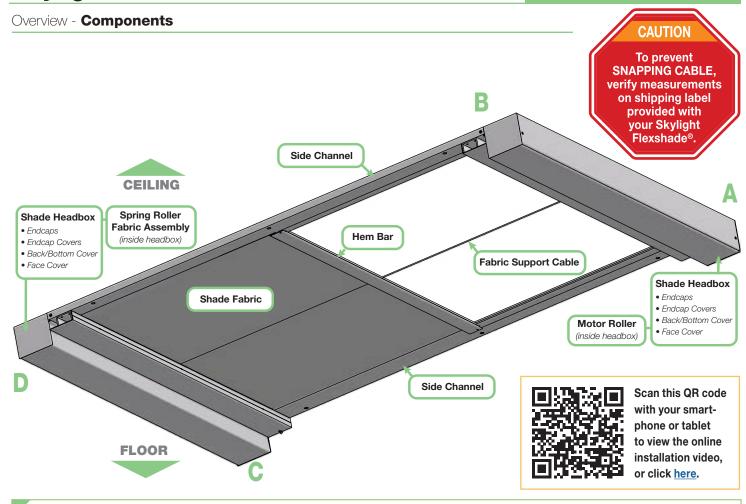
Skylight FlexShade® - Face Mount





TOOLS REQUIRED



















△ CAUTION △

Read and understand all warnings (Page 2 of this document) before beginning installation.

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If you have any difficulties installing or servicing your Skylight FlexShade®, call your dealer or Draper®, Inc.



PLEASE READ - Important Installation Information

⚠ Caution:

- Inspect all boxes to make sure you have received the proper shades and parts. Controls may be shipped separately, or in same carton as shades.
- 2. Open cartons lengthwise, taking care not to cut into cardboard shipping container.
- Before mounting shades, verify measurements on label provided with shade, and ensure unit is installed at correct width.
- All endcaps, fascia, headbox, and other hardware must be installed level. Shades must be level and square.
- Read the following installation guidelines thoroughly and follow them carefully.
 Failure to do so may cause product to fall or otherwise fail, and invalidates warranty.
- 7. Installer is responsible for selecting mounting hardware appropriate for site conditions.

PLEASE READ - Safety Information

Important Safety Information

⚠ WARNING ⚠

Important Safety Information

Improper installation and use of the Skylight FlexShade® can result in serious injury or death. Primarily, injuries can occur if the unit falls due to imprecise installation, mishandling of the unit during installation, or installation on an insufficient wall or ceiling structure.

Please use extreme care.

- Please read the following installation guidelines thoroughly and follow them carefully. Failure to do so may cause product to fall or otherwise fail, and could result in serious injury.
- 2. Installation and calibration of the unit should only be performed by an authorized, qualified, and experienced professional. In particular, electrical work and wiring [indicated in diagram by dashed lines] must be completed only by a qualified professional electrician who has read this manual completely and is familiar with the construction and operation of this equipment and the hazards involved.
- 3. Do not affix the unit to wall or ceilings that have inadequate strength to permanently hold the unit during use. It is the owner's and installer's responsibility to confirm the wall or ceiling to which the unit attaches is sufficient to permanently hold the weight and stress loads of the unit at all times. Draper®, Inc., is not responsible for improper installation, application, testing, or workmanship related to the product at place of installation.
- It is the installer's responsibility to make sure appropriate fasteners are used for mounting.
- All brackets, fascia, headboxes, pockets, wall clips, and other hardware must be installed level. Unit must be level and square.
- Never leave the area while operating the unit during installation, maintenance, or normal operation, unless it is secure and safe.
- Before testing or operation, carefully inspect the entire area and path of the shade and areas underneath the shade to be sure no persons or objects are in the area.
- Turn off power and any nearby equipment or cables carrying electricity before connecting switches, wires, controls, or electrical components.
- Make sure the limit switches are pointed down or accessible when placing the motor in brackets/endcaps.
- All motors should be tested and limits set using test cord before shades are wired.
- 11. Do not wire motors in parallel without written permission from Draper, Inc.
- 12. During testing or operation, carefully watch the surrounding area for any potential safety concerns including nearby persons or objects.

