

# RESIDENTIAL

## SUNNY LUX DOOR

### INSTALLATION INSTRUCTIONS

[www.prlglass.com](http://www.prlglass.com)



## HANDLING, **STORAGE** & *PROTECTION* **OF ALUMINUM**

The following precautions are recommended to protect the material against damage.

Following these precautions will help ensure early acceptance of your products and workmanship.

### **HANDLE CAREFULLY**

All aluminum materials at job site must be stored in a safe place well removed from possible damage by other trades. Cardboard wrapped or paper interleaved materials must be kept dry.

### **CHECK ARRIVING MATERIALS.**

Check for quantity and keep records of where various materials are stored.

### **KEEP MATERIAL AWAY FROM WATER, MUD AND SPRAY.**

Prevent cement plaster or other materials from damaging the finish.

### **PROTECT THE MATERIALS AFTER ERECTION.**

Protect erected frame with polyethylene or canvas splatter screen. Cement, plaster, terrazzo, other alkaline solutions and acid based materials used to clean masonry are harmful to the finish. ***If any of these materials come in contact with the aluminum, IMMEDIATELY remove with water and mild soap.***

The rapidly changing technology within the architectural aluminum products industry demands that PRL Aluminum reserve the right to revise, discontinue or change any product line, specification or electronic media without prior written notice.

## RECOMMENDED **GUIDELINES** FOR ALL **INSTALLATIONS**



### **REVIEW CONTRACT DOCUMENTS**

Check shop drawings, installation instructions, architectural drawings and shipping lists to become thoroughly familiar with the project. The shop drawings take precedence and include specific details for the project.

Note and field verified notes on the shop drawings prior to installing. The installation instructions are of general nature and cover most conditions.



### **INSTALLATION**

All materials are to be installed plumb, level and true



### **BENCHMARKS**

All work should start from benchmarks and/or column lines as established by the architectural drawings and the general contractor with guaranteed accuracy. Working from these datum points and lines determine:

- a) The plane of the wall in reference to offset lines provided on each floor.
- b) The finish floor lines in reference to benchmarks on the outer building columns.
- c) Mullion spacing from both ends of masonry opening to prevent dimensional build-up of daylight opening.

## GENERAL **INSTALLATION** NOTES



### **SURROUNDING CONDITIONS**

Make certain that construction, which will receive your materials, is in accordance with the contract documents. If not, notify the general contractor in writing and resolve differences before proceeding with work.



### **ISOLATION OF ALUMINUM**

Aluminum to be placed in direct contact with uncured masonry or incompatible materials should be isolated with a heavy coat of zinc chromate or bituminous paint.



### **SEALANTS**

Sealants must be compatible with all materials with which they have contact, including other sealant surfaces. Consult with sealant manufacturer for recommendations relative to joint size, shelf life, compatibility, cleaning/priming, tooling, adhesion, etc. It is the responsibility of the Glazing Contractor to submit a statement from the sealant manufacturer indicating that glass and glazing material have been tested for compatibility and adhesion with glazing sealants, and interpreting test results relative to material performance, including recommendations for primers and substrate preparation required to obtain adhesion. The chemical compatibility of all glazing materials and framing sealants with each other and with like materials used in glass fabrication must be established. This is required on every project.

## GENERAL **INSTALLATION** NOTES



### **FASTENING**

Within the body of these instructions "fastening" means any method of securing one part to another or to adjacent materials. Only those fasteners used within the system are specified in these instructions. Due to the varying perimeter conditions and performance requirements perimeter and anchor fasteners are not specified in these instructions. For perimeter and anchor fasteners refer to the shop drawings or consult the fastener supplier.



### **BUILDING CODES**

Due to the diversity in state/provincial local and federal laws and codes that govern the design and application of architectural products it is the responsibility of the individual architect owner and installer to assure that products selected for use on projects comply with all the applicable building codes and laws. PRL ALUMINUM, INC. exercises no control over the use or application of its products, glazing materials and operating hardware and assumes no responsibility thereof.



### **EXPANSION JOINTS**

Expansion joints and perimeter seals shown in these instructions and in the shop drawings are shown at normal size. Actual dimensions may vary due to perimeter conditions and/or difference in metal temperature between the time of fabrication and the time on installation. Gap between expansion members should be based on temperature at time of installation.

## GENERAL **INSTALLATION** NOTES



### **WATER HOSE TEST**

As soon as a representative amount of the wall has been glazed (500 square feet) a water hose test should be conducted in accordance with AAMA 501.2 specifications to check the installation. On all jobs the hose test should be repeated every 500 square feet during the glazing operation.



### **COORDINATION WITH OTHER TRADES**

Coordinate with the general contractor any sequence with other trades, which offset curtain wall installation (i.e. fire proofing, back-up walls, partitions, ceilings, mechanical ducts, converters etc.)



### **CARE AND MAINTENANCE**

Final cleaning of exposed aluminum surfaces should be done in accordance with AAMA. 609.1 anodized aluminum and 610.1 for painted aluminum.

## GENERAL **INSTALLATION** NOTES



### **DANGER OF BEING CAUGHT**

Warning: To avoid injury, keep fingers away from moving parts during handling.



### **DANGER OF FALLING**

Warning: Open sections may present a fall risk. Keep children and unauthorized personnel away.



### **DANGER OF FALLING OBJECTS**

Warning: Risk of falling objects through open sections, especially during cleaning or maintenance.



## TOOLS REQUIRED



Using the correct tools will ensure a precise installation and optimal performance of the Sunny Lux Residential door.

Before starting the installation, make sure you have the following tools available.



**Tape Measure** – For accurate measurements of the frame and opening.



**Level** – To ensure the frame and door are properly plumb and level.



**3 mm Hex Key** – For adjusting grub screws and vertical alignment.



**Drill with Appropriate Bits** – For drilling pilot holes and driving screws where required.



**Screwdriver** – Phillips PH2 recommended for DIN 7981 Z screws.



**Sealant Gun** – To apply sealant for a proper watertight finish.



**Safety Glasses and Gloves** – To protect yourself during the installation process.



**Safety Notice:** Always wear safety glasses and gloves while working. Follow proper handling procedures to avoid injury and damage to components.

