imagine

BI-FOLD DOOR
FABRICATION MANUAL
SEPTEMBER 2020

GLASS PACKING & PACKER POSITIONS

Prior to installing any glass unit or panel, the clip in packer, 109377 must be fitted into the glazing rebates of the sash wherever the glazing unit has to be packed or spaced.

The Clip In Packer:
- raises the unit above the rebate and level to the bead groove.
- acts as a bridge block when used in the bottom rails to allow drainage of the rebate.
- provides a flat surface from which to pack or space the glass.
- prevents the glazing unit standing in water, helping to prolong the integrity of the seals to the glazing unit.

Clip in packers are to used on lower horizontal rails, with a minimum of 2 per rail. Position not to interfere with drain slots.

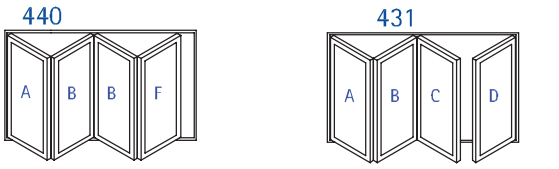
Glazing packers are used to pack the glass unit into the apertures. These packers are to be positioned adjacent to locking points, additional glazing packers must be used to support the glass on longer lengths.

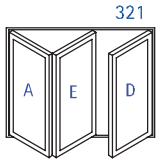
Always unsure the packing blocks that are wider than the glass unit or panel, e.g. for a unit 28mm wide, use a packer 30mm wide. If factory glazing, apply a small amount of silicone adhesive to hold the packing blocks in position whilst being transported, but care should be taken this does not interfere with the drainage.

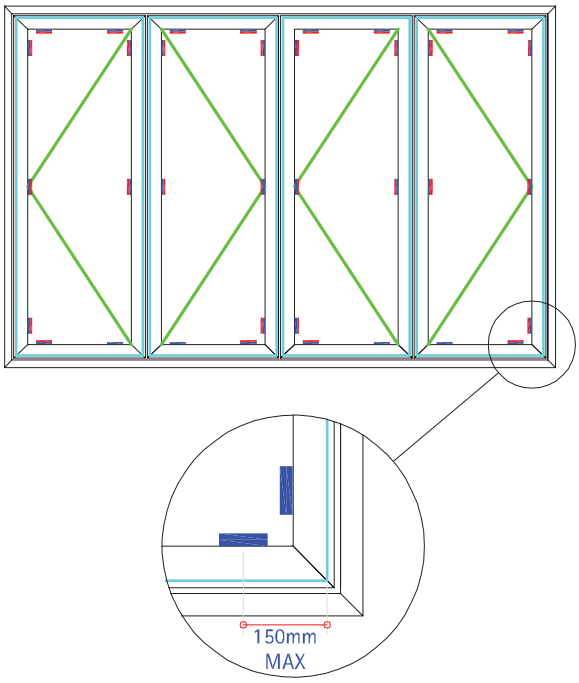
The clip in packers must be placed in the appropriate packing positions shown on the diagram below prior to placing the glazing unit or panel into the opening.

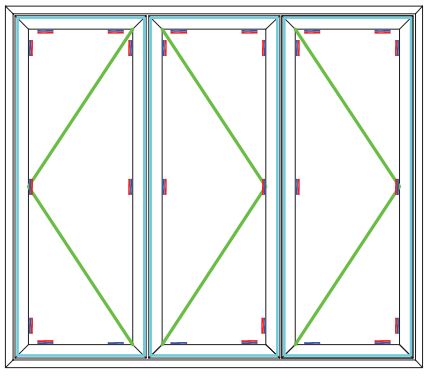
GT security glazing clips are necessary to meet PAS 24 requirements.

Care must be taken to ensure:
- All Bi-Fold Doors are fitted squarely.
- There is sufficient support at the head such as a lintel.
- The head of the frame is secured as firmly as possible.
- All glass should be in accordance with BS6262-2018.

