



# **Rolling Shutter Installation Manual**

Complete Technical Guide

\*Please read fully before installing rolling shutters\*



# **Complete Technical Guide for Rolling Shutter Installation**

Please familiarize yourself with the installation instructions before starting the installation. For immediate questions - please call Rollac at 281.485.1911 and ask for tech support.

Installation instructions require experience in construction and mounting techniques and are written for the professional installer and authorized Rollac dealer.

Have all electrical work performed by a qualified electrician.

#### **COPYRIGHT NOTICE:**

This installation guide is for the authorized and professional Rollac dealer. All content is copyrighted by Rollac. Distribution or unauthorized use of this content without the written consent of Rollac is prohibited. Rollac Shutter of Texas, Inc. will actively pursue its legal rights.

© Rollac Shutter of Texas, Inc. 2024





# **Table of Contents**

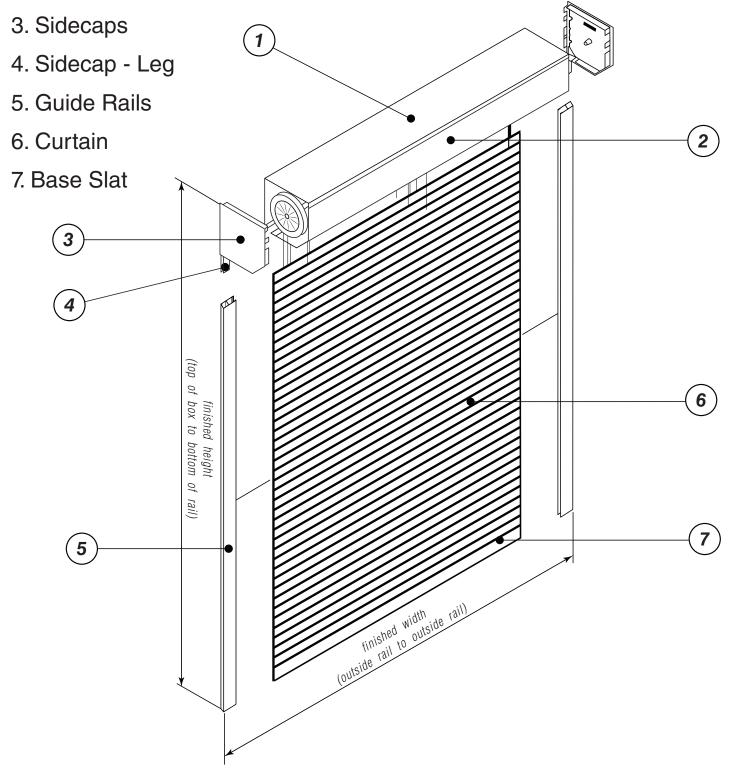
Important Rolling Shutter Terminology	4
Important Dimensional Terminology	5
Installation Condition covered in Technical Guide	6
Key Symbols and Meanings	7
General Information and Safety Advice	8
Rollac Technical Support – 281-485-1911	9
Tools Required	10
Additional Required Installation Items	12
Packaging and Labeling	13
Parts List for Rolling Shutter Systems	14
<ul> <li>Parts List for Tape Drive Rolling Shutter Systems</li> </ul>	14
<ul> <li>Parts List for Gear Operated Rolling Shutter Systems</li> </ul>	15
<ul> <li>Parts List for Motorized Operated Rolling Shutter Systems</li> </ul>	16
Rolling Shutter Installation	17
Surface Preparation	17
<ul> <li>Fix Rolling Shutter Method - A (Install Housing First * Recommended)</li> </ul>	18
<ul> <li>Step 2 A – Tape Drive Rolling Shutter</li> </ul>	21
<ul> <li>Step 2 B – Gear Operated Rolling Shutters</li> </ul>	22
<ul> <li>Step 2 C – Motorized Rolling Shutter Systems</li> </ul>	23
<ul> <li>Step 3: Finishing Installation and Check Function</li> </ul>	31
Alternative Installation Method: Lift Up Shutter	33
Sub Frames and Build Out	34
• A-Frame	34
B-Frame	35
• U-Frame	36
Reverse U – Frame	37
Double I-Frame	38
• O – Frame	39
Single I-Frame	40
<ul> <li>Double I-Frame Attached with Clips</li> </ul>	41
Rail Mounting Options Standard Rail	42
Rail Mounting Options End Retention Rail	43
Exploded Drawings	44
Tape Operated Rolling Shutter	44
<ul> <li>Gear Operated Exploded Drawing</li> </ul>	45
Motorized Rolling Shutter	46
Split Unit Example	47
Electronics Information	48
Smart Motor Control	48
Wireless SIMU Keypad Programming Instructions	55





# **Important Rolling Shutter Terminology**

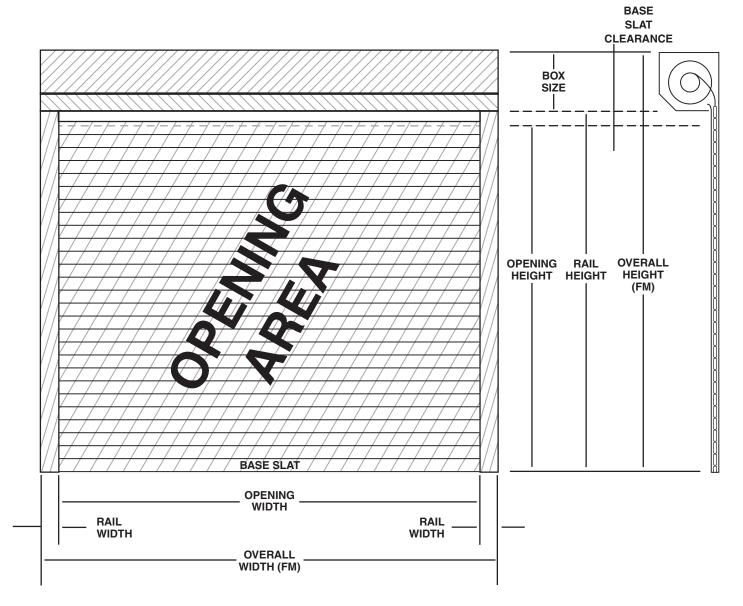
- 1. Shutter Housing Back
- 2. Front Cover or Access Panel







# **Important Dimensional Terminology**



# Width Dimension

### **Overall Width / Finished Width**

Overall width or finished width of the shutter (end to end measurement).

## **Opening Width**

The opening of the shutter and thus actual dimension of unobstructed or dimension through which an object can clear.

#### **Rail Width**

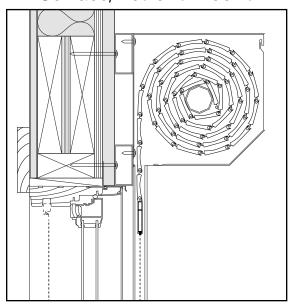
Size of the guide rails on each side

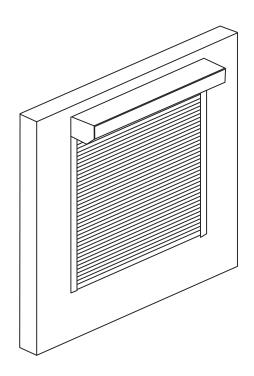




# **Installation Condition covered in Technical Guide**



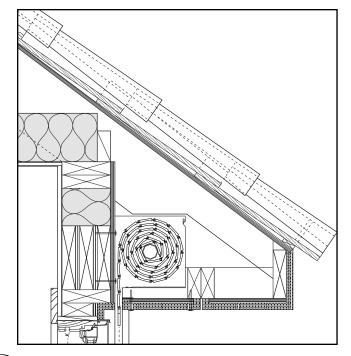




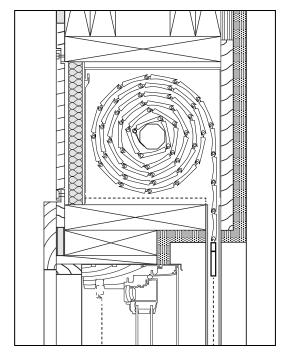
# Special Installation Conditions (Not Covered)

The following Shutter installations are less common and not covered in this technical guide. However, the installation is similar. If you want to perform one of the following installations and have questions, please call Rollac's Technical Support Line at 281-485-1911 for further information.

Soffit Mount



In-Wall Mount







# **Key Symbols and Meanings**

These symbols will be used to denote things of importance throughout this document. Be sure to keep a lookout for them.



#### WARNING!

Risk of Personal Injury. This is important safety information, which must be observed. Indicates a potentially hazardous situation which, if not avoided, could result in severe or fatal injury.



#### **ATTENTION**

Indicates a potentially hazardous situation which, if not avoided could result in damage to the product or building.



#### **OPERATIONAL CHECK**

At this point of the installation an operational check can be performed. Operational checks are very important as they can identify potential errors that could take an intensive time to fix later.



#### ADVICE/TIP

Information that can save time and enhance safety factors during an installation.



### REFERENCE OR IMPORTANT NOTE

During this step, a reference or important note is made. This might be a reference to another source or a reference that this step only applies to certain installation types.

# Special Instructions

#### SPECIAL INSTALLATION STEP

Steps that only apply to a special installation method or operators are in red. This step only applies to a special operator or installation condition. If this step does not apply to your installation, continue to the next step.

#### **EXAMPLE:**

For Motors with Emergency Override - Use a Special Crank Handle





# **General Information and Safety Advice**



These installation instructions are written for the trained and professional installer who is authorized by Rollac. Please read these installation instructions carefully before attempting installation. These installation instructions shall not be given to the owner or operator of the Rollac Rolling Shutters but remains with the installer. Observe all safety advice and relevant instructions.

Installation, commissioning, operator training, servicing, and repairs shall only be performed by the trained and professional installer, who is authorized by Rollac.

When installing, servicing, or repairing electrically operated products, please make sure that the main power supply is disconnected.

After installation and commissioning of the rolling shutter, the owner and, or operator must be trained on how to use the rolling shutter. We refer to the Operating and Maintenance Instructions in the Owner's Manual. Please be familiar with the most important aspects regarding operator training and operation of a rolling shutter:

- The rolling shutter shall only be operated in view
- There should be no obstacles within the operating path of the rolling shutter
- No objects should pass through the rolling shutter while in operation
- The operator / owner shall read and be familiar with the Owner's manual, especially the Operating and Maintenance Instruction.
- In the event of a malfunction, the operator shall consult the Owner's Manual and contact the Rollac authorized dealer if necessary.
- Any repair or modifications by an unqualified technician that was not authorized by Rollac or a an authorized Rollac dealer will void the warranty.

Observe safe working practices and follow other guidelines during the installation. Contact OSHA, Occupational Safety and Health Administration if necessary.



Always check with your local authorities or building code official about any applicable legislation regarding the rolling shutter, i.e. permits.



If in question about any of the procedures, do not perform the work. Have a trained and qualified installer do the installation or repair or call Rollac for further advice.







# **Technical Support Information**

## Rollac Technical Support Line - 281-485-1911

Rollac also provides phone support for installation and servicing of its rolling shutters. Please call 281-485-1911 and ask for Technical Support.

## **More Installation Instructions and Training Videos**

These installation instructions are considered detail and for the rolling shutter professional or professional installer. There are also installation videos available at www.rollac.com or through your sales rep.





