Installation Instructions
For



Metal/Timber and GRP Garage Doors

Unframed

Always read the care and maintenance label thoroughly.

Part No. 002854

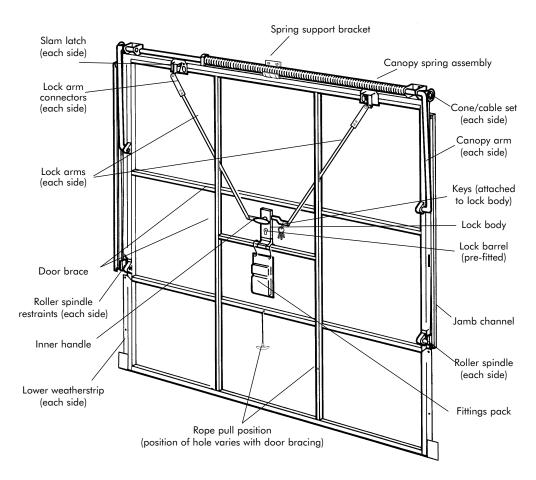
Issue No. 01 August 2007

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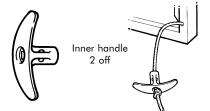
CANOPY DOOR

Familiarize yourself with the terms for the door components before starting the installation. The door and components must be installed by suitably trained and qualified persons, in accordance with the instructions provided. If in doubt contact a professional installer. It is important that the installation does not deviate from the instructions provided such that all requirements of EN 12604 and EN 12453 are met and if necessary verified (from May 2004). Once installed the door should be labeled in accordance with EN 13241 (from May 2004).



Note: The door bracing differs with each door style Illustration shows brace pattern for vertical and horizontal type panels.

NOTE: Two inner handles are provided to make the door easier to lift during transit. They are attached by ropes to the bottom sides of the door chassis and should be removed once the door is secured in position. They will be used in step 12.



IMPORTANT

THIS DOOR IS HEAVY, IT IS RECOMMENDED THAT TWO PEOPLE CARRY OUT THE INSTALLATION.

Check that all contents are included in the packs and that the door size is correct for the opening (see label on side of door - the label refers to the internal frame opening size and not the size of door).

The following parts are supplied strapped to the door and must be detached and checked before starting

Weatherstrip pack
1 off - includes 2 plastic lower weatherstrips
Fittings pack
1 off - see contents list

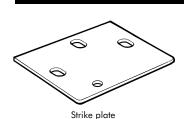
Installation is carried out from inside the garage. Ensure that you have adequate lighting and that all tools and fittings are inside the garage BEFORE you start.

Ensure you have the outer handle with you before leaving the garage during installation. Whilst operating the door be aware of the area it moves through. Keep people and objects out of the way. When manually operating the door, control the leading edge of the door by hand throughout the opening and closing cycle. When the door is in the open position, always ensure it is fully open/as far back as possible - the roller should ride over the jamb channel formed retention lug.

Ensure that good safety practices are employed during installation. Use good quality tools and take appropriate care if using any electrical equipment. Always check for dangerous features in the workspace such as sharp edges, protrusions or concealed or damaged electrical wiring

Note: When considering automating a canopy door, a converter system must be used. Contact your installer/supplier for details.

CONTENTS OF THE FITTING PACK







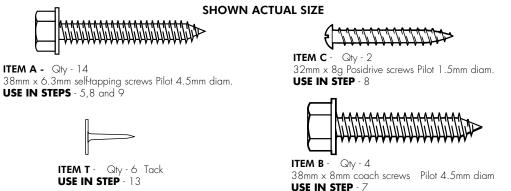


Outer handle - 1 off

Slam latch keep - 2 off

Note: The fascia is not used on Merlin, Durham, Doric and Victoria Steel Doors and is pre-fitted to timber doors. If you are short of any of the items mentioned, please contact your supplier.

LIST OF FIXINGS SUPPLIED IN FITTING PACK



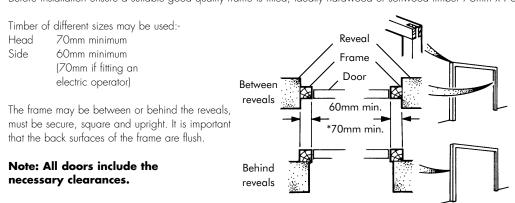
LIST OF TOOLS REQUIRED

Medium size screwdriver
10mm socket
13mm socket
Hammer
Drill
1.5 and 4.5mm pilot drills

Wedges
Packers - Min 10mm Max. 13mm
6mm diam. toggle bars x 2
5/32 Allen key

CHECK EXISTING FRAME DIMENSIONS

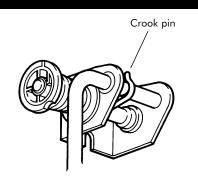
Before installation ensure a suitable good quality frame is fitted, ideally hardwood or softwood timber 76mm x 76mm.



