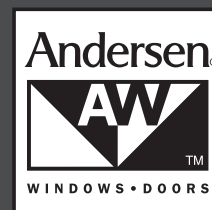


Reglazing Guide

for Andersen® 400 Series Casement/Awning Picture and Transom Windows with Stormwatch® Protection (High-Performance™ Impact Resistant Glass)



INSTALLER: This reglazing procedure is to be performed only by a professional glazier or an Andersen® service provider.

Replace entire unit if storm damage has broken glass, damaged the frame in any way, or resulted in any cracks and/or voids on the interior and/or exterior frame corners.

Important Safety, Assembly, and Installation Information

Impact Resistant Glass used by Andersen is not hurricane proof or shatter proof, and may not offer a high level of security. Proper installation of window and door units with impact resistant glass is as important to product performance as the glass. Every assembly and installation is different (windloads, structural support, etc.), and Andersen strongly recommends consultation with an Andersen supplier or an experienced contractor, architect, or structural engineer prior to the assembly and installation of any Andersen product. Andersen has no responsibility in regard to the post-manufactured assembly and installation of Andersen products.

⚠ WARNING

Using ladders and/or scaffolding and working at elevated levels may be hazardous. Follow equipment manufacturer's instructions for safe operation. Use extreme caution when working around window and door openings. Falling from opening may result in personal injury or death.

⚠ WARNING

Improper use of hand/power tools could result in personal injury and/or product damage. Follow manufacturer's instructions for safe operation of equipment. Always wear safety glasses.

⚠ WARNING

Weight of window/door unit(s) and accessories will vary. Use a reasonable number of people with sufficient strength to lift, carry, and install window and door unit(s) and accessories. Always use appropriate lifting techniques.

⚠ WARNING

Unless specifically ordered, Andersen windows and doors are not equipped with safety glass, and if broken, could fragment causing injury. Many laws and building codes require safety glass in locations adjacent to or near doors. Andersen windows are available with safety glass that may reduce the likelihood of injury when broken. Information on safety glass is available from your local Andersen dealer.

⚠ CAUTION

- Andersen® Head Flashing and Installation Flanges **DO NOT** take the place of standard window and door flashing. Unit must be properly flashed and sealed with silicone for protection against water and air infiltration. Use non-reflective flashings. Highly reflective flashing tapes can raise the surface temperature of the vinyl to the point where vinyl deformation and product damage may occur.
- Do not apply any type of film to glass. Thermal stress conditions resulting in glass damage could occur.
- Use of movable insulating materials such as window coverings, shutters, and other shading devices may damage glass and/or vinyl. In addition, excessive condensation may result causing deterioration of windows and doors.

Parts Included

- (1) Glass Light
- (1) Bed Glazing Silicone, Dow Corning 1350 (4230229)
- (1) 3/16" x 1/8" Lateral Glass Spacer (2230012)

Additional Parts Required (Contact Your Andersen Dealer)

- (1) Fillet Bead Silicone, Dow Corning
White (2903008), Terratone® (2903010),
Sandtone (2092512), Forest Green (2903026)
- (1) Glass Stop Kit (Stops, Screws)
- #8 x 1-1/2" Screws
- 4d (1-1/2") Finish Nails

Optional Material (Reuse existing sill glass spacers when possible)

- 1/4" x 7/8" x 6" Sill Setting Block (2250105)
- 1/8" x 7/8" x 6" Head and Side Spacers (2250109)

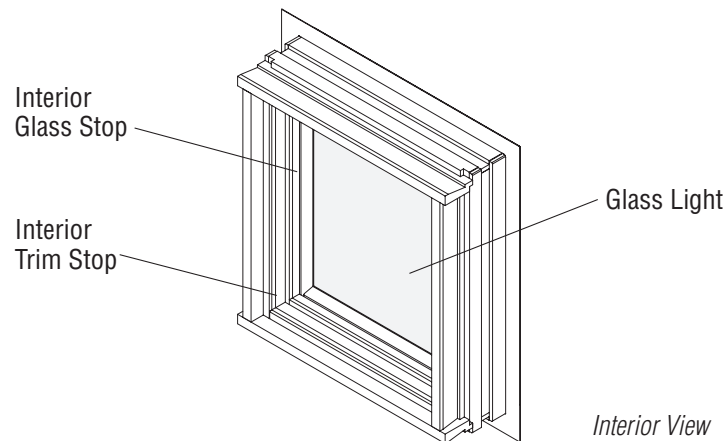
Tools and Supplies

- Vise Grips
- Flat Blade Screwdriver
- 1/4" Wood Chisel
- Glass Clamps (Commercial Grade)
- Gloves
- Safety Glasses
- Utility Knife
- Caulk Gun
- Thin Blade Putty Knife
- Pencil
- Nylon Putty Knife
- Flat Pry Bar
- Hammer
- Nail Set
- Drill
- T-15 Torx Drive
- 5/64" Drill Bit
- Duct Tape
- Isopropyl Alcohol

IMPORTANT

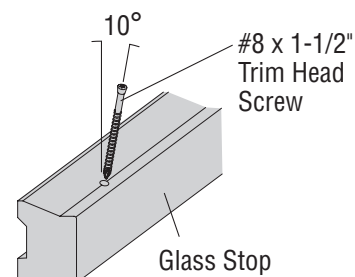
- This procedure requires a high level of construction skill. If you do not possess a high level of skill in construction, window installation or reglazing, Andersen recommends that you contact a qualified Andersen service provider to reglaze your window.
- To determine if you have the appropriate level of skill to properly and safely perform this procedure, read through the instruction manual. If you have any questions or concerns about your ability to complete this procedure, contact a professional Andersen service provider to complete this work for you.
- If your unit has grilles applied to the glass, these grilles need to be removed prior to reglazing. Since specialized tools are required to remove the grilles, it is recommended that the reglazing procedure be done by a professional Andersen service provider.

