

SmartScreen Motorized Standard

Comprehensive Guide



Contents

Recommendations & Resources	3
Preliminary Planning	4
Measurements	6
Ordering Process	9
Field Preparation	13
Installation	15
1) REVEAL FIT accessories	15
2) Install housing back	15
3) Install rolled screen.....	17
4) Motor programming.....	18
5) Install bottom-bar	19
6) Affix tracks	20
7) Fine-tune screen limits	22
8) Route Cord and Re-attach Plug	23
9) Finishing Touches	24

Recommendations & Resources

1. Read this guide before first installation.
2. Bookmark these links. Review “SmartScreen Motorized” occasionally as details and specifications are subject to change:
[Technical Resources | Wizard Screens | Premium Retractable Screens for Doors, Windows and Large Openings](#)
[Install Guides | Wizard Screens | Premium Retractable Screens for Doors, Windows and Large Openings](#)
3. Learn about **Somfy Maestria 50 RTS** and **Alpha WSER50 30/21** motors.



Located in the “SharePoint Marketing Folder”, available from your Wizard rep.

DO NOT PROCEED WITH INSTALLATION BEFORE COMPLETING THE ABOVE.

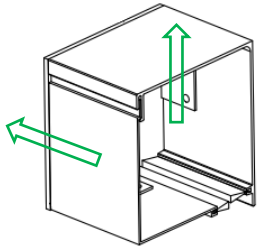
4. Call **1-888-949-3667**
 - a. to schedule an installation training session
 - b. if problems arise during installation
5. Wizard Order Portal
<https://portal.wizardscreens.com/>

Preliminary Planning

Min. width	= 38"
Max. width	= 30'
Max. width (vinyl)	= 25'
Max. height	= 16'

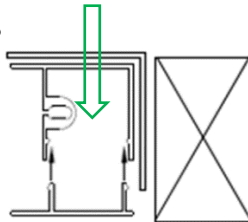
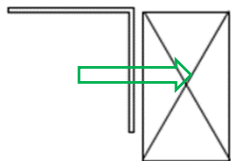
1) Determine the installation type.

a) **Reveal Fit** – Unit mounted *under* header and *inside* jambs.

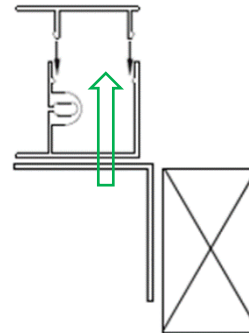


Tracks mounted to:

i) 2"x2" Angle Channels



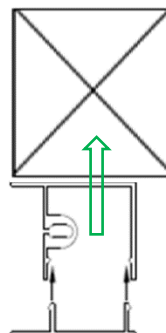
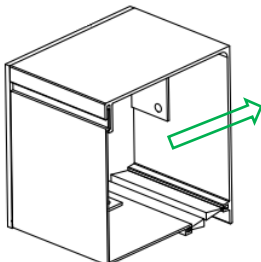
OR



ii) 2"x1" Box Channels



b) **Face Fit** – Unit mounted onto *face* of header and jambs.



***NOTE:** Combination possible as installer sees fit.

2) Component & Sizing Table

Selectable					Dimensional Threshold	
Screen Material	Roll-tube	Housing	Motor	Idler	Width	Height
Mesh & Fabric	4"	5 ½"	Maestria 525 or WSER50 30/21	Standard 2 1/8"	38" to 22'6"	& less than 12'
Mesh & Fabric	5 ¾"	7"	Maestria 550	Double 7 ¼"	22'6" to 30'	& 12' to 16'
Vinyl	See "Dim. Thresh."		Maestria 550	See "Dim. Thresh."	38" to 25'	Up to 16'

***NOTE: If size is *beyond* threshold in first row, some/all of first row items will *not* be selectable.**

For more details, see step 5 "ORDERING PROCESS"

3) Graded floor (I.e., sloped patio)

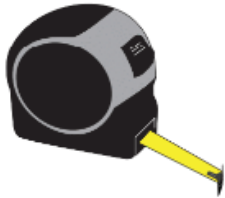
- a) It can be requested the screen be cut at the bottom to a **maximum 1 ½" grade.**
- b) Mohair can accommodate an **extra 1" grade.**

*****HOUSING MUST BE LEVEL!*****

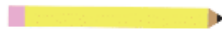
Measurements

1) Tools required:

Tape Measure



Pencil



2-way Laser Level Kit



Laser Distance Measure




2) Establish **plumb** & **level** marks. Then determine dimensions.

