

ALLAN<sup>EST.
1811</sup> BROS.

Craftsmen of Bespoke Timber Windows & Doors

Survey & Installation Manual



Version 2.0

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Contents

| | |
|---|----|
| SURVEYING & MEASURING..... | 3 |
| INSTALLATION..... | 9 |
| FINAL INSPECTION & CUSTOMER TRAINING..... | 11 |
| SITE RE-GLAZING..... | 12 |
| HEALTH & SAFETY..... | 13 |

Surveying & Measuring

Flat Windows & Doors

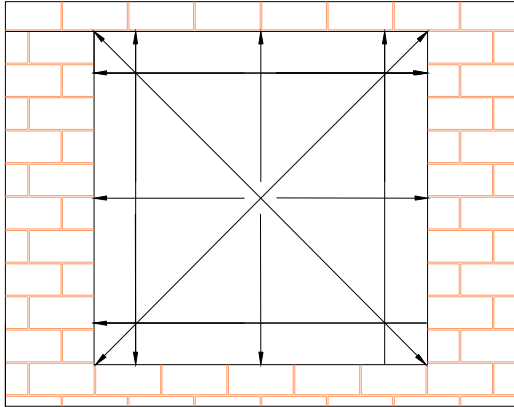


Figure 1

Width Measurement

The width of the aperture should be measured at three points the

- Top
- Middle
- Bottom

The smallest dimension should be used to determine the width. (See figure 1).

Height Measurement

The height of the aperture should be measured at three points the

- Left
- Middle
- Right

The smallest dimension should be used to determine the height. (See figure 1).

Diagonal Measurement

If the diagonals are more than 10mm different, then the client shall be informed, and a solution agreed. (See drawing flat window measurement)

Clause

Window measurements are installers sole responsibility to give Allan Brothers accurate dimensions for manufacture of frames. No responsibility will be accepted by Allan Brothers for inaccurate measurements of apertures.

These are guidelines only to surveying and measuring, we advise you that not all walls and apertures are always plumb and level. Therefore, it is critical that accurate dimensions of windows and doors sizes must be given.

Cill Extensions

The distance from the face of the building to the front face of the cill extension should be no less than 25mm.

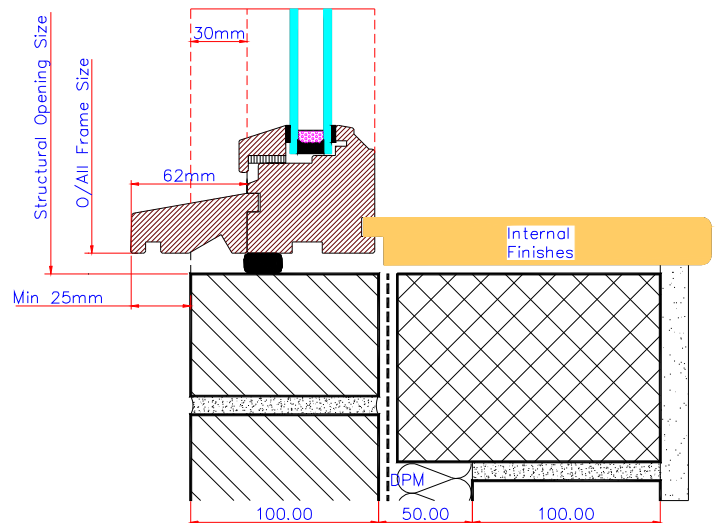


Figure 2

Surveying & Measuring

Flat Windows & Doors

Manufacturing Sizes - Straight Through Openings

Figure 3 shows the recommended deductions for windows & door sets. (Check clause)

Figures 4 & 5 show the recommended deductions as applied to typical installation.

| Length | Up to 15m | From 1.5-3.0m | From 3.0 to 4.5m | Over 4.5m |
|-------------|-----------|---------------|------------------|-----------|
| Window/Door | 5/10mm | 5/10mm | 5/10mm | 5/10mm |