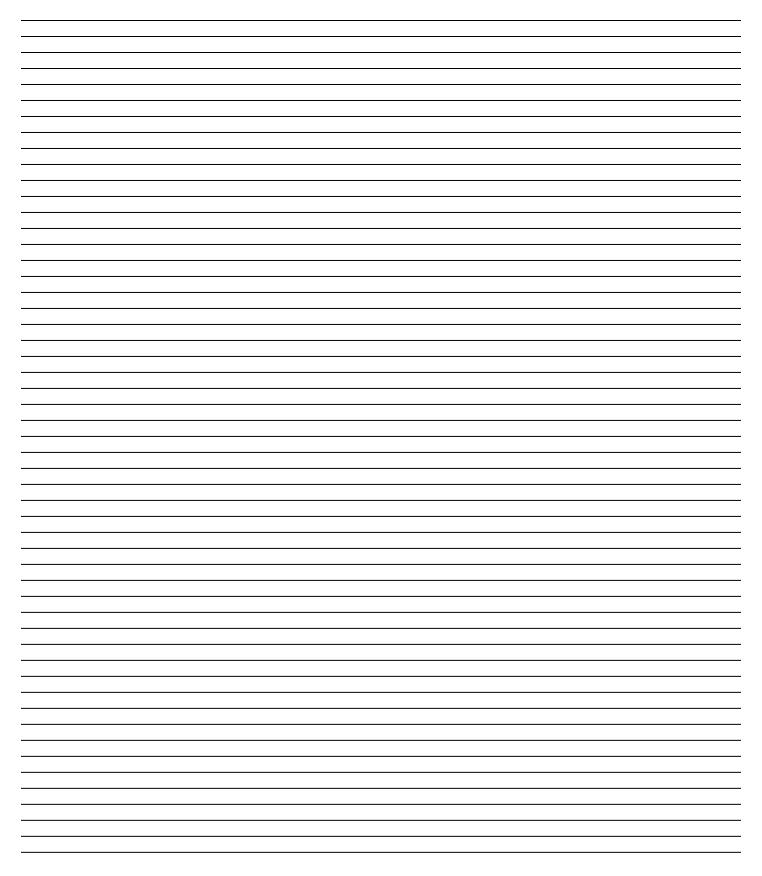
# **Tools Required**

Tools	Description		
Pair of Ladders	Typically 8' ladders are recommended for first floor installations.		
Caulking Gun	Caulking Gun is needed to seal the edges around the rolling shutter.		
Chop Saw for Aluminum	Useful in case parts such as rails need to be trimmed.		
Set of Small Tools	For example, various size Phillips head screw, flat head screws, drivers, pliers, etc.		
3 – 4' Level	To level the rolling shutter (rails and housing).		
Tape Measure with Imperial and metric units	Measure Shutter. Rollac uses the metric system, centimeters, to display sizes such as overall width and overall height.		
Hammer Drill	To be used for buildings with masonry work, such as Stucco, Brick, Center Block, or concrete. The hammer drill is needed to drill a hole through the wall or pre-drill for anchors. The hammer drill should have a ½" chuck to house drill bits (see below).		
Regular Drill with 1/2" chuck	To be used for drilling through a wall using material such as wood, bare cement siding (hardie plank) or aluminum. The hammer drill should have a ½" chuck to house drill bits (see below).		
Drill bit ¼" x 12"	Appropriate drill bit for Substrate. Use to mark drilling point and drill pilot hole.		
Drill bit ½" x 12"	Appropriate drill bit for substrate. Required to drill hole for drive shaft of universal.		
Drill Bit 5/8" x 12	Appropriate drill bit for substrate. Used to drill hole for Tape Drive operated rolling shutters.		
Impact Driver	Secure rails and housing.		
Carpenters Pencil / Chalk	To mark positions.		
Hack Saw	To cut drive shaft of Universal.		
Metal Files (round/half round/flat)	To smooth out metal edges of guide rails.		
Plastic Hammer	To smooth out edges without scratching the metal.		
Metal Cutting Snip	To cut back of housing (sheet metal).		
Adjustable Drill Guide	To drill at an angle, i.e. if required for gear operated shutters.		
Optional: Jigsaw or Circular Saw	If the shutter housing is to be installed in the soft, a circular saw or a jigsaw is required to cut the soft board.		





# **Notes**







# **Additional Required Installation Items**



The following installation items are not included with your rolling shutter and have to be provided separately:

#### **Fasteners:**

Adequate Fasteners are required to x rails and housing, or attach an optional window sill. Rollac always recommends choosing fasteners that are adequate for fixing the shutter into a structural member, such as wood framing, steel frames, concrete walls etc.

#### **Fasteners - Hurricane Shutters**

For installations that have to meet a hurricane code such as Miami Dade require special fasteners depending on substrate. For more information, see Engineering, available from Rollac.

## Caulking

Caulking in a matching or close matching color is needed to seal edges of the rolling shutter. Rollac also recommends caulking around screws (i.e. for Stucco facades to avoid capillary action).

#### Baker's Rod

A Baker's Rod might be required if large gaps have to be cover with caulking, typically gaps larger than ½ Inch. This prevents the caulking from breaking.

## **Dry Lubricant**

A dry lubricant, such as a PTFE to lubricate the guide rails. Do not use WD-40.

#### **Electrical Accessories**

For Motorized Shutters: Electrical accessories such as cable or boxes are not included and need to be purchased separately.





# **Packaging and Labeling**

Description	Visual
General Parts and Packages A Rolling Shutters is typically packed in three packages:  • Housing + Small Parts • Curtain • Rails	Secretary of the Control of Contr
Labeling of Packaging All packages are labeled on the outside. They contain the content and list Job Name and Position Number. Thus, they can be easily identified.	Job
Labeling of Boxes, Curtains, Rails Shutter Housing, Curtains, Rails, and Small parts are labeled.	281-485-1911 (888) 2-ROLLAC  Customer Name:  ORDER  Size: cm X cm





# **Parts List for Rolling Shutter Systems**

# Parts List for Tape Drive Rolling Shutter Systems

#### **General Parts**

- Assembled Shutter Housing (Optional Box Support Angle, Standard for Heavy Duty Systems and Hurricane Shutters)
- Pair of Guide Rails
- Plug Buttons to cover rail drilling holes
- Curtain
- Owner's Manual
- Installation Instructions (available electronically)

## **Operator Specific Parts**

## A.) Tape Drive with Recoil Box Exterior Mounted

- a. Recoil Box with Strap
- b. Diamond Shape Entry Guide

## B.) Tape Drive with Recoil Box Interior Mounted

- a. Recoil Box with Strap
- b. Square Entry Guide for Housing

## C.) Tape Drive with Crank Box Exterior Mounted

- a. Crank Box
- b. Crank Handle
- c. Diamond Shaped Entry Guide

## D.) Tape Drive with Crank Box Interior Mounted

- a. Crank Box
- b. Crank Handle
- c. Square Entry Guide for Housing

NOT Included are any fasteners, caulking, baker's rod, etc. These items must be purchased separately. See above!





# **Parts List for Rolling Shutter Systems**

# Parts List for Gear Operated Rolling Shutter Systems

### **General Parts**

- Assembled Shutter Housing (Optional Box Support Angle, Standard for Heavy Duty Systems and Hurricane Shutters)
- Pair of Guide Rails and Plug Buttons to cover rail drilling holes
- Curtain
- Owner's Manual
- Installation Instructions (available electronically)

## **Operator Specific Parts**

## A.) Gear Operated Shutter Exterior Mounted

- a. Universal joint with drive shaft
- b. Crank handle
- c. Crank handle holder

## **B.) Gear Operated Shutter Interior Mounted**

- a. Universal joint with drive shaft (optionally pre-installed)
- b. Crank handle
- c. Crank handle holder

To be requested separately: Drive Shaft Hex or Square to lift curtain during installation

NOT Included are any fasteners, caulking, baker's rod, etc. These items must be purchased separately. See above!





# **Parts List for Rolling Shutter Systems**

# Parts List for Motorized Operated Rolling Shutter Systems

#### **General Parts**

- Assembled Shutter Housing (Optional Box Support Angle, Standard for Heavy Duty Systems and Hurricane Shutters)
- Pair of Guide Rails and Plug Buttons to cover rail drilling holes
- Curtain
- Owner's Manual
- Installation Instructions (available electronically)
- Wiring and Limit Switch Instructions (available electronically)

## **Operator Specific Parts**

### Motor specific cable

- a. Switch (hard wired) operated motors have 6' cable 4 wires. Additional cable needs to be purchased separately
- b. Remote control operated motors have 6' cable 3 wires. Additional cable needs to be purchased separately

## A.) Switch Operated

a. Switch (Toggle, Decorator, Rocker, either maintained or momentary).

## **B.) Remote Control Operated**

b. Remote Control (multi channel available for multiple units)

## C.) Switch or Remote Operated with Emergency Override (Exterior Mounted)

- a. Switch (Toggle, Decorator, Rocker, either maintained or momentary)
- b. Alternative: Remote Control Operated
- c. Universal joint with drive shaft
- d. Crank handle and Crank handle holder

## D.) Switch or Remote Operated with Emergency Override (Special Crank Handle)

- a. Switch (Toggle, Decorator, Rocker, either maintained or momentary)
- b. Alternative: Remote Control Operated
- c. Extra plug buttons to cover hole of Box Access Panel
- d. Special Crank Handle

NOT Included are any fasteners, caulking, baker's rod, etc. These items must be purchased separately. See above!





# **Rolling Shutter Installation**

## **Surface Preparation**

## **Mounting Surface:**

The mounting surface must be suitable for the rolling shutters. It must be adequate to support the weight of the rolling shutter, take the appropriate fixings, and meet any structural requirements, such as for Hurricane Shutters. Mounting surfaces shall be flat and vertical to ensure a parallel alignment of the guide rails.

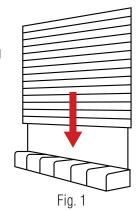
Do not attempt the installation or remove any building components unless the mounting surface is suitable for rolling shutter.

#### **Check Dimensions:**

Check the dimension and verify that the rolling shutter to the actual window / opening and installation surface.

#### No Obstructions

Verify that there are no obstacles such as door handles or window ashing in the up and down path of the rolling shutter. (Fig.1)



## **Bottom Stop | Window Sill**

In closed position, the rolling shutter needs a bottom stop such as a window sill or floor. This bottom stop must be suitable to support the entire weight of the rolling shutter curtain. If no bottom stop is available, an aluminum angle can be used and can be purchased from Rollac.

## **Sub Frame Required**

If obstacles cannot be removed or when in doubt, build out might be required to create a sub frame. See also SUB FRAMES for more information.



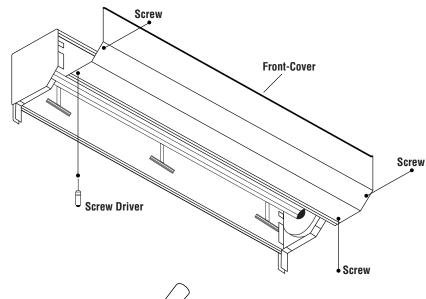


# Fix Rolling Shutter Method - A

(Recommended - Install Housing First)

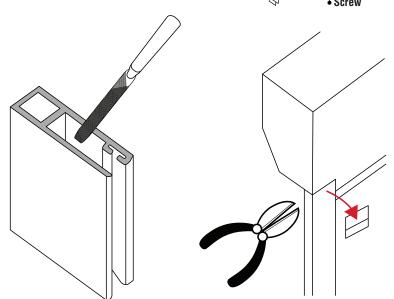
### **Remove Shutter Access Panel**

- 1.) Remove screws on front cover only.
- Lift front panel up from shutter opening. Repeat the same motion for re-installation.



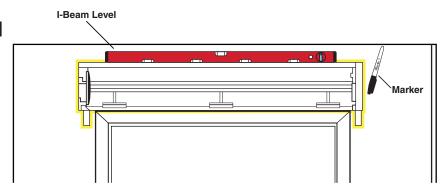
## **Prepare Each Connecting Surface**

- 1.) File the top of the rails to create a smooth entry angle.
- Cut the folding edge which overlaps the guide rails of the Box Housing.



## **Level Shutter Housing Against Wall**

- 1.) Level shutter housing against the wall. Make sure it is level.
- Mark outer position of shutter housing with a carpenter pencil or chalk.







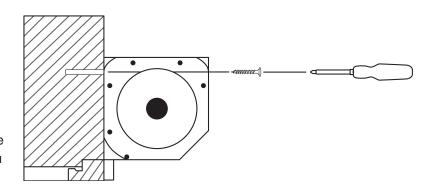
# Fix Rolling Shutter Method - A

# Exterior Mount Shutters: Transfer feed hole onto installation surface

Mark drilling hole.

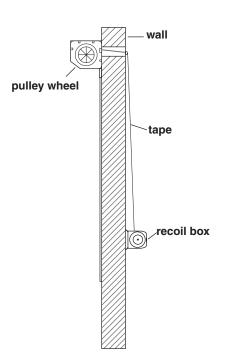


Use a long drill bit and mark the drilling hole by going through the side cap of the rolling shutter. When you use a gear, you can go through the eye for the gear.