## SITE PREPARATION



### Inspect Components

Carefully unpack and inspect all Residential Sunny Lux Door components.

Check for any visible damage or defects that may have occurred during shipping or handling.

Report any missing or damaged components to your supplier before proceeding.



### Prepare the Opening

Make sure the opening is ready to receive the frame and door assembly.

Confirm that the opening is clean, level, and square. Remove any debris, dust, or obstructions that could interfere with installation.

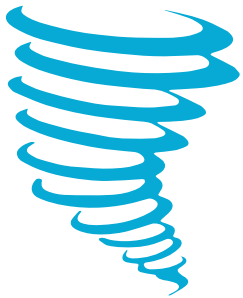
Check the structural integrity of the surrounding walls to ensure a stable and secure installation.

If required, seal or patch any cracks or irregularities in the opening before placing the frame



**Warning:** Do not proceed with installation until the opening meets all specifications. An uneven or out-of-square opening can result in improper alignment, air leakage, and compromised door performance

# INSTALLATION INSTRUCTIONS



Thank you for choosing Residential Sunny Lux Door. Our aluminum door system has been designed and manufactured to meet the **highest** standards of quality, performance, and durability.

Your Residential Sunny Lux Door system is shipped with the door leaf pre-installed in the frame and the glass panels packaged separately to ensure safe transport.

Please follow the step-by-step instructions in this manual to correctly assemble, adjust, and secure your door system for optimal operation and a long service life.

## IMPORTANT INFORMATION



**Read Before Installation:** Carefully read this manual in its entirety before beginning installation.

**Qualified Personnel:** Installation should be performed by trained or qualified personnel to ensure proper alignment, safety, and compliance with building codes.

**Tools and Safety:** Use the recommended tools and wear appropriate personal protective equipment (PPE) such as safety glasses and gloves at all times.

**Damage Inspection:** Inspect all components upon receipt.

Do not install damaged or defective parts.

Report any shipping damage to your supplier immediately.

**Proper Handling:** Avoid dropping or mishandling the door and glass components to prevent injury or product damage.

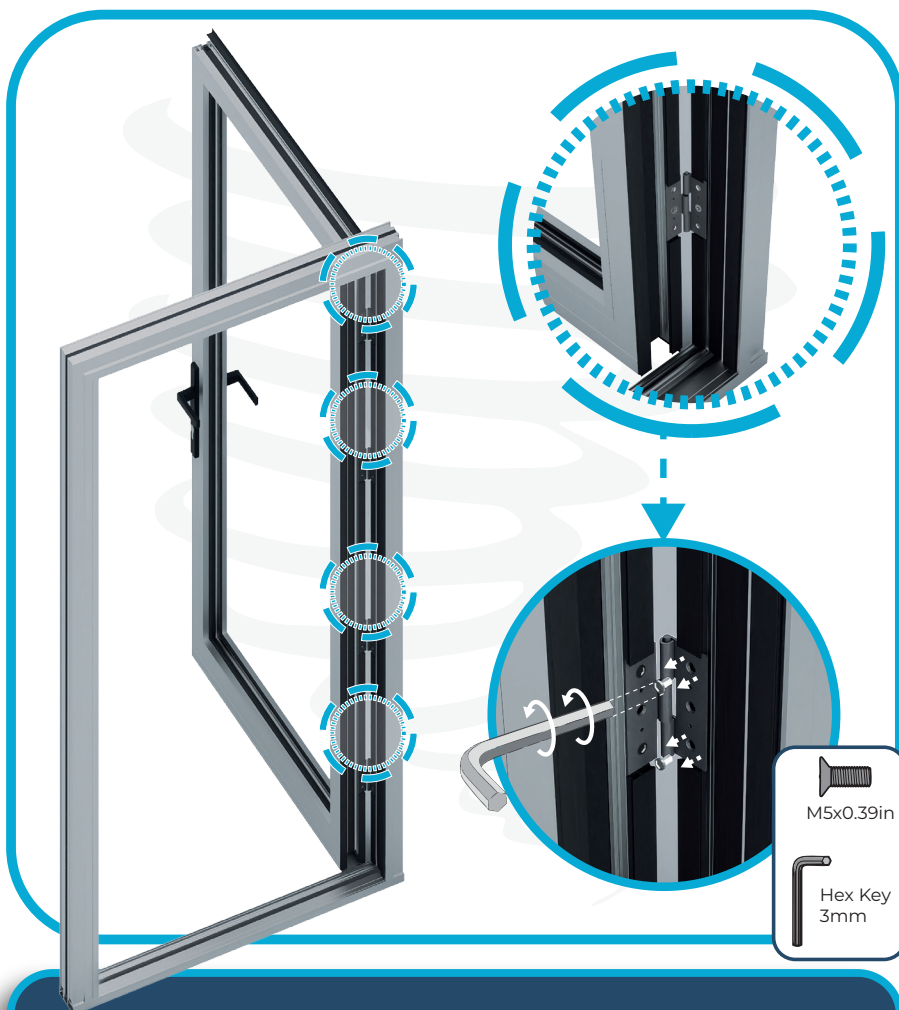
**Follow Local Codes:** Ensure that the installation complies with all local building codes and regulations.



**Disclaimer:** PRL Aluminum is not responsible for damages, misalignment, or performance issues resulting from improper installation, modification of components, or failure to follow these instructions.