Component Identification



1. Prepare New Glass Stops

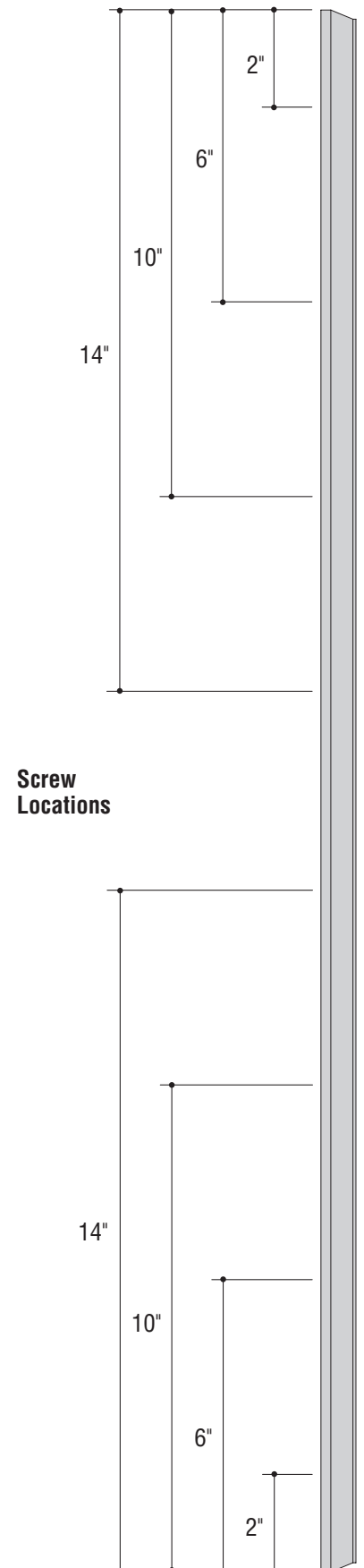
- Identify the number of #8 x 1-1/2" trim head screws needed based on unit size in Table 1, **Page 3**.
- Mark screw locations on *Glass Stop* 2", 6", 10", and 14" from each end (as length applies), as shown on **Page 3**. Locate remaining screws every 12" in between (as length applies).
- Drill 5/64" holes at 10° angle at marked screw locations.



1. Prepare New Glass Stops (Continued)

Table 1 Glass Stop Screw Quantity

UNIT	RAIL LENGTH	SCREWS PER RAIL	STILE LENGTH	SCREWS PER STILE	TOTAL SCREWS
CTR1510	13 3/8"	4	8 3/8"	2	12
CTR1810	16 7/8"	4	8 3/8"	2	12
CTR2010	20 1/2"	5	8 3/8"	2	14
CTR2410	24 3/4"	6	8 3/8"	2	16
CTR2810	27 7/8"	7	8 3/8"	2	18
CTR2910	30 1/8"	8	8 3/8"	2	20
CTR/PTR3010	32 5/16"	8	8 3/8"	2	20
CTR3410	37 1/8"	8	8 3/8"	2	20
PTR3510	37 3/16"	8	8 3/8"	2	20
CTR/PTR4010	44 3/8"	9	8 3/8"	2	22
PTR4510	49 3/16"	9	8 3/8"	2	22
CTR4810	52 7/8"	9	8 3/8"	2	22
PTR5010	56 1/4"	10	8 3/8"	2	24
CTR5210	59 1/8"	10	8 3/8"	2	24
PTR5510	61 3/16"	10	8 3/8"	2	24
CTR51110	68"	11	8 3/8"	2	26
CTR/PTR6010	68 1/4"	11	8 3/8"	2	26
P3030	32 5/16"	8	32 5/16"	8	32
P3035/P3530	32 5/16"	8	37 3/16"	8	32
P3040/P4030	32 5/16"	8	44 3/8"	9	34
P3045/P4530	32 5/16"	8	49 3/16"	9	34
P3050/P5030	32 5/16"	8	56 1/4"	10	36
P3055/P5530	32 5/16"	8	61 3/16"	10	36
P3060/P6030	32 5/16"	8	68 1/4"	11	38
P3535	37 3/16"	8	37 3/16"	8	32
P3540/P4035	37 3/16"	8	44 3/8"	9	34
P3545/P4535	37 3/16"	8	49 3/16"	9	34
P3550/P5035	37 3/16"	8	56 1/4"	10	36
P3555/P5535	37 3/16"	8	61 3/16"	10	36
P3560/P6035	37 3/16"	8	68 1/4"	11	38
P4040	44 3/8"	9	44 3/8"	9	36
P4045/P4540	44 3/8"	9	49 3/16"	9	36
P4050/P5040	44 3/8"	9	56 1/4"	10	38
P4055/P5540	44 3/8"	9	61 3/16"	10	38
P4060/P6040	44 3/8"	9	68 1/4"	11	40
P4545	49 3/16"	9	49 3/16"	9	36
P4550/P5045	49 3/16"	9	56 1/4"	10	38
P4555/P5545	49 3/16"	9	61 3/16"	10	38
P4560/P6045	49 3/16"	9	68 1/4"	11	40
P5050	56 1/4"	10	56 1/4"	10	40
P5055/P5550	56 1/4"	10	61 3/16"	10	40
P5060/P6050	56 1/4"	10	68 1/4"	11	42

