DEMPSEY DYER CF68 BIFOLD DOOR INSTALLATION GUIDE

Dempsey Dyer Ltd

a way forward for sustainability

BEFORE YOU START

IMPORTANT

Installation of these doors should be undertaken by experienced and trained installers. Please read through these instructions carefully before you start work and follow each step during the installation process. Failure to install the doors as instructed may impair the functionality of the doors and may invalidate the guarantee.

It is the responsibility of the owner of the building, the architect, the contractor or the installer to ensure that the door complies with the necessary regulations and legal requirements.

TOOLS

The following tools will be required for the correct installation of this door set:

- Large spirit level or laser level
- Tape measure
- Cordless drill/driver
- Phillips screwdriver (PH2)
- Power hammer drill
- A selection of drill bits (HSS and SDS)
- A selection of Allen keys
- Glazing paddle
- Assortment of glazing packers and packing shims
- Glass cleaner (to assist in wedge gasket installation)
- Suitable fixing for securing the frame to the opening
- Hammer
- Rubber mallet
- Quick release soft face clamps
- Glass suction pad lifter
- Work bench or trestles

COMPONENT PARTS

A standard door set will come with the following components. Please check that you have all these parts before you start:

- Outer frame comprising 2 side jambs, 1 head-rail and 1 threshold
- The required number of door panels
- The required number of glass sealed units
- One projecting sill (and two sill ends caps) if required
- Allen key (for adjusting the roller wheels)
- Roller set – top and bottom
- Panel catches / sash clips as required

PREPARATION

CHECKING THE OPENING

The opening into which the door is to be fitted will often not be completely plumb and level. However, it is imperative that the outer frame is fitted plumb and level in the opening at all points. There should be no bowing or twisting at any point.

There should be a 10mm gap between the outer frame and the wall at the tightest part of the opening.

The lintel above the opening must be structurally sound.

The four internal faces of the aperture including the lintel and the floor should be flat and even and in line with each other. Please use a laser or other suitable tool to confirm that this is the case and to locate the fixing points.

Before installing the outer frame, please consider whether a sub-sill is required for drainage and whether any preparation is necessary to achieve the correct threshold height.

INSTALLING THE OUTER FRAME

STEP 1

Measure the actual size of the outer frame and compare it to the size of the aperture.

STEP 2

Consider the required threshold height and floor height and calculate the amount of packing that will be required to make the threshold perfectly level. If a projecting sill is required, apply silicone to the cut ends and along the back edge as shown in figure 1.

NOTE: It is important to ensure that the sill it is level and secure in the aperture to give a level base upon which to install the outer frame.

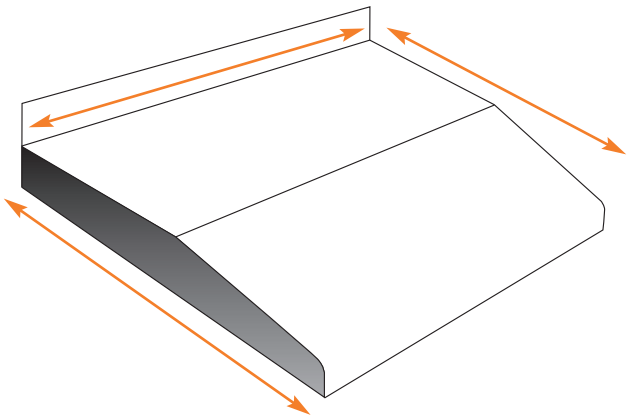


Fig. 1

STEP 3

Position the outer frame in the aperture, making sure that the drainage holes are to the outside. If a projection sill is required, run a line of silicone along the length of the of thermal break on the underside of the threshold as shown in figure 2, ensuring that no gap exists between the outer frame and the sill.

