



## Motorized Roll Shutter Installation Guide



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## Disclosure

Before beginning, double check that Shop Drawing Measurements match your current project specification.

Install, service, and repairs should be performed by a qualified and trained technician.

Please read the guide thoroughly before proceeding with installation. Ultra-Lite Shutters will not be held responsible for any property damage, product damage, or charges incurred due to improperly installed shutter components.

The following instructions will not alleviate you from complying with local building codes.

Ensure that the shutter installation does not interfere with federal, provincial, or municipal building codes, safety or fire regulations, or other restrictions that may apply. Ultra-Lite Shutters will not be held responsible for any injury or death from improper installation or use of provided shutters.

Failure to follow installation instructions could result in damaged product or personal injury. Ultra-Lite Shutters installation guide is tailored to an experienced installer who has a basic understanding of construction rules, regulations, and mounting techniques.

After installation, end-user should be trained on how to properly operate the shutter system in a safe manner to avoid damage or injury.

The shutter should only be operated when in view. The user should ensure there are no objects or persons in the opening at any time during installation or operation.

### WINTER CONDITIONS

During freezing conditions, ensure the curtain and guide rails are clear of any ice or snow buildup before operation. Operating the shutter with frozen debris on the curtain or guide rails may cause damage to the shutter system.

Do not roll up a wet curtain when freezing temperatures may be imminent, as dropping temperatures could freeze the water on the coiled curtain inside the box housing.

### Maintenance Instructions

With the shutter in the completely open position, use a damp microfiber cloth to wipe down the inside of the guide rails.

Spray the inside of the guide rails with **DRY GRAPHITE** or **DRY SILICONE SPRAY ONLY**.

**DO NOT** use any oil-based lubricants such as WD-40.

Dampen cloth with dry graphite or dry silicone spray and wipe down the outside of the hood assembly, the exterior of the guide rails, and universal joint if applicable. This procedure should be done once a year.

### Warranty Requirements:

- The installation was completed by a certified and competent installer following these instructions.
- Only original OEM parts are used.
- No additional foreign objects are attached to the shutter system.
- Regular maintenance checks have been performed.



#### Important Install Tips



**Risk of Product Damage, Handle with Care**



**Risk of Personal Injury. Follow Safe Working Procedures**

- ❖ Motorized operation
- ❖ Electrocuting
- ❖ Fire hazard
- ❖ Heavy curtain
- ❖ Pinch points
- ❖ Heavy lifting may cause bodily harm
- ❖ Oversize shutters require 2 or more technicians
- ❖ Do not climb or stand underneath the shutter system
- ❖ The shutter should only be operated when in sight

**PLEASE CHECK IF ALL PARTS ARE INCLUDED IN PACKING**

## Tools

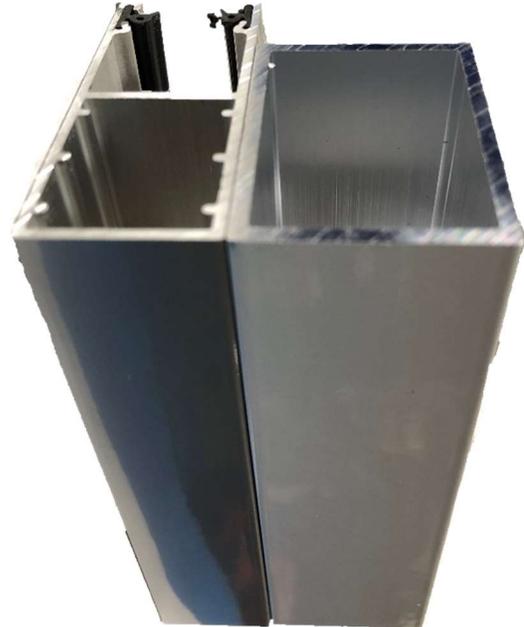
- ✓ Pliers
- ✓ Wire Strippers and Crimpers
- ✓ Electrical Tape
- ✓ Electrical Twist-On Wire Caps
- ✓ Robertson #2 Bit
- ✓ Long Philips Bit
- ✓ Level
- ✓ Pencil
- ✓ Tape Measure
- ✓ Loctite
- ✓ Caulking Gun and Outdoor Silicon Sealant
- ✓ Drill
- ✓ UL Certified Junction Box
- ✓ Conduit
- ✓ Knife
- ✓ Safety Glasses
- ✓ Microfibre Cloth
- ✓ Mild Detergent
- ✓ As many extra helpers as necessary