2 REMOVE LOOSE ITEMS FROM THE DOOR

Note: Do not remove the crook pins until step 10. Caution - The spring is pre-tensioned and the crook pins resist a high spring tension.

You should carefully remove all loose items attached to the door. Remove the protective strip from the bottom of the door (where fitted). Handle the door carefully to avoid damage.



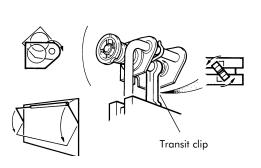
LOWER THE CANOPY SPRING

Support the canopy spring to prevent uncontrolled

Cut the ties attaching the spring assembly to the top of the door.

Some doors may be fitted with transit clips in place of the cable clip. Twist transit clips firmly to remove, or unscrew fixings where applicable.

Rotate the canopy spring assembly as shown and carefully lower the spring down to rest against the back of the door.



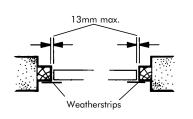
PLACE THE DOOR IN POSITION

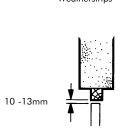
At this stage ensure that all equipment and fittings are inside the garage.

Position the door within the frame, ensuring that the top weatherstrips are flush against the frame legs.

Temporarily prop the door in position. Place 2 packers (Min.10mm Max. 13mm) on the top of the door, lift and wedge the door under both sides until the frame is in contact with the top packers. Ensure that the following clearances are established between the door and frame

Each Side (Premier Door) = 8 -1 1 mm Bottom = 10-15 mm



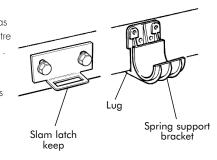


5 FIT THE SPRING SUPPORT BRACKET & LATCH KEEPS

Engage the latch keeps into the slam latches. Move vertically as far as possible in both directions and mark both positions. Move horizontally as far as possible in both directions and mark positions. Set bracket in centre of marks and drill 4.5mm pilot in centre of slots and secure with item ${\bf A}$.

Position the spring support bracket in the centre of the frame head, with the lugs up against the underside of the frame as shown. Drill pilot holes through the two highest holes and secure in position using two 38mm \times 6.3mm screws item **A**.

Two lower holes are provided for applications using the narrow timber. In this instance, carefully trim the top of the spring support bracket to fit.



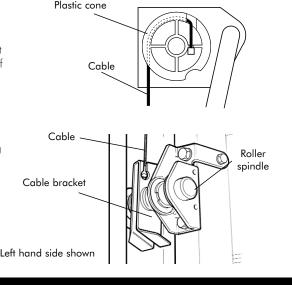
FIT THE CABLES

Remove any remaining packing and cable ties from the spring.

Attach one end of the cable to the cone ensuring that the cable is fully engaged in the slot along the end of the cone. The end of the cable must be fully inserted into the cable support as shown. Fit the other end of the cable into the bracket on the roller spindle as shown. Repeat for the other side.

Raise the spring assembly and hook it over the spring support bracket. It Is Essential that the cable emerges from the rear of the cone and is positioned in the outer groove of the cone.

Both sides must be the same.

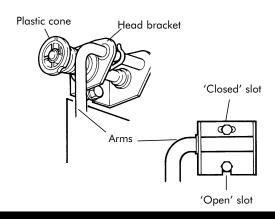


FIT THE HEAD BRACKETS

Position the head brackets flat against the frame head, (ensuring that the head brackets rest against the inside edges of the plastic cones).

Ensure that the arms hang parallel to the door.

Drill 4.5mm diameter pilot holes through the centre of the 'closed' slots and fit two 38mm x 8mm coach screws item **B** - one each side - Right Hand side first to hold the head brackets in position. Repeat for the open slots and fully tighten all screws to secure the brackets.

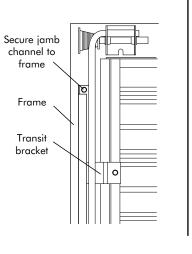


SECURE THE JAMB CHANNELS

It is important to ensure that the jamb channels are positioned correctly and securely. The jamb channels are correctly positioned on the transit brackets. Drill a 4.5mm pilot hole through each end of the jamb channel and secure to the frame using screw **A**. Repeat for the other side.