- 13. After installation, the entire system, including all sensors, should be carefully tested to ensure safe and normal operation. Extreme care should be taken during testing to remain clear of moving parts to avoid possible injury.
- 14. Operation of unit should be performed only by authorized and qualified personnel, who have been trained in the safe and effective operation of the unit and understand its safety features.
- 15. The safety features of the unit, including sensors, should never be disabled, bypassed, or overridden. The system should not be operated until all safety features, including the sensors, are properly and completely installed, calibrated, and tested.
- 16. Unit may need to comply with local, state, or district rules and regulations, in particular when installed in schools. All applicable rules and regulations should be reviewed before installation and use.
- 17. Failure to precisely follow installation guidelines invalidates all warranties.
- 18. Custom products/installations may not be reflected in this manual. Call Draper, Inc., if you have questions about the installation of custom products or any questions about your installation.

Before Beginning Installation

- Look for any job site conditions that could interfere with installation or operation of the system.
- 2. Read carefully and be sure to understand all installation instructions and all related operations manuals. These instructions are intended to serve as a guide for the installer and owner. They should be followed closely and combined with the expertise of experienced qualified installers. Draper, Inc., is not responsible for improper installation, application, testing, or workmanship related to the product at place of installation. Please retain all instructions for future use.
- 3. Open cartons lengthwise.
- 4. Locate and lay out all pieces.
- Inspect all boxes to make sure you have received the proper shade and parts. Controls may be shipped separately, or in same carton as shade.
- If you have any difficulties with installing, servicing, or operating your shade, call your dealer or Draper, Inc., 765-987-7999.

PLEASE READ - Cleaning and Maintenance

Window covering products manufactured by Draper®, when properly installed, should require no operational maintenance or lubrication.

Most standard Draper® fabrics may be cleaned at the window by vacuuming with a soft brush attachment. They also may be cleaned by using a sponge or soft cloth and mild solution of warm soapy water. A mild dishwashing liquid is recommended. A clean dry cloth is recommended for the metal finish.

Please Note: Exceptions are GreenScreen Evolve, GreenScreen Revive, Flocké, and Phifer SW7000 fabrics, which must be cleaned with a dry art sponge.

Section 1 - Prepare for Installation

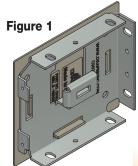
A Caution: Before mounting shades, verify measurements on label provided with shade, and ensure unit is installed at correct width.

Please Note: Installer is responsible for selecting mounting hardware appropriate for site conditions.

- 1. Look for any site conditions that could interfere with installation or operation.
- 2. Inspect all items prior to assembly:
 - a) Open cartons lengthwise and lay out all pieces.
 - b) Ensure that product is as ordered by checking pieces against Page 1 of this document.
- 3. Arrange all pieces on floor in the general manner they are to be installed and remove covers from both headboxes.

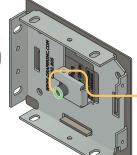
Section 1.1 - Spring Roller Removal and Re-Tensioning

- Remove spring roller from its headbox (Fig. 1). This single notch spring roller is pre-tensioned and the dog is locked in its notch. To remove, disengage pin end from endcap.
- Pivot roller so that spear end can be worked out of slot in the spear endcap. A small bushing is included on pin end (shown in green).
 Be sure not to misplace it.









 If tension is lost, rotate spear clockwise a maximum of 15 times to regain tension (Fig. 2).

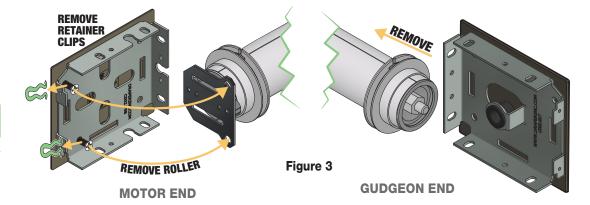


Section 1.2 -Motor Roller Removal

 Locate motor roller assembly and remove from headbox. Remove retainer clips from motor end of roller (Fig. 3).

Please Note: Be sure to keep all retainer clips.

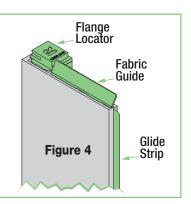
Compress spring in gudgeon by sliding roller toward idler end of headbox, and pivot motor end of roller out of box.



