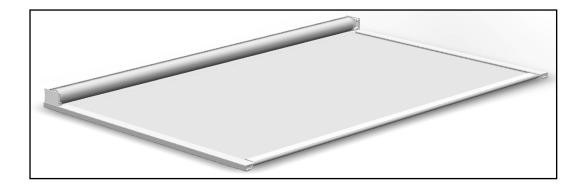
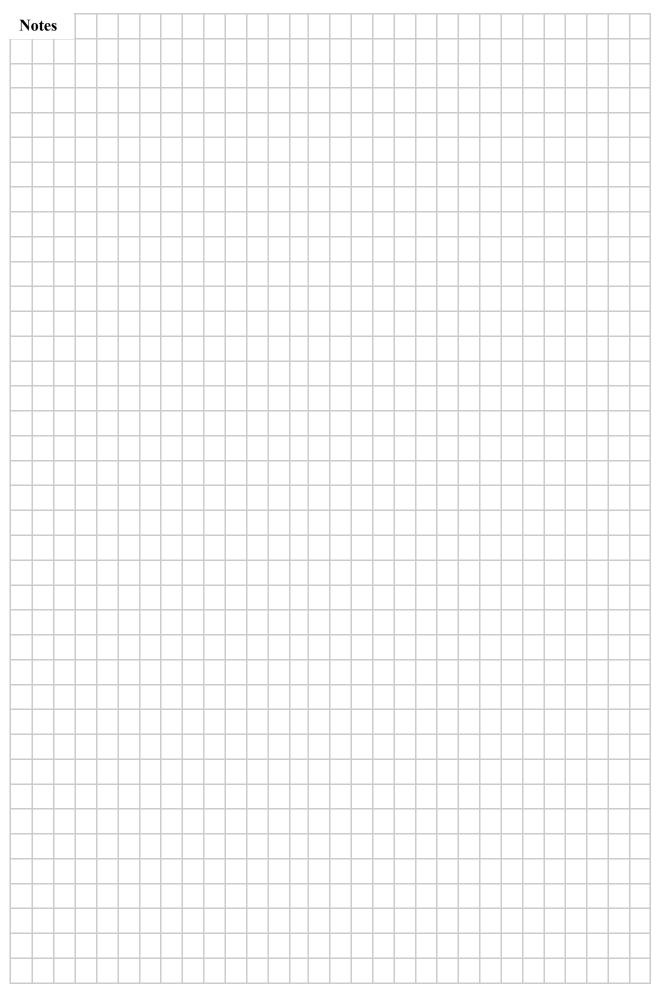
TESS™ 660 Recess Fix

Installation Manual



Please read these instructions in full prior to starting your installation.





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1. Important information about TESS™ Systems

Guthrie Douglas TESSTM Systems are technical products that require installation, servicing and maintenance by professionals with the appropriate skills. If in doubt, please contact us for further advice and training. All products are designed, tested, and manufactured in line with relevant EU regulations. General certificates of conformity and declarations of performance are available on our website www.guthriedouglas.com.

Alternatively please contact us for any special local testing requirements. As the product installer, you are responsible for ensuring that the installed product conforms with relevant standards and legislation.

TESS™ Systems are designed to operate at temperatures between 0 and 55°C, and in winds of less than 40Km/h. If operating conditions are likely to exceed these limits, do not commission the systems. Please contact us for advice.