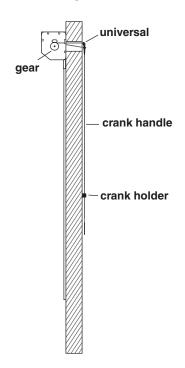
#### **Exterior Mount Shutters: Drill Feed Hole**

#### **Tape Drive Operated**



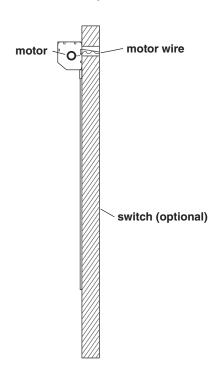
# Drill hole diameter for tape drive operated shutters: Ø 5/8"

#### **Gear Operated**



Drill hole diameter for gear operated shutters or motors with emergency override: Ø 1/2"

#### **Motor Operated**



Drill hole diameter for electrical feed (consult your electrician for cable routing): Ø 1/2"

Always drill a pilot hole before making a bore hole. Use appropriate drill bits and tools for various substrates such as brick or concrete.



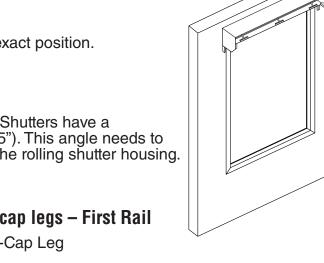


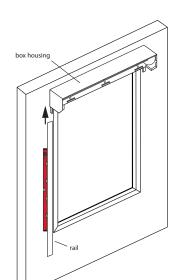
# Fix Rolling Shutter Method - A

## **Fix Shutter Housing**

- 1.) Fix Shutter Housing. Use previous marks to find exact position.
- 2.) Make sure that shutter housing is level
- 3.) Fix housing using appropriate screws

Rollac Heavy Duty Systems and Hurricane Shutters have a supporting box angle (typically 1" x 2" x 0.25"). This angle needs to be installed separately in the top corner of the rolling shutter housing.





# Insert Rails into Sidecap legs – First Rail

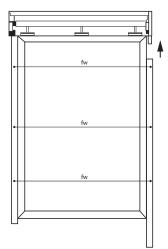
- 1.) Insert Rail into Side-Cap Leg
- 2.) Fix Top Screw
- 4.) Make sure rail is level.
- 5.) Fix bottom screw

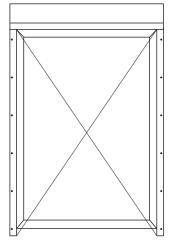


Be careful not to put too much stress and force on the sidecap legs. They can break easily.

## Insert Rails into Sidecap legs - Second Rail

- 1.) Insert second guide rails
- 2.) Install second guide rail away from first rail use finished width as a measurement and fix the top screw
- 3.) Repeat this process for the bottom screw





#### **Take Cross Measurement**

As a quality check – measure the diagonals and make sure it is plumb, level and square. Adjust if necessary.



Tip: Do not fix all screws yet. Fix remaining screws, once operator is installed and curtain runs freely up and down in its tracks!

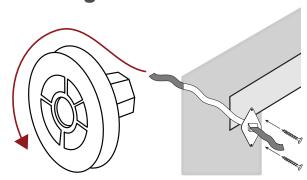


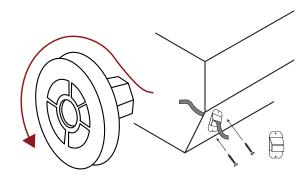


# Step 2 - Install Operator and Insert Curtain Step 2 A - Tape Drive Rolling Shutter

#### **Exterior Mounted Shutters: Install Recoil Box**

- About 2" away from the beginning of the tape cut a ½" hole lengthwise.
- Install recoil box.
- Feed tape through the diamond shape entry guide
- Feed tape through the wall and shutter (you may use a hacksaw blade as a guide to feed the tape through)
- Install tape onto pulley wheel. Pulley wheel has a diamond shape hook. Use ½" hole to connect with pulley



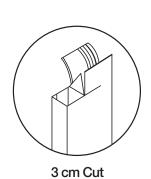


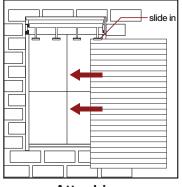
#### **Interior Mount Shutters: Install Recoil Box**

- About 2" away from the beginning of the tape cut a ½" hole lengthwise
- Install recoil box.
- Feed tape through the entry guide and shutter housing
- Do not reconnect access panel
- Install tape onto pulley wheel. Pulley wheel has a diamond shape hook. Use ½ hole to connect with pulley

## Charge Recoil Box For DuraComfort A150 and A150H

- Pull down curtain (if it is winded around axle)
- Disconnect curtain from springlock hangers
- Turn springlock hangers (T-Hangers) 90 degree's in order to scratch the curtain
- Pull Entire Tape out of the recoil box but leave about 12" inside
- Fix tape with clamp to avoid tape being pulled back into recoil box
- Turn axle to wind extra tape onto pulley
- Turn axle until tape is slightly tensioned
- Reattach curtain onto springlock hangers
- Use Tape to lift shutter and make sure it runs smooth in its tracks





Attaching Springlock Hangers

## Charge Recoil Box - All Other Systems

- Pull Entire Tape out of the recoil box but leave about 12" inside
- Fix tape with clamp to avoid tape being pulled back into recoil box
- Turn springlock hangers (T-hangers) by 90 degree
- Turn axle to wind extra tape onto pulley
- Turn axle until tape is slightly tensioned
- Bend 3 cm cut into an entry funnel (use a cloth and pliers)
- Attach curtain to springlock hangers
- Use tape to lift curtain and wind it around axle.



Make sure curtain does not scratch at the entry funnel

• Using the baselsat as starter - feed curtain into rails





# **Step 2 B – Gear Operated Rolling Shutters**

#### **Exterior Mount Shutters: Install Universal**

- Insert the Drive shaft of the universal into the gear
- Mark exit point from the Universal and deduct approximately three inches for the desired shaft length
- Cut the Universal to desired length
- Install Universal

## **Gear and Assist Spring: Charge Spring**



This step only applies to rolling shutters that are gear operated with assist spring:

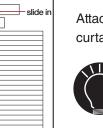
- Prior to installing the curtain, the spring needs to be charged
- For this: Crank shutter downwards to charge the spring until gear hits bottom stop
- Interior Mount Shutters: use Hex or Square Shaft to charge the system!
- Crank shutter until gear hits its bottom stop position. Make sure axle turns towards to down position!
- The spring should be charged to assist lifting up the curtain.

## Bend 3 cm Cut (does not apply to A150 and A150H)

The guide rails have an entry funnel that needs to be bended roughly 45 degree. This allows the curtain to enter smoothly into the guide rails.



Take a cloth and a pair of pliers'. Put cloth over guide rail funnel and bend with pliers into desired position. Also - push in tri-angle towards the sidecaps (outside of shutter) to avoid jamming of curtain.



#### **Attach Curtain**

Attach Curtain as shown. (Does usually not apply to shutters A150 / A150H as the curtain is already winded around the axle)



- The gear has a one side stop. Factory side this stop is installed as a bottom stop, meaning it will stop the gear from further rotation once the shutter curtain reached its down position.
- Some rolling shutters might have multiple curtain sections. This is for shipping purpose and ease of installation. Attach and lift curtain in sections, starting with the top section.

#### **Interior Mount Shutters: Lift Curtain**

 After attaching the curtain, use the Hex or Square bar to lift the curtain and wind it around the axle. Make sure not to scratch the curtain on the 3cm cut, if applicable.

#### Wind Curtain Around Axle and Insert

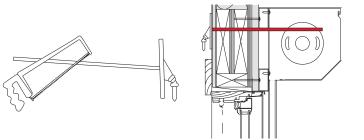
• Use Gear Operator to lift curtain into axle.

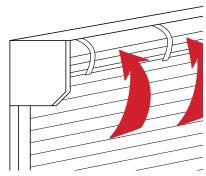


Be careful not to scratch curtain when inserting, especially on the entry funnel that has been bent.

• Using the baseslat as starter - feed curtain back into its guide rails











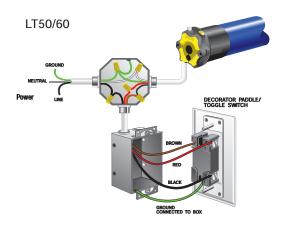
Always have a trained electrician make wiring connection. Also, follow local code requirements.

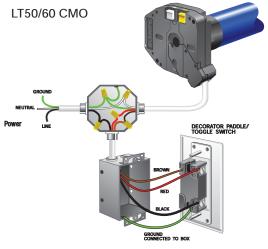
## **Supply Motor with Electricity**

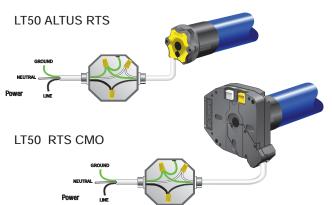
See wiring instructions below for various motors. Before making final connections, you can always use a tester switch.

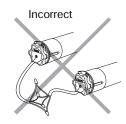
# SOMFY.

# **Operator Wiring Instructions**







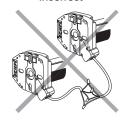


#### WARNING:

Do not wire two or more LT operators to one single pole switch.

This will cause the motors to malfunction.

#### Incorrect



#### LT MOTOR WIRING COLOR CODE

120V AC	CODE	
BLACK	WHITE PUSH-BUTTON	
RED	YELLOW PUSH-BUTTON	
WHITE	(C) COMMON	
GREEN	(G) GROUND	

Note: Only RTS and ILT motors can be wired in parallel.

## LT50 ALTUS RTS AND LT50 RTS CMO MOTOR WIRING COLOR CODE

120V AC	CODE			
BLACK	(H) HOT			
WHITE	(N) NEUTRAL			
GREEN	(G) GROUND			



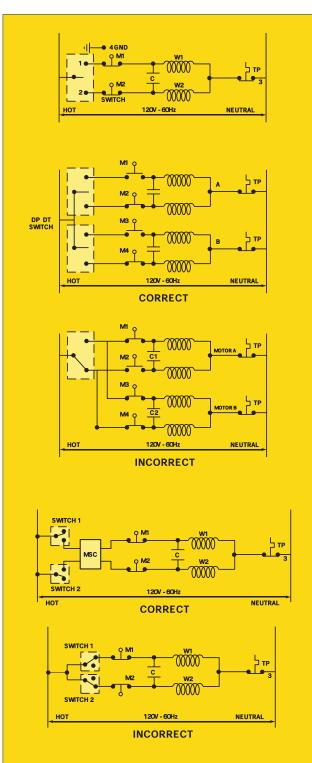




Please observe the operator wiring considerations:



# **Operator Wiring Considerations**



Because of the type of motor (Asynchronous with built-in capacitor) and the built-in limit switches, it is important to follow two important recommendations to assure proper operation of the motorized systems - SOMFY Operators are not universal motors.

SYMBOLS				
M1	Microswitch	W2	Motor Winding	
M2	Microswitch	TP	Thermal Protector	
С	Capacitor	GND	Ground	
W1	Motor Wiring			

The operator is connected to a 120V-60HZ power source through a single pole (or double pole), double throw, center off switch.

 Do Not Wire SOMFY Operators in Parallel (Does not apply to RTS or ILT motors). Parallel Wiring Means: Several Operators are Wired to Only One Electrical Contact Per Direction of Rotation.

There will be constant feedback from one motor to another, so stopping points will not be stable and there is a risk of motor burn out.

#### Correct

Correct wiring solution is to use a double pole, double throw, center off switch which would isolate both motors.

#### Incorrect

Motor A stops at its limit in direction 2 before Motor B. Current in Motor B feeds back to motor A through capacitor C2 and microswitches M3 and M1. Both operators keep rotating in opposite directions at reduced power.

2. Do Not Control One SOMFY Operator from Several Locations Without Using Proper Controller.

#### Correct:

Possible problem: When switch (1) is turned on, the motor will begin running in direction 1. As it reaches its limit, the microswitch M1 will open. If, at the same moment in time switch (2) is turned on, the motor will operate in the opposite direction. This is why we recommend the use of momentary switches with the Multi-Switch Command (MSC).

#### Incorrect

The microswitch M1 closes, shortcircuiting the capacitor which is loaded at its maximum voltage (180V). As a result the microswitch M1 is damaged.

Solution: Use relays to build priorities between controls sending opposite signals. Do not use a standard "light" switch as a motor control.

NOTE: SOMFY Control Systems are designed to comply with these two basic criteria and assure reliable operation of motorized systems. Non-compliance to these two basic principles voids the SOMFY warranty.





