins at the mating sides have been removed at the factory and the T-bar is pre-inserted in one unit; on fixed units the interior glazing bead at the mating edge has been removed at the factory to expose the pre-drilled holes. Check the supplied screws and hole caps.

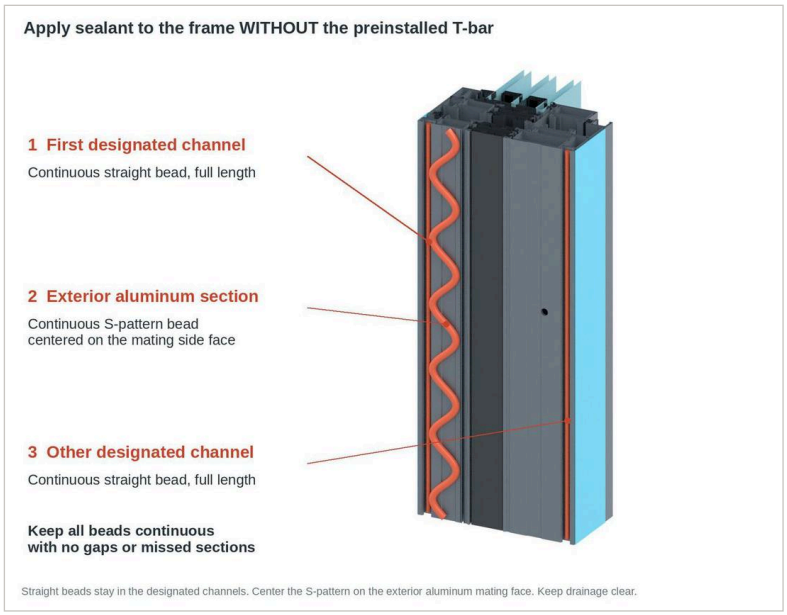
02 Check the protective film on both units. Keep film on all exposed profile faces next to the mating edges to protect the finish from sealant squeeze-out. Patch damaged or missing film up to the edge, but do not cover the sealant channels.

03 Check the opening. Verify size, level, plumb and square; confirm that support and flashing substrates are in place and that the sill flashing drains to the exterior. Remove dust, debris and moisture from the mating faces and channels.

04 Install the first unit per Chapters 3–5 and the project drawings; the WRB and the sill flashing for the entire opening must be complete first. Before setting, apply sealant to the back of the remaining fins, leaving drainage gaps at the sill as required. Place setting blocks, then level, plumb, square and fasten. Flash over the fins in Step 11 after all units are joined. Support the second unit independently; do not hang it on the T-bar.

Have ready: caulking gun, padded clamps, level, tape measure, screwdriver, rubber mallet and lint-free cloths. Wear safety glasses and cut-resistant gloves; use handling equipment suited to the unit weight and brace units to prevent tipping.

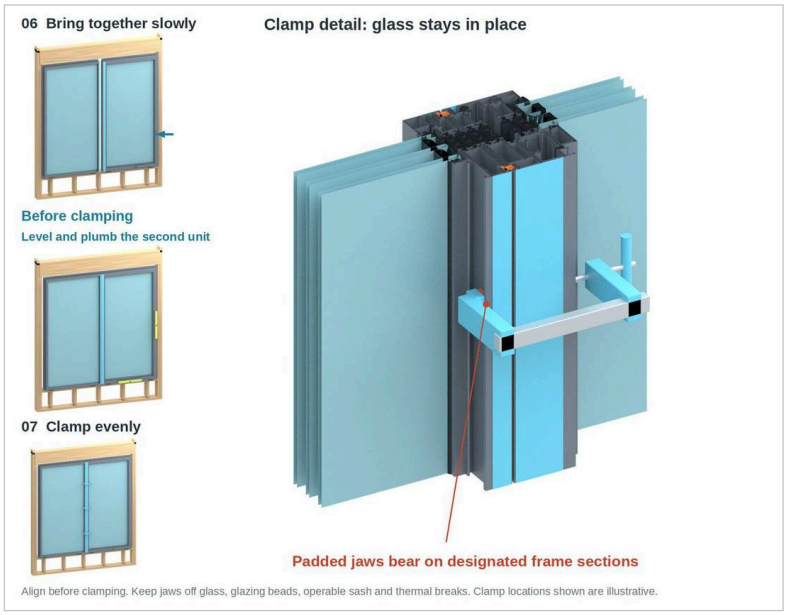
7 Mulling Multiple Units (cont.)



