

VistaCore Hinged Doors Installation Instructions



Installation Guidelines for VistaCore Hinged Doors

Important Information to Review Before You Begin

- Ensure that the building envelope is properly prepared with weather-resistant barriers that comply with local and state codes.
- All frame and sill surfaces must be adequately prepared for air, water, and structural integrity by the builder or contractor prior to installation.

We recommend hiring a high-level installer or someone who has received training as a Win-Gate certified installer.

- Please read these instructions thoroughly from start to finish before beginning the installation.
- Verify compliance with local building code requirements by consulting your local code official.

Win-Gate is not liable for site measurements or the structural and architectural requirements associated with the door installation.

Keep in mind that unique aspects of your project—such as building design, construction methods, materials, and site conditions—may necessitate different approaches than those outlined in these instructions.



Thermal-Break Aluminum
Hinged Doors



Thermal-Break Aluminum
French Doors

Remove Packaging

Opening the Wooden Crates

Follow the instructions displayed on the outside of the crates: start by opening the top cover, then proceed to the indicated side. You may require a pry bar to help lift the crate or a drill to remove the screws.

- Remember to:
 - Use safe lifting techniques.
 - Enlist an appropriate number of individuals with sufficient strength to lift and carry the windows.

This will help prevent injury and protect the products from damage.

WARNING

Windows and doors can be quite heavy. When opening the crates, exercise caution to prevent the windows or doors from falling towards the installer, as this could result in injury or damage to the products.

Inspect Door

Each door will feature an identification label displaying the Item Number, description, sizes, and more to assist you in locating the appropriate door for its designated place.

Visible Damage

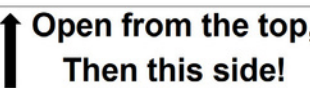
Carefully remove the packaging material from the frame and inspect it for any damage or glass breakage that may have occurred during manufacturing or shipping.

Correct Product

Verify the product to ensure it aligns with the shop drawings and meets the requested specifications, including size, color, grid pattern, handing, glazing, energy efficiency requirements, and more.



Instruction on Wood Crate

OPERATION GUIDANCE

↑ Open from the top, Then this side!

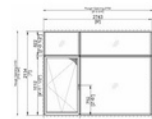
OPERATION GUIDANCE
1. Please follow the arrow above to open the top cover first.
2. Then open the indicated side.

Packing List

CTN NO.	Product ID	Quantity	Specification (L*W*H mm)	Volume (m³)	Net weight (kg)	Gross weight (kg)
C3	W1.1	1				
	W1.4	1				
	W1.2	1				
	W1.3	1				
	W1.1	1	1780 760 1970	2.68	492	573
	W1.2	1				
	W1	1				
W5	1					



Product packaging label


W1.06
Project / Client: Nichole Grams
Location: 1st South KITCHEN
Quantity: 1
Specification: 2743mm x 2134mm
Installation: Nail Fix
Origin: Made in China

Materials Needed

To properly secure your project, you will need:

- 10 x 1 ½" flat head or washer head screws** (stainless steel is recommended)
 - These screws should go through the metal clips or directly into the frame, reaching the rough framing.
 - Ensure that fasteners penetrate at least 1" into the framing (or follow local code requirements).
 -

For masonry or concrete walls, masonry screws are essential.

Additionally, fasteners must be installed through:

- Nailing flanges
- Installation straps
- Head
- Side jambs Sill

FASTENER SCHEDULE		
Building Materials	Minimum Fastener Size	Minimum Embedment
Wood Frame	#10 Wood Screws	1 1 / 2
Concrete / Masonry	3 / 16" Masonry Screw	1 1 / 4
Steel Frame	#10 Self-tapping Screw	3 Threads
*1 3/4" Roofing nails can be used for fastening through installation flanges into wooden frame construction.		

Interior and exterior window/door grade sealant

Polyurethane low expansion foam

Non-compressible or non-water degradable shims/Plastic shims

Self-adhered flashing tape (Minimum 6" wide)

NOTE

Example Fastener Schedule and Installation Guidelines

This fastener schedule serves as an example of fastening requirements, which may differ depending on the product, building type, application, and region.

The installers will supply the necessary materials for installation and are responsible for ensuring quality. They should adhere to the manufacturers' instructions throughout the process.

WARNING

Using unsuitable materials during installation can lead to failures, which may result in injuries, as well as damage to property or products.

Needed Tools



Hammer



Utility Knife



Tape Measure



J-Roller



Suction Cups



Sealant Gun



Caulking Gun



Pry Bar



Drill with Bits



Laser Level



Framer's Square



Air Wedge

WARNING

Always adhere to the manufacturer's instructions when using hand or power tools. Be sure to wear safety glasses at all times. Neglecting these precautions may lead to injuries and/or damage to the product.

Safety Precautions for Handling Glass

- Exercise caution when dealing with glass.
- Broken or cracked glass can lead to severe injuries.

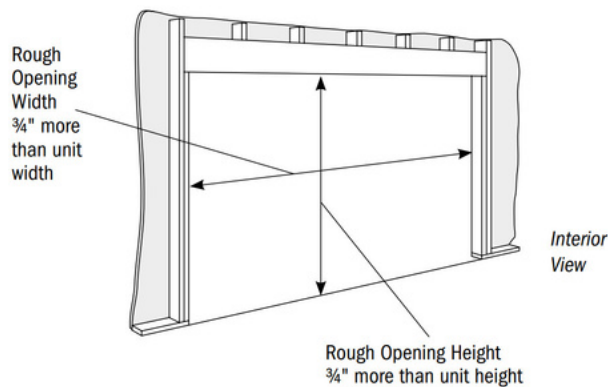
In Case of Injury

If an injury occurs, seek medical attention immediately!

INSTALL DOORS (WOOD STUD-FRAMED WALL)

Step 1: Verify Rough Opening

Before proceeding with the installation, ensure that the rough opening sizes are accurate. Typically, the rough opening (RO) dimensions should be $\frac{3}{4}$ " wider and taller than the actual sizes of the window or door (from frame to frame), as indicated in the shop drawings we submitted.



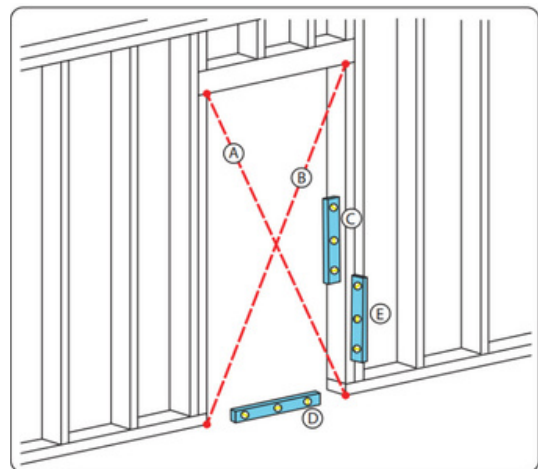
WARNING

Ensuring Proper Installation of Rough Openings

The rough opening must be both level and square. Neglecting to achieve this can significantly impact product performance. If you find that the rough opening is not plumb or level, make the necessary adjustments to correct it.

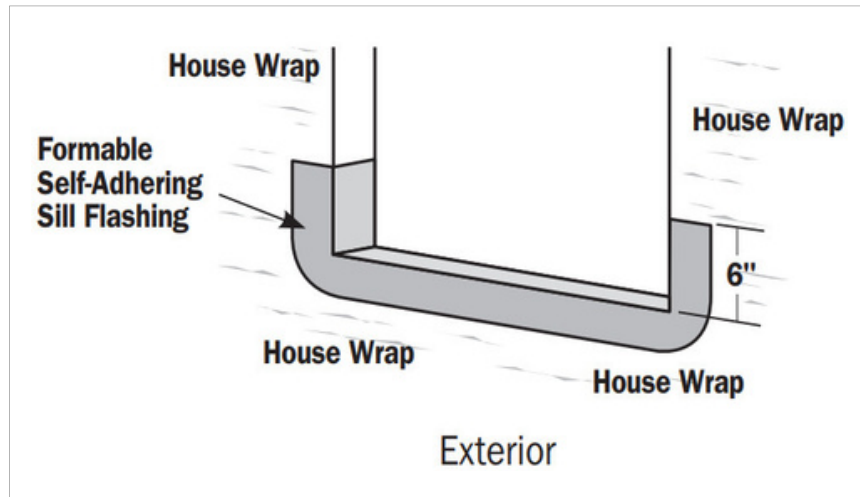
Ensuring Accurate Rough Opening Measurements

- Confirm that the rough opening is square; the measurements (A) and (B) should match.
- Check that the rough opening is level and plumb, paying attention to points (C), (D), and (E).
- The sill should be level and flat; use shims if necessary.
- The exterior face of the rough opening must be aligned in a single plane (E), with a twist of no more than $\frac{1}{8}$ " from corner to corner.