Figure 3

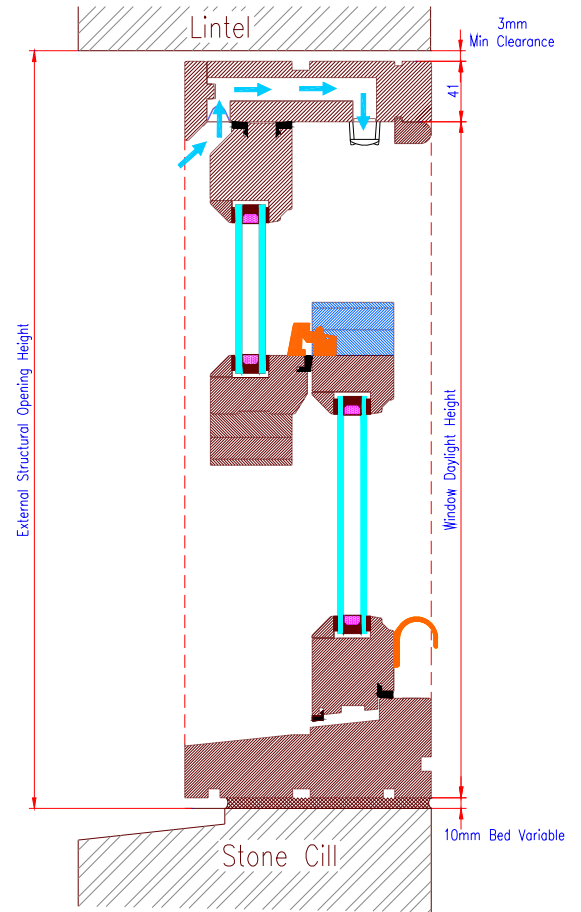


Figure 4

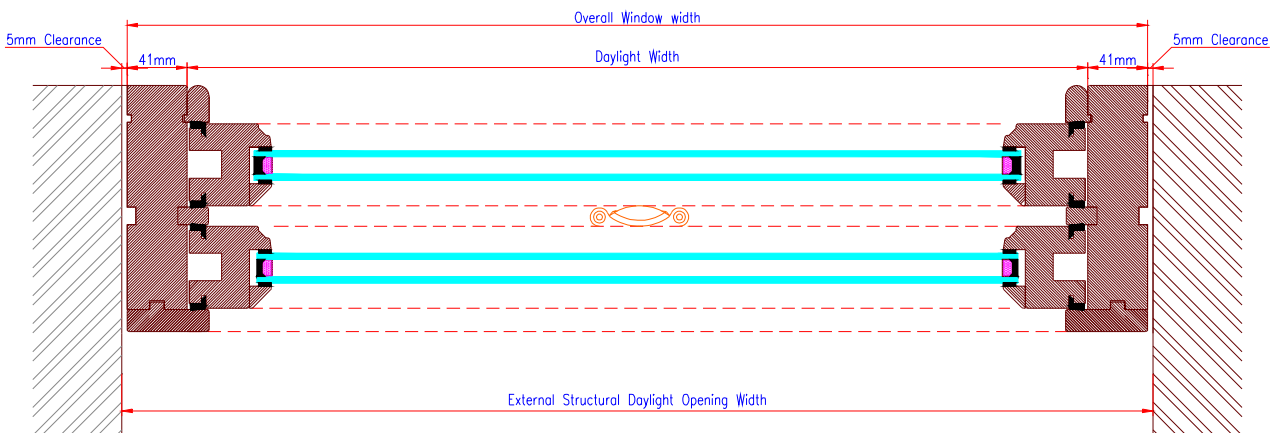


Figure 5

Surveying & Measuring Check List

APERTURE

- Are the aperture and DPC in suitable condition for the installation?
- Is there any evidence of damp or existing cracks?
- Are windows and doorsets load-bearing?
- Are any services in the aperture/existing frame?
- Will existing curtains/tracks cause problems?

MEASUREMENTS

- Are the aperture diagonals within 10mm of each other?
- Do the 3 width measurements agree within 5mm? If not what action is proposed?
- Do the 3 height measurements agree within 5mm? If not what actions proposed?
- Has the length and type of cill extension been checked?
- Have the reveal sizes been checked to ensure that the proposed window/doorset will function correctly?