Straight beads in both channels; S-bead on the exterior aluminum face

05 Apply sealant at the designated locations. On the unit without the T-bar, run a continuous straight bead full length in each of the two designated channels, and a continuous S-shaped bead along the middle of the exterior aluminum mating face. Apply sealant only when the units can be joined immediately; do not exceed the sealant's working time. Sealant added to the exterior after joining does not replace these beads.

Check before joining: inspect the beads and both ends. Where sealant is missing, contaminated or past its working time, prepare per the sealant requirements and reapply.



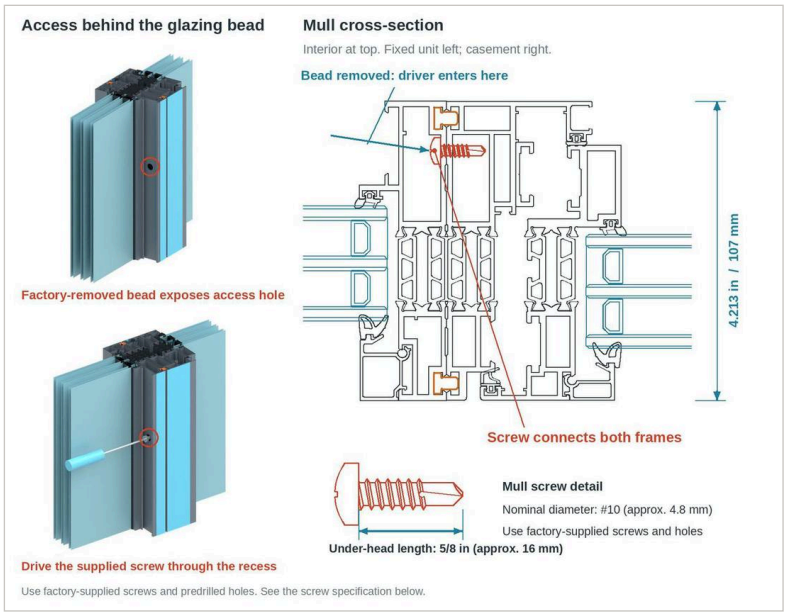
Join slowly and in parallel; clamp in stages with padded clamps

06 Join slowly. Before setting the second unit, apply sealant to the back of its remaining fins. Align the top and bottom and the interior and exterior planes, then bring the units together slowly and in parallel so the T-bar engages the mating channel. If it binds, back off and check; do not strike or force it. Recheck level, plumb and alignment of the second unit before clamping.

07 Clamp in stages. Tighten padded clamps evenly in stages along the joint, bearing on the designated structural profiles. Keep the glass in place; do not clamp the glass, glazing beads, sashes or thermal break. A little squeeze-out is normal but does not prove the channels are fully sealed; if misaligned, release the clamps before adjusting.

Sealant: neutral-cure, 100% silicone window sealant, ASTM C920 Grade NS, Class 25 or higher movement class, compatible with the finish, gaskets and flashing materials.

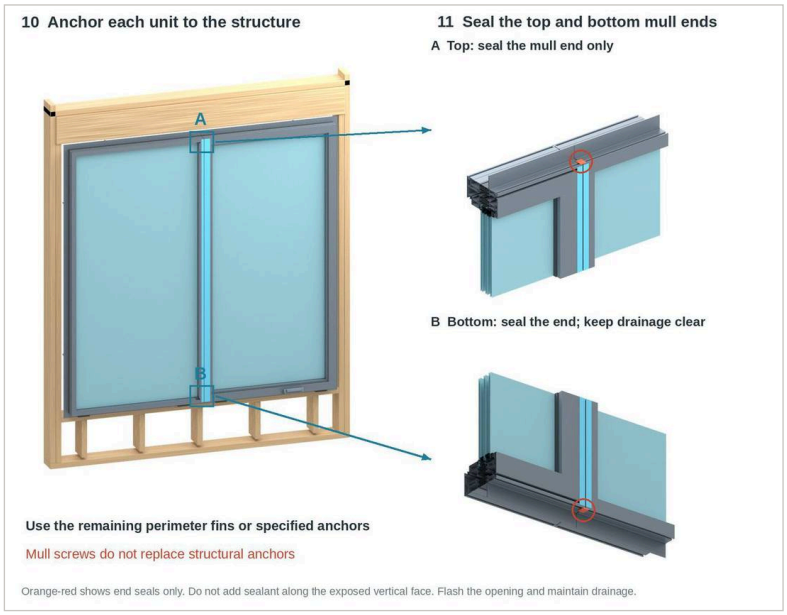
7 Mulling Multiple Units (cont.)



Drive screws into the pre-drilled holes in the groove exposed under the removed bead

08 Recheck position. Check level, plumb, square and elevation of both units; interior and exterior faces flush, joint even, frames not twisted.