* The industry standard “3-width-measurements method” will *not* work **most effectively** for most cases.

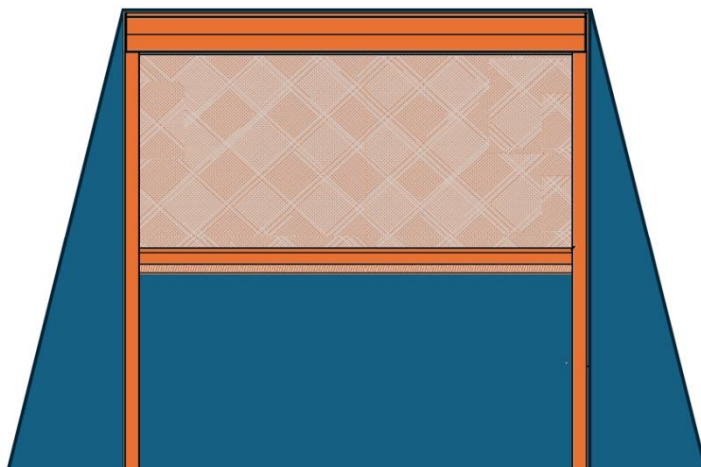
****Unit must be *measured for and established plumb, level, parallel, and square.* It is likely the opening will *not* have all of these attributes. For *reveal fit* applications, it is especially important to *not* measure a unit’s **width too large.****

The “opening” illustrations are *exaggerated* to provide clarity.