Step 2: Apply Sill Flashing or Sill Pan According to the Local Code

Apply the self-adhering formable sill flashing in one continuous piece, extending over the sill and up both jambs for 6 inches, as illustrated. Use a J-roller to smooth out any bubbles or creases.



There are various types of flashing available in the market. Ensure that the installers select the appropriate type and adhere to both the manufacturer's instructions and local codes.



NOTE

Rigid sill pans and liquid flashing can be quite effective when the correct application techniques are employed. The installers will supply the sill pan or flashing, which must adhere to the manufacturer's instructions and comply with local codes.

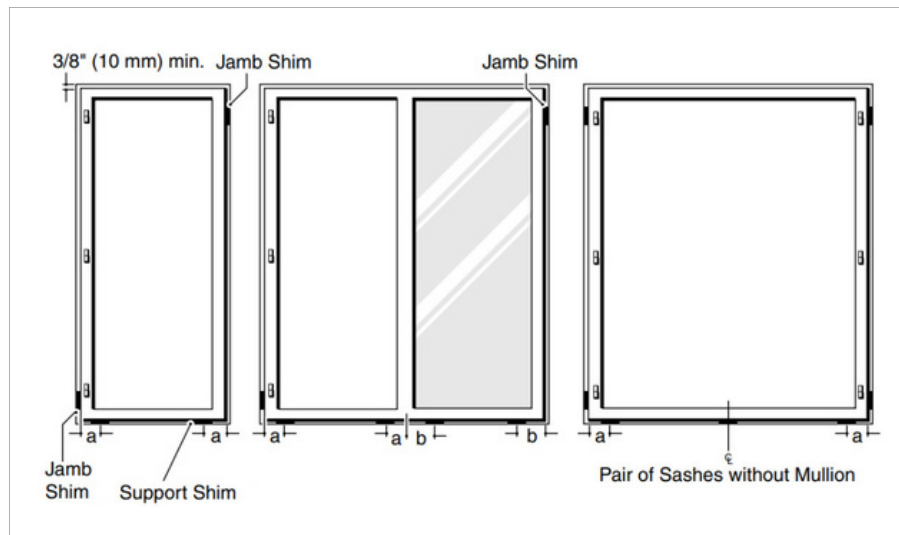
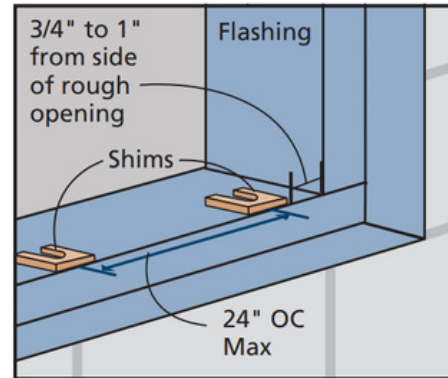
Step 3: Set Shims

Installation Guidelines for Support Shims

- Place support shims (composite shims) over the flashing.
- Ensure the shims are level and adjust their height to achieve a level sill.

Key Steps:

- **Verify Door Installation Location:** Consult with the contractor, builder, or owner to confirm the correct placement of the shims beneath the door threshold.
- **Shim Placement:**
 - Position shims on the sill 4" (100 mm) from each end.
 - Maintain a maximum spacing of 24 inches between additional shims.
 - For mulled units, make sure a shim is placed 1/2" on either side of the mull joint.



Placement of Support Shims and Jamb Shims

- Position a shim level with the top hinge on the lock side (above the metal strap).
- Place a shim under the bottom hinge on the hinge side (above the metal strap).

For French doors, ensure there is a shim located at the center line.

IMPORTANT

- **Avoid excessive shimming.** Bowed jambs can negatively impact product performance and the unit's proper operation.
- **Do not place the door unit directly on the sill.** Shims can be temporarily secured with sealant.

In a later step, ensure that the foam applied under the door creates a continuous seal at the sill.

Step 4: Install the Door

Pre-Installation Checklist

Before you begin the installation process, ensure that you verify the door swing and handing. Refer to the shop drawings that have been confirmed and approved by the clients. Additionally, inspect the door frame to see if metal straps are attached. If they are not present, check the accessory box or reach out to your sales representative for assistance.

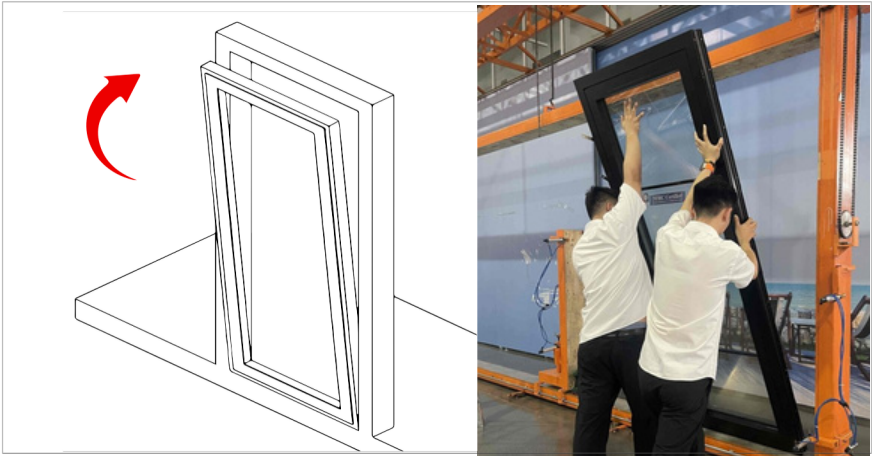
WARNING

The door is quite heavy! To prevent injury, it's essential to have at least two people for the installation. Ensure that the door is adequately supported until it is fully secured.

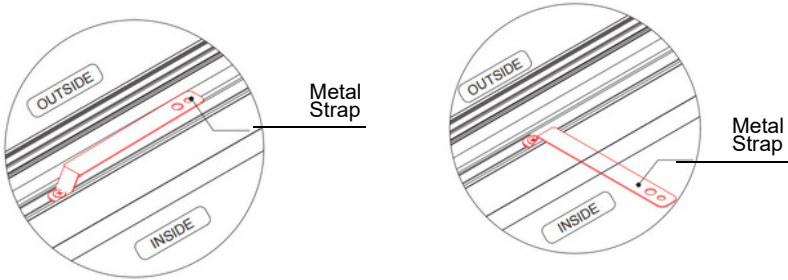
Door Handing Chart

SINGLE DOORS		DOUBLE DOORS			

Position the door within the rough opening, beginning with the bottom edge resting on the sill pan (if installed). Ensure that the jamb legs are securely placed on the sill shims on both sides.



Rotate the metal straps affixed to the door frame (specifically the head and side jambs; there are no metal straps on the threshold) until they form right angles with the frame. Ensure that the metal straps are directed toward the interior of the building.



Rotate the metal straps to the Interior

Center the door within the rough opening, making sure it is oriented correctly. Secure the door temporarily by screwing the metal straps to the top of the jamb on both sides and to the bottom of the jamb on the hinge side.

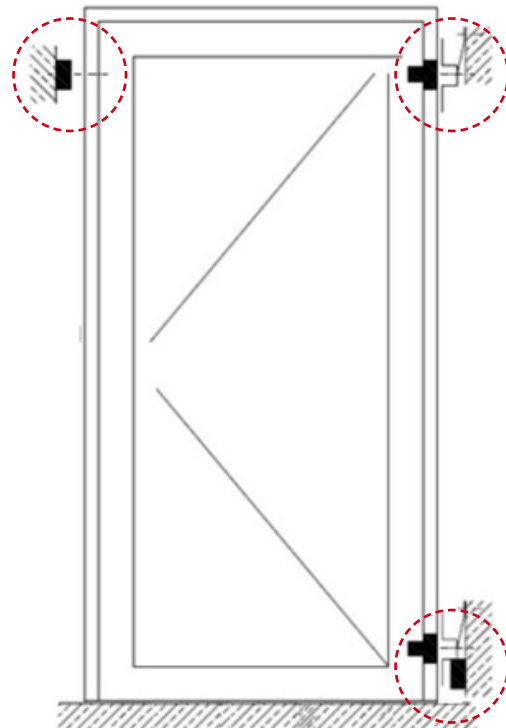


Screw the Metal Straps from the Interior

Temporarily fasten the door using metal straps at the specified locations before making any adjustments and verifying that it is plumb, level, and square.



