



INSTALLATION INSTRUCTIONS
Gravity Automated Strut Windows



INSTALLATION QUALITY CONTROL

This quality control sheet has been included for use by the installers to ensure all steps are taken for a quality installation and should be reviewed and utilized throughout the installation process. It's recommended by Gravity to check your installation against the quality checks identified below as being critical components of a proper and thorough installation.

Receiving & Inspection of Product



- Product was checked thoroughly for damage and correct dimensions upon receipt of product
- Damage and/or discrepancy in specification was immediately reported to Gravity
- Product was unloaded and stored in an area protected from weather and other potential damage
- Hardware Box was delivered with window

Before installing your Gravity Window



- Installation coordinated with General Contractor and/or homeowner
- Review of Gravity drawings installation detail performed
- Opening is true and correct
- Adequate framing for size & weight of window
- Weatherproofing detail reviewed with Contractor or other expert
- Necessary overhangs and protection from air and water infiltration
- Local codes reviewed and followed

Installation & Final Checks



- Necessary equipment to install Gravity Window reviewed and present
- All sealants and other installation materials reviewed for compatibility
- Correct orientation of product in opening: Sash to swing out or in
- Countertop is installed to ensure proper seal at bottom of jamb legs
- Frame is positioned correctly in depth of opening to ensure proper fixing points into framing
- Window is square, level and plumb
- Shims were used at all fixing points
- Screws were inserted through hinge into header framing
- Electric Actuators were installed in correct orientation
- Security nuts & bolts were installed on all 4 gas spring brackets
- Weep holes (if applicable) are clear of debris
- Final Inspection of weatherproofing and screw attachment
- Installation reviewed with General Contractor

Date of Final Inspection _____

Inspected by _____

THANK YOU FOR PURCHASING GRAVITY WINDOWS

Please read installation instructions carefully prior to installation. These instructions are intended to be a guideline only as site conditions vary by construction method and specific region you will be installing.

These instructions are proprietary of Gravity Windows and may not be copied, altered or distributed for any purpose.

INSTALLATION INSTRUCTIONS GRAVITY WINDOWS AUTOMATED STRUT WINDOW

With the right tools and equipment, Gravity recommends having at least 2 people present while unloading and installing a Gravity Window. Large units may require more manpower.

Your Gravity Window will arrive pre-hung in a frame ready to install. It will be hinged at the top. Struts will not be attached to the side jambs for ease of installation. They will be installed after the frame has been secured and can take the force of the loaded electric actuators struts.

If you ordered a no-sill option the bottom of each jamb side will be secured by a wood board so that the jambs stay in place. Wood bracing will be required to be removed just prior to install.

*Note – countertops are highly recommended to be installed prior to gas strut window being installed. It is recommended when installing No-Sill option, the exterior portion of the countertop be installed with a slight pitch to the exterior so that any water collecting on the surface, deflects away from the window / house.

All Gravity Products will arrive securely wrapped with cardboard corners and/or wooden crates depending on job site delivery location. It is the receiver's responsibility to inspect the window for correct specification and damage prior to installing.

PREPARE PRIOR TO INSTALLATION

Tools Recommended

- Screw Gun
- Flat Head Screw Driver
- Adjustable wrench or open ended wrench set
- Caulk gun
- Support Post (to hold sash up while securing frame)
- 3ft & 6ft level and/or laser level
- Ladder
- Glass suction cups (to assist in lifting window into opening)

Parts List

- Pre-hung sash in a 5 ½" block frame ready to install.
- 2 x Electric Actuators
- 2 x Strut Covers
- Installation hardware kit including screws for wood framing (all other screws for metal studs and/or concrete block to be sourced independently)
- UPS Panel, Snyc Box, Extension leads, Remote Control

STEP 1 – REVIEW AND PREPARE OPENING

- Unpackage window and stage near opening where window will be installed. Check opening for square, plumb and level
- Gravity Windows have been designed for a ‘Block Frame Installation’. No nail fin or mounting fin is supplied. This ensures a square and proper installation independent from out of plumb wall conditions