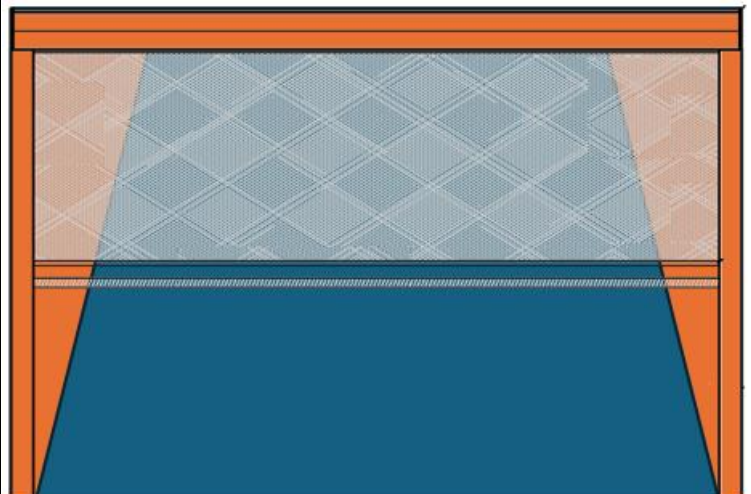
 = opening

 = future screen

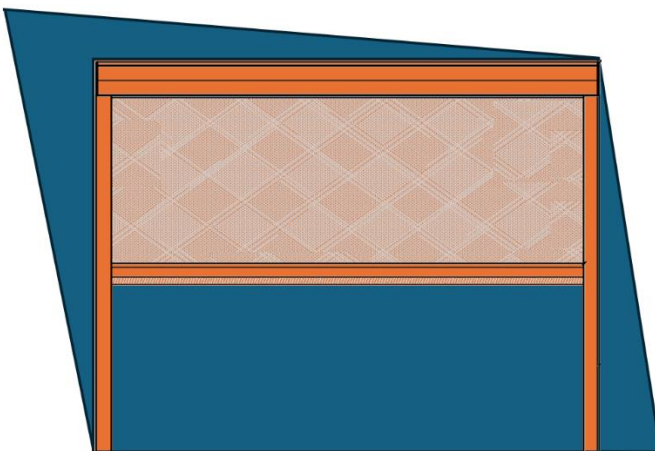
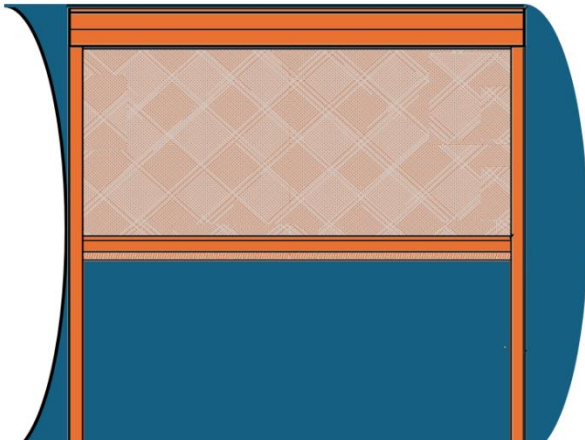
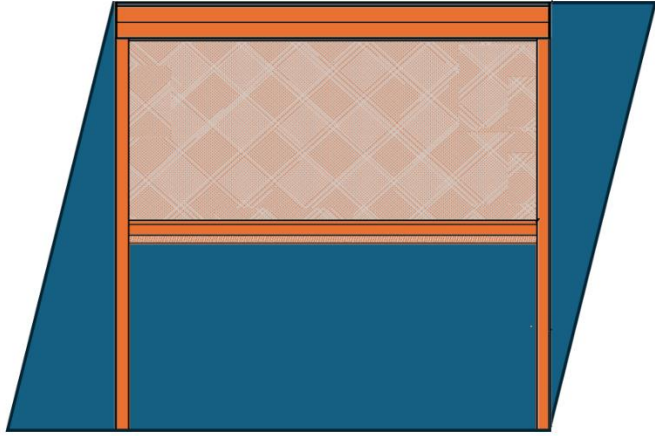
In-Jamb Fit



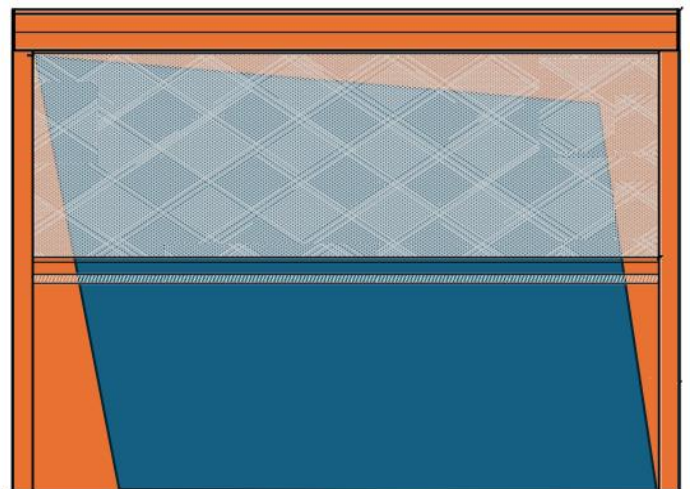
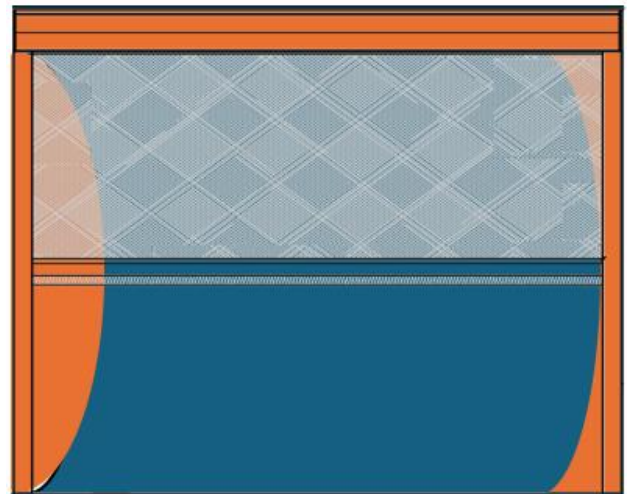
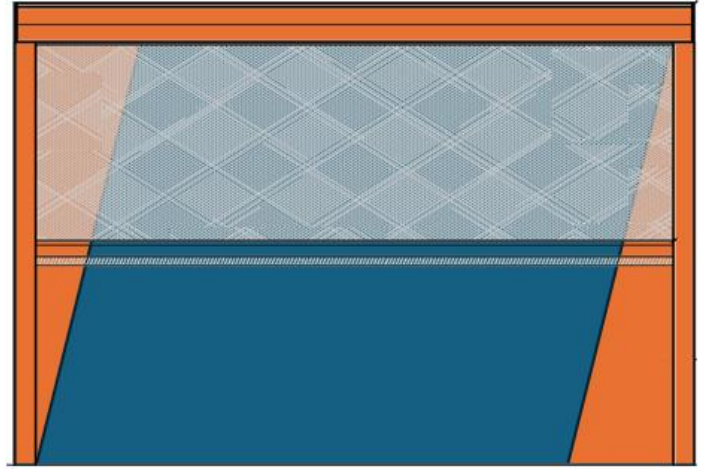
Face Fit