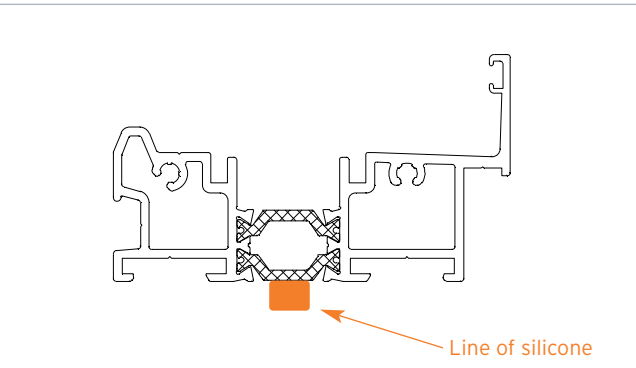


Fig. 2

STEP 4

Position and pack the outer frame in the aperture, ensuring that it is plumb and square.

INSTALLING THE OUTER FRAME

STEP 5

Secure the frame to the wall through the aluminium profile (not through the thermal break).

NOTE: It is recommended that lug fixings are NOT used for a bi-fold door.

Fixings should be no more than 150mm in from each corner and at centres of no more than 600mm. See figure 3 below.

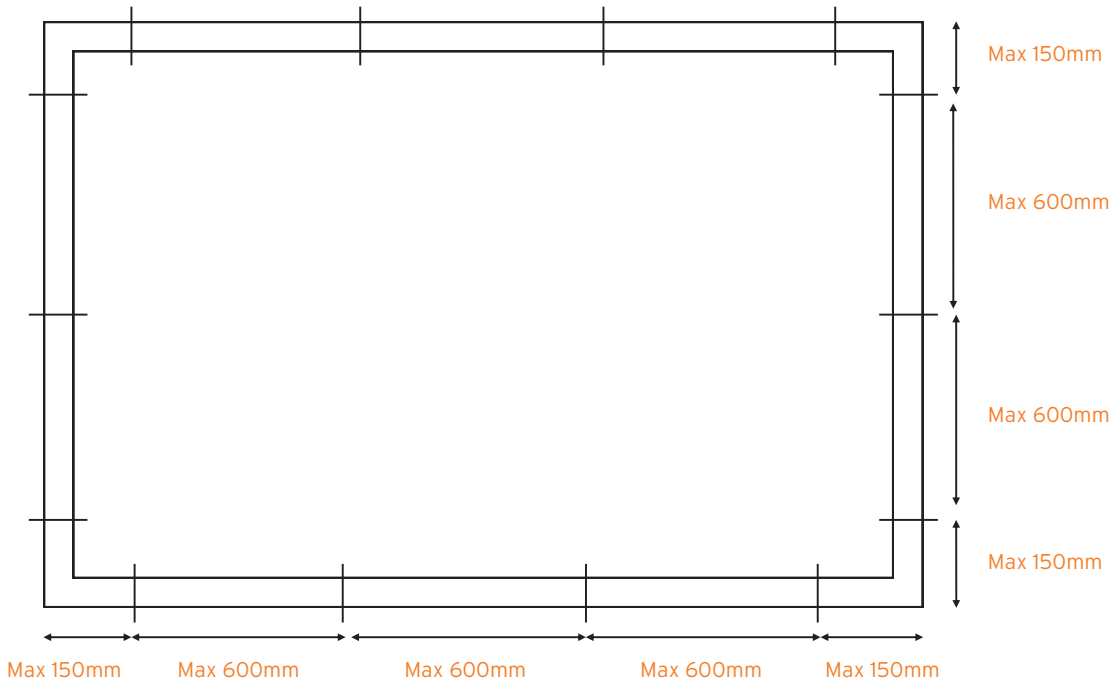


Fig. 3

STEP 6

Use suitable packers around the frame and check that the screws are tight.

STEP 7

We recommend the use of additional fixings on the side(s) where the doors stack to allow for the additional weight that the frame must carry.

STEP 8

Once all the screws are in place, go back and check that the frame is completely plumb, level and square. Check the diagonal measurements too.

INSTALLING THE OUTER FRAME

STEP 9

The door frame can be fitted with an adjustable vertical profile that allows 9mm adjustment (+6mm and –3mm) as shown in figure 4.

