

## Vinyl Sliding Patio Door and Multi-Slide Patio Door

### KNOCK DOWN ASSEMBLY AND COMPONENT INSTALLATION INSTRUCTIONS

**IMPORTANT** This instruction is for Knock Down Frame Assembly which includes installing the panels and other door components into the frame. Panel and component installation apply to both knock down and welded frames. Please refer to the appropriate installation booklet for your specific installation type.

**SEE PAGE 2 FOR SAFETY INFORMATION.**

**WARRANTY:** For applicable product warranty and arbitration information, please see product website.

Please read entire instruction completely before beginning.



**NOTICE** BEFORE REMOVING PREVIOUSLY INSTALLED DOOR AND BEGINNING FRAME ASSEMBLY AND INSTALLATION:

- Read through and understand all the assembly steps and the installation process.
- Carefully remove shipping/packaging materials and check for any product damage.
- Confirm the correct product was received (size, color, handing, etc.).
- Confirm all parts listed are present and accounted for.



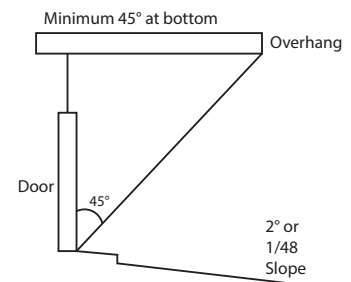
**If there are any missing parts, product damage, wrong parts, or other issues...**

**NOTICE** DO NOT assemble!

Contact your local sales representative or product customer service team.

Before purchasing and installing, verify performance of product meets the requirements of the application and region. Not all products or sill types are rated for water performance. To reduce the likelihood of water infiltration where application exceeds product performance, install doors under an overhang that extends to meet a 45 degree line from the door sill and slope the exterior 2 degrees away from the door or use a stepdown.

**FAILURE TO DO SO MAY RESULT IN DAMAGE TO THE INTERIOR OF THE STRUCTURE.**





**NOTICE** Especially with multiple tracks, ensure the threshold is level the entire length of the opening and the entire depth of the opening from interior to exterior.


# IMPORTANT SAFETY AND PRODUCT INFORMATION

**Safety Alert Symbol Reference:** These symbols are intended to alert you to potential injury hazards and information. Obey all safety messages.

<b>COULD</b> Result in:	 <b>WARNING</b> Major Injury/Death	<b>COULD</b> Result in:	 <b>CAUTION</b> Minor Injury	<b>COULD</b> Result in:	<b>NOTICE</b> Product or Property Damage	<b>COULD</b> Result in:	<b>IMPORTANT</b> Procedure and Product Info.
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 **WARNING** To ensure safety and security and help prevent property damage, including possible damage to your window or door, close and lock windows and doors any time they are not being used for venting on a nice day, and particularly during high winds or rain. Ensure all windows and doors are properly fastened to the wall structure according to the product anchor instructions. It is the responsibility of the Buyer or User, the architect, contractor, installer, or other construction professional to ensure the appropriate windows and doors are chosen for the project and the wall construction is designed to resist all loads in accordance with local building code requirements.

 **WARNING** May require (2) or more persons for safety reasons.

 **CAUTION** Many doors in older homes are painted with lead-based paint. Removal of old doors may disturb this paint. Proper precautions must be taken to minimize exposure to dust and debris. Consult state or local authorities and/or go to [www.epa.gov/lead](http://www.epa.gov/lead) for more information.

**NOTICE** Products must be stored in an upright, level position not exposed to weather. The storage must be ventilated and provide protection from direct sunlight and excessive temperature.

**IMPORTANT NOTICE** These instructions were developed and tested for use with wall systems designed to manage water. These instructions are not to be used with any other construction methods or window frame types. Installation instructions for use with other construction methods or frame types may be obtained from the product website or your local product seller. Building designs, construction methods, building materials, and site conditions unique to your project may require an installation method different from these instructions and/or additional care. Determining the appropriate installation method is the responsibility of you, your architect, or construction professional. Additional preparation or anchoring may be required to comply with local building code requirements.

## CARE AND MAINTENANCE

Refer to the Owner's Manual or contact your local seller for more information.

**CLEANING INSTRUCTIONS:** Refer to the Owner's Manual for comprehensive maintenance and cleaning information. Contact your local seller for more information.