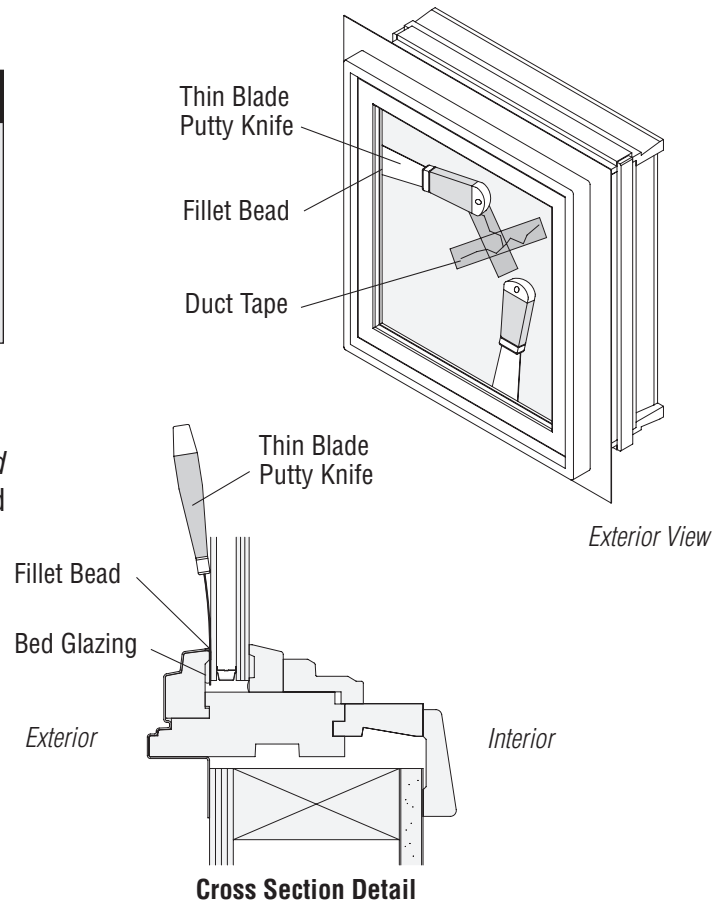


2. Tape Glass and Cut Fillet Bead

⚠ WARNING

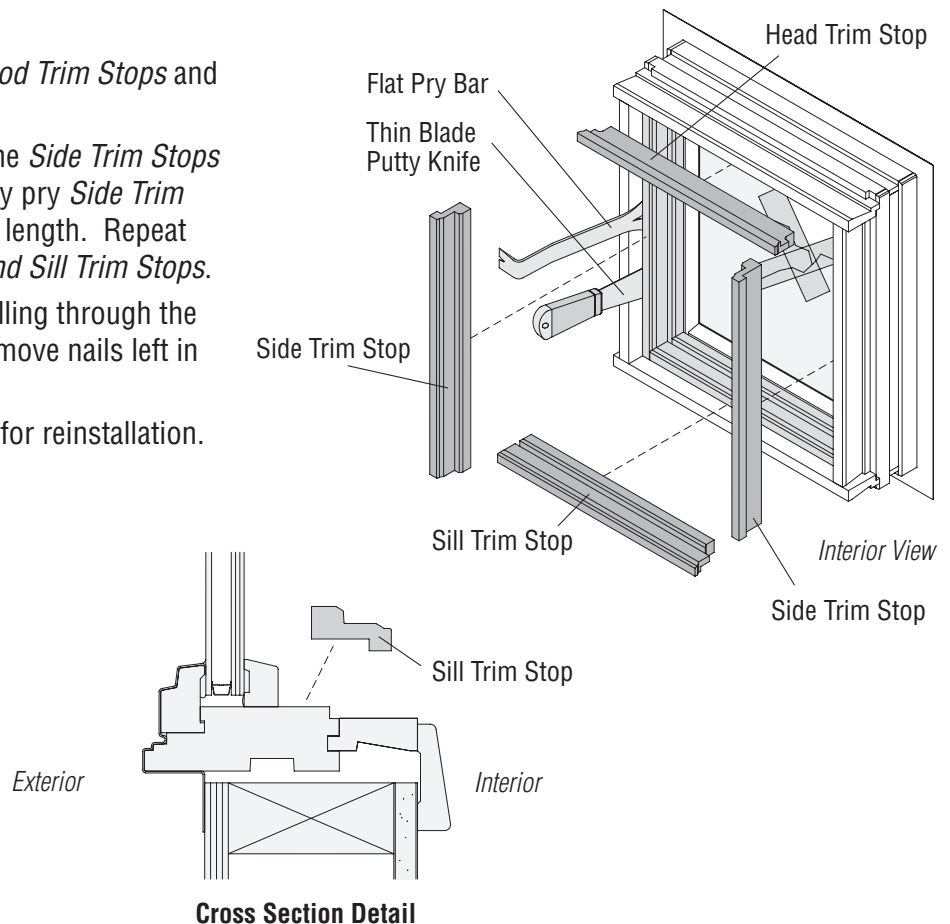
Wear gloves and safety glasses when handling glass. Tape broken glass with duct tape before removal to reduce glass fragmentation. Failure to do so may result in personal injury, product, and/or property damage.