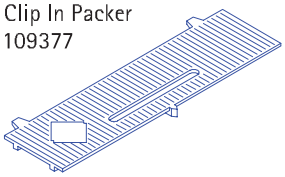








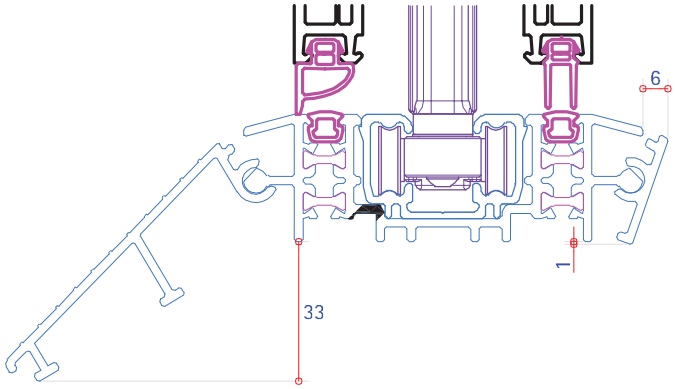
Clip In Packer
109377



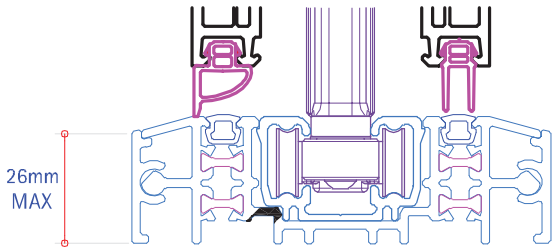
ALUMINIUM THRESHOLDS – INSTALLATION GUIDELINES

OPTIONAL 104391 (Threshold ramp required to comply with document M).
OPTIONAL 104394 (Threshold blank).

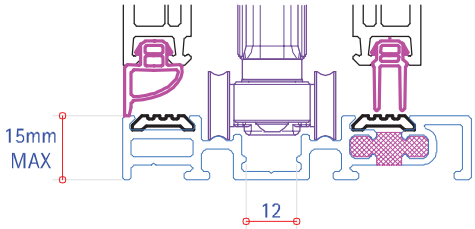
⚠ The threshold ramp 104391 & threshold blank may not be fitted to prevent damage during transportation and must be fitted before installation unless sufficient access is available .



Burying the aluminium threshold (not suitable for weather applications).



Burying the room divider threshold (not suitable for weather applications).



Installation

Exert taken from the GGF Good Practice Guide For The installation Of Replacement Windows And Doors. For full details please visit http://www.ggf.org.uk/assets/W&D_Good_Practice_Guide-4ec42d0c5aa21.pdf and refer to BS EN 8213:4.

There are two principal methods of fixing available, which may be used separately or in combination. These are through frame fixings and lug fixings. The manufacturer's instructions should always be followed. If lug fixings are used they should be of a suitable material to resist corrosion and, if used externally, they should be secured to the wall using "one-way" or other suitable security screws.

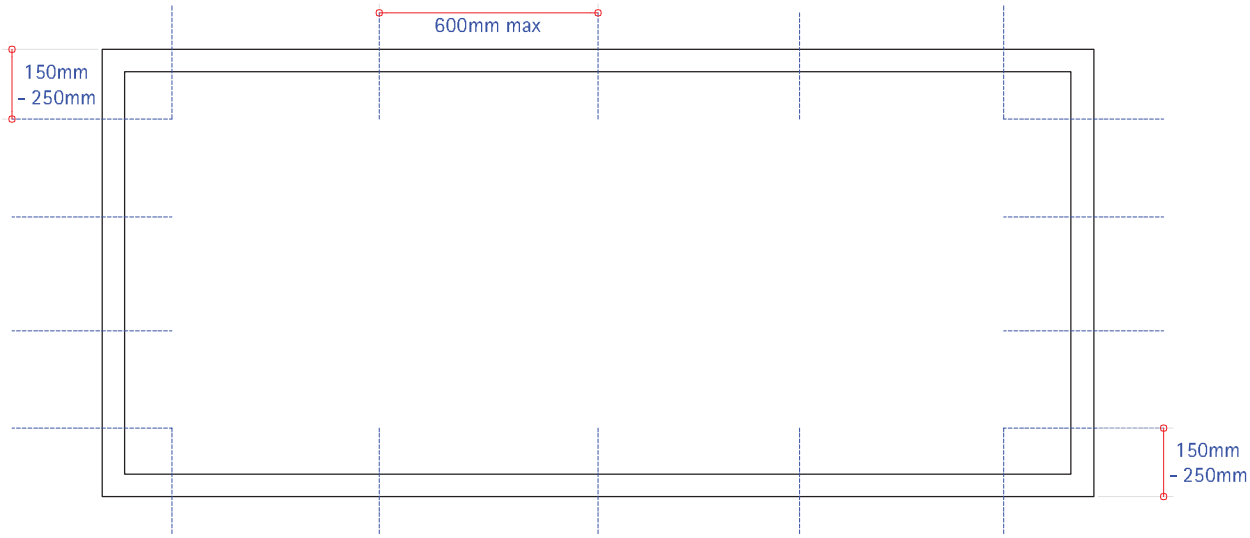
Screws should be sized to penetrate at least 25mm into timber, or 40mm into plugged holes in brick, block, or masonry, unless equivalent demonstrable provision can be made by other means, for example by complying with an appropriate structural code. Connections to steelwork up to 2mm thick such as folded sheet lintels should be made with appropriate thread cutting screws. Connections to steelwork over 2mm thick should be into pre-tapped holes with machine screws of minimum 5mm diameter or alternatively with power-driven hardened selfdrilling screws.