For technical installation video please visit - https://www.youtube.com/user/GuthrieDouglas

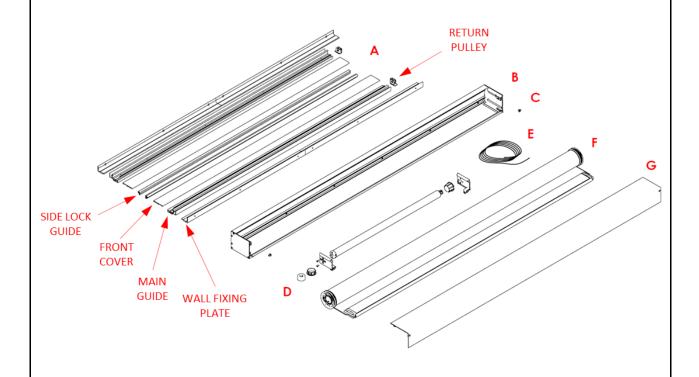
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2. TESSTM 660 Recess Fix System

Standard components and assemblies supplied



Desc	ription	Qty
A.	Main Guide Wall Fixing Plate Front Cover Side Lock Guide Return Pulley	2 2 2 2 2 2
B.	Head Box Assembly	1
C.	Tracking Plate Screws and Washers	1
D. •	Motor Kit: Motor Tracking Plate Bobbin Assembly Motor Head Screws Limit Collar Drive Hub	1 2 1 2 2 2 1
E.	Tension Cable	1
F.	Barrel/Fabric Assembly	1
G.	Headbox Lid (for lidded system only)	1
Installer to supply fixing screws to suit the building material where the system is being installed.		
Also	Supplied: Fitting Kit, Limit Adjuster, Installation Manual	

3. TESSTM 660 Recess Fix System Sizes **Standard System Lidded System** 102 105 (%) (%) (*) TESSTM 660 system width: Minimum - 650mm Maximum - 3000mm The TESSTM 660 Recess Fix system is not available in TESSTM 660L size. Refer to website for installation drawings.

4. Site Installation SW SD SD SW SW

4.1.

- 1. Check the order, order reference and the delivered system sizes. Ensure that the fixing points match delivered system sizes.
- 2. At the position the system is to be installed, check/mark out the system width (SW), the system draw (SD) and the diagonals (X).
- 3. It is important that the diagonals are equal. Measure and adjust the marking out so the diagonals are equal.
- 4. System width (SW) and system draw (SD) must be parallel (i.e. the same measurement across the system).
- 5. Refer to the installation drawing supplied with the system and mark out the fixing positions.
- 6. All wall fixings are to be supplied by the installer and are to be suitable for the material being fixed to. Fixings should be M4 size.

VERY IMPORTANT – DO NOT ATTEMPT TO INSTALL THE SYSTEM UNTIL SYSTEM AND FIXING POINT DIMENSIONS HAVE BEEN CHECKED AND FIXING POSITIONS ARE SQUARE.

4.2.

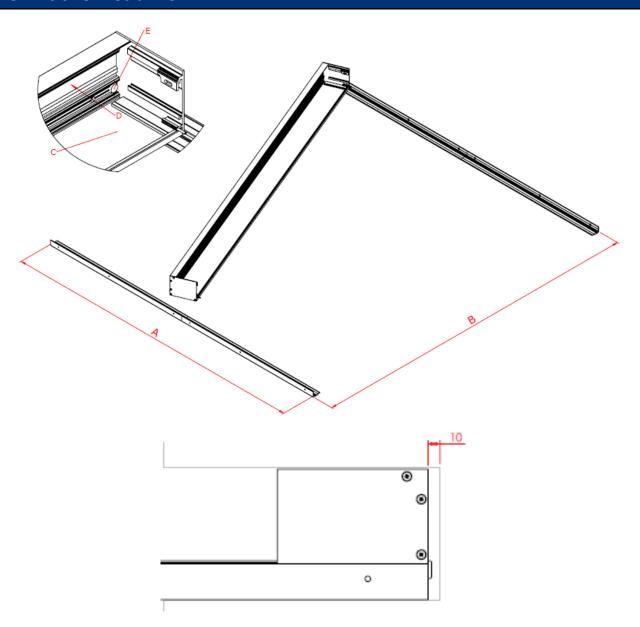
Electric power supply

- Each system should be on a switched single spur, so as to isolate each system.
- Check with the site manager to ensure that electrics are set up correctly.