- Tape damaged glass with duct tape.
- Working from the exterior use a *Thin Blade Putty Knife* with blade fully extended to cut the *Fillet Bead* and *Bed Glazing* the full perimeter of the unit. Knife blade should penetrate through *Fillet Bead* 5/8" so it reaches *Bed Glazing*.



3. Remove Wood Trim Stops

- Break varnish/paint seal between *Wood Trim Stops* and glass using a thin blade putty knife.
- Insert a flat pry bar between one of the *Side Trim Stops* and frame, from the interior. Carefully pry *Side Trim Stop* toward exterior along the entire length. Repeat for opposite *Side Trim Stop*, *Head*, and *Sill Trim Stops*.
- Remove nails from *Trim Stops* by pulling through the backside using a vise grip pliers. Remove nails left in trim stop area.
- Mark location on back of *Trim Stops* for reinstallation.



4. Remove Glass Stops and Damaged Glass

- Remove *Head*, *Sill* and *Side Glass Stops* from unit using a small pry bar and putty knife. *Glass Stops* may have a silicone bond with glass and may be difficult to remove.
- Retain *Glass Stops* for future use. *Glass Stops* will be reused as temporary stops when installing replacement glass.
- Mark location of *Glass Spacers* for reinstallation.

⚠ WARNING

Support Glass Panel at all times once cutting of back glazing begins. Glass Panel may fall inwards. Handle broken glass with extreme caution. Failure to do so may result in injury.

⚠ WARNING

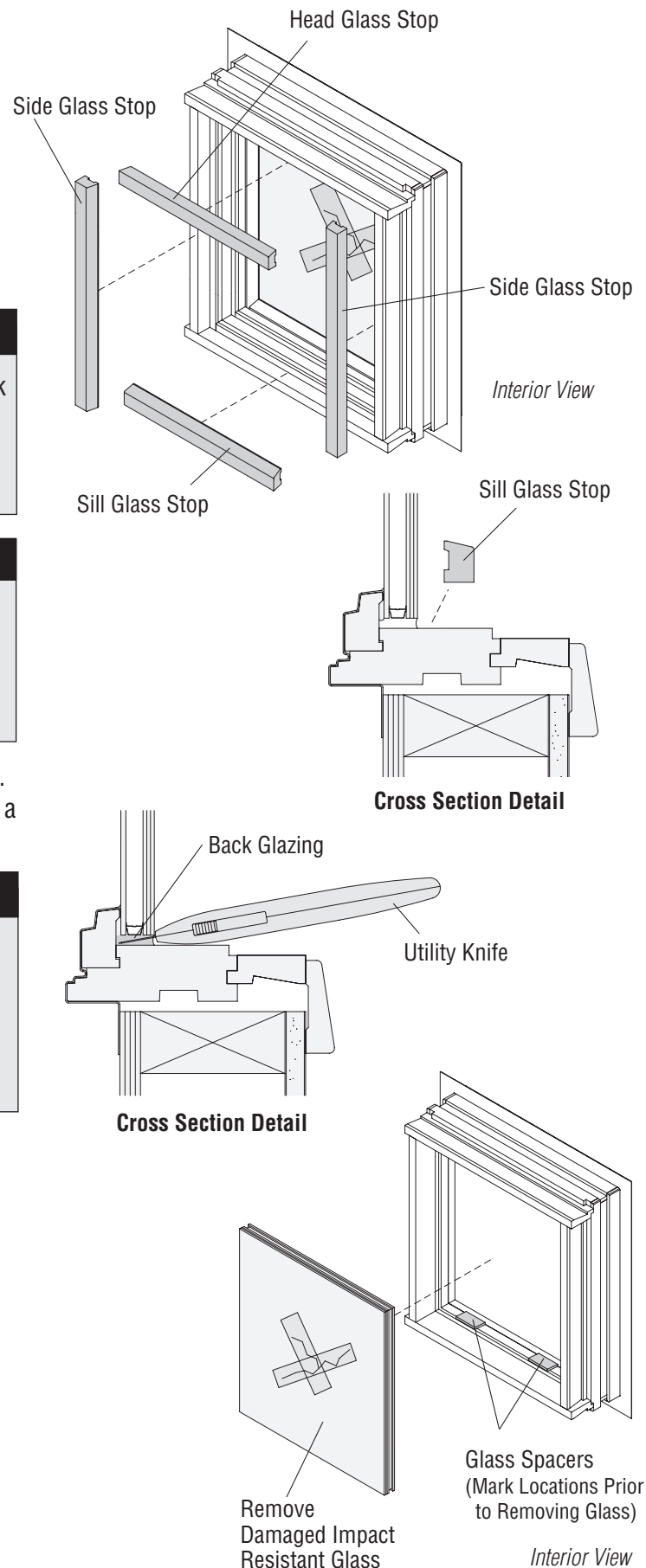
Weight of glass will vary. Use a reasonable number of people with sufficient strength to lift, carry, and install glass. Always use appropriate lifting techniques. Failure to do so may result in injury.

