



Clearly the best.

86xx SERIES

SLIDING GLASS DOOR ASSEMBLY, INSTALLATION & ADJUSTMENT INSTRUCTIONS

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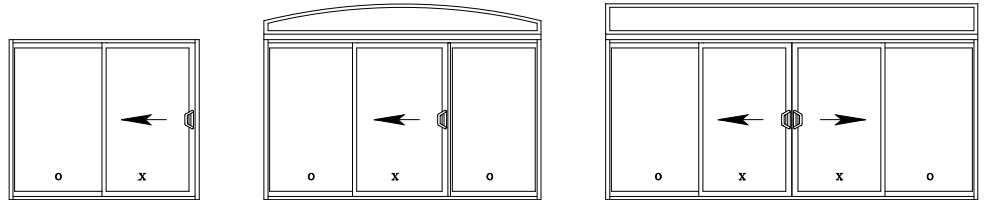
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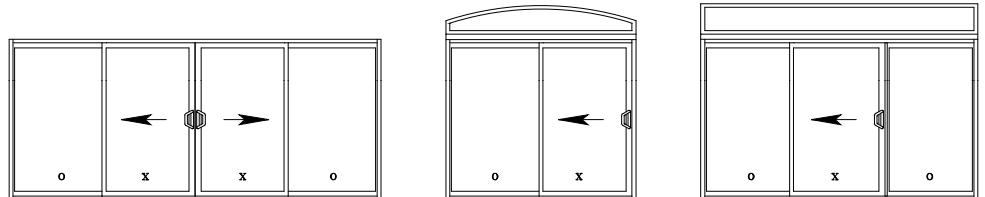
86xx & 56xx SLIDING GLASS DOOR CONFIGURATIONS (exterior view)



2-PANEL
OX (XO)

3-PANEL ARCHTOP
OXO

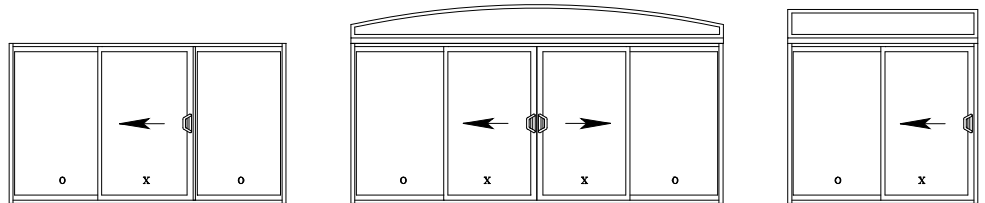
4-PANEL PICTURE
OXXO



4-PANEL
OXXO

2-PANEL ARCHTOP
OX (XO)

3-PANEL PICTURE
OXO



3-PANEL
OXO

4-PANEL ARCHTOP
OXXO

2-PANEL PICTURE
OX (XO)

NOTE:
WHEN READING ASSEMBLY STEPS, REFERENCE THE CONFIGURATION TYPE (ie. OX, XO, OOX,
XOO, OXO OXXO) AND APPLY ONLY THE STEPS NOTED FOR YOUR DOOR CONFIGURATION.

**** REFERENCE THE AAMA 2400-10 FOR NEW CONSTRUCTION INSTALLATION & AAMA 2410-13 FOR REPLACEMENT INSTALLATIONS.
INSTALLATION INSTRUCTIONS CAN ALSO BE FOUND AT <http://www.milgard.com/professionals/installation-finishing> ****

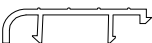

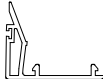
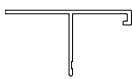


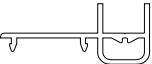

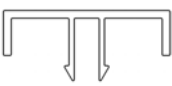

**** Adjustment videos can be located found on the Milgard Webpage -
<http://www.milgard.com/warranty/window-and-door-care/product-care-videos> ****

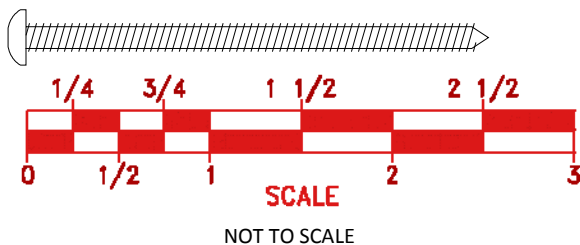
86xx DOOR PARTS LIST

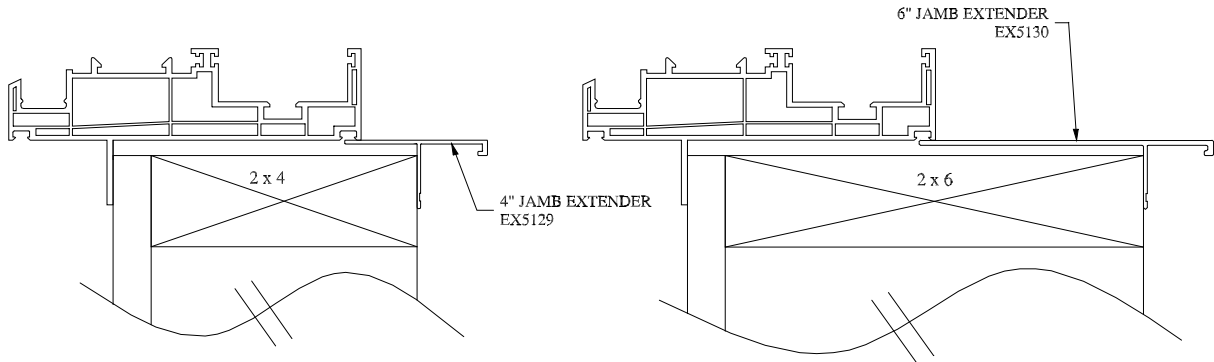
IMPORTANT:

BEFORE STARTING THE INSTALLATION OF THE DOOR, PLEASE READ THROUGH THE INSTRUCTIONS. VERIFY THAT YOU HAVE THE REQUIRED PARTS FOR YOUR DOOR CONFIGURATION AND ANY OPTIONAL PARTS THAT MAY BE REQUIRED FOR YOUR PARTICULAR INSTALLATION. IF YOU ARE USING OPTIONAL PARTS FOR YOUR DOOR CONFIGURATION, REFER TO THE "OPTIONAL COMPONENTS ASSEMBLY" IN DETAIL 1, STEP 5 & DETAIL 2 FOR INSTRUCTIONS PRIOR TO STARTING.

NOTE: THE FOLLOWING STEPS TO ASSEMBLE THE OX CONFIGURATION ARE THE SAME FOR THE XO CONFIGURATION.

| REQUIRED PARTS | OPTIONAL PARTS |
|---|---|
|  <p>HEAD & SILL COVER – VX5016XX QTY = 2-OX, OXO, OOX, OXXO</p> |  <p>Z-BAR FLANGE – VX5198XX QTY = 3-OX, 3-OXO, 3-OOX, 3-OXXO</p> |
|  <p>SNAP ON INTERLOCK – VX5228XX QTY = 1-OX, OXO, OXXO</p> |  <p>2x4 JAMB EXTENDER - EX5129MLXX QTY = 3-OX, 3-OXO, 3-OXXO</p> |
|  <p>DOOR STOP – VA5042BP QTY = 2-OX, OXO, OXXO</p> |  <p>2x6 JAMB EXTENDER - EX5130MLXX QTY = 3-OX, 3-OXO, 3-OOX, 3-OXXO</p> |
|  <p>SNAP ON SCREEN ADAPTER VX5017SC QTY = 1-OXO</p> |  <p>OOX & XO FIXED PANEL CLIP VA6130XX QTY = 1-OOX, 1-XOO</p> |
|  <p>ANTI-LIFT CLIP – VA5215XX QTY = 2-OX, 2-OXO, 2-OOX, 4-OXXO</p> | |
|  <p>VENT PANEL COVER – VX5017XX QTY = 2-OX, 2-OXO, 2-OOX, 4-OXXO</p> | |
| | <p>PROVIDED:</p> <p>2 ea. #8 x 2-1/2" Screw</p> |
| | <p>Necessary to secure SGD Lock Strike through frame jamb to framing studs on the following configurations: XO, OX, OOX & XOO</p> |



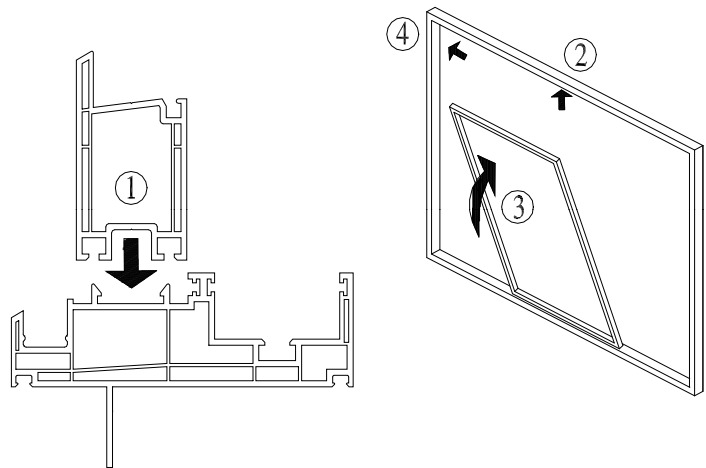
DETAIL 1**USED ON ALL CONFIGURATIONS (OPTIONAL COMPONENTS)****FRAME EXTENDER ASSEMBLY:**

NOTE: THE FRAME EXTENDERS ARE INSTALLED ON THE INTERIOR SIDE AFTER THE DOOR IS SECURED INTO THE ROUGH OPENING FRAMING.

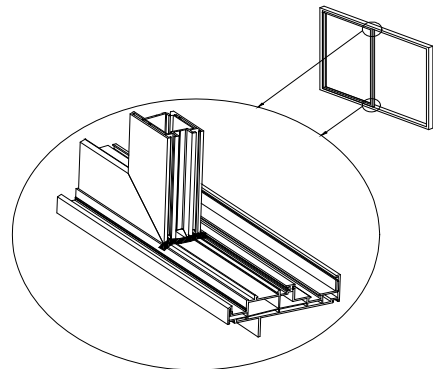
STEP 1**USED ON ALL CONFIGURATIONS****INSERTING FIXED PANEL:**

INSERT THE FIXED PANEL BY FOLLOWING THE FOUR STEPS SHOWN IN THE PICTURE TO THE RIGHT.

- 1) PLACE THE BOTTOM OF THE FIXED PANEL ON TOP OF THE SILL FRAME.
- 2) LIFT THE MIDDLE OF THE FRAME TOP SO THERE IS A SLIGHT BOW.
- 3) ROTATE THE TOP OF THE FIXED PANEL INTO THE FRAME SO THAT IT IS LINED UP WITH THE SNAPS IN THE FRAME.
- 4) SLIDE THE FIXED PANEL TO THE END OF THE FRAME.