## Install Tips

- 💡 To prevent damage and for ease of access, remove the front 45° hood assembly cover.
- 💡 Remove protective foil from areas that will be inaccessible after installation process is complete.
- 💡 **For In-Jamb Mount with no overhead clearance:** Place hood upside-down onto the floor, and seat both guide rails firmly onto its designated end caps at the bottom of the hood assembly. With assistance, gently flip, and lean the assembled hood and guide rails into the opening.
  - *Be sure to support the shutter so you do not kink, twist, or bind the hood assembly.*
- 💡 **For Surface Mount with no overhead restriction:** Level and fasten the guide rails into the opening **before** setting the hood onto the guide rails.
  - *This will require a minimum of 50mm (2") of overhead clearance above the hood*

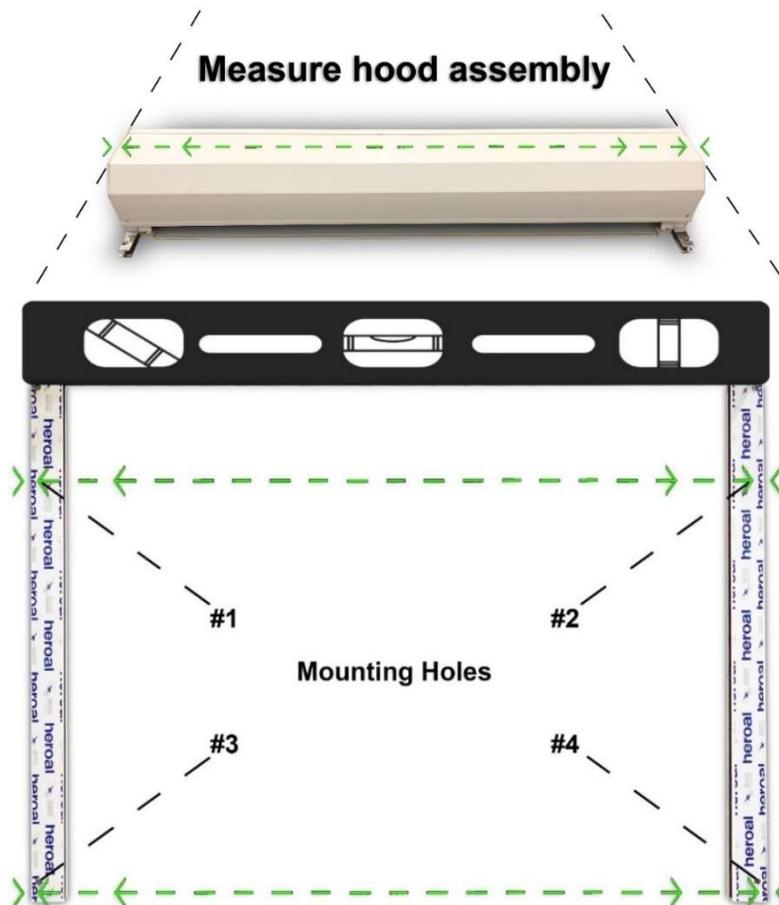
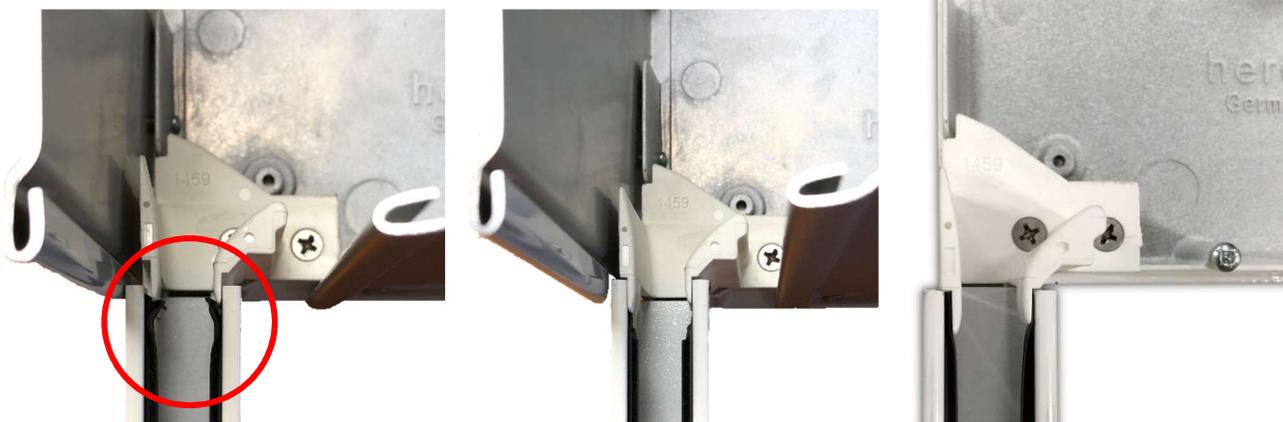
## Build-Out Assembly

