Electric Agridoor

Auto

Installation Instructions

Galebreaker AGRI

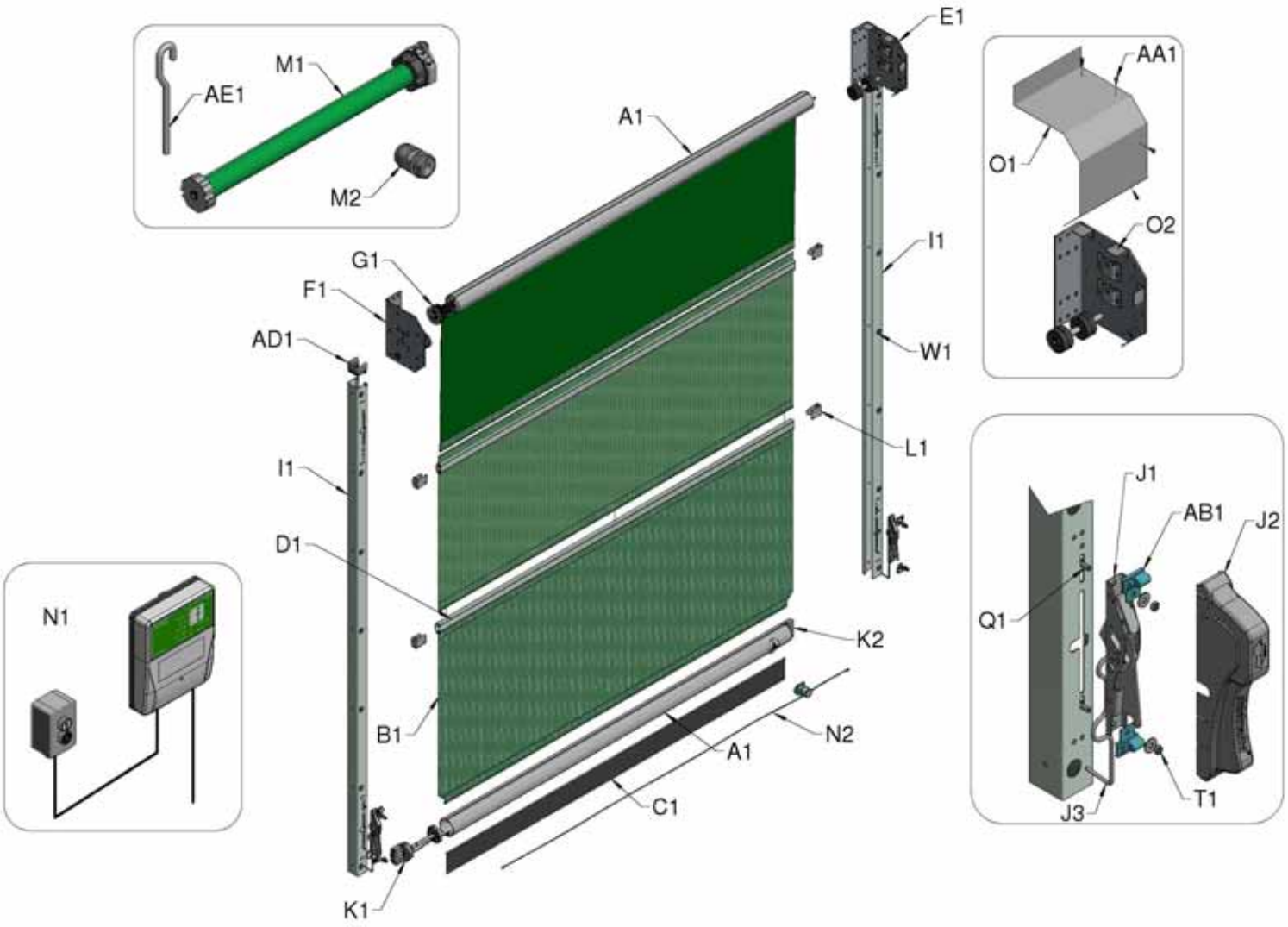

Figure 1, System Overview and Individual Components

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INTRODUCTION

Parts List

REFERENCE:	QTY	PRODUCT DESCRIPTION
A1	2	Top and Bottom Tubes
B1	*	Fabric Panels
C1	1	Lower Flap
D1	*	Wind Bars
E1	1	(i) Drive Bracket
F1	1	(ii) Spring Bracket
G1	1	Spring Assembly (Left-Hand Insertion Shown)
H1	*	(iii) 6mm Nylon Insert for Fabric (not shown)
I1	2	(iv) Guide Rail (3 or 4 supplied in some instances)
J1	2	Locking Catch
J2	2	Locking Catch Cover
J3	2	Activation Hook (Left and Right Hand)
K1	1	Bottom Tube Insert LH
K2	1	Bottom Tube Insert RH
L1	*	Windbar Protection Cap
M1	1	Electric Motor
M2	1	M16 Cable Gland
N1	1	Control Box and External Switch
N2	1	Bottom tube transmitter
O1	1	30cm Motor Cowling
O2	4	Cowling Brackets
P1	1	350 x 127mm Yellow Template (not shown)
Q1	6	M8 x 20 Hex Bolts to Fix Locking Catches
R1	*	M8 x 30 Hex Bolts for Fixing Guide Rails to Building (not shown)
S1	8	M10 x 30 Hex Bolts for Fixing Brackets to a Steel Building (not shown)
T1	16	M8 Nylocs
U1	*	M8 Nuts
V1	*	M8 Washers
V2	8	M10 Washers
W1	26	Guide Rail Plug
X1	8	M10 Nylocs
Y1	2	M4 x 75mm Split Pins to Secure Top Tube to Brackets (not shown)
Z1	*	M4 x 25 Self-Drilling Screws for Fixing Fabric Panels, Inserts and Flap.
AA1	4	M5.5 x 19 Hex Self Drilling Screws
AB1	4	Magnet
AC1	2	M6x12 Bolt and Nyloc Nut
AD1	1 pr	Guide Rail Guide
AE1	1	Manual Override Hook

* *Quantities according to size of door*

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Your Safety

The larger doors will require a mechanical lift to mount the roller assembly onto the top brackets. The respective weights are given in the table below based on standard material. Add 5% to this figure for doors supplied with 'HP' fabric, and 15% for doors supplied with black Stockscreen and solid fabrics.

	HEIGHT			
WIDTH	3.1m	4.1m	5.1	6.1m
2.5m	49kg	55kg	61kg	66kg
3.0m	54kg	61kg	68kg	75kg
3.5m	59kg	68kg	82kg	90kg
4.0m	65kg	80kg	89kg	99kg
4.5m	76kg	87kg	97kg	113kg
5.0m	82kg	93kg	110kg	122kg
5.5m	87kg	99kg	118kg	130kg
6.0m	92kg	111kg	125kg	139kg

Table 1, Roller Assembly Weights

CAUTION: To safeguard against any danger points, the minimum height 'H' of any door is 2.5m.
In the event of power or door failure, the door must not form the only means of exit from the building to which it is fitted.

Wind Loadings

The structure to which the door is fitted needs to be of adequate strength to resist the following wind loads.

Wind Speed (km/hr)	**Wind Load (N)***	**Wind Load (Kg)***
70 km/hr	= W x H x 233	= W x H x 24
100 km/hr	= W x H x 481	= W x H x 49
140km/hr	= W x H x 933	= W x H x 95

**No allowance made for safety margins*

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Pre-Installation Check

Figure 2 indicates space required to install your door, with additional information for mounting multiple doors in series

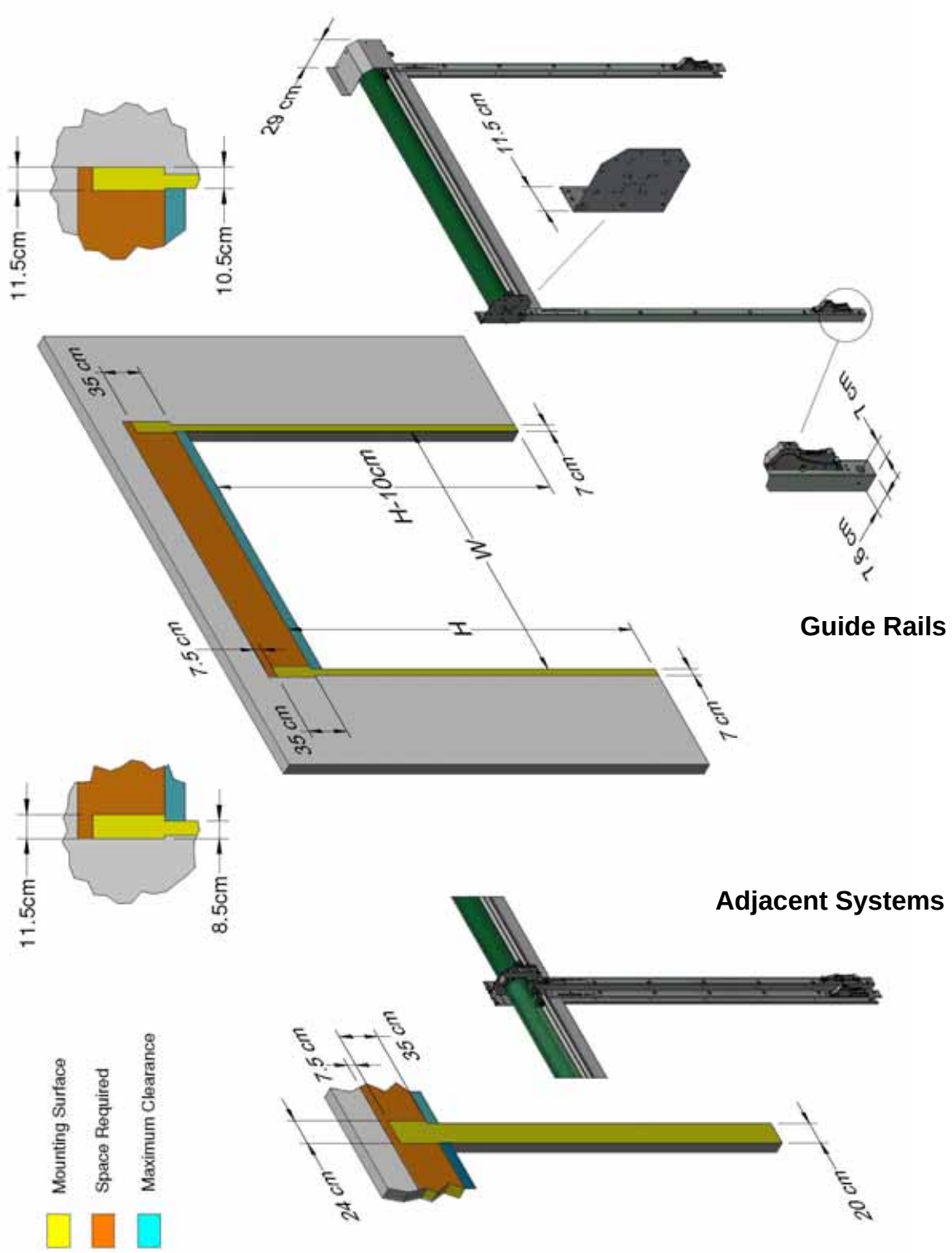

FIgure 2, Fitting Requirements

Order Width (m)	Max Width W (m)
2.5	2.5 (2.38 min)
3.0	3.0
3.5	3.5
4.0	4.0
4.5	4.5
5.0	5.0
5.5	5.5
6.0	6.0

Order Height (m)	Max Height H (m)	Max Clearance H-100mm (m)
3.1	3.1	3.0
4.1	4.1	4.0
5.1	5.1	5.0
6.1	6.1	6.0

CAUTION: To safeguard against any danger points, the minimum height 'H' of any door is 2.5m.
In the event of power or door failure, the door must not form the only means of exit from the building to which it is fitted.

Right or Left Hand Drive

Your door will be supplied in accordance with the drive orientation specified when ordered. The images and text in these Instructions are based on a door with a right-hand drive, if you have ordered a left-hand drive then reverse the references. To change the orientation of your product:

- Top Brackets: The mounting plate is non-handed with a pair of holes for left or right orientation, which are marked 'L' and 'R'. To change orientation remove the item from the plate and secure on the opposite hand.
- Spring: See Appendix I for details of spring conversion.

Electrics

Only allow qualified electricians to work on the electrical connections of the door. This document covers the key instructions with regards to bringing the Electric Drive into service. Read the additional information from the supplier of the Electrical Motor and Control Box for full installation instructions.

ATTENTION: The power supply must be a clean Mains Supply and not taken from an Electric Generator Set.

ATTENTION: The power supply must be taken from a LOCKABLE isolation switch positioned within 2m from the door.

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Installer Competence

The installer should be able to demonstrate the required level of competence via evidence of installing similar products or formal training. If competence cannot be proven then they should not be allowed to install the product.

Product Description

The Agridoor is a power operated vertically moving rolling door comprising of a series of linked flexible curtains capable of being rolled and for which the main intended uses are giving safe access for goods and vehicles accompanied or driven by persons.

Noise Levels

A-weighted sound pressure level (dB)	**50**
C-weighted peak sound pressure level (dB)	**75**

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Items Required by the Installer

Standard tool kit including:

- Electric drill
- Angle grinder
- Sharp pair of scissors or knife
- Spirit level
- Bolts for fixing to steel up to 12mm thick are supplied, if fixing to a wooden or concrete building you will require eight M10 fixings to fasten top brackets and M8 fixings for guide rails.
- Clips to fix electrical cables to the building
- Power for motor (220Volts, 600Watts, 3Amps)
- 50mm hole saw for steel

Key Instructions

CAUTION: Potentially hazardous situation: must be avoided otherwise injuries may result.

ATTENTION: Observe the given instructions otherwise the product or adjacent items may be damaged

NOTE: Helpful comments and information to assist in installation or use of your product

NOTE: Before starting the installation you must fully read these instructions (including the separate electrical details) to completely understand the procedure.
Keep the instructions supplied for reference purposes.

NOTE: Colour versions of the installation instructions can be downloaded from our website:
www.galebreaker.com

INSTALLATION

1. Check the contents of your door against the parts, Figure 1. Do not let the screen material come into contact with sharp objects or corners.

Fitting the Top Brackets

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2. Using the template, fit the spring bracket (F1) and drive end bracket (E1) at the required height with M10 fixings (S1). Do not use the bottom set of holes, the fixings may interfere with the rolling action of your door. The door has been designed such that the tops of the guide rails are fitted directly underneath the brackets (Figure 3), aligning with the letter 'F' for the free-end bracket and the bracket edge for the drive end. When fitting the brackets it is essential that they are **level and upright and square to the building**.

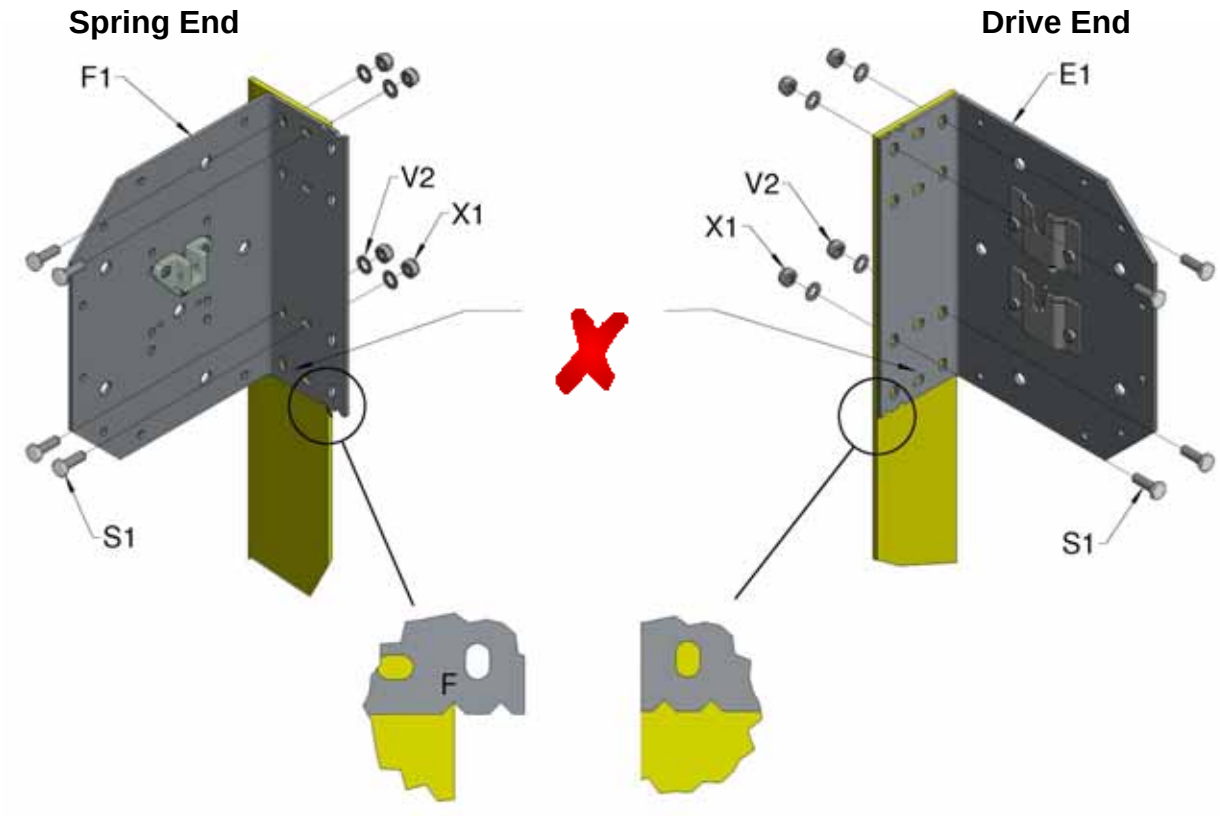

Figure 3, Top Bracket Positioning

CAUTION: Referring to Table 1 on page 4, ensure the building is of sound construction and that the most suitable type of fastener is used. Use only M10 bolts or greater to fit these items and ensure they are securely fastened to the building. Failure

of these fixings will result in your door falling off the building, potentially injuring operators and bystanders.