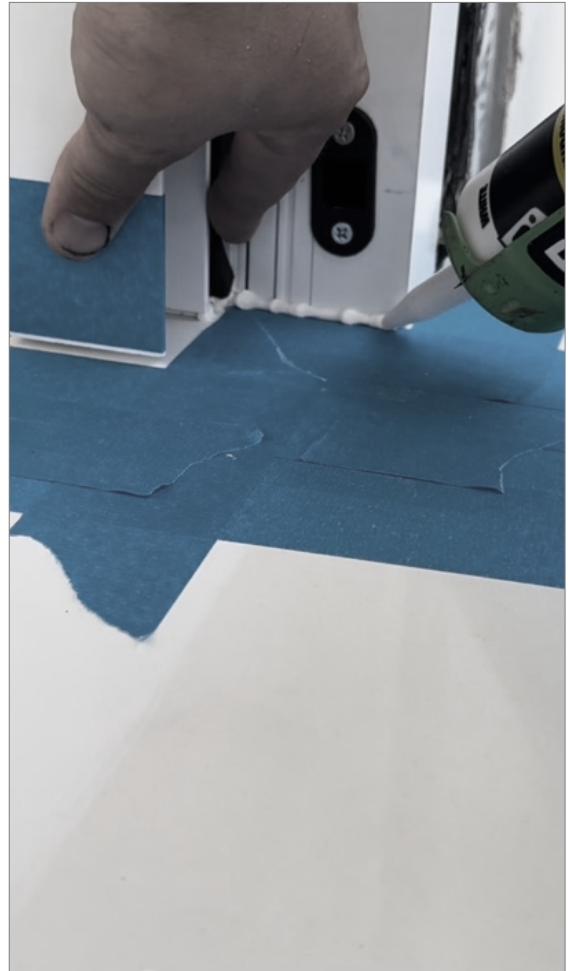
Tip: Review wall condition prior to installation to understand where you will be locating the window frame within the jamb depth and how you will be finishing the exterior siding / stucco and interior drywall.

ALSO SEE STEP 7 SECURING HINGE SCREWS & HEADER ALIGNMENT

- Check opening size and net window frame dimensions. Your Gravity Window has been specified and fabricated to achieve approximately a 5/16” gap on both sides and 1/2” gap at the top header



- Opening should be flashed and weatherproofed according to site condition and code. Once all weatherproofing has been applied and ready, add compatible sealant to bottom of the opening
- For flush countertop installations, sealant should be applied adequately to the bottom of each jamb leg so that a positive seal is achieved against the finished countertop. Alternatively, when setting window in opening with or without a countertop, ensure there is a small gap at the bottom of the jamb so that sealant can be applied and pushed into the gap to create a positive seal. **Failure to do this can result in potential water infiltration.**



Tip: Tape off area around bottom of jamb to protect countertop

STEP 3 – INSTALLING FRAME

- Lift window frame up and into the opening so that bottom of jambs sit in sealant and frame is located in correct position in the depth of the opening
- If window has a water drainage sill/threshold, apply sealant to bottom of opening prior to lifting window into position



STEP 4 – SECURING FRAME IN OPENING

- At this stage, the frame needs to be temporarily secured and/or held in the opening where you intend to position it in the depth of the opening and so that the sash can be opened while fixing screws are applied around the frame
- Position 1-2 x people on the outside of the window to hold the frame in place and one person inside with screw gun ready to start inserting screws into pre-drilled installation holes

STEP 5 – FASTENING FRAME

- Slightly crack / open the bottom of the window until you can see the bottom installation hole. **Note: ensure frame/jamb leg stays level during this process**
- Frame installation holes are pre-drilled. **Using SCREW A**, start by fixing bottom corners of the jambs, working your way up both jamb legs until all jamb screws have been inserted
- It's time to ensure your jamb legs are not only level but they are also plumb. Use shims as required at all fixing / screw points



- You can now lift your window into the 90 degree position and fasten head screws to finalize securing your frame.