09 Install the mull screws. Keep the supports and clamps in place. From the groove previously covered by the glazing bead, drive the supplied screws into the factory pre-drilled holes; tighten evenly in passes from the middle of the joint toward the ends and recheck position. Do not use the screws to pull a misaligned frame into place, and do not overtighten.



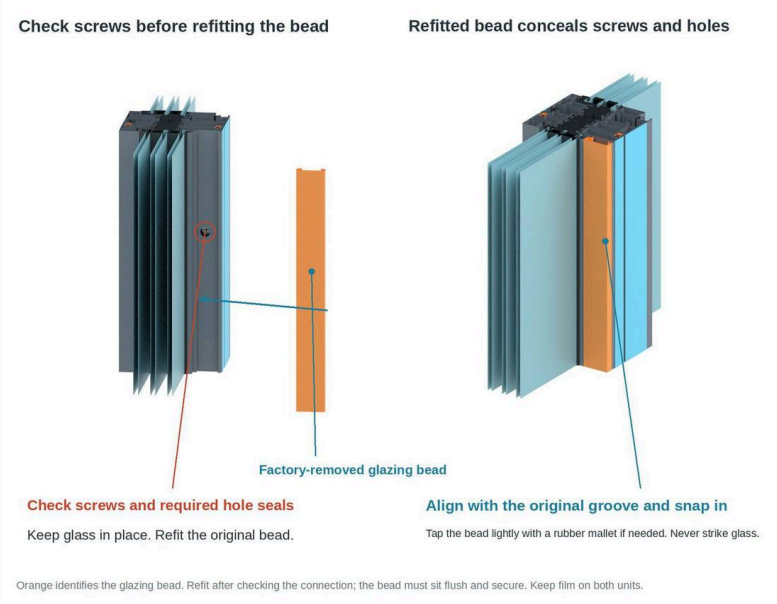
Anchor each unit to the structure; seal only the top (A) and bottom (B) of the mull

10 Anchor to the building. Mull screws only join the units; each unit must still be anchored to the structure. Fasten the second unit through its remaining fins or the specified anchors, and recheck the first unit. Remove the clamps only after the units are secure and have not shifted.

11 Complete the weather seal. Seal the top (Detail A) and bottom (Detail B) ends of the mull; do not add sealant along the exposed vertical joint. Complete the fin tie-in, head flashing or drip cap and perimeter flashing, lapping each layer shingle-fashion into the WRB. Keep the drainage path at the bottom open.

Mull screws: use the supplied #8 × 5/8" self-drilling screws through the factory pre-drilled holes; use only the supplied screws and do not enlarge the holes. For building anchors, see the project installation drawings.

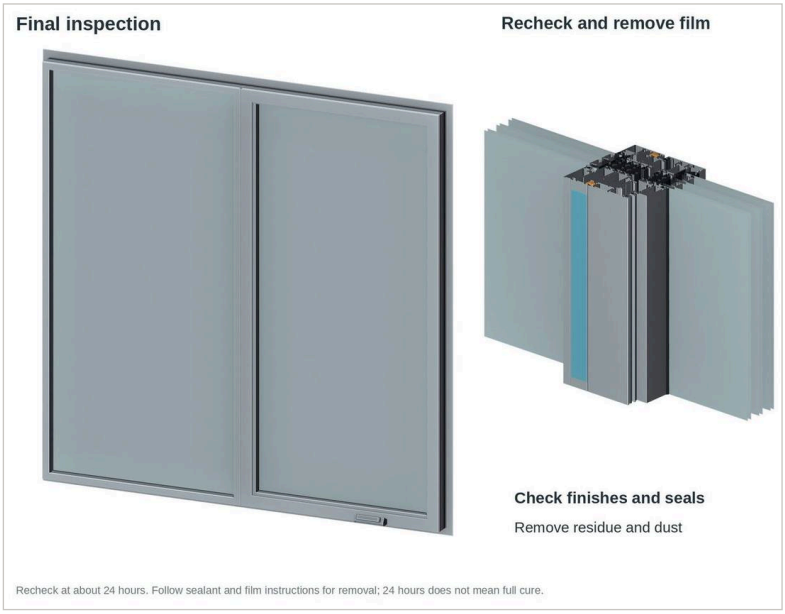
7 Mulling Multiple Units (cont.)



After checking screws and holes, snap the factory-removed bead back in

12 Reinstall the glazing bead. Check the screws and any holes to be sealed, then align the factory-removed bead with its original groove and snap it in. If needed, tap the bead lightly with a rubber mallet, protecting the finish; never strike or press on the glass. Check that it is not loose or lifted, then reinstall the supplied gaskets and hole caps.