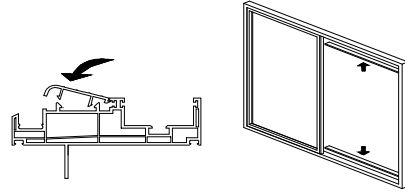
**STEP 2****USED ON ALL CONFIGURATIONS****FIXED PANEL JOINT SEAL:**

IN ORDER TO ELIMINATE LEAKING AT THE FIXED PANEL, A 5/16" NOMINAL BEAD OF SILICONE SEALANT MUST BE APPLIED AT BOTH THE HEAD AND SILL.

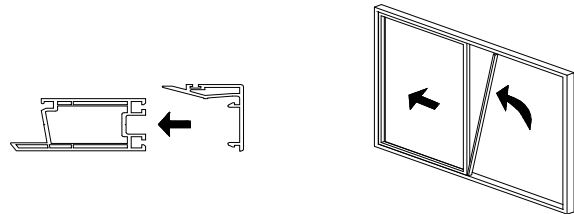


STEP 3**USED ON ALL CONFIGURATIONS****HEAD AND SILL CAP INSTALLATION:**

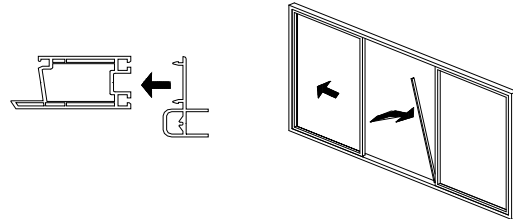
ROTATE HEAD AND SILL CAPS INTO PLACE AS SHOWN.

**STEP 4****USED ON ALL CONFIGURATIONS****SNAP-ON INTERLOCK:**

INSTALL INTERLOCK TO FIXED SASH AS SHOWN

**STEP 5****USED ON OXO ONLY; OTHER CONFIGS PROCEED TO STEP 6****SNAP-ON SCREEN ADAPTER:**

INSTALL SCREEN ADAPTER TO FIXED SASH (LOCKRAIL SIDE)

**STEP 6****USED ON ALL DOOR CONFIGURATIONS**

NOTE: FOR DOORS 6'0" WIDE, USE (1) TUBE OF SEALANT, WIDER DOORS USE (2) TUBES OF SEALANT



NOTE: WHEN INSTALLING ON A CONCRETE SURFACE, A MOISTURE BARRIER MUST BE LAID DOWN FIRST TO PROTECT THE SILL.

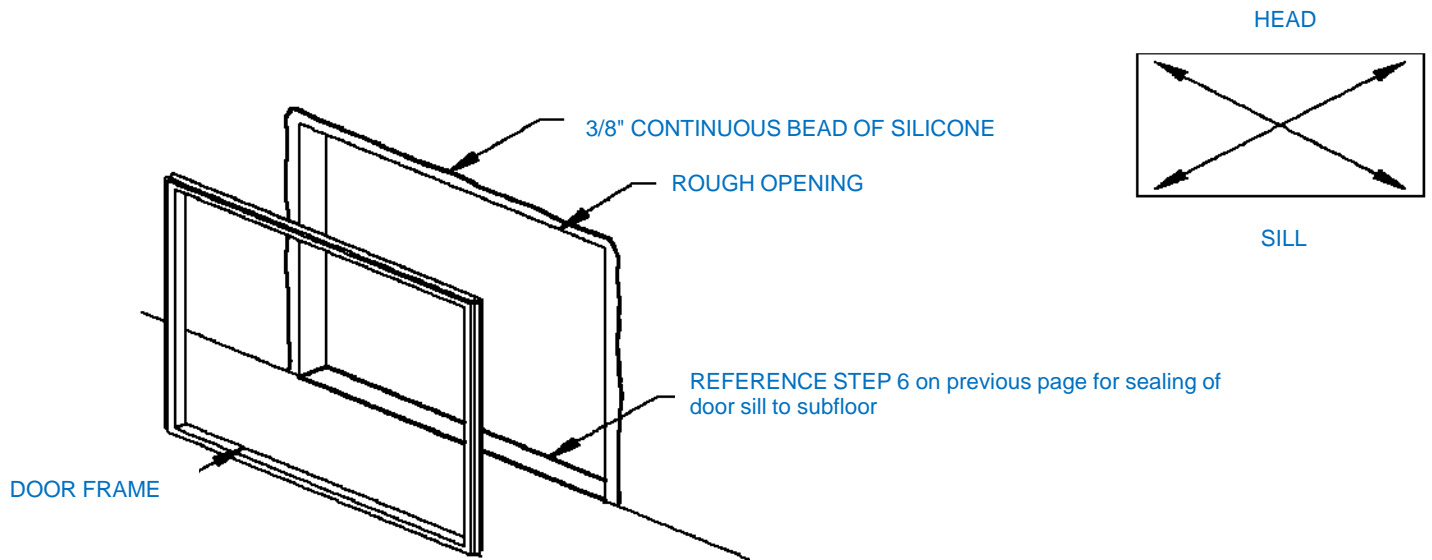
**** PLEASE REFERENCE THE AAMA 2400-10 FOR NEW CONSTRUCTION INSTALLATION & AAMA 2410-13 FOR REPLACEMENT INSTALLATIONS.****

SILL SEALANT APPLICATION (reference the AAMA 2400-10 & 2410-13 for additional instructions):

APPLY 2 TO 3 (3/8") NOMINAL BEADS OF CONSTRUCTION SEALANT ON THE FLOOR FROM JAMB TO JAMB DIRECTLY UNDER SILL. RUN ADDITIONAL SEALANT ACROSS EACH END OF THE WALL SILL PLATE SO THE BOTTOM CORNERS OF THE DOOR FRAME WILL BE BURIED IN SEALANT.