In-Jamb Fit



Face Fit



3) Minimum Deductions & Additions

a) In-Jamb Fit - Width

- i. 2"x2" Angle Channel
 $\frac{1}{8}" + \frac{1}{8}"$ Angles thickness
 $+\frac{1}{8}"$ Safety
 $= -\frac{3}{8}"$ **Width Deduction**
(from plumb marks)



b) Face Fit - Width

- i. Tracks
 $1\frac{7}{8}" + 1\frac{7}{8}"$ Track Widths
 $\approx +4"$ **Width Addition**

- ii. 2"x1" Box Channel
 $\frac{1}{8}"$ Safety
 $-\frac{1}{8}"$ **Width Deduction**
(from plumb marks)



c) Height

- i. Record **largest** height measurement from **top of future-housing to floor**.
- ii. If floor is *graded*, measure from **top of future housing to floor** at **left** and **right** sides. Record both measurements.
 - * It can be requested the screen be cut at the bottom to a **maximum 1 ½"** grade.
 - **Mohair can accommodate an **extra 1"** grade.

*****HOUSING MUST BE LEVEL!*****

Ordering Process

1) Dimensions

Min. width	= 38"
Max. width	= 30'
Max. width (vinyl)	= 25'
Max. height	= 16'

2) Colors of components

Latest offerings: [Screens for Doors, Patio, Window, Deck Spaces - Built Better | Wizard Screens](#)

3) Bottom-bar Seals

- Mohair
- Rubber (necessary if adding extra weight & with vinyl)

4) Screen Material

Latest offerings: [Screens for Doors, Patio, Window, Deck Spaces - Built Better | Wizard Screens](#)

*See "Clear Vinyl Minimum Dimensions & Colours": [Technical Resources](#)

** Necessity of a seem is dependent on material roll widths. Request from your Wizard rep.

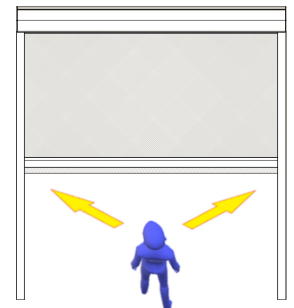
5) Motor

a) Select side as if looking at **front** unit, imagining how it will be oriented.

b) Select power cable **type** and **length**

*Somfy Antennae within 18" of motor end. **Do not cut!**

**If hardwiring, consult with electrician. See available motor technical specifications: [Technical Resources](#).



6) Component Table

Selectable					Dimensional Threshold	
Screen Material	Roll-tube	Housing	Motor	Idler	Width	Height
Mesh & Fabric	4"	5 ½"	Maestria 525 or WSER50 30/21	Standard 2 1/8"	38" to 22'6"	& less than 12'
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Vinyl	See "Dim. Thresh."		Maestria 550	See "Dim. Thresh."	38" to 25'	Up to 16'

***NOTE: If size is *beyond* threshold in first row, some/all of first row items will *not* be selectable.**

If the project has multiple openings of varied sizes, and some require the larger size unit, consider the following:

a) **Retraction speed:**

Assume some smaller openings only require 4" roll-tubes and some larger openings require 5 ¾" roll-tubes.