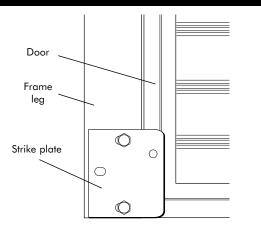
Secure the centre of the jamb channel to the frame using one $8g \times 32$ mm posidrive Item ${\bf C}$ (pilot drill 1. 5mm). This will cut into the jamb channel hole and drive into the timber frame. Repeat to fix the opposite side jamb channel.

Remove the transit brackets from the jamb channel and door chassis by removing the M6 securing bolts. The bolts and four brackets can be suitably disposed.



FIT THE STRIKE PLATES

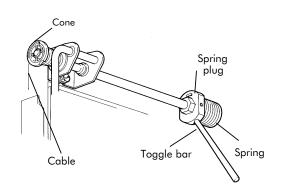
Align the edge of the strike plate with the inside edge of the door chassis as shown. Secure using 2 off screw **A**.



() REMOVE THE CROOK PINS

CAUTION!!

With pliers or a suitable lever carefully remove the right hand crook pin then the left hand pin by easing the spring pressure using a toggle bar in the spring plug as shown. Ensure that both cables emerge from the rear of the cones and are correctly located in the outer grooves. Ensure that the cable brackets are positioned correctly and that the cable tension is supported at the cable bracket.



OPEN THE DOOR

Remove the items being used to temporarily secure the door in position. Temporarily place the external handle into the lock and grip the panel or brace of the door. Turn the handle to operate the lock and delatch the door. Pull the door open, the canopy spring tension will assist the lifting action and the door should be controlled manually. Ensure the rollers are running smoothly in the jamb channels and the cable winds onto the cones. Remove the handle from the intside of the lock and retain for the next step.

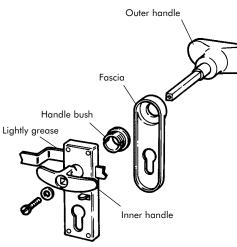
This door is fitted with an anti drop device. This device should not effect the normal door operation. The device will not engage while there is tension in the cable. During opening and closing of the door the cable bracket should pass freely over the detents in the jamb channel. If the cable bracket is not running freely see the detailed instructions on the anti drop device.

FIT THE LOCK

Fit the fascia by inserting the fixing lugs into the holes until they 'snap-in'. Remove the screw and washer from the outer handle and pass the handle through the lock as shown. Fit one of the inner handles and secure using the screw and washer just removed. **'Do not overtighten'**Check the operation of the handle and lock mechanisms. The second inner handle, with warning label, should now be attached with the rope below the lock body, on the door bracing. Thread the rope through the hole provided (in either the lower door brace or bottom lock plate bracket) and knot securely to make a 'rope pull'.

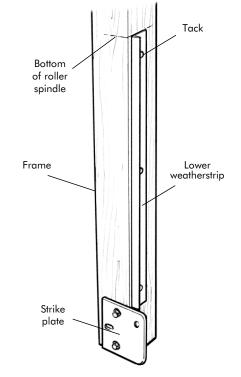
Lightly grease the lock body arms.

Note: The fascia is not supplied for the Merlin, Doric, Regent and Victoria steel doors and is supplied pre-fitted to timber doors. The 'rope pull' is supplied pre-fitted to GRP doors.



13 FIT BOTTOM WEATHERSTRIP

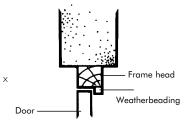
Mark position of the bottom of the roller spindle bracket. With the door open but the bottom angular weatherstrip against the top of the strike plate. It should run upto the bottom of the roller spindle bracket. Trim where necessary. Align and nail as shown.



14 COMPLETING THE INSTALLATION

When the installation is complete oil along the top of the spring with light engineering oil and rub gently with a cloth. Oil pivot points. **Do not oil the jamb channels!!**

When installing into a timber frame of the recommended size, fit a $25 \, \text{mm} \times 25 \, \text{mm}$ weather beading to the outside of the frame head as shown.



SPRING TENSIONING

CAUTION!!

The following must be carried out by a competent person!!

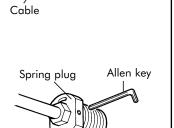
The door can not be opened or closed without sufficient spring tension as this will engage the anti drop device. Always ensure that the spring is tensioned sufficiently to allow free running of the cable bracket.