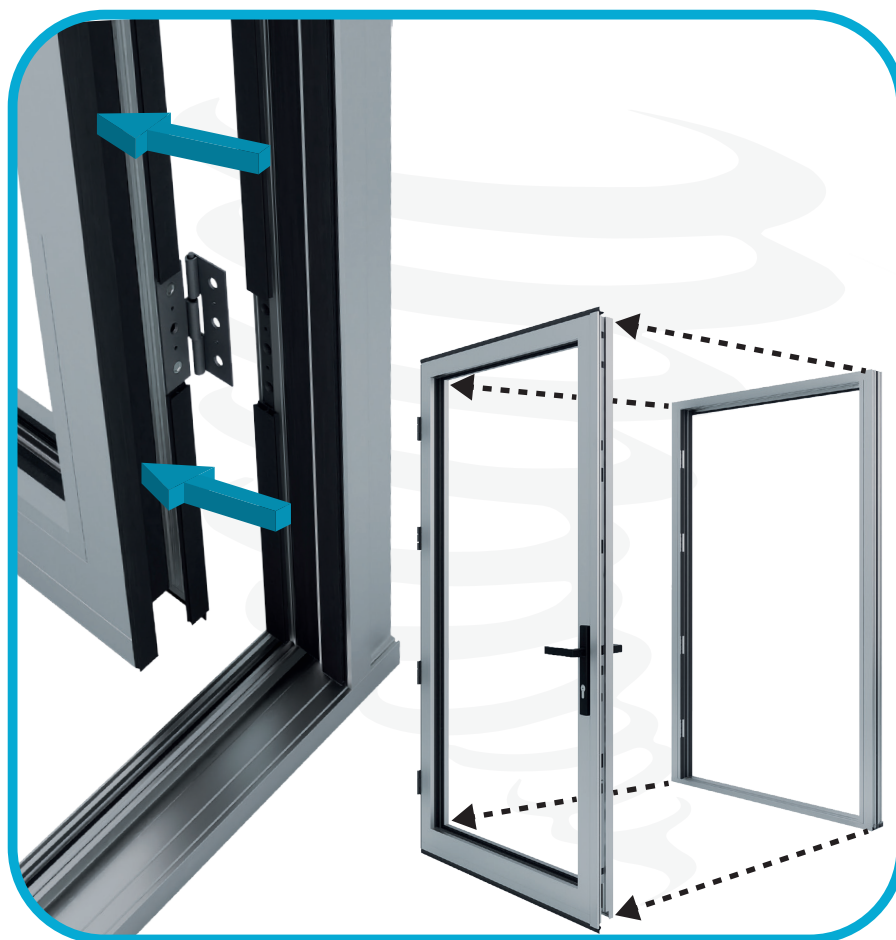
# 01

## Step 1: Remove the Hinge Screws



Using a 3 mm hex key, remove the **M5 X 0.39"** screws located on the jamb-side hinges. Each hinge has two screws that must be removed before proceeding.

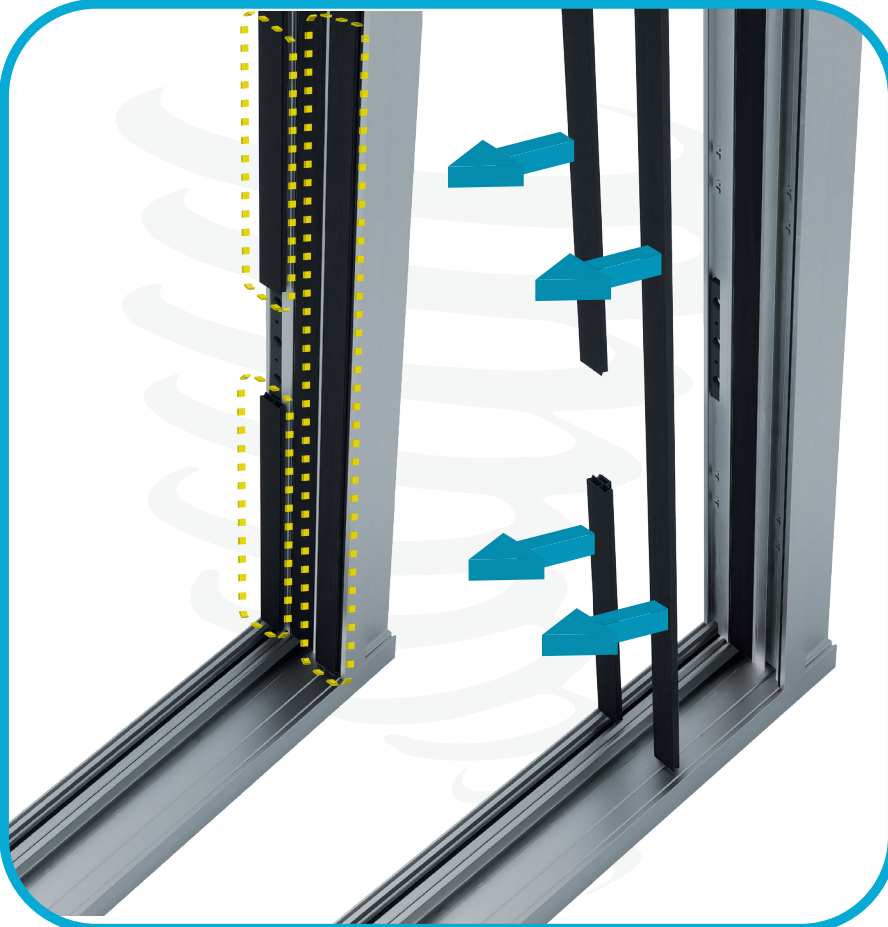
## Step 2: Separate the Door from the Frame



Carefully lift and remove the door from the frame once all hinge screws have been removed. Make sure to support the weight of the door to prevent damage or injury.