- Cut silicone *Back Glazing* around full perimeter of unit. Trim *Back Glazing* as close to frame as possible using a utility knife or glazing cutting tool.

⚠ WARNING

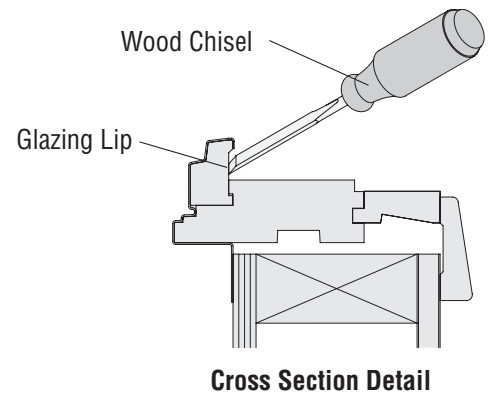
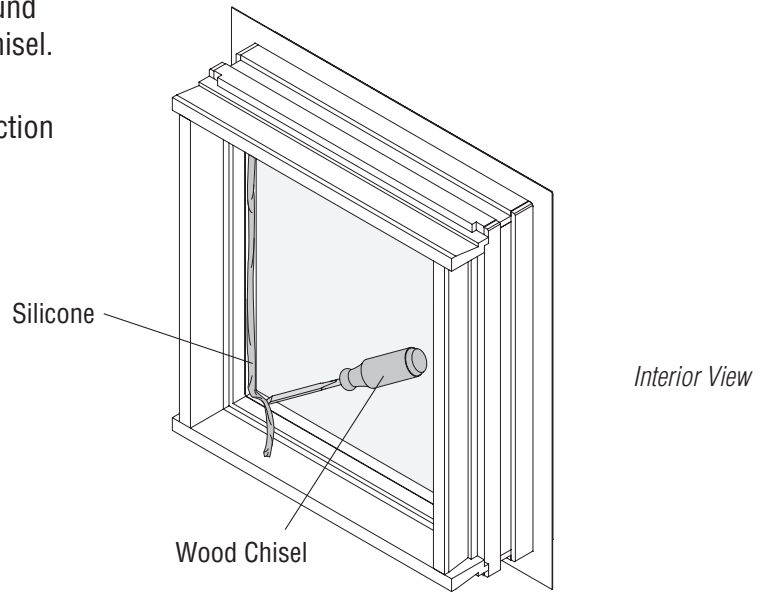
Use extreme care when working around window opening. Never leave a window opening unattended, especially when children are present. Falling from window opening may result in severe personal injury or death.

- Carefully remove and properly dispose of damaged *Impact Resistant Glass*.
- Remove and retain *Glass Spacers* for reinstallation.



4. Remove Glass Stops and Damaged Glass (continued)

- Remove silicone from *Glazing Lip* and frame (around full perimeter of unit) using putty knife or wood chisel. Clean surface with isopropyl alcohol and air dry.
- Cut retained *Glass Stops* into 6" sections. A 6" section is required for every 12" of glass side edge.



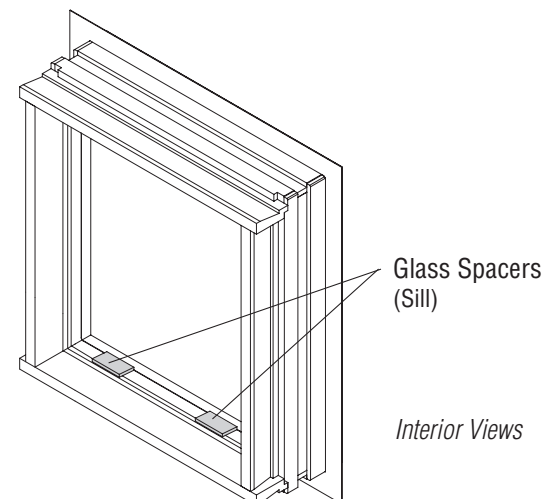
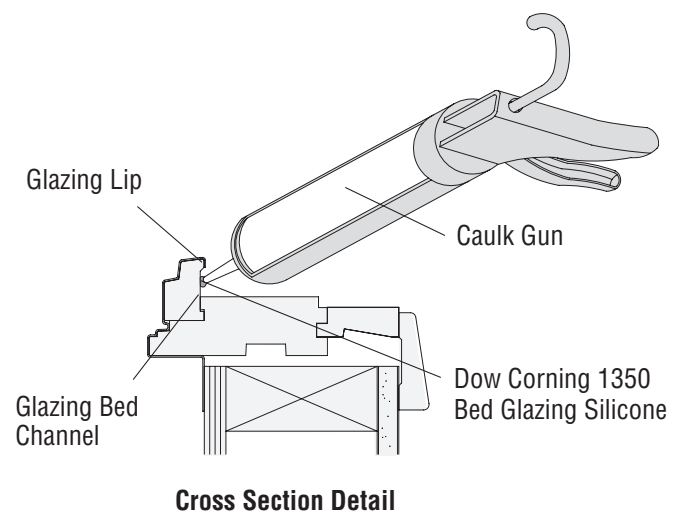
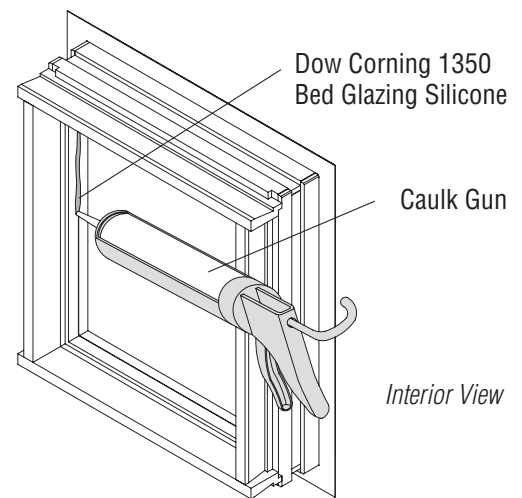
5. Install Replacement Glass

