

How to change a defective or broken insulating glass unit in the field

This process applies to all Windows & Doors' welded double-hung, single-hung, slider, picture window, awning, patio door and casement products. The following instructions detail the proper methodology for applying the permanent field solution.

Careful attention must be paid to ensure the glass pack thickness is the same as the original. Safety gloves, safety glasses and protective gauntlets should always be worn whenever handling glass.

Replace a tempered IG unit with tempered glass. In most cases, tempered glass is installed per code. If unfamiliar with these codes, err on the side of caution and play it safe. In most cases tempered glass is marked with a small-etched logo in an inconspicuous corner.

A) Field replacement process

1. From the interior of the building, remove the screen (casement and awning only).
2. Remove the sash from the frame.
3. Remove the glazing beads from the sash or frame by inserting a chisel between the bead and the edge of the sash or frame profile. With gentle pressure, push in the direction opposite to the way the bead was inserted and extract it from the glazing pocket.
4. Insert a moon knife between the glass and the glazing leg of the sash or frame. Applying constant force, pull tool along the length of unit. Repeat for each side of unit. Once bond between tape and vinyl or glass has been severed, carefully remove IG unit.
5. It is very important that all remaining tape residue be removed from the sash or frame vinyl with a moon knife, 3/8-inch wood chisel, or 3/8-inch flat-head screwdriver.
6. Beginning with the bottom horizontal component (rail, sill or mullion) apply glazing tape along the entire length of the component at the outermost edge of the glazing leg (vinyl). Repeat this step for all remaining sides; make sure to butt the tape ends together but do not overlap them.
7. Make sure all setting blocks are in the proper locations. If they are not, replace the missing blocks or reposition existing blocks.
8. Remove the glazing tape backer no more than 4 inches from each corner and fold the backing material over to prevent it from getting trapped in the window once the IG is put in place. Apply a 1/8-inch diameter drop of sealant on the butt joints of the glazing tape.
9. Re-install the new IG unit into the sash or frame. Make sure that the low-emissivity side faces toward the outside of house, when applicable. The low-e side can be identified by viewing the IG unit from the side; it will appear darker.
10. Make sure the IG is properly aligned. Carefully remove the glazing tape backer.

Once removed, press firmly and uniformly around the perimeter of the IG unit to ensure contact between tape and glass.

11. Re-install the sash into the frame. Close and lock the window.
12. Using minimal force, re-install the glazing beads with a plastic mallet or hammer. Clean the glass.
13. Replace the screen (casement and awning only).

How to de-glaze and re-glaze single-hung windows in the field that contain IG units sealed with a moisture-cure polymer or wet glazing

B) De-glazing

1. The single-hung sash is left in the frame at all times during this process. From inside, remove the vertical glazing beads with a wood chisel. Insert the chisel between the glazing bead and the sash, and apply gentle pressure to remove the glazing bead from the sash. On slider products, remove the operable sash by sliding it past the anti-lift blocks, then lift the sash up and out of the mainframe. Place sash with glazing beads facing up on a drop cloth or some other protective covering.
2. Tilt the single-hung sash in so that the glazing bead side of the sash faces down. Insert a flexible EZD Glazer or “pizza cutter” between the glass and the glazing leg of the sash, apply constant pressure and roll the tool along the length of the unit on all four sides until the bond between the sealant and the sash is removed.
3. Return the sash to the original position and remove the horizontal glazing beads, using the same instructions for removing the vertical glazing beads described above.
4. Carefully remove the IG unit from the sash by pushing gently from the outside in.
5. Remove the moisture-cure polymer or sealant. Starting in the middle, begin pulling the sealant straight up and off of the sash. As the sealant is removed, begin balling it up and use it to continue to remove the rest of the sealant on the sash.
6. If reusing the existing IG unit, clean all sealant residues from the edges of the glass with a glass scraper.
7. Check the sash for any defects and make sure the setting blocks are in the correct locations before starting the re-glazing procedure.

C) Re-glazing

1. Beginning at the bottom horizontal edge of the sash, apply glazing tape along the entire length at the inside edge of the glazing leg retainer nub. Repeat step for the top horizontal edge next, and then for the side edges. The tape ends should be butted together, not overlapped.
2. Remove the tape backer from the two sides and the top.
3. Peel back the tape backer on the bottom 2 inches from each end. If the temperature is below 45 degrees Fahrenheit, remove the bottom tape backer completely.
4. Apply silicone to the joints between the glazing tape at the corners to ensure a weather-tight seal and cover any inconsistencies.
5. Install IG unit into the sash; make sure the fill hole is located at the top of the left side. If the IG unit has low-e, identify the low-e side by looking at the unit from the side. The low-e will be the darker piece of glass; that side should be glazed against

the tape.

6. Remove the tape backer from the bottom.
7. Press firmly around the edges to set the tape.
8. Re-install the glazing beads, using hand pressure or a block of wood to support the edges of the sash and making sure that the sash rails do not bow.

D) Replacing the top of a single-hung window

The following instructions detail the proper methodology for de-glazing and re-glazing the top glass of a single-hung with moisture-cure polymer glazing.

1. From the inside, remove all glazing beads.
2. Raise the operable sash all the way up
3. From the exterior, remove the bond, using the same tool described in de-glazing step No. 2.
4. Apply pressure from the exterior until the IG unit comes loose.
5. From the interior, lower the operable sash and remove the IG unit.
6. Follow de-glazing step 5 to remove the sealant.
7. Install glazing tape as described in re-glazing step 1. The tape for the fixed lite should stay on the inside ridge of the frame.
8. Complete the re-glazing following steps 5 through 8.