- Build-Out Standard Locations:
  - Left Guide Rail (Pre-Drilled)
  - Right Guide Rail (Pre-Drilled)
  - Mullion Guide
  - Hood Assembly Top
  - Hood Assembly Bottom
  - Sill
- Proper mounting of build-out is subject to adjacent structure locations and condition.
  1. Ensure that fasteners are long enough to penetrate mounting surface for a secure mount. Components do not come pre-attached and will require independent mounting.
- **If build-out is applicable:** Level & fasten side facing the wall in the following order:
  1. Vertical build-out first. Fasten bottom, and second mounting hole from the top (This will allow room for minor adjustment).
    - ⚠ **If the floor is sloping, you must install the higher side first.**
  2. Fasten horizontal top, bottom, and then sill build-out.



## Guide Rail Assembly

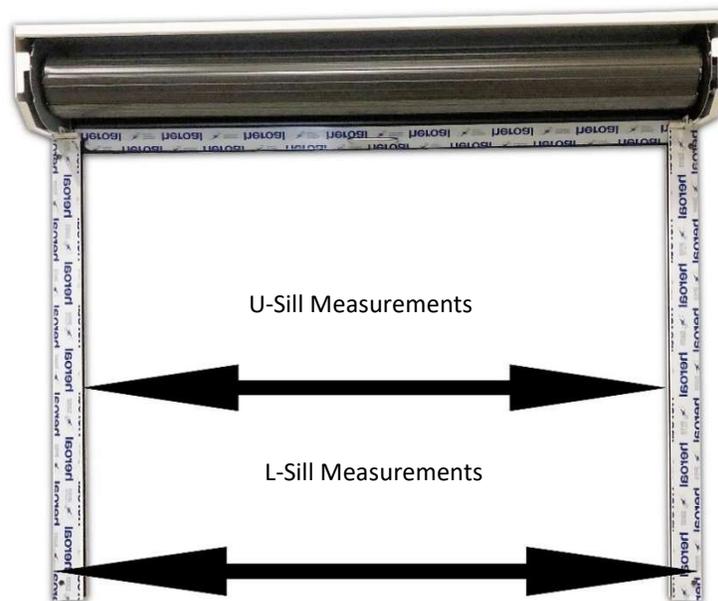
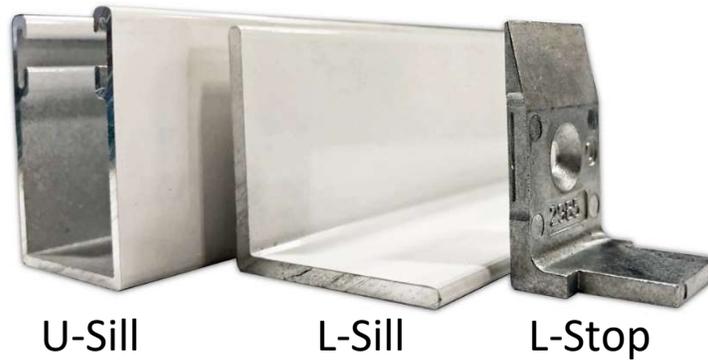
1. Measure the hood assembly length. This will give you outside-to-outside measurements.
2. Place marks on the opening where your guides will line up.
3. Level guide rails with unprotected side facing the wall.
  - ⚠ If the floor is sloping, you must fit the higher side first.
4. Fasten guide rails using predrilled mounting holes, start with second from top (**#1, #2**) & bottom (**#3, #4**) mounting holes (This will allow room for minor adjustments).