5. Fit the Wall Fixing Plates SD SW SW

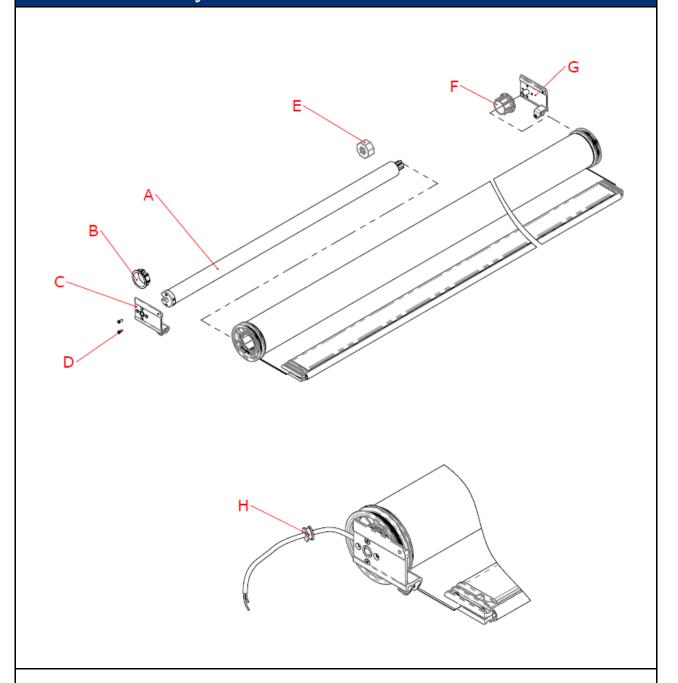
- **5**.
- 1. There are two wall fixing plates of equal length for either side of the system; these should be aligned with each other as if one length, with no gap in between.
- 2. 10mm clearance should be left at either end of the wall fixing plates (i.e. 10mm at the headbox end and 10mm at the opposite end); this is clearance to allow for an easy installation.
- 3. Fix the plates through the side into the recess (A). The number of fixings will depend on the system draw (SD). Fixing holes are based on 4/4.5mm (No' 8) countersunk twin fast screws (not provided by GD).
- 4. If more suitable for the installation, holes can be drilled through the bottom face of the plate (B).
- 5. Check the squareness of the installed fixing plates (C); measure between diagonal corners in both directions. Check the level of the fixing plates and adjust if necessary.

6. Fit the Head Box



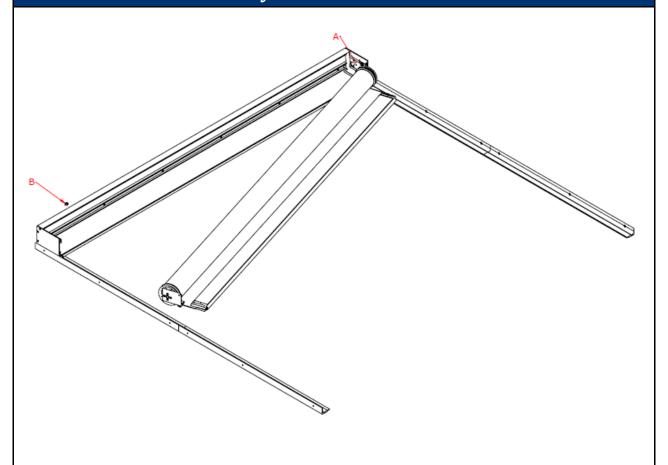
- 6.
- 1. If the system is a lidded system, remove the headbox fixing screws and lid from the headbox.
- 2. Offer the headbox assembly (C) up to the fitted fixing plates. The headbox may need rotating diagonally to fit through the recess. Ensure that the headbox is symmetrical between the fixing plates. Mark out the fixing holes (D).
- 3. Determine where the power supply is. Ensure there is a cavity to feed the motor wire into through the headbox. The open grommet will be used at this side; fit the closed grommet (E) at the other side.
- 4. Fix the headbox (C) in to the recess through the back of the headbox, lining the back of the headbox up with the edge of the fixing plates. There will be 10mm of clearance behind the fixing plates and headbox; packing or spacers will be required to fix the headbox. These are supplied in the fitting kit. Fixings holes (D) are based on 4/4.5mm (No'8) twin fast screws (not provided by GD); the number of fixings will be dependent on the system width.
- 5. Check the headbox is symmetrical between the fixing plates and adjust if necessary.