13 Clean squeeze-out. Remove excess sealant promptly per the sealant requirements; keep the protective film on. Do not scratch the finish, hollow out the joint or push residue into drainage paths. Do not wait for the sealant to cure and then scrape it off.



Final inspection; recheck and remove film after approx. 24 hours

14 Final inspection. Joint tight, all screws installed, seals continuous; frames level, plumb and undistorted; drainage open, beads and hole caps in place; sashes open, close and lock properly (see Chapter 10).

15 Recheck and remove film. Recheck after approx. 24 hours. Time the film removal per the sealant and film manufacturers' requirements; 24 hours does not mean full cure. Peel the film carefully without pulling the sealant, and remove residue and dust.

8 Flashing After Installation

Flash the window immediately after it is fastened, and complete the flashing in one pass; never leave an opening partially flashed. Lap all flashing shingle-fashion (upper over lower) so that each layer directs water onto the layer below. For mulled units, complete this chapter after all units are joined and fastened. This chapter applies to nailing fin installations; for non-fin installations, flash the exterior per Chapter 6 and the project details.

1. Before flashing, confirm that all fin joints and all fastener heads through the fin are sealed (Chapter 5).

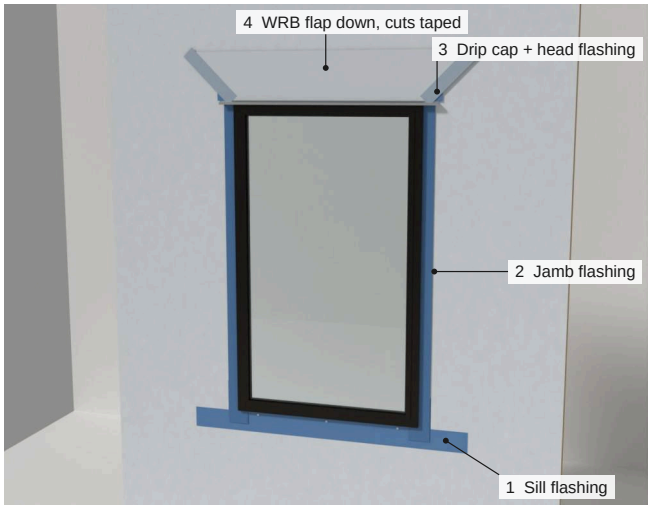
2. At each jamb, apply self-adhered flashing (min. 4" wide) or liquid flashing over the fin: lap over the sill flashing and extend at least 1" below its bottom edge, and extend at least 2" above the top of the head fin. Where possible, use the same standard (AAMA 711 / 714) and the same manufacturer's system as the sill flashing.

3. At the head, where required by local code or the exterior finish, first set the drip cap (rigid head flashing) in sealant. Then apply flashing over the head fin and the drip cap upturn, extending at least 1" beyond the jamb flashing at each end.

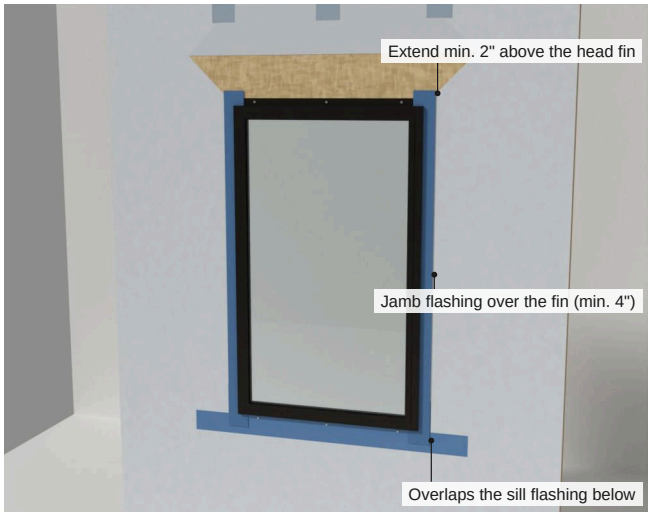
4. Fold the WRB head flap down over the head flashing and seal both 45° cuts with seam tape.