## U-Sill, L-Sill, or No-Sill

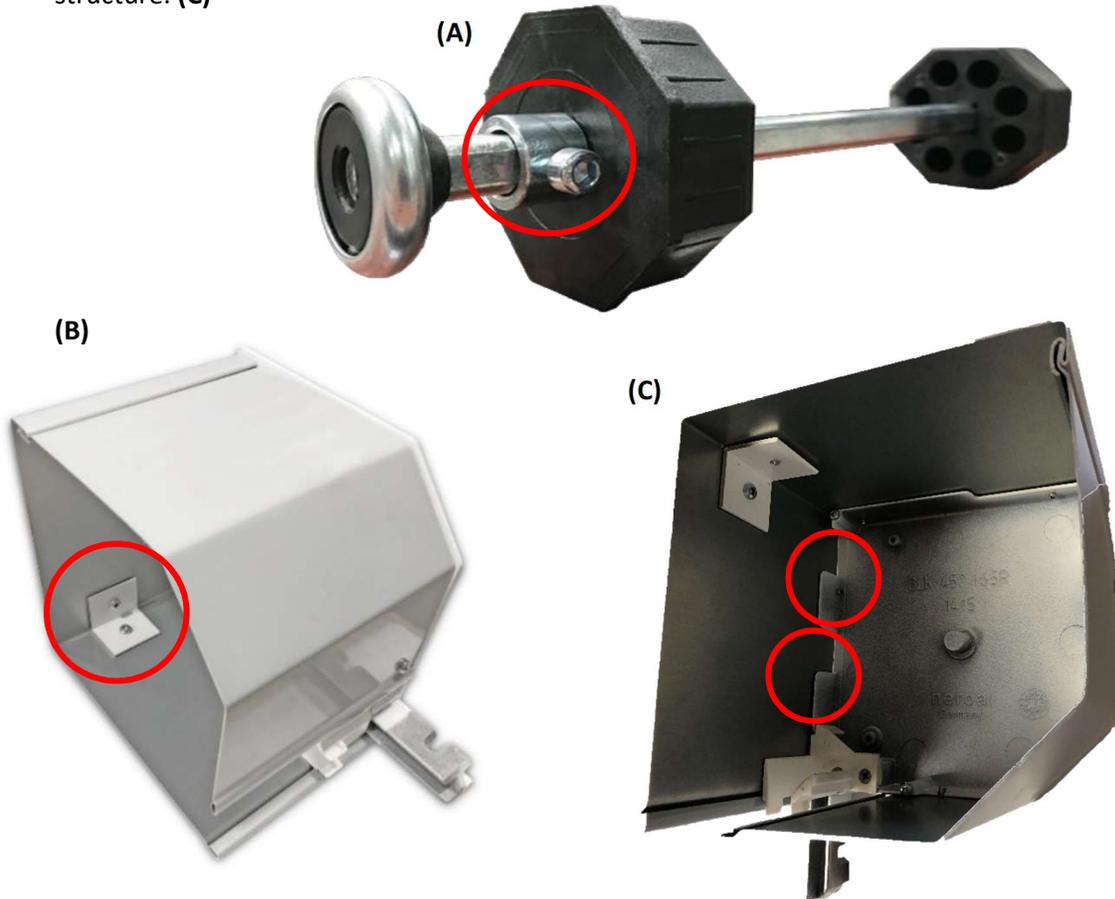
Adjust the bottom width of the guide rails to the appropriate length of the sill to assure optimal shutter operation.