- A 4" roll-tube will retract faster than a 5 ¾" roll-tube. Order 7" housings and 5 ¾" roll-tubes for *all* units.

b) **Aesthetics:**

Assume larger openings require 7" housings and smaller openings only require 5 ½" housings.

- Order 7" housings for *all* units.

c) If both **retraction speed** and **aesthetics** are important with above assumptions, order 7" housing and 5 ¾" roll-tubes for *all* units.

7) Remotes

a) Handheld

i) Somfy Telis 1 RTS Patio Transmitter



ii) Somfy Telis 4 RTS Patio Transmitter



iii) Somfy Telis 16 RTS Pure



iv) Alpha RE301 1 Channel



v) Alpha RE302 5 Channel



vi) Alpha RE303 8 & 16 Channel



b) Wall Mounts

- i) Somfy DecoFlex WireFree™
Surface
RTS 1 Channel, White



- iii) Alpha RE201 1 Channel



- ii) Somfy DecoFlex WireFree™
Surface
RTS 5 Channel, White



- iv) Alpha RE202 2 Channel



- v) Alpha RE203-8C 8 Channel



*NOTE: It's recommended an installer carries a 1 channel remote dedicated to programming.

c) The effectiveness of remotes is subject to:

- i) Distance (**should be within 30' of motor**)
- ii) Physical obstructions (i.e., concrete, wood, drywall, windows, etc.).
- iii) Wired and wireless devices (i.e., refrigerators, wifi extenders, etc.)

*Multiple remotes may be necessary.

8) Optional accessories

- a) Somfy Eolis RTS Wind Sensor 24V DC Kit



- c) Alpha-Neo App



- b) Somfy TaHoma® Switch



***Note: Relying *exclusively* on the wind sensor can cause the screen to be in motion without first being checked for interference from debris/ acts of God, etc. Customer would use at own risk.**

Obstacle detection is **default with all motors.

9) Other special requests:

- a) Seam location
 - *Request mesh/fabric roll sizes from your Wizard rep.
- b) Accessories
- c) Extra weight
 - i) Windy areas with fabric
 - ii) Clear-vinyl

Field Preparation

Before installing the SmartScreen Motorized units

- 1) Tools Required:
 - a) Cordless drill
 - b) Step drill bit
 - c) Desired driver bits
 - d) Phillips screwdriver
 - e) 2-way laser level
 - f) Tape measure
 - g) Laser distance measure
 - h) Scissors
 - i) Needle nose pliers
 - j) Duct tape (if floor is graded)
 - k) Dry silicone spray
 - l) Caulking gun with desired color caulk
 - m) Chop saw with non-ferrous blade
 - n) Concrete, metal, or wood fasteners. **Min. 2" long.**
 - o) Appropriate fasteners determined by material affixed to (e.g. lumber, metal, plywood, etc.) **Min. 2" long.**

- 2) Contents of Shipment per unit (may vary)
 - a) Assembled housing
 - b) Assembled rolled screen
 - c) Bottom-bar with seal
 - d) Probes (x2)
 - e) Tracks (x2)
 - f) Remote(s)Optional:
 - g) 2"x2" angles (x2)
 - h) 2"x1" box channels (x2)

- 3) Package and unit visual inspection
 - a) If the **packages** are damaged, the **unit** may still be free of damage.
Regardless, you must mark the external damage on the waybill.
 - b) Report any potential damage to Wizard Screens *immediately* with pictures.