5. Cover the flashing with the exterior finish within the flashing manufacturer's recommended UV exposure limit.

6. Do not apply flashing or sealant over the sill fin; the sill must be able to drain.

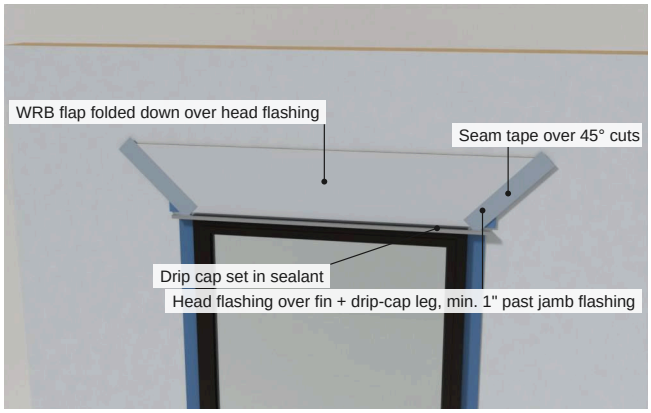


Shingle-lapped flashing sequence



Jamb flashing

Flashing lengths (AAMA 2400 Table 1)
Sill = RO width + 12" or more (min. 6" up each jamb)
Jamb = RO height + (2 × flashing width) − 1"
Head = RO width + (2 × flashing width) + 2"



Head flashing tucked under the WRB

Note: If the primary water barrier behind the exterior finish is installed by another trade, the owner or general contractor is responsible for its continuity and its integration with the window flashing.

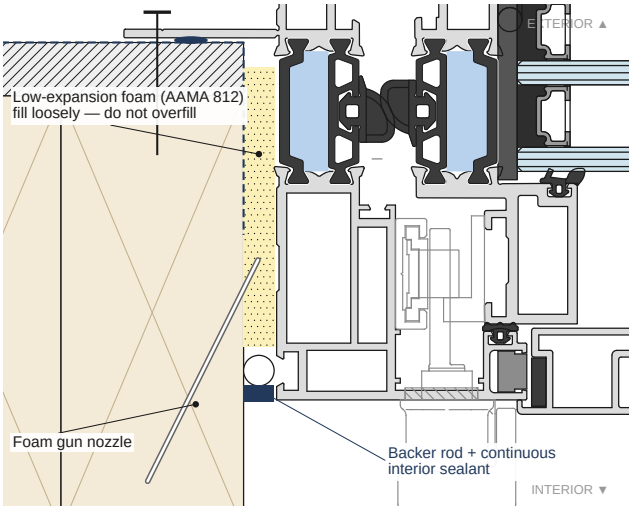
9 Insulation and Sealing

Interior

1. Fill the gap between the frame and the opening with low-expansion foam (AAMA 812) or loosely packed fiberglass insulation.

2. Do not overfill. One-component polyurethane foam exerts high pressure; if excess foam bows the frame, remove it and refill.

3. Complete the interior air seal with backer rod and a continuous bead of sealant around the entire interior perimeter, tooled flat. The opening is then water-resistant at the exterior and air-sealed at the interior (dual barrier).

