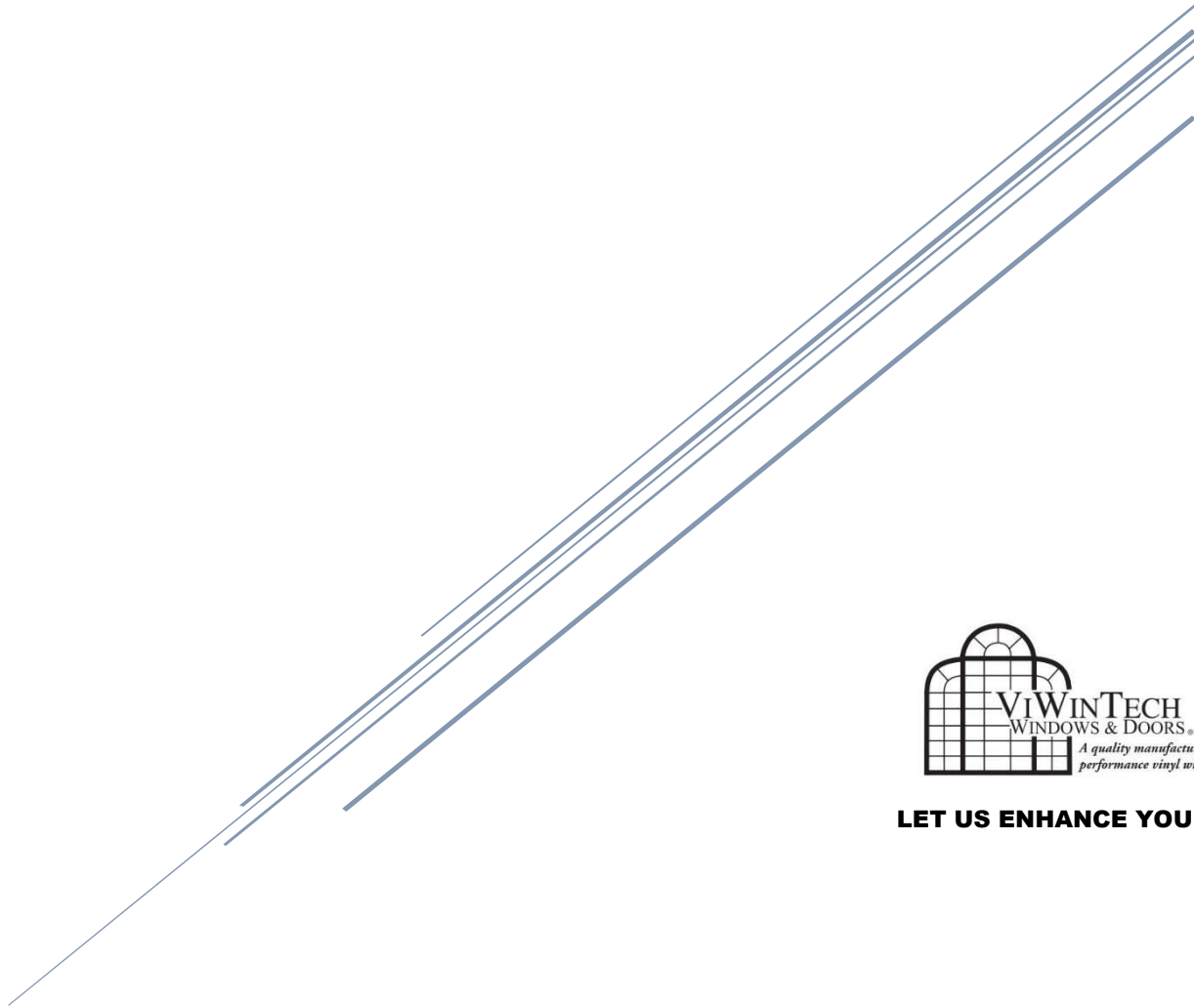


GRAND VISTA 650 SERIES MULTI-TRACK PATIO DOOR

Knock Down Assembly Instructions



LET US ENHANCE YOUR VIEW

<i>Items needed to complete installation</i>	<i>Included Parts</i>
<ul style="list-style-type: none"> • Electric Drill / Impact • Standard 1/2" Drill Bit • Standard 3/32" Drill Bit • 6" #2 Phillips Screw Driver Bit • 5/16" Driver Bit • Hammer • Level • Flat Head Screw Driver • Phillips Head Screwdriver • Dead Pound Hammer • Hand Caulk Gun • Waterproof Caulk <p><i>Additional tools may be required for special conditions or to aid in the removal of existing door.</i></p>	Main Frame Components Operating Panels Fixed Panels (<i>By-Pass Doors Only</i>) Fixed Panel Risers (<i>By-Pass Doors Only</i>) Tower Covers Sash Interlock Covers Roller Tracks Hurricane Clips Installation Hole Covers Roller Adjustment Hole Covers 1.5W x .75H x 1.3L Dust Plugs Handle, Lock & Keeper Set Sill Dam Riser P-Hook (<i>Pocket Doors Only</i>) #8x3" Truss Head Screws #10x1 1/4" Phillips Pan Head Tek Screws #10x1" Hex Head Tek Screws #10x2" Hex Head Tek Screws

Safety:

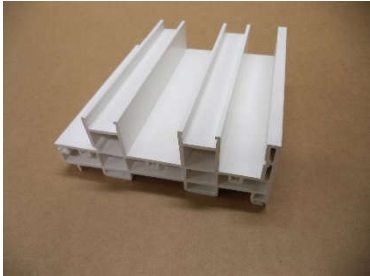




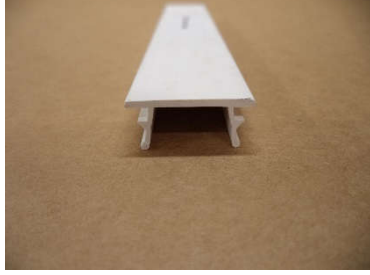
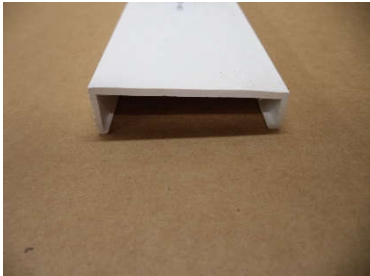


- Read and fully understand all manufacturer's instructions before beginning.
- Do not work alone. Two or more people are required. Use safe lifting techniques.
- Wear protective gear (e.g., safety glasses, gloves, ear protection, etc.).
- Operate hand/power tools safely and follow manufacturer's operating instructions.
- Use caution when working at elevated heights.