⚠ WARNING

Weight of glass will vary. Use a reasonable number of people with sufficient strength to lift, carry, and install glass. Always use appropriate lifting techniques. Failure to do so may result in injury.

⚠ CAUTION

- Remove all obstructions from glazing area that could chip glass and lead to breakage. Use caution when handling glass. Protect glass edges, and **DO NOT** roll glass on edges or corners. Breakage or damage may occur.
 - For high altitude glass, make sure breather tube (located at the top of the glass) is not plugged or pinched during procedure. Plugging or pinching of breather tube may result in collapsed or damaged glass.
 - **DO NOT** use a metal knife and/or metal objects against glass surface to avoid scratching or chipping.
- Remove replacement *Impact Resistant Glass* from crating and clean perimeter with surface conditioner.
 - Prepare caulk gun with *Dow Corning 1350 Bed Glazing Silicone*.
 - Apply a 3/8" diameter bead of *Dow Corning 1350 Bed Glazing Silicone* to entire perimeter of glazing bed channel and place *Sill Glass Spacers* at marked locations.
 - Replace *Sill Glass Spacers* at pre-marked positions.



5. Install Replacement Glass (Continued)

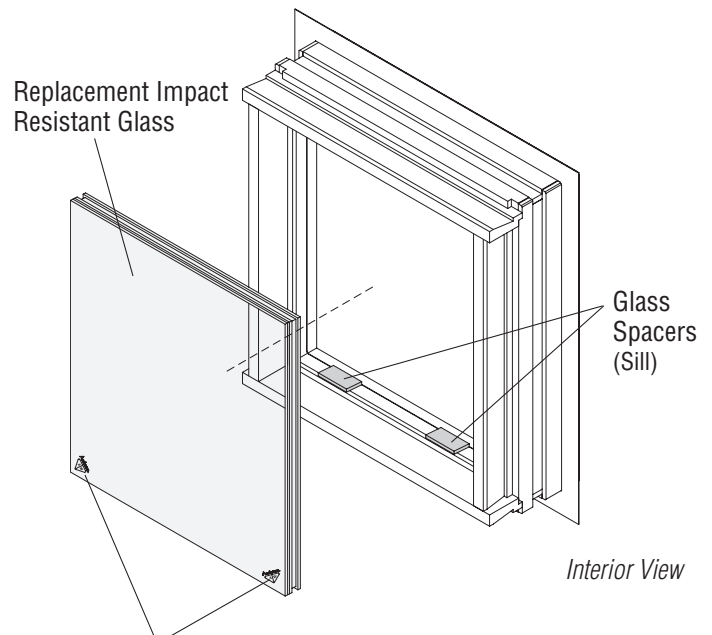
⚠ WARNING

Support Glass Panel until glass stops are screwed in. Glass Panel may fall inward resulting in personal injury, product, and/or property damage.

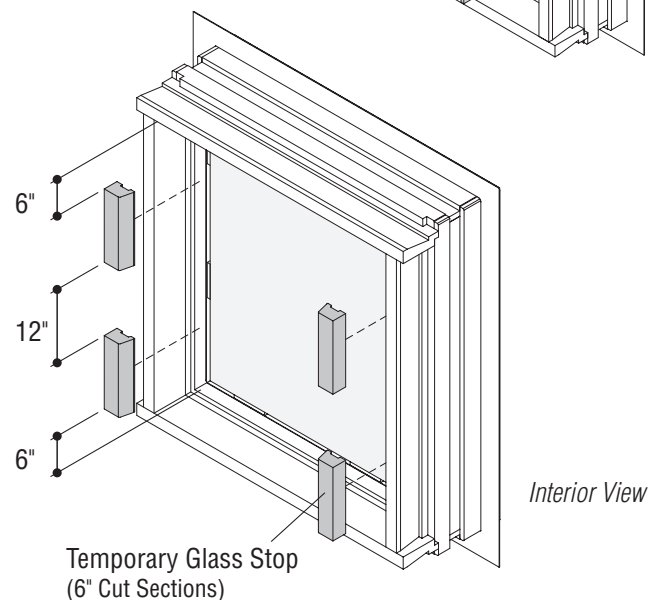
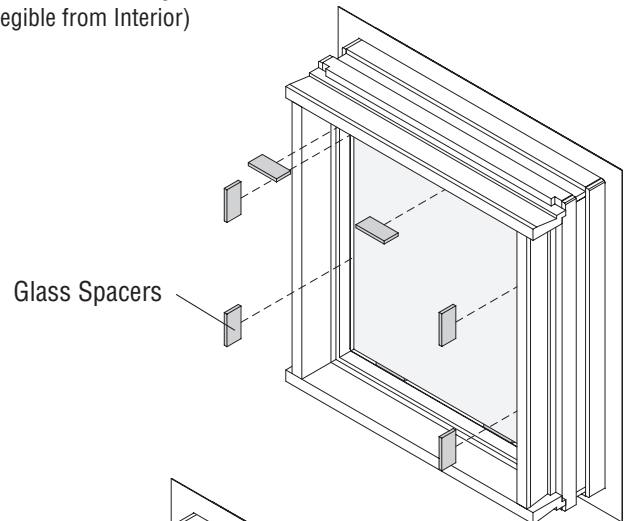
NOTICE

