# Rollerdoor with Guide Rails



Installation Instructions



ROLLERDOOR – GUIDE RAILS Introduction

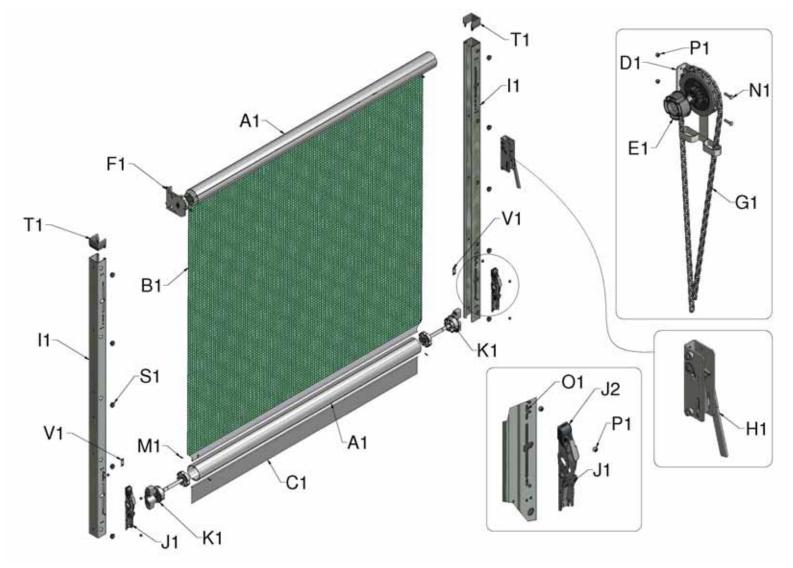


Figure 1, System Overview and Individual Components

## **INTRODUCTION**

#### Parts List

| REFERENCE: | QTY  | PRODUCT DESCRIPTION   |
|------------|------|---|
| A1         | 2    | Top and Bottom Tubes  |
| B1         | 1    | Screen Material   |
| C1         | 1    | Bottom Flap   |
| D1         | 1    | Drive Bracket   |
| E1         | 1    | Drive Collar  |
| F1         | 1    | Spring Assembly (Left-Hand Insertion Shown)                 |
| G1         | 1    | Operating Chain   |
| H1         | 1    | Chain Tensioner   |
| l1         | 2    | 'C' Section Guide Rail (4 supplied in some instances)       |
| 12         | *    | Aligning Pins if Guide Rails Require Joining (not shown)    |
| J1         | 2    | Locking Catch Bracket                                       |
| J2         | 2    | Locking Catch Cap   |
| K1         | 2    | Bottom Tube Insert  |
| L1         | 1    | 6mm Nylon Insert for Bottom Flap (not shown)                |
| M1         | 8    | M4 x 19 Self Drilling Screws for Fixing Screen and End Caps |
| N1         | 12   | M8 x 30 bolts for Fixing Brackets to a Steel Building       |
| 01         | 4    | M8 x 20 Hex Bolts to Fix Locking Catch Brackets             |
| P1         | 12   | M8 Nylocs   |
| Q1         | *    | M8 Washers  |
| R1         | 1    | 140 x 45mm Yellow Template (not shown)                      |
| S1         | 26   | Guide Rail Plug   |
| T1         | 1 pr | Guide   |
| U1         | 2    | M6 x 12 Hex bolt and Nyloc Nut                              |
| V1         | 2    | Locking Catch Adjuster Stop                                 |

Quantity dependent on door size

## Your Safety

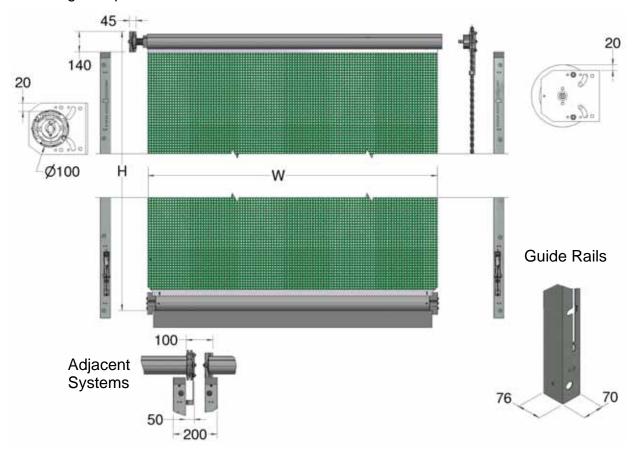
The larger doors will require a mechanical lift to mount the roller assembly onto the top brackets. The respective weights are given in the table below based on standard material. Add 5% to this figure for doors supplied with 'HP' fabric, and 15% for doors supplied with black Stockscreen and solid fabrics.

|       | HEIGHT |      |      |
|-------|--------|------|------|
| WIDTH | 2.1m   | 3.1m | 4.1m |
| 2.5m  | 39kg   | 39kg | 40kg |
| 3.0m  | 43kg   | 43kg | 44kg |
| 3.5m  | 47kg   | 47kg | 48kg |
| 4.0m  | 51kg   | 51kg | 59kg |
| 4.5m  | 61kg   | 62kg | 64kg |
| 5.0m  | 65kg   | 67kg | 68kg |
| 5.5m  | 69kg   | 71kg | 72kg |
| 6.0m  | 74kg   | 75kg | 76kg |

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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.



| Order Width (m) | Fabric Width (m) |
|-----------------|------------------|
|                 | (111)            |
| 2.5             | 2.5              |
| 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 (m) |
|------------------|----------------|
| 3.1              | 3.10           |
| 4.1              | 4.10           |
| 5.1              | 5.05           |

Figure 2, Fitting Requirements



CAUTION: To safeguard against any danger points, the minimum height 'H' of any door is 2.5m.