IMPORTANT: ViWinTech will not be responsible for finishing imperfections nor damage from unapproved finishes or cleaning chemicals which can cause adverse reactions to window or door materials. If in doubt, contact your local ViWinTech Sales Representative. Unapproved product modifications will void all warranties. Application of after-market window or door films can cause glass breakage due to thermal stresses. Application of such films will void all glass warranties.

Table of Contents:

Part Descriptions.....	Page 3
Main Frame Assembly.....	Page 5
Main Frame Installation.....	Page 6
Panel Installation.....	Page 7
Astragal Installation.....	Page 11
P-Hook Installation (<i>Pocket Doors Only</i>)	Page 12
Handle Set Installation.....	Page 14
Screen Installation (<i>2P2T-STD, 2P2T-REV, 4P2T-STD Only</i>)	Page 17
Configuration Charts.....	Page 18

Part Descriptions

		
2-Track Frame	3-Track Frame	4-Track Frame
		
Roller Track	Fixed Panel Spacer	Tower Cover
		
Sash Interlock Cover	Astragal	P-Hook (Pocket Doors Only)

 <p>Hurricane Clip</p>	 <p>Sill Riser</p>	 <p>Dust Plug</p>
 <p>Hole Cover <i>Roller adjustment holes & between tower installation holes</i></p>	 <p>Frame Assembly Screw <i>#8 x 3" Truss Head</i></p>	 <p>Fixed Panel Spacer Screw <i>#10 x 1 1/4" Pan Head Tek Screw</i></p>
 <p>Hurricane Clip Screw <i>#10 x 1" Hex Head Tek Screw</i></p>	 <p>Astragal Attachment Screw <i>#10 x 2" Hex Head Tek Screw</i></p>	 <p>Lock Keeper Screw <i>#8 x 3" Pan Head (Jamb Installation)</i></p>
 <p>Lock Keeper Screw <i>#8 x 1" Flat Head Tek (Astragal Installation)</i></p>		