**GLASS:** Remove any protective film and labels and clean the glass, using a soft, clean, grit-free cloth and mild soap or detergent. Be sure to remove all liquid by wiping dry or use a clean squeegee.

**NOTICE** DO NOT apply any other types of film to the glass. Doing so could void product warranty.

**DOOR FRAMES:** The vinyl frame may be cleaned using the same method as the glass. For stubborn dirt, a "non-abrasive" cleaner such as Bon-Ami® or Soft Scrub® may be used.

**NOTICE** Do not use solvents such as mineral spirits, toluene, xylene, naphtha or muriatic acid as they can dull the finish, soften the vinyl and/or cause failure of the insulated unit seal.

**NOTICE** Do not use Isopropyl Alcohol on laminated surfaces as it will damage the finish. Keep door tracks clear of dirt and debris. Keep weep holes open and clear of obstructions.

**NOTICE** DO NOT use abrasives. DO NOT scrape or use tools that might damage the surface.

**NOTICE** DO NOT use inappropriate solvents or brickwash or cleaning chemicals. If you do, permanent damage can result and the product failure, loss or damage would not be covered by the Limited Warranty.

**IMPORTANT** These parts are assembly and/or installation critical!

If any parts are missing...



Contact your local sales representative or customer service team.

**Parts List:**

- Sill assembly
- Jamb assembly
- Upper screen track (if required)
- Frame assembly screws
  - Washer head
  - Pan head
- Jamb gasket
- Alcohol wipes
- Fin corner
- Keeper screws
- Keepers
- Astragal keeper screws
- Keeper shim
- Fixed panel screws
- Frame install screws
- Bumper
- Standard hardware and standard hardware screws
- Hole plugs

**You Will Need to Supply:**

- Moisture resistant shims/spacers (12 to 20)
- Closed cell foam backer rod/sealant backer (21 to 30 ft.)
- Foil backed butyl window and door flashing tape or equivalent
- Window and Door Installation Sealant or equivalent high quality, multi-purpose sealant
- Low expansion, low pressure polyurethane insulating window and door foam sealant. DO NOT use high pressure or latex foams
- Sill pan frame depth x (Rough Opening Width +2)
- Aluminum sill support or wood blocking
- Interior trim and/or jamb extensions (15 to 40 ft.)

**Tools Required:**

- #2 Phillips handheld screwdriver
- Pry bar
- 6", 2', 4', & 6' Level
- Square
- Safety glasses
- Utility knife
- Hammer
- Wood block
- Mallet
- Tape measure
- Drill with 3/8", 9/64" and 3/4" bits
- Fine tooth chop saw
- Sealant gun
- Large hook tool
- Suction cups
- Putty Knife

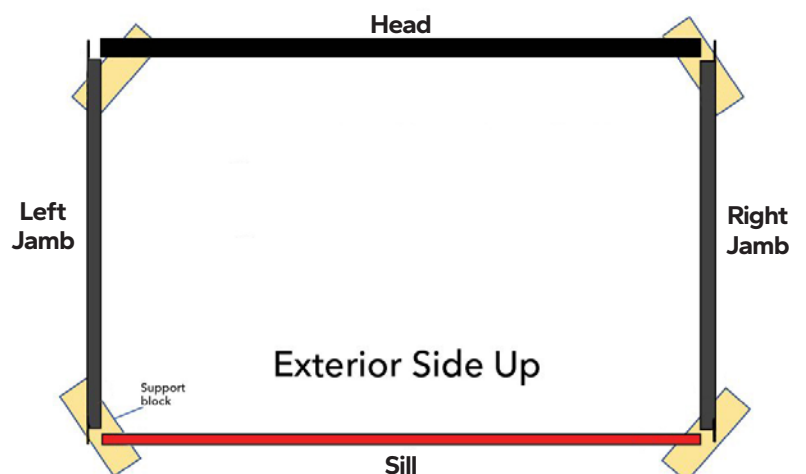
# 1 Knock Down Frame Assembly:

**NOTICE** Knock down doors come with the frame covers installed in the frame. The covers need to be removed.

A. **Identify frame parts necessary** (head, 2 jambs and a sill). The sill can be identified by the weep holes.

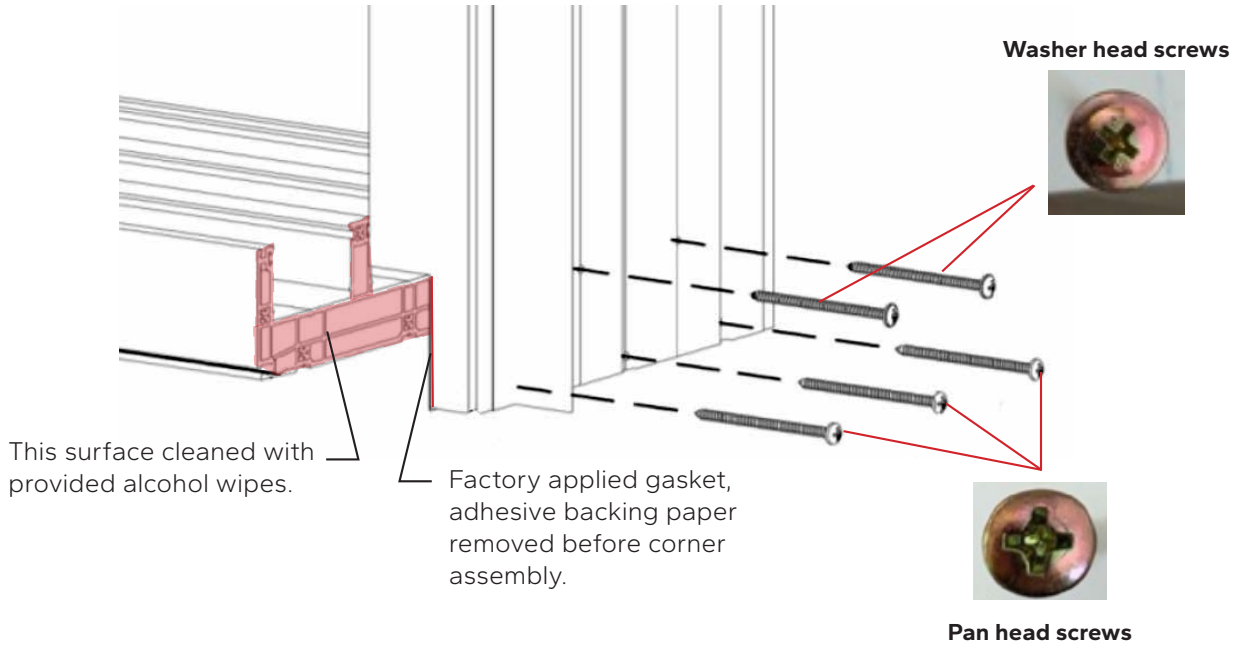
Position the head, sill and 2 side jambs exterior side up on a clean flat surface in the orientation in which they will be assembled. Insert blocks under each corner to support and level the corners on an uneven surface. Or position the frame parts on sawhorses.

Be sure to assemble one frame corner at a time. Joining the sill to the jambs first, followed by joining the head to the jambs.



# 1 Knock Down Frame Assembly (continued):

**NOTICE** Use care if using an impact driver during the Frame Assembly Process. If not careful, impact drivers can cause screw head breakage.



- B. **Using the provided alcohol wipes**, clean the area where the jamb gaskets will be adhering to on the head and sill.



- C. **Remove the adhesive backing paper** from the gasket on one jamb frame corner near the sill. Position the jamb and sill together.



# 1 Knock Down Frame Assembly (continued):

- D. Insert the packaged frame assembly screws into the predrilled holes in the jamb. Pan head screws will go in the recessed sections of the frame. The washer head screw will go in the holes with the flat surface. One corner at a time, make sure each screw is aligned with the proper screw boss, and tighten each screw sequentially and evenly until the jamb is tightened firmly against the sill and/or head. Be careful not to over torque and strip out the vinyl or pull through the jamb's walls. There should be a slight dimple in the frame where the washer head screws are applied.



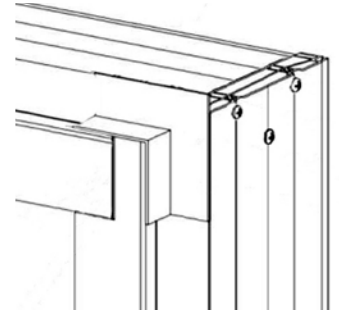
Washer head screws



Pan head screws



- E. Repeat 1C-1D on the other sill jamb/sill corner and then on the two head/jamb corners.



- F. Remove the adhesive backing paper of the seal tape to expose the sticky side of the tape.