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Cutting the Top tube, Windbars, and Fabric

3a. If it is required to cut your door, measure the daylight gap between the inside face of the top brackets (A) and cut to the following rules (Figure 4a), do not cut the lower flap and tube at this point.

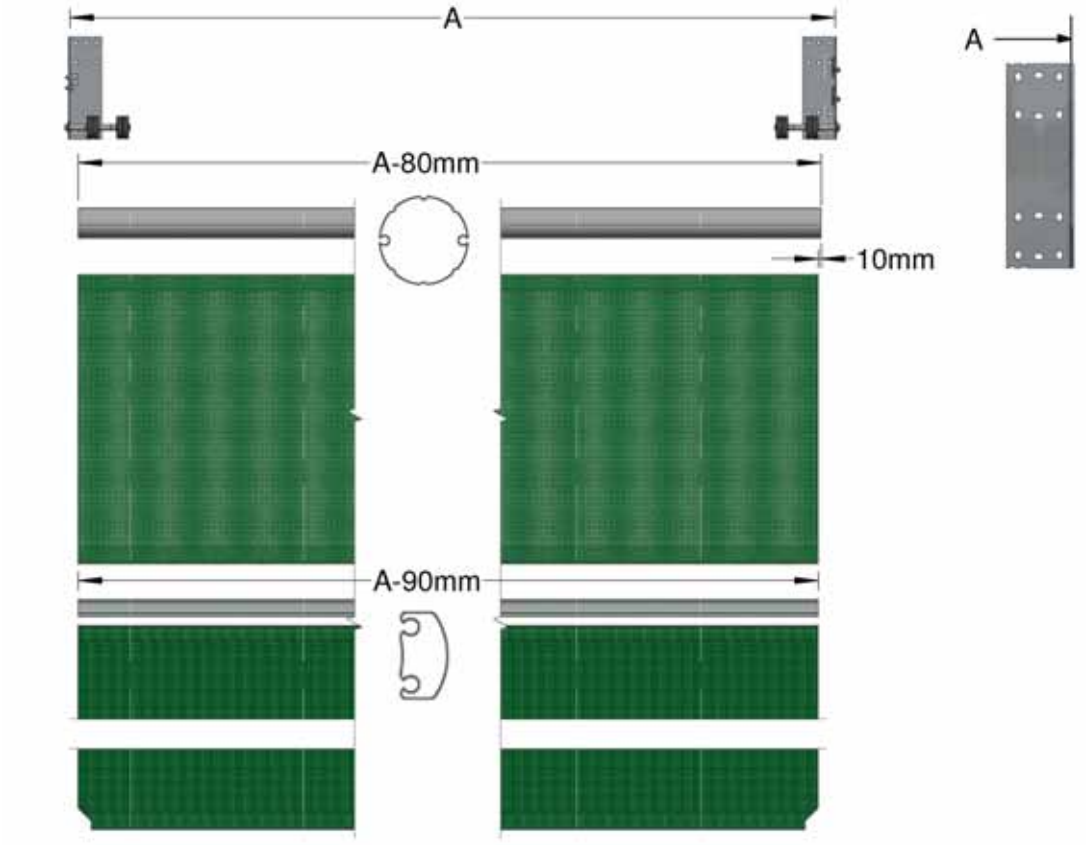

Figure 4a, Standard Cutting Lengths of Tubes and Fabric

Top Tube	=	Distance between inside faces -80mm (-0.080m)
Fabric Panels	=	Distance between inside faces -90mm (-0.090m)
Windbars	=	Distance between inside faces -90mm (-0.090m)

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3b. If your door can be mounted without cutting the top tube, windbars and fabric panels, follow the dimensions shown in Figure 4b, note the bottom tube and flap will always have to be cut.

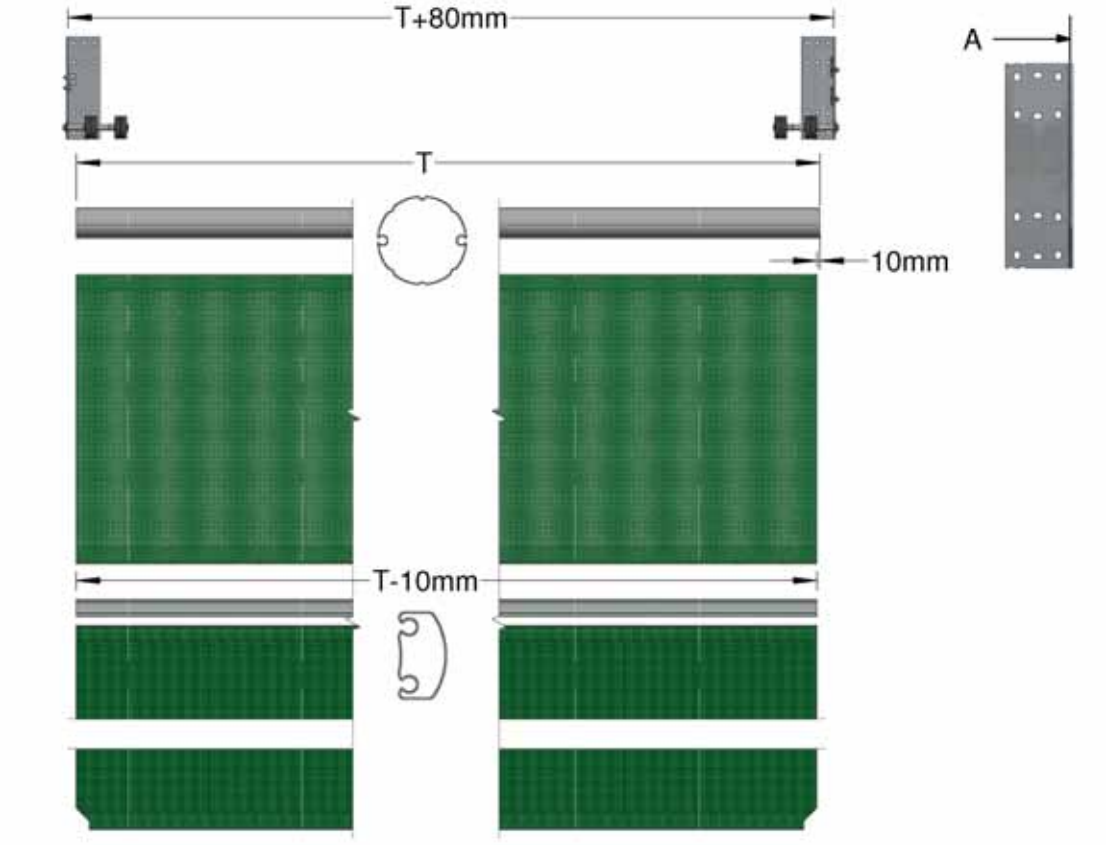
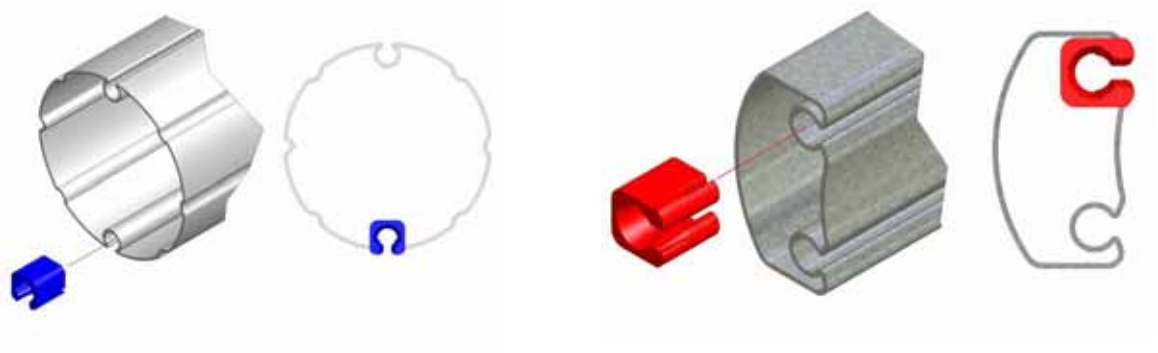


Figure 4b, Top Bracket Spacing When Not Cutting Tube, Windbars and Fabric

4. Slide the nylon insert (found inside the windbars) into the pocket of the fabric and cut to suit, slide the fabric panels and windbars onto the top tube assembly (Figure 5a).

NOTE: To ease the insertion of the fabric panels into the windbars ensure all metal burrs are removed, and use a lubricant such as light oil or washing-up liquid.



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Push the Flute Guide Insert over the end of the flute in the tube or windbar to protect the fabric sheet as it is being fitted. When the fabric is inserted remove the Flute Guide Insert form the end of the flute.

Ensure that the panels go in the correct position, as they are different heights, refer to Figure 5b.

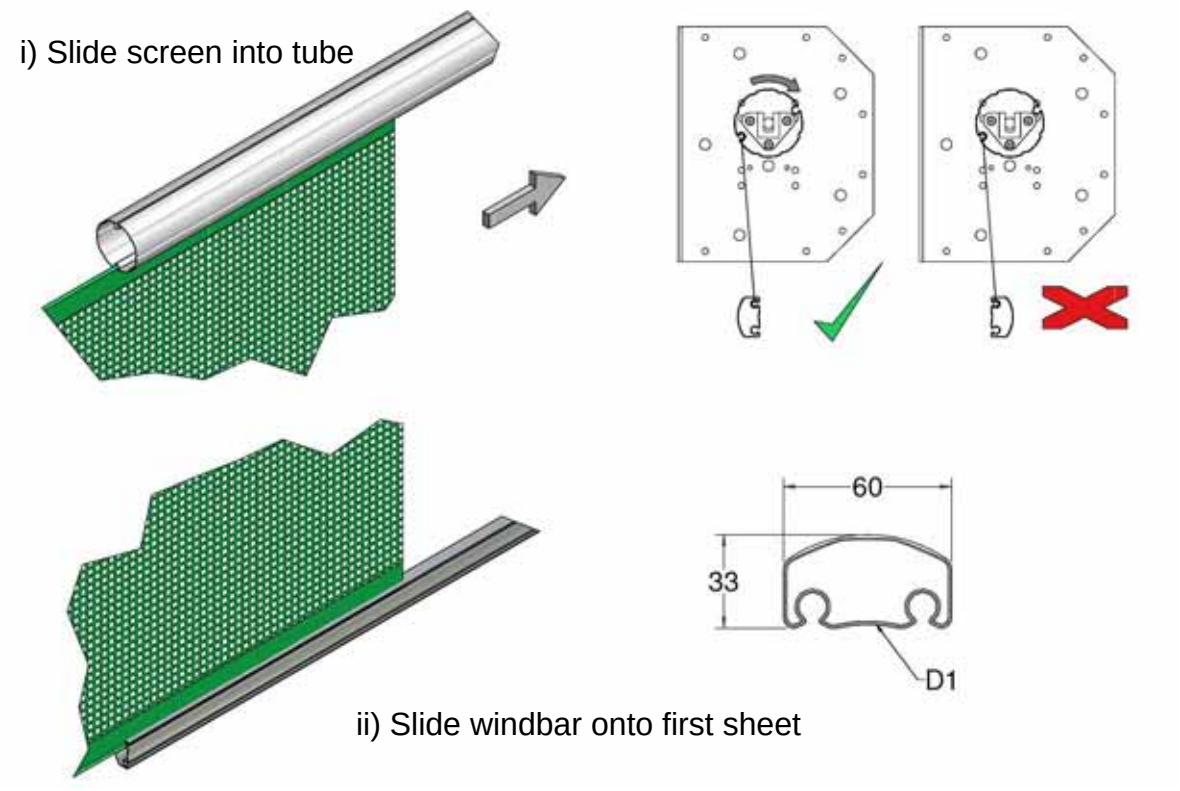

Figure 5a, Sliding Fabric Panels and Windbars onto Top Tube

6.1m Solid Material (only)

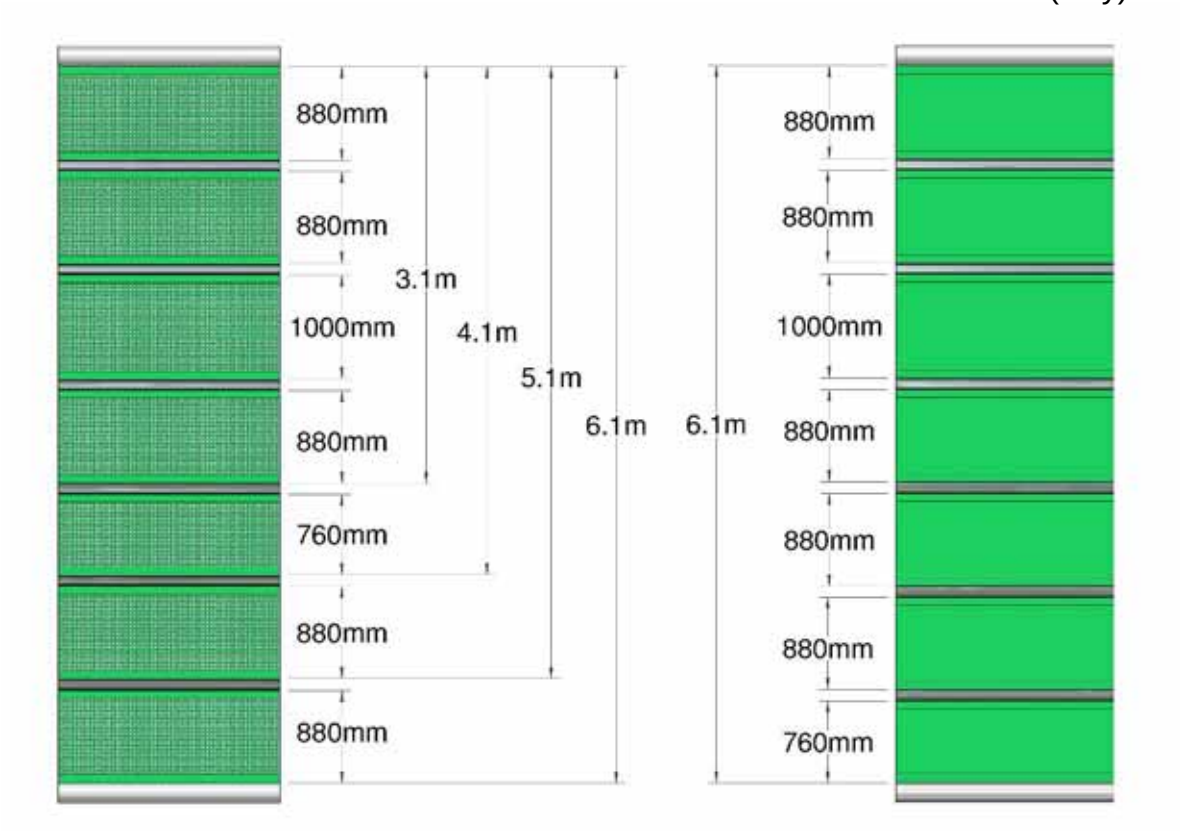

Figure 5b, Fabric Panel Layout

Secure the screen in each corner using the 25mm self-drilling screws supplied (Z1), ensuring the windbar protection caps (L1) are fixed at the same time. To prevent damage to the pads do not over tighten the screws. It is important to tension sheet sideways before fixing to remove creases (Figure 5c). Do not secure the fabric to the top tube at this point.