Label on Glass



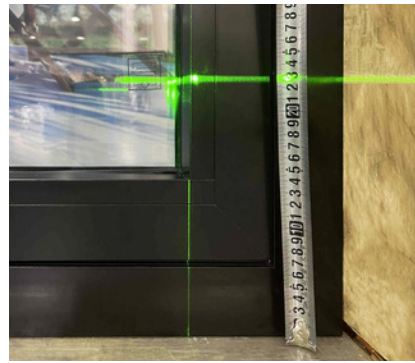
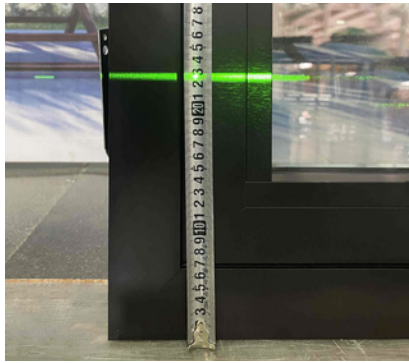
Temporarily secure the door

NOTE

When installing the door into the opening, be mindful of the door swing and handing. Important: Do not position the door upside down. The label sticker on the glass indicates which side should be facing up.

Level the Door with a Laser Level

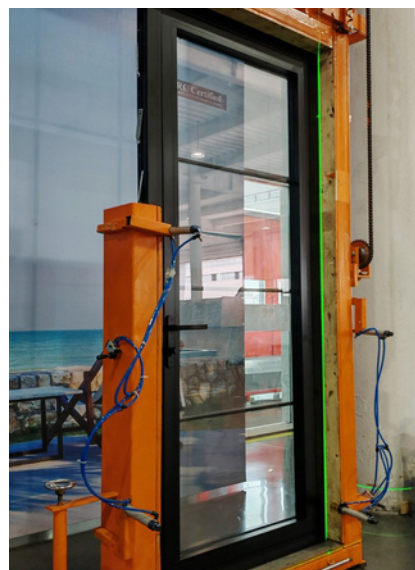
To ensure that the door is perfectly aligned both vertically and horizontally, use a laser level. It's essential that all four sides are in a single plane to guarantee that the door frame remains straight.



Check horizontal level (Floor leveled and laser height same)

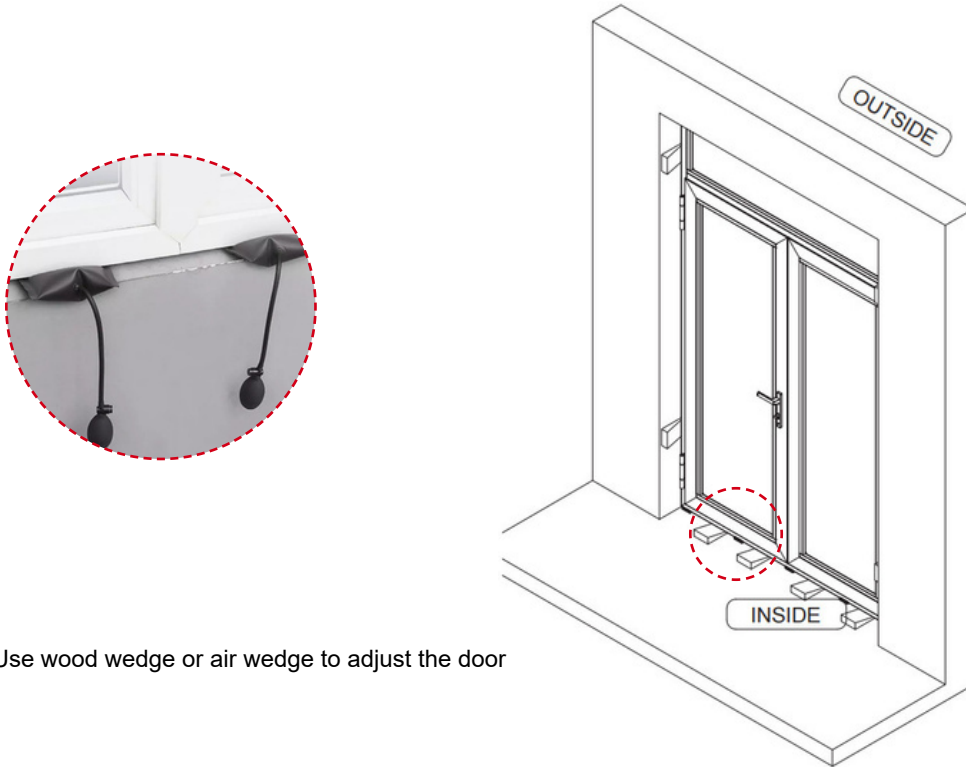


Check vertical level (Two sides straight)



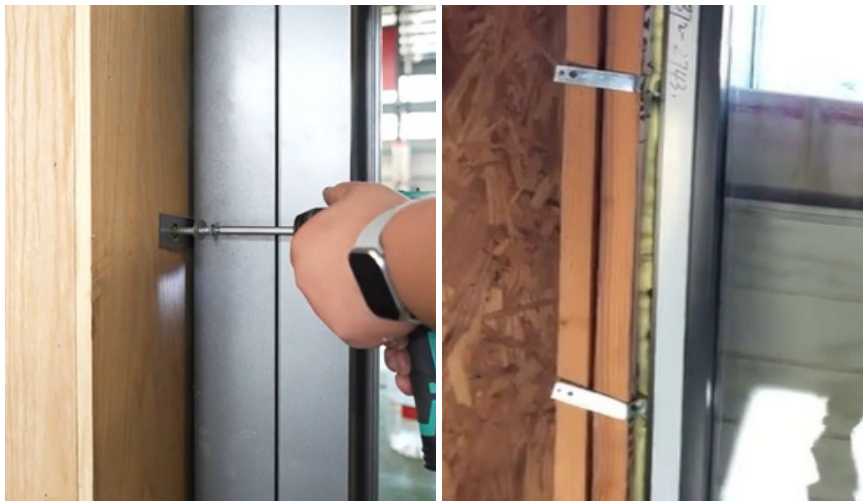
Check four sides in a single plane (Two side frame surfaces straight)

Adjust the Shims as needed until the door is perfectly leveled. DO NOT over shim.



Use wood wedge or air wedge to adjust the door

Once the leveling is precisely adjusted using a laser level, attach the remaining metal straps to the framing and secure the entire door within the opening. No straps are needed for the aluminum sill.



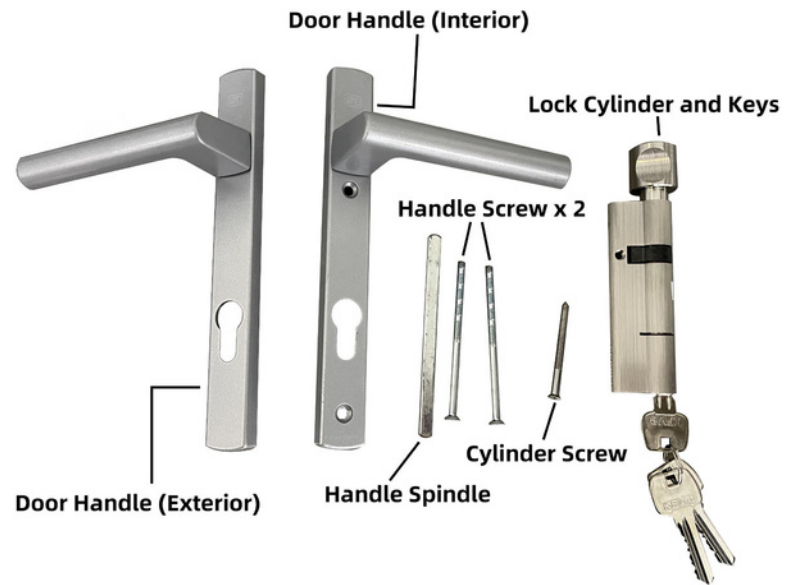
Rotate the straps at a right angle or bent them over the inside edge of the rough opening

Install Door Handles and Lock

NOTE

Although the design of door handles and locks can differ between brands, the installation process stays the same.

Each door comes with two handles (In & Ex), one handle spindle, two handle screws, one cylinder screw, one lock cylinder and three keys.



Insert the spindle to the handle and insert it to the door.



Insert the lock cylinder to the door.



Turn the thumb turn to the hinge side to unlock the door.



Press the handle to open the door.



Open the door and screw the Lock Cylinder tight.