Other proprietary mechanical fixing methods should be assessed for suitability, preferably by obtaining an appropriate third party assessment. Fixings should be at least as corrosion-resistant as BS EN 1670:1998, Grade 3. The presence of pre-cast concrete or steel lintels may make it impracticable or pose severe difficulties in achieving the specified fixing distances. In these instances the use of polyurethane foam has proved a useful adjunct to mechanical fixings. However, foam fixings should never be used as the sole method of fixing the entire frame into the reveal.

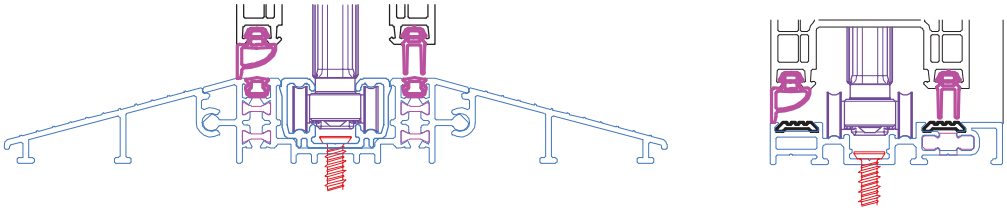
Where possible, all four sides of the frame should be secured as follows:-

- Corner fixings should be between 150 mm and 250 mm from the external corner.
- Intermediate fixings should be at centres no greater than 600mm

Where a fixing is required on a jamb fitted with a keep fixings should be placed through the Allen Key adjustment bolts & behind the removable plastic covers.



Rap Anchor - Recommended fixing with low threshold and room divider threshold to prevent fouling the rollers.



ADJUSTMENTS

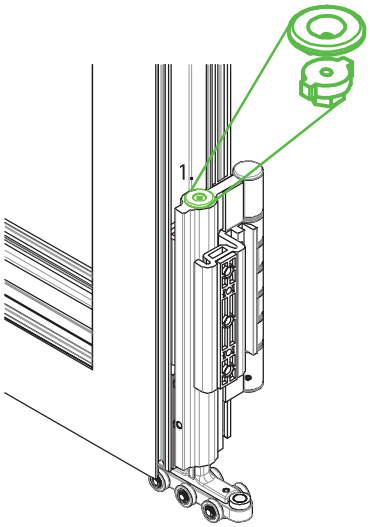
Adjustment

As a final check during installation, it is recommended that all security grubs on all hinge types are tightened. It is important that the security grub screw is never loosened.

Whenever a Pivot Roller is fitted, it is important that the two grub screws that hold the carrier body are fastened tightly so they cannot move. This only applies to the Bottom Pivot Roller.

The slave door must be fully locked for the main lock mechanism to operate.