The door should open to approximately waist or chest height under its own spring tension.

If the spring requires tensioning or slackening - replace the crook pin on the right hand side. Hold the spring plug tight with a toggle bar in one of the four holes to maintain the tension. Loosen the two Allen screws (5/32 ((A/F) in the spring plug. Using a second toggle bar, turn the spring plug one or two turns up to tension or down to slacken the spring. Tighten the two Allen screws and carefully allow the spring to take up the tension before removing the original toggle bar.

Ensure that the cables run down behind the cones and are in the outer grooves as shown. Remove the crook pin.

Operate the door to make sure it is correctly balanced. Readjust as necessary.



TROUBLE SHOOTING

If you experience any problems with the operation of your door firstly check the frame installation as shown in steps 1 & 4 and ensure all installation steps have been followed correctly.

PROBLEM SOLVING

Problem When in the open position the door is slightly lower to one side

This is sometimes characteristic of Canopy Doors and may not be a mechanical problem. Check that the cables have wound onto the cones correctly see steps 6

and 15.

blem The handle is stiff to turn.

Apply a drop of lubricating oil to the handle bush. See step 12.

Problem

The door operation is not smooth

1. Lubricate spring and pivot points. Do not lubricate jamb ch

Lubricate spring and pivot points. Do not lubricate jamb channels.
 Ensure clearances between the roller and jamb channel are maintained. Adjust

as necessary. See step 8

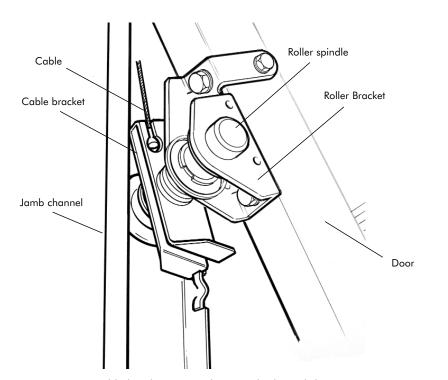
3. Check the spring tension. See step 15

Problem The door operation is restricted

on Check the free running of the cable bracket. See step 11 and 17 and the notes for

the anti drop device.

THE ANTI-DROP DEVICE



Cable bracket engaged into jamb channel detent

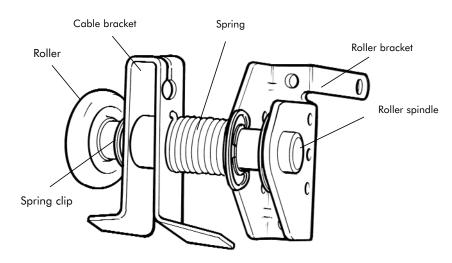
This garage door is fitted with an anti-drop device which reduces risk of injury. The device will prevent the door falling in the event of a single suspension component failure such as a cable or spring. To ensure that this device will operate effectively it is important that the door is well fitted and well maintained throughout its service.

Once activated the anti drop device will support the door leaf and prevent sudden and uncontrolled closing. If the device activates the door is in a potentially dangerous situation and the closing procedure must only be undertaken by trained installers. Untrained users should contact P.C. Henderson Customer Service for the name of a qualified installer. The following instructions are provided for the benefit of trained personnel only.

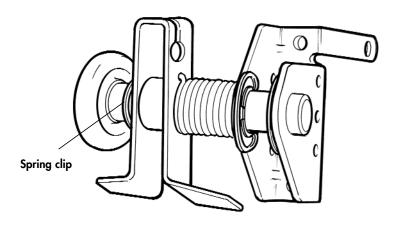
The anti drop device will activate when either the canopy torsion spring has failed or a cable has broken. Although it is easier to bring the door to a closed position by two people it can be undertaken single-handedly. The following steps should be followed carefully.

- 1 Keep people, especially children, away from the garage opening.
 - 2 Carefully check the door to ensure that it is safely at rest. Always move around the door carefully and avoid moving beneath the door leaf if at all possible.
 - 3 Do not try to force the door closed. Excessive force might cause unnecessary damage.
- 4 Carefully check the cable bracket to view engagement into the jamb channel detents. At this stage do not attempt to move the cable brackets or the door leaf. Determine whether both cable brackets are engaged (possible spring failure) or if only one cable bracket has engaged (single cable failure).
- 5 It is not recommended that intact cables be cut. This might release the torsion spring to rotate freely, which can damage the torsion spring. Additionally, when a cable is cut it might allow the cones and loose cables to spin with the spring shaft. This can be dangerous particularly to the eyes.
- 6 Prepare a suitable prop and lift the front of the door approximately 40mm. This will lift the cable bracket out of the de-tent in the jamb channel.
- 7 Ensure that the door is well supported preferably using an assistant who can ensure that uncontrolled movement is avoided.