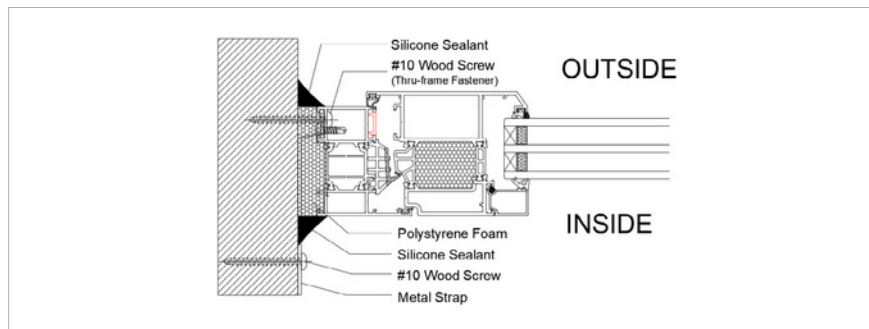


Install the Door Handles.



Screw the handles together from Inside

In addition to metal straps, through-frame fasteners are essential for stabilizing the door and securing it to the rough opening framing. Important: Avoid screwing them in too tightly.



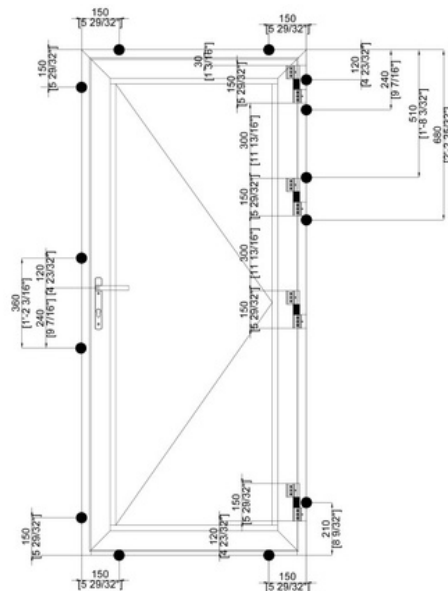
Section drawing to show installation details

Important Thru-frame Fastener Locations:

Screws near the hinges.

Top and bottom with 6" distance to the corners.

The rest screws with 20"oc max.



Predrilled screw hole locations

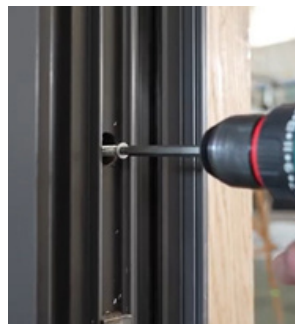
NOTE

Reassess the door's level and ensure it remains unchanged throughout the installation process. It is essential to place shims in the same locations as the fasteners to avoid any warping of the frame.

DO NOT screw too tight.



Remove rubber seal from the frame to show pre-drilled screw holes



Screw through the frame to the Wall



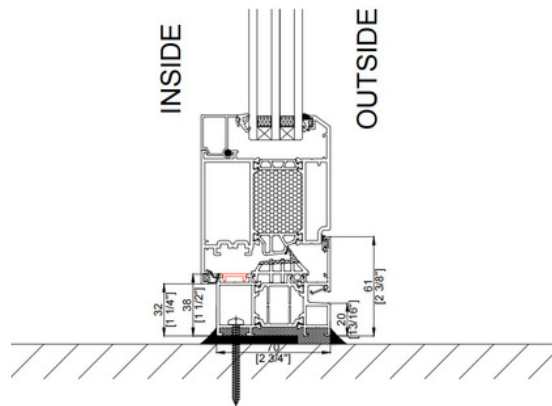
Install the rubber seal back to the frame and cover the screw holes

Door Thresholds

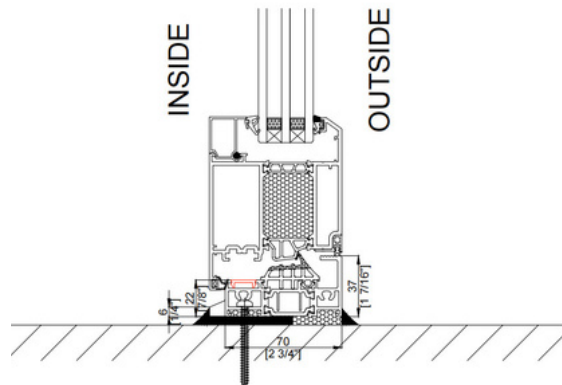
There are three threshold options available based on the client's needs or local building codes. Be sure to verify which threshold option is utilized in your doors.

NOTE

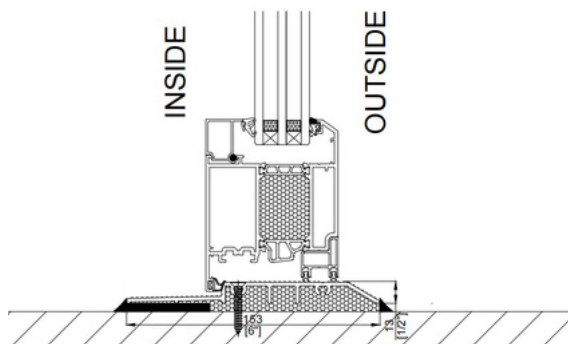
For doors equipped with a Low Profile Threshold or ADA Threshold, make sure the sill is elevated enough to accommodate the interior floor finish materials. If necessary, install a sill plate.



High-Performance Threshold



Low Profile Threshold



ADA Threshold

Step 5: Test the Door

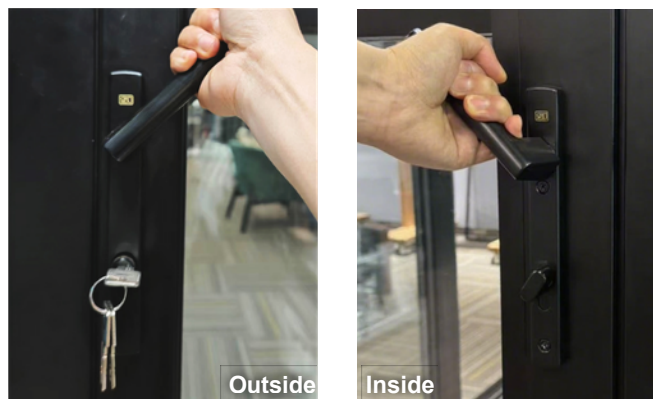
Check the door's operation by opening and closing it to ensure it moves smoothly. If you encounter any issues, utilize a laser level to determine if the door's alignment has shifted. Make adjustments as needed.

Test the lock.
To secure the door.

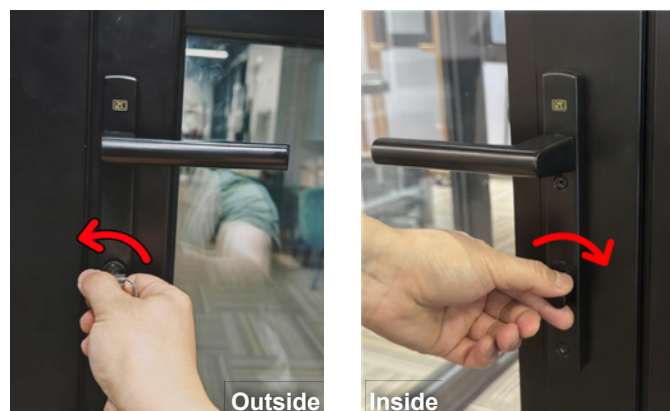
Close the door firmly, the latch engaged.



Lift the handle up, the deadbolt comes out and multi-locking points engaged.

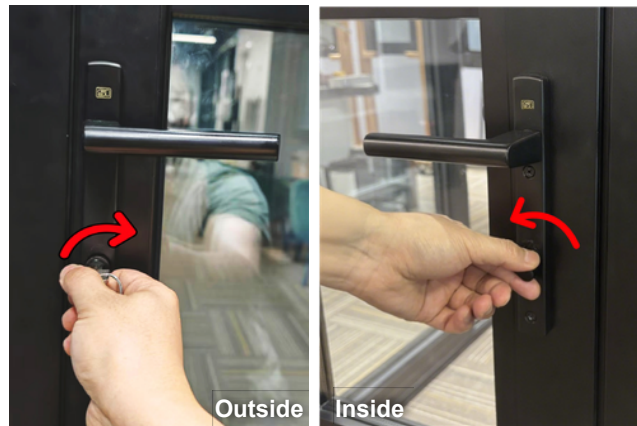


To lock the door, either turn the key from the outside or rotate the thumb turn from the inside towards the strike-side jamb. This action will prevent the handle from turning, effectively securing the door.

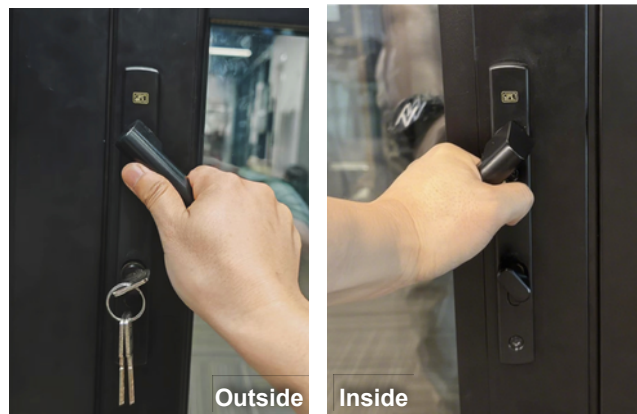


To Open the door

To unlock the door, insert and turn the key from the outside or rotate the thumb turn from the inside towards the hinge-side jamb.