Before starting verify the opening is correctly built

- Check that the opening is plumb and level. Use a large level (6' long if possible).
- Check the diagonal dimensions of the opening and make sure they are within ¼" of each other.
- Measure opening width at top, middle, and bottom of opening. Make sure size is correct, if not, make necessary corrections.
- Measure opening height along the entire length of opening to make sure there is no rise in the floor or dips in the header. Correct as necessary.
- Chip out any concrete that may protrude from the mounting surface that may interfere with the installation. This often occurs at the corners.
- ViWinTech recommends the use of a sill pan flashing system under all patio doors.

Note: Refer to configuration charts at back of instructions for frame orientation and panel placement.

Main Frame Assembly

1. Lay main frames on a flat surface and drill ½" installation holes. Installation holes can be placed either in towers (fig.1) * or in between towers (fig.2) † When drilling in the towers, drill through first and second vinyl wall. When drilling between towers, drill through first vinyl wall.

*(For all installations not needing Florida Approval)

Non-Florida Installation:

Drill installation holes in towers 6" from each end and every 21" max on center.

† (For Florida Approval consult www.floridabuilding.org for fastener placement and spacing)

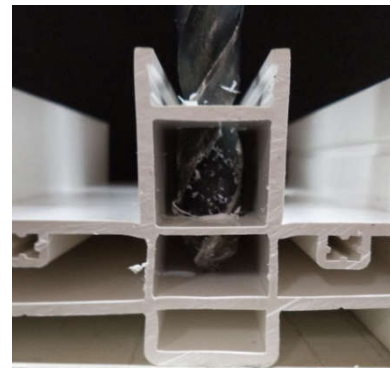


fig.1

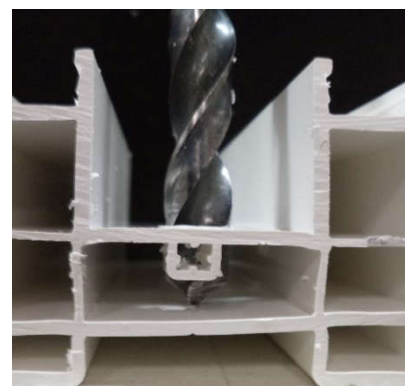
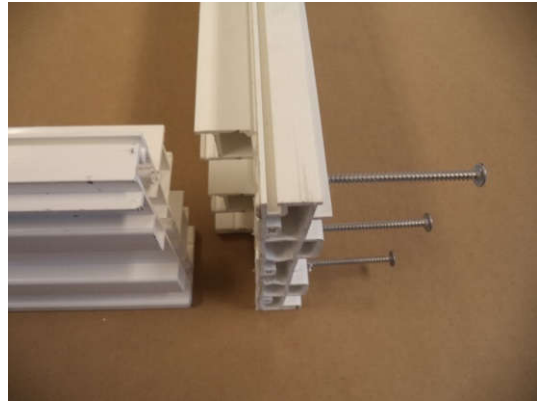


fig. 2

2. Lay the main frame sections on a flat surface with exterior facing up. Verify that foam gaskets are present at each end of the side jambs. Fasten the sill and head to the side jambs with the supplied #8x3" truss head screws.

(Pilot holes will be prefabricated)



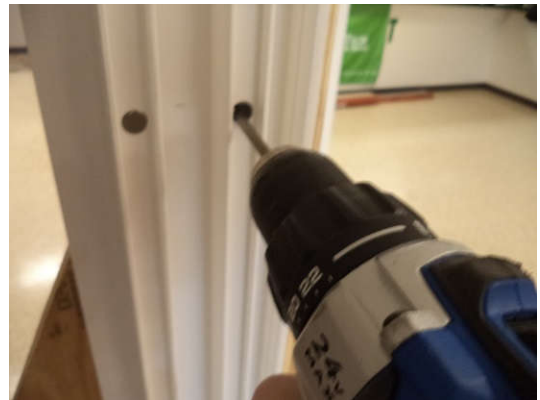
3. Apply two beads of weatherproof caulk to the bottom side of the sill at tower locations and where the sill and side jambs meet.