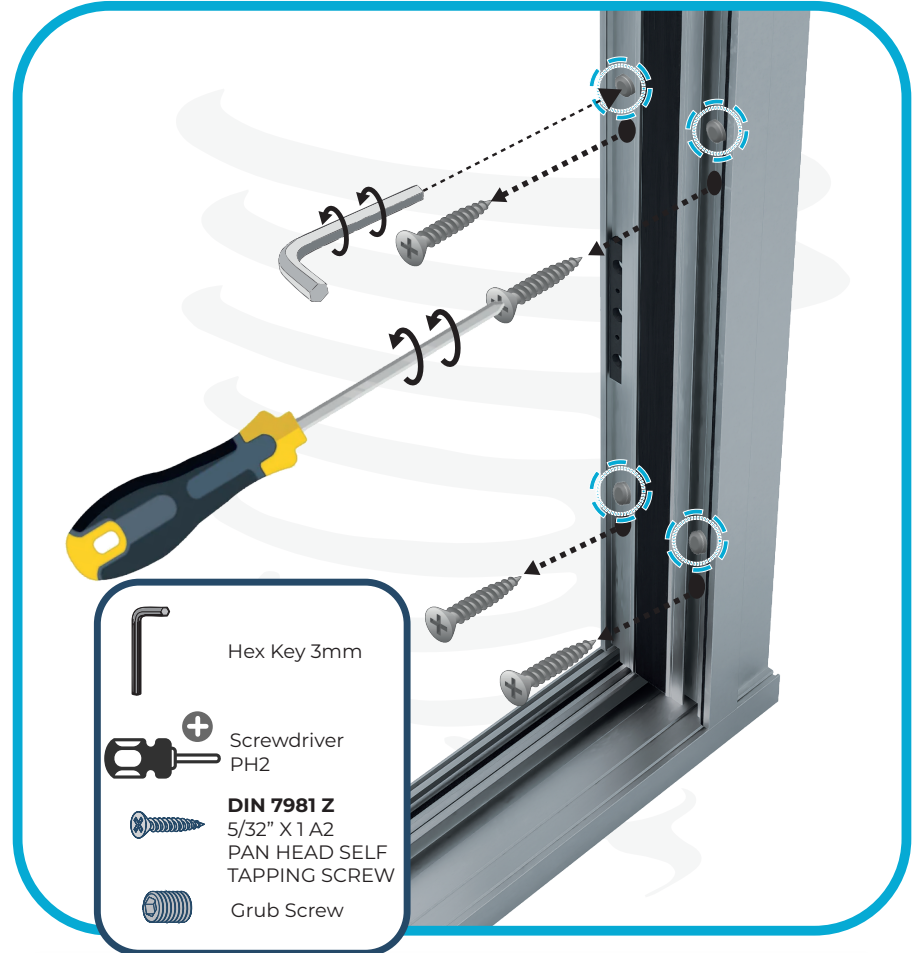
# 01

## Step 3: Remove the Weather Seals



With the frame clear, remove the weather seals attached to the adjustable jamb. Carefully pull them out to avoid damage, and store them in a safe place for reinstallation later.

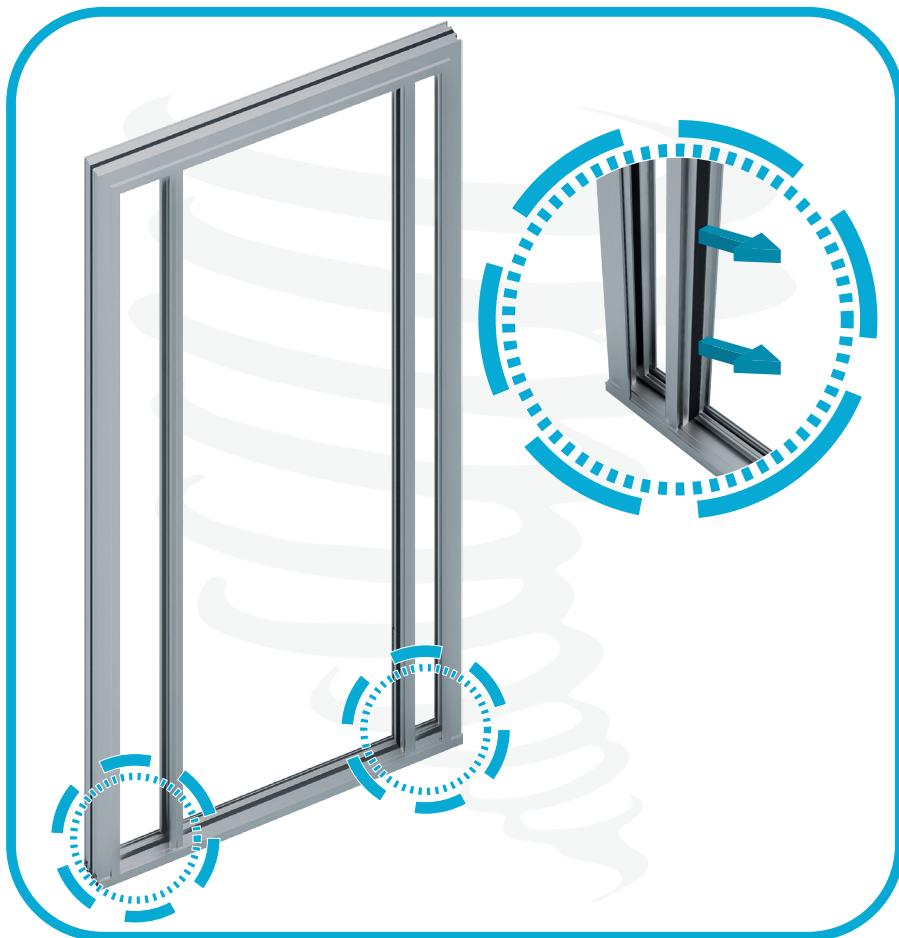
## Step 4: Remove the Adjustable Jamb Screws



Using a 3 mm hex key, loosen the grub screws, and using a PH2 Phillips screwdriver, remove the DIN 7981 Z screws located on the adjustable jamb.