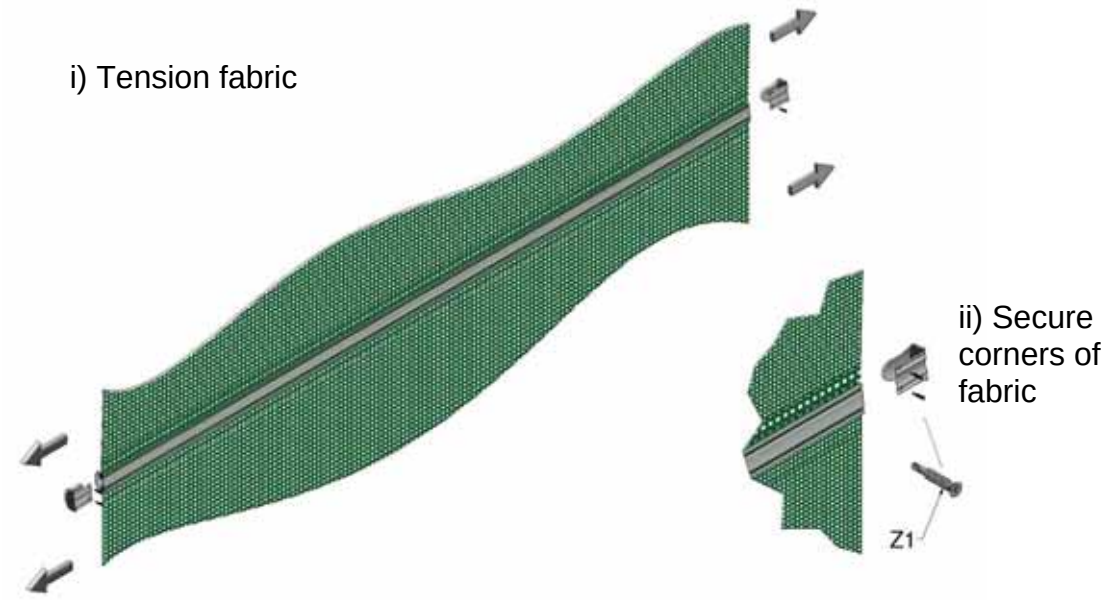

Figure 5c, Securing Fabric

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5. Roll the windbars and fabric panels onto the top tube. It is important that when the door is hung the fabric should come off the back of the top tube, between the tube and the building face (Figure 6a).

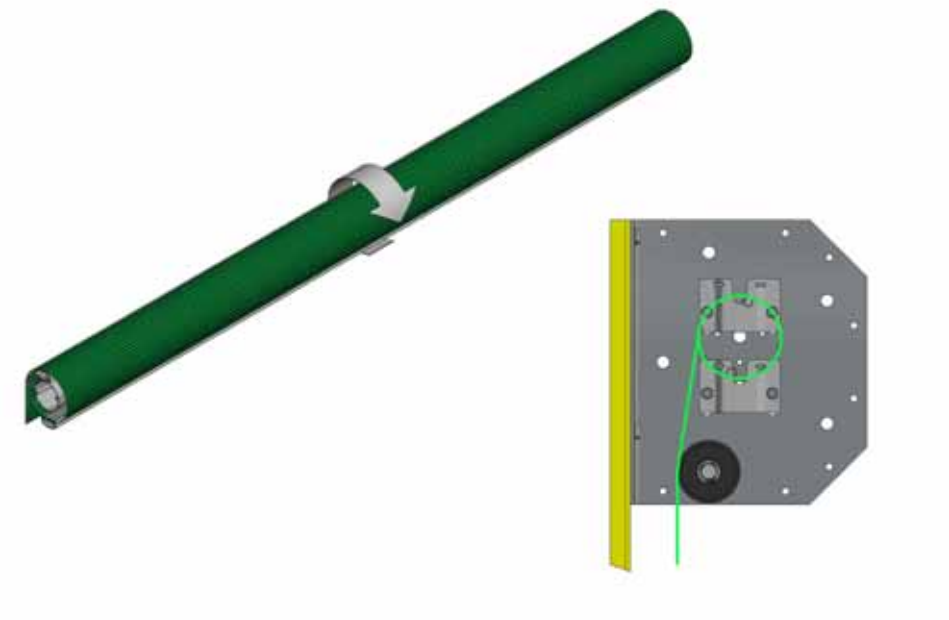

Figure 6a, Fabric Attached to Top Tube and Rolled Up

Slide the spring assembly (G1) into the top tube to match the orientation of the free end bracket, insert motor (M1) into opposite end. Refer to Figure 6b for right hand drive and Figure 6c for left hand drive.

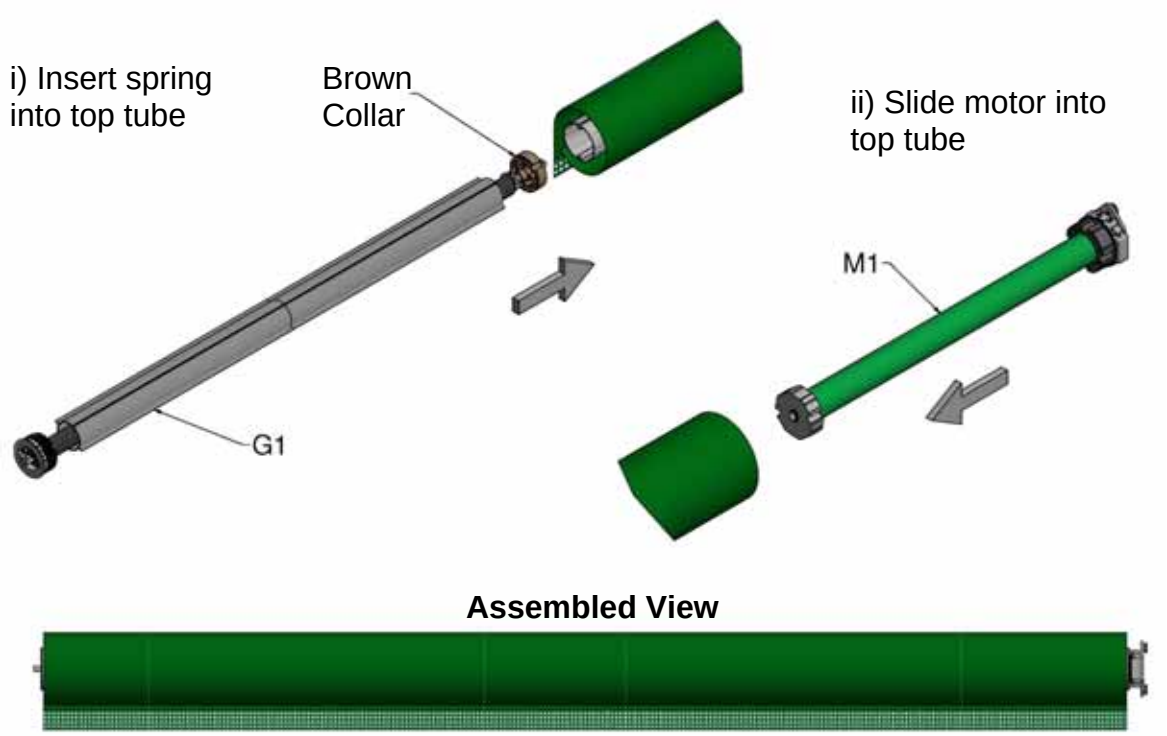

Figure 6b, Top Tube Assembly (Right Hand Drive)

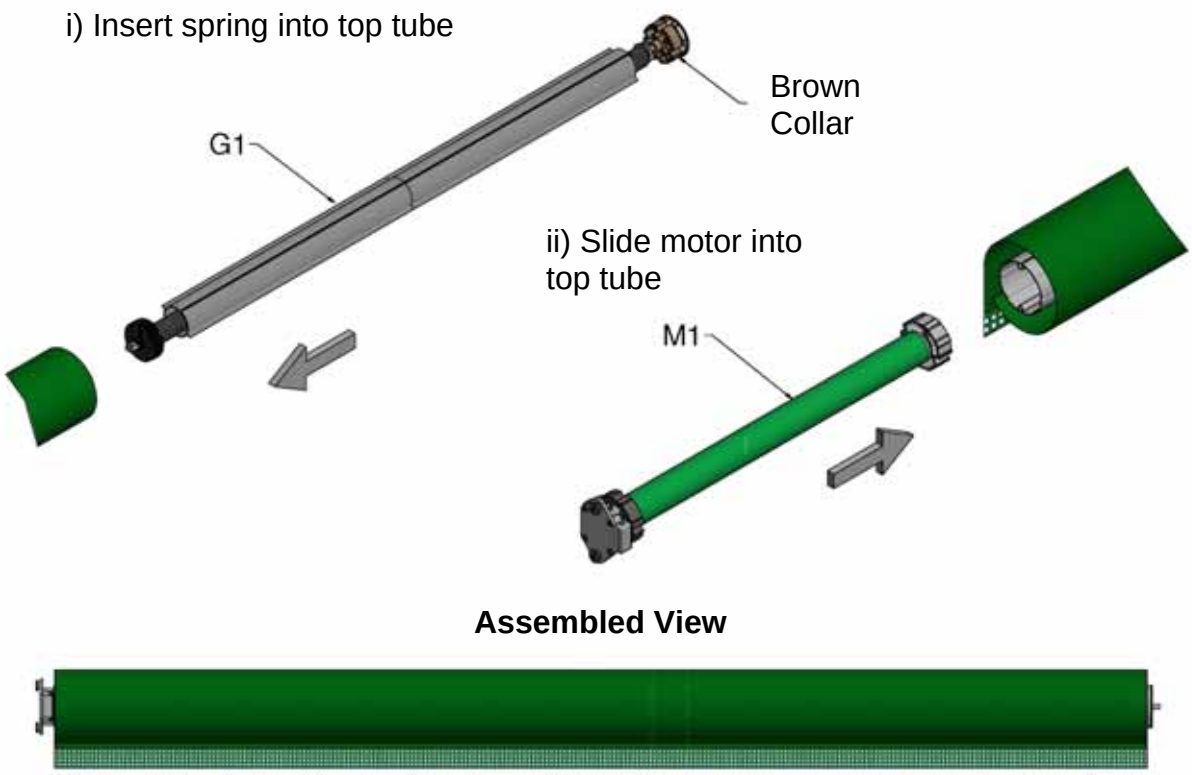

Figure 6c, Top Tube Assembly (Left Hand Drive)

ATTENTION: It is vital that the spring assembly is fitted correctly, as shown in Figure 6b or 6c, otherwise the spring will suffer terminal damage, for which Galebreaker is not liable, i.e. if you have a right hand operated door (option R) as shown in Figure 6b the Brown collar should be inserted first.

NOTE: If you wish to fit the spring to the opposite side to that ordered, refer to instructions in Appendix I.

Hanging the door

6. When lifting the roller assembly onto the top brackets, ensure that the spring shaft and the pins on the motor head slide completely into the base of the cup brackets (Figure 7). Lock in place with the M4 split pins (Y1) each end.

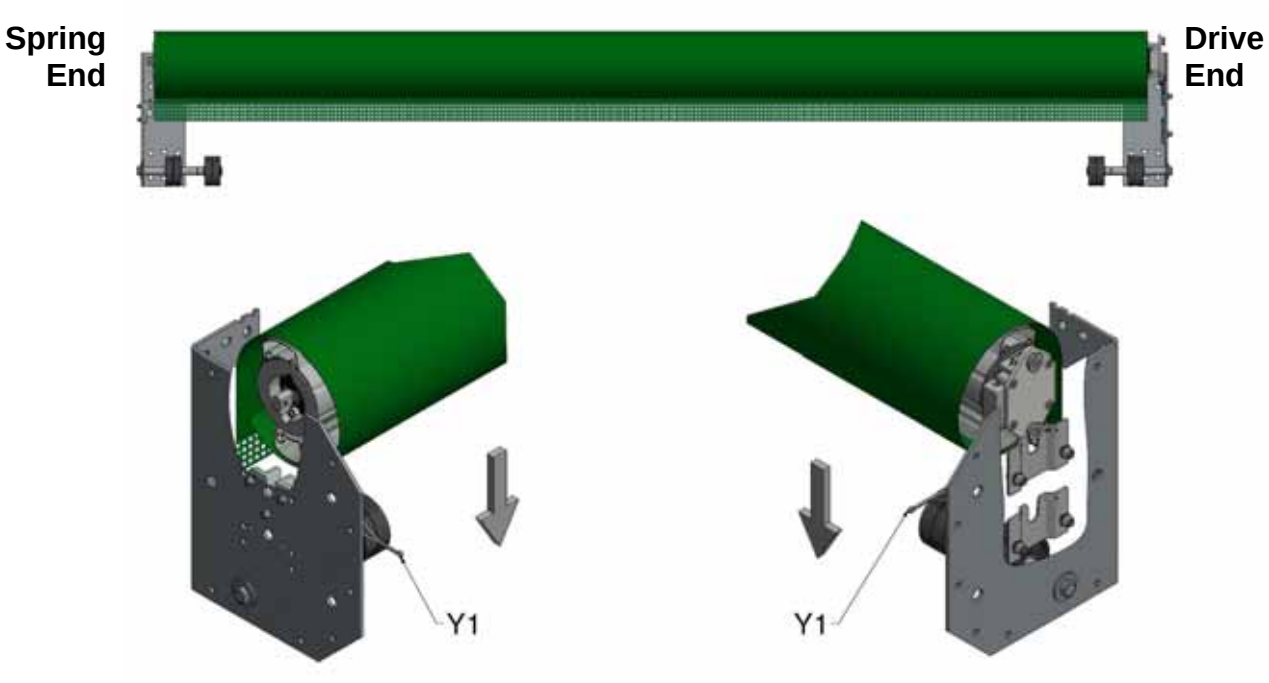

Figure 7, Locating Top Tube in Brackets (RH Drive Shown)

CAUTION: It is important to insert the split pins, this will prevent your door falling if the end brackets are struck, thereby potentially injuring operators and bystanders.

Feed the motor 4-core wire through the cable gland (M2) in the drive bracket (E1) Figure 8a. When routing electric wire to motor ensure there is a 'Drip-loop', i.e. a loop in the cable such that any water running along the cable does not make its way to the motor or any controller. Make sure the cable is kept tight against the Top Bracket to prevent any contact with the windbar caps.

Secure the control box, secondary switch, and wires to the building (N1). Ensure all wires exiting from the drive bracket (E1) and motor switches (N1) point down to form a drip-loop so that rain water cannot enter the motor or switches. To protect the circuit board we advise the control box is mounted inside the building.

CAUTION: Position the control box in sight of the door and in direct line of sight of the bottom tube of the door throughout its operating range for best radio reception.