Tip: Using a story pole is a good way to hold the window open if you do not have manpower to do so. This also alleviates people from tiring when holding open the heavy window



Tip: Use level or preferably a laser level consistently throughout installation of frame to ensure square, level & plumb

STEP 6 – SECURING CONTINUOUS TOP HINGE TO HEADER

Remove 3 x small screws on the interior side of the top hinge one by one while inserting **SCREW C** through hinge holes and into the wood header. Repeat both sides of the top hinge. For systems over 72" wide, additional screws have been supplied to repeat this process through the middle of the hinge

Note: This must be done AFTER frame has been installed and all frame installation screws have been applied. Also, frame must be located in frame depth so that screws align & 'catch' header.



STEP 7 – Attach Electric Actuators

Top and Bottom post brackets will be already attached to the window frame.

Thread wire at top of actuator through the middle hole of the top post bracket to the backside of the frame and slide actuator onto the post securing with washers and lock nut.

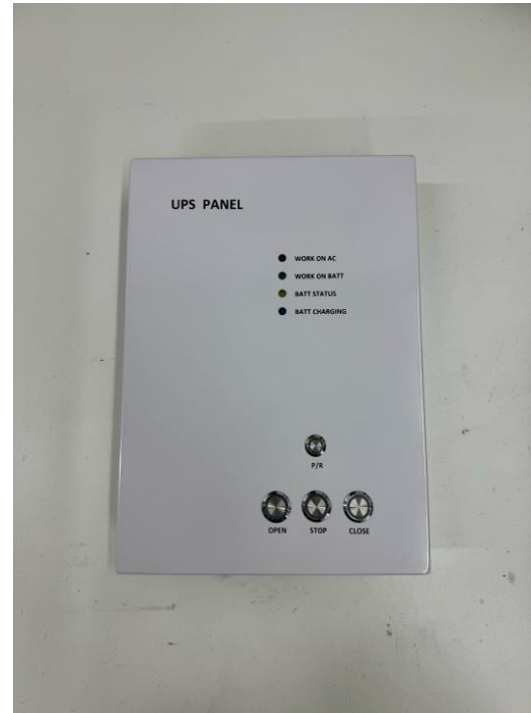


Slide bottom of actuator onto bottom latch box securing with washers and lock nut.



STEP 8 – Mount Panel & Sync Box

Typically the UPS Panel is mounted under the sink in the cabinet if the application is a kitchen window. However it can be mounted in any location providing the electric actuators wires can reach.
Note: Outlet should be located next to the UPS panel to provide power.



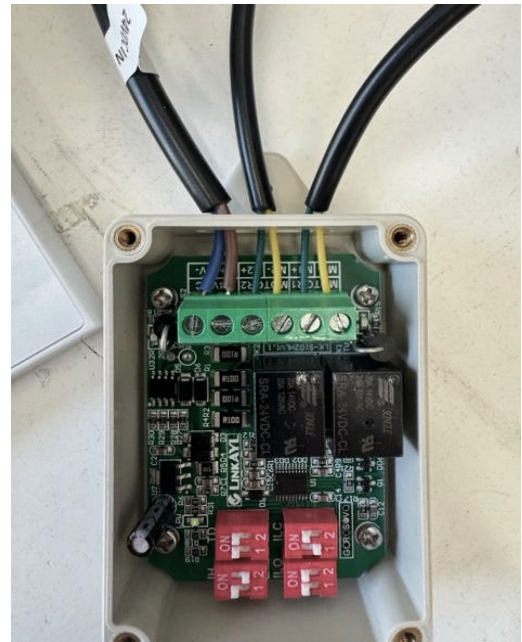
Open both the UPS panel and the sync box and attach the male and female plug cables through the hole at the bottom of the panel.



STEP 9 – Wire Actuators to Sync Box

Route each wire from both actuators through the framing to the sync box.
Note: If extension cables (supplied) are required, they will require splicing.

With small flat head screwdriver open port and attach the yellow and green wires into the ports as shown.