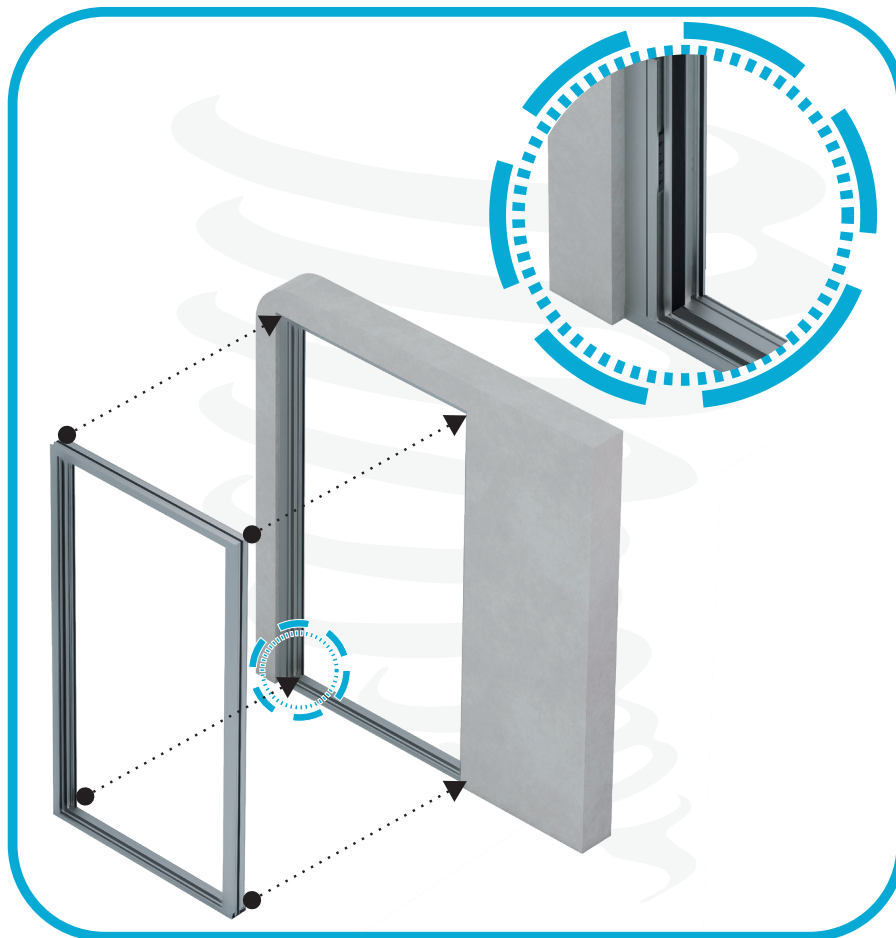
01

### Step 5: Remove Both Adjustable Jams



Carefully remove both adjustable jacks from the frame, including the one located on the door strike side. Handle with care to avoid bending or damaging the aluminum profiles.

### Step 6: Position and level the frame

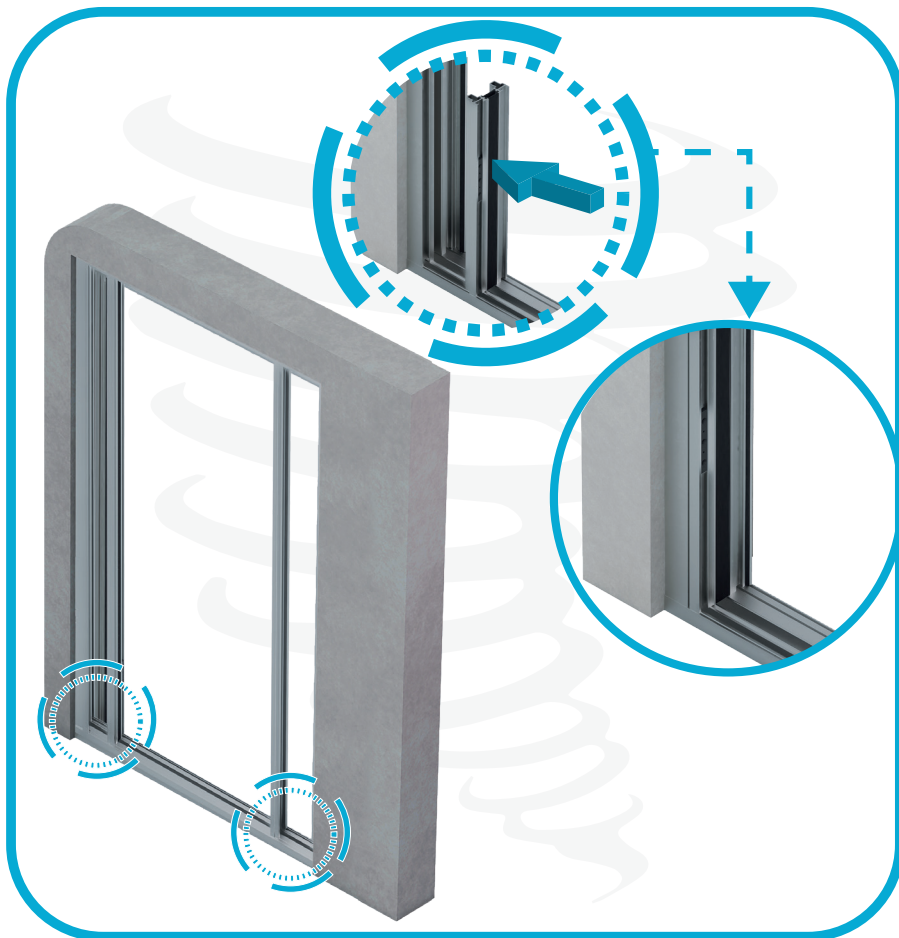


Once the frame is free, place it into the opening. Use shims as needed, then plumb and level the frame to ensure proper alignment.