Section 1.3 - Quality Check

- 1. While unit is still on floor, install both side channels to both headboxes. Be sure both channels, fabric guides, and endcap locators are properly seated (Fig. 4).
- Before affixing shade to ceiling, verify measurements printed on package label to preassembled shade and the opening.
- 3. Check the location of building power supply to ensure motor cable will reach once properly installed.
- 4. Check the opening for squareness by measuring for equal diagonals.

Please Note: The unit can accommodate up to 1/8" (3mm) of variance.



Section 2 - Preparing Components for Installation

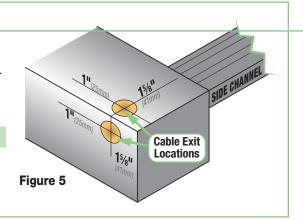
Section 2.1 - Drilling Motor Cable Exit

- 1. Disassemble the frame. Identify conduit connector location on motor headbox (see Fig. 5).
- 2. Mark with a pencil. Using center punch, mark drilling point.
- 3. Using power drill, drill %" (22mm) hole in motor headbox (Fig. 5) to accommodate conduit connector. Deburr hole using deburring tool.

Please Note: Conduit connector not supplied.

Section 2.2 - Drilling Side Support Flanges

1. Drill evenly spaced mounting holes in side support flanges on 3/4" (19mm) side.

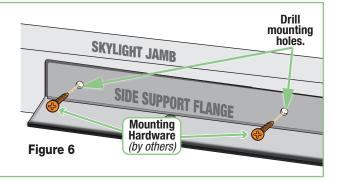


Section 3 - Installing Skylight FlexShade®

Section 3.1 - Side Support Flanges

 Install side support flanges using appropriate mounting hardware provided by installer. If necessary, measure and cut side support flanges using a power or miter saw.

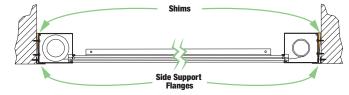
Caution: These flanges will support the headboxes and side channels
 and should fit opening exactly.



Section 3.2 - Securing Skylight FlexShade® Into Frame

- 1. Assemble skylight frame on side support flanges (Fig. 7).
- 2. Center Skylight FlexShade® frame in opening and temporarily place shims opening and unit.
- 3. Once frame is in place, measure diagonals to ensure unit is square.

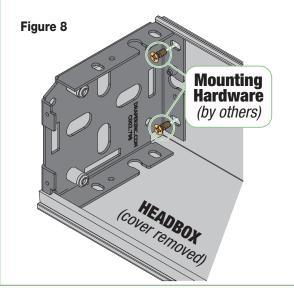
Please Note: If unit is not square, adjust frame and re-shim to correct.

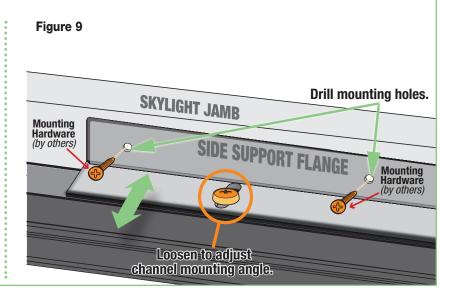


- 4. Mark mounting surface holes at previously drilled locations. Drill pilot holes into mounting surface.
- 5. Install screws through endcaps to hold them in position (Fig. 8).
- 6. Next, loosen adjustable channel mounting angle fasteners (Fig. 9), and slide angles out until they meet jamb. Fasten with screws.

Figure 7

7. Re-check straightness of each side support flange, then tighten side support flange screws.



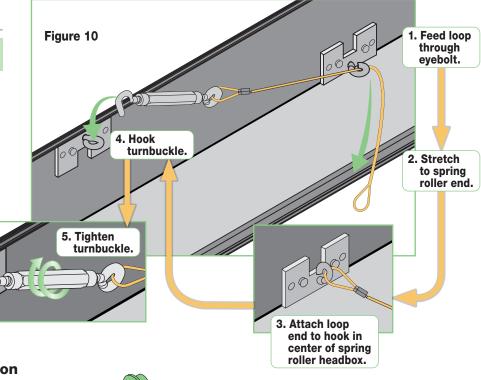


Section 4 - Installing Fabric Support Cable

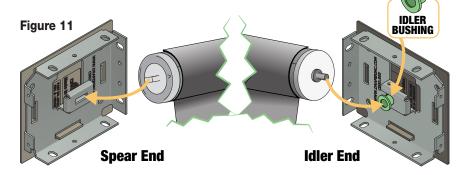
Please Note: If unit is over 36" (91.4cm) wide, a fabric support cable will be included