STEP 7

USED ON ALL CONFIGURATIONS



**** PLEASE REFERENCE THE AAMA 2400-10 FOR NEW CONSTRUCTION INSTALLATION & AAMA 2410-13 FOR REPLACEMENT INSTALLATIONS.****

ASSEMBLED FRAME INSTALLATION:

PRIOR TO INSTALLING FRAME, RUN A 3/8" CONTINUOUS BEAD OF CONSTRUCTION SEALANT AROUND ROUGH OPENING WITHIN 1/2"

OF EDGE. PUT THE FRAME INTO THE OPENING AND PUSH SECURELY INTO PLACE SO THE NAIL FIN EMBEDS INTO SEALANT.

HELPFUL HINT: TO TEMPORARILY HOLD FRAME IN OPENING, USE AN 8D NAIL ABOVE THE HEAD NAIL FIN AND BEND IT OVER THE NAIL FIN. SILL MUST BE LEVEL: SILL MUST BE COMPLETELY SUPPORTED & SHIM AS REQUIRED, TO ENSURE SQUARENESS. DOOR MUST BE LEVEL & PLUMB, LEAVING 1/4" CLEARANCE ON EACH SIDE. MEASURE FRAME DIAGONALLY FOR SQUARENESS; REFER TO DETAIL 2. NEXT, NAIL JAMB AND SILL NAIL FIN WITH 8D GALV. BOX NAILS AT 8" O.C. MAX. AND COVER NAIL FIN WITH 9" MIN. FLASHING PAPER. FLASH HEAD. FINALLY INSTALL THE WEEP COVERS TO THE WEEP HOLES LOCATED AT EACH END OF THE SILL.

STEP 8

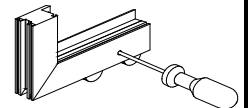
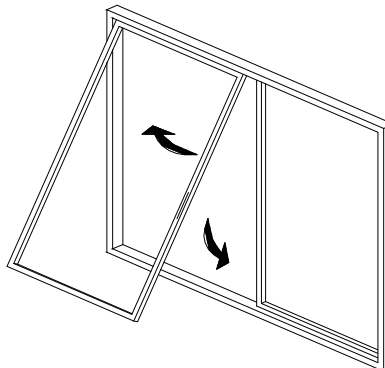
USED ON ALL CONFIGURATIONS

VENT PANEL INSTALLATION:

(USE OF POWER ASSISTED TOOLS IS NOT RECOMMENDED FOR ROLLER ADJUSTMENTS)

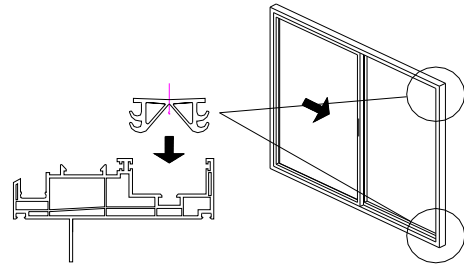
TO SET VENT PANEL:

- 1) REMOVE SGD ROLLER ADJUSTMENT PLUGS.
- 2) LIFTING WEIGHT OFF ROLLERS ONE AT A TIME; USING #3 PHILIPS TIP HANDHELD SCREW DRIVER COMPLETELY RETRACT ROLLERS BY TURNING ADJUSTMENT SCREW COUNTER-CLOCKWISE.
- 3) WITH HEAD OF VENT ALIGNED WITH VENT POCKET, LIFT VENT PANEL - INSERTING HEAD OF VENT PANEL INTO VENT POCKET OF THE FRAME HEAD.
- 4) SWING BOTTOM OF VENT PANEL INTO VENT POCKET OF FRAME SILL.
- 5) REFERENCE STEP 14 FOR OPERABLE PANEL ADJUSTMENT INSTRUCTIONS.

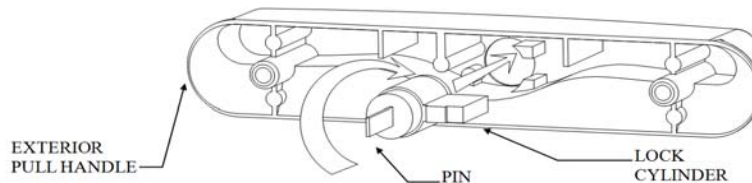


STEP 9**USED ON ALL CONFIGURATIONS****DOOR STOP INSTALLATION:**

INSTALL DOOR STOPS IN BOTH THE HEAD AND SILL VENT CHANNEL AS SHOWN. (OPPOSITE LOCK SIDE)

**STEP 10****FOR KEYED LOCKS ONLY****INSTALLING THE LOCK KEY CYLINDER:**

1. TRIM THE PIN DOWN SO THAT IT PROTRUDES 5/8" FROM THE END OF THE CYLINDER.
2. HOLDING THE LOCK CYLINDER SO THE PIN IS FACING YOU (AS SHOWN), TURN PIN CLOCKWISE UNTIL IT STOPS.
3. ORIENT THE LOCK CYLINDER TO THE EXTERIOR PULL HANDLE AS SHOWN, AND INSERT LOCK CYLINDER AS SHOWN. MAKE SURE THE PIN IS STILL ROTATED ALL THE WAY CLOCKWISE.