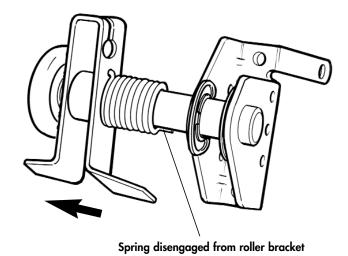
8 Attend the cable bracket that had been engaged in the jamb channel and remove any loose cable. The cable bracket will have the bottom legs inclined towards the face of the jamb channel. A torsion spring supported on the roller spindle provides the force and this must be overcome to release and close the door. This can be achieved in several ways. The roller bracket assembly has been designed to allow the spring to be disengaged from the cable bracket as follows,



Cable bracket assembly



Remove the spring clip between the roller and the cable bracket



Slide the cable bracket towards the roller and disengage the torsion spring leg from the cast roller bracket

9 The door must now be closed - this can be difficult and it is recommended that two people complete this task. Ensure that tools and light are available inside the garage. One person should stand on the inside of the door. Ensure that people are kept out of the door leaf closing envelope. Firmly grip and support the door leaf and then remove any temporary supporting props. Lower the door leaf carefully, to a closed position. If one cable is supporting the door, then it may be necessary to use some force to push the outside of the door closed at the side of the remaining intact cable.

10 When the door is safely in the closed position inspect all parts for signs of damage. If the jamb channels, retaining features or cable bracket have been deformed then they must be replaced. Note the cable bracket is supplied as part of the roller spindle assembly. If a cable has broken then both cables must be replaced and if the canopy torsion spring has failed it will be necessary to replace the canopy spring assembly. If in doubt change all of the associated parts.

- 11 After replacing all damaged parts pay particular attention to the installation instructions, steps 8, 11 and 15.
- 12 Always leave the door in a safe condition and ensure that the users understand any potential dangers and how to operate the door safely.

Important Note

When repairing the door always ensure that the anti-drop features are assembled correctly and that the torsion spring is acting to push the bottom of the cable bracket towards the bottom of the jamb channel. The spring clip must be fitted to ensure that the cable bracket is engaged correctly with the torsion spring

DISMANTLING

The door must be dismantled with care. Always ensure that the structure is well supported during dismantling and that parts are not allowed to fall or pivot in an uncontrolled manner.

Start from inside the garage and ensure that all necessary lighting, tools and personnel are available. The door should be closed and propped securely in the opening. If the door is to be disposed of then the spring tension should be carefully released -see note 15 for reference. If the door is to be reinstalled then the cables should be disengaged from the cable bracket by using a toggle bar and the crook pins to release the cable tension. - see note 10 and ensure that both crook pins are correctly fitted.

Remove the jamb channels by removing the bottom, small centre and finally top screws. Support the channel when removing the top screw and release by sliding the channel outwards away from the door - see note 8 for reference.

The head brackets can now be removed from the frame head by releasing the four fasteners while ensuring that the spring assembly is not free to drop - see note 7 for reference.

Release the spring assembly by lifting over the spring support bracket and lower the spring assembly to rest against the door leaf - see note 6 for reference.

Remove the top slam latch keeps to release the engagement of the slam latch - see note 5 for reference.

The door can now be carefully handled; the prop supports removed and the door will release from the opening. Ensure that hands will not come into contact with any sharp edges and wear gloves if necessary. Always take care when handling heavy items.

Carefully remove the lower weatherstrips and tacks ensuring that they are not left in the vicinity where they can be trodden or driven upon.

Remove the spring support bracket - see note 5 for reference.

Dispose of all unwanted parts in accordance with best practices and legislation.



Metal/Timber and GRP Garage Doors

Framed

IMPORTANT

Check that all contents are included in the packs and that the door size is correct for the opening (see label on side of door - the label refers to the internal frame opening size and not the size of door).

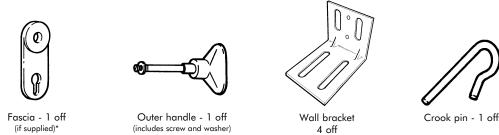
The fittings pack (see contents list) is supplied strapped to the door and must be detached and checked before starting the installation. The fittings supplied are for use in general brickwork applications. If you intend to install this framed door to any other material (for example, 'Thermalite' blocks) you must use suitable fittings. These are readily available from most Builders Merchant outlets

Installation is carried out from inside the garage. Ensure that you have adequate lighting and that all tools and fittings are inside the garage BEFORE you start.