7. Barrel Assembly



- **7.** The barrel assembly is supplied pre-assembled. The assembly comprises:
- A motor tracking plate (C) fitted to the motor (A) with two screws (D). The motor tracking plate has the short pin; the bobbin tracking plate (G) has the long pin. Ensure the screws are fully tightened and the plate is secure.
- A limit collar (B) fitted to the motor (A). Ensure the drive key on the motor is located at the keyway of the crown and NOT at the split in the crown.
- A drive hub (E) fitted to the motor (A).
- The motor assembly slid in to the barrel.
- A bobbin assembly (F) fitted at the other end of the barrel. Ensure the bobbin is fully fitted.
- An open grommet (H) slid over the motor power cable.

8. Fit the Barrel Assembly



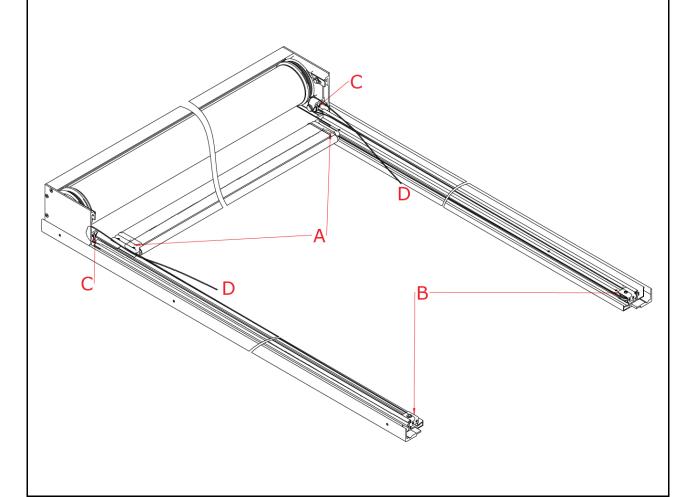
- 1. The barrel fitting requires two people. The barrel will be fitted with the fabric face first.
- 2. The barrel can be fitted either with the bobbin tracking plate (A) already screwed in place or inserted into the bobbin assembly.
- 3. Slide the bobbin tracking plate (A) into the slot in the end plate and secure in place with a M5 hex screw and washer (B) through the slot in the end plate.
- 4. Tighten the screw to the recommended torque of 6Nm.
- 5. The tracking plate should be fixed in place as close to the back of the headbox as possible.
- 6. At the motor end feed the power cable through the access hole.
- 7. Offer up the barrel assembly to the bobbin tracking plate if already screwed in place.
- 8. Feed the power cable so that it is looped inside the head box and secure the grommet.
- 9. Ensure the power cable is not touching the moving parts of the barrel.
- 10. Swing the barrel into the headbox and slide the motor tracking plate into the slot in the other end plate.
- 11. Secure the tracking plate in the furthest position back using a M5 hex screw and washer (B), tightening to the recommended torque of 6Nm.