STEP 10 – Power Up

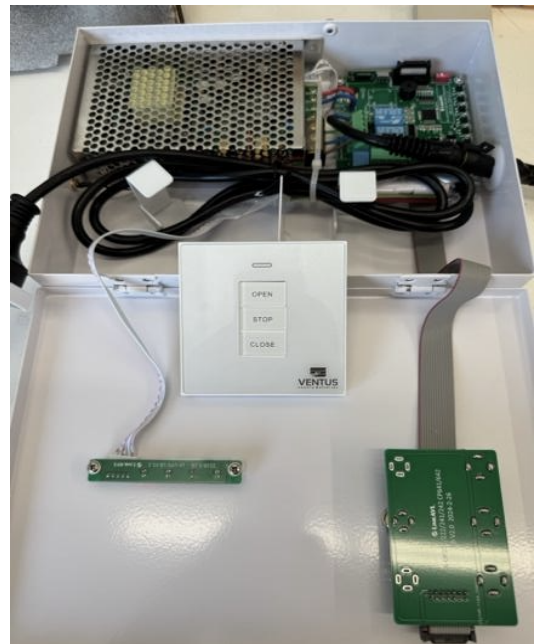
Plug UPS Panel into outlet. A bright blue LED will appear on the panel when powered on.

Note: Wires will need to be unscrewed and threaded through bottom access hole and reconnected.

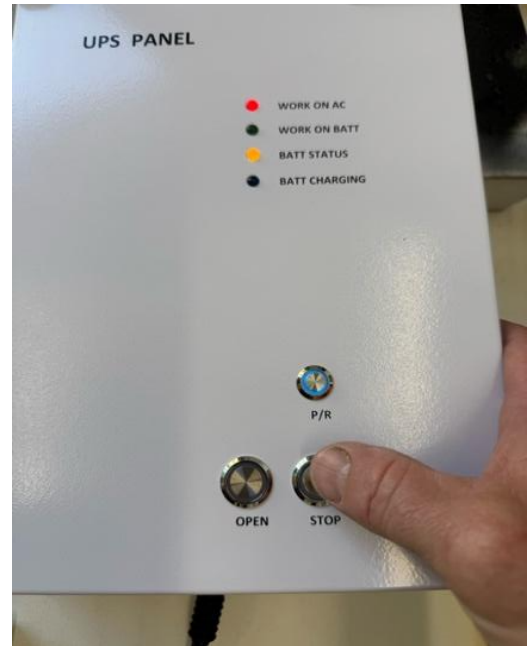


STEP 11 – Pair Controller to Panel

Place remote controller close by the panel.

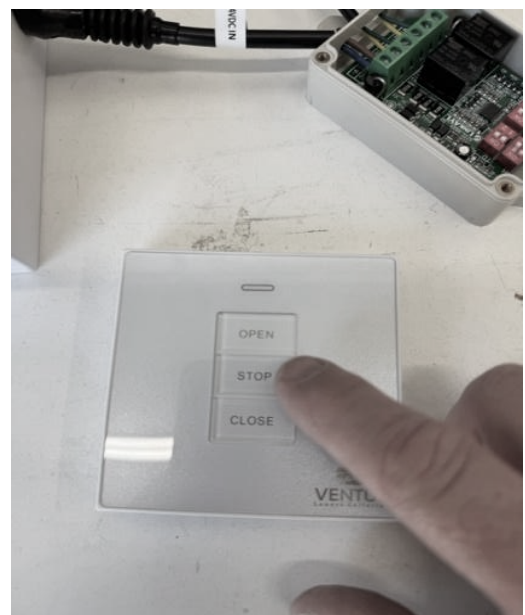


Press STOP on the panel for 5 seconds until the red STOP LED starts to blink.



Then press OPEN on the remote once.

Your remote is now paired to the control panel and you can operate your window to the open and close position.