Glass logo must be located in bottom left or right corner of unit, legible from the interior. Glass logo is critical for glass warranty information and Low-E coating orientation.

- Set bottom edge of glass on *Sill Glass Spacers*, and push top of glass into bed glazing.
- Center glass using a **nylon** putty knife to pry between glass and jamb, if needed.
- Apply remaining *Glass Spacers* to sides and head at previously marked locations.
- Apply previously removed and shortened, temporary, *Glass Stops* to sides and **press glass outwards** to fully seat glass tight against glazing lip.
- Space first 6" section of temporary *Glass Stop* 2" from glass edge. Secure to frame using #8 x 1-1/2" screw centered on stop. Repeat for opposite side.
- Space additional *Temporary Glass Stops* 12" apart and secure as previously described.



Glass Logo Locations
(Bottom Left **or** Right Corner,
Legible from Interior)



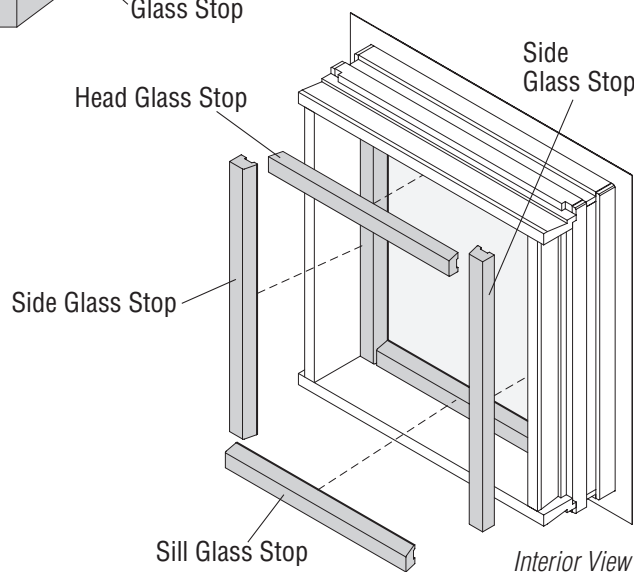
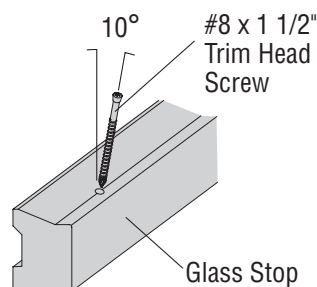
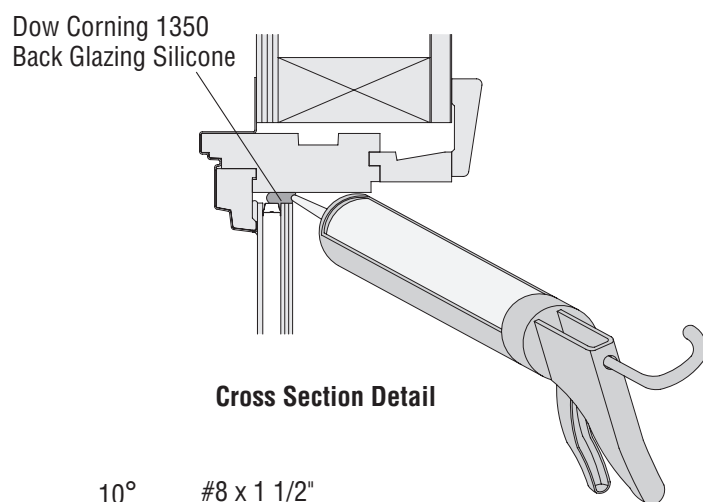
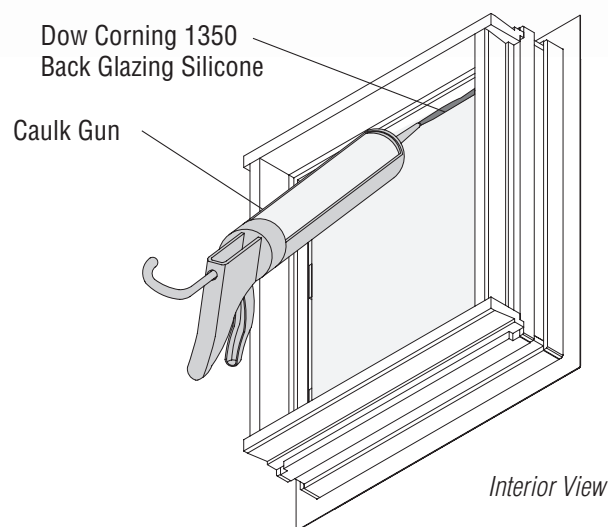
6. Back Glaze and Install Stops

- *Back Glaze* head of unit with *Dow Corning 1350 Back Glazing Silicone* (use only silicone provided) while applying pressure to glass. Fill void completely between edge of glass and frame.
- Apply replacement *Head Glass Stop* to unit.