Main Frame Installation

1. Lift frame and place into building opening. Secure to opening using the installation holes drilled in step 1 of the frame assembly.

IMPORTANT: Frame head and sill must be level, square and plumb at the frame jambs. Measure at head, sill and midpoint horizontally to be certain that frame is not bowed. Also measure from head and sill across the entire frame length to make sure there are no rises in the sill or dips in the head. Rises in the sill or dips in the head could prevent the panels from being installed correctly and effect the operation of the door. Do not over tighten frame installation screws as this could warp the frame.



2. Fill the installation holes on the sill with waterproof caulk, covering the screws to ensure water cannot penetrate through frame.



3. Install installation hole plugs in sill installation holes if holes were placed between towers. Installation holes placed in towers will be covered by roller tracks or tower covers.



Panel Installation

NOTE: Consult configuration charts for correct panel placement. Panels are labeled on the interlocks.

Fixed Panel Installation:

(For Double Stack By-Pass and Pocket Door configurations skip to step 6)

1. Lift fixed panel up into the head frame and sit on sill tower. Slide fixed panel toward the side jamb until the aluminum panel spacer hits the side jamb.



2. Lift the fixed panel up and slide an aluminum sill riser under the fixed panel. The flange on the riser will face the interior of the unit. Center the riser under the fixed panel. The riser is free floating and does not get secured to the sill.

(A Dead Pound hammer may be required for this)



3. Make sure the fixed panel is all the way down on the aluminum sill riser and secure the aluminum jamb spacer to the jamb using the supplied #10x1 1/4" PPH Tek screws. Secure the spacer to the frame at 6" from top and bottom, then center, then in between center and top and bottom, 5 screws total.



4. Retrieve the fixed panel aluminum head riser and insert between the fixed panel and the head frame. The flange on the riser will face the interior of the unit. Center the riser above the panel. The riser is free floating and does not get secured to the head.

(A Dead Pound hammer may be required for this)



5. Install two 1.5W x 1.3L dust plugs between the towers on the head and sill frames above and below the fixed panel interlocks.

(Repeat steps 1-5 for all fixed panels)



Operating Panel Installation:

6. Install roller tracks in sill towers where operating panels will be placed. Use a hammer and flat head screwdriver to ensure the roller track snaps into the vinyl grooves on the sill towers.



7. Lift operating panels up into the head frame and sit on the sill towers. Make sure the interlock on the operating panel is facing and past the interlock on the fixed panel.

(Roller adjustment holes on the operating panel will face to the exterior of the door)






8. Using a Philips head screwdriver adjust the rollers through the exterior side adjustment holes on the operating panels until the panel is in the highest position.

(Repeat steps 6-8 for all operating panels)



9. Install two 1.5w x 1.3L dust plugs under and above the interlocks of any additional operating panels.
10. Operate the moving panels to validate smooth operation and engagement into the interlocks. Check reveal between panels and side jambs, and between panels on any configurations where an astragal will be installed. Adjust rollers as necessary.
11. Install roller adjustment hole covers.

<p>12. Install Hurricane Clips at the top and bottom of each interlock. End of clips should just touch the top of the dust plugs. Drill through the two pre punched holes in the clip with a 3/32" drill bit and attach with two #10x1" Hex head Tek screws.</p> <p><i>(Do not allow the clips to dig into the dust plugs, the clips may damage the dust plugs during operation and cause air infiltration)</i></p>	
<p>13. Install the vinyl tower covers to all tower tracks on the jambs and head, also any towers on the sill that do not contain roller tracks.</p>	
<p>14. Install the sash interlock covers. The covers will snap over the interlocks and Hurricane Clips.</p> <p><i>(The wide side of the notch on the sash interlock covers will face the interlock flange)</i></p>	
<p>15. Install the aluminum sill dam riser over the interior leg of the vinyl sill frame with a dead pound hammer to ensure that it is not dented. Make sure the riser is all the way down.</p> <p><i>(If P-Hook is used for Pocket Door installation, the sill dam riser must be installed after the P-Hook)</i></p> <p>16. Put a small bead of waterproof caulk vertically between sill dam riser and the side jambs.</p>	

Astragal Installation (If supplied)

(All panel roller adjustments must be made before astragal is installed.)