Press the handle down.



Push or pull door open.



Step 6: Finish the Installation

Fill the gap between the frame and the wall using low-expanding foam.



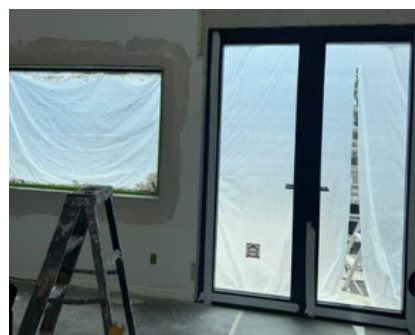
After the foam is dry, cut the overflowing foam and clean up the foam and dirt.



Apply Silicone Sealant around the joint continuously on the inside and outside or wait until the all the installation work is finished.



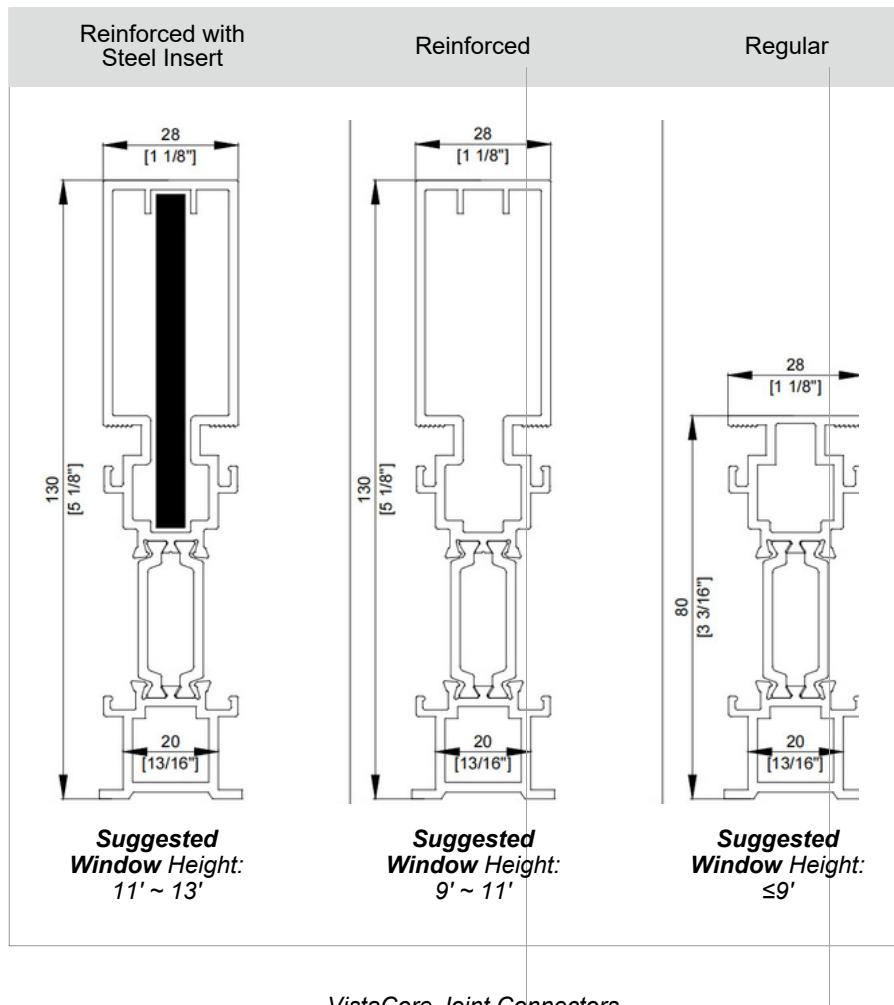
Add protection and marks on the door to avoid glass being hit and damaged when the house is still not ready.



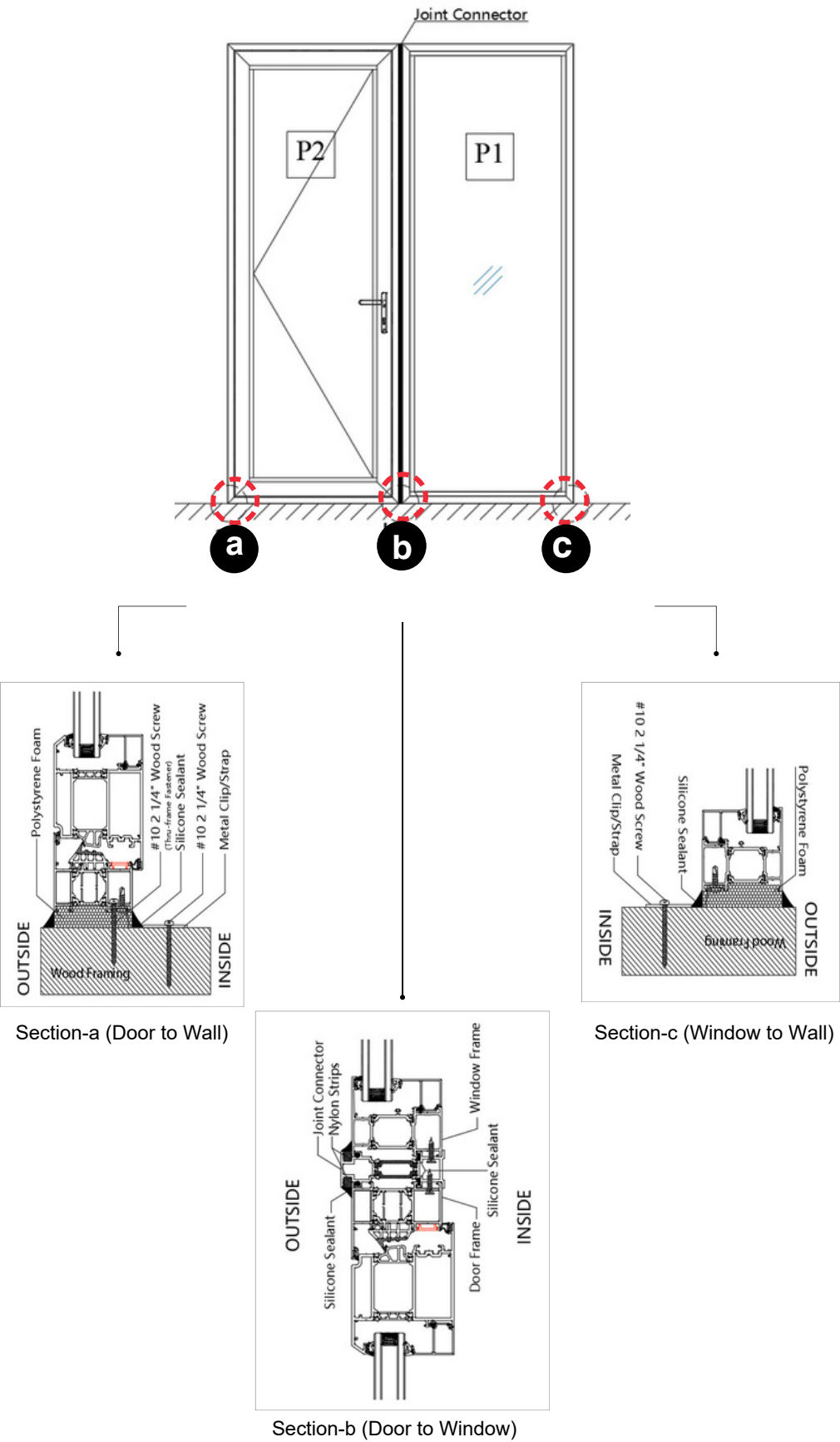
Step 7: Mull the Door and Window together

In certain orders, there are oversized Door and Window Combinations that exceed the container shipping size limits due to the dimensions of the container door opening. Consequently, we must manufacture and ship the door and window separately, allowing installers to join them on-site. Doorwin has created specially patented joint connectors to facilitate the connection between the window and door.

Below is to show the joint details and the process of joining the window and door together.