ATTENTION: For maximum protection of the circuit board inside the control box, we advise this is mounted inside the building away from direct rainfall. If outside operation is required use the secondary switch for this location

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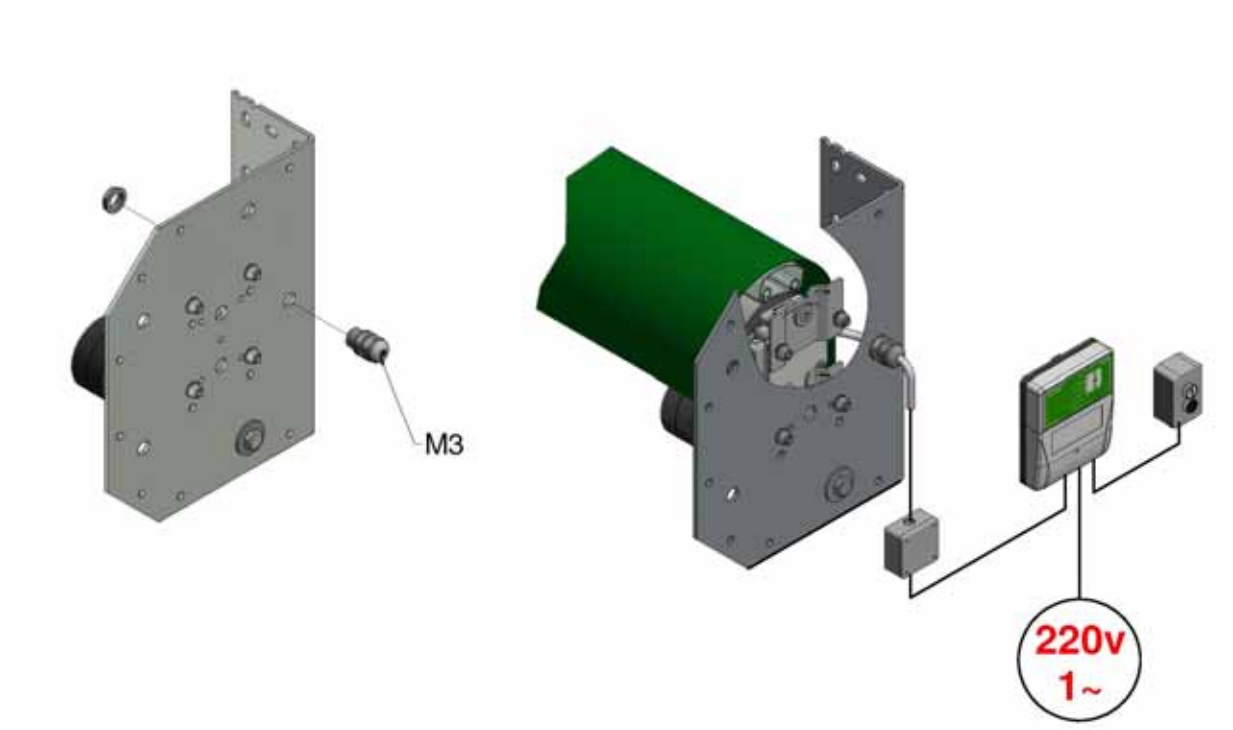

Figure 8a, Routing of Motor Wire

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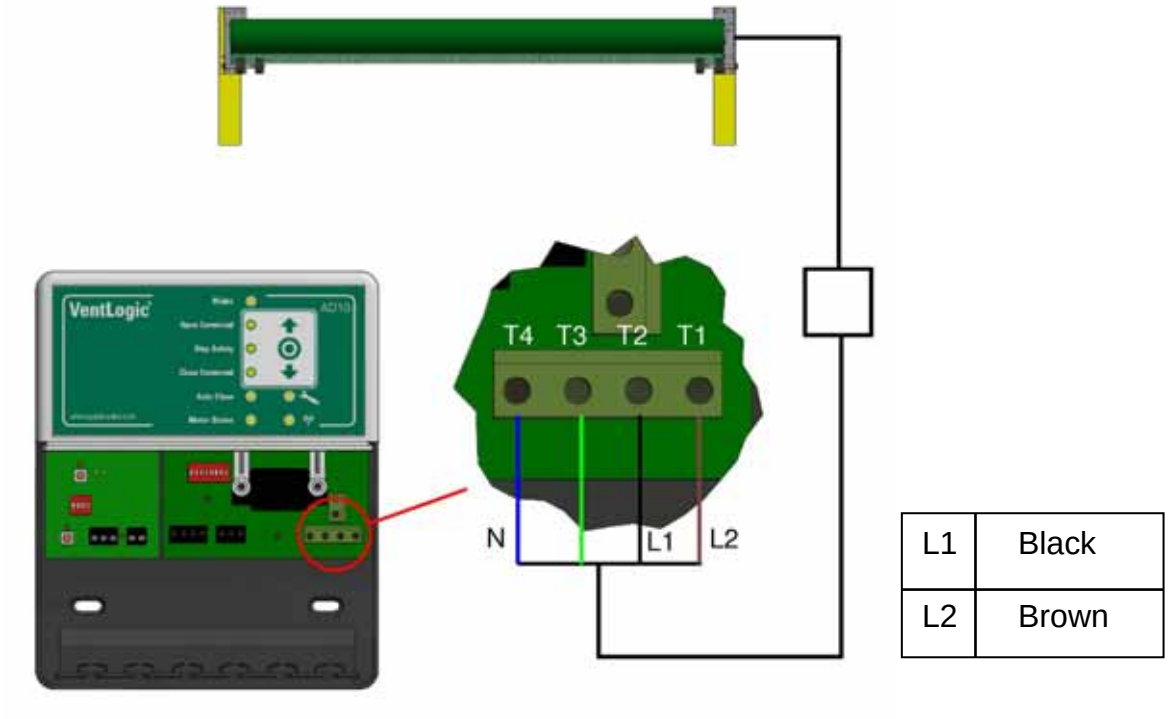

L1	Black
L2	Brown

Figure 8b, Control Box Wiring

7. Connect the motor wires to the AD10 followed by the power lead (see AD10 Instructions section 5.2 and 5.3). Check the motor direction using the AD10 lid buttons and correct if necessary using DIP 1 switches 7 & 8.

8. Select the commissioning mode (see AD10 Instructions Section 5.6) and using the switches on the control box, lower the door fully, when the fabric and windbars are down you will be able to check the top tube is level.
   As the door is lowering the mechanical limits will require adjusting by turning the screws on the head of the motor with the hand tool supplied with the motor.

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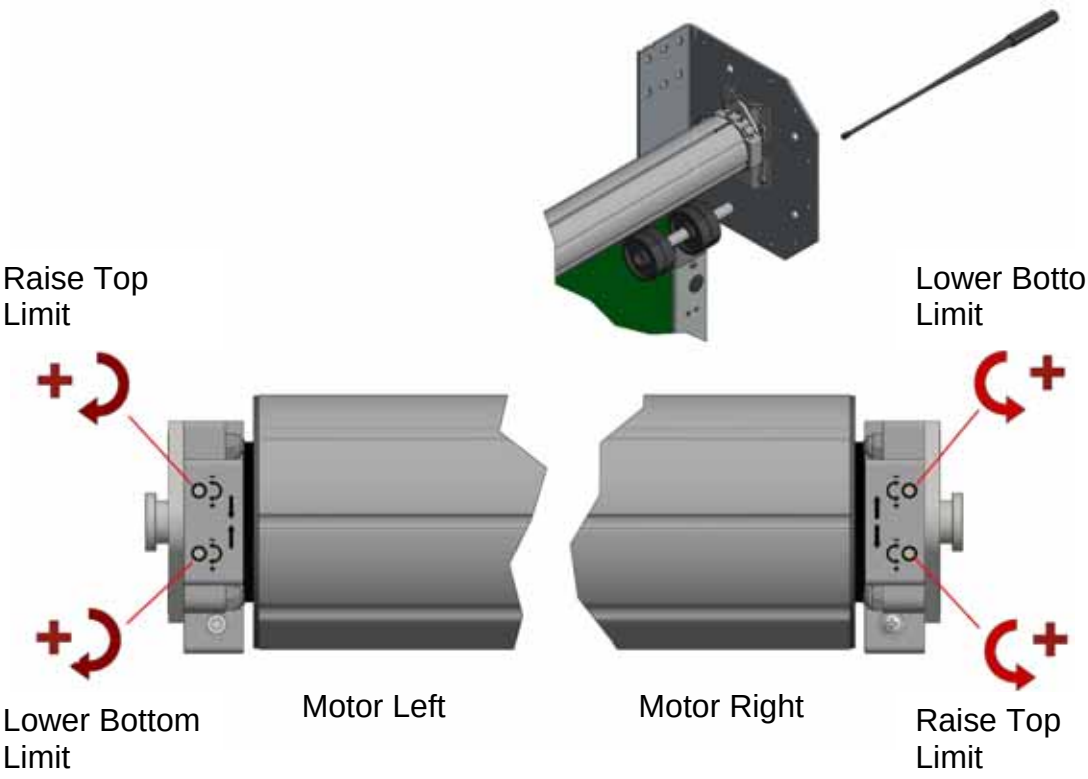

Figure 8c, Limit adjustment

Raise the door, the fabric and windbars will now stack tightly around the top tube which will make tensioning the spring easier in section 11 below. Tie up the roller assembly (Figure 9).

Figure 9, Tie Up Roller Assembly

Fixing the Guide Rails

9. Equally cut the guide rails (I1) to fill the gap between the underside of the top brackets and the ground allowing 4 cm for the guide (AF1). Always cut the top of the guide rail to leave the slot/ hole arrangement at the bottom for the fitting of the locking catches. Fit the pair of guides into the top of the guide rails (cut end) and secure with the M6x12 bolt and nut (AE1) in the front face, Figure 10.

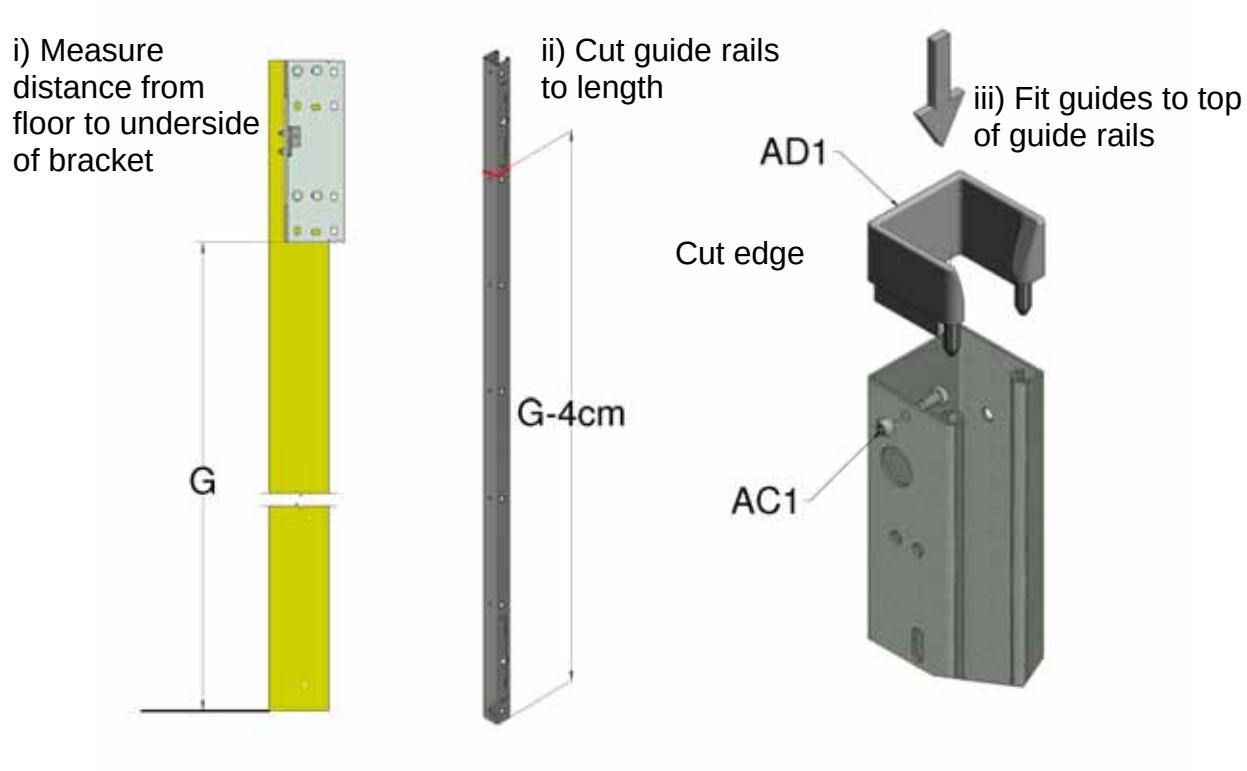

Figure 10, Cutting Lengths of Guide Rails

10. Fit the guide rails to the building with M8 fixings at 100cm centres. If tracking is supplied in part lengths, align each section with the joining pins supplied (Figure 11a and Figure 11b).

CAUTION: Use only M8 bolts or greater to fit these items and ensure they are securely fastened to the building.

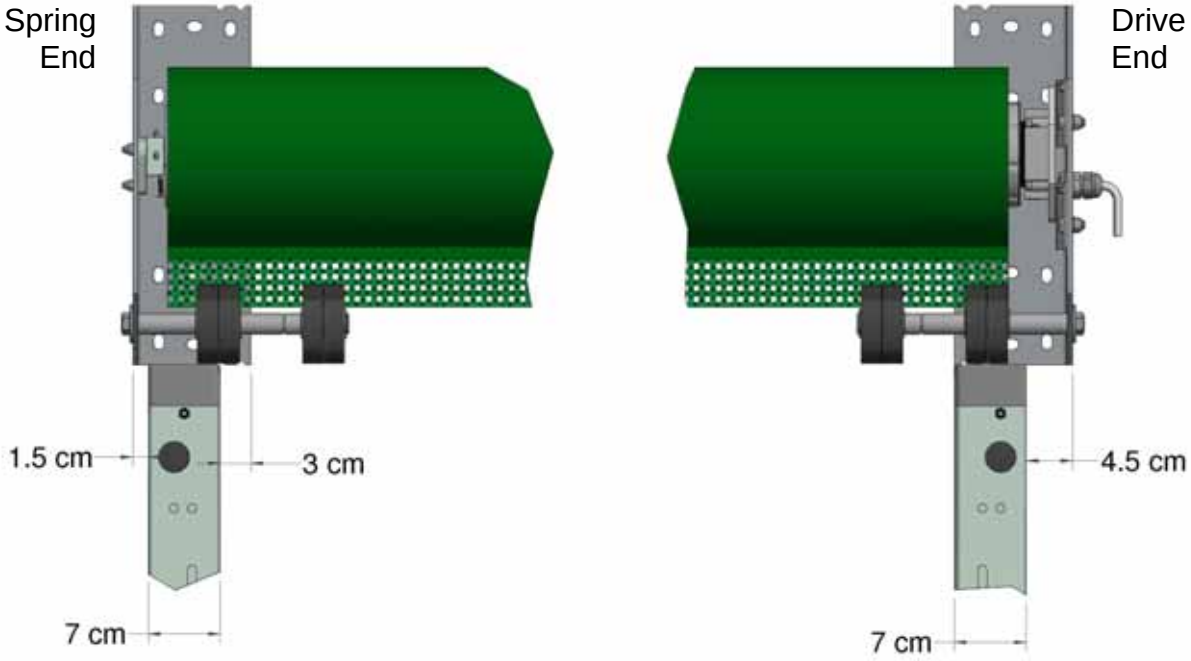

Figure 11a, Location of Guide Rail

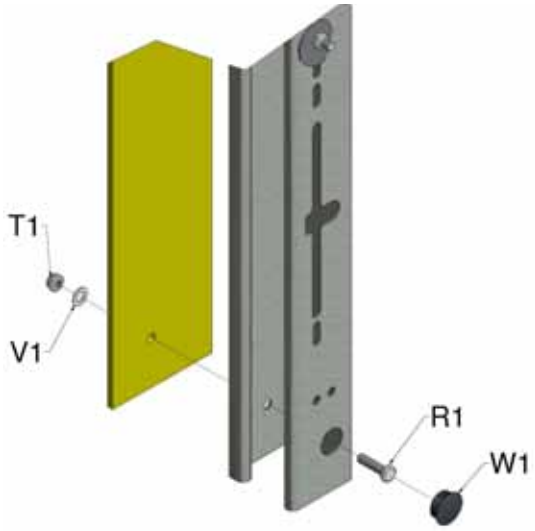

Figure 11b, Bolting of Guide Rail and Joining of Guide Rail to Wall

11. Attach the pair of activation hooks (J3) to the locking catches by inserting the crimped end of the hook through the keyhole shaped aperture in the swinging plate, (Figure 12). Feed the activation hook through the slot in the guide rail and bolt the locking catch (J1) onto the guide rail. Fit a pair of Magnets (AB1) to the catch bolts and secure with the M8x25mm washers and lock nuts (T1).
    The arrows on the magnets MUST point towards the door opening.

The top hole of the locking catch should align with the upper of the two pre-punched slots. The activation hook should hang vertically down with the bent leg pointing towards the inside of the door.