In the event of 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<br>(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

#### 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 base on a door with a right-hand drive, if you have ordered a left-hand drive then reverse the references. To change drive orientation on-site refer to Appendix I for details of spring conversion.

#### 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**

This door is a manually operated vertically moving rolling door comprising of a flexible curtain capable of being rolled and for which the main intended uses are giving safe access for goods and vehicles accompanied or driven by persons.

#### Items Required By The Installer

Standard tool kit including:

- Electric drill
- Angle grinder
- Sharp pair of scissors or knife
- Spirit Level
- Bolts for fixing the brackets to steel up to 12mm thick are supplied, if fixing to a
  wooden or concrete building you will require eight M8 fixings to fasten the top
  brackets and M8 fixings for the guide rail at 1m centres.

#### **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 it is advisable to read these instructions completely to understand the procedure and keep the instructions supplied for reference purposes.

NOTE: Colour versions of the installation instructions can be downloaded from our website:

www.galebreaker.com

#### <u>INSTALLATION</u>

#### Door Assembly

- Check the contents of your door against the parts list using Figure 1. Do not let the screen material come into contact with any sharp objects or edges.
- Using the yellow template (R1), drill M8 holes for the two top brackets. The
  maximum recommended overlap for Post Fixing (Drive End) = 150mm, Post
  Fixing (Free End) = 100mm and for lintel fixing = 175mm (Figure 3). It is essential
  that the top brackets are level and upright.

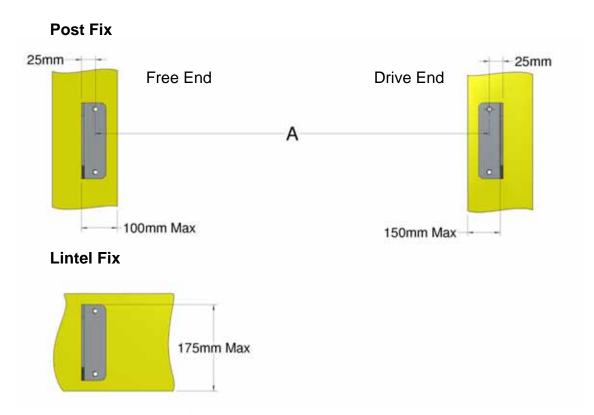


Figure 3, Top Bracket Positioning



ATTENTION: To prevent abrasion and material fray, maximum overlap between bracket face and edge of fixing must not exceed that shown in Figure 3. If overlap exceeds these recommendations ensure there are no sharp objects on the building to damage the material, and rough surfaces such as concrete is protected with PVC strip or similar.

3. Slide drive collar (E1) onto chain wheel gear attached to drive bracket (D1) and bolt assembly to the building with M8 fixings supplied, Figure 4a. The orientation of the drive bracket is as specified when you ordered your door, see Figure 4b and 4c, the spring is situated on the opposite side. If you wish to fit the drive bracket to the opposite side to that ordered, refer to instructions in Appendix I.



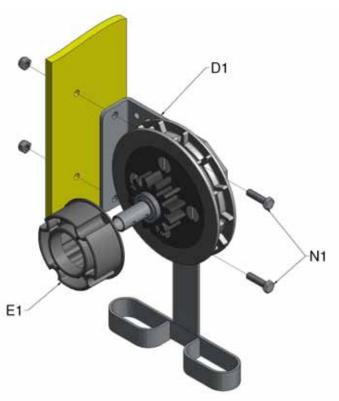


Figure 4a, Attach Drive Bracket to Building



CAUTION: Only use M8 bolts or greater to fit the door. Ensure all brackets are securely fastened to the building. Failure of these fixings will result in your door falling off the building, potentially injuring operators and bystanders.

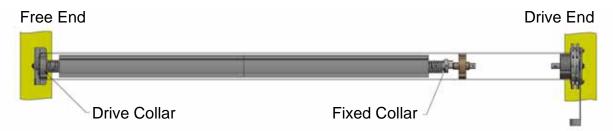


Figure 4b, RH Door, Drive Bracket on the Right

Figure 4c, LH Door, Drive Bracket on the Left



ATTENTION: It is vital that the spring is fitted in accordance with these instructions; otherwise it will suffer terminal damage, for which Galebreaker is not liable.