REGULATIONS

- Is the opening area greater than 5 % of the floor area?
- Is there an adequate fire escape route from the room?
- Is the building Listed, or in a Conservation area?
- Is the replacement likely to be subject to Planning Permission?
- How do Building Regulations affect the installation?

FUNCTION

- Will the proposed style of the window/door set function in the reveal?
- Are window/doorsets sizes within manufacturing limits?
- Will the proposed drainage function?
- Will leaded/Georgian glasses line through correctly?
- Is any safety glazing required?
- Is the window/doorset specified suitable for the exposure category of the house?
- Are all the extras specified on the order correct?

BAY WINDOWS

- Are there cracks indicating existing settlement?
- Is the head in good condition, and will it be re-used? If not, calculate deflection of proposed head plate solution.
- What is the end condition of existing segments?
- What existing trims are to be retained, & what new trims are needed?

FIXING METHOD

- How will the window/doorset be fixed?
- Can fixings be obtained at the correct spacing?
- How will the heads be fixed?

HINGED DOORS

- Is the mode of opening correct (In or outwards opening)?
- Are the thresh, doorstop and letterplate positions and sizes OK?
- Are the doorset combinations the correct size and is the joint suitable?
- Is all extra hardware correct and practicable?

Installation

Fixing

It is important that all Allan Brothers products are installed to ensure they perform correctly both now and in the future. All Allan Brothers windows and doorsets should be fitted into preformed openings which are at least 10mm larger (5mm all round) than the overall frame size. In the case of new buildings or extensions, frames should not be built in as the work proceeds.

Frames should be installed plumb and square using metal fixings or perimeter battens and figure 11 shows typical fixing centres.

A minimum of two fixing points per side (depending on height) should be used. These should be positioned at between 100mm & 200mm in from each corner.

Additional fixings will depend on the size of the frame as follows: -

1000mm height up to 1000mm = 3 per side
 1600mm 1601mm = 4 per side
 Over 1800mm maintain 450mm centres.

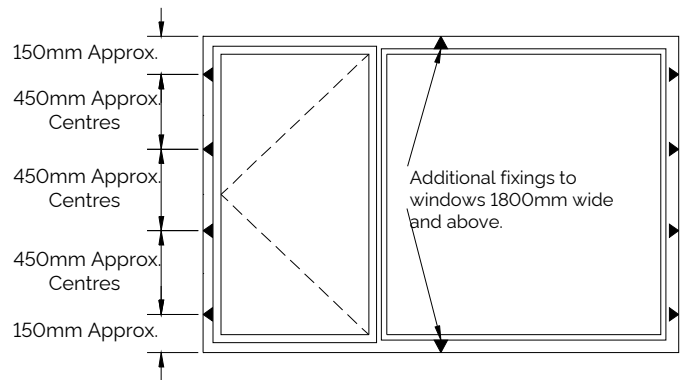


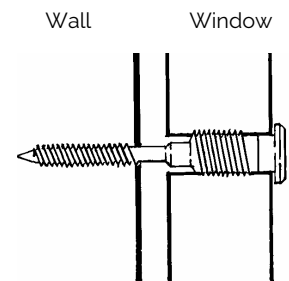
Figure 11

Where the frame width exceeds 1800mm or is formed by two or more coupled units, fixings should be provided at the head and cill.

Fixing will normally be through the frame; although fixing lugs, which facilitate fixing from inside the building can also be used.

Purpose made nylon fixings are available. These utilise the same diameter hole through the frame as well as the substrate and are normally supplied together with screws.

Alternative fixings include a proprietary screw device, which enables the window position to be adjusted on the fixing itself. (see figure 12).



Gap adjusted by turning Thread in window

Figure 12

Fixings should not be overtightened and surrounding brickwork should abut the frame only lightly so that no frame distortion can occur.

Before final fixing, check that opening sashes have equal clearance on both sides. Mullions of multi-light windows MUST be supported to avoid sagging.

Installation

Support

Packing pieces should be located at fixing points where necessary (See figure 13) but these should not contact the frame and thereby prevent correct operation of opening doors or sashes.

Particular care is necessary when providing packing for vertical sliding windows, where even minor distortion can prevent the movement of the sashes or introduce excessive clearance. When fitting packing, the correct operation of sashes should be checked prior to installation and a mortar bed can be used to provide continued support at cill level.