**STEP 11****D-Ring Handle****USED ON ALL CONFIGURATIONS UTILIZING THE D-RING HANDLE****D-RING DOOR HANDLE INSTALLATION:**

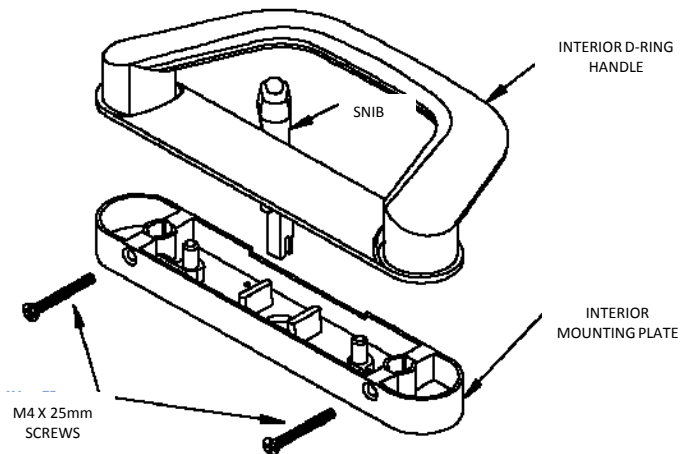
PLACE THE SNIB THROUGH THE MOUNTING PLATE AND INTO THE CENTRAL SQUARE IN THE LOCK UNIT. ENSURE SNIB IS COMPLETELY INSERTED IN THE LOCK UNIT.

NOTE:

THE SNIB CAN BE INSTALLED IN TWO DIFFERENT POSITIONS. TO CHECK OPERATION, DEPRESS THE ANTI-SLAM PIN AND OPERATE TO ENSURE THE SNIB IS IN THE CORRECT POSITION BEFORE CONTINUING. IF USING A KEYED LOCK, KEY CYLINDER PIN MUST BE CENTERED IN THE LOCK HOLE & SNIB PRIOR TO HANDLE INSTALLATION.

PLACE THE INTERIOR HANDLE ONTO THE MOUNTING PLATE AS SHOWN. ENSURE THE SNIB FITS CORRECTLY INTO THE UNDERSIDE OF THE INTERIOR HANDLE AND THE HANDLE FITS FULLY ONTO THE MOUNTING PLATE. PLACE THE TWO COLOR MATCHED M4 x 25mm COUNTERSUNK SCREWS IN THE TWO HOLES IN THE SIDE OF THE MOUNTING PLATE AND TIGHTEN.

THE LOCK AND HANDLE ARE NOW INSTALLED. DEPRESS ANTI-SLAM PIN AND CONFIRM CORRECT OPERATION OF THE LOCK BEFORE CONTINUING.



STEP 12

Smart Touch Handle

FOR ALL CONFIGURATIONS USING THE SMART TOUCH HANDLE

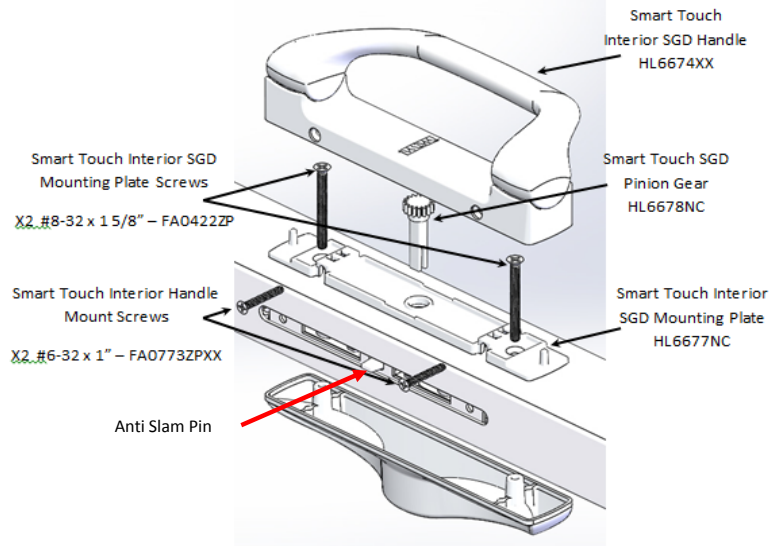
SMART TOUCH SGD DOOR HANDLE INSTALLATION:

PLACE EXTERIOR HANDLE AGAINST EXTERIOR OF OPERABLE PANEL AND MOUNTING PLATE ON INTERIOR SIDE; SECURE USING #8-32 x 1 5/8" MOUNTING PLATE SCREWS.

INSERT PINION GEAR FROM INTERIOR SIDE OF SGD AND INSTALL THE INTERIOR HANDLE; SECURE USING #6-32 x 1" HANDLE SCREWS

DEPRESS ANTI-SLAM PIN ON LOCK AND VERIFY SMART TOUCH LOCK ASSEMBLY PERFORMS CORRECTLY (HANDLE PUSHED IN TOWARDS GLASS SHOULD ACTIVATE LOCK).

VERIFY ALIGNMENT WITH SGD STRIKE AND ADJUST AS NECESSARY (REFERENCE STEP 14).