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

#### 4. Cutting lengths

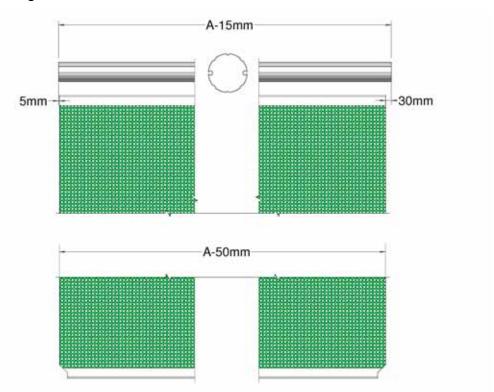
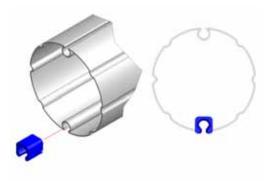


Figure 5, Standard Cutting Lengths of Tubes and Fabric

Top Tube = Distance between centre of drilled holes -15mm (-0.015m)

Screen = Distance between centre of drilled holes -50mm (-0.050m)

(35mm shorter than top tube)



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Push the Flute Guide Insert over the end of the flute in the tube 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.

5. Slide the screen material (B1) into the flute of the top tube and fully roll up. Tie up the roller assembly (Figure 6a).

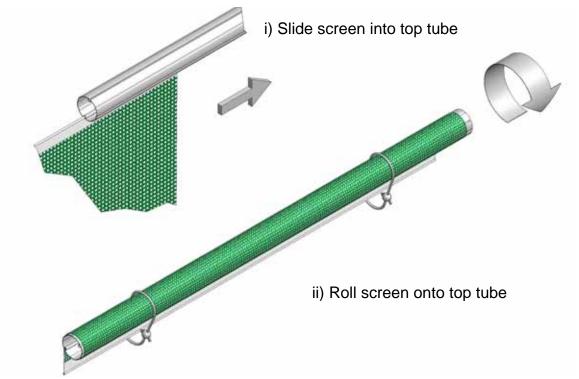


Figure 6a, Fabric Attached to Top Tube and Rolled Up

Slide spring assembly (F1) into the top tube (A1). Lift assembly into position, checking that the fabric rolls off the back of the top tube (Figure 6b).

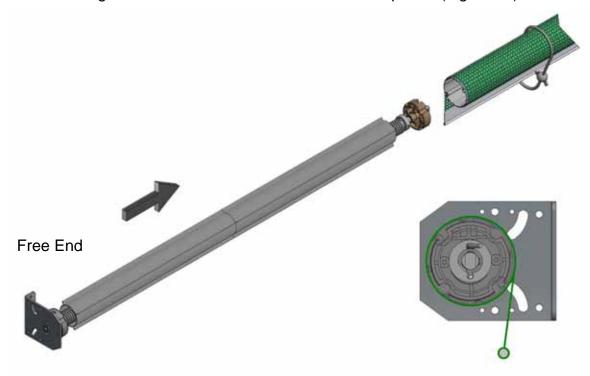


Figure 6b, Insert Spring Assembly into Top Tube

Locate top tube on the drive collar and bolt the free end (spring) bracket to building with M8 fixings supplied (Figure 6c). If optional cowling has been supplied, fit cowling brackets at this stage, see Point 17.

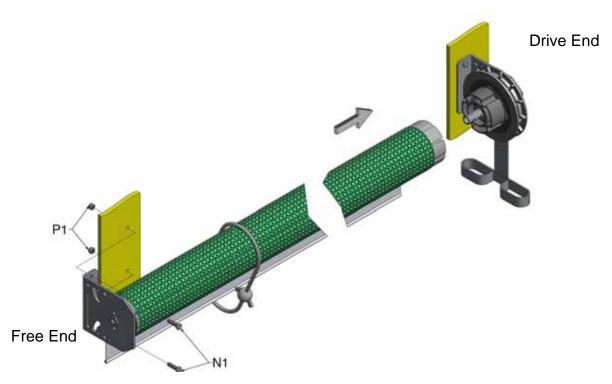


Figure 6c, Bolt Free End Bracket to Building



ATTENTION: Check the material rolls off the back of the top tube and the spring is in correct position. It is vital these instructions are followed correctly; otherwise the spring will be damaged.

6. Equally cut the two guide rails (I1) to fill the gap between the underside of the top brackets and the ground, allowing 4 cm for the guide (T1). Make sure that the uncut end with the slot and holes is at the bottom ready to accept 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 (U1) in the front face, Figure 7.

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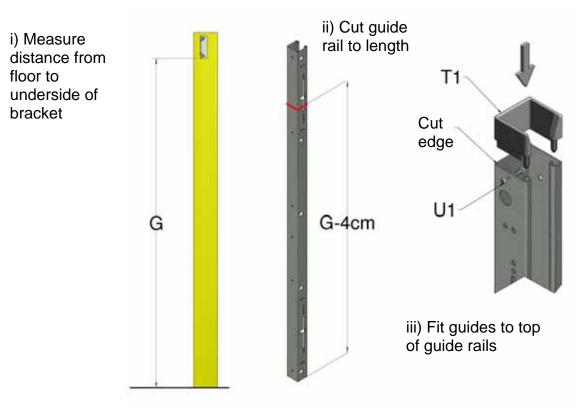


Figure 7, Cutting Lengths of Guide Rails

7. The Guide Rails are to be positioned so that the Free End Guide Rail is flush with the spring bracket (F1) and the Drive End Guide Rail is offset by 50mm from the drive bracket (D1), as shown in Figure 8a. The cut ends of guide rails are to be positioned next to wall brackets.