- G. Apply the provided seal tape to the outside of the jamb-sill joint on both sides. Press the tape firmly in place.



# 1 Knock Down Frame Assembly (continued):

H. **Once the tape has been applied**, remove the Mylar® backing. Once the Mylar® backing has been removed, work the tape into any voids in the frame to ensure a good seal.



I. **If needed flip the frame over**, so the exterior side is facing up.

**Note: Continue to Step 2 for doors without fins or if placing fin corners after installation is preferred.**



J. **Apply the fin corner.** Using the provided sealant, fill the outer most hole on top of the frame as well as apply a bead of provided sealant to the fin on the jamb and head. Firmly apply the fin corner into place. Make sure the fin corner is on the outer portion of the frame mounted to the face of the frame.



## 2 Frame Installation:

**NOTICE** Panel and component installation apply to both knock down and welded frames.

A. **Install and anchor the assembled frame (with no panels)** after preparing the rough opening and flashing the sill in accordance with the installation instructions. Integrate the frame with the building's weather resistive barrier.

Refer to product website for instructions.

# 3 Vent Panel Installation:

- A. **3- and 4-Panel knock down doors**, install the roller track into the interior sill track. Press the track into place along the length of the track.
- B. **Apply suction cup(s) to the vent panel.**



- C. **Install the vent panel(s)** (the panel onto which the handle hardware will be installed) into the inner track.

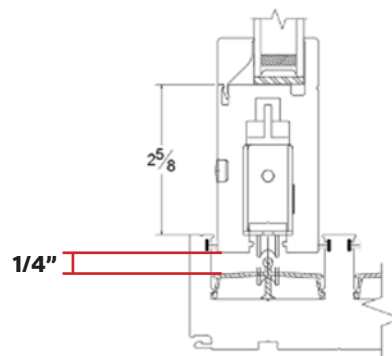


- D. **Slide the vent panel(s) over to the lock side jamb.**



- E. **Adjust the panel heights to 1/4" clearance from the bottom of the panel to sill track by removing the hole cover (if applicable) and using a #2 Phillips screwdriver to turn the roller adjustment screw clockwise (raise) or counterclockwise (lower).**

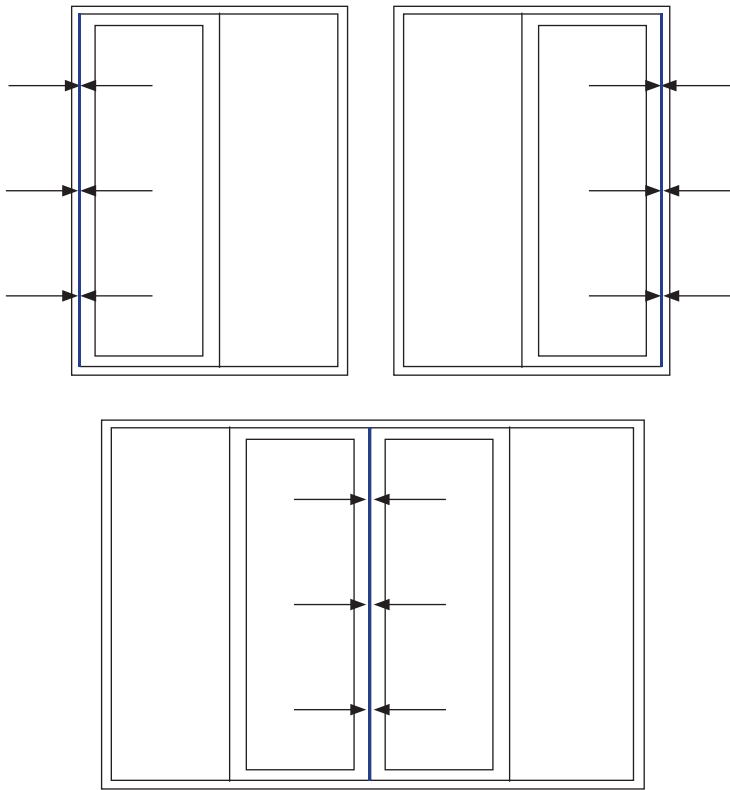
**Tip:** Lift one corner up to take the weight off the roller.



- F. **Slide the vent panel** to each jamb and look at the reveals.

### 3 Vent Panel Installation (continued):

**NOTICE** The goal is for both reveals to mirror each other and be straight the length of the jamb. If they are not, first check plumb, level and squareness of the frame before continuing onto troubleshooting the issues.