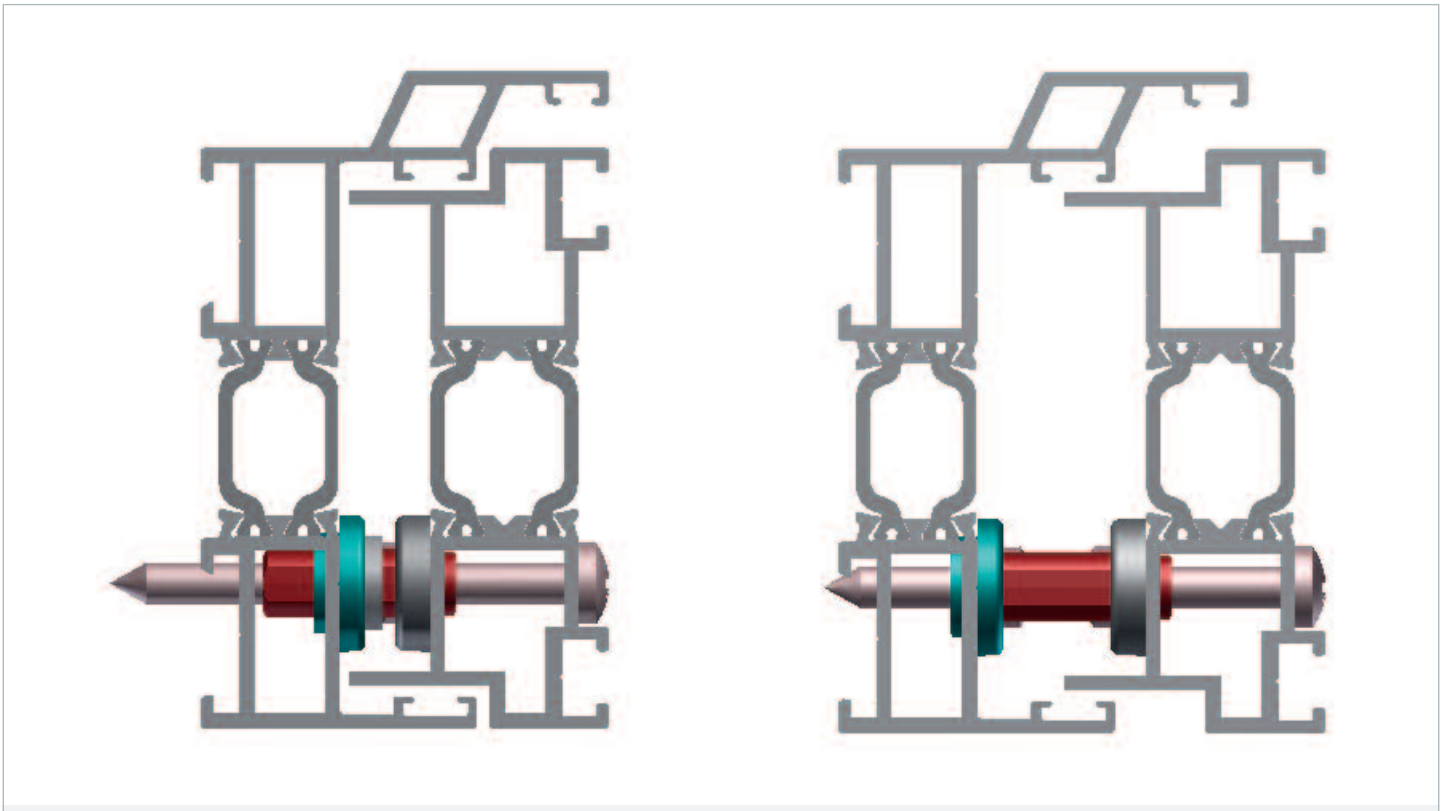


Fig. 4

IT IS ESSENTIAL THAT THE WHOLE OUTER FRAME IS ABSOLUTELY PLUMB, LEVEL AND SQUARE BEFORE CONTINUING.