# For RTS and RTS CMO MOTORS: Program Remote and Motor Directions

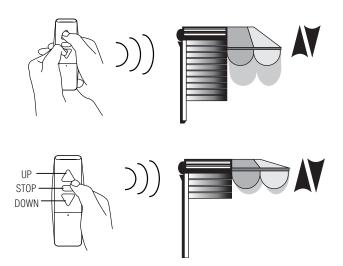


# Altus RTS and Orea RTS Motor

Programming and Limit Setting Instructions (Note: Orea RTS motor was designed for cassette awnings only)

# Factory Mode

In this mode the transmitter has not been assigned to communicate with the motor and the limits have not been set



- 1) To assign the transmitter to communicate with the motor's receiver, push the UP and DOWN buttons on the transmitter SIMULTANEOUSLY and release the buttons after the end product jogs briefly UP and DOWN indicating the transmitter can now operate the motor for programming. The motor will now operate in a momentary fashion.
- 2) Check direction of operation. The DOWN button must correspond to DOWN on the motor. In the case of an awning, it will open or extend the awning. If the direction is wrong, press the STOP button on the transmitter until the motor jogs briefly UP and DOWN (approx. 5 seconds) and then release. Verify that the direction has changed and now corresponds to the transmitters UP and DOWN buttons.



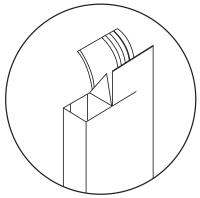
Do not program limit switches yet. Just make sure that the motor responds to the commands of the rolling shutter.

## Bend 3 cm Cut (does not apply to A150 and A150H)

The guide rails have an entry funnel that needs to be bended roughly 45 degree. This allows the curtain to enter smoothly into the guide rails.



Take a cloth and a pair of pliers'. Put cloth over guide rail funnel and bend with pliers into desired position. Also – push in tri-angle towards the sidecaps (outside of shutter) to avoid jamming of curtain.







#### **Attach Curtain**

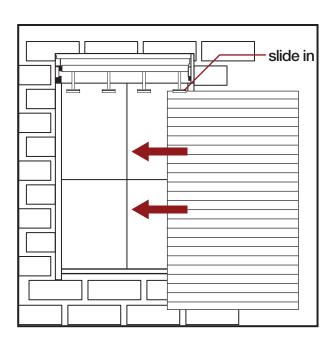
Once Power and an operator is installed - attach curtain as shown. (Does usually not apply to shutters A150 / A150H as the curtain is already installed inside housing)

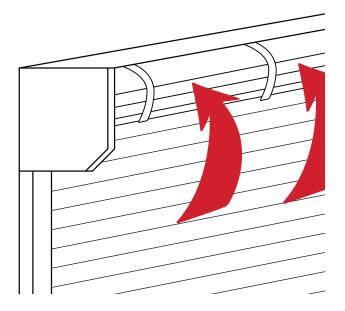


Some rolling shutter might have multiple curtain sections. This is for shipping purpose and ease of installation. Attach and lift curtain in sections, starting with the top section.



Do Not Set Limit Switches Yet





#### **Insert Curtain Into Rails**

Wind Curtain Around Axle and Insert

- Use Gear Operator to lift curtain into axle.
- Be careful not to scratch curtain when inserting, especially on the bended entry funnel.

Using the baselsat as starter - feed curtain back into its guide rails.





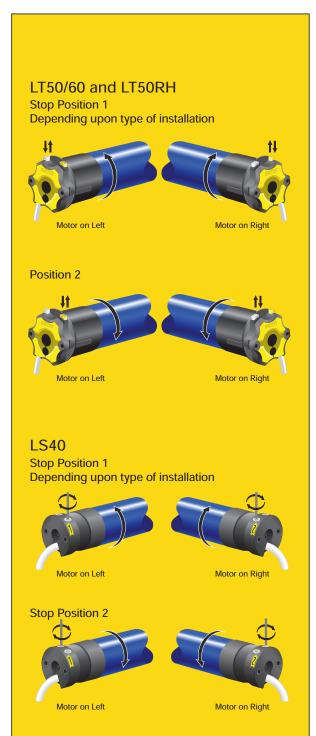
# Switch Operated Motor (Regular And Override): Adjust Limit Switches

See graphic below. Arrows indicate the turning direction of the motor. Based on the turning direction – it indicates the direction of movement of the rolling shutter.



## Installation Instructions

LS40, LT50/60, LT50 RH



Stop position 2

- Bring end product into stop position 2 (direction of rotation 2)
- Release the limit switch adjustment button that lies in the direction of rotation 2 by pressing it down again.
   Stop position is now set.

Always attach protective cap over limit switch adjustment buttons.

NOTE: It is important to note that SOMFY motors are weatherproof, but NOT WATERPROOF and therefore the motor head should not be exposed to direct rainfall.

#### Test Run 2

Allow the motor to run in both directions, until it shuts off in the stop positions. Because of the built-in thermal protection feature, the motor may shut off automatically after running without interruption for an extended period of time. Please wait until the motor has cooled off and is ready for operation again (approximately 10-15 minutes).

Changing a Set Stop Position...

- Press the limit switch adjustment button that lies in the direction of rotation.
- Bring the end product into the desired stop positon.
- Release the limit switch adjustment button by pressing it down again.

# Adjustment of Upper and Lower Positions for the LS40 Motor

- Connect the motor tester cable (Cat. No. 6020086) to the motor cable, match the wire colors and connect to power.
- Identify the UP recessed limit screw by finding the arrow on the motor head which points in the direction that retracts (rolls up) the system.
- Turn the power on to ensure that the switch is operating properly (UP-raises, DOWN-lowers). If not, turn the power off and simply reverse the black and red motor leads.
- Flip the tester cable switch in the UP direction. If the system stops before its UP limit, turn the UP screw to "+" until necessary. If the system does not stop at its UP limit, flip the tester cable switch off and turn the UP screw to "-". Repeat this until correct setting is achieved.

NOTE: 7 Turns of Hex Screws equals 1 turn of roller tube.

Flip the tester cable switch in DOWN direction. If the system stops before its DOWN limit, turn the DOWN limit screw to "+". If not, flip the tester cable switch off and turn the DOWN limit screw to "-". Repeat this until correct setting is achieved.

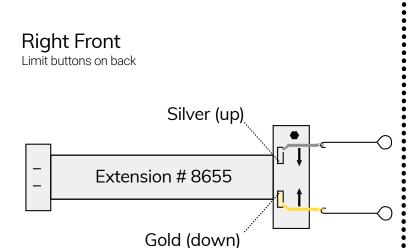
NOTE: Recessed thumbscrews can accomodate a flat head screwdriver, SOMFY's Allen wrench or Flexible limit switch adjuster.



# Switch Operated Motors (Regular And Override): Alternative Illustration for Limit Switch Adjustments

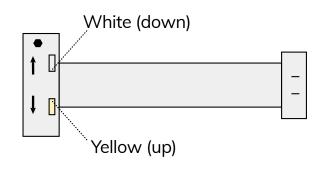
#### **Setting Limit Switches for Somfy CMO Motors**

Viewed from the front of the shutter



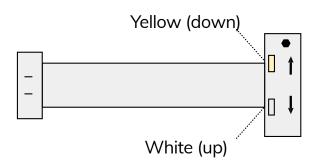


Limit buttons on front



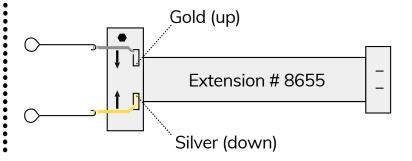
## Right Front

Limit buttons on front



#### Left Front

Limit buttons on back



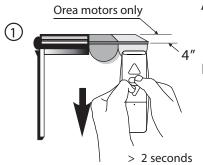




# Remote Controlled Motors (Regular And Override): Limit Switch Adjustment

- 3) Adjust the end product to the UP position. This is necessary to establish a reference starting point. Read the complete limit setting procedure before proceeding with setting the UP and DOWN limits.
- 4) Setting of the END LIMITS (always start at the upper reference point (UP limit).

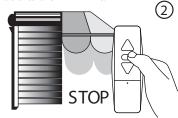
  Note: an extension of 4" is required as a starting point for the Orea RTS (cassette awning motor) only.

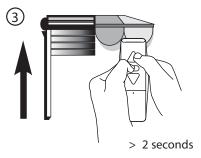


A. To set DOWN limit, press the STOP and DOWN buttons for more than 2 seconds, until the product begins moving down (Fig. 1). Release the buttons once the product begins to move, and be prepared to stop it at its DOWN limit.

B. Press the STOP button to stop the motor when it reaches the desired down position (Fig. 2). The DOWN limit is now set.

If necessary, adjust the correct down position using the UP and DOWN buttons. Remember at this point the motor moves for only as long as you keep your finger on the button (momentary operation).

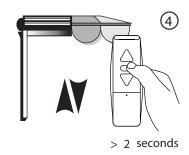




C. To set the UP limit, press and hold the STOP and UP button for no more than 2 seconds, until the product up (Fig. 3). Release the buttons once the product begins to move. It will stop at its upper limit automatically. Adjust if necessary using the UP or DOWN buttons.

NOTE: It is not necessary to adjust the UP limit on an OREA RTS motor since it is automatically set once the cassette awning is completely closed.

D. To confirm these limit positions, press and hold the STOP button for more than 2 seconds, until the application jogs briefly UP/DOWN (Fig. 4), indicating the limits have been memorized by the motor. The setting of the end limits is now complete.





For a complete and more comprehensive motor programming instructions, please call Rollac at 281-485-1911 or see complete motor wiring instructions at the end of the reference.



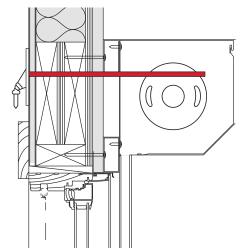


# **Exterior Mounted Shutters With Emergency Override: Install Universal**

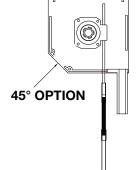
## Does not apply to SPECIAL CRANK HANDLE

**Exterior Mount Shutters:** 

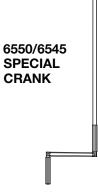
- Insert the Drive shaft of the universal into the motor's gear
- Mark exit point from the Universal and deduct approximately three inches for the desired shaft length
- Cut the Universal to Desired Length
- Install Universal



# Motors With Emergency Override: Install Special Crank Handle



- 1.) Look for Cover Plug installed at the bottom of the shutter housing
- 2.) Remove Plug
- 3.) Insert special crank handle



SPECIAL CRANK HANDLE OPTION FOR OVER RIDE MOTORS. USED FOR EMERGENCY OPERATION.





# **Step 3: Finishing Installation and Check Function**

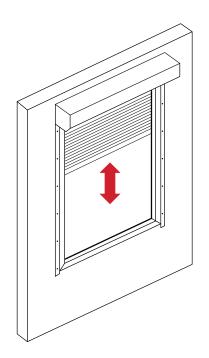
#### Test run shutter curtain

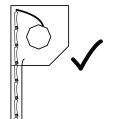


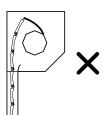
Test run the shutter up and down 3 times. Make sure it runs free from obstructions. Adjust if necessary.

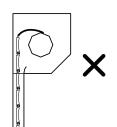


Be extra careful if not all screws have been installed as the shutter might not support the entire weight of the curtain. After the operational test is performed successfully, install remaining screws.







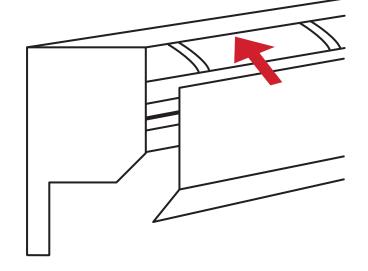


## **Adjust Curtain Height**

Adjust the shutter curtain to the correct height. Remove or add slats if necessary.

### **Reattach Access Panel**

Reattach access panel. Remove protective foil



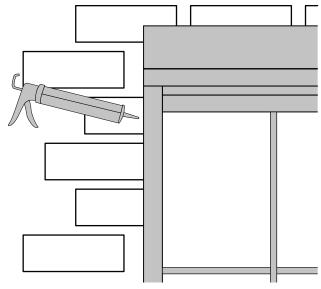




# **Step 3: Finishing Installation and Check Function**

#### Caulk Rails and Boxes

Caulk around rails and boxes.