Ensure you have the outer handle with you before leaving the garage during installation. Whilst operating the door be aware of the area it moves through. Keep people and objects out of the way. When manually operating the door, control the leading edge of the door by hand throughout the opening and closing cycle. When the door is in the open position, always ensure it is fully open/as far back as possible the roller should ride over the the jamb channel formed retention lug.

Ensure that good safety practices are employed during installation. Use good quality tools and take appropriate care if using any electrical equipment. Always check for dangerous features in the workspace such as sharp edges, protrusions or concealed or damaged electrical wiring

CONTENTS OF THE FITTING PACK



Note: The fascia is not used on Merlin, Durham, Doric and Victoria Steel Doors and is pre-fitted to timber doors. If you are short of any of the items mentioned, please contact your supplier.

ITEM F

LIST OF FIXINGS SUPPLIED IN FITTING PACK

SHOWN ACTUAL SIZE



Qty - 16 38mm x 6.3mm self tapping screw Steps - 3 & 4.



Qty - 8 Rawlplug, Pilot hole 8mm Diameter Steps - 3 & 4.

CLEARANCES

The framed door may be fitted centrally between or behind the

If fitted between, the ideal clearance between the wall and the frame is 10mm around the head and leas

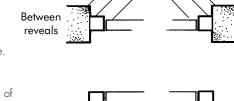
frame is 10mm around the head and legs.

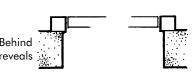
If fitted behind, the clearance between the wall and the inside

If fitted behind, the clearance between the wall and the inside face of the legs is 2.5mm min, and 62.5 mm max on each side. (60mm frame - 52.5mm)

Ensure there is a minimum 10mm clearance between the bottom of the door (not the frame legs) and the floor.

Note: All doors include the necessary clearances within the frame. The frame legs must be kept parallel to the door chassis. It is not permissible to misalign the frame legs to suit the brickwork.





REMOVE LOOSE ITEMS FROM THE DOOR

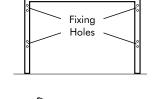
Do not remove the frame leg transit screws until step 5. Check that you have all of the necessary items.

You should carefully remove all loose items attached to the door. Check that the correct parts are provided.

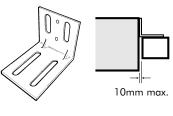
Handle the door carefully to avoid damage.

FITTING BETWEEN THE REVEALS

Loosely fit four brackets to the pilot holes in the frame legs (where shown) using the self tapping screw **A**. The top brackets are fitted after removal of the self tapping screw secured above the top of the jamb channel - one at the top of each frame leg. These are not required when replaced by screws **A** to secure the wall bracket.

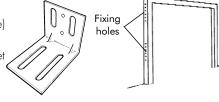


Position the door and frame centrally in the opening, ensuring that the frame head is level horizontally and that the frame legs are square to the head. Adjust the brackets so that they are against the wall and tighten all fixings. Secure the brackets to the walls the $38\,\mathrm{mm}\times6.3\,\mathrm{mm}$ screws, washers and plugs (**A** and **F**)

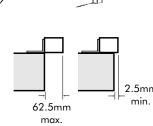


FITTING BEHIND THE REVEALS

Sets of six pilot holes are provided on the outside edge of the frame legs. Loosely fit the large brackets (two each side) to the frame using the self tapping screws **A**. Ensure that a secure wall fixing is possible, if not simply move the bracket to a better position.



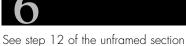
Position the door and frame centrally in the opening, ensuring that the frame head is level horizontally and that the frame legs are square to the head. Loosely secure the brackets to the wall using the $38\,\mathrm{mm} \times 6.3\,\mathrm{mm}$ screws, and plugs (**A** and **F**). With the frame legs flush against the rear of the reveals, tighten the screws into the frame and finally tighten the wall fixings.



(52.5mm - 60mm frame)

OPEN THE DOOR

See step 11 of the unframed section



FIT THE LOCK

oce step 12 of the utilitative seems



SPRING TENSIONING

See step 15 of the unframed section



TROUBLE SHOOTING

See step 16 of the unframed section



THE ANTI-DROP DEVICE

See step 17 of the unframed section



DISMANTLING

See step 18 of the unframed section

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