- 💡 U-Sills are provided and mounted to the interior span between the guide rails. Drill adequate weeping holes for water drainage if necessary (use level to determine which side).
- 💡 L-Sills are provided and mounted to the total outside width of guide rails.
- 💡 For No-Sill applications, L-Stops will be provided.
  - ❖ Installation is optional and dependant on application.



## Install Hood Assembly

1. Insert rubber grommet into drilled 10mm (3/8") hole on hood assembly, then with assistance, feed the wire lead through the grommet.
    - ❖ If no hole is predefined, drill a 10mm (3/8") hole and insert the grommet from the hardware bag.
  2. Mount hood assembly by inserting end cap legs into the guide rails.
  3. The 60mm and 70mm axles have an adjustable shaft on the opposite side of the motor.
    - ⚠ **Loctite must be used to tighten set screw. (A)**
  4. Verify level, plumb, and square. Adjust mounting holes (#1, #2, #3, #4, from reference on page 7) to achieve desired fit.
  5. Complete fastening the guide rails.
    - ⚠ Ensure that top fasteners are securing the hood assembly to the opening and the guide rails.
- 💡 For specific commercial or oversized applications, you will need to secure the hood assembly to the structure behind. Use 30x30mm L-Angle or flat-washers as backing to secure evenly along the edges every 30-60cm. **(B)**
- 💡 Screw through the metal inserts on the hood assembly end caps to secure the product to the structure. **(C)**



## Motors

- ⚠ **FOR RTS MOTORS, DO NOT CUT WIRE LEAD WITHIN 30CM (12") OF THE TUBULAR MOTOR. This will damage the antenna which is incorporated into the wire lead.**
- ⚠ **All tubular motors require a licensed electrician to install.**
- ⚠ **For outdoor installations, a drip loop must be formed on the wire lead to prevent water from entering the motor.**
- ⚠ **Do not wire two or more Standard LT Motors to one single pole switch. This will cause the motors to malfunction and void the warranty.**

- ⚠ Make the appropriate wire connections for the tubular motor.
- ⚠ See Somfy Wiring Instructions for parallel wiring under 'Downloads' on Dealer Portal

💡 **RTS** tubular motors are fast and easy to install. 3 wire lead RTS Motor with a 120V wall plug can be supplied at extra cost.

- ❖ Limits are set with any Somfy RTS Remote, Keypad, or Smooove.

💡 **CMO** tubular motors come in both RTS (3 wire) and Standard (4 wire) wiring.

- ❖ Main purpose of a CMO motor is to operate the shutter in case of a power outage.

💡 **STANDARD** tubular motors are to be hardwired in line with your facility's breaker box and light switch circuits.

💡 Crank Manual Override does not interfere with the motor's limit settings, allowing both manual and electrical operations to function properly.

💡 **One motor, Single Pole Switch. Two Motors, Double Pole Switch.**

- ❖ All lead connections must be carried through a UL certified junction box.
- ❖ Use twist-on wire caps to secure wire connections.
- ❖ To control more than 2 motors with 1 switch, you will need to install an Individual Group Control (IGC4N1).

\*White and Yellow limit buttons correspond to a direction (up or down), depending on which side the motor is mounted.

Motor Wiring Color Code			
LT50 ALTUS RTS & LT50 RTS CMO		LT Motor	
120V AC	Code	120V AC	Code
BLACK	(H) HOT	BLACK	WHITE PUSH-BUTTON*
WHITE	(N) NEUTRAL	RED	YELLOW PUSH-BUTTON*
GREEN	(G) GROUND	WHITE	(C) COMMON
		GREEN	(G) GROUND

## Installing Shutter Curtain

-  ALWAYS USE AS MANY PEOPLE AS NECESSARY TO AVOID INJURY OR PRODUCT DAMAGE
-  BE SAFE AT ALL TIMES AND NEVER STAND IN THE OPENING OR UNDER THE SHUTTER
-  Light weight curtains will come pre-rolled inside the hood.