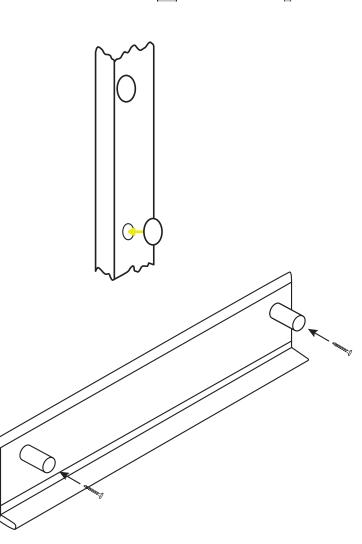
## **Insert Plug Buttons**

Cover all screw holes with the included plug buttons

## **Insert Exterior Stops**

This step does not apply to A150, A150H since they have an interior stop. Also, this step does not apply to motorized shutters using a remote control or switch. It does apply to shutters with motor and manual override.

Install all exterior stops at the bottom bar. These prevent the shutter from rolling into the shutter housing.

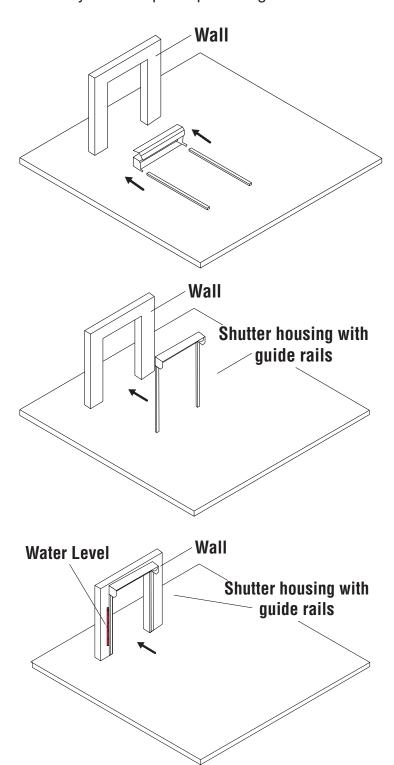






# **Alternative Installation Method: Lift Up Shutter**

The following installation method describes the lift up shutter installation method. It is typically used over doors or windows where the floor is used as a bottom stop. During this method, the entire shutter assembly is lifted up and placed against the wall. The method is shown as a short version.



**End of Installation Instructions** 

## **Complete Shutter on bottom**

- 1. Place blanket on floor to protect shutter from scratching.
- 2. Remove Shutter Access Panel
- 3. Insert Guide Rails into Sidecap-Legs.



## 4. Lift up Shutter Assembly

Lift shutter at shutter housing. Make sure it is properly supported. Make sure to not break the legs of the side cap.

# Put shutter assembly against the wall | Drill for Operator if required

- 11. Put shutter assembly against the wall.
- 12. If necessary mark and drill for operator. See Page 19 for more information.

## **Fix Shutter Assembly**

- 4. Make sure Box is level. Fix shutter box
- 5. Make sure shutter and rail is leveled
- 6. Fix the top screw of first guide rail.
- 7. Make sure guide rail is level and fix bottom screw.
- 8. Install second guide rail. Use the distance as a measure and fix top screw of second rail.
- 9. Use distance measure and install bottom screw.
- 10. Take Cross Measurement

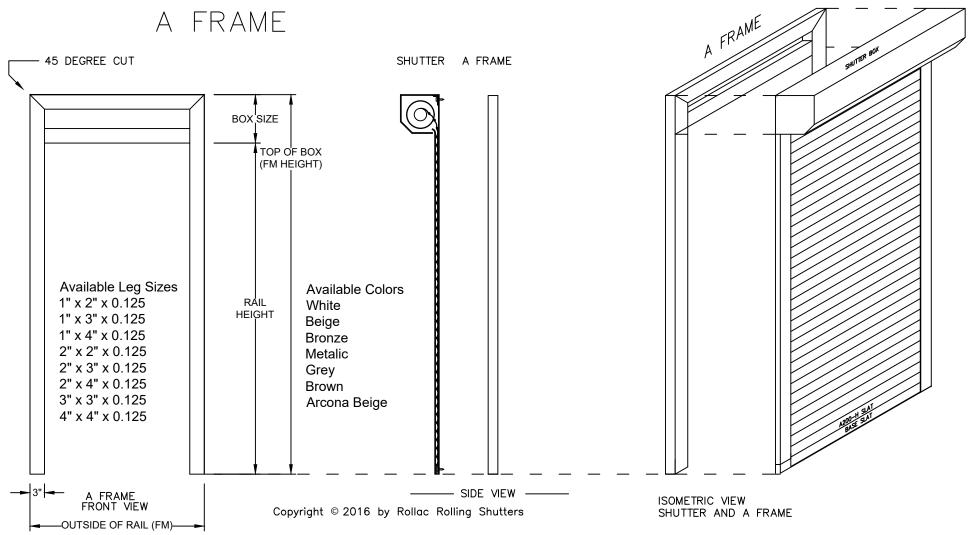


Proceed with Step 2: Install Operator and Insert curtain as well as Step 3: Finish Installation and Check Function.





## **Sub-frames and Build Out - A Frame**

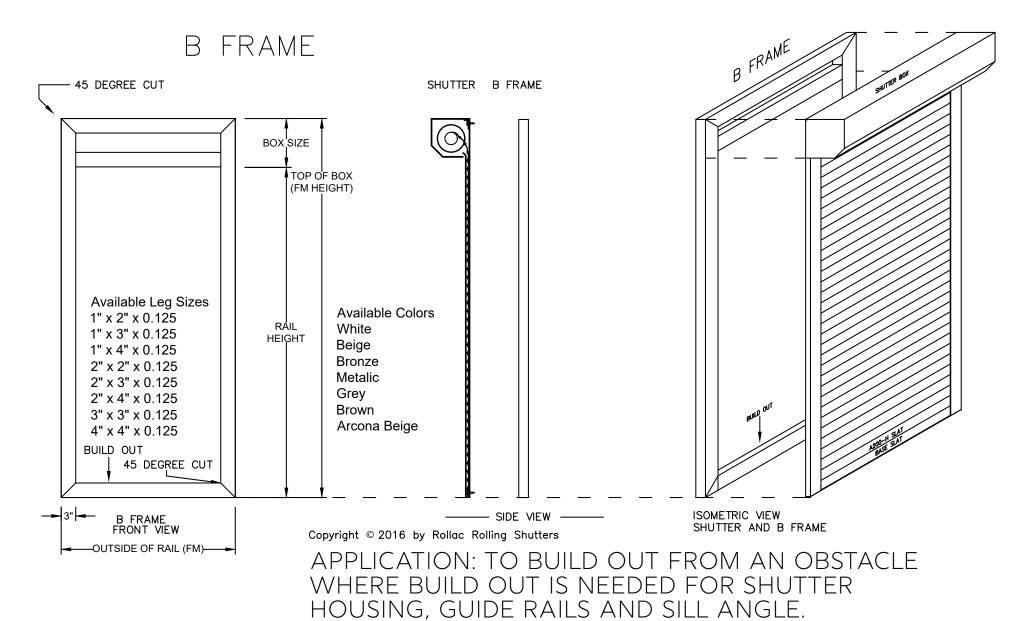


APPLICATION: TO BUILD OUT OVER AN OBSTACLE SUCH AS A DOOR HANDLE. BUILD OUT IS FOR SHUTTER HOUSING AND GUIDE RAILS.





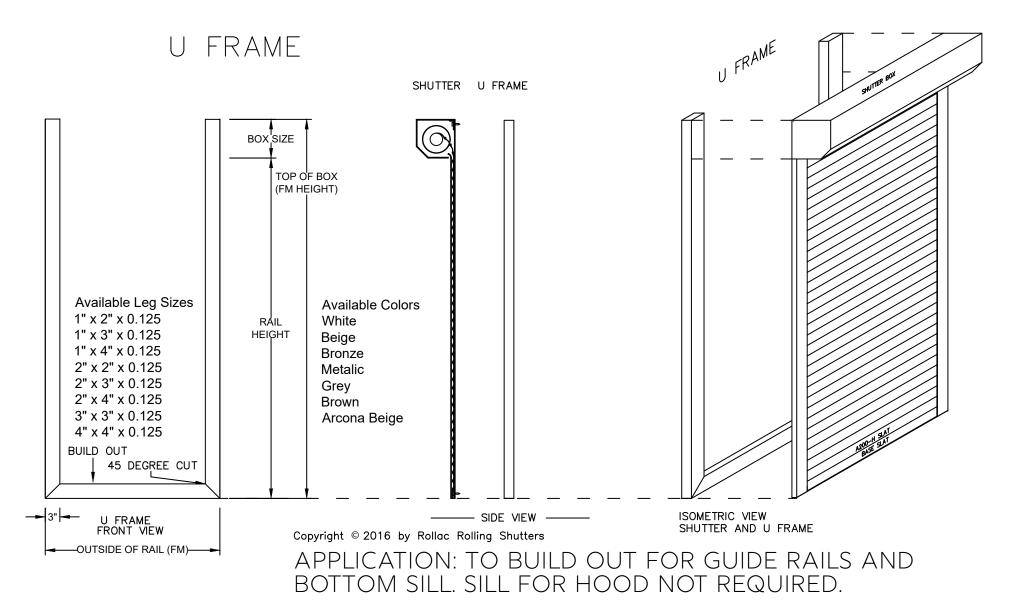
## **Sub-frames and Build Out - B Frame**







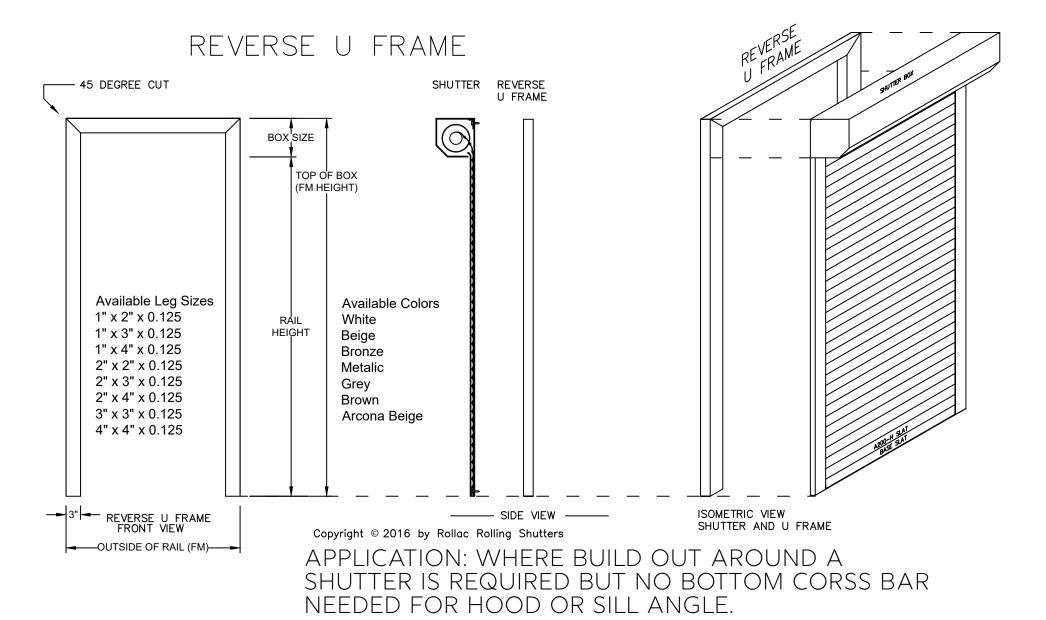
# **Sub-frames and Build Out - U Frame**







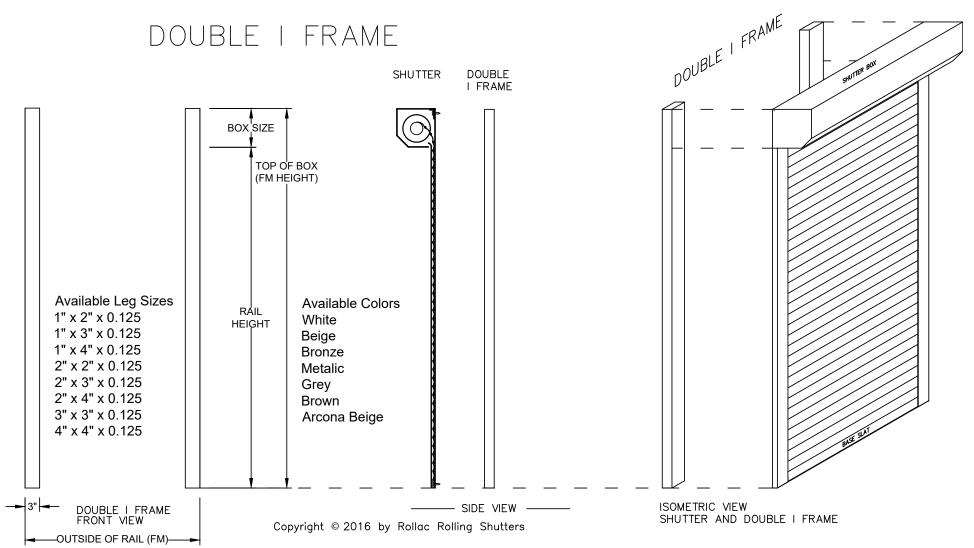
## **Sub-frames and Build Out - Reverse U Frame**