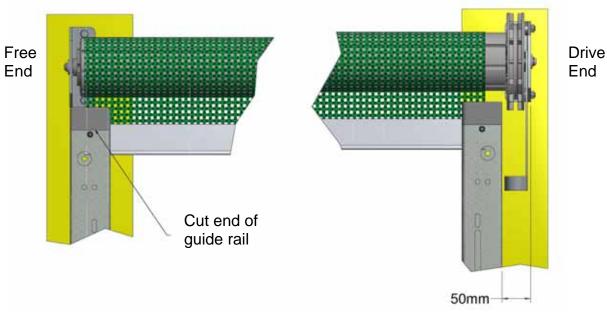


Figure 8a, Guide Rail Positioning

Fit the guide rails to the building with M8 fixings at 500mm centres, see Figure 8b for the standard installation layout. If the guide rails are supplied in part lengths align each section with joining pins supplied.

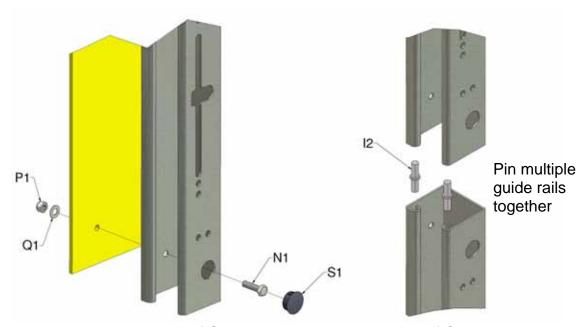


Figure 8b, Bolting of Guide Rail to Wall and Joining of Guide Rail

8. Bolt the locking catches (J1) to the pre-punched slots at the base of the guide rails using the M8x20 set screws (O1) and lock nuts supplied (P1). Pass the upper catch screws through the locking catch stop plate (V1) fitted on the inside of the guide rail to prevent the catch sliding up the pre-punched slots. Ensure the swinging arm of the locking catch clears the long slot in the guide rail. Fit caps (J2) to top of locking catches.

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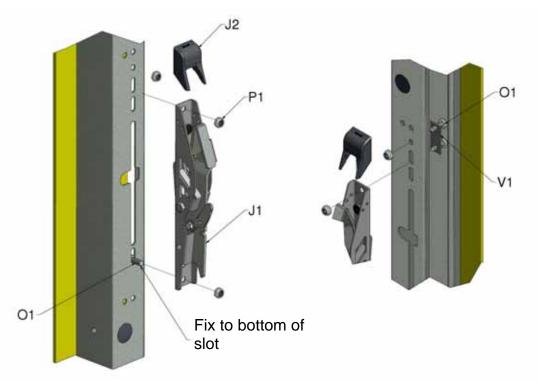


Figure 9, Bolting Locking Catches to Guide Rail

9. Feed the operating chain (G1) around the chain wheel, through the chain guide and trim to length if required. Make chain into a continuous loop by cutting through one link, bending open and rejoining the ends. After closing, file away any sharp edges to ensure the chain does not injure operators; it is not necessary to weld the link shut. Install the chain tensioner (H1) to the guide rail or building with two M8 fixings. The height of the chain tensioner depends upon your installation, but is typically 1.5m high.

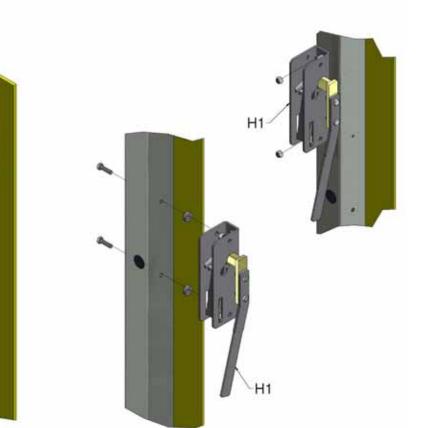


Figure 10, Installation of Operating Chain and Chain Tensioner

NOTE: If you wish to fit the chain tensioner to the Left Hand side, refer to instructions in Appendix II.

10. Pre-tension the spring mechanism by rotating the roller assembly in the direction shown in Figure 11, this is done by pulling down on the inner chain as shown. The number of pre-tension turns is given in the table below. When the required number of turns has been reached, lock the operating chain into the chain tensioner.