⚠ CAUTION

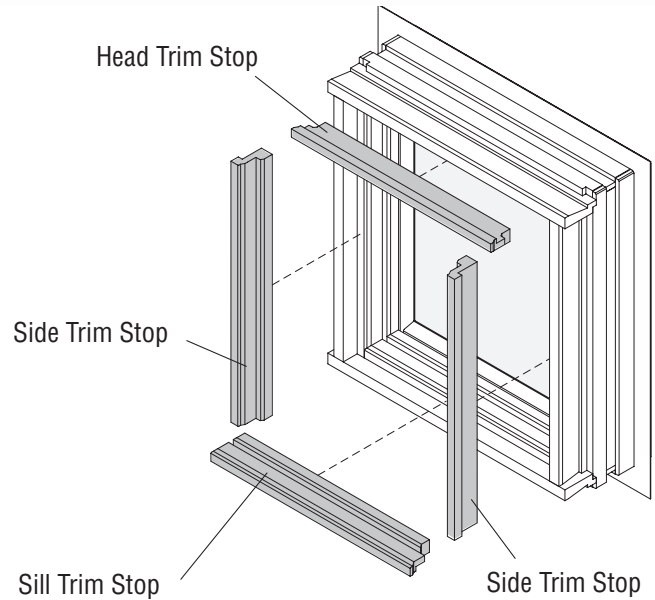
Fasten flat portion of *Glass Stops* at no more than a 10° angle to glass surface as shown. Failure to do so could result in glass edge damage and/or glass breakage.

- Apply outward pressure on *Glass Stop* seating glass in bed glazing before fastening. Fasten *Glass Stop* using #8 x 1-1/2" trim head screws at no more than a 10° angle at pre-drilled locations. While fastening, continue to push on *Glass Stop* to make sure glass is tight against frame.
- Repeat back glazing at sill, apply replacement *Sill Stop*, and fasten *Sill Glass Stop* as in previous step.
- Remove *Temporary Side Glass Stops*.
- Back glaze sides of unit, apply replacement *Side Stops*, and fasten *Side Glass Stops* as previously described.



6. Back Glaze and Install Stops (Continued)

- Apply *Trim Stops* to unit and fasten using 1-1/2" (4d) finish nails. Use same nail spacing as original nails, nailing next to original holes.
- Set nail heads in *Glass Stops* and *Trim Stops* approximately 1/16".



Interior View

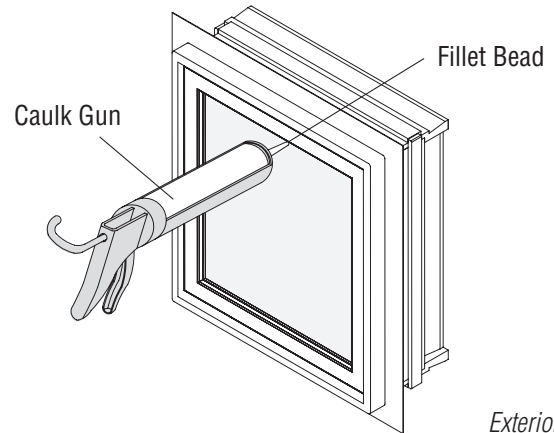
7. Apply Silicone Fillet Bead

- Clean *Fillet Bead* area with clean cloth and isopropyl alcohol.
- Apply a 3/16" *Fillet Bead* of color matched *Silicone* to exterior seal between *Glazing Lip* and glass (full perimeter) using a caulk gun.

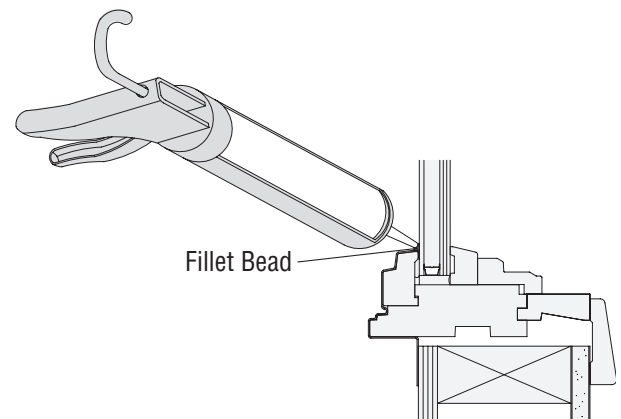
NOTICE

Wait until Silicone cures before removing excess from glass. Use a nylon knife to scrape off and when scraping, apply a liberal amount of window cleaner to keep area lubricated.

- Clean excess *Silicone* around *Fillet Bead*, if needed.



Exterior View



Cross Section Detail