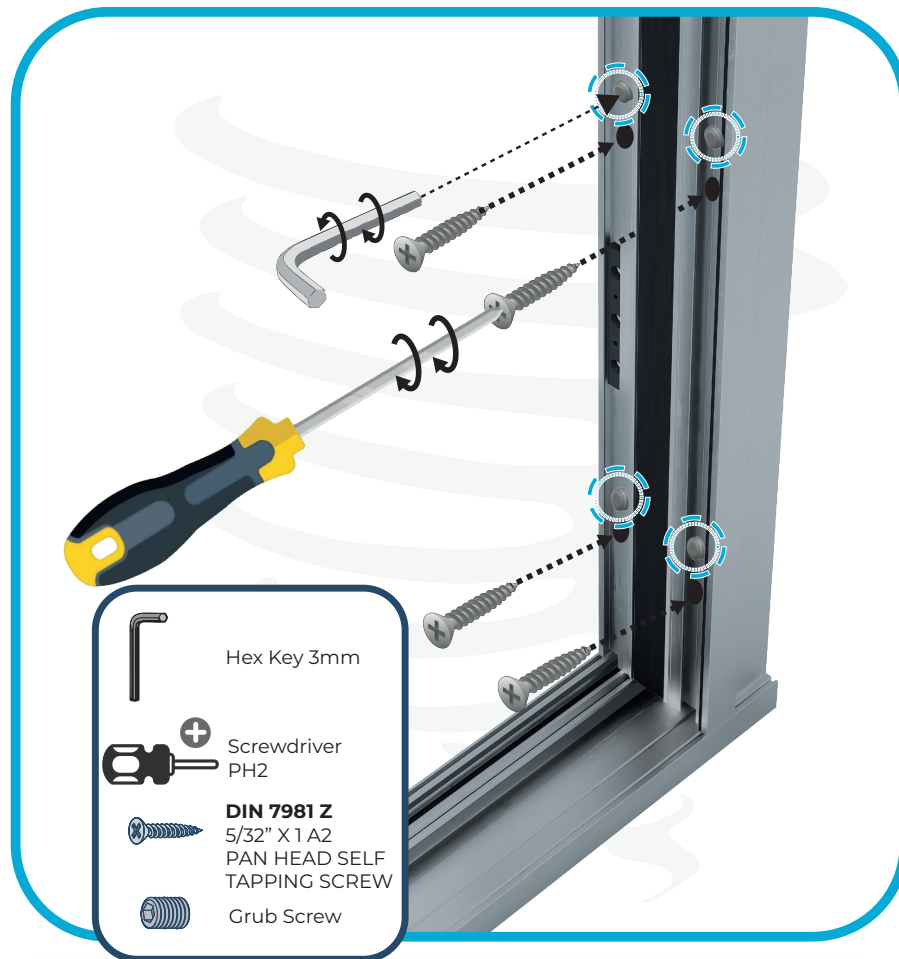
# 02

## Step 7: Reinstall the adjustable jamb



Reposition both adjustable jambs back into the frame, ensuring they are fully seated and properly aligned.

## Step 8: Adjust the Jambs

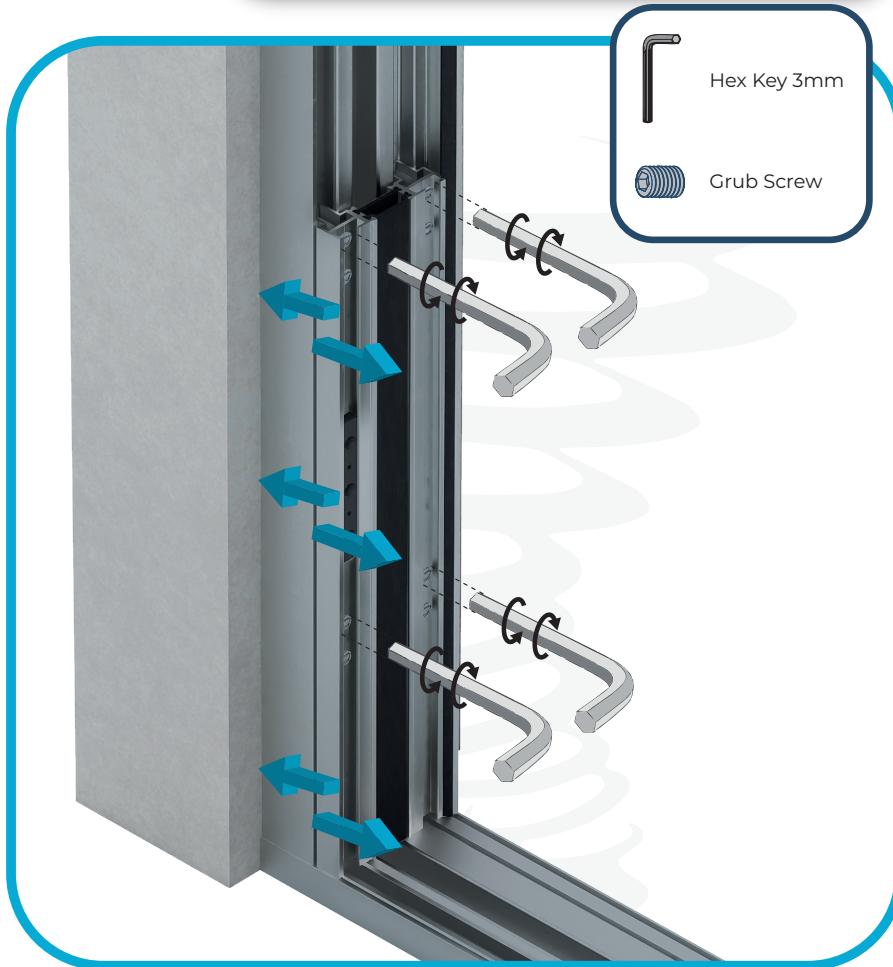


Use a 3 mm hex key to tighten or loosen the grub screws as needed. This will allow you to adjust both jambs by up to 1/4" on each side.