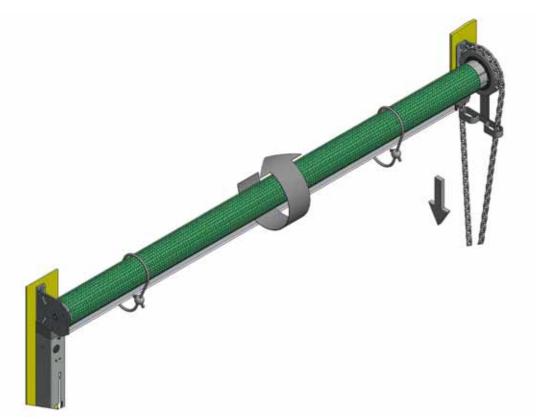


Figure 11, Tensioning of Spring

|       | HEIGHT & No. OF TURNS |                |      |  |
|-------|-----------------------|----------------|------|--|
| WIDTH | 3.1m                  | 4.1m           | 5.1m |  |
| 2.5m  | 8 (2.                 | 32m spring 8   | 8    |  |
| 3.0m  | 9 wit                 | h red tag) 9   | 9    |  |
| 3.5m  | 10                    | 10             | 10   |  |
| 4.0m  | 11                    | 11             | 7    |  |
| 4.5m  | 8 (2.                 | 97m spring 8   | 8    |  |
| 5.0m  | 9 wi                  | th blue tag) 9 | 9    |  |
| 5.5m  | 9                     | 9              | N.A. |  |
| 6.0m  | 10                    | 10             | N.A. |  |

NOTE: Additional pre-tension: Add one extra for doors supplied with 'HP' fabric, and two extra for doors supplied with black Stockscreen and solid fabrics.



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

11. Cutting bottom tube and flap:

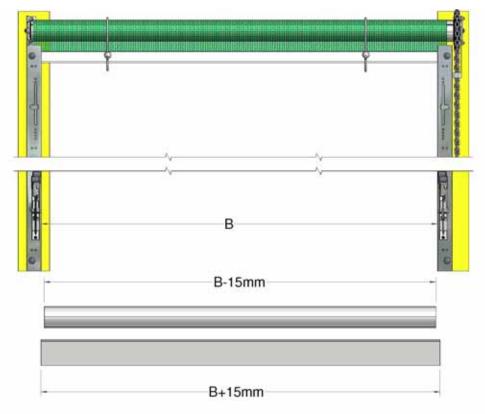


Figure 12, Cutting Length of Bottom Tube, Insert and Flap

Bottom tube = gap between inner faces of guide rails - 15mm (-0.015m)

Insert = gap between inner faces of guide rails +15mm (+0.015m)

Bottom Flap = gap between inner faces of guide rails +15mm (+0.015m)

12. Slide nylon insert (L1) into the pocket of the flap (C1) and slide flap into bottom flute, Figure 13.

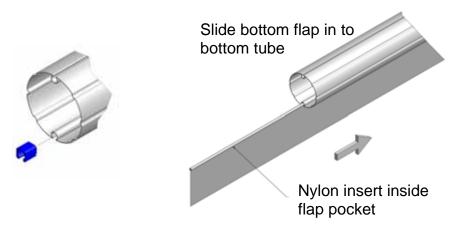


Figure 13, Flap Attached to Bottom Tube

#### **Attaching Bottom Tube**

13. Until the top tube assembly and lower the door. Pull the fabric outside the guide rails and slide on the bottom tube, Figure 14a, centralise and trim excess fabric as shown in Figure 14b. Push the inserts (K1) into the tube and fix using the M4x19mm self-drilling screws supplied (M1).

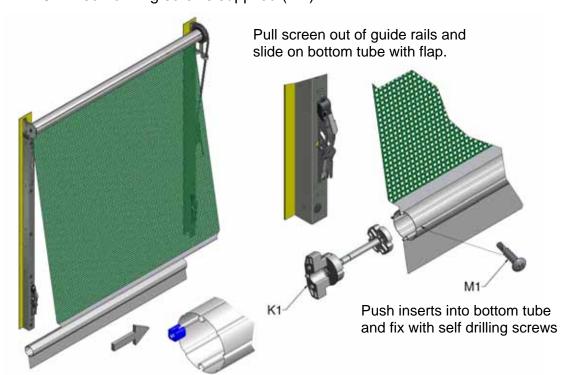


Figure 14a, Attaching Bottom Tube

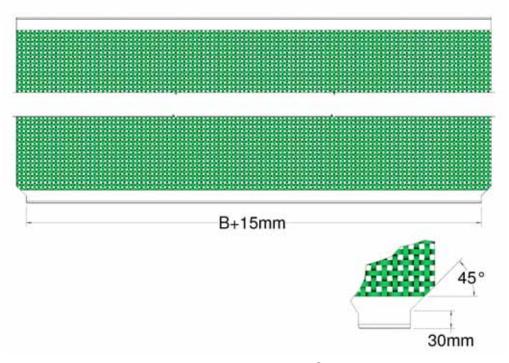


Figure 14b, Trimming Sheet

#### Securing Fabric

14. Lower your door fully, centralise the screen and secure each corner using 19mm self-drilling screws supplied (M1). It is important to tension sheet sideways before fixing to remove creases as shown in Figure 15. Insert one end of the bottom tube into the guide rail, lift and insert the other end into the opposite guide rail.