STEP 11 – Attach Antenna



STEP 12 – ATTACH STRUT COVERS

- Attach strut covers to each side of the window with 4 x thumb screws. Thumb screws are attached on frame in rivnuts when shipped.
- Covers are left & right-handed. Holes will align with gold colored rivnuts installed at the top and bottom of jambs

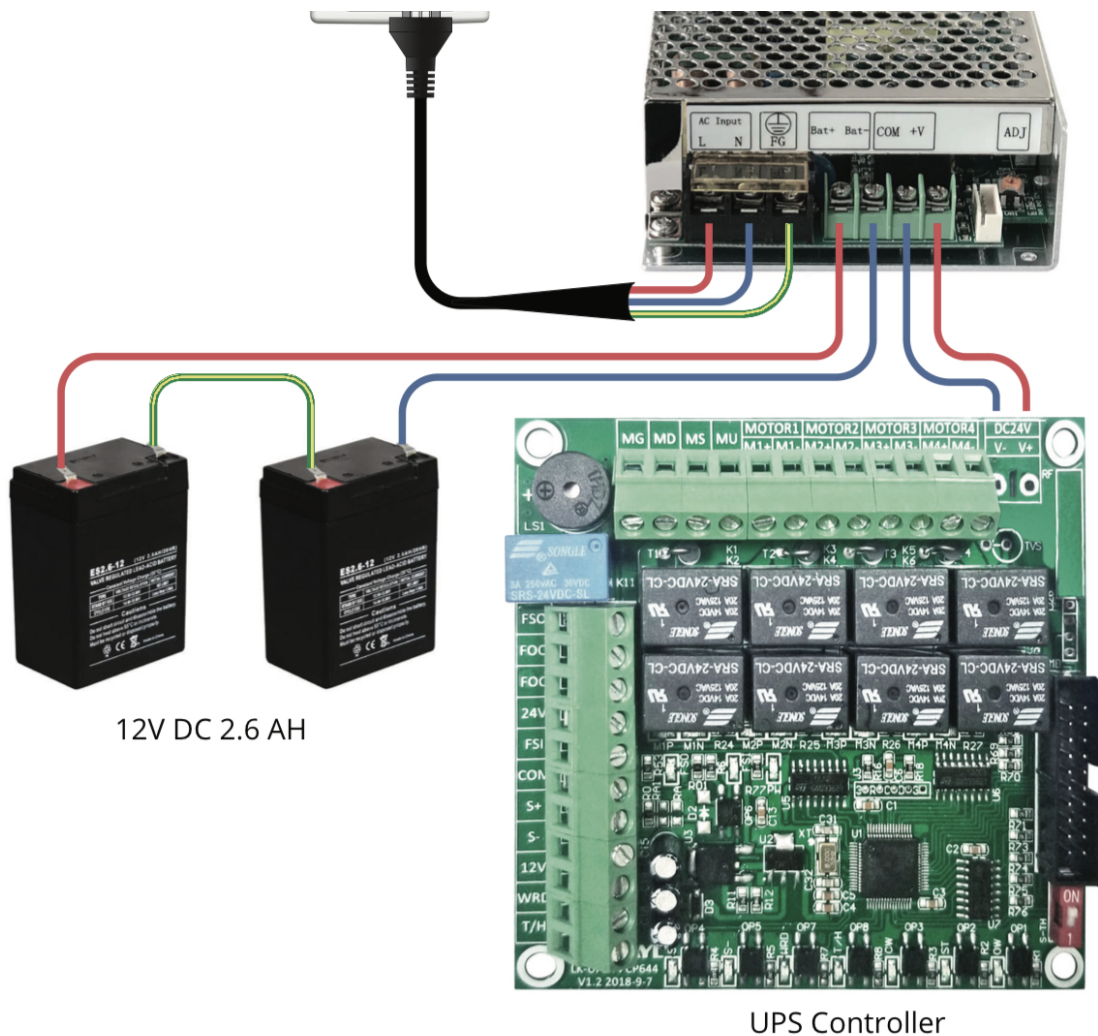


STEP 13 - BATTERY CONNECTION

Wires can be found inside the UPS Box.

The UPS Box will monitor battery life, will trickle charge and monitor power usage. The unit can work on battery for 6 hours of use or 6 hours on standby. Any longer the battery status light will flash and remind you to reconnect to mains power.

Unit self charges when batteries are fitted. Connect batteries only when everything is installed and the owner intends on using the window. If batteries are connected for periods beyond 6 days without the main power connected, the batteries will not recharge and new batteries will need to be purchased.



12V DC 2.6 AH

UPS Controller

2 x 12 Volt, 2.6 Amp Hour Batteries. FP1226A Non Spillable