1. After successfully mounting the hood assembly, you are ready to install the curtain.
  - ❖ Lightweight curtains will normally come installed inside the hood for easier setup. You can temporarily wire the motor to drop the curtain and complete the wiring and then complete the limit settings.
2. For heavier curtains, you will receive boxes with the curtain separated.
  - ❖ If you receive your curtain in two or more sections, follow these steps. Once the first section is draped over the axle, with assistance, slide on the bottom portion, attach the slat stop on the ends and continue.
3. Out of the packaging, your curtain should be rolled so that the bottom bar/end slat is on the outer edge of the roll.
4. If you would prefer, you may use some of the packaging material and drape it over the axle to avoid scratching the slats in the following steps.
5. With assistance, take the bottom bar of the curtain and feed it over the axle and into the guide rail channels.
6. Slowly unroll, and while supporting the bottom bar as it drops, continue to feed the curtain into the guide rail channels.
7. Before the last slat is inside the hood, slide on your Anti-Push-Up Curtain Attachments.
8. Once the curtain is fully resting, separate the Curtain Attachments 30-50 cm (12-14") and fasten them to the axle, following the directions that are included.
9. Ensure that all fasteners are secure, and you should also confirm that if a Shaft Bolt is used in your Roll Shutter, you have secured it and used Loctite to secure the set-screw.

## Reset Instructions

To reset a previously programmed motor:

1. Disconnect from power for 3 seconds.
2. Reconnect power for 8 seconds.
3. Disconnect for another 3 seconds.
4. Reconnect motor.
5. The motor should jog once if done correctly.

## Setting Limits

-  **Please read instructions completely before attempting to set limits.**
-  **Jog** – A jog is a brief up and down shutter movement from the motor.

### RTS

1. Connect Motor to power, motor should jog once. If motor was previously programmed or does not jog, reset with Reset Instructions.
2. Press and **hold** the **programming** button on the back of the remote. **Wait until the motor jogs twice. This may take up to 30 seconds.**
  - ❖ Do not release the programming button until the jogging is complete, or you will have to start the Reset Instructions again.
3. Press and hold both **UP** and **DOWN** buttons until motor jogs to initiate programming mode.
4. Check the direction of the operation. Press and hold the **DOWN** button and confirm it moves the motor down.
  - ❖ **To change the direction**, press and hold the **MY** button until the motor jogs.
  - ❖ Check the direction of the operation to ensure it's moving in the right direction.
5. Press and hold the **UP** button until you reach your desired UPPER limit.
  - ❖ Your desired upper position should have the curtain fully retracted into the hood, allowing the end slat to drop and rest in the guide rails.
6. Press and hold the **MY** and the **DOWN** buttons until the motor starts to move down.
7. Press the **MY** button once when you reach your desired LOWER limit to stop the shutter.
  - ❖ Your desired lower position should be all the way closed, leaving no gaps or space between slats. The anti push-up mounts should be pressed against the hood.
8. Press and hold the **MY** and the **UP** buttons until the motor starts to move up.
9. The motor will then stop at your desired UPPER limit automatically.
10. Press and hold the **MY** button until the motor jogs to confirm the limit settings.
11. Press and hold the **programming** button on the back of the remote until it jogs to save your settings.
12. Your shutter limits are now saved.

## RTS CMO

1. Make sure both limit setting buttons on the motor are in the down position.
2. Connect Motor to power, motor should jog once. If motor was previously programmed or does not jog, reset with Reset Instructions.
3. Press and **hold** the **programming** button on the back of the remote. **Wait until the motor jogs twice. This may take up to 30 seconds.**
  - ❖ Do not release the programming button until the jogging is complete, or you will have to start the Reset Instructions again.
4. Press and hold both **UP** and **DOWN** buttons to initiate programming mode.
5. Hold until motor jogs.
6. Check the direction of the operation. Press and hold the **DOWN** button and confirm it moves the motor down.
  - ❖ **To change the direction**, press and hold the **MY** button until the motor jogs.
  - ❖ Check the direction of the operation to ensure it's moving in the right direction.
7. Press and hold the **UP** button until you reach your desired UPPER limit.
  - ❖ Your desired upper position should have the curtain fully retracted into the hood, only showing the end slat.
8. Press and release the upper limit button on the motor.
  - ❖ The button should be in the upper position now.
9. Press and hold the **DOWN** button until you reach your desired LOWER limit.
  - ❖ Your desired lower position should be all the way closed, leaving no gaps or space between slats. The anti push-up mounts should be pressed against the hood.
10. Press and release the lower limit button on the motor.
  - ❖ The button should be in the upper position now.
11. Press and hold the **MY** button until the motor jogs to confirm the limit settings.
12. Press and hold the **programming** button on the back of the remote until it jogs to save your settings.
13. Your shutter limits are now saved.