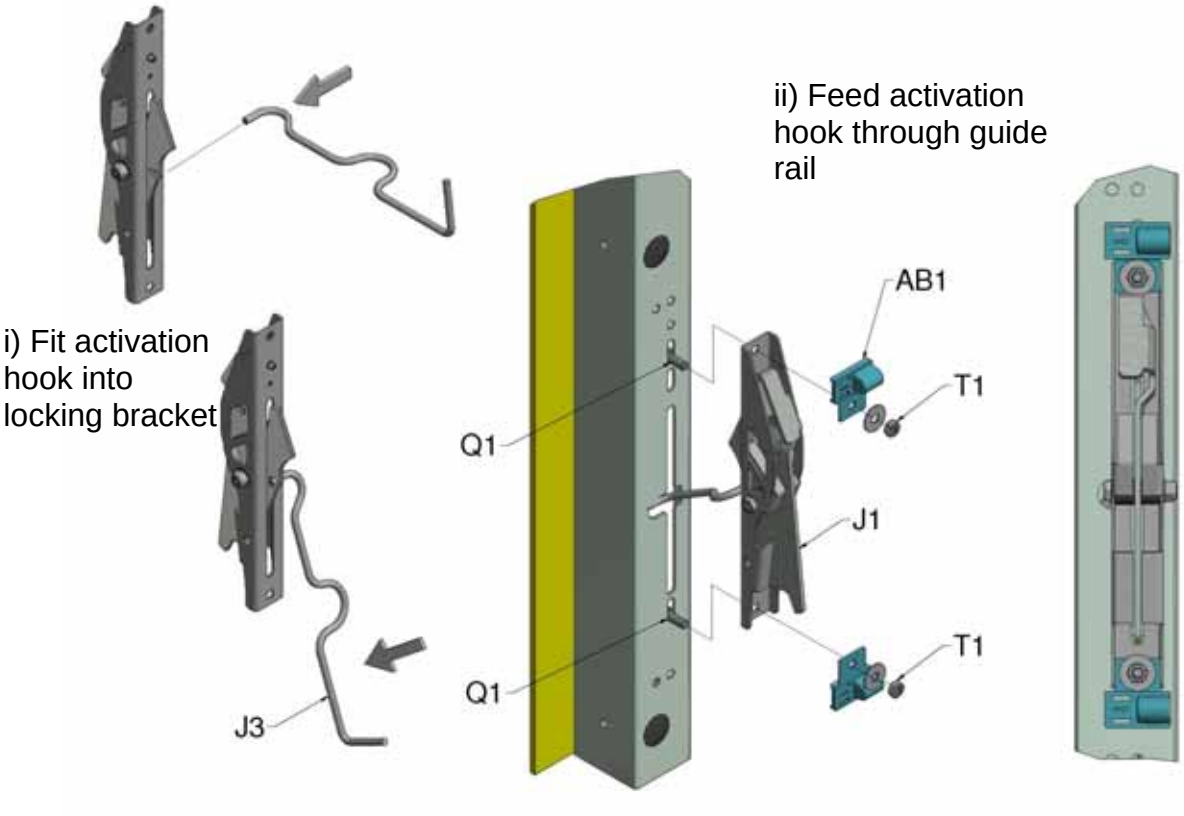

Figure 12, Bolting of Locking Catches

Ensure the swinging arm of the locking catch clears the long slot in the guide rail. Set the locking catches each side to the bottom of the slotted hole.

Tensioning the Spring Mechanism

12. Pre-tension the spring mechanism by rotating the roller assembly in the direction shown in Figure 13. The number of pre-tension turns is given in the table below. The mechanical limit position will require adjusting to achieve the full number of turns (see Figure 8c)

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Figure 13, Tensioning of Spring

	HEIGHT & No. OF TURNS			
WIDTH	**3.1m**	**4.1m**	**5.1m**	**6.1m**
2.5m	0 *(1.7m long*	0	2	4
3.0m	2 *Spring)*	4	6	8
3.5m	4	7	3	4
4.0m	7	3	5 *(2.4m long*	7
4.5m	3	5	9 *Spring)*	4
5.0m	5	7	4	6 *(3.0m long*
5.5m	7	9	5	7 *Spring)*
6.0m	9	5	7	9

ATTENTION: To prevent spring damage, do not over-tension.

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Installing the Bottom Tube and Flap

13. Cutting bottom tube and flap (Figure 14a):

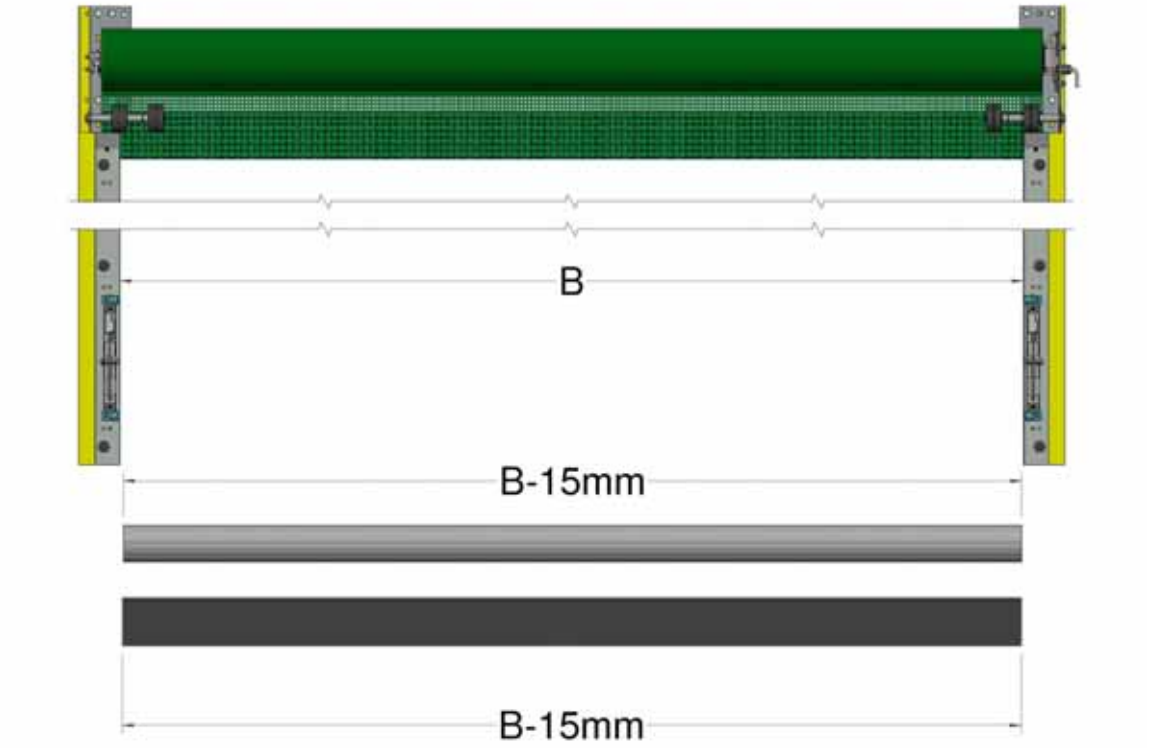

Figure 14a, Cutting Length of Bottom Tube and Bottom Flap

Bottom Tube = Gap between inside face of Guide Rails -15mm (-0.015m)

Bottom Flap = Gap between inside face of Guide Rails +15mm (+0.015m)

Using a diameter 5cm hole saw drill a hole in the bottom tube as shown in Figure 14b and file a notch at the bottom of the hole for the cable. The hole needs to be located on the inside of the door and at the drive end.

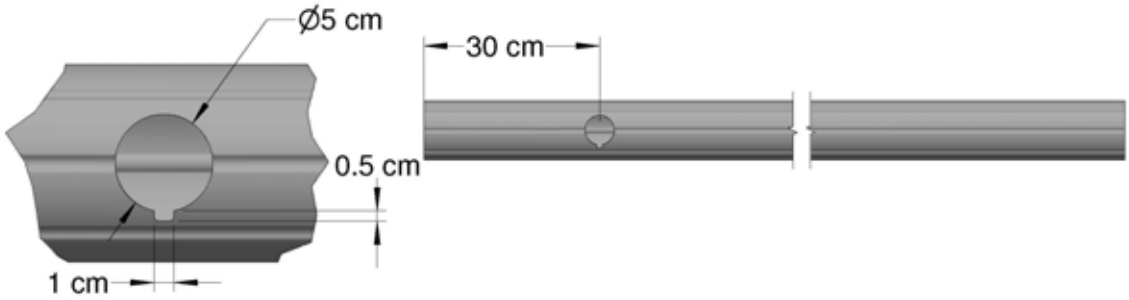

Figure 14b, Cutting Hole

NOTE: If your door is supplied with an Optical Edge Safety Kit, refer to instructions in Appendix II for details.

14. Pull the bottom fabric panel outside the guide rails and slide on the bottom tube (Figure 14c), centralise and trim excess fabric in each corner as shown.

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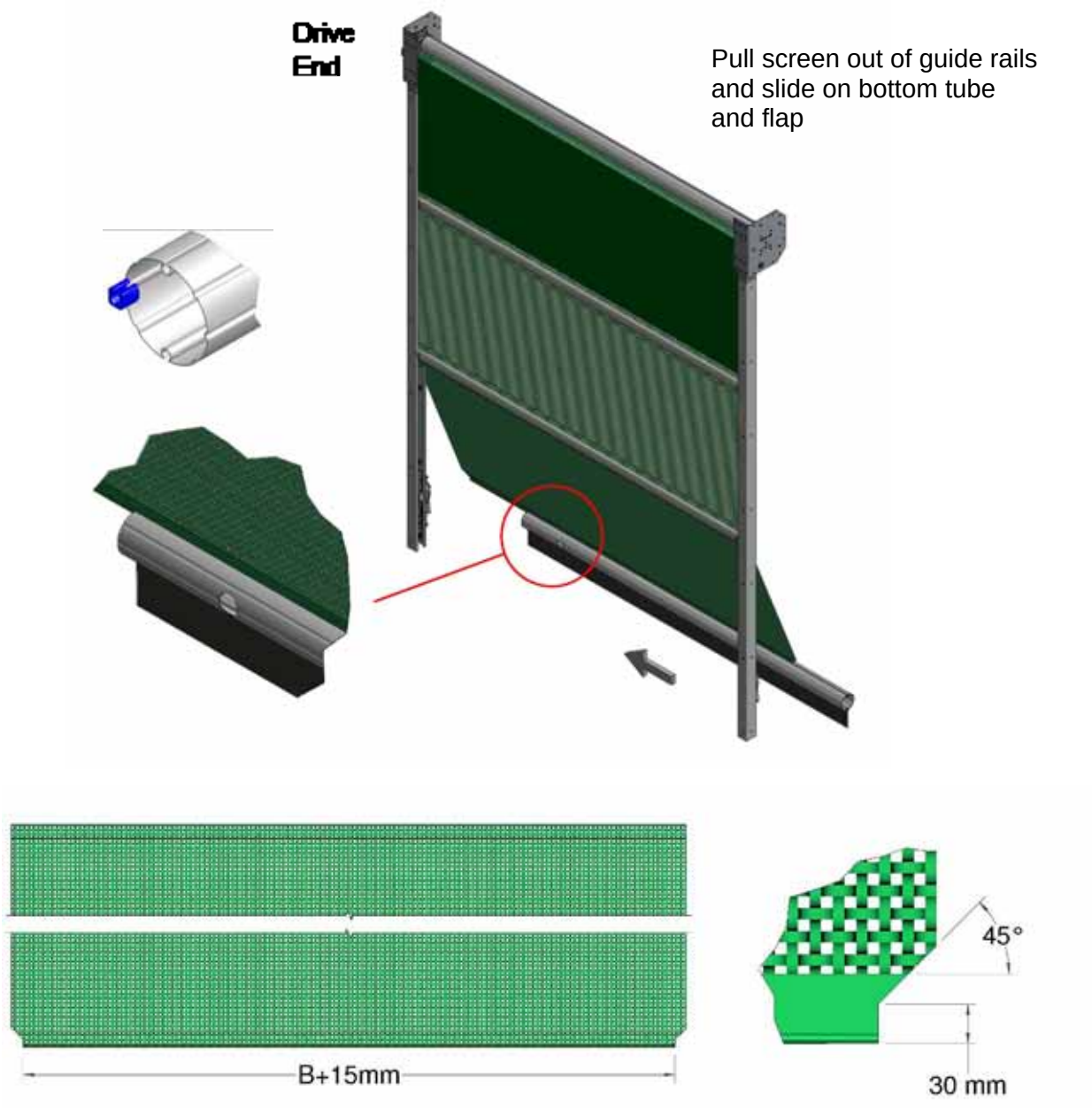

Figure 14c, Attaching Bottom Tube

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15. Feed the sensor wires (N2) in through the 5cm hole and out to each end of the tube. Insert the sensor housing into the hole with the wires aligning with the notch and secure to the tube using the M4x19 self-drilling screws.

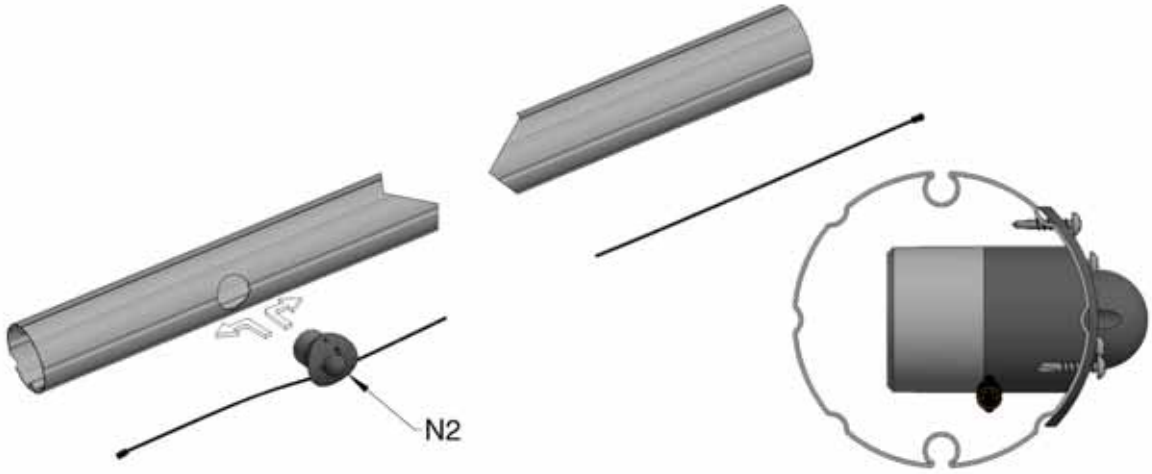

Figure 15a, Sensor Mounting

Connect the sensor cables (align the arrows and push together), push the inserts (K1/K2) into the tube with the arrow pointing **UP**, and fix using the M4 x 25mm self-drilling screws (Z1) supplied, fix on the inner side of the tube only. **Do not secure on the locking catch side as this could damage the sensors**. Secure flap with same self-drilling screws.

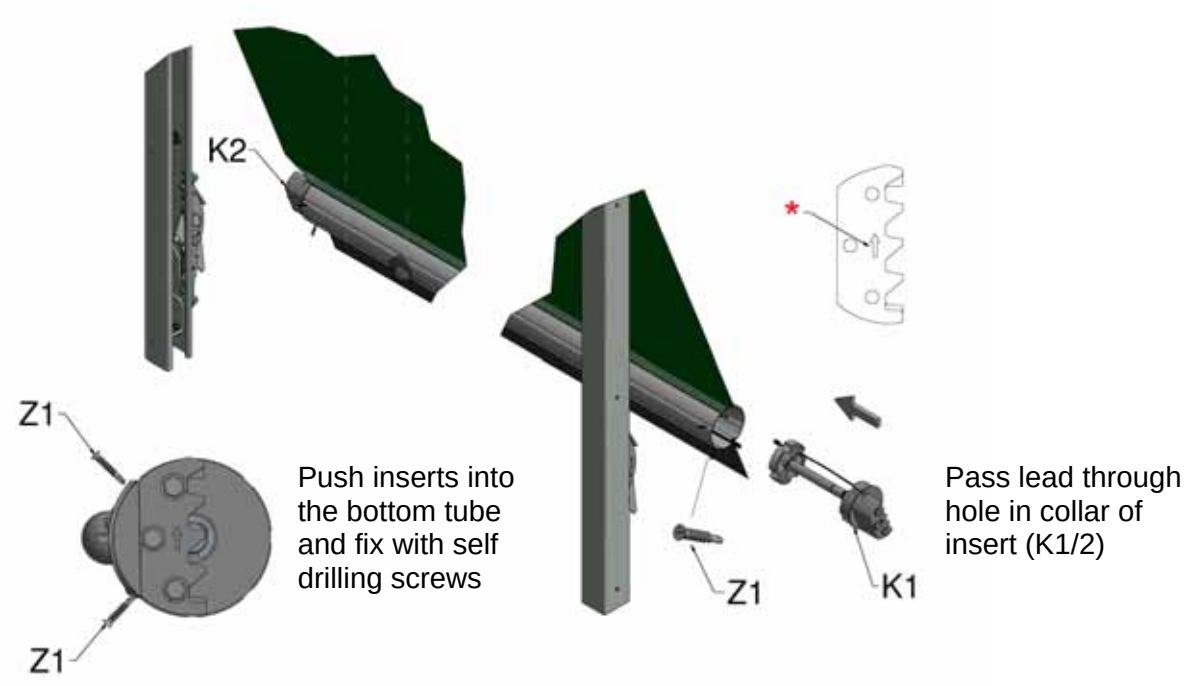

Figure 15b, Bottom Inserts

16. Lower your door fully and secure the fabric panel to the top and bottom tube with the self-drilling screws (Z1). It is important to tension sheet sideways before fixing to remove creases (Figure 16). Insert the screws into the top tube by a maximum of 35mm in from the edge to prevent damage to the spring and motor. Check the operation of the locking catches; it may be necessary to trim additional fabric above the tube to allow the swinging arm to fully close.