9. Fit the Main Guides 63

- 9.
- 1. Slide the main guides (A) on to the wall fixing plates (C), leaving 15mm between the headbox and the guides to avoid the spring pins protruding from the headbox. The guides are 15mm shorter than the front covers to allow room to do this. The guides may need rotating diagonally to fit inside the recess.
- 2. Slide the main guides up to the headbox, locating on the spring pins. There should be a gap of a few mm between the guide and the upright face of the fixing plate (C).
- 3. Measure the diagonals of the guides—from corner to corner in both directions—and adjust until equal.
- 4. Fix the main guides in position with the M5 grub screws (B). The number of fixings is dependent on the system draw.
- 5. Check the diagonals of the main guides and adjust if necessary until equal.
- 6. Check the main guides are also parallel and adjust if necessary.

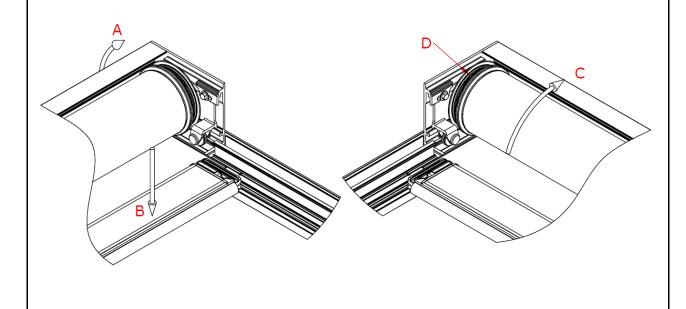
Approximate length of cable required = 4 x System Draw + 1 x System Width + 1m.

10. Cable Installation (Loose)



- 1. DO NOT remove the hembar end caps (A).
- 2. With the hem bar retracted feed the tension cable into the hem bar. This is done from one end. The cable will feed through the hem bar and is guided to the other side.
- 3. Pull the cable down to the return pulley (B). Working from the inside, feed the cable around the pulley.
- 4. Pull the cable back towards the head box and behind the diverting pulley (C).
- 5. Continue to pull the cable through so that it is approximately equal on each side (D).
- 6. Secure the cable so it cannot slip back down.
- 7. Check the cable to ensure it is not tangled.

11. Tension the Spring

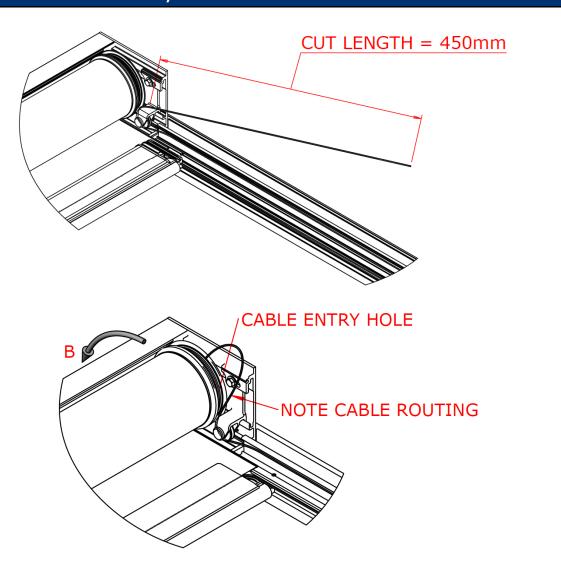


11.

- 1. For instructions on operating the motor, refer to the relevant manual for the specified motor (supplied).
- 2. Connect power to the motor.
- 3. Operate the motor to retract the fabric in the direction of arrow (A).
- 4. As the hem bar touches the edge of the head box, place pressure on the hem bar in the direction of arrow (B). Continue to turn the motor in the direction of arrow (A).
- 5. Keep turning the motor in this direction until the motor stalls, ensuring limits have not been reached if the motor is manual.
- 6. Retain light pressure on the hem bar (B).
- 7. Turn the motor back by ONE turn in the direction of arrow (C). Then, continue to turn the motor in the direction of arrow (C) until the entry hole for the cable is in position (D). The hole in each spool will be in the same position.
- 8. Retain light pressure on the hem bar (B).

For technical installation video please visit - https://www.youtube.com/user/GuthrieDouglas

12. Connect the Cable / Tension the Fabric



12.