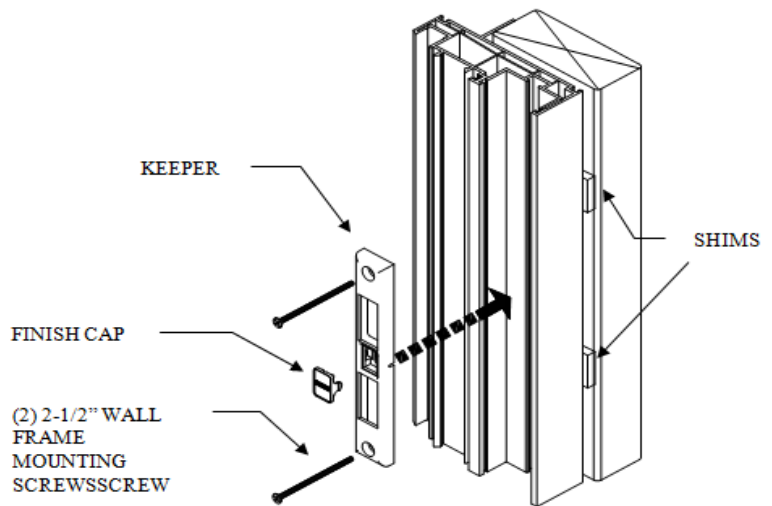


STEP 13

USED ON OX, OOX, OXO ONLY

STRIKE AND LOCK ADJUSTMENT:

THE CENTER ADJUSTING SCREW HAS BEEN PRE-INSTALLED. LOOSEN THE STRIKE AND CENTER IT WITH THE LOCK HOOKS AND RETIGHTEN THE CENTER SCREW, BEING CAREFUL NOT TO OVERTIGHTEN. CHECK TO MAKE SURE THE DOOR LOCKS PROPERLY. THEN INSERT SHIMS BETWEEN THE WALL AND THE DOOR FRAME UNDER THE STRIKE AS SHOWN. NEXT, INSERT THE TWO 2-1/2" SCREWS INTO THE TOP AND BOTTOM HOLES OF THE STRIKE. FINALLY, INSTALL THE FINISH CAP OVER THE CENTER SCREW.



VENT PANEL ADJUSTMENT STEPS:

**** Battery and/or Air Power Tools are not recommended for adjusting Sliding Glass Door Rollers ****



When adjusting all Milgard Sliding Glass Doors, it is required that the panel weight is removed from the roller by either using a putty knife and lifting the panel or suction cup attached to the glass and lifting the panel while adjusting.

A (#3) Philips tip screwdriver is recommended to adjust Milgard Vinyl SGD Rollers (shown above). Battery or air powered tools are not

recommended for adjusting rollers; power tools can strip the screw head or threads of the adjustment nut.

SGD Roller Adjustment Summary

1. Close vent panel to lock jamb of frame. **** In the case of OXO & OXXO configurations; close panel to strike.**
2. Check reveals of panel in relation to frame; reveal references the distance between the vent panel and frame jamb. This distance should be very close to the same at the top of door and the bottom of the door.
3. Open vent panel a minimum of 18" to halfway open.
4. Using a putty knife or suction cup, lift the panel weight off the appropriate side of the panel you plan to adjust.
5. Using a #3 Philips Handheld Screwdriver, make a series of handle turns (clockwise raises rollers – counter clockwise lowers rollers).
6. Gently set panel back down on roller track.
7. Check reveals.
8. Repeat steps 3 thru 6 as needed.
9. Once completely adjusted for proper and even reveal, verify lock height to door frame strike.
10. Adjust strike as needed.
11. Properly secure strike and frame jamb at strike location using 2 ½" screws to ensure strike is attached to structural framing of wall. ***Instructions in step 13.***
12. Verify proper operation of locking mechanism.
13. Verify Keyed lock operation – repair as necessary. ***Instructions on previous pages.***

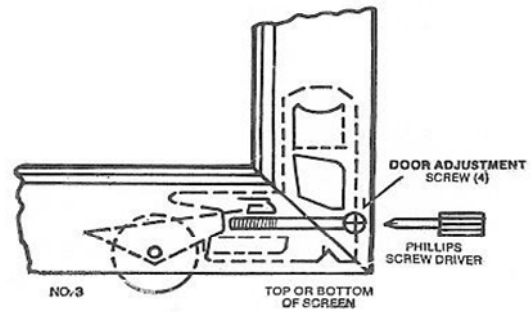
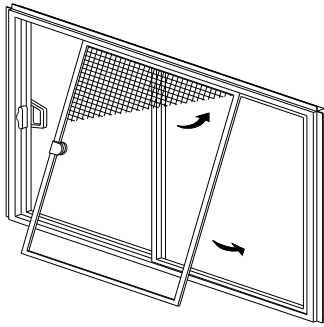
HELPFUL HINT:

If the adjustment head is stripped, a #2 square drive handheld screwdriver may allow roller adjustment. Panel weight must be removed from the roller prior to adjusting.