4) Unpackaging

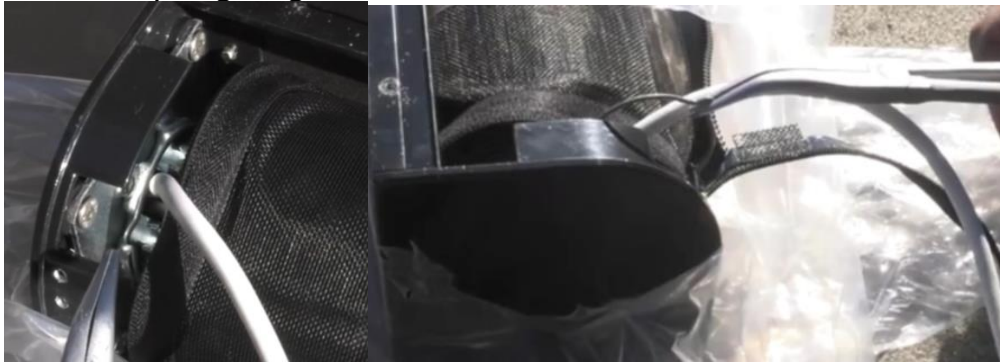
- a) *Carefully* unpackage the contents. **Do not cut screen! Do not scratch components!**



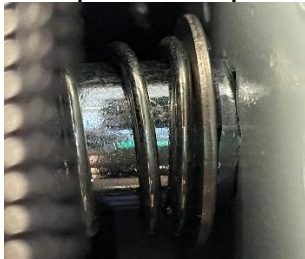
- b) Report any visible damage to Wizard Screens *immediately* with pictures.

- c) Detach housing cover. Set that and screws aside.

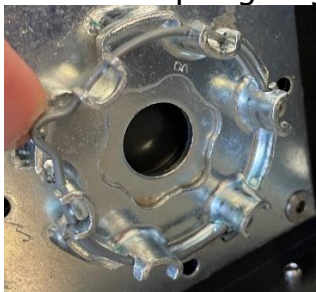
- d) Remove spring ring from crown.



- e) Compress the pivot end until the motor end comes free from the crown, then remove.



- f) Re-attach spring ring onto crown.



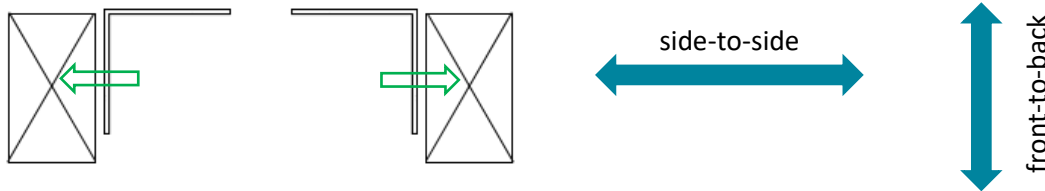
Installation

*Minimum 2 people recommended.

1) REVEAL FIT accessories

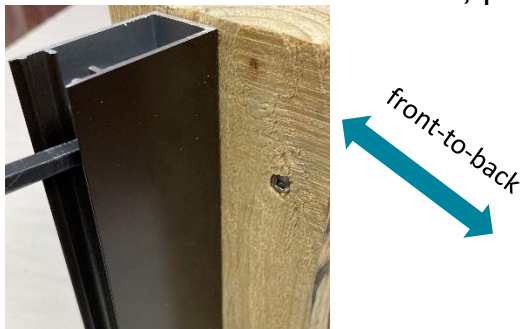
a) Install 2"x2" angle channels

- i) Mark angles to desired lengths and cut.
- ii) Pre-drill and countersink holes 2" from top and bottom. Then continue 48" O/C.
- iii) Fasten angles to surface using flatheads, plumb front-to-back.



b) Install 2"x1" box channel

- i) Mark box channels to desired lengths and cut.
- ii) Fasten box channel to surface, plumb front-to-back.



iii) Attach sashes at **end** of installation.

2) Install housing back

a) Feeding motor cord:

- i) Somfy cord: Pre-drill a 3/8" hole through the housing **as far from the rolled screen as possible** to ensure the cord will not interfere with operation; OR feed along inside of track and out drilled hole at bottom.



OR



ii) Alpha cord **NEW Sep. 2024**

Outlet at top:
5/8" hole



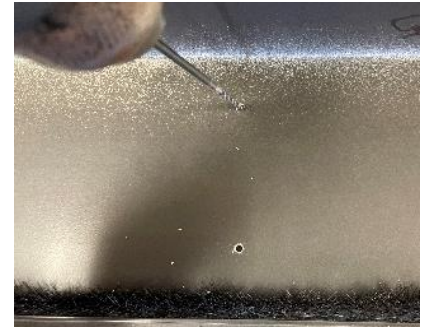
OR

Outlet at bottom: Feed cord through bottom of track and along inside.



b) Pre-drill mounting holes through bracket holes, then 36" O/C in pairs.