- 1. The barrel and spring assembly is tensioned. It has been fully wound up and backed off by one turn, as described previously. This is important.
- 2. Retain pressure on the hem bar as described in Section 11.
- 3. At one end fit the cable into the grip lock contained within the spool; at the other end, make sure the cable is pulled taut through the system and cut the cable to desired length. The cable cut length is shown in the diagram above. Note the cable routing.
- 4. Push the cut cable end into the hole on the spool and into the grip lock behind. The cable will push through by approximately 50mm and then stop.
- 5. Turn the barrel to deploy the fabric in the direction of arrow (B). The cable will engage on the spools. Check the cable is engaging without any gaps.
- 6. As the cable is taken up on to the spools the hem bar will deploy. The cable should be taken up on the grooves of the spool with no gaps or overlaps.
- 7. Check the hem bar runs in the main guides correctly. Adjust if required.

 $For \ technical \ installation \ video \ please \ visit - \underline{https://www.youtube.com/user/GuthrieDouglas}$

12. Connect the Cable / Tension the Fabric continued...

The limits can now be set. For instructions on setting the motor limits, refer to the relevant manual for the specified motor (supplied).

Important

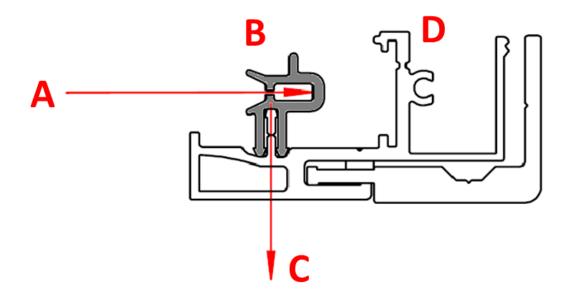
The motor limit positions are to be set accurately. The hem bar is not to be jammed into the closing surface without the motor limit position being reached. Failure to set the limits correctly may cause motor failure.

Note – If the tension is too great, the cable spooling will be noisy.

The tension will be over specification if:

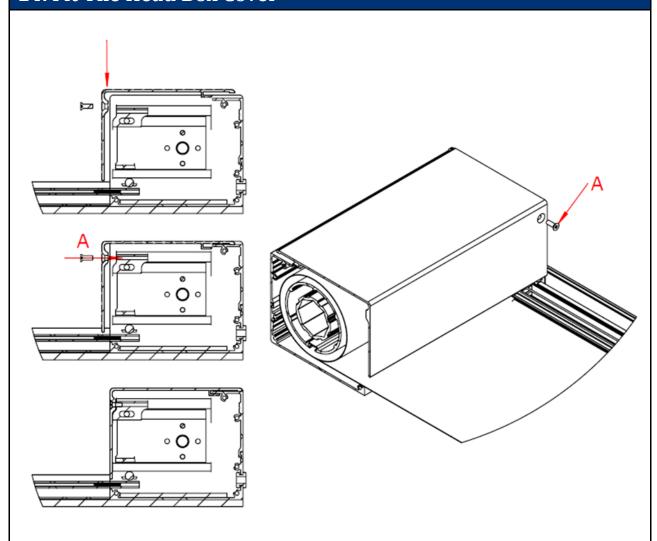
- The back turn in Section 11 has been missed
- The cable has been cut short at this stage (Section 12)
- The cable has gaps in the first turn at this stage (Section 12)