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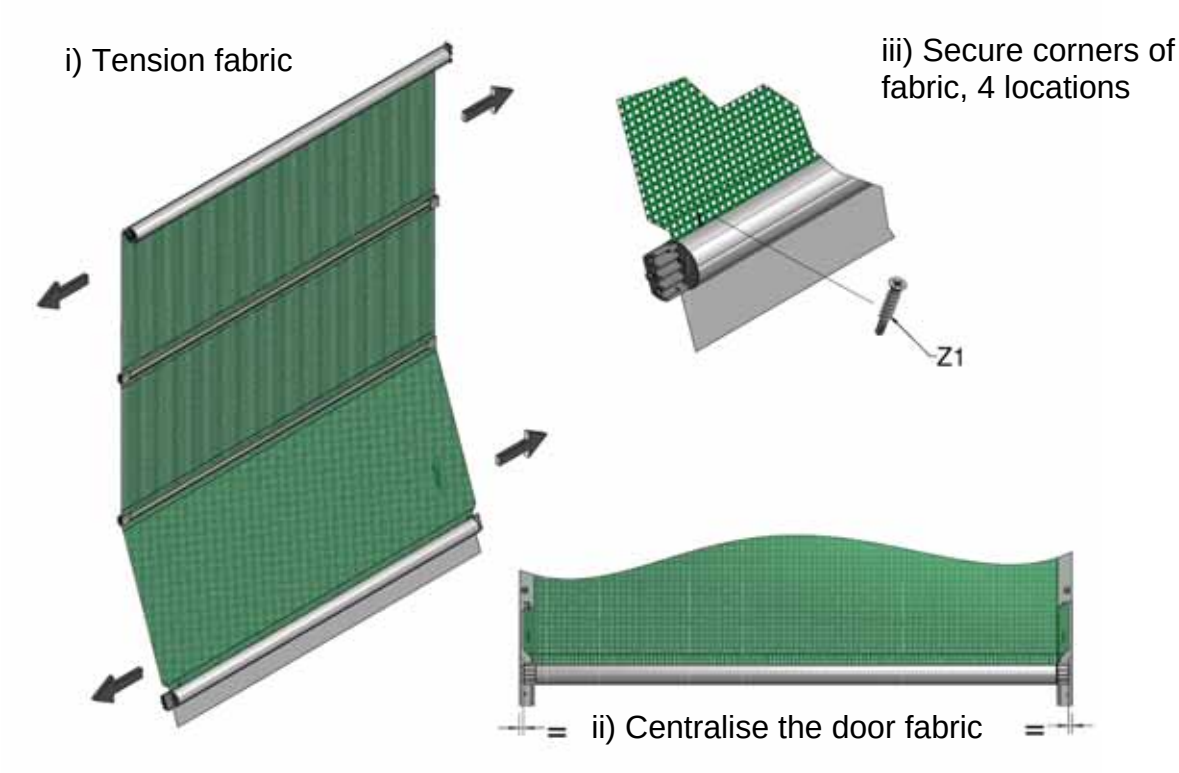

Figure 16, Centralising Screen

Electrical Commissioning - see AD10 Instructions section 5.6 and 5.7

17. Setting the Limits. The duty cycle of the motor is 4 minutes per hour, therefore it is important that operation of the motor is kept to a minimum during the setting process. If overused a thermal trip will stop the motor to prevent damage. Should this occur leave the motor for a minimum of 15 minutes to cool down & reset itself.

    Setting the limits should be carried out with the Control Box still in commissioning mode.

Top Limit: Fully open the door until the bottom tube is positioned just below the guide rollers. Set the Top limit at this position (Figure 8c).

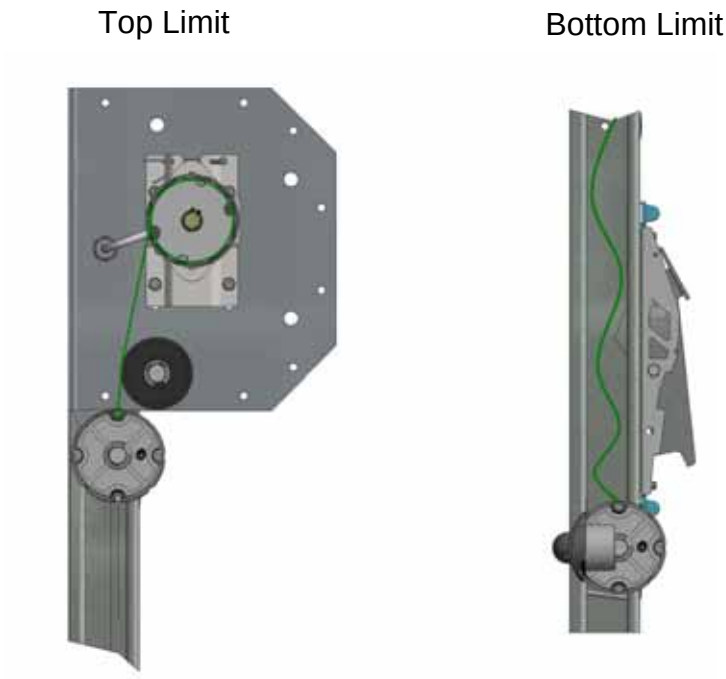

Figure 17, Setting Limits

Bottom Limit: Lower the door until the locking catch opens. Continue to operate the door in small steps until the fabric becomes slack. Set the Bottom limit at this position.

Setting limit positions are now complete. Drive the door through one complete opening and closing cycle to check the limit positions are correct.

When the electrical commissioning has been carried out in Section 17 it may be necessary to adjust the height of one locking catch to ensure both catches return over the tube insert with equal clearance. If this is the case slacken the locking catch bolts and raise one of the locking catches up and re-tighten the bolts.

Electrical Controls

18. Install the external switch on the outside of the building with the gland facing down and connect into the control unit (see AD10 Instructions section 5.2). Check that the UP and DOWN push buttons operate the door in the correct direction. If not swap wires 2 and 3 in the control box.

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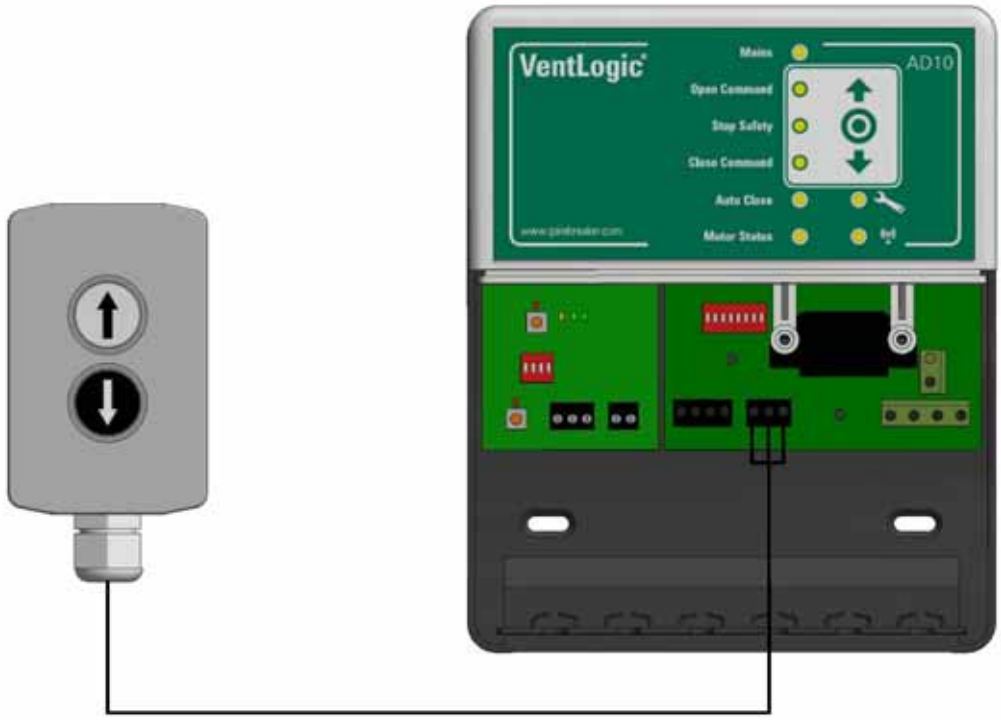

Figure 18, External Switch

CAUTION: For safety, position the switch in sight of the door

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Manual Override

19. Push the manual override eyelet into the motor gearbox and secure from above with the retaining screw supplied with the motor, Figure 19.

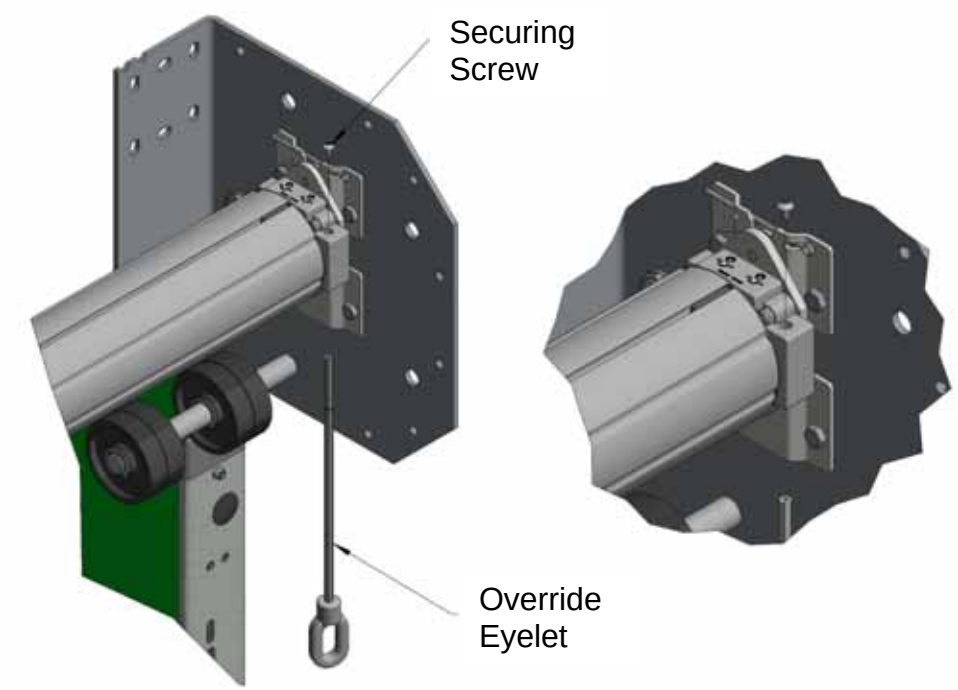

Figure 19, Manual Override Eyelet

Attaching Covers and Label

20. Clip the locking catch covers over the locking catches each side so that the internal studs locate in the holes of the catch. Attach the company details label supplied to the centre of the bottom tube.

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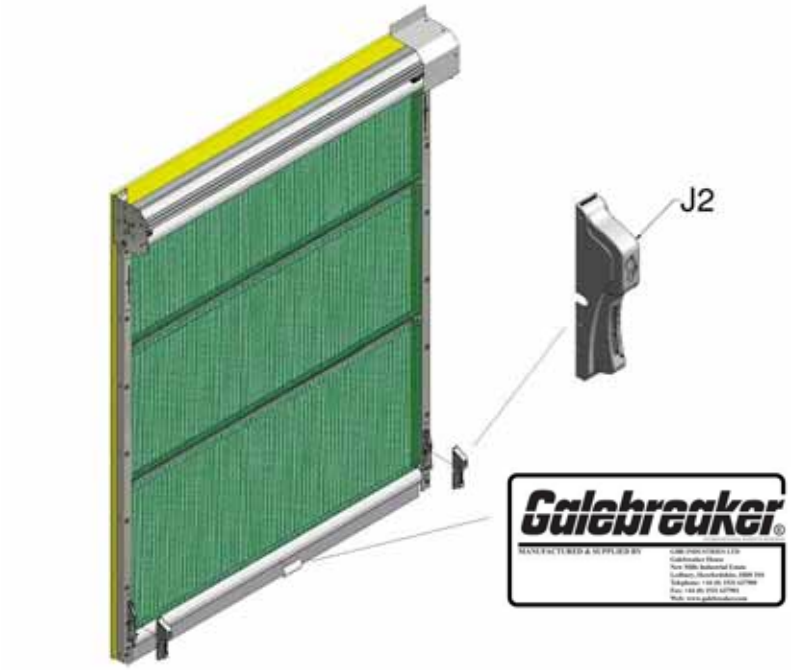

Figure 20, Cover and Label Location

Installing Motor Cowling (Standard) or Door Cowling (Optional)

21. Fit cowling support brackets (O2) to motor bracket using the M8 x 20 setscrews supplied (Q1), as shown in Figure 21. Fit 300mm cowling (O1) to cowling bracket with the M5.5 x 19 self-drilling screws supplied (AA1).

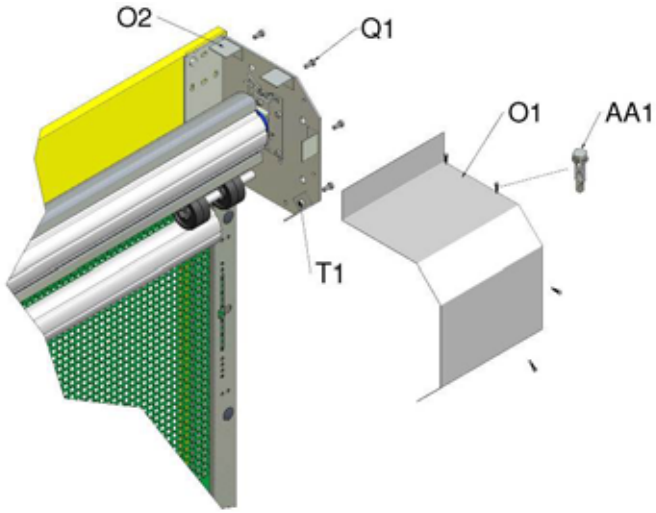

Figure 21, Motor Cowling Assembly

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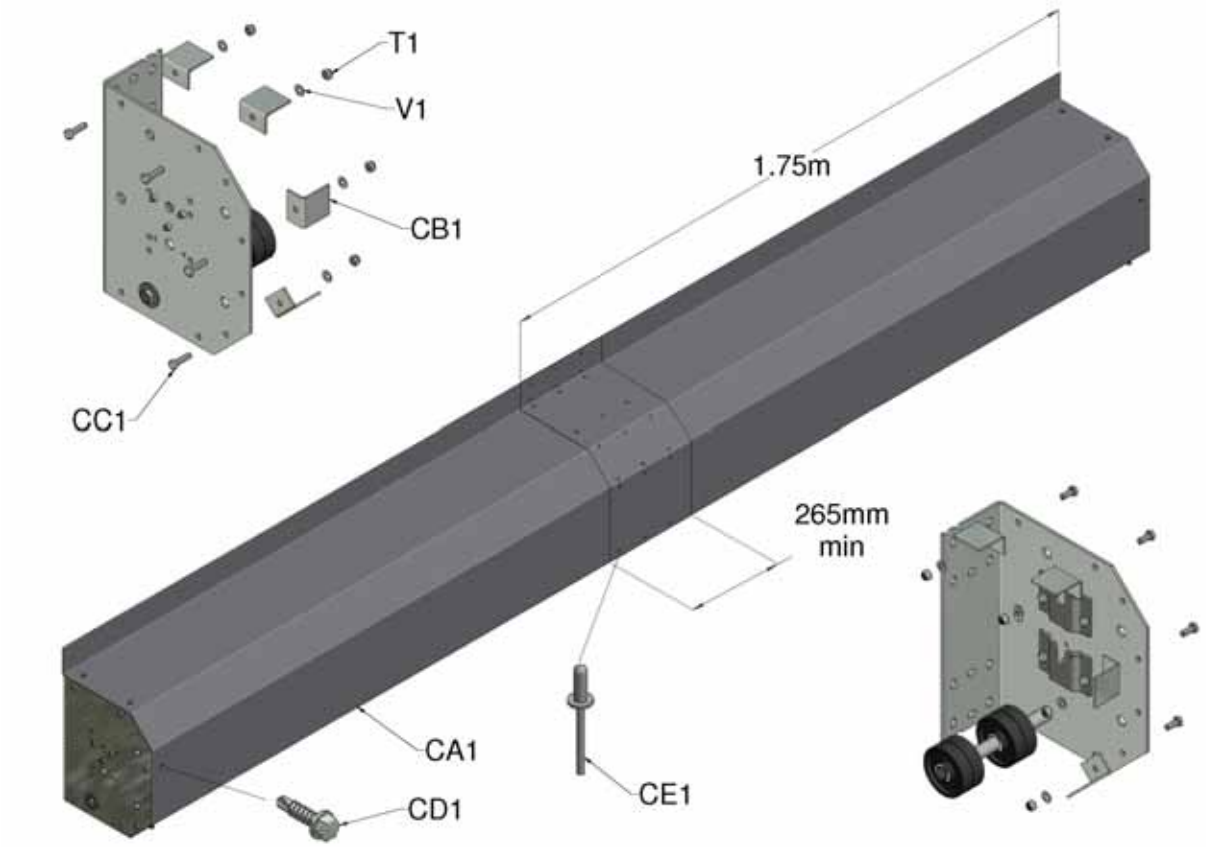
21 Door Cowling (Optional at extra cost)



REF:	Section .02 QTY	PART DESCRIPTION
CA1	*	1.75M Lengths of Cowling
CB1	8	Cowling Brackets
CC1	8	M8 x 20 Hex Bolts & Nuts
CD1	8	M5.5 x 19 Self Drilling Screws
CE1	*	M4.8 x 8 St Steel Rivets / per join
CF1	1	5mm Drill for rivets (not shown)

Figure 22, Door Cowling Assembly

C1. Fit cowling brackets (CB1) to the top brackets using the fixings (CC1).