## Standard & Standard CMO

1. Make sure both limit setting buttons on the motor are in the down position.
2. Connect Motor to power, motor should jog once. If motor was previously programmed or does not jog, reset with Reset Instructions.
3. Press and **hold** the **programming** button on the back of the remote. **Wait until the motor jogs twice. This may take up to 30 seconds.**
  - ❖ Do not release the programming button until the jogging is complete, or you will have to start the Reset Instructions again.
4. Press and hold both **UP** and **DOWN** buttons to initiate programming mode.
5. Hold until motor jogs.
6. Check the direction of the operation. Press and hold the **DOWN** button and confirm it moves the motor down.
  - ❖ **To change the direction**, press and hold the **MY** button until the motor jogs.
  - ❖ Check the direction of the operation to ensure it's moving in the right direction.
7. Press and hold the **UP** button until you reach your desired UPPER limit.
  - ❖ Your desired upper position should have the curtain fully retracted into the hood, only showing the end slat.
8. Press and release the corresponding upper limit button on the motor.
  - ❖ The button should be in the upper position now.
9. Press and hold the **DOWN** button until you reach your desired LOWER limit.
  - ❖ Your desired lower position should be all the way closed, leaving no gaps or space between slats. The anti push-up mounts should be pressed against the hood.
10. Press and release the corresponding lower limit button on the motor.
  - ❖ The button should be in the upper position now.
11. Press and hold the **MY** button until the motor jogs to confirm the limit settings.
12. Press and hold the **programming** button on the back of the remote until it jogs to save your settings.
13. Your shutter limits are now saved.

## Adjusting the Limits

If you have already set your limits and need to adjust, or if you're performing maintenance, follow these instructions to adjust your limit settings:

### To change the LOWER limit:

1. Set the shutter to its **CURRENT** lower limit.
2. Press and hold both **UP** and **DOWN** buttons until motor jogs.
3. Adjust to a new lower limit.
4. Press and hold the **MY** button until motor jogs.

### To change the UPPER limit:

1. Set the shutter to its **CURRENT** upper limit.
2. Press and hold both **UP** and **DOWN** buttons until motor jogs.
3. Adjust to a new upper limit.
4. Press and hold the **MY** button until motor jogs.

## Setting an Intermediate (MY) Position

### Setting your Intermediate (MY) Position

1. Move the shutter and stop it at your desired MY position by pressing the **MY** button.
2. Press and hold the **MY** button until the motor jogs.
3. Your intermediate position is now saved.
4. You can now move the shutter to your intermediate position by pressing the **MY** button from any position.
5. You can always change your MY position by following these instructions.

### Deleting your Intermediate Position

1. Activate shutter to intermediate position.
2. Press and hold the **MY** button until motor jogs.
3. Intermediate position is now deleted.

## Keypad Instructions

- ⚠ You **must** have the shutter limits pre-programmed with a SOMFY remote **and** have the remote with you!

### Full Reset

1. Open the Keypad with the key provided.
2. Press and hold the **ADR** button on the back of the Keypad until **BOTH** the lower and upper indicator lights will **flash 7 times**.
  - This takes approximately 10 seconds.
3. The Keypad is now reset.

### Commissioning (For first use)

1. Open the Keypad with the key provided.
2. Press the **RESET** button on the back of the Keypad for at least 1 second.
3. Check that the Keypad has been commissioned by pressing one of the Keypad buttons.
  - If the lower indicator light turns on, the Keypad has been commissioned.
  - If the lower indicator light **doesn't** turn on, press the **RESET** button again.