The flat side of the astragal will slide onto the dummy handle set panel. The lock keeper will attach to the aluminum tower on the other side of the astragal. The large vinyl side of the astragal will face the exterior on all configurations except 4P2T-DP, where it will face to the interior.

1. Using a ½" drill bit, drill 4 holes in the first wall of the aluminum tower on the side of the astragal, 6" from top and bottom, then evenly spaced in between.
2. Make sure the astragal is spaced on the operating panel so that it does not rub the head or sill frame when the panel is operated. Fasten with the supplied #10x2" Hex head screws.
3. Attach the lock keeper to the astragal tower using two #10x1 ¼" pan head tek screws, making sure the raised nub in the center of the keeper lines up with the hook release push pin in the center of the mortise lock.
4. Pull the panel with the lock handle over until the interlocks fully engage, then place one 1.5W x 1.3L dust plug between the first and second tower at the end of the lock panel in the head and sill frame. When the two panels are closed the dust plugs should be under and above the astragal.



P-Hook (For Pocket Door Installation)

(If P-Hook is used, close the panels and set the lock and keeper prior to installing the P-Hook)

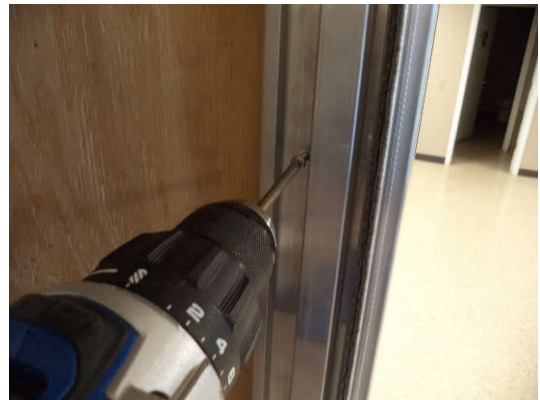
1. Push all the panels to the closed position and engage the lock.
2. Insert the P-Hook between the exterior of the opening and the interlock of the last panel. Make sure the P-Hook and last panel interlock are engaged.



3. Push the P-Hook to ensure the panels are tight. Measure the distance between the P-Hook and the opening.
4. Unlock the door and push completely pass the P-Hook into pocket cavity.

(Some configurations may require some of the panels to be removed)

5. Recheck the measurement you took in step 3, make sure it is the same.
6. Attach the P-Hook to the opening with the supplied #10x2" Hex head screws, 6" from top and bottom, then center, then in between center and top and bottom, 5 screws total.
7. Ensure engagement of the last panel with the P-Hook. At this point adjust the rollers if necessary to ensure proper fit, working from P-Hook to lock panel. Re-adjust lock and keeper if necessary.



8. Install the aluminum sill dam riser over the interior leg of vinyl sill frame with a dead pound hammer to ensure that it is not dented. Make sure the riser is all the way down and in place.
9. Apply waterproof caulk around top and bottom of P-Hook where it intersects with vinyl and sill dam riser and where the sill dam riser meets the lock side jamb. Apply waterproof caulk the entire height of the P-Hook on both the exterior and interior to help with air/water infiltration.



10. Apply two 1.5W x 1.3L dust plugs, one on top of the other the height of the sill dam riser, butting up to the P-Hook.
11. Apply one 1.5W x 1.3L dust plug under the P-Hook, and one inside the P-Hook interlock flange and against the vinyl sill dam.



12. Slide all the panels toward the lock jamb and seal the gap between the sill frame and the building at the pocket cavity with waterproof caulk.