- G. If the reveals are not even down the length of the jamb and not consistent at both jambs, first try roller adjustment to see if this corrects the reveals. If roller adjustment does not correct the reveal issue, the frame may need to be adjusted.

#### Possible issues:

Reveal on the right, panel to jamb, has 1/4" gap on the top corner but bottom corner has no gap. Left, panel to jamb, has a perfect reveal top to bottom. In this case pull the top of the frame to the left to split the difference and mirror the reveals. Now there is 1/8" gap on top and no gap on the bottom on the right side and left side. Place an appropriate shim under the sill in the middle of the frame. This will fix both reveals at the same time.

Reveal on the right, panel to jamb, has no gap on the top corner but the bottom corner has 1/4" gap. Left, panel to jamb, is perfect top to bottom.

Check for humps in the center of the sill or dips in the corners.

**Any time you do any adjustments to the sill with shims or just moving it one side to the other, always use a level and check the threshold for any humps or dips before continuing.**

# 4 Fixed Panel and Cover Installation:

**NOTICE** See Step 5 for OOX or XOO fixed panel installation.

- A. **Make sure the fixed panel setting blocks are positioned correctly.** One should be positioned near the jamb at the corner and the other block should be placed approximately where the other edge of the fixed panel will sit. There are two sets of setting blocks, one set for each fixed panel, of OXXO doors.



- B. **Install the fixed panel(s) in the outer track** on top of the setting blocks. Before securing the panel(s) in place make sure the vent panel is completely in the strike side jamb pocket and the hardware locks into the keeper. Slide the fixed panel back so the interlocks are engaged but the vent panel is still fully in the pocket, closed and locked. Adjust the fixed panel accordingly so the vent panel has enough clearance to lock properly.



- C. **Check the panel reveals** by making sure the interlockers align on both the vent and fixed panel. Check reveals on both vent to fixed connections and make sure the vent panels align in the center.

**NOTICE** Check plumb, level and squareness of the frame before continuing.

**NOTICE** Before securing the fixed panel to the frame, install the handle and keeper; refer to the Sliding Door Handle and Keeper Installation and Roller Adjustment Instructions in the hardware box for more information.



## 4 Fixed Panel and Cover Installation (continued):

- D. **With the screws provided in the Fixed Panel Screw Kit, secure the fixed panel.** Place screws evenly spaced into the frame leg where the weatherstrip is located at the top middle and bottom. Repeat this on the second panel for OXXO units.



- E. **High Performance Doors Only:** Apply sealant on the exterior of the fixed panel where the fixed panel meets the frame across the sill and two inches up the fixed jamb. Tool the sealant as needed.



- F. **Install the Secure Vent Lock Strike plate;** refer to the Secure Vent Lock Installation Instruction document located in the hardware box.

# 4 Fixed Panel and Cover Installation (continued):

**NOTICE** The interior fixed panel side jamb cover and exterior vent panel side jamb cover are two different profiles.

Be sure to correctly identify the jamb covers and install in the correct pocket.



Fixed Panel Side Jamb Cover



Vent Panel Side Jamb Cover

F. Install the interior jamb fixed panel cover, this will cover the frame installation screws making for a clean finish. Insert one end and apply pressure along the length of the cover to snap the cover into place. Repeat for second fixed panel on OXXO units.



G. Install patio door bumper by inserting it into the outer track against the interior jamb fixed panel cover. Bumper can be installed in either the sill or head of the unit.



# 4 Fixed Panel and Cover Installation (continued):

H. Install the exterior vent side jamb cover in the exterior pocket. Insert one end and apply pressure along the length of the cover to snap the cover into place.



**NOTICE** Make sure the threshold and head cover is cut  $\frac{1}{8}$ " less than the maximum dimension (the measurement between the fixed panel and jamb, minus  $\frac{1}{8}$ " for thermal expansion is max dimension in the cavity a particular cover is to be installed).

I. Measure the distance between the vent jamb and fixed panel to confirm the head cover is  $\frac{1}{8}$ " less than the measured dimension.

**NOTICE** DO NOT trim the angled end of the cover.

Repeat for second panel on OXXO units.



J. Install the head cover. Insert one end and apply pressure along the length of the cover to snap the cover into place.



## 4 Fixed Panel and Cover Installation (continued):

- K. **Measure the distance between the vent jamb and the fixed panel at the sill** to confirm the threshold cover is 1/8" less than the measured dimension.