2. Screw Locking Block

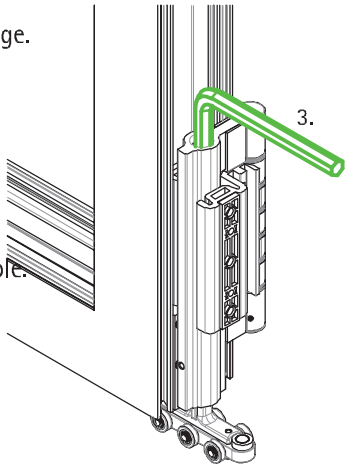


Vertical adjustment +/-2mm

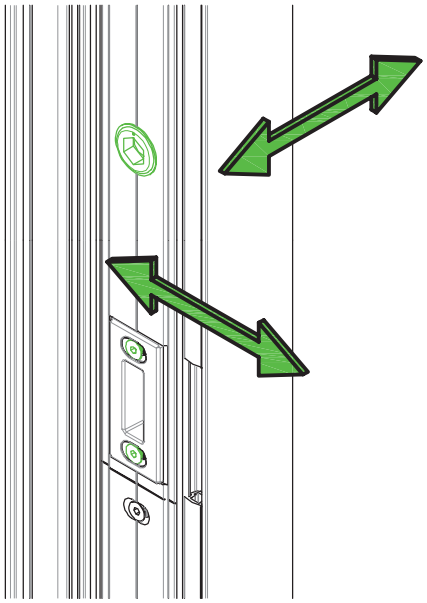
Pivot Rollers

1. Remove the bolt screw from the top of the hinge.
2. Remove the screw locking block.
3. Adjust using a 8mm Allen key.
4. Re-insert screw locking block. Re-fit screw bolt back into top.

Horizontal adjustment of the hinges is not possible.



Horizontal Adjustment



Keep - horizontal + 1 to 4mm: Using a 10mm Allen Key -¼ turn = 1mm, Full turn = 4mm

Keep - compression +/- 2mm: Using a 2.5mm Allen Key the latch plate can be altered to increase or decrease compression.

ADJUSTMENTS CONTINUED

Horizontal adjustment continued

Sash to sash horizontal - 1mm to the gap between sashes:

1. Loosen the 6 fixing screws used to attach the adjustment flag of the hinge to the sash.

2. Loosen the adjustment bolts with an Allen Key. Remove the 2mm C-clips.

3. Remove the 1mm narrow strip packer from the back of the hinge plate.

4. Continue loosening the adjustment bolts so that the metal adjustment plate sits flush with rest of the hinge.

5. Carefully tighten back up the 6 fixing screws ensuring you do not strip the profile. Recommended to use a screwdriver rather than a torque gun.

Hinges - sash to frame & sash to sash - horizontal + 1mm to 2mm:

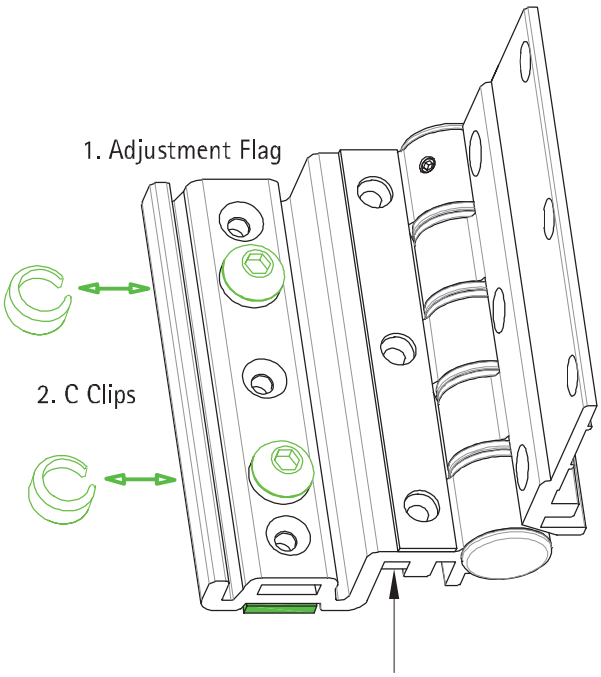
1. Loosen the 6 fixing screws used to attach the adjustment flag of the hinge to the sash.

2. Loosen the adjustment bolts with an Allen Key. Replace the 2mm C-clips with the 1mm C-clips supplied separately. Re-tighten the adjustment bolts using an Allen key.

3. Add either a 1mm or 2mm narrow strip packer supplied separately depending on the amount of adjustment required.

4. Place on top of the current 1mm narrow strip packer.

5. Carefully re-tighten the 6 fixing screws ensuring you do not strip the profile. Recommended to use a screwdriver rather than a torque gun.



Shoot Bolt Height Adjustment

1. Slide the spring block and hold to release the shootbolt.

2. Turn the shootbolt to alter the height.

3. Release the spring block ensuring the one of the four slots engage.