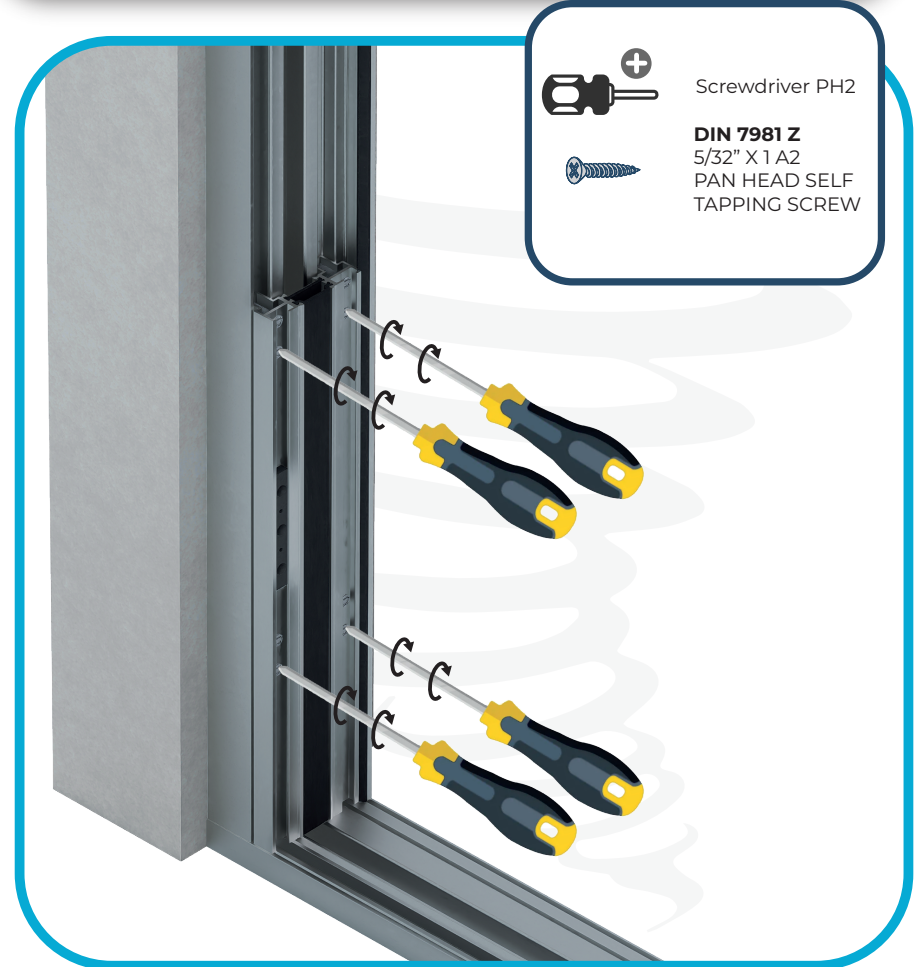
# 03

## Step 9: Adjust the jamb



Use a 3 mm hex key to tighten or loosen the grub screws as needed. This will allow you to adjust both jacks by up to 1/4" on each side

## Step 10: Lock the adjustable jamb in place



Once both jacks are correctly positioned, fully tighten the DIN 7981 Z screws to secure the adjustable jacks.

03

### Step 11: Place the door in position



Carefully place the door back into the frame, aligning the hinges with their corresponding positions. Use two people to lift and position the door to prevent damage or injury. Make sure the door is properly seated before proceeding.

### Step 12: Secure the hinges



Install the M5 x 0.39" screws into the frame-side hinges to firmly secure the door. Verify that all screws are uniformly tightened to ensure proper hinge alignment and optimal door operation.

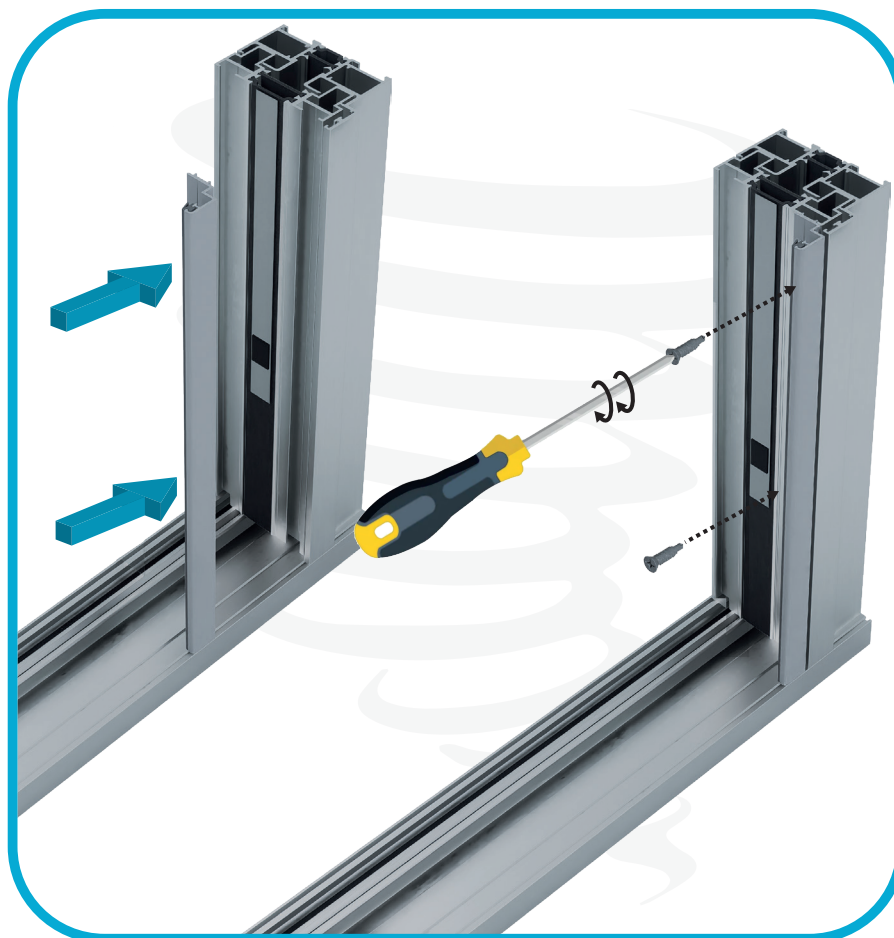
# 04

## Step 13: Vertical adjustment of the door

## Step 14: Install the T-Astragal



Once the door is installed and secured, slightly loosen the M5 x 0.39" hinge screws to allow vertical adjustment as needed. The door can be adjusted up to 1/4" to achieve proper alignment.