C2. Join cowling with a minimum overlap of 265mm (Figure 22). Secure with 30 no. rivets, 6 in each of the five faces. Offer cowling to brackets and secure with M5.5 x 19 self-drilling screws supplied. Fix rear upstand to building, sealing to prevent water ingress if necessary.

NOTE: The Cowling is self-supporting and does not require intermediate brackets.

22. CE Marking Electrically Operated Products under Machinery Directive

It is the responsibility of the installer to check that the installation conforms to the specific safety features detailed in the Manufacturer's Installation Instructions, to issue the CE Declaration of Conformity and mark a power operated product under the Machinery Directive 2006/42/EC. To do this you will require the following which should be delivered with the product:

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1) This set of Installation Instructions *(operating and maintenance instructions)*
2) Maintenance Log Book, *(including Installation Checklist and Customer Declaration of Conformity)*
3) 1 x Declaration of Conformity (Installer Copy) – *to be completed*
4) A CE Label

When CE marking a power operated Galebreaker product, it is vital to follow the steps outlined below:

a) Install the product as per instructions, with no adaptations or modifications and complete of the *Health and Safety Checklist* in the Maintenance Log Book.

b) Complete the two 'Declarations of Conformity' using the following:

- **Model Type:** As shown on CE Label
- **Serial Number:** As shown on CE Label
- **Installation Company:** Your company name
- **Date Installed:** Date Installed
- **Declaration made by:** Responsible Person
- **Declaration and Instructions received by:** Customer's Signature

c) Fix the supplied CE label to the bottom tube. The label should be accessible / visible. Where the serial number does not incorporate the door size, add the Product width and Product height to the end of serial number using a permanent marker pen. i.e. the full serial number should read

Serial Number: **1234** / **ADET** **W** X **H**

[**W**] Product Width (m)

[**H**] Product Height (m)

d) Your customer must be given a copy of the completed ‘Maintenance Log Book’ along with the ‘Installation Instructions’ supplied by Galebreaker. These should be stored adjacent to the door controls for reference purposes.

e) Finally, ask your customer to sign the ‘Declaration of Conformity’ (Installer Copy). This important document must be filed back at the office of the installer for future reference

ATTENTION: Use of motors or controllers that are not supplied by Galebreaker, will make the installer the manufacturer (as defined by the Machine Directive 2006/42/EC) of the system and will require the installer to produce their own ‘EC Declaration of Conformity’ and product ‘CE label’.

In such circumstances the door supplied by Galebreaker becomes a partly completed machine and therefore a Certificate of Incorporation can be supplied on request. The installer MUST NOT use the CE documentation supplied by Galebreaker.

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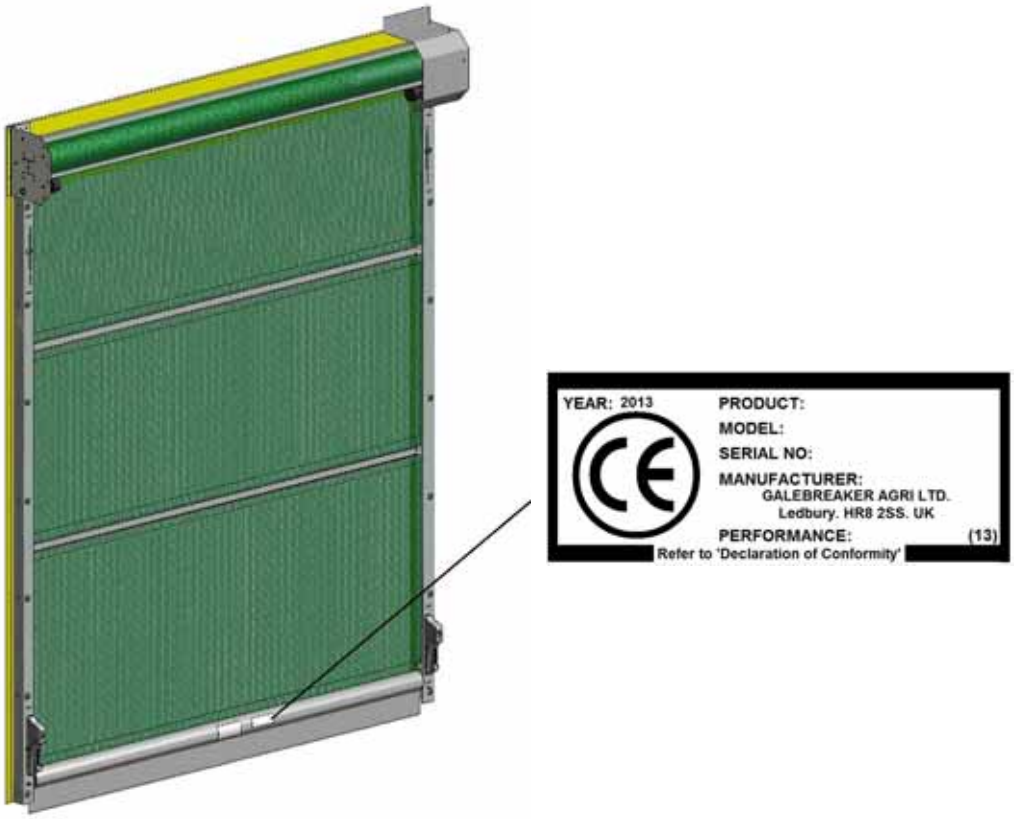

Figure 23, CE Label Location

YOUR DOOR IS READY FOR USE

OPERATION AND MAINTENANCE

How to use your door

From Open: Operate the switch to close your door, the bottom tube will lower until it passes the locking catch, Figure 24(iii). The control system will reverse the motor to tension the fabric. It will automatically turn off when it stalls Figure 24(iv). This action will tension the sheet & protect it from wind damage.

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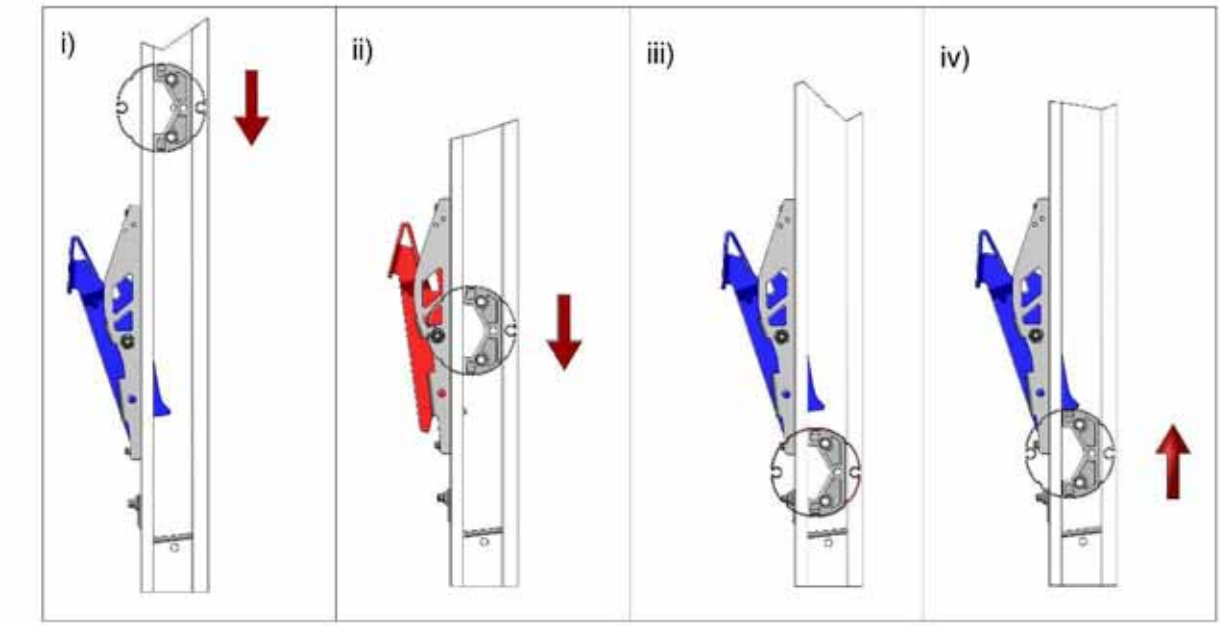

Figure 24, Closing Door

ATTENTION: It is vital that the door is either fully open or closed when the wind speed is above 32kph / 20mph

ATTENTION: It is vital that there is no obstruction under the bottom tube to prevent the de-activation of the locking catches otherwise damage to the fabric could occur.

From Closed: Operate the switch to open the door, the bottom tube will initially lower to contact the activation hooks and unlock the catch. The control system will reverse the motor direction to open the door, and as the lower tube passes the locking catches they will reset ready for the next door closure, Figure 25(iv).

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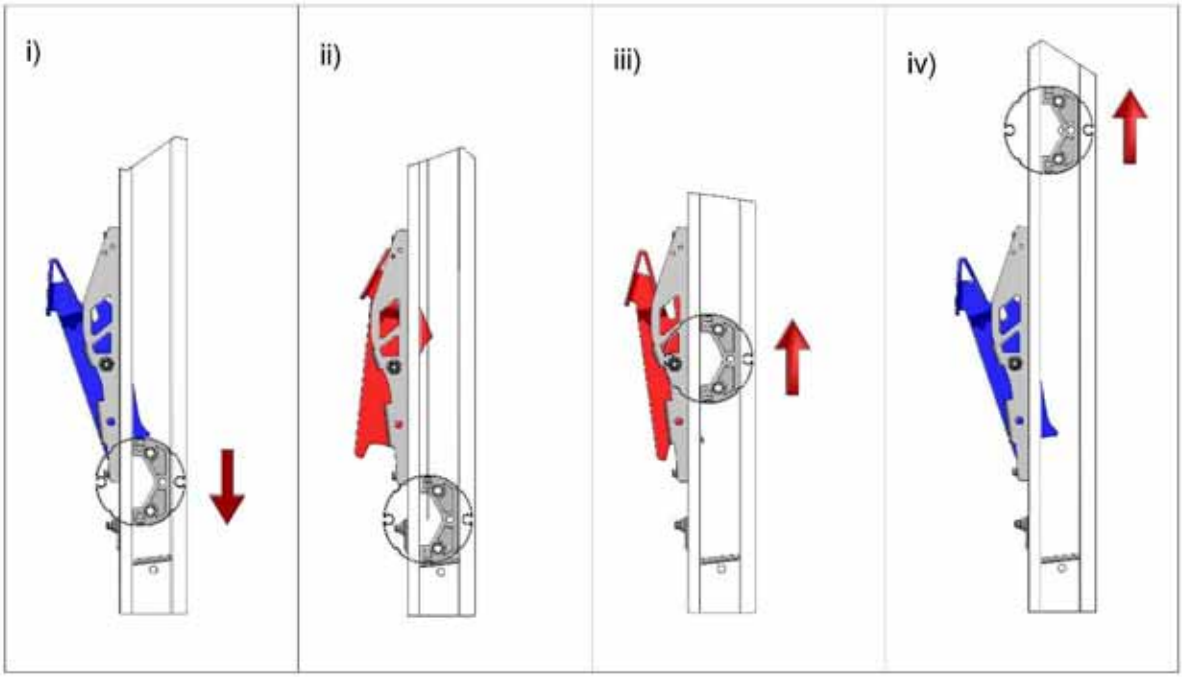

Figure 25, Opening Door

ATTENTION: The motor has built-in obstacle recognition and is not damaged by stalling under power

Door Duty Cycle

The maximum frequency of door operation is once every 30 minutes. One operation is classed as an open & close cycle. If the frequency is more than once every 30 minutes then the motor could overheat, and to protect itself from damage the motor will automatically stop. Should this occur leave the door for a minimum of 15 minutes to cool down & reset itself.

To gain access during power supply failure, insert the manual override hook AE1 into a power drill, engage the hook in the override eyelet and using the slow speed lower the door to disengage the locking catches before opening the door.

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Important Safety Information

- This door must only be operated by users familiar with its operation.
- When operating the door do not place fingers near the guide rails or other moving parts at any time.
- The person operating the door must have the door in sight at all times during its operation.
- Do not permit children to play with the door or its electrical controls.
- Do not modify or attach any objects to the door as this may cause damage and/or injury.
- Operate the door only when properly adjusted and free from obstructions.
- Should the door become difficult to operate or inoperable, consult your local dealer. Repairs should only be carried out by competent personnel.

How to maintain your door

- Check annually for corrosion of the supporting bolts fixing the product to the building, the bolt holding the shaft into the top brackets and the blind in general. Replace suspect items to ensure it is safe for operators and bystanders alike.
- The spring has a design life of 10,000 operations, which equates to using the door approximately 3 times a day for 10 years. After 10 years we recommend a replacement spring be fitted, or following the dismantling instructions given below remove the spring annually to ensure it has not broken.
- Check annually the electrical cables for damage. Use a qualified electrician for any repair.
- Annually clean the magnet on the locking catch to remove surface dirt.
- The motor and controls are maintenance free items. Should the fuse inside the contactor box (N1) require replacement, turn off the power before removing the lid.
- Should Screen material be damaged, repair with special repair kit (code SPS-99) available from your Galebreaker dealer, importer or head office.

How to dismantle your door

Follow the installation instructions in reverse order. In particular ensure all spring tension is removed before unbolting the top brackets to remove the roller assembly and recoil spring.

CAUTION: To prevent injury ensure spring has no residual tension before removal.

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NOTE: This product has been tested to European Standard EN 12424 with a Resistance to Wind Load rating of Class 5. Tried and tested in the harshest weather conditions, a summary of our guarantee is listed below, see our website for full details:

- **Mechanical components: 100% guarantee for two years, followed by an eight year graduated guarantee.**
- **Electrical components: 100% guarantee for two years, followed by a three year graduated guarantee.**

RAIN INGRESS:

Please note that in extreme weather conditions some moisture will penetrate a mesh material.