## **Sub-frames and Build Out - Double I Frame**

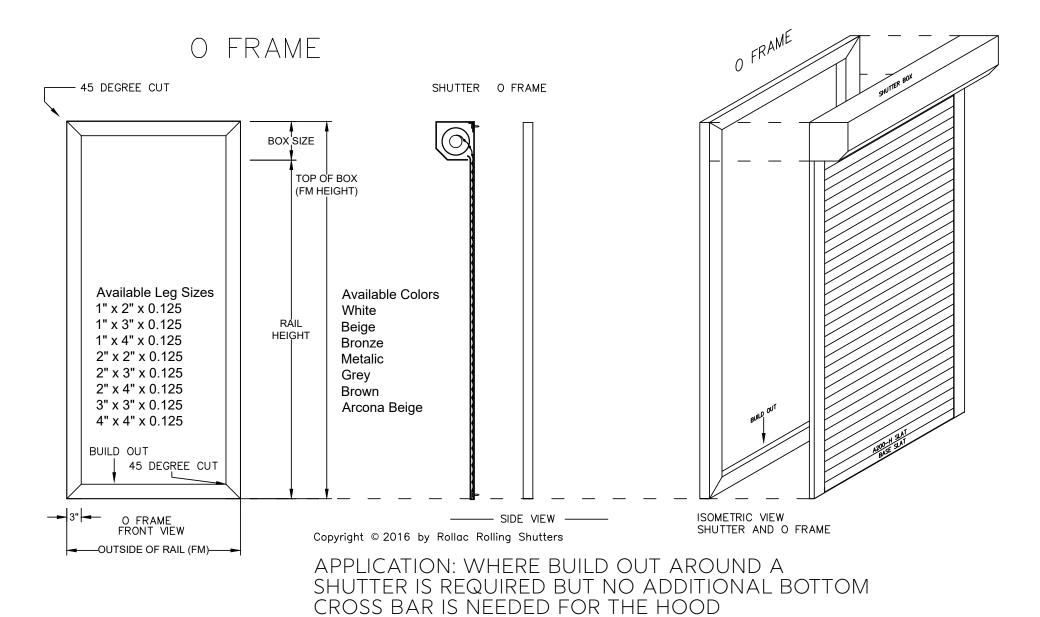


APPLICATION: TO BUILD OUT FOR THE RAILS ON FACH SIDE.





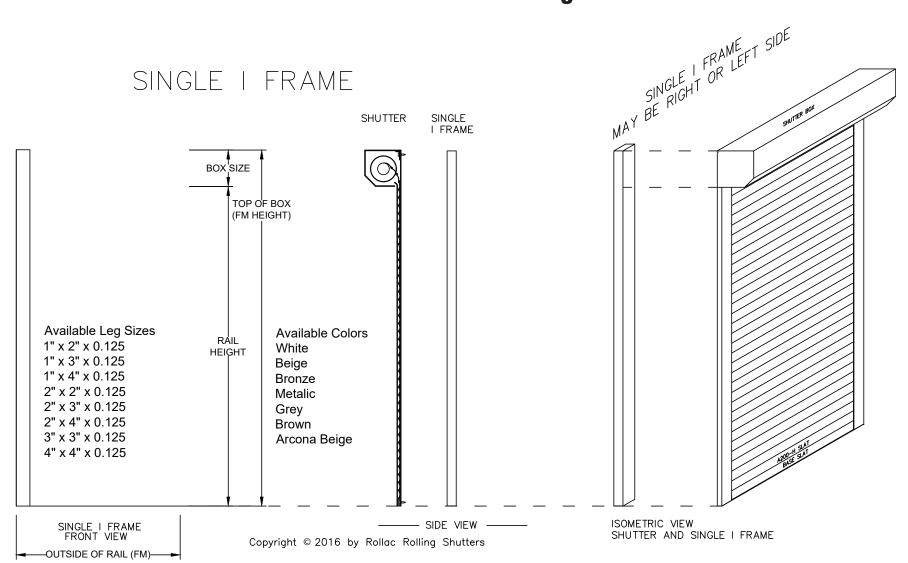
## **Sub-frames and Build Out - O Frame**







# **Sub-frames and Build Out - Single I Frame**

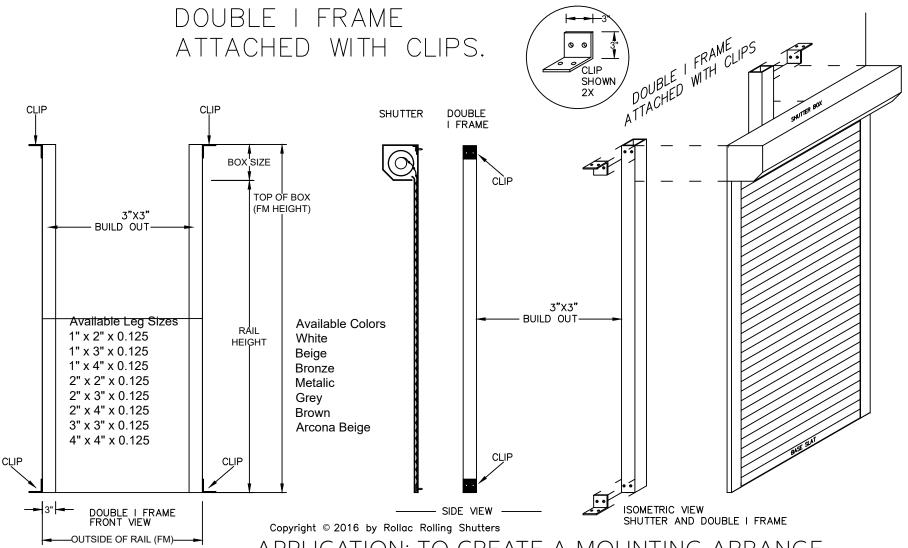








# **Sub-frames and Build Out - Double I Frame Attached with Clips**

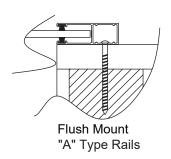


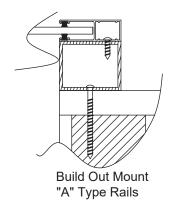
APPLICATION: TO CREATE A MOUNTING ARRANGE-MENT FOR THE SHUTTER WHEN FLOOR AND CEILING ATTACHMENT ARE THE ONLY OPTION. EXAMPLE: STORE FRONTS WITH WINDOW WALLS.

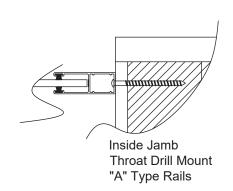


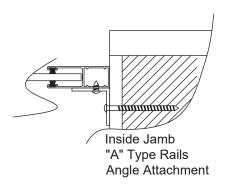


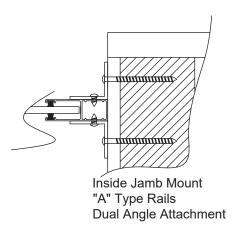
# **Rail Mounting Options Standard Rail**

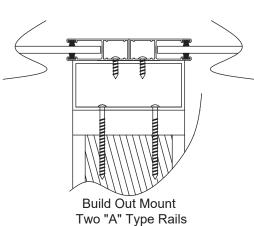


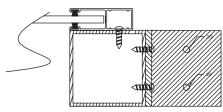






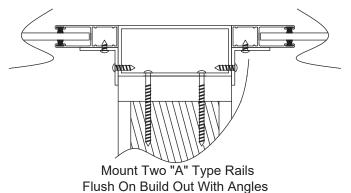






3 Inch X 3 Inch Clip.

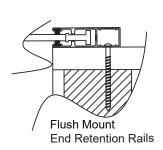
Mounted to 3 Inch X 3 inch Build Out with rails attached. Use one clip at floor and ceiling for each rail to mount shutter when no other mounting options are available. Other sizes are available.

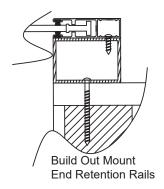


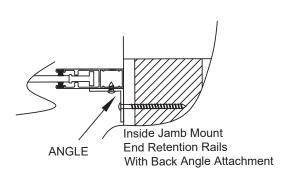


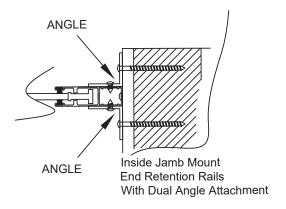


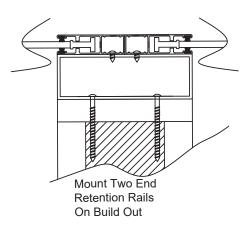
# **Rail Mounting Options End Retention Rail**

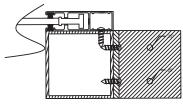






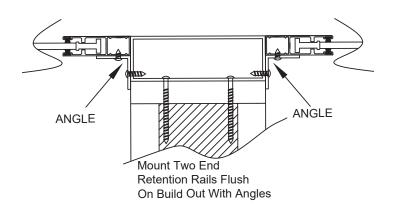






3 Inch X 3 Inch Clip.

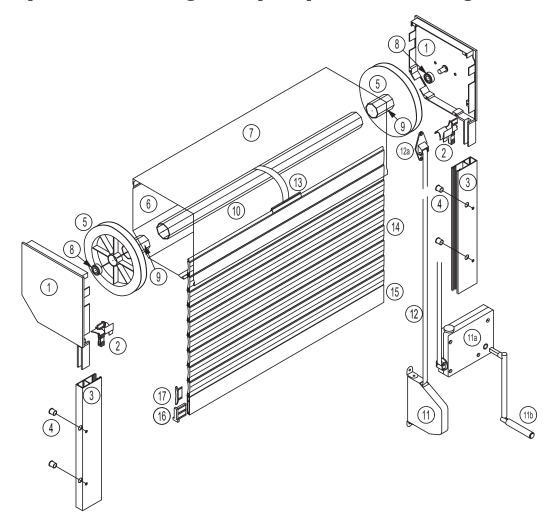
Mounted to 3 Inch X 3 inch Build Out with rails attached. Use one clip at floor and ceiling for each rail to mount shutter when no other mounting options are available. Other sizes are available.