STEP 10

Check that the gap between the door leaf and frame is an even 12mm at the top and the side and is 9mm at the sill. Note that if a level 1 (flush) threshold is used the gap will be 10mm and not 9mm.

STEP 11

Check that there is an even gap between door leafs and the outer frame. Further adjustment can be made if using the floating jamb - see figure 5. Please ensure that equal adjustment is applied to the inner and outer screws.

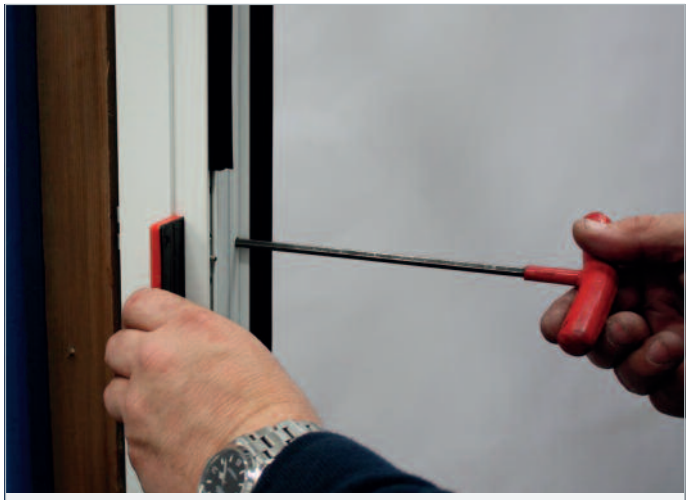


Fig. 5

GLAZING

STEP 12

NOTE: It is essential that the doors are glazed following the procedure detailed in this guide. Incorrect glazing may adversely affect the operation of the door.

Firstly, close all the door leafs and lock them into position. Then start glazing the doors in the same order that they were installed in the frame – the first door leaf being the one that is hinged to the outer frame.

Measure the height of the glass sealed unit and the length of the vertical glazing bead. The difference between the two measurements will be a good indication of the thickness of packers required.

STEP 13

Place the first packer on the hinge side of the first door leaf, located 100mm in from the corner. Make sure this packer is wide enough to support the full width of the sealed unit. Silicone the packer in place taking care not to get any silicone anywhere where it may come i contact with the edge of the sealed unit.

Silicone a second packer on the adjacent vertical section, also 100mm in from the corner. See figure 6.

Fig. 6

STEP 14

Now insert the glazed sealed unit into the frame, taking care to ensure that it is standing properly on the packer. It is recommended that the sealed unit is held in place temporarily using the top glazing bead on the right and the bottom glazing bead on the left leaving the corners free. Use temporary packers to help hold the glass in place as shown in figure 7. This will allow access to insert the rest of the packers and to make the necessary adjustments before securing the glass in place with all four beads.

Fig. 7

GLAZING

STEP 15

Now insert packers in the same way in the diagonally opposite corner, inserting the vertical packer first and then the horizontal one. Each packer should be 100mm in from the corner.

STEP 16

Check that the door leaf is completely plumb and square and that the diagonals are the same. Adjust using additional packers where necessary.

STEP 17

Now insert the spacer packers as shown in the diagrams in figure 8. Ensure that all packers are siliconed into place to prevent them moving over time.