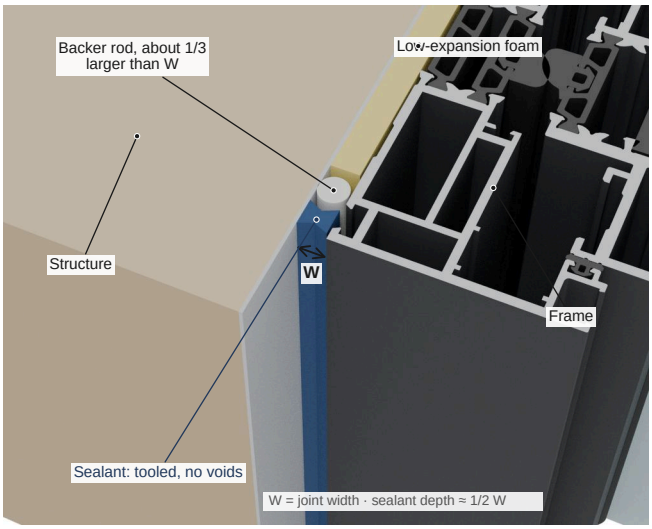


Insulate; do not overfill

Exterior

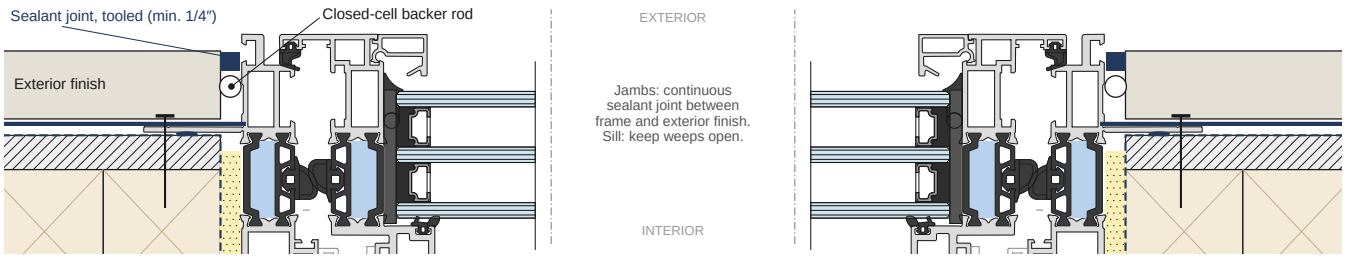
1. Leave a joint of at least 1/4" between the frame and the exterior finish. After the finish is complete, insert closed-cell backer rod approx. 1/3 larger than the joint width, then apply a continuous bead of sealant along both jambs. Where a drip cap is installed at the head, seal only 1"–2" in from each end so the drip cap can drain. Tool flat with no voids.

2. Leave the sill joint open, or treat it per the project drainage design; the sill weep holes must remain clear.



Exterior sealant joint

CAUTION: Do not seal or block the sill weep holes. Blocked weeps trap water in the frame.



10 Operation Check and Hardware Adjustment

After installation and flashing, check the operation and locking of every unit and adjust as needed before handover. Do not force sashes or open them beyond their stops.

Type	Operation	Hardware
Crank-out casement Crank-out awning	Turn the crank to open and close the sash. When closed, fold the handle into its cover, then engage the lock.	Folding crank handle; lock (frame interior)
Push-out casement Push-out awning	Turn the handle to unlock and push the sash out; to close, pull the sash in and turn the handle to lock. With screens, follow the sequence in Chapter 11.	Concealed handle or side-mounted stainless steel handle; limit stay above the sash. Awnings: friction hinges + extension arms
Push-out French casement	Open the active sash first, then the passive sash; close in reverse order.	Concealed handle
Tilt-turn	Handle down: closed and locked; horizontal: turn (swing in); up: tilt. Close the sash before changing the handle position.	Hopo side-mounted concealed handle or FSB face-mounted handle
Fixed	Non-operating	—

Check Every Unit

- Margins around the sash are even, gaskets are compressed full length, and no light shows when closed.
- All locking points engage fully; handles and locks turn smoothly without effort.
- Fully opened casements and awnings do not strike the wall, the exterior finish or other components. Siegenia concealed hinges on casements open to a maximum of 90°.
- Crank handles turn smoothly and fold into their covers when closed.
- Check screens per Chapter 11; sill weep holes are clear.

Adjustment

If a sash sags, rubs the frame or its locks do not align, check the installation first: equal diagonals, shims in place, frame not bowed by fasteners or foam. If problems remain once the frame is square, adjust the hinges (vertical, lateral, compression) per the hardware manufacturer's instructions, or contact Elephant Windows & Doors.

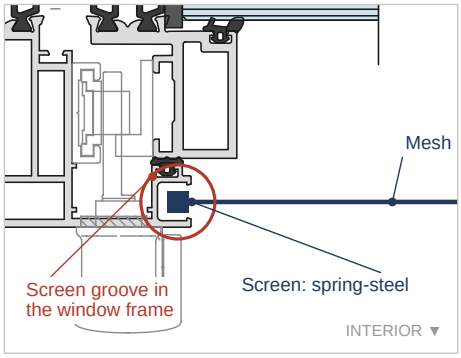
Do not remove hinges, relocate locking points or drill additional holes in the profiles.

11 Screen Installation

Install screens after the window is installed, flashed and sealed. The screen type depends on the window type and operation; fixed windows have no screen. Except on tilt-turn windows, G Max screens are on the interior side.

Type	Screen option	Location	Use
Crank-out casement Crank-out awning	Flexible screen (standard) Fixed high-visibility stainless mesh screen	Interior	Stays in place; crank operated inside the screen
Push-out casement Push-out awning	G Max folding screen Hinged high-visibility stainless mesh screen	Interior	Folding screen slides out sideways; hinged screen swings in, max. 90°
Push-out French casement	G Max folding screen	Interior	Slides out sideways
Tilt-turn	Hinged high-visibility stainless mesh screen	Exterior	Screen swings out, max. 90°
Fixed	None	—	—

Flexible Screen: Crank-Out Casements and Awnings



Flexible screen: spring-steel edge in the interior screen groove

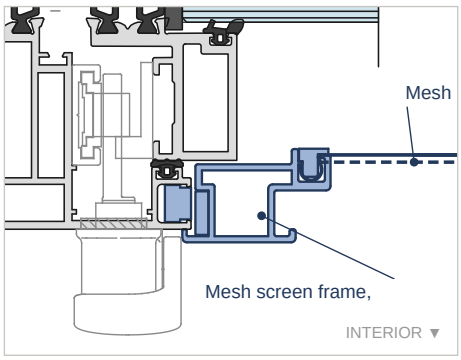
The flexible screen has no aluminum frame and needs no hardware; its spring-steel edge snaps into the screen groove built into the window frame. The screen has a front and a back; check the orientation before installing.