- 1. To install, feed looped end of cable through eyebolt in center-bottom of motor headbox.
- 2. Stretch fabric support cable across length of shade.
- **3.** Attach loop end of fabric support cable into hook in center of spring roller headbox.
- 4. Attach turnbuckle hook to off-center attachment point.
- 5. Tension cable by tightening turnbuckle by hand or with a wrench until cable is taut and straight.

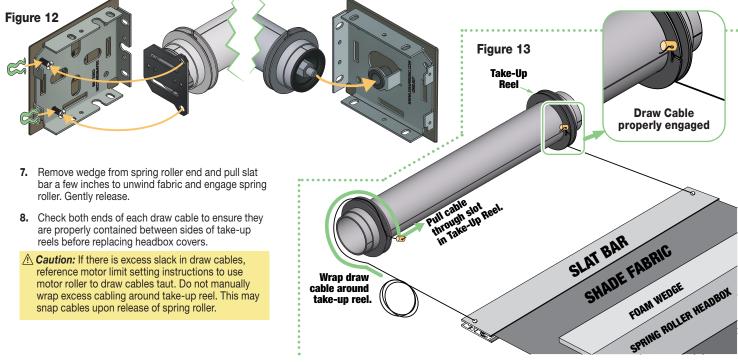
⚠ **Caution:** DO NOT OVERTIGHTEN. Overtightening may deform headbox.



Section 5 - Roller Assembly/Installation



- 1. Replace spring roller assembly (Fig. 11).
- Replace motor roller assembly, including motor retainer clips (Fig. 12)
- 3. Wedge something soft, such as a towel or foam, between spring roller and its headbox to keep spring roller from moving (Fig. 13).
- 4. Uncoil draw cables and extend fully to motor end.
- **5.** Wrap one end of draw cable underneath and around motorized roller so that approximately ¾ of a revolution is achieved.
- 6. Slide draw cable into slot provided in take-up reel and seat cable stop against outer side of take-up reel.



Section 6 - Limit Switch Adjustments

Standard and Quiet Motors

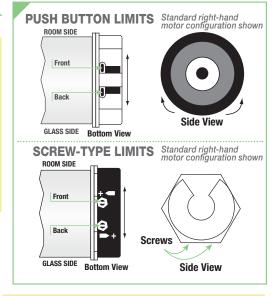
 Caution: Unit ships without limits. Limits will need to be set before the unit is operated. Always be prepared to shut off manually when new adjustment is being tested.

Push Button Limits

- Fully depress both limit switch push buttons, then operate wall switch to make sure system works properly.
- 2. Raise shade to desired "UP" stop position.
- 3. Set upper limit by depressing proper (back) push button.
- 4. Lower shade to desired "DOWN" stop position.
- 5. Set lower limit by depressing proper (front) push button.

⚠ Caution:

- Be sure all switches are in "off" position before adjusting limit switches.
- Shade may be damaged by running shade fabric up too far and exposing roller.
- If using a group control system, each limit switch must be set prior to connecting to system.
- Motor must be installed so limit switches are pointed down or accessible



Screw-Type Limits

- 6. Determine which direction of fabric travel corresponds with arrows on motor.
- Operate shade to desired "down" stop position.
 Set limit by turning proper socket toward "+" to lower limit, and "-" to raise it.
- 8. Operate shade to desired "up" stopping position. Set limit by turning proper screw toward "-" to raise limit, and "+" to lower it.

Please Note: Each full rotation of the limit screw equals approximately %" (16mm) of shade travel, which may require rotating the limit screw several times.

Section 6.2 - Limit Adjustments (RS485 Motors)

For limit setting instructions on these motors, see instructions packaged with the RS485 Address/Limit Setting Tool (part# C156.241).

Section 6.3 - Limit Switch Adjustments (RTS Motors)

Programming Instructions

- 1. Connect power to one motor. Select a transmitter channel to assign motor. Hold UP & DOWN buttons until motor jogs, then release.
- 2. Check motor direction. To reverse motor direction, hold MY/STOP button for 5 seconds until motor jogs. Check direction again.