For Example:



The process of joining the door and window together:

Double check the window and rough opening width

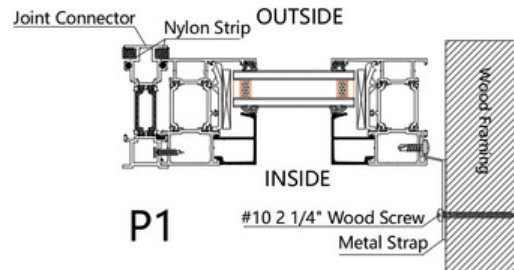
Overall Window Dimension Width:

Sum of individual window widths plus 3/4" (20mm) for each joint.

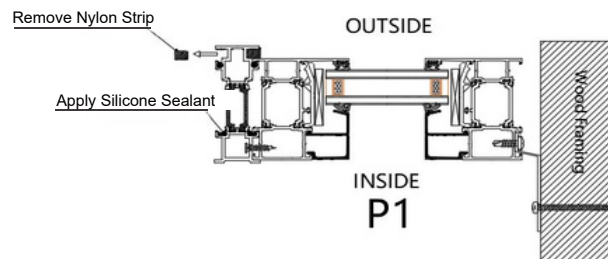
Overall Rough Opening Width:

Overall window dimension width plus 3/4" (20mm).

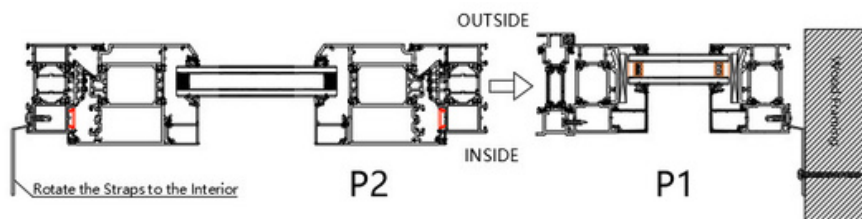
Install P1 in the rough opening using metal straps, ensuring it is level with a laser level. If needed, use shims for adjustment. The joint connector has already been installed on P1 at the factory.



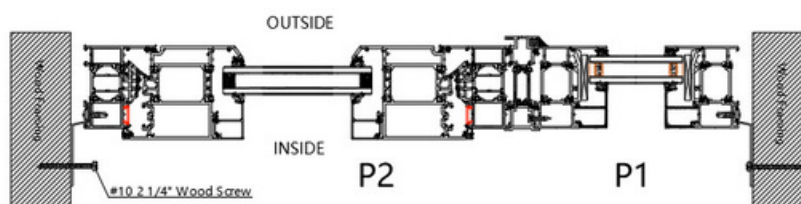
Remove the Nylon Strips and apply Silicone Sealant on the Joint Connector.



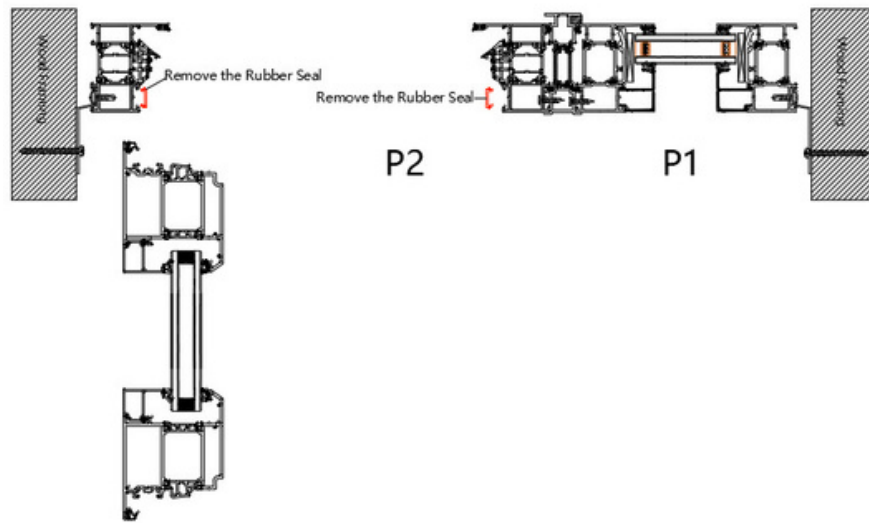
Install P2 and connect to P1.



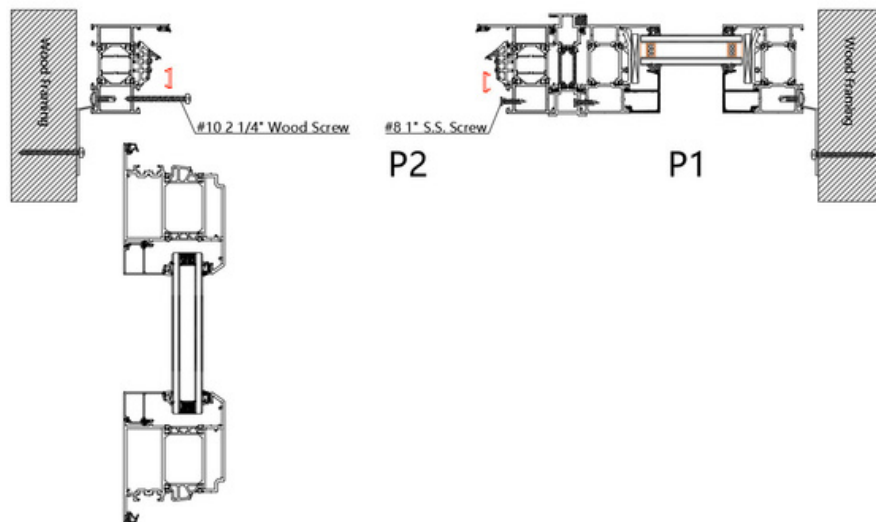
Make sure the door is perfectly leveled (refer to step D, on Page 12), and then screw the straps to the wall.



Open the door and install the door handle as per step G (on Page 14), and remove the rubber seal from the two side door frame.



Screw through the frame to the wall and to the joint connector, and then install the rubber seal back to the frame.

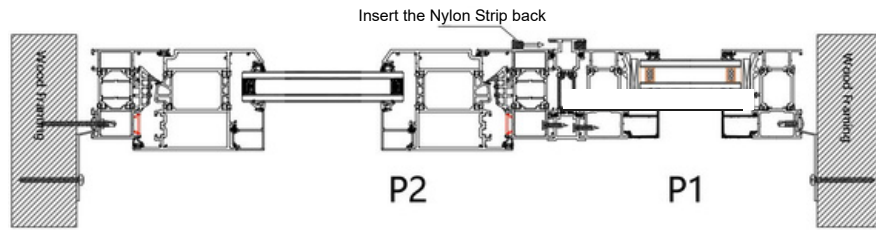


NOTE

The individual window / door will be installed one after another, so it is very important to check the rough opening width first, and make sure the window combination will fit and be in the center of the rough opening.

A Laser Level must be used during the installation for accuracy.
Make sure the door is leveled perfectly, or the sash will not operate properly.

Use laser level to recheck the leveling, and make adjustment if necessary. Insert the nylon strip back to the joint connector. Use rubber hammer to hit it in if it is tight.

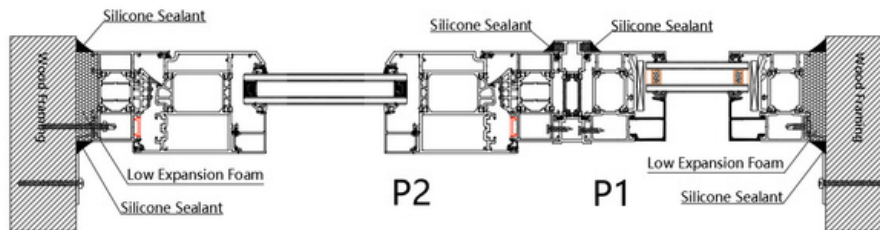


Finish the Installation:

Apply continuous beads of silicone sealant along two sides of the nylon strips.

Fill the gaps with low expansion foam between the frame and wall.

Apply silicone sealant between the wall and window & door frame, or wait until all the installation work is finished.



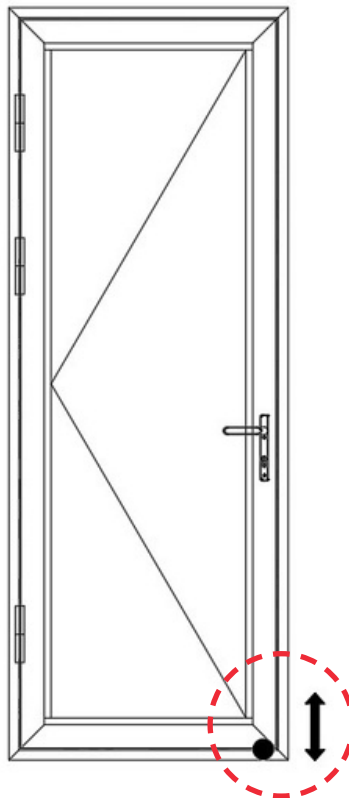
For the installation of more panels combination, install one panel by one panel according to above instructions.