Handle Set Installation



Interior Handle & Mounting Plate



Exterior Handle



Lock Cylinder



Mortise Snib



Mortise Lock



Lock Keeper

1. Install the mortise lock in the side of the lock panel using the supplied #8x1" flat head tek screws.

(For left-handed doors, as viewed from the exterior, the brand logo on the side of the mortise lock will face towards the interior of the door. For right-handed doors the brand logo will face towards the exterior)



(For non-key locking handles skip to step 3)

2. Cut the tail of the lock cylinder at the fifth groove from the end of the tail bar. Remove the screw from the exterior handle and install the lock cylinder. For left-handed doors, as viewed from the exterior, insert the lock cylinder into the exterior handle as shown in fig.1, for right-handed doors insert the cylinder as shown in fig.2.

(Failure to cut the lock cylinder tail will cause the lock to bind up and not work properly)

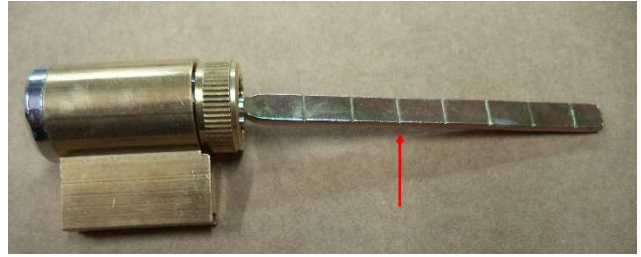


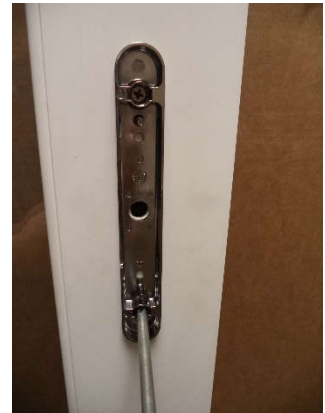
fig.1



fig.2

3. Install the exterior handle into the three pre drilled holes in the panel. Place the interior handle mounting plate on the interior of the panel, making sure the slot on the side of the mounting plate is facing the glass on the panel, and secure with the two 1-3/4" machine screws included in the handle kit.

(The 1-3/4" machine screws are thread cutting, they will cut threads in the exterior handle as they are installed)



4. Install the mortise snib through round hole in mounting plate and into square hole in the mortise lock, with the lever of the snib in the upward position. Insert the key to align the tail bar of the lock cylinder with the end of the snib. Ensure snib lever operates in the mounting plate (center button on the mortise lock must be pushed for lock to operate). Ensure key can be removed in both the locked and unlocked position.



5. Install the interior handle to the mounting plate with two of the $\frac{3}{4}$ " machine screws included in the handle kit.

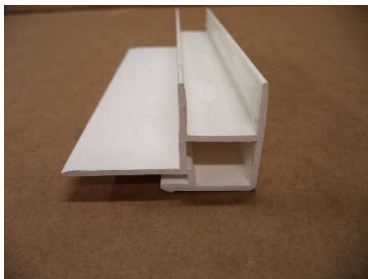


6. Install the lock keeper on the lock side jamb or the astragal depending on the configuration of the door. Making sure all roller adjustments have been done, measure up from the sill tower to the push button on the center of the mortise lock, then measure the same distance on the lock jamb or astragal and set the nub in the center of the lock keeper at that same distance. Attach the keeper with the supplied #8x3" pan head screws if attaching to side jamb tower, if attaching to aluminum astragal tower, use the supplied #10x1 $\frac{1}{4}$ " pan head tec screws.

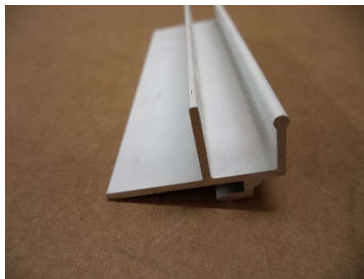


Screen Installation

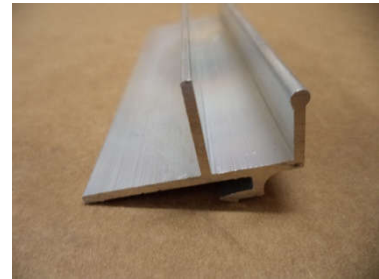
(Only available on 2P2T-STD, 2P2T-REV, and 4P2T-STD configurations)