# **Exploded Drawings - Tape Operated Rolling Shutter**



- 1 Side/End Cap
- 2 Entry Guide
- (3) 2 1/8"Guide Rail / Opt. 2 1/2" Guide Rail
- 4 Plug Button
- 5 Pulley (Mini) PVC
- 6 Housing (Front/Bottom) 6"-10"
- 7 Housing (Top/Back) 6"-10"

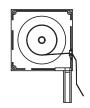
- (8) Ball Bearing
- 9 Idler Insert (PVC) Telescopic
- (10) 40 mm Axle (Galvanized/Aluminum)
- (11) Mini Recoil Box
- (11a) Mini Tape Crank Box (option alternative)
- (11b) Crank Handle (option alternative)
- 12) Tape

- (12a) Tape Guide
- (13) Springlock Hanger
- (14) A150 Slats
- (15) Base Slat
- (16) Interior Nylon Stop
- (17) Side Lock

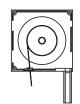
## **TAPE EXIT OPTIONS:**



TAPE ROLLER MOUNTED AT TOP REAR OF SHUTTER NORMALLY GOING THROUGH TO INTERIOR WALL



TAPE ROLLER MOUNTED AT BOTTOM REAR OF SHUTTER NORMALLY GOING THROUGH TO INTERIOR WALL



TAPE ROLLER MOUNTED AT BOTTOM OF SHUTTER NORMALLY MOUNTED ON THE EXTERIOR WALL

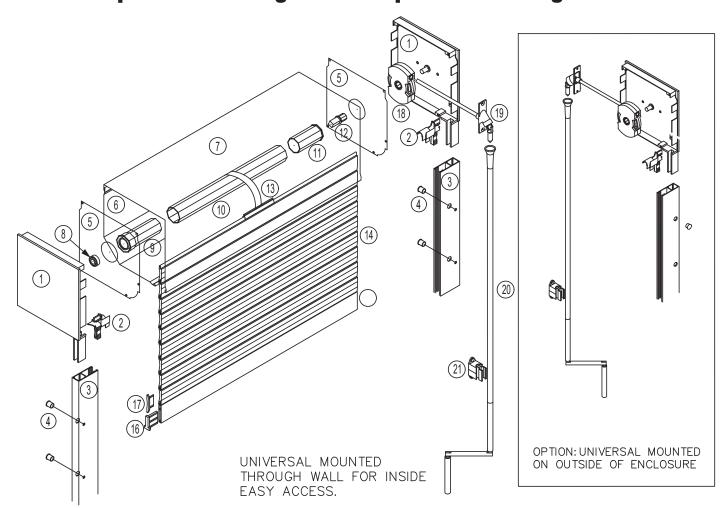


TAPE ROLLER MOUNTED AT TOP OF SHUTTER NORMALLY MOUNTED ON THE EXTERIOR WALL





# **Exploded Drawings - Gear Operated Rolling Shutter**



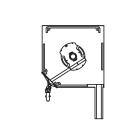
- 1) Side/End Cap
- 2 Entry Guide
- (3) 2 1/2" Guide Rail
- 4 Plug Button
- 5 Safety Plate
- 6 Housing (Front/Bottom) 6"-10"
- 7 Housing (Top/Back) 6"-10"

- 8 Ball Bearing
- 9 Idler Insert (PVC)
- (10) 60 mm Octagonal Axle
- (11) Gear Insert
- (12) Gear Connector
- (13) Springlock Hanger
- (14) A150H Slats

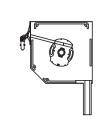
- (15) Base Slat
- (16) Interior Nylon Stop
- (17) Side Lock
- (18) Gear
- (19) Universal
- (20) Crank Handle
- (21) Crank Holder

## **GEAR EXIT OPTIONS:**





UNIVERSAL MOUNTED AT 45°



UNIVERSAL MOUNTED AT FRONT OF ENCLOSURE

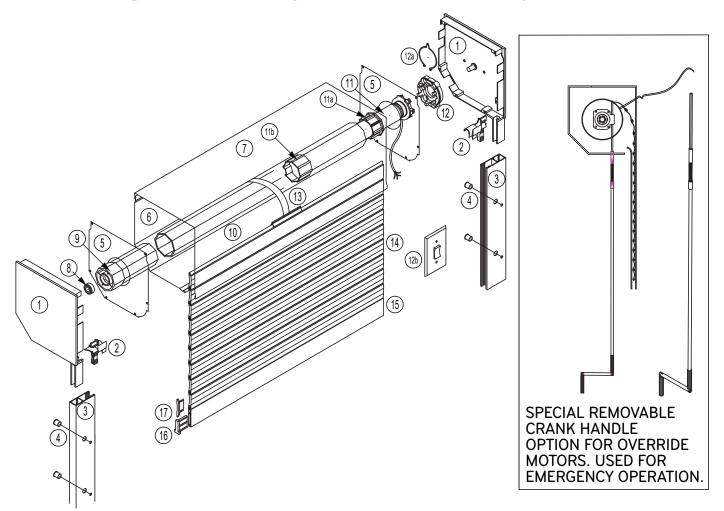


UNIVERSAL MOUNTED AT BOTTOM OF ENCLOSURE





# **Exploded Drawings - Motorized Rolling Shutter**



- (1) Side/End Cap
- (2) Entry Guide
- (3) 2 1/2" Guide Rail
- (4) Plug Button
- (5) Safety Plate
- 6 Housing (Front/Bottom) 6"-10"
- (7) Housing (Top/Back) 6"-10"

- (8) Ball Bearing
- 9 Idler Insert (PVC)
- (10) 60/70 mm Octagonal Axle
- (11) Tubular Motor
- (11a) Crown
- (11b) Drive
- (12) Motor Bracket

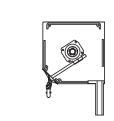
- (12a) Spring Ring
- (12b) Switch / Opt. Remote
- (13) Springlock Hanger
- (14) A150H Slats
- (15) Base Slat
- (16) Interior Nylon Stop
- (17) Side Lock

#### **OVERRIDE EXIT OPTIONS:**



MOUNTED AT REAR

OF SHUTTER



MANUAL OVERRIDE MOUNTED AT 45°



MANUAL OVERRIDE MOUNTED AT FRONT OF ENCLOSURE

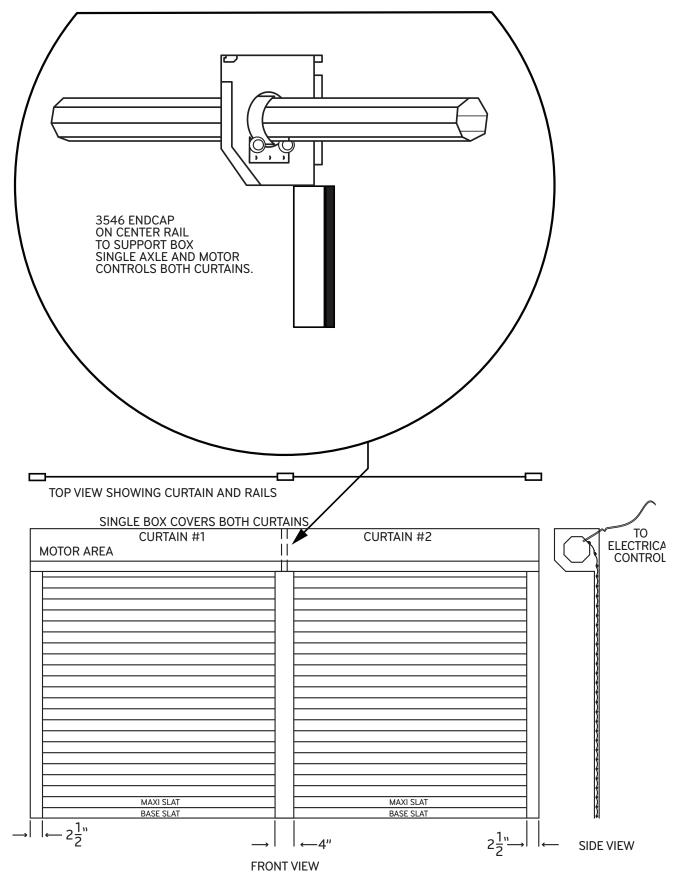


MANUAL OVERRIDE MOUNTED AT BOTTOM OF ENCLOSURE





# **Split Units - Two Curtains on a Single Axle**





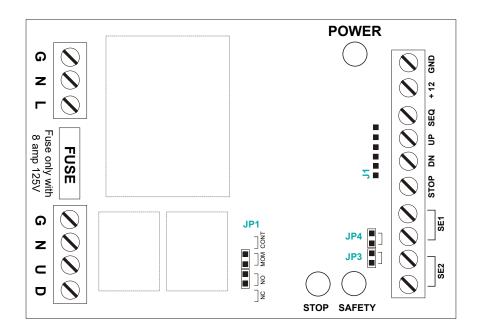


# **Smart Motor Control (SMC) Introduction**



# **SMART MOTOR CONTROL (SMC)**

**NEW SMART MOTOR CONTROL** 



- THE "SMART MOTOR CONTROL" (SMC) IS AN IDEAL GENERAL PURPOSE INTELLIGENT CONTROL SYSTEM FOR COMMERCIAL OR INDUSTRIAL APPLICATIONS.
- THE SMC ALLOWS CONTROL OF A 120V AC TUBE MOTOR BY MOST STANDARD COMMERCIAL CONTROLS AND SAFETY DETECTORS.
- Mounts in standard 3-gang electrical box.
- 250 mA 12V supply for accessories.
- Diagnostic LEDs for quick, easy trouble shooting.
- Supports normally open and closed inputs from reversing detectors.
- Supports 2- and 4-wire safety edges.
- The stop button is selectable normally open or normally closed.
- Control is selectable timed run or continuous pressure.
- Sequencing input supports single contact devices such as: Radio Controls, Key Switches, Card Readers.



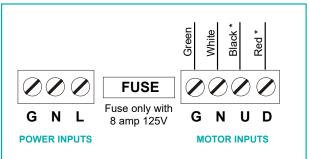




# **Smart Motor Control (SMC) High Voltage Connections 1/2**



## HIGH VOLTAGE CONNECTIONS



## **POWER INPUTS:**

**G** - Ground

N - 120V AC Neutral

L - 120V AC Hot

#### **MOTOR INPUTS:**

G - Motor Ground (Green)

N - Motor Neutral (White)

**U** - Motor Up (Black\*)

**D** - Motor Down (Red\*)

 $<sup>^\</sup>star$  If motor runs in wrong direction, reverse the red and black motor wires.



## JUMPERS RUN TIME JUMPER JP1 (TOP)

#### **JUMPER ON (MOM)**



- With the jumper on, the run timer is off and the SMC will drive the motor only as long as the up or down button is pressed.

#### NOTES:

- The reversing detector controls are deactivated in this mode.
- 2- The sequencing control is deactivated in this mode.
- 3- This mode can be used to close the door if there is a malfunction in the reversing detectors. This must only be done if the UP/DOWN switch is in direct view of the door. The reversing detectors must be serviced as soon as possible and the door returned to its normal operating mode.

#### JUMPER OFF (CONT)



- With the jumper off, the run timer is active and the SMC will drive the motor for 1 minute (or to the motor limit) when the up or down button is pressed.
- Pressing the other direction when the motor is running will cause the motor to stop for 1/4 second before reversing directions.

#### **NOTES**

I- The SMC must be in this mode for the sequencing and reversing detectors to be active.







# **Smart Motor Control (SMC) High Voltage Connections 2/2**



#### **JUMPER ON (NO)**



- With the jumper on, the stop button is selected normally open (NO). A closed stop contact will stop the motor and light the yellow stop LED.

#### NOTES:

I- The jumper must be in this position if a stop switch is not used or if the stop button is NO.

#### JUMPER OFF (NC)



- With the jumper off, the stop button is selected normally closed (NC). A open stop contact will stop the motor and light the yellow stop LED.

#### NOTES:

I- The jumper must be in this position if a NC stop switch is used. Leaving the jumper on without a NC stop button attached will cause the SMC to not operate.

# ì

## **JUMPERS**

## REVERSING DETECTOR JUMPERS (JP3 JP4)

#### **JUMPERS OFF (4-WIRE EDGE)**



- Both jumpers JP3 and JP4 must be off to use a 4-wire sensing edge.

#### **JUMPERS ON (2-WIRE EDGE OR N.O. DETECTOR)**



- Both jumpers JP3 and JP4 should be on if a normally open reversing sensor is used or if no reversing sensor is used.

#### NOTES:

I- If either jumper is off without a 4-wire sensing edge attached, the red safety LED will light and the door will be locked in the up direction.

#### NOTES:

I- It is strongly recommended that a reversing sensor be used if the SMC run timer is on.

#### 1 JUMPER ON, 1 JUMPER OFF (N.C. DETECTOR)



- With jumper JP3 on and JP4 off a normally closed reversing sensor can be connected to SE1.

#### NOTES:

With JP4 off a normally closed contact must be connected to SE1 or the SMC will lock the door open.



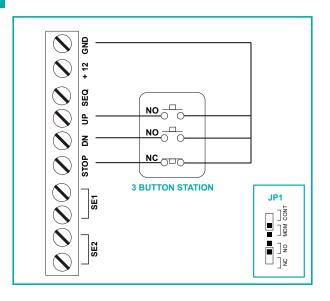




# **Smart Motor Control (SMC) Low Voltage Switching 1/3**

## LOW VOLTAGE SWITCHING CONNECTIONS

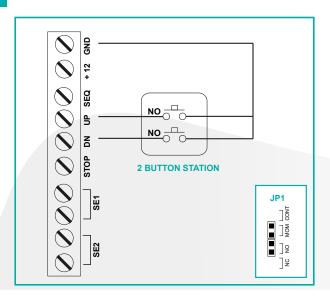
## **3 BUTTON STATION**



#### NOTES:

- I- Should be used with reversing sensors.
- 2-Shown configured for a NC stop button.

## **2 BUTTON STATION**



#### NOTES:

- I- Shown requiring constant pressure on the switch for the motor to operate.
- 2- Switch must be in view of the door.