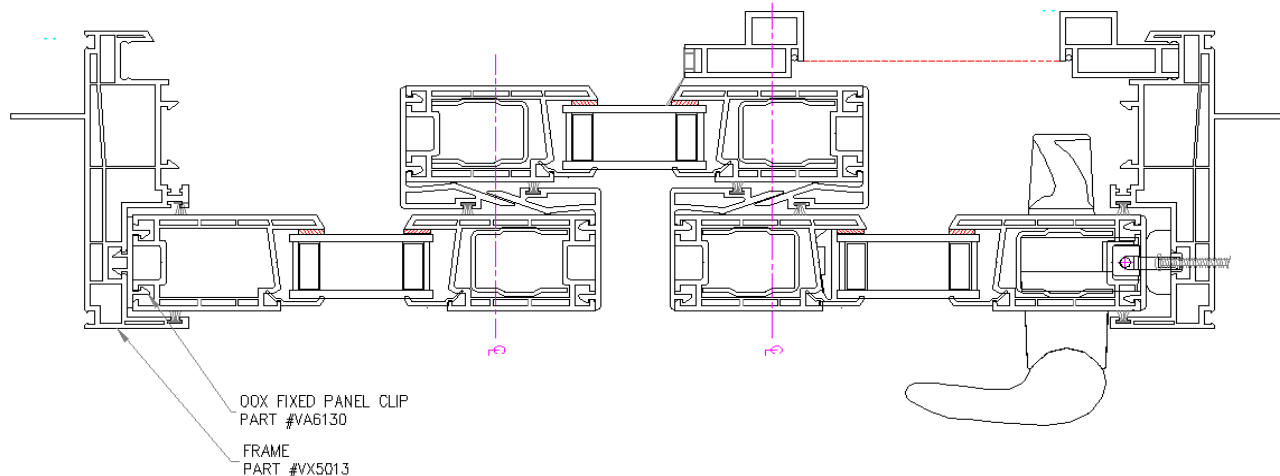
STEP 15**USED ON ALL CONFIGURATIONS****SCREEN INSTALLATION:**

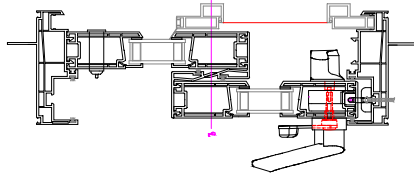
- 1) REMOVE HARDWARE FROM PLASTIC BAG THAT CAME WITH THE SCREEN DOOR.
- 2) ATTACH THE NYLON TOP GUIDES TO TOP OF SCREEN DOOR WITH A HAMMER.
- 3) PUT ONE ON EACH END.
- 4) POSITION THE SCREEN SO THE LOCK HANDLE IS ON THE INSIDE TOWARDS THE LOCK JAMB ON OX AND OOX, AGAINST THE 3-PANEL ADAPTER ON OXO MODELS, AND FACING THE OPPOSITE SCREEN ON OXXO MODELS.
- 5) STANDING OUTSIDE, LIFT THE SCREEN INTO THE CHANNEL AT THE HEAD AND SWING THE BOTTOM IN AND ONTO THE SCREEN ROLLER TRACK AT THE SILL.
- 6) ADJUST ALL FOUR CORNERS BY INSERTING A PHILIP SCREWDRIVER IN THE ADJUSTMENT HOLE AND TURNING CLOCKWISE TO RAISE THE WHEELS.
- 7) WHEN COMPLETED THE SCREEN JAMB SHOULD BE PARALLEL WITH THE JAMB AND INTERLOCK

** NOTE: 4 PANEL SLIDING GLASS DOOR SCREENS REQUIRE SNAPPING A SINGLE SCREEN ASTRAGAL INSTALLED ON THE PASSIVE SIDE SCREEN. **

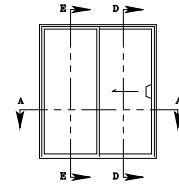
**(DETAIL 2)****SUPPLEMENTAL OOX or XOO FIXED ASSEMBLY****OOX or XOO FIXED ASSEMBLY:**

THE OOX IS ASSEMBLED MUCH LIKE THE OX WITH THE EXCEPTION OF THE ADDITION OF THE INSLIDE FIXED IN THE OOX CONFIGURATION. THE INSLIDE FIXED IS PLACED INTO THE FRAME LIKE A NORMAL VENT, IT IS THEN SLID TO ONE JAMB AND SECURED WITH (6) 1" #8 STAINLESS STEEL PAINTED HEAD FASTENERS THROUGH THE FRAME JAMB INTO THE INSLIDE FIXED PANEL.