Please note: Failure to complete Step 2 before Step 3 can only be corrected with a motor reset (see Section 6.6).

- Move motor to upper limit position. Hold MY/STOP & DOWN buttons until motor moves down, then release. Use UP & DOWN buttons to move shade to correct lower limit and press MY/STOP.
- 4. While motor is at lower limit, hold UP & MY/STOP buttons until motor moves up, then release. The shade should move to upper limit and stop.
- 5. Next, hold MY/STOP button for five seconds until motor jogs.
- 6. Put motor into USER MODE by pressing small programming button (see fig. 1) on the back of transmitter until motor jogs.
- 7. Disconnect power to this motor and move to next motor in installation and start with step 1.
- 8. Reconnect motor to power when all motors are programmed.

Setting an Intermediate Stop - Shade MUST BE in USER mode.

- 1. Move shade to desired mid-point location and hold MY/STOP button until motor jogs.
- 2. To test, press the MY/STOP button when motor is standing still. The shade will move to that intermediate location.
- 3. To delete an intermediate stop, go to the intermediate stop and hold the MY/STOP button until motor jogs.

Add a Channel - Shade MUST BE in USER mode.

- **1.** Select channel currently operating motor, then hold programming button until motor jogs.
- 2. Select new channel to add to motor, then hold programming button until motor jogs.
- 3. The motor should now work on both the old and new channel.

Delete a Channel - Shade MUST BE in USER mode.

- 1. Select channel operating motor that you want to keep, then hold programming button until motor jogs.
- Select channel to remove, then hold programming button until motor jogs. Motor should now only work on channel kept from Step 1.

Adjust Limits in User Mode

- 1. Move motor to limit (upper or lower) to be changed. Shade must move to previously set limit and will stop automatically.
- 2. Hold UP & DOWN buttons until motor jogs.
- 3. Move motor to its new limit location and hold MY/STOP button until motor jogs.

Reset Motor

- 1. Disconnect power for 5 seconds and reconnect to power for 15 seconds. Disconnect power for 5 seconds, then reconnect to power and leave connected. Shade should roll down a few inches and stop.
- Hold programming button (see fig. 1) for 15 seconds. Motor will jog up and down once; pause and then jog a 2nd time. Motor is now reset and ready to be programmed.



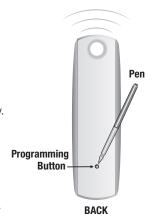


Figure 11

my

Section 7 - Limit Switch Adjustments - RTS Motors

⚠ Caution:

- Be sure all switches are in "off" position before adjusting limit switches. Be prepared to shut off manually while testing.
- Shade may be damaged by running shade fabric down too far to expose roller.
- If using a group control system, each limit switch must be set prior to connecting to system.
- Motor must be installed so limit switches are pointed down.

Section 7.1 - Limit Switch Adjustments (Figure 11)

- 1. Switch on the power supply. The LED switches ON.
- Press Up and Down buttons on RTS control point OR Motor head at the same time:
 The shade moves up and down (fast raising and lowering), and commissioning process begins.
 The RTS control point is pre-programmed in the motor.

Section 7.2 - Checking the direction of rotation (Figure 12)

- 1. Press Up button on the RTS control point / Motor head:
 - a) If the shade rises (A), the direction of rotation is correct: Move onto the section entitled "Setting the end limits".
 - b) If shade lowers (B), the direction of rotation is incorrect: Move onto the next step.
- Press my / stop button on RTS control point / Motor head until shade moves up and down: The direction of rotation has been modified.
- 3. Press Up button on RTS control point / Motor head to check the direction of rotation.

A my S and S

Figure 12

1.

Section 7.3 - Setting the end limits (Figure 13)

Please Note: The end limits can be set in any order.

- 1. Raise shade to desired position by pressing Up button.
- Press my / stop and Down buttons at the same time until shade moves. The upper end limit is memorized.
- 3. Press my / stop button when the shade reaches the desired lowered position. If necessary, adjust the position of shade using the Up and Down buttons.
- Press my / stop and Up buttons at the same time until shade moves.
 The lower end limit is memorized. The shade rises and stops in raised position.