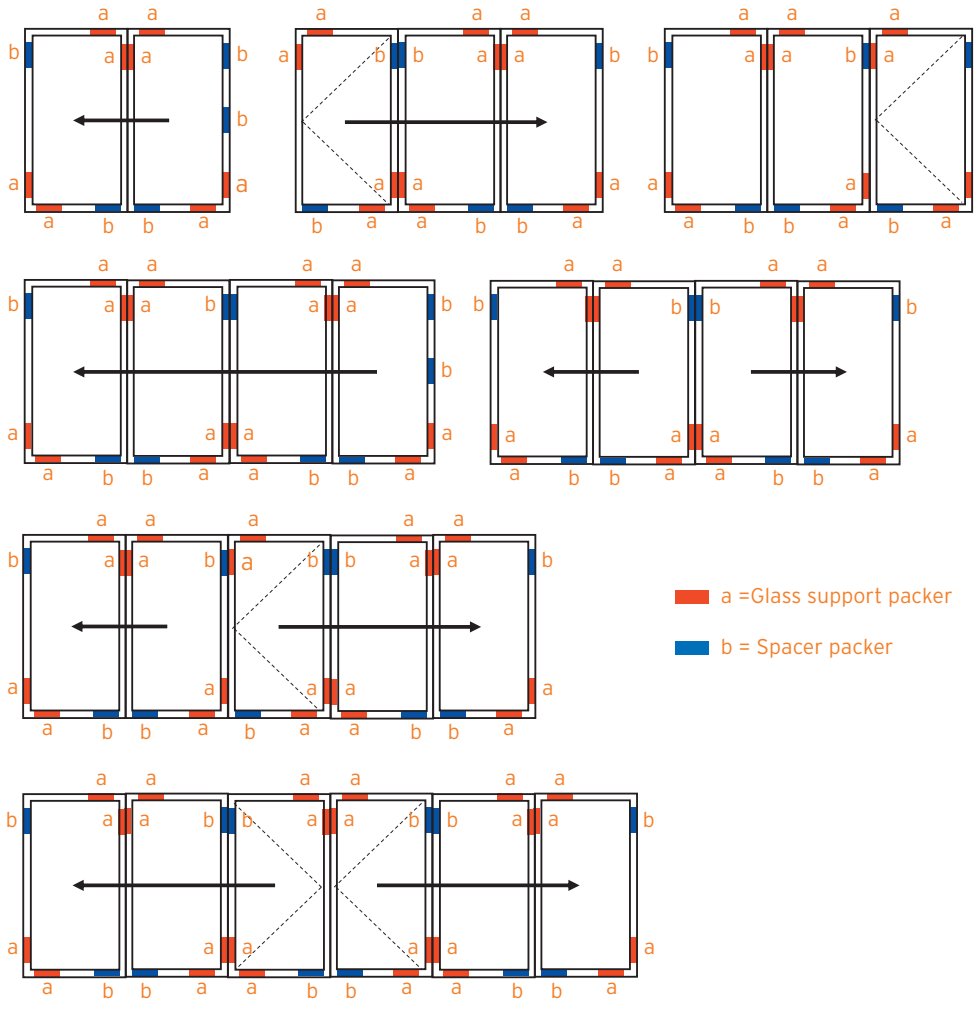


Fig. 8

GLAZING

STEP 18

After a final check that the door leaf is square and plumb, clip the four glazing beads in place and insert temporary packers behind the bead to hold the glass firmly in place. See figure 9 below.

Fig. 9

STEP 19

Insert the wedge gasket as shown in figure 10, allowing approximately 1% over length in the corners to ensure a good seal.

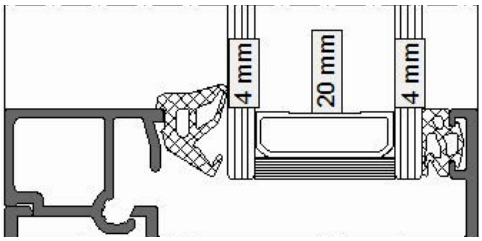


Fig. 10

STEP 20

Push the gasket into the gap using thumb pressure and working towards the corner. DO NOT STRETCH THE GASKETS TO MEET AT THE CORNERS. If the gasket is short, it must be replaced.

Push the end of the gasket tight into the corner for a neat finish as shown in figure 11.