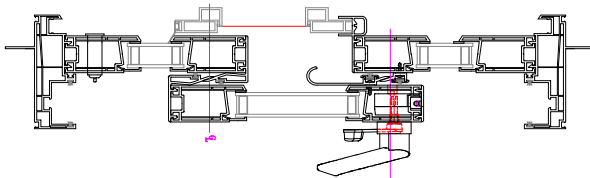


STEP 16**CROSS-SECTIONAL VIEWS OF CONFIGURATIONS**

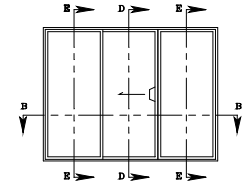
2 PANEL XO;OX
HORIZONTAL SECTION A-A



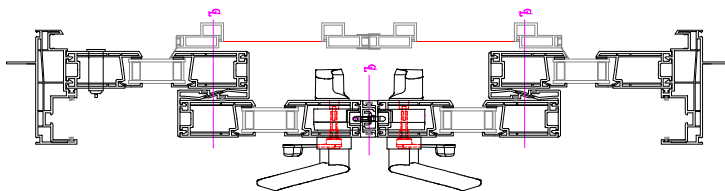
XO;OX



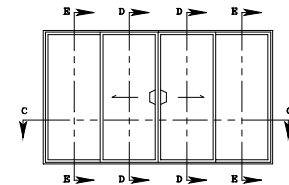
3 PANEL OXO
HORIZONTAL SECTION B-B



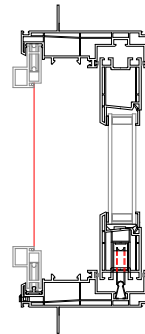
OXO



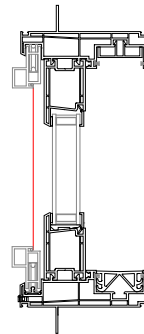
4 PANEL OXO
HORIZONTAL SECTION C-C



OXO



VERTICAL SECTION D-D
VENT (SASH) PANEL

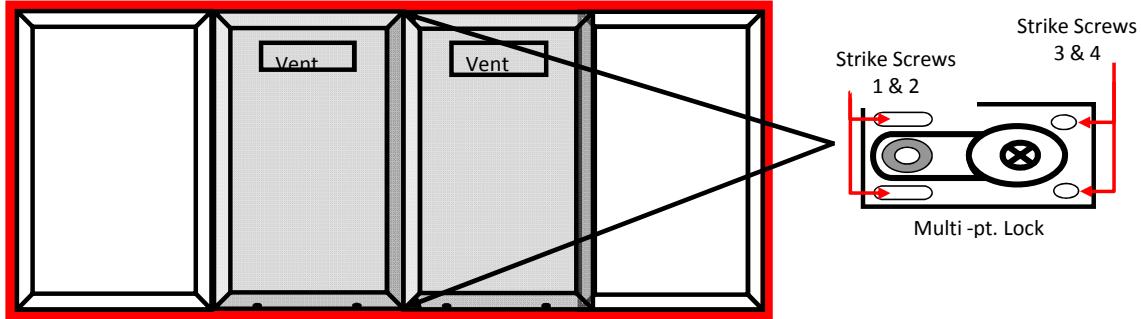


VERTICAL SECTION E-E
FIXED PANEL

FIELD GLAZING HINTS

1. Proper training is required prior to attempting any glazing of Milgard Products.
2. Using setting blocks provided, place two setting blocks in glazing pocket sill at each corner between the weep holes.
3. Carefully peel paper or plastic backing off double sided glazing tape.
4. Apply a small amount of silicone between 5/16" - 3/8" diameter at the tape joints in each corner of the glazing pocket.
5. Wearing proper personal protection, carefully grab glass; setting the bottom of the glass unit on the setting blocks, centering in the glazing pocket and roll the glass unit in towards the top (Squaring the panel/frame/window to the glass as you set the unit). (BE CAREFUL NOT TO ROLL THE GLAZING TAPE AT THE SILL)
6. Firmly and evenly press against glass edges along the perimeter of the glass Unit to ensure good adhesion.
7. Using a glazing hammer; starting at a corner and firm/even strokes install glazing bead. Work the corners in, then go back and forth towards the center.

OXO & OXXO SLIDING GLASS DOOR MULTI-PT LOCK ADJUSTMENT INSTRUCTIONS



The following steps provide basic instructions for adjusting an OXO Door Configuration

1. Verify the Sliding Glass Door is installed plumb, level and square; the sill of the door **must be level, flat and completely supported across the entire width.**
- (OXO) 2. Close the operable panel towards lock jamb of fixed panel, leaving 1/8"-1/2" space to view daylight reveal between the operable panel and the fixed lock jamb to check sight line from head to sill. Distance between the panel and fixed lock jamb should be the same from head to sill.
- (OXO) 3. Open the operable panel enough to view the jamb side opposite the lock assembly to verify daylight reveal at the interlock of the fixed panel and operable panel. (If the center is lined up and the interlock does not line up, the sill is not level and will make adjustments difficult).
- (OXO) 4. Close the operable panel towards fixed panel lock jamb leaving open enough to view the fixed panel jamb to operable panel jamb alignment.
 5. Remove wheel adjustment screw plugs of panels.
 6. Starting with one roller, insert a putty knife or use a suction cup to remove the panel weight off the roller.
 7. Rotate adjustment screw using a #3 handheld philips tip screw driver in clockwise motion a couple turns to raise the panel and gently lower panel down.
 8. Check reveal again as described in steps 3 & 4. Next repeat steps 6 & 7 on the furthest roller opposite to the one you just adjusted.
 9. Verify reveal and alignment.
 10. Repeat steps 6-9 as necessary.
 11. Close and verify lock operation.
 12. To adjust Multi-pt. Strikes, gently loosen screws 1 & 2 located in the slotted holes of the strike located at the sill. Slide strike left to right as necessary to allow lower multi-pt. lock rod engagement & tighten screws.
 13. With lower multi-pt. lock rod strike positioned and screws tightened; loosen screws 1 & 2 securing head strike and adjust as necessary to allow rod engagement & tighten screws.
 14. Close and verify proper operation.
 15. After verifying proper locking operation, open door and install screws 3 & 4 provided into remaining 2 holes on each strike with a #2 hand held philips tips screwdriver. (BE CAREFUL NOT TO OVER TIGHTEN SCREWS AND STRIP OUT THE HOLES)

The following steps provide basic instructions for adjusting an OXXO Door Configuration

1. Verify the Sliding Glass Door is installed plumb, level and square; the sill of the door **must be level, completely supported across the entire width**
- (OXXO) 2. Close the operable panels towards each other, leaving 1/8"-1/2" space to view daylight reveal between the two panels to check sight line from head to sill. Distance between the panels should be the same between both panels from head to sill.
- (OXXO) 3. Open the operable panels enough to view the jamb side opposite the lock assemblies to verify daylight reveal at the interlocks of the fixed
- (OXXO) 4. Close the operable panels towards each other leaving them open enough to view the fixed panel jamb to operable panel jamb alignment.
 5. Remove wheel adjustment screw plugs of panels.
 6. Starting with one roller, insert a putty knife or use a suction cup to remove the panel weight off the roller.
 7. Rotate adjustment screw using a #3 handheld philips tip screw driver in clockwise motion a couple turns to raise the panel and gently lower panel down.
 8. Check reveal again as described in steps 3 & 4. Next repeat steps 6 & 7 on the furthest roller opposite to the one you just adjusted.
 9. Verify reveal and alignment.
- (OXXO) Working towards the center, follow steps 6 & 7 on the remaining rollers
- (OXXO) Verify reveal and alignment.
10. Follow steps 10-15 from OXO Door Configuration adjustment to complete OXXO Door Configuration adjustments.