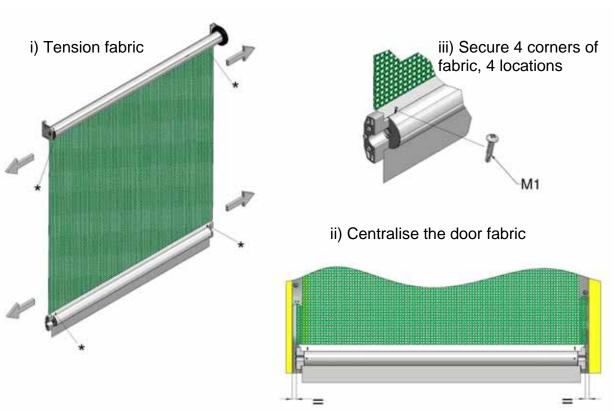


Figure 15, Centralising Screen

15. Finally adjust the operating chain such that when the door is lowered the joining link is situated below the chain tensioner. During high winds there is considerable force on the chain between the wheel and the chain tensioner and there is the risk that the joint would fail in these circumstances.

16. Attach the locking catch instruction labels to the front of the guide rails at a convenient height, typically 1.5m from the ground. Attach the company detail label centrally to the front of the bottom tube.

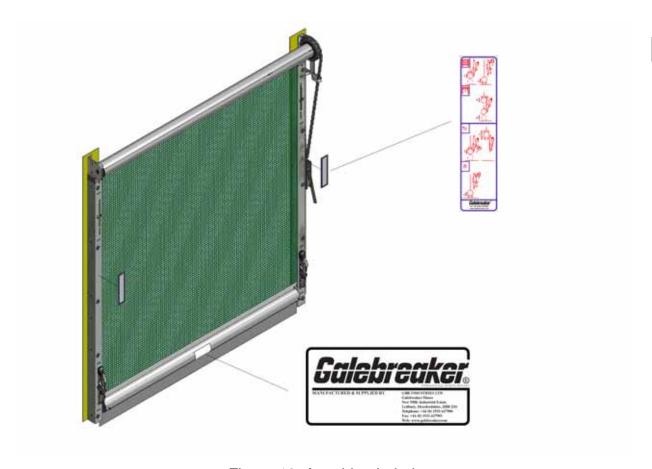
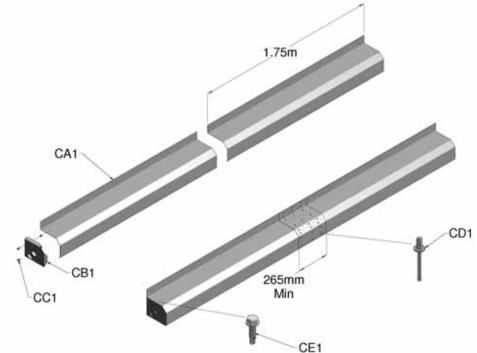


Figure 16, Attaching Labels

#### Installing Door Cowling (Optional)

17. Door Cowling (Optional at extra cost)



| REF: | QTY  | PART DESCRIPTION                    |
|------|------|-------------------------------------|
| CA1  | *    | 1.75M Lengths of Cowling            |
| CB1  | 1 pr | Cowling End                         |
| CC1  | 2    | M8x20 Hex bolt and Nut              |
| CD1  | 24   | M4.8 x 8 St Steel Rivets / per join |
| CE1  | 6    | M5.5 x 19 Self Drilling Screws      |
| CF1  | 1    | 5mm Drill for rivets (not shown)    |

Figure 17, Door Cowling Assembly

- C1. Fit the cowling ends (CB1) to the outsides of the drive & free end brackets using the M8x20 hex bolts and nuts.
- C2. Join the main cowling (CA1) with a minimum overlap of 265mm, using the M4.8 x 8 rivets, (CD1) 6 in each of the four faces. Fix the cowling to the cowling ends using the M5.5 x 19 self-drilling screws (CE1), three per side, Figure 17.

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

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18. CE Marking Products under Construction Products 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 product under the Construction Products Directive 89/106/EEC. To do this you will require the following which should be delivered with the product:



- 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 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 / RR 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.

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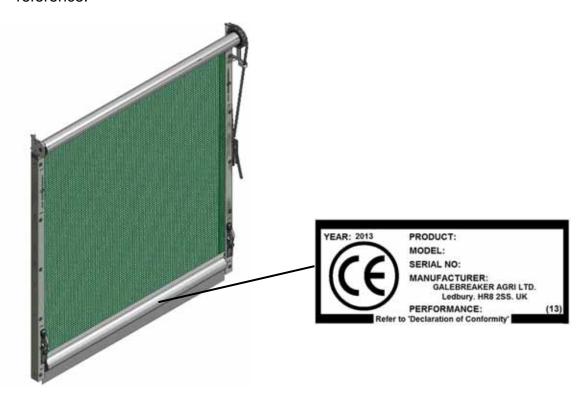


Figure 18, CE Label Location

#### YOUR DOOR IS NOW READY TO USE

#### **OPERATION AND MAINTENANCE**

#### How to use your door

Windspeed less than 32kph / 20mph

In light wind conditions, the locking catch can be disabled. If the Locking Catch (J1) is active, disable it by pushing on the disengagement lever, Figure 19. Pull the operating chain to open and close your door, insert the outer chain into the chain tensioner to hold the door at any level.