**NOTICE** DO NOT trim the angled end of the cover!

- L. **Install the threshold cover.** Insert one end and apply pressure along the length of the cover to snap it into place.



- M. **Install hole plugs** in the roller adjustment holes.



## 5 OOX/XOO Fixed Panel Installation:

**NOTICE** When installing OOX/XOO doors, the fixed panels will be installed differently than an XO/OX.

- A. **Select the fixed panel with only one interlocker.** Position this panel in the interior most track of the frame on top of the fixed panel setting blocks with the setting blocks approximately 3" from each edge of the panel located near the fixed jamb.
- B. **Select the second fixed panel with two interlockers.** Position this panel on top of the fixed panel setting blocks (with the setting blocks approximately 3" from each edge of the panel) in the exterior most track of the frame sill. Be sure to align the interlockers between the first and second panel.

**NOTICE** Make sure the fixed panel setting blocks do not block any of the sill weep holes.

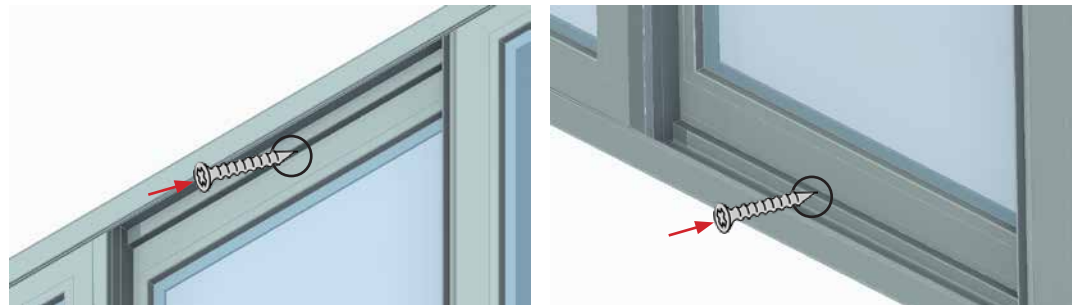
- C. **Position the vent panel into the interior most track.** Be sure align the interlocker between the second panel and the vent panel.
- D. **Center all three panels within the frame.** Once the panels are centered, shift the second fixed panel (the one with two interlockers) 1/8" towards the first fixed panel.

# 5 OOX/XOO Fixed Panel Installation (continued):

- E. **With the fixed panel screws provided**, secure the first fixed panel by inserting screws through the mohair of the jamb and into the panel edge. Install the screws from the exterior side. Place a screw roughly 6" from the top and bottom of the panel edge, as well as one in the center.



- F. **Proceed to the second fixed panel.** Confirm the second fixed panel is positioned 1/8" towards the first fixed panel. From the interior side of the door, insert a screw through the mohair on the edge of the center frame leg at both the head and sill into the center of the top and bottom rail of the panel. Be sure to drive the screw through the mohair of the frame.



- G. **High Performance Doors Only:** After installing both fixed panels, apply sealant on the exterior of each fixed panel where the fixed panel meets the frame across the sill and two inches up the fixed jamb. Tool the sealant on fixed panels as needed.



- H. **Measure the gap between the second fixed panel and the edge of each jamb.** Then cut the corresponding threshold cover 1/8" less than the measured dimension. **There is a straight cut edge on the threshold cover and a side with a 5-degree cut on the other end.** Be sure to do any needed trimming from the straight edge. Do this on both sides of the second fixed panel.

- I. **Follow the same process for the head pocket covers.** Be sure to cut each head pocket cover 1/8" less than the dimension and be sure to do any needed trimming from the straight edge.

- J. **Install the jamb covers.**

# 6 Final Checklist:

A. **Check sliding operation of vent panel to ensure it's smooth.**

If the panel is difficult to slide, lift the panel up and move the bottom in/out until the rollers engage the track. Or adjust the rollers as needed.

B. **Install handles** per the provided instructions in handle package.

C. **Install lock strike / keeper** and #8 x 3" screws in lock strikes per included instructions.

E. **Confirm all screws** which are to go through the frame into the rough opening are installed per installation instructions (Head, Jambs, Lock Strike, Sill).

F. **Install vent lock strike plate** per included instructions.

G. **Complete any remaining steps** in accordance with the applicable installation instruction booklet available on the product website.