Section 7.4 - Validation of the setting (Figure 14)

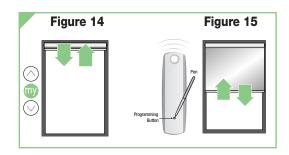
To confirm end limits, press my / stop button until shade moves up and down. The end limits are programmed and the LED switches OFF.

Section 7.5 - Recording the RTS control point (Figure 15)

The motor is in programming mode:

Quickly press the PROG button on the RTS control point to be programmed:

The shade moves up and down: this RTS control point is now programmed.



Section 8 - Complete Electrical Connection

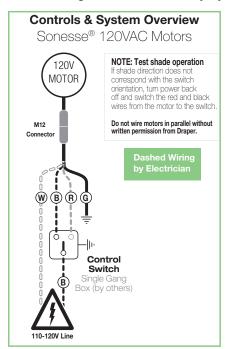
Operates on 110-120V, 60 Hz. current. Shade is shipped with internal wiring complete and control switch (es) fully boxed, and supplied with a 6' (183cm) cable lead (standard). Longer lead can be substituted by removing two screws in motor end of roller, removing lead, plugging new lead in, and replacing screws. Wire to connect shade to switch (es) and switch (es) to power supply should be furnished by installer. Connections should be made in accordance with attached wiring diagram, and wiring should comply with national and local electrical codes.

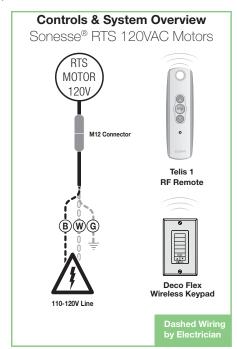
DO NOT wire motors in parallel without written permission from Draper®.

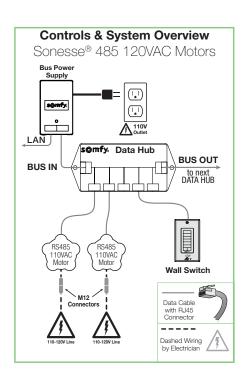
All operating switches should be "off" before power is connected.

Section 9 - Wiring Diagrams

Sonesse® is a registered trademark of Somfy® Systems, Inc.

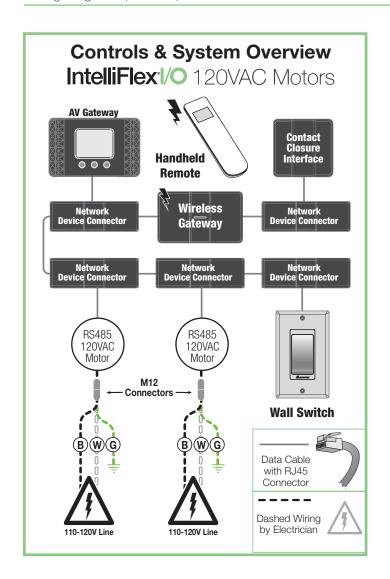


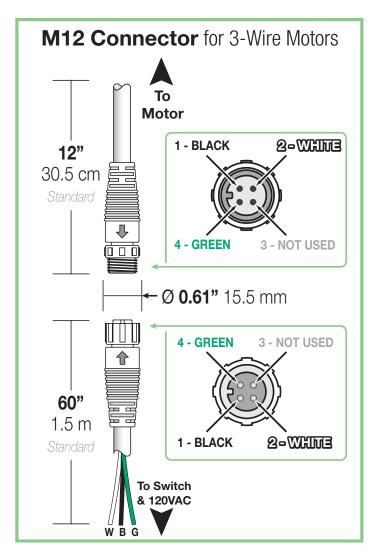


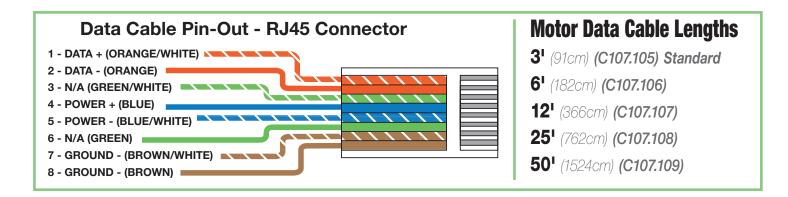




Wiring Diagrams (Continued)







Section 9 - Dimensions

