WARNING:
Improper re-glazing product(s) can affect the performance under stress and may contribute to property damage or injury in high wind conditions. The installer should not proceed with re-glazing if these instructions are not understood.

WARNING:
Unless specifically ordered, MIWD products are not equipped with safety glass, and if broken, glass fragments could cause injury. Many laws and building codes require safety glass in locations adjacent to or near doors or in bathrooms. MIWD products are available with safety glass that may reduce the risk of injury when broken.

WARNING:
Do not apply any type of film to glass as this will void the warranty. Thermal stress conditions resulting in glass damage could occur. Use of moveable insulation materials such as window coverings, shutters and other shading devices may damage glass and/or frame materials. In addition, excessive condensation may result causing deterioration of windows.

WARNING:
Use extreme care when working around a window opening. Never leave a window opening unattended, especially when children are present. Falling from a window opening may result in severe personal injury or death.
REMOVING SASH:
* To remove either the top or the bottom sash. Unlock the window. You will need to lower the top sash or raise the bottom sash.
* Push and hold the tilt latches toward the center of the window, while tilting the sash open 90 degrees (See figure 1).
* Gradually raise one side of the sash higher than the other side until sash comes out of place (See figure 2).
* Pivot bar on sash fits into pivot shoe in main frame jamb (See figure 3).
* To replace sash put pivot bar into highest shoe and push down and align bar with other shoe.

WARNING:
Coil spring balances are under constant tension. If brake is accidentally released, damaged may occur to the balance or frame.

WARNING:
Use a reasonable number of people with sufficient strength to lift, carry, remove and install glass. Handle broken glass with extreme caution, it may cause severe personal injury.
8500/3500 SASH & GLASS REPLACEMENT INSTRUCTIONS

REMOVING GLASS FROM SASH

Tools and Supplies Needed:

*Safety Glasses
*Utility Knife
*Wood Chisel
*Glazing Hammer
*Surface Cleaner (Dow Corning Solvent, OS-2)
*Caulk Gun
*Glazing Cutting Tool
*Commercial Glass Clamp
*Glazier Glove and Arm Guards
*Isopropyl Alcohol
*Nylon Putty Knife
*Thin Blade Putty Knife
*Quality Silicone

Parts Included:

*Instruction Sheet
*Replacement Glass
8500/3500 SASH & GLASS REPLACEMENT INSTRUCTIONS

1. Tape Damaged Glass and Confirm Replacement Panel Size

**WARNING:**
Wear glazier gloves, arm guards, safety glasses, goggles, or eye shields when handling glass. Tape broken glass with duct tape before removal to reduce glass fragmentation. Failure to do so may result in severe personal injury, product and/or property damage.

* Tape damaged glass, using duct tape, on both sides.
* Using a thin blade putty knife or wood chisel, from the interior surface of the window, remove the glazing bead pieces beginning with the vertical pieces. Be sure to mark each piece as to where it is removed from. This will insure that each piece can be replaced to the proper location.
* Once the vertical pieces are removed, remove the lower horizontal piece. Repeat procedure for the upper horizontal piece. After the upper horizontal glazing bead is removed, safely support the glass panel or the glass panel may fall from the frame.
* Measure the damaged glass and confirm the size of the replacement glass panel. If the size of the replacement glass panel is incorrect, using a glazing hammer, re-install the upper horizontal glazing bead and then the lower glazing bead. Repeat the procedure when installing the vertical glazing bead. After the glazing beads are replaced, contact your distributor or the sales representative. If the size of the replacement glass panel is correct, re-install the glazing beads as instructed above. After the glazing beads are replaced, proceed to section 2.

**WARNING:**
Replacing the glazing beads will hold the glass panel in place while the glazing is cut. This will help to keep the glass panel in place until ready to be removed from the frame.
2. Cut Glazing and Remove Glazing Bead Pieces

**WARNING:**
Support the glass panel at all times. Glass panel may fall inwards. Handle broken glass with extreme caution, it may cause severe personal injury.

* Using a cutting tool (utility knife, thin blade putty knife, glazing cutting tool) cut the glazing around the full perimeter of the window, between the glazing leg and the glass panel. The cutting tool should penetrate approximately 5/8”.
* Note: Glazing may vary depending upon the series or the manufacture date of the product. Glazing may be double or single sided adhesive foam tape or silicone. Silicone glazed products will require more force to de-glaze.
* After the glazing is cut, while supporting the glass panel, remove the glazing beads as done in step 1. Removing the vertical beads first, lower horizontal bead next and then the upper horizontal bead.

3. Remove Damaged Glass

**WARNING:**
Use a reasonable number of people with sufficient strength to lift, carry, remove and install glass. Handle broken glass with extreme caution, it may cause severe personal injury.

* Once the glazing bead pieces, both the vertical and horizontal, have been removed, carefully remove and dispose of the damaged glass. This will require several people. It is suggested to have one person on the exterior to gently push the top of the glass panel inward. The person on the exterior may need to cut any sealant that may have been missed. Additional people on the interior will need to support the panel as pushed inward.
* Remove the glass spacers/setting blocks.
* Carefully remove all of the silicone from the glazing leg/frame. The surface must be dry/clean with no contaminates prior to the installation of the new glass.
* Remove all obstructions from glazing area that could chip the replacement glass and lead to breakage.
4. Install New Glass

**WARNING:**
Protect glass edges. Do not roll glass on edges or corners, breakage or damage could occur.

* Remove new glass panel from packaging and clean appropriately, leaving no residue (s) on the surface.
* Measure the replacement glass panel to determine the proper orientation.
* Using a quality silicone recommended for glazing, apply a 1/4” bead of silicone to entire perimeter glazing leg and place the glass spacers/settings blocks at the sill end of the unit. Silicone must be recommended for vinyl and glass applications.
* Position the replacement glass, with the corner seal upward. Corner seal should be the upper right hand corner.
* Set bottom edge of the glass panel on the setting blocks using the glass clamps. Push the top of glass panel into the silicone applied to the glazing leg and center horizontally in opening.
* While supporting the glass panel, center glass using a NYLON putty knife to pry between the glass and jamb, if needed.
* While supporting the glass panel, position remaining glass spacers/settings blocks to head and side locations using silicone to hold them in place.
* Ensure adequate amount of silicone between the glazing leg and the glass panel.

**WARNING:**
Silicone alone will not hold the glass panel in the frame. Continue supporting the glass panel until the glazing beads are installed.
5. Install Glazing Bead Pieces

NOTICE:
INSTALL GLAZING BEAD PIECE ONE AT A TIME, BEGINNING WITH THE UPPER HORIZONTAL PIECE.

* Using a glazing hammer, install the upper horizontal glazing bead. (1)
* Repeat the above procedure when installing the lower horizontal glazing bead. (2)
* Once the horizontal glazing bead pieces are installed, begin to install both of the vertical glazing beads. (3)
* After the glazing beads are installed, clean up any excessive silicone that may be visible.

6. REPLACING SASH IN WINDOW FRAME

* To place the sash back into the frame there will be a pivot bar on the left and right side of the sash.
* The pivot bar on the sash fits into the pivot shoe in the main frame jamb.
* Place the pivot bar into the highest shoe and push down and align bar with the other shoe. Tilt window back up into place making sure the tilt latches secure.