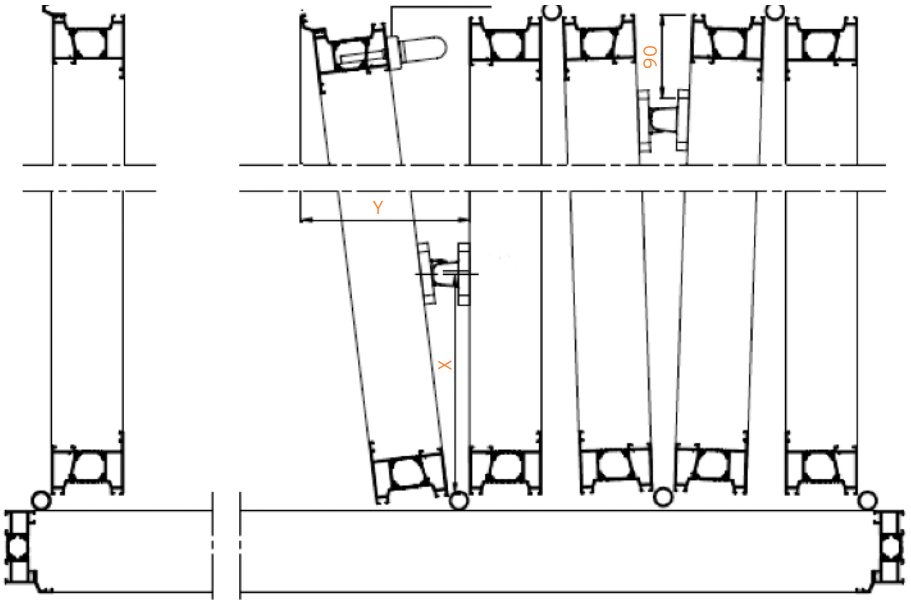
TIP: Use a little glass cleaner if some additional lubrication is required.

Fig. 11

PANEL CATCHES

STEP 21

The panel catch should be positioned as shown in figure 12.



500 - 700	X = max 225mm
700 - 1000	X = max 323mm

Y = min 168mm

Fig. 12

ADJUSTMENT

STEP 22

Some minimal adjustment of the height is also possible on the top guides and the bottom wheel carriages, though this should not be necessary. If adjustment is required, loosen the grub screw then use the Allen key to adjust the height. (See figure 13 below). Retighten the grub screw when finished. This can be done with the door leafs in situ. Please note that there is no adjustment on the hinges.

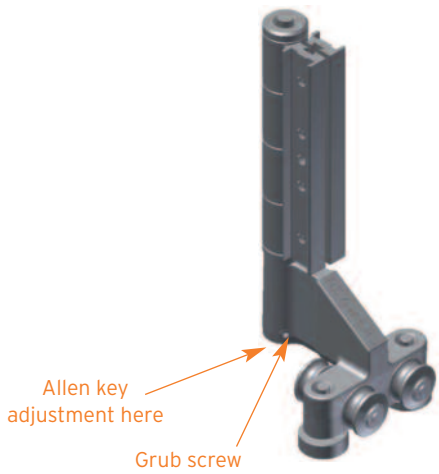


Fig. 13

STEP 23

The hinges have been fixed with 2 screws, leaving 2 unused. This is to allow adjustment of the hinges, if it is required, once the sashes have been toe and heeled correctly. A fixing kit containing the screws will be delivered with the bifold.

If the hinge position requires no adjustment, simply fix the screws into the remaining holes in the hinges.

If the hinges need to be adjusted, remove the 2 screws in each size (Being careful to have the weight of the sashes supported). When in position, you can use the undrilled holes to securely fix the hinges in place, before replacing all the remaining screws. See figure 14.

Fig. 14

TROUBLE SHOOTING

PROBLEM	POSSIBLE SOLUTIONS
The locks don't engage	• Check that the door frame is plumb and level. • Check that the glass is correctly toe and heeled • Check that the adjustable jamb is aligned
There is a gap between the panels	• Check that all gaskets are present • Check that all gaskets have been fitted properly
The door rattles	• Remove the shoot-bolt cap and adjust the shoot-bolt by turning it anti-clockwise to extend it or clockwise to retract it
The glazing bead does not fit	• The wrong thickness of sealed unit has been supplied – check the thickness of the sealed unit and compare it with the specification
The door does not slide smoothly	• Clear the track of any dirt and debris and clean the track before operating the door
Water collects in the track	• Clear any blockages from the drainage holes
The doors lean when open	• Check that the panel catches have been fitted in accordance with the instructions in this guide

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