Install: 1. Hold the screen with both hands and bow the two long sides toward the center. 2. Keeping it bowed, seat one upper corner in the upper corner of the groove, then the other. 3. Seat both lower corners and release slowly so the screen springs open, with all four edges in the groove and the mesh flat.

Remove: 1. Bow the two long sides toward the center, lift slightly, and free one lower corner from the groove. 2. Free the other lower corner. 3. With both lower corners out, pull the screen down out of the upper groove.

When the window is wider than it is tall, rotate the steps 90°: bow the two short sides and use the left and right sides instead of the top and bottom.

Fixed High-Visibility Mesh Screen: Crank-Out Casements and Awnings



Aluminum-framed high-visibility mesh screen in the same groove

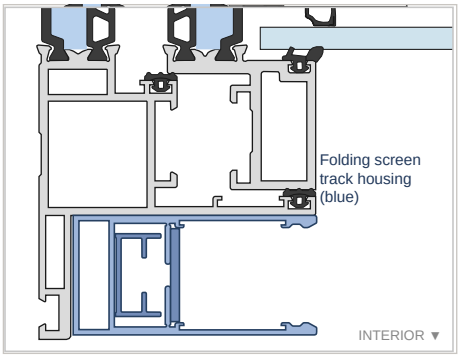
An aluminum-framed screen with fine stainless steel mesh that fits the same screen groove as the flexible screen. Sturdier than the flexible screen.

Install: 1. Align the screen frame with the screen groove and press it in, evenly seated on all four sides. 2. Turn in the two thumb screws by hand so their heads engage the groove and secure the screen. 3. Check that the crank operates normally.

Remove: Loosen the two thumb screws by hand and lift the screen out.

11 Screen Installation (cont.)

G Max Folding Screen: Push-Out Casements, Awnings and French Casements



Folding screen frame on the interior side of the window frame (blue)

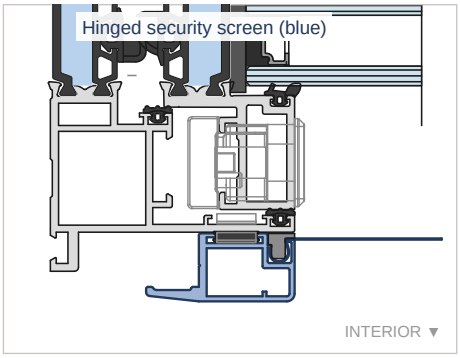
The dedicated G Max pleated folding screen consists of a screen frame and the folding screen.

Install: 1. Install the screen frame on the interior side of the window frame. 2. Place the folding screen in the screen frame. 3. Pull it out and retract it once to confirm smooth travel without binding, and that the pull bar meets the frame.

Use: Keep the screen retracted while the window is closed. To open, turn the handle and push the sash out, then pull out the screen; before closing, retract the screen, then pull the sash in and lock it.

Interior finish: on windows with folding screens, the interior finish may be no more than 1/2" thick, and at least 2-3/16" must remain from the finished face to the frame opening; otherwise the screen cannot be installed.

Hinged High-Visibility Mesh Screen: Push-Out Casements, Awnings and Tilt-Turns



Hinged screen on push-out windows: interior, swings in

Push-out casements and awnings: the screen is on the interior and swings in. Tilt-turn windows: the screen is on the exterior and swings out. Maximum screen opening is 90°.

Install (either way):

• Hang the screen directly on the hinges on the window frame.

• Or push out the pins of the small hinges on the frame, align the screen hinges, and reinsert the pins.

After installing, open and close the screen once to confirm that its frame is aligned and seals all around when closed.

Opening a push-out window: swing the screen in, turn the handle and push the sash out, then close the screen.

CAUTION: Interior casings and window treatments must not cover or press on the screen groove or folding screen frame, or obstruct the screen's swing. On tilt-turn windows the screen is on the exterior, projects approx. 1/4" beyond the frame exterior face and swings out 90°; exterior finishes, trim and shading devices must not obstruct it.

12 Care and Maintenance

Cleaning

• Clean glass with a liquid glass cleaner.

• Clean exterior frames, sashes and screens with mild detergent and water, using a soft cloth or brush.

• For stubborn areas, use a non-abrasive cleaner, alcohol and water, or ammonia and water.