### Copying the previously programmed remote to the Keypad

1. Press and hold the **PROGRAMMING** button on the back of the previously programmed SOMFY remote until the shutter jogs, this should take 3 seconds.
2. Punch in the pre-set code into the Keypad and press the **SET** button (000000 + SET).
  - The pre-set code is six (6) zeroes (000000).
3. Press the **PROG** (PROGRAMMING) button on the back of the Keypad for 1 second or until the upper indicator light flashes.
4. Press the Single Circle Button, the top indicator light should light up and the shutter should jog if done correctly.
5. The limits have now been saved to the Keypad.

## Changing the Code

1. Enter the main code and press the **SET** button to confirm.
2. Press and hold the SET button until the lower indicator light turns on and stays on.
  - This takes approximately 8 seconds.
3. Enter your chosen replacement code and press the **SET** button to confirm.
  - The lower indicator light should turn off and on again.
4. Enter your chosen code again and press the **SET** button to confirm.
5. The lower indicator light should now be off.
6. Your code has been recorded.

## Programming a Secondary Code

- ❖ Allocation of a secondary code to a control button makes it possible to authorise partial access to the property.
  - ❖ Access authorisation can be temporary as the secondary code can be cleared by the owner at any time.
1. Enter the main code and press the **SET** button to confirm.
  2. Press and hold the **SET** button until the lower indicator light turns on.
    - This takes approximately 8 seconds.
  3. Press the control button (Single Circle Button or Double Circle Button) to which the secondary code will be allocated.
  4. Enter the secondary code and press the **SET** button to confirm.
    - The bottom indicator light will turn off and on again.
  5. Enter the secondary code again and press the **SET** button to confirm.
  6. The lower indicator light should now be off.
  7. To check the validity of the secondary code:
    - Wait for 30 seconds for the Keypad to time out and lock.
    - Unlock the keypad with the secondary code.
    - Press the control button associated with the secondary code:
      - If the upper indicator light flashes, the secondary code is correct.
      - If the lower indicator light flashes, the secondary code is incorrect. Restart the programming procedure for the secondary code.

## Clearing a Known Secondary Code

1. Enter the main code and press the **SET** button to confirm.
2. Press and hold the **SET** button until the lower indicator light turns on.
  - This takes approximately 8 seconds.
3. Press the control button to which the secondary code is allocated.

4. Enter the secondary code to be cleared.
5. Press and hold the SET button until the lower indicator light turns off.
  - This takes approximately 10 seconds.
6. The secondary code is now cleared.

### Clearing all Secondary Codes

1. Enter the main code and press the **SET** button to confirm.
2. Press and hold the **SET** button until the lower indicator light turns **on**.
  - This takes approximately 8 seconds.
3. Press and hold the **SET** button until the lower indicator light turns **off**.
  - This takes approximately 10 seconds.
4. All secondary codes are now cleared.

## Finalize Installation

- Check proper motor and limit operations.
- Inspect all components of the hood assembly:
  - Ensure bearings are fully seated.
  - Any push-up mounts are spaced evenly.
  - Axle has less than 3mm (1/8") play side-to-side
  - Axle bolt set screw is tight.
  - No debris inside the guide rails.
  - Check drip loop if necessary.
  - Check all fasteners holding the unit to the building structure.
  - Ensure shutter operates without binding or rubbing.
- Install front hood assembly cover.
  - If the hood assembly is fitted externally, cover should be fastened using 1/8", 5/32", or 3/16" rivets.
- Ensure that all opening gaps are sealed with silicone to avoid water penetration.
  - For exterior applications, a rain drip cap is recommended.
- With customer present, remove protective foil and install plug buttons or round attachment profile (RAP).
- Clean shutter assembly using a microfibre cloth and mild detergent.

## Contact



Office: 1-403-280-2000

Toll Free: 1-877-350-3667

Technical Support: 1-403-312-8877

7307 40<sup>th</sup> Street SE

Calgary AB, T2C 2K4, Canada

[www.ultraliteshutters.ca](http://www.ultraliteshutters.ca)

For Advanced Technical Support, please  
contact the Manufacture's Support Lines

Canada: 1-800-667-6639

USA: 1-800-227-6639

Contact Center Hours:

8AM – 5PM