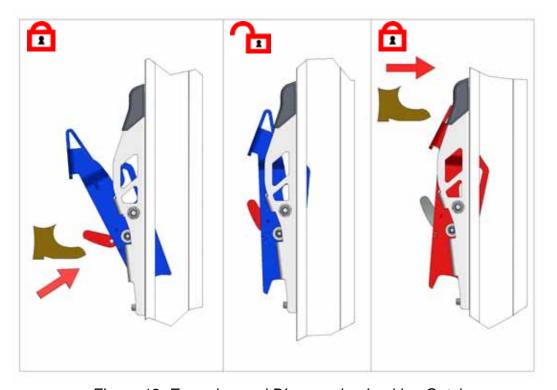


Figure 19, Engaging and Disengaging Locking Catch



CAUTION: The chain must be secured using the chain tensioner to prevent the door movement

Windspeed over 32kph / 20mph



ATTENTION: It is vital that a closed door is secured via the locking catches when the wind speed is above 32kph / 20mph

From Open: If the Locking catch (J1) is disabled push on the top section of the locking plate for re-activation, Figure 20i. Pull on the outer chain to close your door and when the bottom tube passes the locking catch (Figure 20ii) backwind the door until the bottom tube engages with the locking catch (Figure 20iii). Raise the handle of the chain tensioner and insert the nearest link of the outer chain into the hook slot. Push the lever fully down to tension the door.



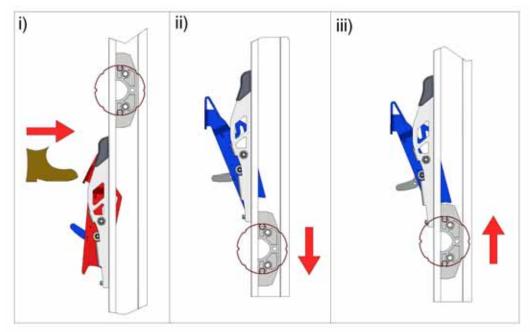


Figure 20, Locking Door Closed

From Closed: Pull on the inner chain to lower the door at least 10mm, open both locking catches by pushing on the top section of the locking plate (Figure 21). Pull on the outer chain to fully open the door and insert the outer chain into the chain tensioner.

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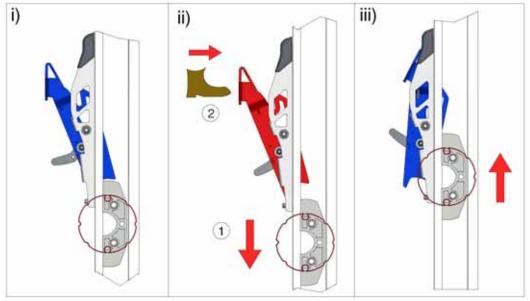


Figure 21, Opening Door From Locked Position



CAUTION: The chain must be secured using the chain tensioner to prevent the door movement.

#### 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.
- 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.

#### Wind Load Resistance:

Mesh 75% Solid Up to 25sqm = Class 5

Solid Material Up to 25sqm = Class 5

#### Maintenance of 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 safety spring (doors above 5.5m in width) 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.
- If the chain tensioner becomes stiff to operate apply a thin layer of grease to either end of the pivot shaft and to the outer walls of the two slots.
- Annually clean the magnet on the locking catches to remove surface dirt.
- 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.

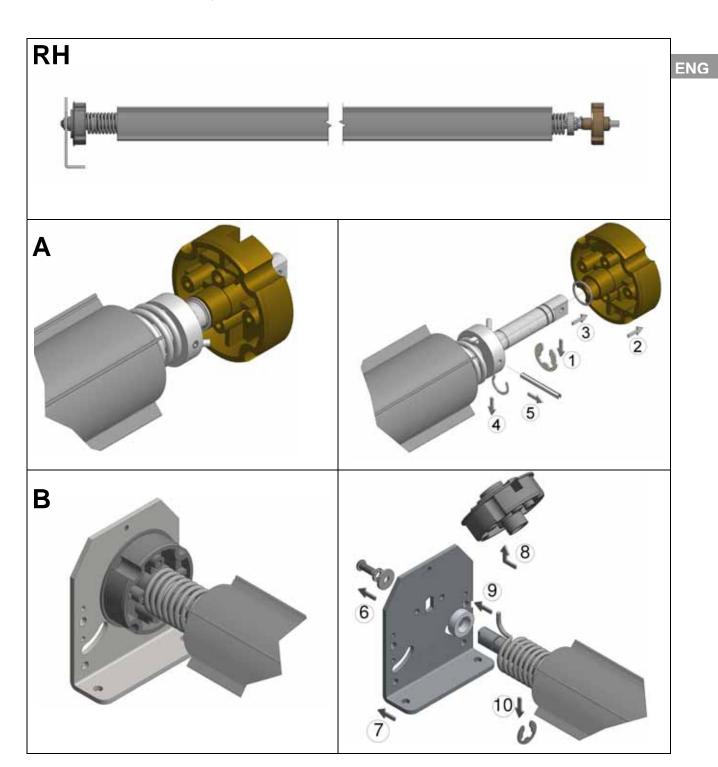
NOTE: Tried and tested in the harshest weather conditions, a summary of our guarantee is listed below, see our website for full details:

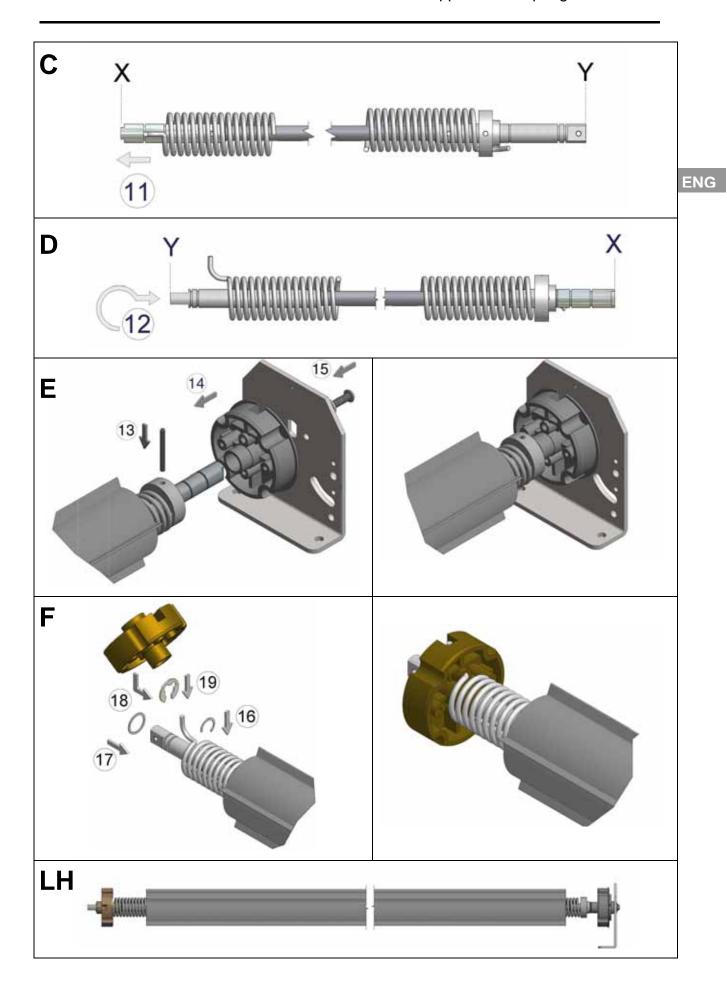
- Mechanical components: 100% guarantee for two years, followed by an eight year graduated guarantee.
- Electrical components: 100% guarantee for two years, followed by a three year graduated guarantee.

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

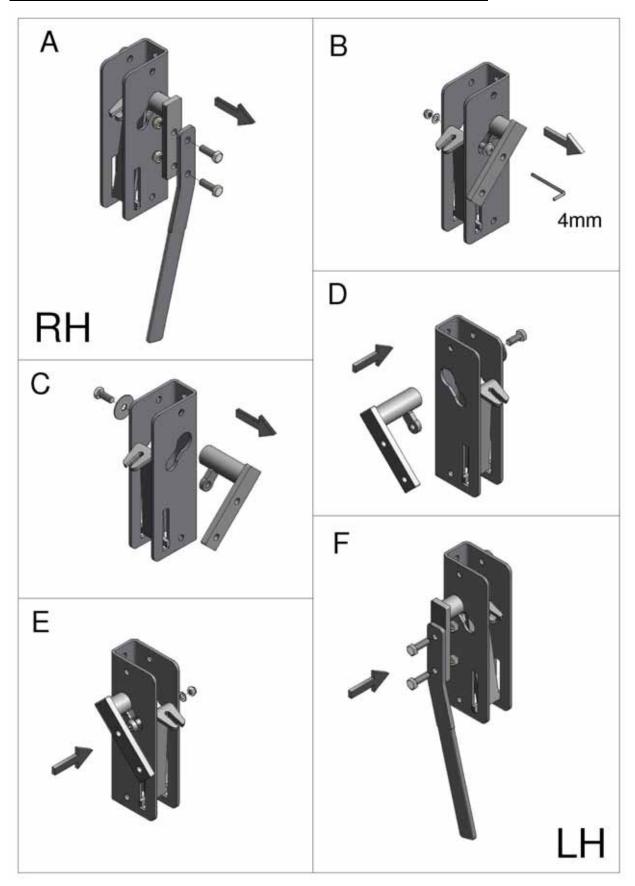
# RIGHTHAND TO LEFTHAND SPRING CONVERSION

RH = Drive bracket on the right with spring bracket on left
For LH to RH conversion, follow instructions in reverse order





# RIGHTHAND TO LEFTHAND CHAIN TENSIONER CONVERSION





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www.galebreaker.com

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

**Original Instructions** 

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Model No: RR/GR/Mk3/12/04 Instruction Ver: 2013/07/ENG