• Elephant strongly recommends cleaning all products after installation and protecting them from construction debris and equipment.

CAUTION Acid solutions used to clean masonry or concrete will damage glass, fasteners, hardware and metal flashing. Protect the windows; if acid contacts a window, flush all surfaces with water immediately.

CAUTION Abrasive cleaners will damage the glass surface.

Removing Protective Film

• Remove the protective film from profiles and glass as soon as the exterior finish and perimeter sealant are complete; after prolonged sun exposure the film is hard to remove and may leave residue.
• Do not pull on sealant joints while peeling; do not use blades or metal tools. Remove residue with mild detergent.

CAUTION Metal blades will damage the glass surface and the exterior finish.

Maintenance

• Keep sill weep holes free of dust, plaster and construction debris.

• Inspect perimeter sealant joints annually and repair any gaps or cracks.

• Clean hardware with mild detergent; lubricate hinges and operators with silicone-based lubricant as needed.

• For more information, contact Elephant Windows & Doors or visit elephant-windows.com.

Warranty: This product has a factory-applied finish. Failure to protect exposed surfaces from corrosive materials, solvents, abrasion, impact and wet packaging materials voids the warranty. Water penetration resulting from installation that deviates from these instructions is not covered by the Elephant Windows & Doors warranty. For any questions, contact Elephant Windows & Doors.

ELEPHANT WINDOWS & DOORS, INC.
3233 De La Cruz Blvd, Unit B, Santa Clara, CA 95054 · elephant-windows.com

A Appendix: Field Glazing (Special Cases Only)

Factory glazing: all G Max windows are glazed and inspected at the factory. Standard installation does not require field glazing; do not remove the glazing beads.

Field glazing is required only in special cases: replacing damaged glass, oversized units shipped knocked down due to site access, or special butt-glazed corners. Contact Elephant Windows & Doors before field glazing, and use only Elephant-approved replacement glass.

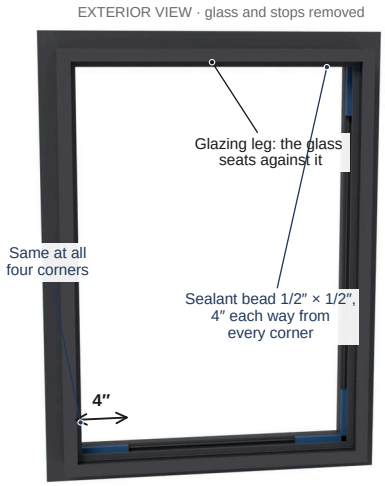
Field Glazing Steps (When Required)

1. Remove the glazing beads from the exterior (G Max glazing beads are on the exterior) and set them aside in order.

2. On the glazing leg, apply a 1/2" × 1/2" × 4" length of compatible sealant from each corner.

3. Place the setting blocks. Operating sash: place the bottom block approx. 4" from the hinge-side bottom corner; once the glass is seated, tack the block at both ends with sealant. Place the top edge block at the handle-side top corner, wedge it tight between glass and frame, and tack both ends with sealant so it cannot shift. When glazing upright in the field, first raise the handle-side bottom corner approx. 1/16" so the hinge-side bottom to handle-side top diagonal is approx. 1/16" longer than the other, then glaze and wedge the top block, so the sash does not sag after installation. Fixed units: place setting blocks at the quarter points of the bottom edge.

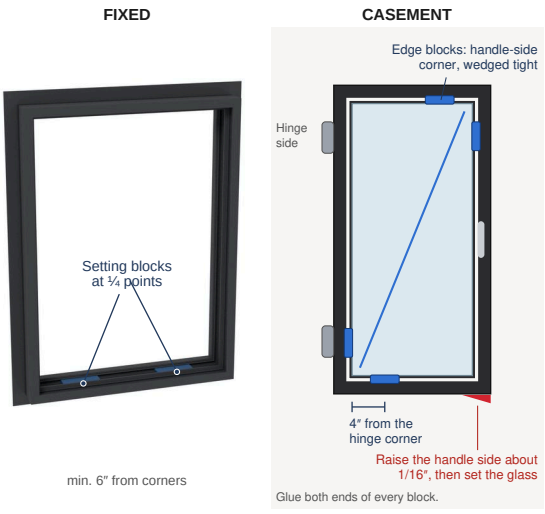
4. Set the glass against the glazing leg, then reinstall the glazing beads.



Corner sealant: 4" each way

Do Not Modify the Glazing in the Field

Do not convert to wet glazing or add sealant between the glass and the frame. If you need to replace glass or feel additional weatherproofing is needed, contact Elephant Windows & Doors first.



Setting block locations