Wind Load Resistance:

Mesh 75% Solid	**Up to 25sqm = Class 5**
Solid Material	**Up to 25sqm = Class 5**

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RIGHTHAND TO LEFTHAND SPRING CONVERSION

RH = Drive bracket on the right with spring bracket on left

For LH to RH conversion, follow instructions in reverse order

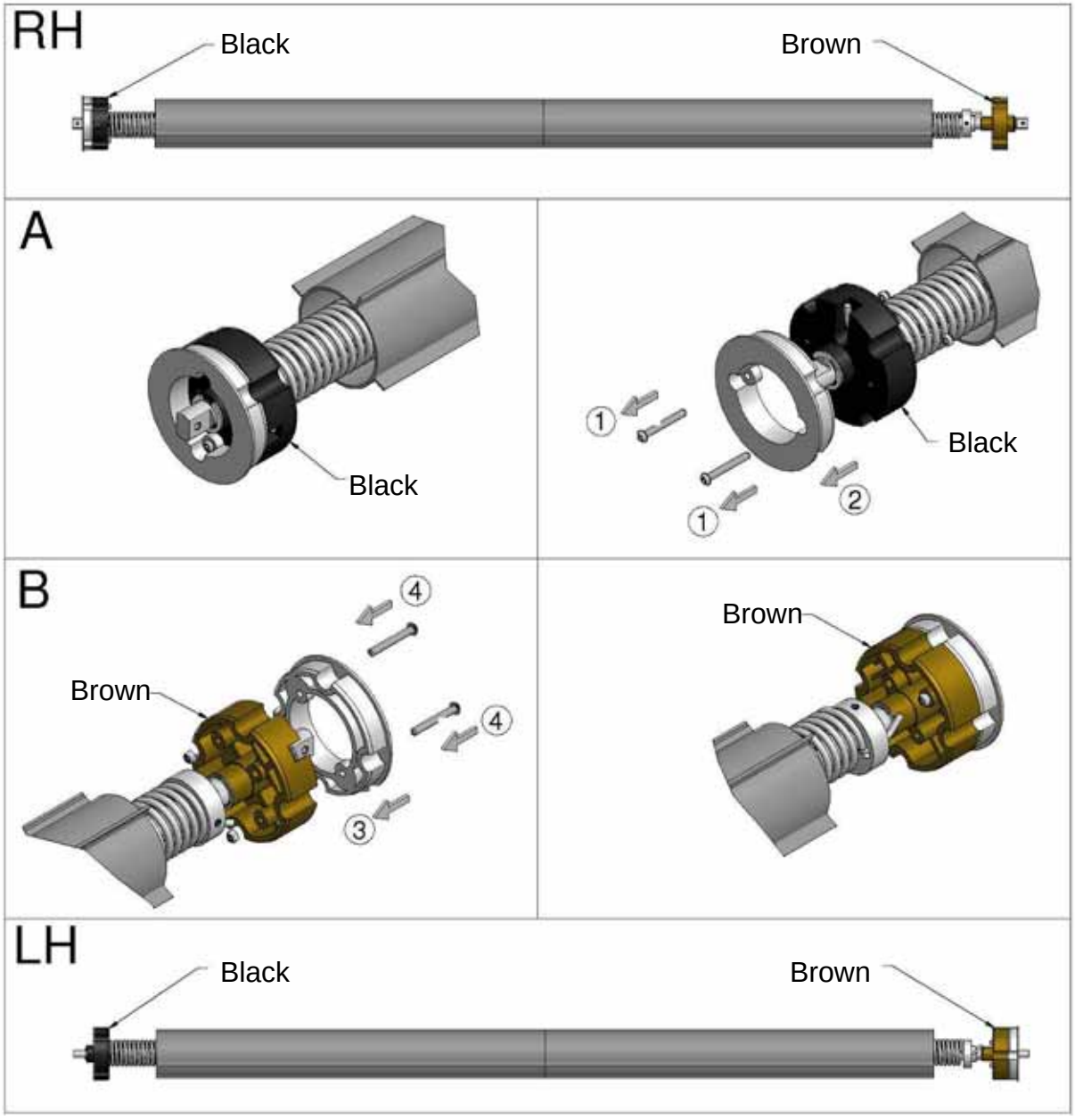

Figure 26, Spring Conversion

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<u>OPTICAL SAFETY EDGE KIT</u> – required for remote control operation

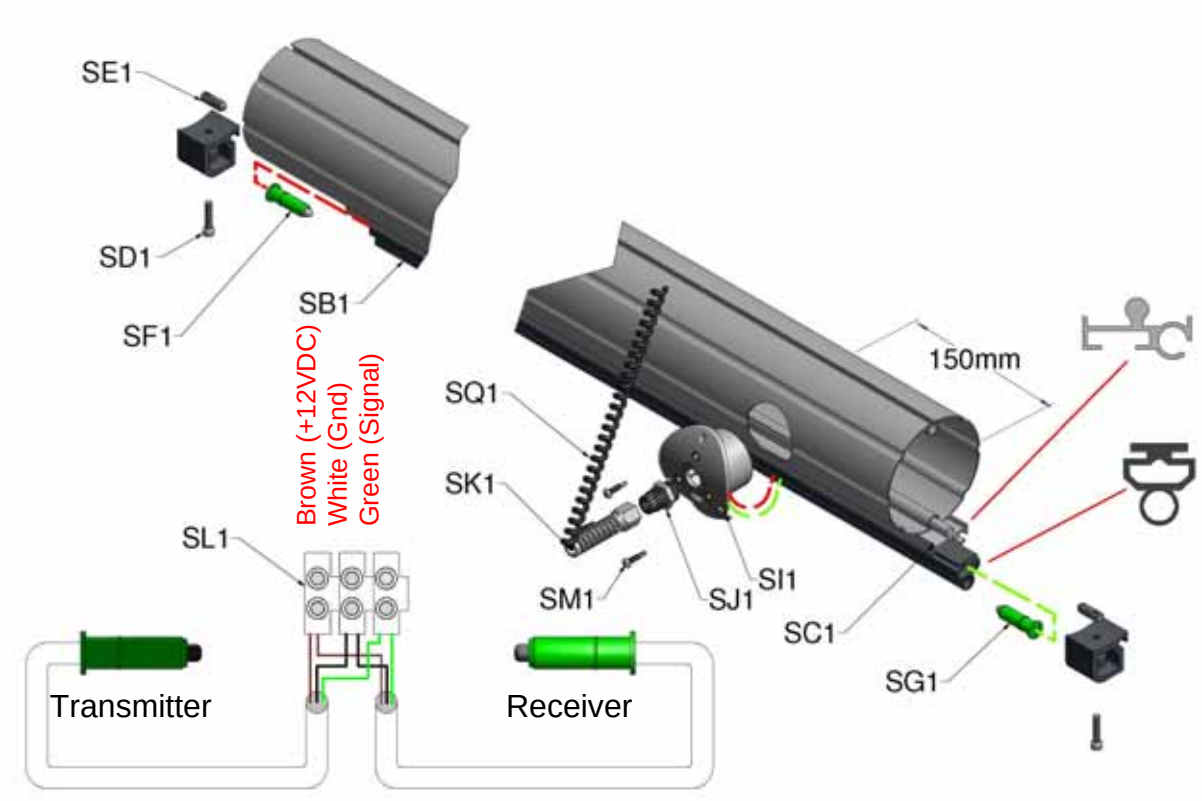

Figure 27, Optical Safety Edge Arrangement

REFERENCE	QTY	PART DESCRIPTION
SA1	2	Bumper Block
SB1	1	Rubber Profile
SC1	1	Aluminium Carrier
SD1	2	M5x40 Cap Screw
SE1	2	Insert Locker
SF1	1	Transmitter
SG1	1	Receiver
SI1	1	Enclosure
SJ1	1	Gland
SK1	1	Strain Relief
SL1	1	Connector Block
SM1	3	M4x19 Self drill screw
SN1	1	Offset Bracket
SO1	1	Junction Box
SP1	2	M8x16 Flanged bolt and nut
SQ1	1	Coiled Cable

The optical safety edge is to be assembled as shown in Figure 27. Drill a 50mm hole through the outer face of the bottom tube 150mm from the one end and on the motor side of the door. Cut the aluminium carrier profile (SC1) and rubber profile (SB1) to length B-75mm (see Figure 14a). Cut the lower flap to length B-15mm.

Slide the rubber profile and lower flap into the aluminium carrier profile and then slide the assembly into the bottom tube, Figure 28.

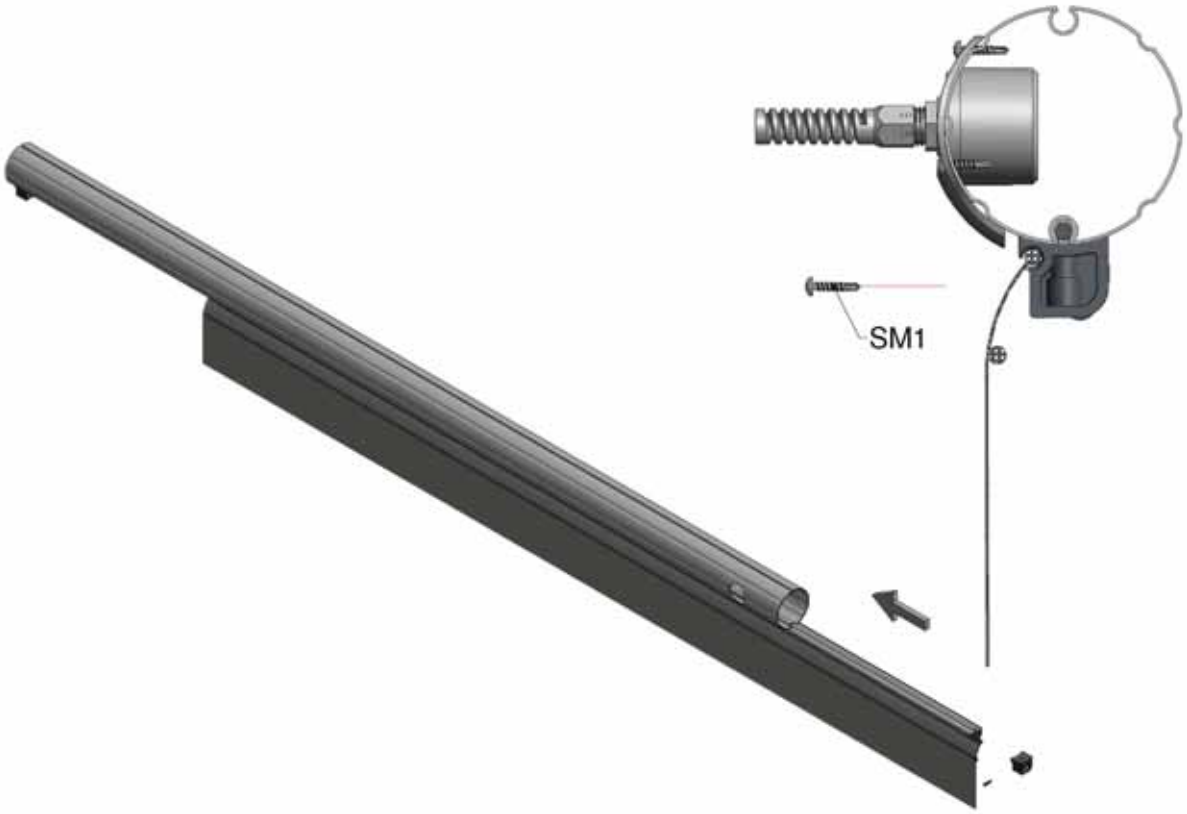

Figure 28, Bottom Flap

Cut a slit about 20mm long through the flap and rubber profile into the top cavity directly beneath the 50mm hole to allow the electrical cables to exit. Feed the transmitter (SF1) and receiver (SG1) cables in through the ends of the top cavity of the rubber profile and out through the slit.

Push the transmitter and receiver into the end bungs (SH1) and into the bottom cavity of each end of rubber profile. Fit the M5x40 cap screw (SD1) through the bumper block (SA1) and into the insert locker (SE1). Slide the insert locker into the bottom tube so that the bumper block is flush with the end of the tube and tighten.

Push the inserts (K1) into the tube, and fix using the M4 x 25mm self-drilling screws (Z1) supplied, secure flap with same self-drilling screws, see Figure 14b.

Wire the transmitter and receiver into the connector block (SL1), feed the end of the spiral cable (SQ1) through the strain relief (SK1), gland (SJ1) and enclosure lid (SI1). Connect the matching colours into the connector block, place the connector block into the enclosure body and secure the lid.

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Fix the enclosure into the 50mm hole in the bottom tube and secure with the M4x19 self drilling screws.

The free end of the optical edge flexible cable is to be wired in to a junction box (SO1) fixed to the offset bracket (SN1) attached to the guide rail using M8x16 flanged bolts and nuts (SP1). The height of the offset bracket is to be approximately half the height of the door, as shown in Figure 29.

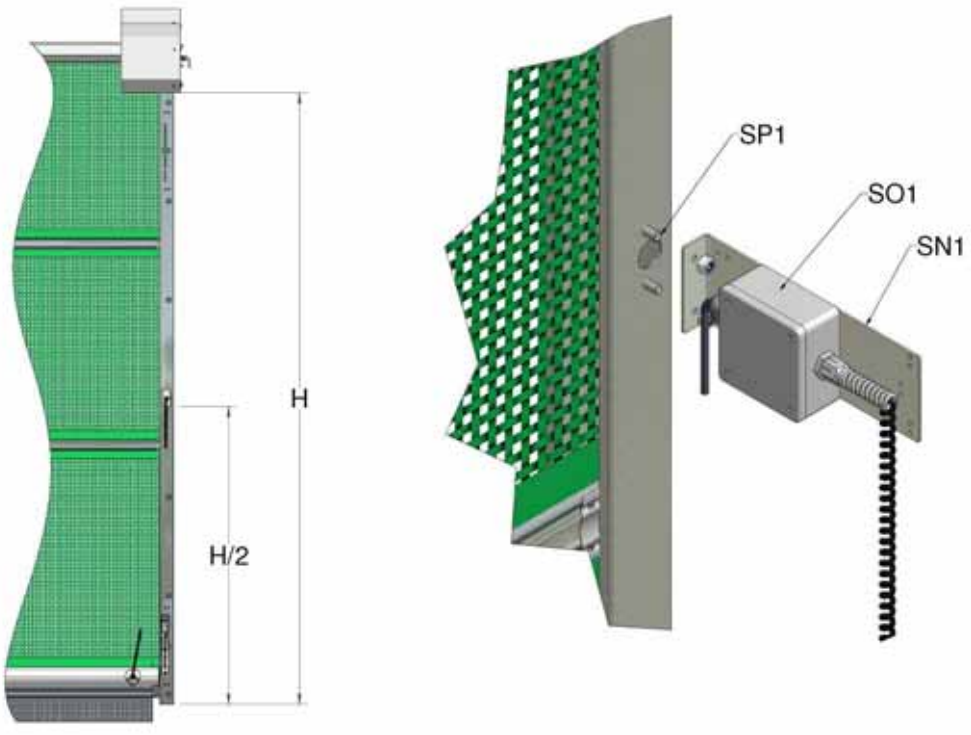

Figure 29, Offset Bracket

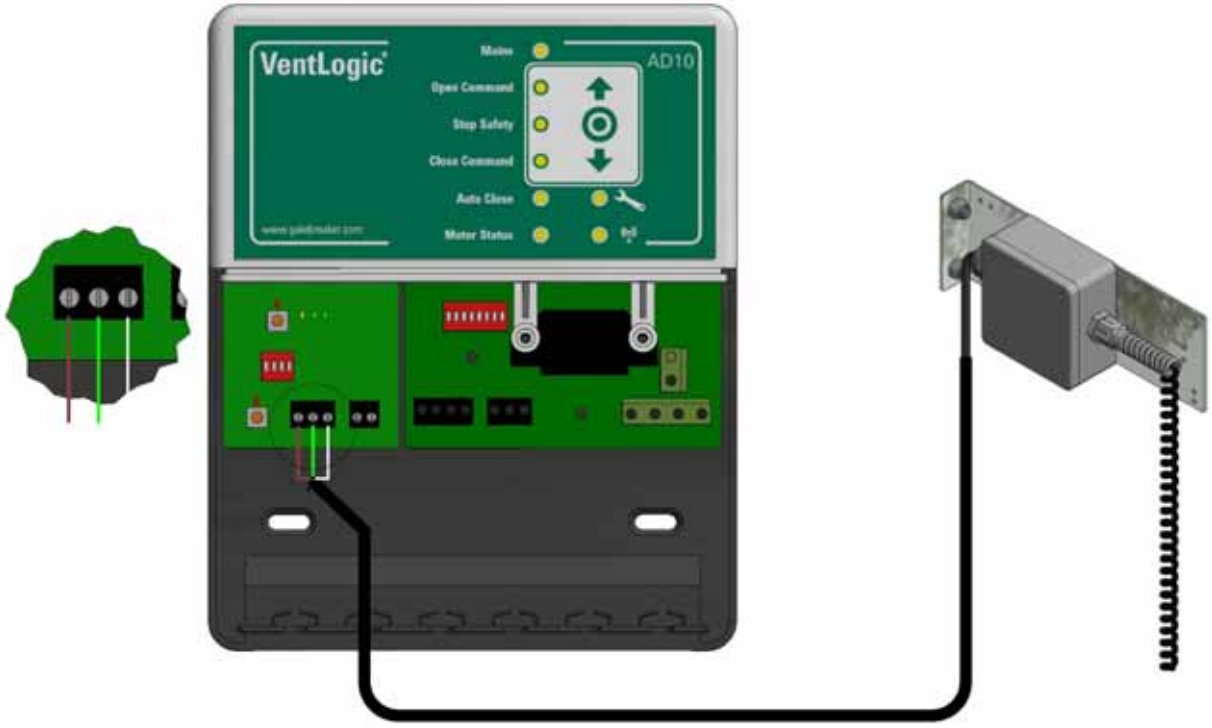

Figure 30, Safety Edge Wiring

Join the straight cable to the flexible cable in the junction box (matching the colours) and wire in to the AD10 Controller (N1) as shown, Figure 30. Set DIP 2 switches 3 & 4 (see AD10 Instructions Section 5.2 and 5.4).

ENG

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www.galebreaker.com

Designed and Manufactured in the UK by Galebreaker Agri Ltd.,
Original Instructions

Model No: ADET/Mk10/17/07 **Instruction Ver: 2017/07/ENG**