Jamb Screen Track

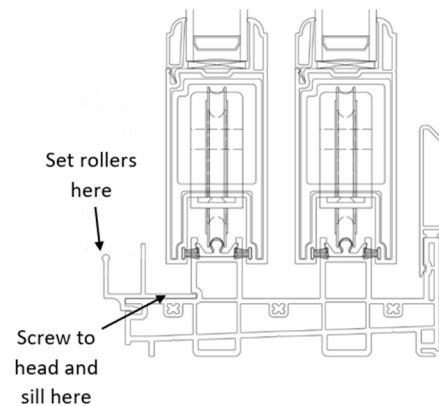


Head Screen Track (White)

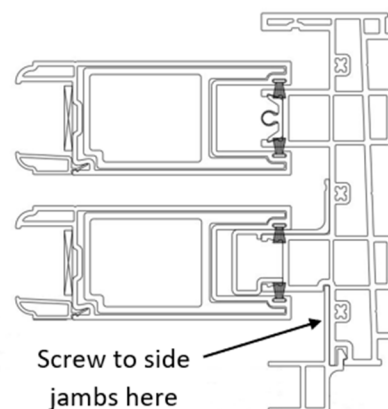


Sill Screen Track (Mill Finish)

1. Install screen tracks to the head and sill as shown in drawing 1, and secure with the supplied #8 x $\frac{5}{8}$ " pan head screws. The white track goes on the head and the mill finish track goes on the sill. Install one screw 6" from each end, then center, then in between center and each end.
2. Install the jamb screen tracks to both side jambs as shown in drawing 2, and secure with the supplied #6 x $\frac{1}{2}$ " color matched pan head screws. Install one screw 6" from each end, then center, then in between center and each end.
3. Set screen on the sill track with the rollers straddled the outermost track leg as shown in drawing 1, then swing door inward while pushing top rollers down. Release rollers so they straddle the outmost leg on the head screen track.
4. Adjust rollers using the adjustment screws located on the sides of the screen frame at top and bottom. Rollers should be adjusted so the screen is evenly spaced between the head and sill tracks.



Drawing 1



Drawing 2

Configuration Charts

As viewed with exterior at bottom of page.

2 Track By-Pass	
2P2T-STD 2-Panel/2-Track Standard Stack XO	
2P2T-REV 2-Panel/2-Track Reverse Stack OX	
2P2T-SDS 2-Panel/2-Track Standard Double Stack XX	
2P2T-RDS 2-Panel/2-Track Reverse Double Stack XX	
3P2T-STD 3-Panel/2-Track Standard Stack OXO	
3P2T-REV 3-Panel/2-Track Reverse Stack OXO	
4P2T-STD 4-Panel/2-Track OXOXO	

3 Track By-Pass	
3P3T-STD 3-Panel/3-Track Standard Stack XXO	
3P3T-REV 3-Panel/3-Track Reverse Stack OXX	
3P3T-SDS 3-Panel/3-Track Standard Double Stack XXX	
3P3T-RDS 3-Panel/3-Track Reverse Double Stack XXX	
6P3T-STD 6-Panel/3-Track OXXXXO	

4 Track By-Pass	
4P4T-STD 4-Panel/4-Track Standard Stack XXO	
4P4T-REV 4-Panel/4-Track Reverse Stack OXXX	
4P4T-SDS 4-Panel/4-Track Standard Double Stack XXXX	
4P4T-RDS 4-Panel/4-Track Reverse Double Stack XXXX	

2 Track Pocket	
1P2T-LP 1-Panel/2-Track PX	
1P2T-RP 1-Panel/2-Track XP	
2P2T-LP 2-Panel/2-Track PXX	
2P2T-RP 2-Panel/2-Track XXP	
2P2T-DP 2-Panel/2-Track PXXP	
4P2T-DP 4-Panel/2-Track PXXXXP	

3 Track Pocket	
3P3T-LP 3-Panel/3-Track PXXX	
3P3T-RP 3-Panel/3-Track XXXP	

4 Track Pocket	
4P4T-LP 4-Panel/4-Track PXXXX	
4P4T-RP 4-Panel/4-Track XXXXP	