Troubleshooting and Adjustments

Before you start to do adjustments, check the brand of door hinges first. We usually use German SIEGENIA or German ROTO. The adjustments are different.

SIEGENIA HINGE

SIEGENIA
brings spaces to life



If the sash binds at the bottom, use below adjustment to raise the sash.

Adjustment 1: Vertical Clearance

Maximum adjustment: raises the sash 2mm or lowers the sash 2mm from the factory setting. This adjustment moves the sash up or down.

NOTE

Make sure that you raise or lower all three / four hinges by the same amount.

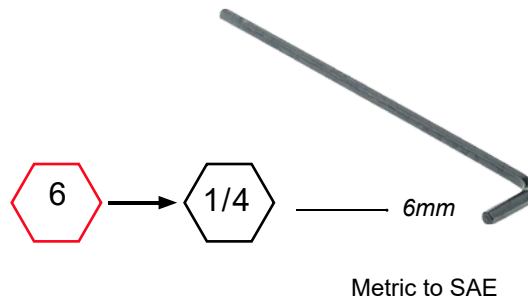
Open the sash and use a small knife blade or a flat head screwdriver to remove the plastic cap from the bottom of each hinge.



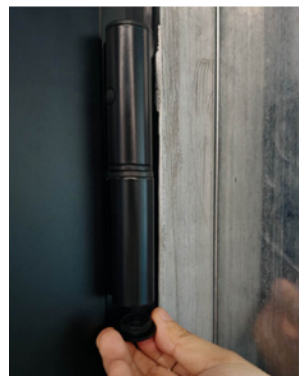
Insert the SW6 Allen Key (Standard Hex Key) into the recessed screw head in the bottom of the hinge.



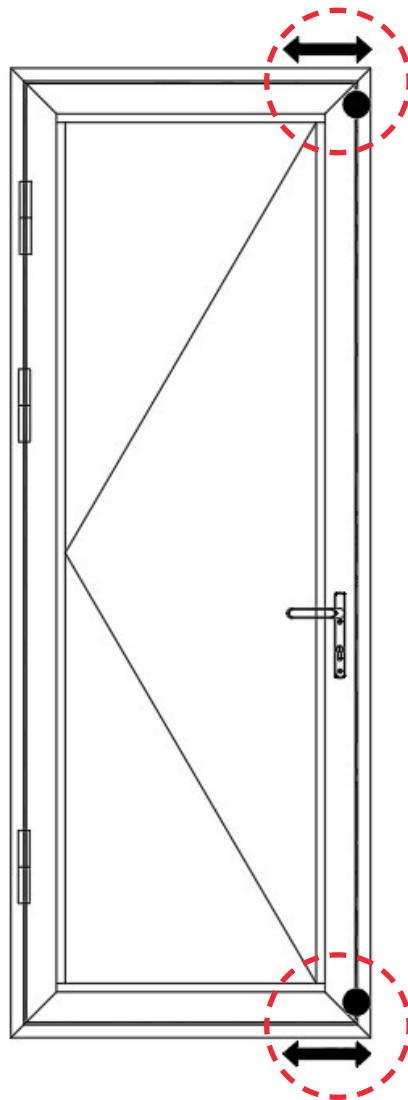
To raise the sash height, rotate the screw in a clockwise direction



To lower the sash height, rotate the screw in a counter-clockwise direction



After the adjustment is done, put the caps back on the hinges



If the sash is tight on the handle side, apply the adjustment below to shift the sash towards the hinges.

Adjustment 2: Horizontal Clearance

Maximum Adjustment

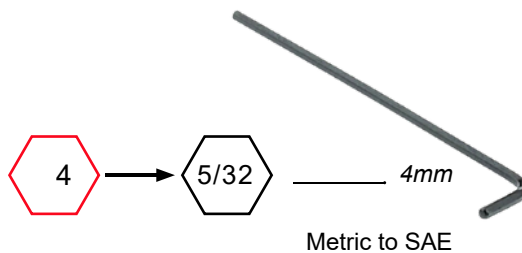
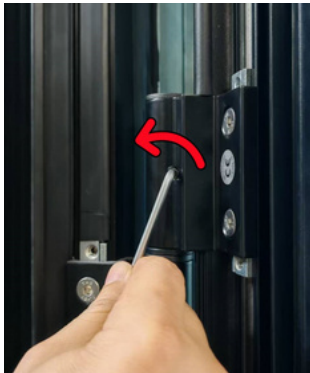
- Move the sash 1.5 mm to the left.
- Move the sash 1.5 mm to the right.

This adjustment allows the sash to shift from side to side.

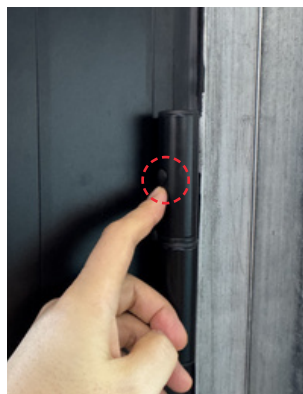
Open the door, you will see this small screw on each hinge.



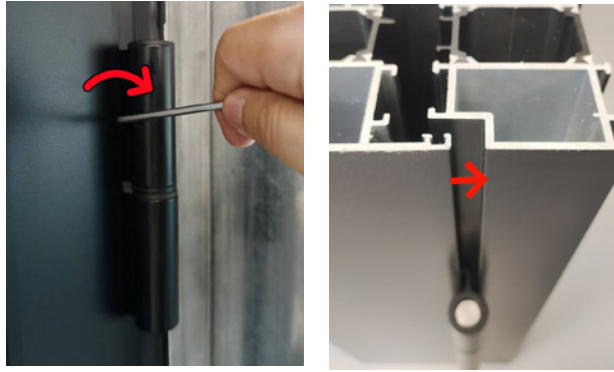
Use an SW4 Allen Key (Standard Hex Key) to turn the screw counter-clockwise in order to loosen the screws on all three hinges.



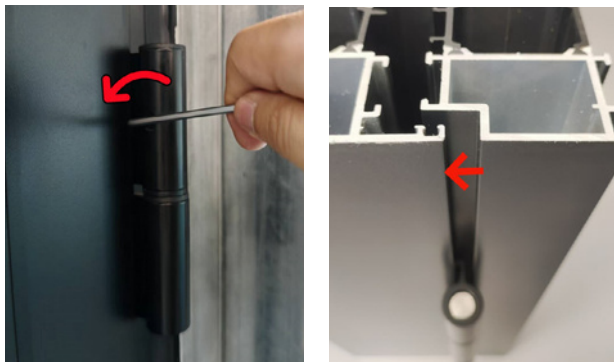
Remove the small plastic caps surrounding the hinges to reveal the tiny screws on all three hinges.



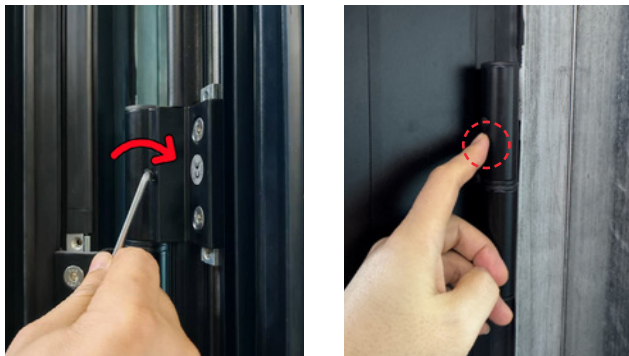
Use SW4 Allen key (Standard Hex Key) and rotate the screws in a clockwise direction to move the sash to the hinge side (max 1.5mm).



Or rotate the screws in a counter-clockwise direction to move the sash to the handle side (Max 1.5mm) .