13. Fit The Side Lock Guides



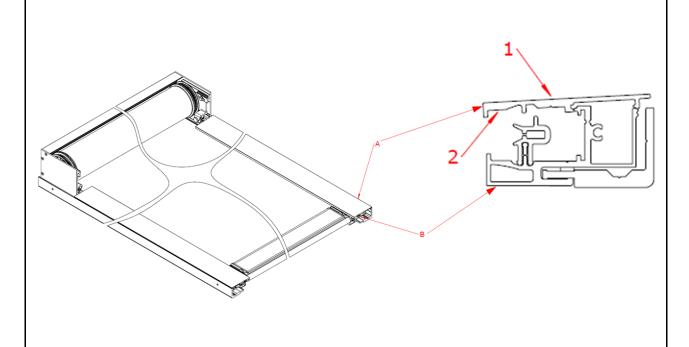
- 1. Deploy the fabric (A) to the mid-point of draw.
- 2. Slide the plastic side lock guides (B) on to the fabric.
- 3. Clip the side lock guides on to the main guide (D) at position (C).

14. Fit The Head Box Cover



- 1. If the system is lidded, fit the head box cover.
- 2. Slide the lid on to the small back panel, ensuring the small arm at the back of the lid fits underneath the small back panel top leg.
- 3. Push the lid up to the protruding features on each end plate and fit the screw (A) at each end of the head box.

15. Fit The Guide Front Covers



- 1. Offer the front cover (A) up to the main guide (B). Ensure the front cover is in the correct orientation and is hooked onto the protruding ridge of the main guide (see arrow 1).
- 2. Push the front cover from underneath (see arrow 2) to clip the front cover on to the main guide along its full length.
- 3. Tools can be used to increase the leverage and aid the clipping.
- 4. Repeat at other side.

16. Final Checks

16.

Final system checks:

After fitting the guide front covers, make a final test run of the system (i.e. deploy and retract the system).

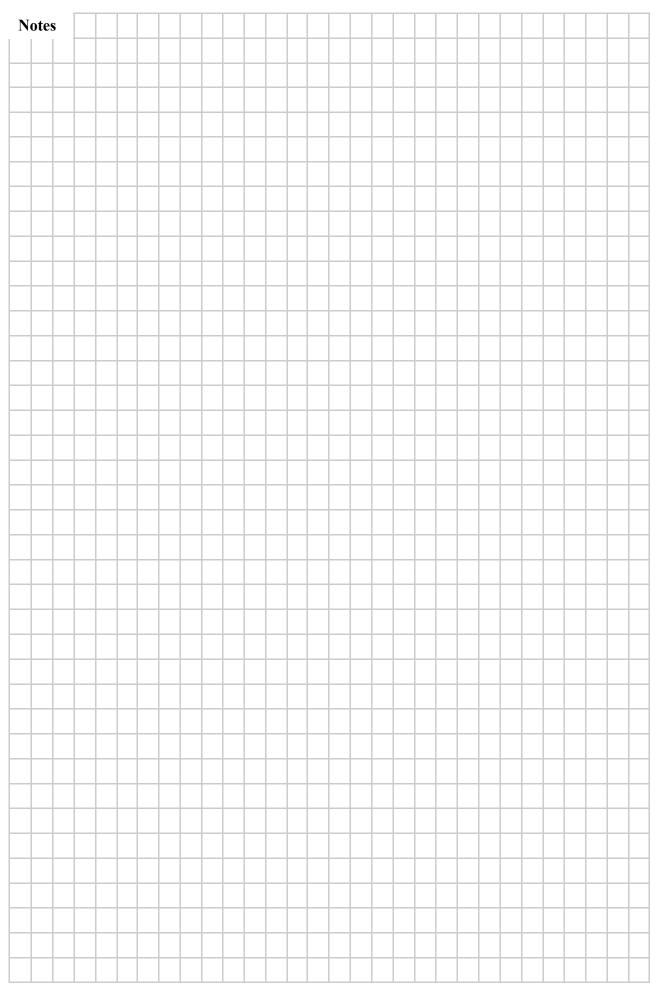
- 1. Check the installation visually and mechanically; ensure all fixings are fastened securely.
- 2. Check to make sure the fabric is running straight with no tracking or creasing of fabric visible. If the fabric is not running straight, the tracking plates in the headbox can be adjusted accordingly.
- 3. Check the hem bar limits, ensuring that the motor limit positions have been accurately set.
- 4. Check for light gaps and fill any gaps that occur.
- 5. Make sure obstacle detection is set if required. If obstacle detection is required to avoid crush hazards in accordance with BS EN 13120:2009, it is the responsibility of the installer to ensure these are programmed and functioning correctly.
- 6. If the installation is a twin system (hem bars meeting in the middle) blinds should not be left in the closed position for a prolonged period. Silicon sealing strips can fuse together when subjected to hot conditions over time. To avoid this, consider the necessity for both strips and remove one if possible. If they are both required, ensure the roof lights are operated on a regular basis i.e. open every few days.