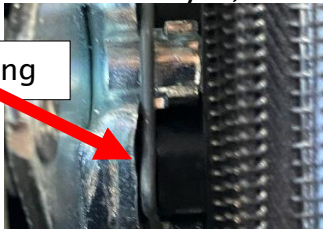
c) Fasten at ends and middle first, ensuring level. Then through remaining holes. Shim where necessary.



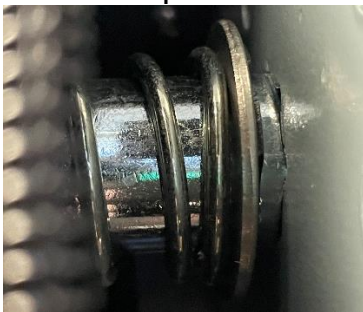
3) Install rolled screen

a) If not done yet, attach spring ring onto crown.

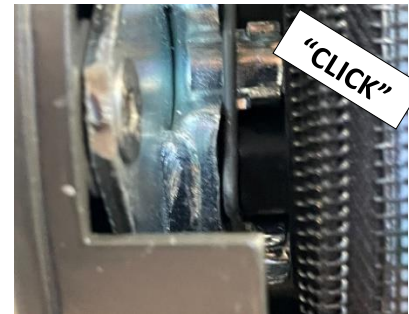
Spring ring



b) Insert the pivot.



c) As lifting rolled screen into place, feed cord through hole, compress pivot end, and seat motor end into crown. ***There must be a distinct "CLICK" sound.**



***For Alpha motors, put spring ring onto crown after rolled screen is seated.**

4) Motor programming

a) Attach plug to cord per provided instructions. Plug into outlet.



*If hardwiring, consult with electrician. See motor technical specifications:
[Technical Resources](#).

b) Program screen limits **roughly** (recommended).

- i) See remote programming guides: [Install Guides](#).
- ii) You may need to assist screen by holding each end as it comes down.
- iii) You will precisely set limits at the end.



5) Install bottom-bar

a) Send screen to comfortable height.

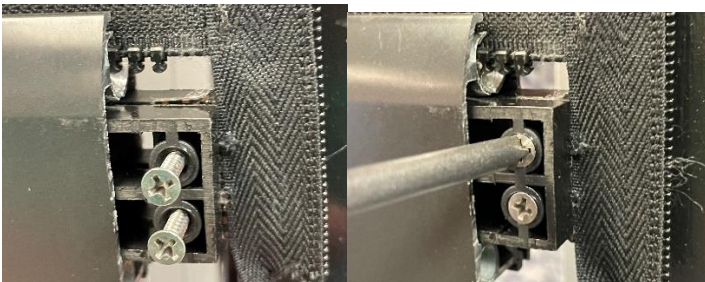


b) Feed bottom-bar along zipper.

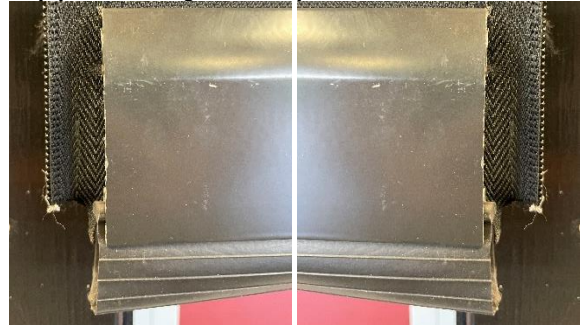


c) Manually screw probes onto tabs until they pinch fully.