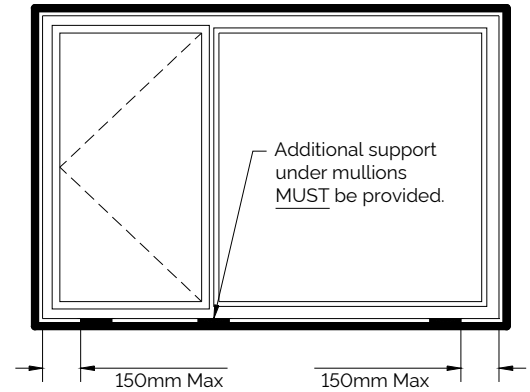


Figure 13

Sealing

To prevent air infiltration between the window/door and adjacent wall the gap between the window and wall should be sealed. A polythene backed sealing strip can be fitted prior to installation or alternatively an expanding foam seal or mineral wool can be fitted after installation has been completed.

When using gap-filling foams avoid injecting excessive amounts as this may deflect the jambs and induce vertical bow.

An additional seal can be then be provided by a silicone or polysulphide based sealant. (Approved to BS 5889.) (See figure 14).

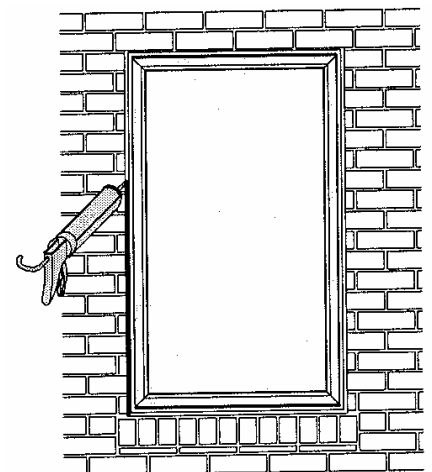


Figure 14

Final Inspection & Customer Training

Following completion a final inspection should be carried out to ensure that the installation is of the highest standard. We recommend that there should be a formal procedure for checking the work, using a checklist similar to the one shown below. We also recommend that these checks should be carried out in the presence of the customer, who should be familiarized with the operation and maintenance requirements of the products at the same time. Leaving the Allan Brothers operating and maintenance instructions with the customer should further support this training and instruction.

| Inspection | Area to be checked | OK Yes/No |
|-------------------|--|--------------------------|
| Visual Appearance | 1 Windows installed plumb, square and vertical. | <input type="checkbox"/> |
| | 2 Exposed faces including beads free from surface damage. | <input type="checkbox"/> |
| | 3 Window and frame clean and all protective film removed. | <input type="checkbox"/> |
| | 4 Check for damage around surrounding aperture. | <input type="checkbox"/> |
| | 5 Check all internal trims are installed correctly. | <input type="checkbox"/> |
| | 6 Check the site is clean and all debris is removed. | <input type="checkbox"/> |
| Glazing | 1 Glazing as specified. | <input type="checkbox"/> |
| | 2 No cracks or scratches on glass, or signs of unit failure. | <input type="checkbox"/> |
| | 3 Obscure glass is oriented the correct way. | <input type="checkbox"/> |
| Operation | 1 All opening sashes open and close correctly | <input type="checkbox"/> |
| | 2 No air gaps between seals and frames. | <input type="checkbox"/> |
| | 3 No scraping or rubbing between cams and strickers. | <input type="checkbox"/> |
| | 4 When doors slam , no bounce, nor outer frame movement | <input type="checkbox"/> |
| | 5 All operation gear correctly lubricated. | <input type="checkbox"/> |
| | 6 All hardware attached with correct number of fixings. | <input type="checkbox"/> |
| Sight Lines | 1 Visually correct. | <input type="checkbox"/> |
| | 2 Adjacent vents aligned. | <input type="checkbox"/> |
| Sealing | 1 Sealant to be continuous around frame run. | <input type="checkbox"/> |
| | 2 No excess sealant to be present on frame faces. | <input type="checkbox"/> |
| Bay Windows | 1 Ensure no settlement of structure when temporary supports removed. | <input type="checkbox"/> |
| | 2 Check that flashings and DPC have not been disturbed or | <input type="checkbox"/> |

Site Re-Glazing

Removing Timber Beads

Where de-glazing is necessary, remove the vertical timber beads. Starting tap the bead towards the centre of the pane using a plastic glazing spade. (See figure 15). This should separate the bead from the sash or frame and a chisel can then be used to prise it off completely. Repeat this process for the remainder of the beads. Remove any nails from the glazing rebate. Nails that are left in the glazing bead should be pulled through the back of the bead with a pair of pincers to avoid break out through the face.