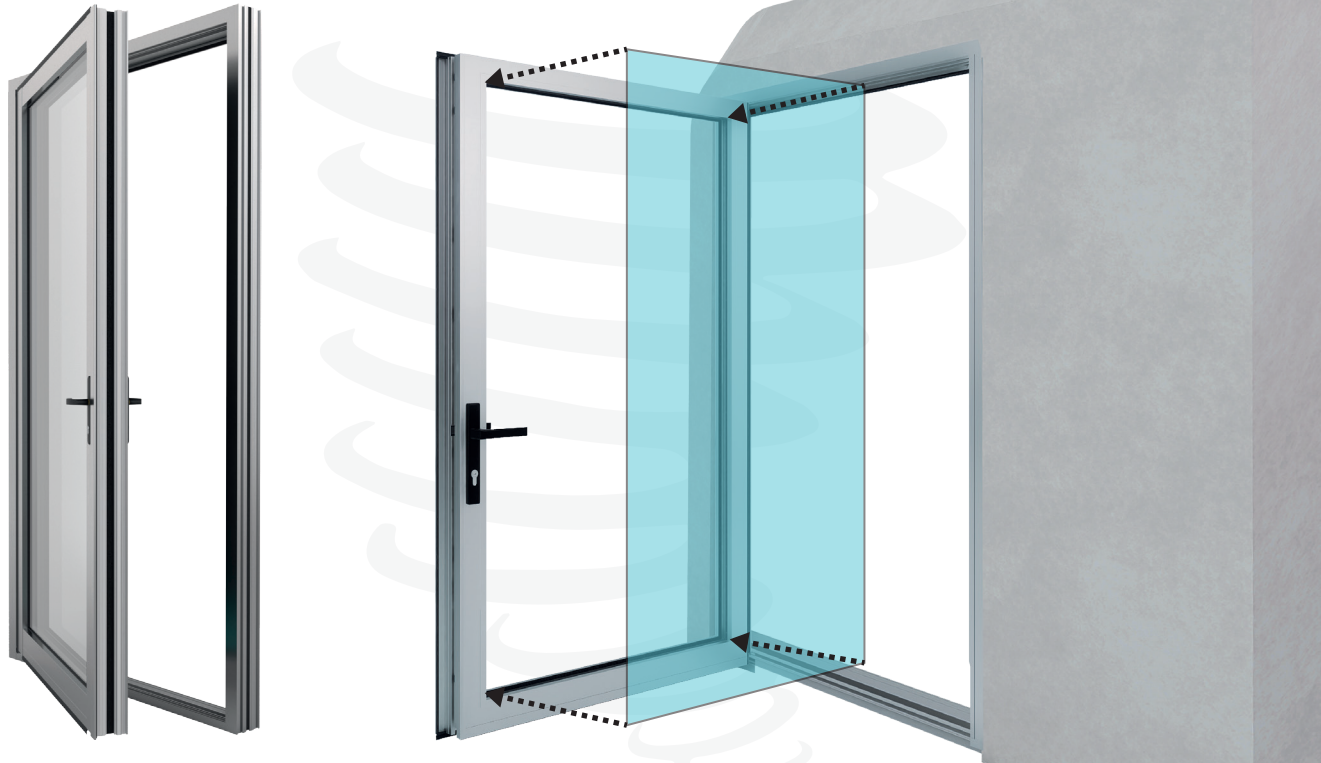


Place the T-astagal on the interior side of the door. Secure it in position using DIN 7981 Z screws. Ensure all screws are properly seated without over-tightening to maintain proper alignment.



05

### Step 15: Install the glass panel



After confirming that the frame is plumb, level, and securely fastened, carefully install the glass panel using proper handling equipment such as suction cups.

Place setting blocks at the bottom of the frame to support the glass weight, then position the panel by first seating the bottom edge and gently tilting the top into place.

Use shims to center the glass and maintain even clearances on all sides.

Apply a continuous bead of approved glazing sealant around the perimeter to ensure full adhesion and a watertight seal, then reinstall glazing stops or retainers if applicable.

Always wear gloves and safety glasses, and avoid installing glass in extreme weather conditions.

05

#### Step 16: Securing the door hinges



After the door is properly aligned and level, install the DIN 7981 Z screws in all hinges to securely fasten the door. Ensure all screws are fully seated without over-tightening to maintain the integrity of the hinges and the frame.

#### Step 17: Reinstall the Weather Seals and Final Check



Reinstall the weather seals to ensure a proper airtight seal around the door.  
**Final Check:** Verify that the door opens and closes smoothly, all components are securely fastened, and the weather seals are correctly positioned to maintain optimal sealing.

# 06

## Butterfly Adjustment

## Lock Latch Adjustment



Use a 3 mm hex key, adjust the top adjustment ("butterfly") to fine-tune the vertical alignment of the door once it is re-hung. Turn gradually and check the door's position after each adjustment until it is perfectly aligned and plumb.



To adjust the lock latch, slightly loosen the DIN 7981 Z screws that secure the latch plate. This will allow the latch to be moved horizontally to achieve the correct alignment with the strike. Once the desired position is reached, retighten the screws firmly to secure the latch in place.