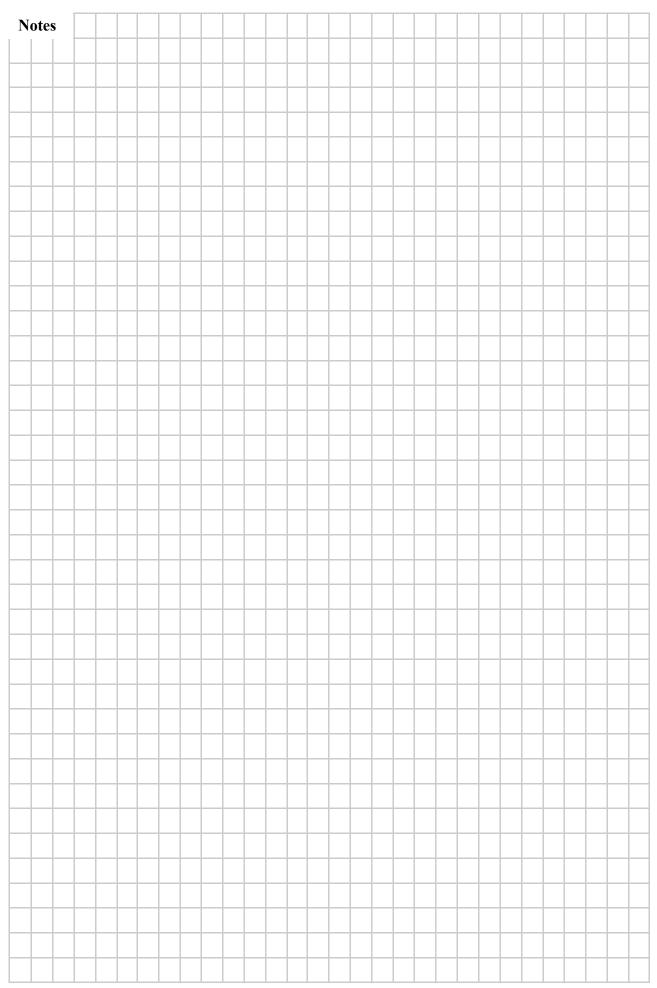
17. Duo Screen Recess Fix Systems

17.

If installing two systems on top of each other with one headbox at either end (known as the 'Duo Screen' configuration), installation is very similar to that detailed in this manual. A few points to consider:

- 1. The Duo Screen can be treated as one system: both sets of wall fixing plates should be fitted before installing the headboxes (spaced apart as detailed in the installation drawing provided), then both the headboxes should be fitted, then both sets of guides, etc.
- 2. The headboxes do not need to be fixed to the recess in this configuration; the tensioning of the systems will pull the headboxes against the two sets of main guides, which will be fixed to the fixing plates as normal.
- 3. As the headboxes do not require fixing, they can be inserted into the recess with the fabric barrel in place.
- 4. The headboxes will need a 15mm gap behind them so that they can be temporarily moved backwards in order to fit the spring pins into the guides.
- 5. The two pin ports on the end plates (A) fix the distance between the two sets of guides; 4 extra pins will be required for a Duo Screen system (8 in total).
- 6. Lids are not used with Duo Screen systems.





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