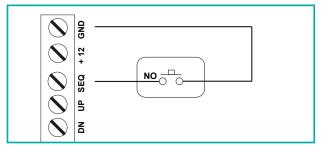




# **Smart Motor Control (SMC) Low Voltage Switching 2/3**



#### **SEQUENCING CONTROL**

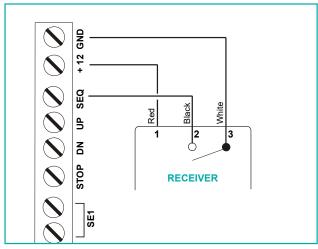


#### NOTES:

- I- Can be used with any momentary, dry contact such as key switches, card readers, radio controls, etc..
- 2- Two or more switches can be wired in parallel.
- 3- Control will follow a sequence with each pulse (up, stop, down, stop, up, .....)



#### SINGLE CHANNEL RADIO

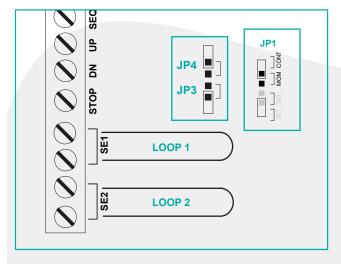


#### NOTES:

Wiring shown is standard but may vary with manufacturer. Check instructions with radio receiver for differences before wiring.



#### **4-WIRE SENSING EDGE**



#### NOTES:

- Jumpers JP3 and JP4 must be off when using a 4-wire sensing edge.
- 2- JP1 top jumper must be off (CONT). This sets the SMC run timer on.
- 3- JP1 lower jumper setting depends on stop button.
- 4- Check sensing edge function. If the motor reverses upon sensing edge activation when the door is going up instead of down, reverse the red and black motor leads.

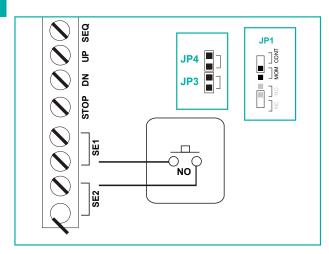






# **Smart Motor Control (SMC) Low Voltage Switching 3/3**

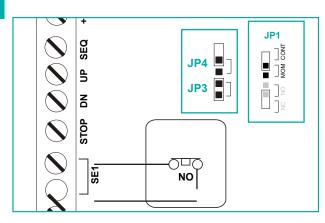
## N.O. SENSING EDGE (2-WIRE)



#### NOTES:

- I Jumpers JP3 and JP4 must be on when using a normally open sensing (2-wire) edge.
- 2- JP1 top jumper must be off (CONT). This sets the SMC run timer on.
- 3– JP1 lower jumper setting depends on the stopbutton.
- 4- Check sensing edge function. If the motor reverses upon sensing edge activation when the door is going up instead of down, reverse the red and black motor leads.

#### **N.C. REVERSING SENSOR**

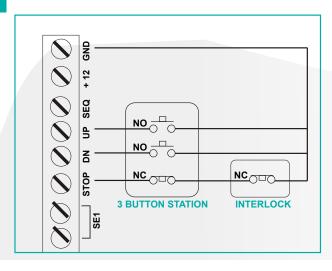


#### NOTES:

- I Jumper JP3 must be on and JP4 must be off when using normally closed reversing sensor.
- 2- JP1 top jumper must be off (CONT). This sets the SMC run timer on.
- 3- JP1 lower jumper setting depends on stop button.
- 4- Check sensing edge function. If the motor reverses upon sensing edge activation when the door is going up instead of down, reverse the red and

black motor leads.

## **INTERLOCK (KEYED LOCK OUT)**



#### NOTES:

- I- A normally closed interlock (keyed lock out) can be connected in series with the NC stop button.
- 2- Should be used with reversing sensors.
- 3- Shown configured for a NC stop button

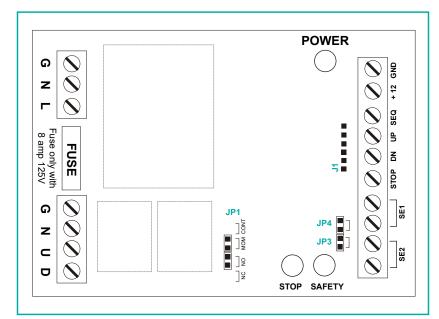






# **Smart Motor Control (SMC) Electrical Ratings**

## **ELECTRICAL RATINGS**



#### **ELECTRICAL RATINGS**

- Input power: 120V AC 60Hz
- Motor output maximum: 8 amps
- Fused: 8 amp 125V
- Low voltage supply for off board controls: 12V DC @ 250mA

## **DIAGNOSTIC LED'S**

- GREEN POWER LED ON power and fuse connections are good.
- YELLOW STOP LED ON active stop signal (control is locked).
- RED SAFETY LED ON active reversing detector signal (control will lock door in open direction).

#### **TROUBLE SHOOTING**

## Problem - no response from control

- I f the green power LED is not on: confirm that there is 120V AC on the power input and that the connections are correct. Check the fuse. Remove devices connected to +12 to confirm +12 output is not overloaded.
- 2- If the green power and yellow stop LEDs are on: check that the stop jumper is configured correctly. Check connections to the stop button.
- J- If the green power LED is on and the yellow stop and red safety LEDs are off: check the connections to the motor. Test the motor directly with a test switch. Check the motor limits (turn both limits plus 5 revolutions).

#### Problem - motor locked in one direction

- In If the red safety LED is on: check the connections to the reversing detectors. Confirm that the jumpers JP3 and JP4 are configured correctly.
- 2- If the red safety LED is not on: check the connections to the motor. Check the motor limit (turn it plus 5 revolutions). Test the motor directly with a test switch.

#### Problem - motor runs only as long as switch is held down

This is correct operation if reversing detectors are not used. If reversing detectors are used, check the position of the run time jumper (JP1 top).



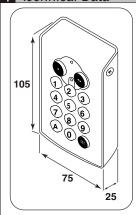


# Wireless Simu (Somfy) Keypad Programming Instructions 1/2

. simu Hz Digital Keypad Instructions
For use with SIMI Hz radio motors and receivers

Hz Digital Keypad Ref # 2006029 Read all instructions carefully before use.

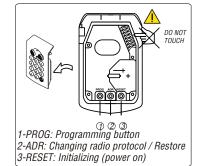
#### 1 Technical Data



- Power supply: 3VDC lithium battery CR 2450
- Operational temperature: -5°/140 F (-20°/60°C)
- Enclosure: IP54 (outdoor rated)
- Frequency: 433.42 Mhz

WARNING: Do not allow children to play with the control system

To insure proper operation, do not install on a metal surface.



Use finger or erasure to press PROG, ADR or RESET button. DO NOT USE a hard or sharp object

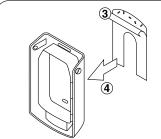
Product Description: The Hz Digital Keypad provides sequencing up/stop/down control of one or two Hz operators or Hz receivers. Control is limited to authorised users via user selected security codes of 4, 5 or 6 digits.

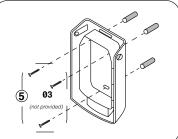
- 1 Master code (required): Valid to control both channel buttons and required for all programming operations.
- <u>4 Secondary codes</u> (optional): 2 codes can be programmed for each channel button allowing partial access to be given to the property. Backlighting: Pressing any button will activate back lighting in the event of low light conditions.

#### 2 Installation/Mounting

1) Remove the two allen screws with the provided tool as shown. 2) Pull the top of the face away from the back. 3) Peel cover off foam. 4) Apply the foam to the back of the keypad case. 5) Mount the back of the case to a vertical wall in the orientation shown. Do not mount to a metal surface.

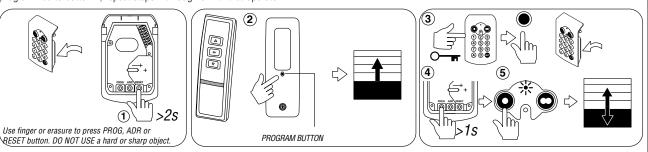






## 3 Programming

1) Initialize (power on) the Keypad by pressing the reset for over 2 seconds. This will only need to be done once on a given keypad. 2) Press the programming button on a transmitter already programmed to the operator for 3+ seconds until the operator jogs. 3) Input the master code (000000 until changed). Press set and release. 4) Flip the keypad over and press the programming button for over 1 second. The top LED will start blinking. 5) Flip the keypad over and press the desired channel button (1 dot or 2) while the top LED is still blinking. The motor will jog. If a 2nd operator is to be programmed to button 2, repeat steps 2 through 5 with that operator.



SIMU Technical Support 1-800-822-SIMU (7468)





## Wireless Simu (Somfy) Keypad Programming Instructions 2/2

## 4 Changing the Master Code

To change the master code: Enter the current master code (the master code is 000000 until changed). Press set and release. Press set again and hold it for over 7 seconds. The lower red LED will light and stay lit. Enter the desired new master code. Press set. Enter the new master code a 2nd time and press set. The master code has been changed. Note: 9A621 is shown below as an example only. It is recommended you choose a different unique master code 4 to 6 digits in length. Copy the selected master code in a safe location as it is required for any programming or code change.



#### 5 Secondary Codes

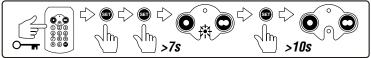
To add a secondary code: Enter the master code. Press set and release. Press set a 2nd time and hold it for over 7 seconds. The lower red LED will light and stay lit. Press the desired channel button (1 or 2 dots). Enter the desired secondary code 4 to 6 digits in length. Press set. Enter the same code a 2nd time and press set. The new secondary code is now set. Note: 2582 is shown below only as an example. Choose a unique 4 to 6 digit code.



To delete a secondary code: Enter the master code. Press set and release. Press set a 2nd time and hold it for over 7 seconds. The lower red LED will light and stay lit. Press the desired channel button (1 or 2 dots). Enter the secondary code to be deleted. Press set for over 10 seconds.



To delete all secondary codes: Enter the master code. Press set and release. Press set a 2nd time and hold it for over 7 seconds. The lower red LED will light and stay lit. Press set for over 10 seconds until the LED goes out.



#### 6 Daily Use

Pressing any button will activate the back lighting in the event of low light conditions. Enter the security code and press the transmit button. The top LED will blink while transmitting. The keypad will be active for 30 seconds after the code has been entered allowing the operator to be sequenced between up/stop/down/stop as desired by each press of the transmit button. Note: the master code will grant control of both channel buttons (1 and 2 dots). The secondary codes will only grant control of the button they were programmed to.

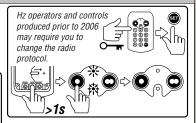


#### 7 Trouble Shooting

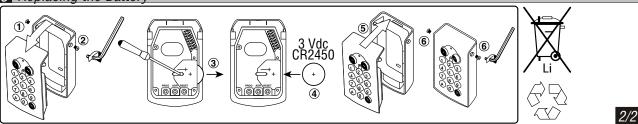
If an Hz operator or control was produced before 2006 and will not accept programming, you may need to switch the keypad to the old protocol by: Entering the master code. Press set. Press the address button. Press the channel button that will be programmed to the older unit. Again attempt programming as per step 3 above. will lock the keypad for 5 min. If an error is made in the middle of a programming step, stop and wait 30 seconds and the keypad will reset. If the master code is lost,

the code can be reset by pressing the address button for over 15 seconds until both red LED's start to blink The master code will be reset to 000000 and the secondary codes will be cleared.





#### 8 Replacing the Battery







# Highest Standard in Custom Manufacturing

Since 1982, Rollac has combined quality, service and the latest technology to produce the best possible product for our customers. Each job is constructed to ensure the best fit and finish. Whether trying to enhance security, seeking bespoke comfort, or adding protection from the elements, Rollac will provide a premium experience from the beginning to the end of every job.

In 2021, commercial, industrial and residential sectors sector used a combined 63% of all energy in the United States, making our market the leading source of carbon emissions. Our Miami-Dade rated shutters, as well as our Zipshades and awnings increase efficiency while decreasing environmental damage and saving money in operational costs.

Using the latest technology at hand, all of our products are engineered in house and customfit to suit any job. We at Rollac strive to provide the best possible experience for any company, residence or individual looking to improve their property.



5331 West Orange Street Pearland, TX 77581

Phone 281.485.1911 Toll Free 1.888.2-ROLLAC Fax 281.485.0839