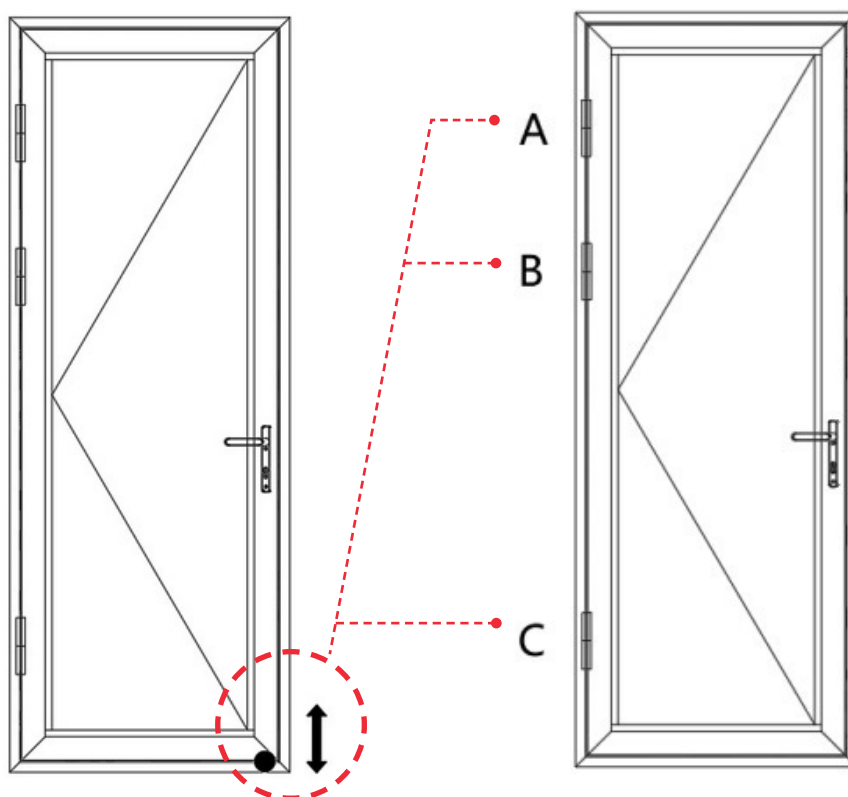
Once the sash is adjusted, rotate the screw clockwise to secure it on all three hinges.
After completing the adjustment, replace the small caps onto the hinges.



NOTE

All hinges need to be tightened following the adjustment; otherwise, the door's alignment may shift.

ROTO HINGE



If the sash is binding at the bottom, apply the following adjustment to elevate it. Please note that Hinge A and B differ from Hinge C.

Adjustment 1: Vertical Clearance

Maximum Adjustment:

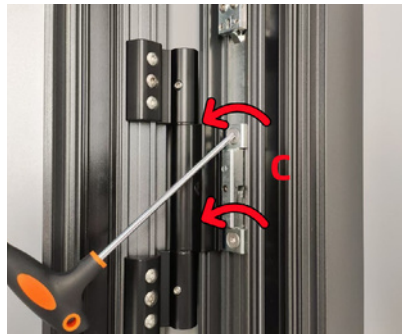
Raises the sash 4 mm or lowers the sash 2mm from the factory setting. This adjustment moves the sash up or down.

Open the sash.

Use T25 Torx Key and rotate the screws in a counter-clockwise direction to loose the Hinge A & B.



Use T25 Torx Key (Star Key) and rotate the screws in a counter-clockwise direction to loose the Hinge C.

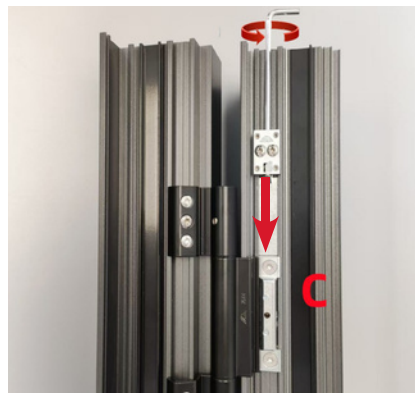


To adjust the sash height, follow these instructions using the SW4 Allen Key (Standard Hex Key):

- To raise the sash height (maximum of 4mm): Rotate the screw at the top of Hinge C in a clockwise direction.
- To lower the sash height (maximum of 2mm): Rotate the screw at the top of Hinge C in a counter-clockwise direction.

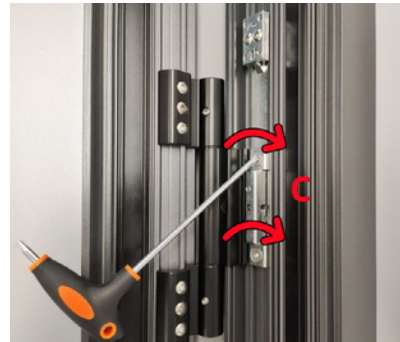


Rotate clockwise to raise the sash height



Rotate counter-clockwise to lower the sash height

Once the sash height has been adjusted, secure the hinge screws. Utilize a T25 Torx key and turn the screws clockwise to tighten Hinge A, B, and C.



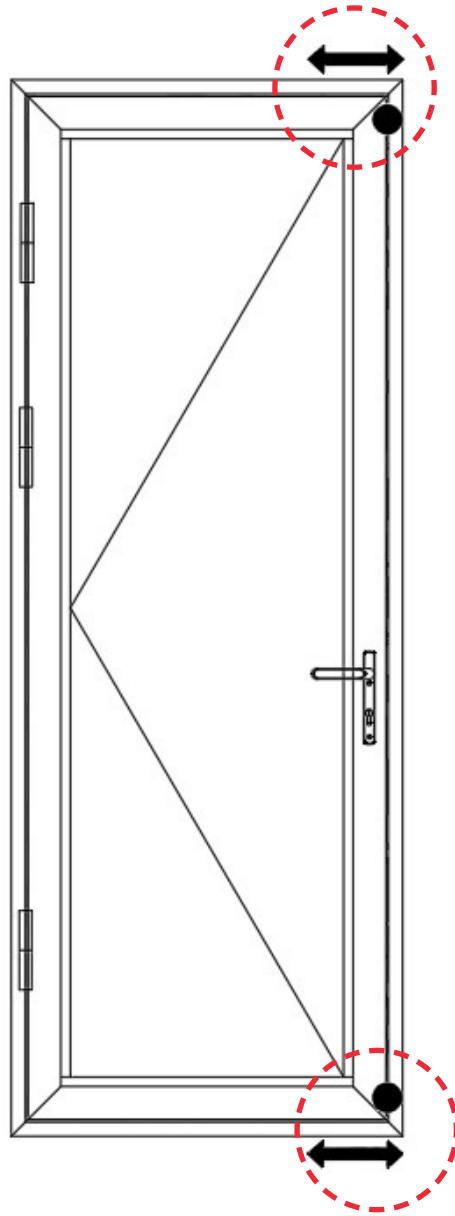
To conduct a test, close and open the door. You may need to adjust the locking blocks and strike plate on the locking jamb either up or down after modifying the sash height.



Loose the locking blocks to
move up or down



Loose the strike plate to
move up or down



If the sash is tight on the handle side, apply the following adjustment to shift the sash toward the hinges.

Adjustment 2: Horizontal Clearance

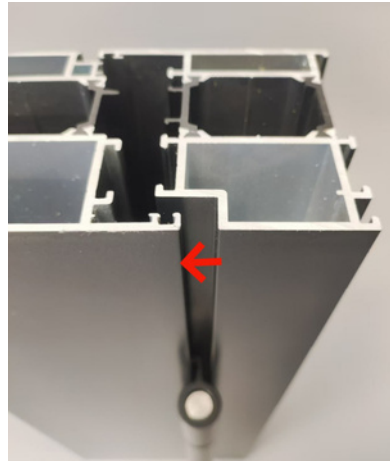
NOTE

This adjustment moves the sash from side to side and maximum adjustment is $\pm 1.5\text{mm}$.

Use SW4 Allen Key (Standard Hex Key) and rotate the screw in a clockwise direction to move the sash to the handle side (Max 1.5mm).

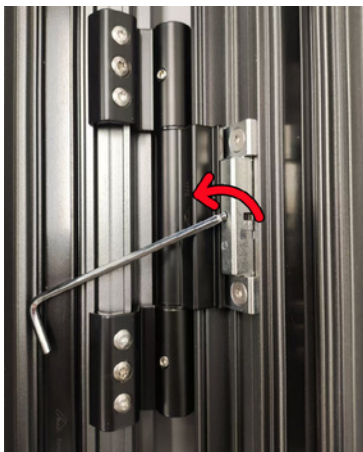


Rotate Clockwise

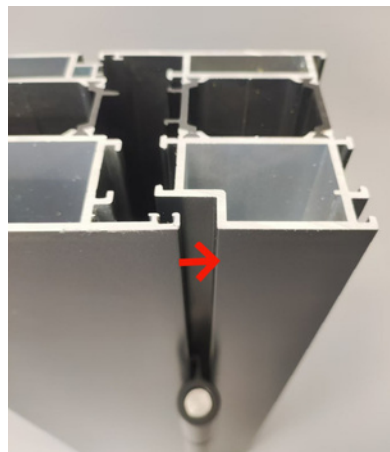


Move sash to handle side

Use SW4 Allen Key (Standard Hex Key) and rotate the screw in a counter-clockwise direction to move the sash to the hinge side (Max 1.5mm).



Rotate Counter-Clockwise



Move sash to hinge side

In addition to these guidelines, feel free to reach out to your sales representative to request videos that demonstrate how to make adjustments and troubleshoot effectively.