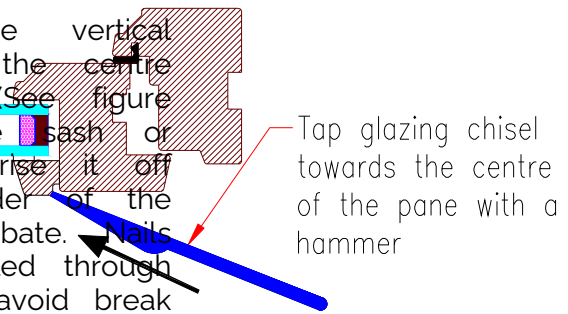


Figure 15

Removing Glass

Before removing the sealed unit, the double si tape must be cut from the inside around the fi of the glass using a utility Knife. (See figure 16 should now be removed from the outside. Th of the security tape should be removed from upstand and replaced with new security tape.

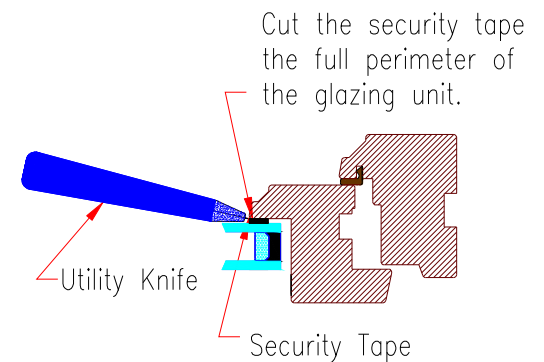


Figure 16

Replacing Glass & Beads

Place the glass into the glazing check ensuring equal spacing all around. Correct spacing of the glass blocks is shown in figure 17. The centre of the glazing block should be approximately 100mm from the Beads. should be replaced fixing the top and bottom ones first then the side ones, ensuring compression on the glazing tape to create a water tight seal. Nails should be punched and filled with an appropriate coloured filler and the face of the bead should be repainted/stained

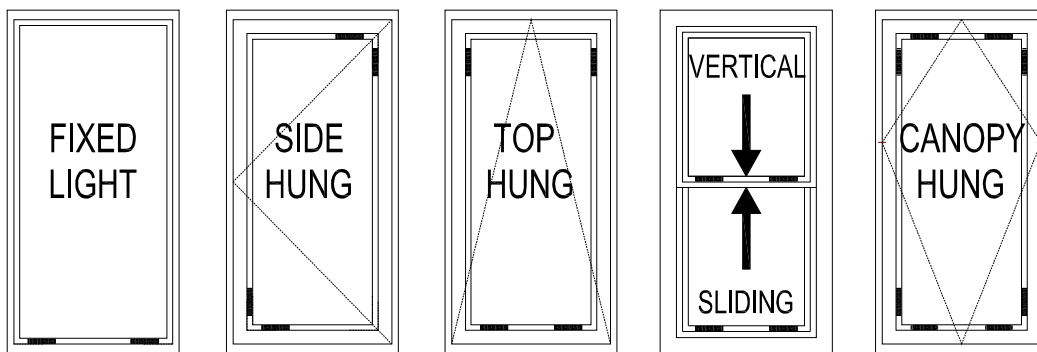


Figure 17

For further glazing information please refer to:
 BS 8000 Part 7 1990.
 BS6262 Glazing in Buildings.
 NHBC Standards Charter 6.7 January 1999 edition as of January 2000.

Health & Safety

It is the responsibility of the installer to make him/her self aware of any Health & Safety and Construction Design and Management Regulations that may apply to the work he/she is undertaking.