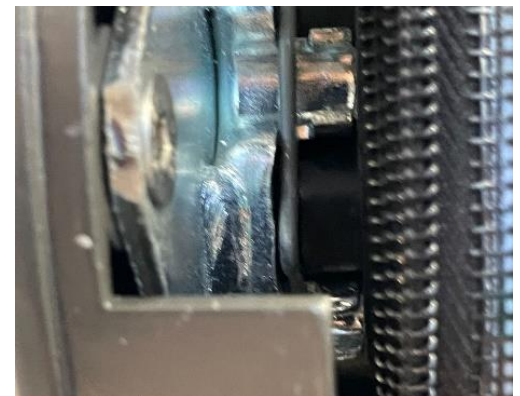
***Do not over-tighten screws.**



d) Flush seal at one end of slide-bar and cut excess off at other. Cut excess zippers off just beyond tabs.



e) Send screen to upper limit, ensuring zipper stacks well.



6) Affix tracks

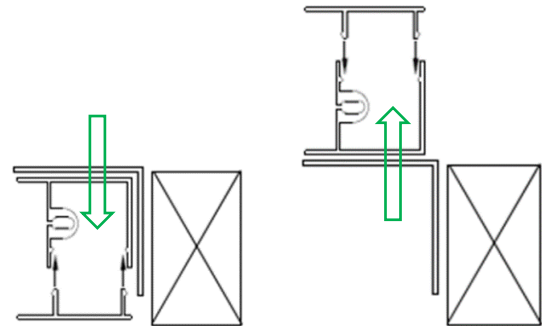
- a) Measure from horizontal lip to ground. Subtract 1/8" and **record**. If lengths are different, label tracks.
- b) Measure from square part of entry ends. Mark and cut tracks.



- c) Starting with one track:
 - i) Feed track along zipper.
 - ii) Fasten top of track first (like shown).



- iii) Fasten remainder of track **straight** and **plumb** (notice laser). *If affixing 2"x2" angles to tracks, ensure fasteners are less than 1" and do not penetrate zipper grooves.



- d) Run screen up and down, ensuring the zipper stacks well.



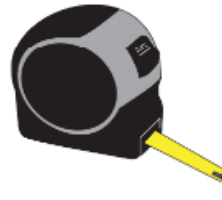
- e) Affix other track.



f) Ensure tracks are **parallel, plumb, and straight.**



Tape Measure



2-way Laser Level Kit



g) Spray dry silicone along zipper grooves.



7) Fine-tune screen limits

a) Fine-tune the screen's upper and lower limits



i) See remote programming guides: [Install Guides](#).

ii) When establishing lower limit, depending on the screen material, allow a $\frac{1}{4}$ " - $\frac{1}{2}$ " gap. The screen will settle over time and close gap.

iii) If screen has a grade bias, it is typically desired that the bottom-bar be parallel with the housing at the upper limit. Stack strips of duct tape onto the roll-tube at the *higher* side until accomplished.

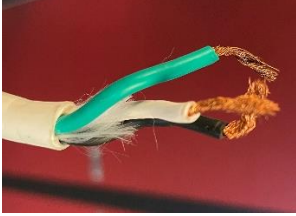


b) Ensure the following when operating:

- i) Zipper stacks on itself well.
- ii) Obstacle detection does not activate prematurely.
- iii) Zipper does not unzip from tracks.
- iv) Screen maintains trampoline like bounce.
- v) Bottom-bar remains centered.

8) Route Cord and Re-attach Plug

a) Remove plug from cord



b) If cord is to follow inside track, drill a 3/8" hole at bottom of a track and feed cord through.



c) Route cord.



d) Cut cord to desired length.

- i) *If using Somfy, do *not* cut cord within 18" of motor where the antenna lies.
- ii) Ensure there is enough cord to form a drip loop at plug end.



e) Attach plug to cord per provided instructions. Plug into outlet.



9) Finishing Touches

a) Attach housing cover.

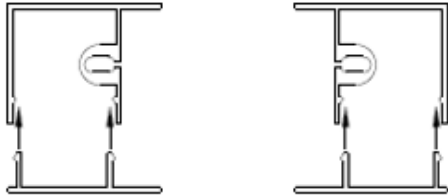
Top



Bottom



b) Mallet track covers onto tracks.



c) If applicable, mallet sashes onto 2"x1" box channels.



d) Affix remote's wall mount **inside** because it is sensitive to moisture (IP 20 rating).
Hang remote.



*Somfy Telis 1 Channel shown

See "Homeowner Training":
[Install Guides](#).

Details and specifications subject to change