WINDOW DISTRIBUTION LIMITED

eurocell®

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INSTALLATION GUIDE

Issue 1

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INSTALLATION GUIDE

TRANSPORTATION AND HANDLING OF WINDOWS

- Windows can be transported either glazed or unglazed. Bay windows may be supplied in separate frames and assembled on site. It is important that when the windows are in transit they are stacked in a vertical position. Take care to prevent movement and surface scratching by wedging flexible packing material between surfaces.
- Prior to fitting on site windows must be checked for imperfections and damage. The majority of building materials (i.e. sand, cement) will not affect the properties of the PVC-U. However, solvent-based materials - Bitumen etc - that can be found on building sites will stain white PVC-U.
- It is recommended that PVC-U windows delivered in a fully fabricated state should retain the protective film until all building work has ceased.

1. SURVEYING

- Good surveying is essential to ensure a trouble free successful installation, also to avoid costly remakes caused by incorrect measuring.
- When surveying it is the surveyor's responsibility to determine that the structural openings and surrounding areas are in a state of good repair and provide the correct dimensions for manufacture.
- It is not possible to provide full comprehensive surveying instruction to cover every eventuality, the following basic notes are for on-site surveying guidelines.

FOR ALL CONFIGURATIONS OF DOOR AND WINDOWS CARRY OUT THE FOLLOWING:

1. Check the brickwork around the opening for any defects.
2. Check if any provision needs to be made for telephone or TV cables. Advise the customer of these facts before proceeding.
3. Take several measurements across the opening to find the narrowest point, having taken care to measure beyond any existing sub-frame or packing. Deduct 10mm from this dimension to give the finished width. (5mm allowance for expansion on each side).
4. Measure the height of the opening in the same way as detailed above and deduct 10mm for expansion.
5. Take a note of any existing cill and establish if this is to be included in the overall frame dimension (eg. stone cill). If the cill is to be replaced take a note of the depth of the existing reveal and determine which cill is most appropriate (i.e. 180mm, 150mm or the 85mm cill).
6. Check the opening is square – it is important that the diagonals are no more than 10mm different, if they are then remedial work may need to be carried out on the brickwork to ensure the opening is square.
7. If the window is fitted deep into the reveal check to see if the extension blocks are necessary to ensure that the sash operates and is not impeded.
8. If the customer has chosen a style of window, the surveyor must check to see if the styles are suitable for the intended application.

Surveyor must check:

a) That the units are within the supplier's specification.

b) That the units are within the max/min size limitations.

c) That the windows will perform as designed.

d) That the windows are acceptable to the customer.

e) That all windows meet the requirements of current legislation.

9. The responsibility for re-plastering, fitting of curtain rails, blinds or other fittings or fixtures must be discussed and agreed with customer.

BAY WINDOWS

PRELIMINARY CHECKS REFERENCE LOAD BEARING WINDOWS

It must be assumed that all bay windows are load bearing unless it can be proved beyond doubt that alternative support is sufficient to carry all dead and imposed loads. Bay windows are supported by structural mullions (brick, stone etc), bays with small flat roofs and oriel windows are considered non-load bearing.

The structure between and above the bay window must be carefully inspected for any cracks or defects.

New lead trays may be required under first floor bays that rest on timber or stonework. Bay windows require to be replaced along the outside line of the existing frames. **Consequently, accurate measurement of the internal angles is essential** in addition to the overall dimension. In the same way as for flat windows wherever possible the surveyor should draw a template of the base of the bay using as many dimensions as are accessible.

All bay windows must be fully reinforced due to the method of coupling the frames with bay poles or support members. If bay windows are load bearing, bay poles must be located either directly on to a galvanised steel base plate resting on stone cill or the masonry beneath the cill and onto the structure at the window head.

- When surveying bay windows it is important that the angles are correct, particularly for the manufacture of bay cills because no alteration can be made to the configuration once on site!

2. REMOVING THE FRAMEWORK

2.1

On arrival, before removing any existing window frames, check that the replacement frames size is the same as the existing window frames. When checking the sizes, ensure that the new frame has a 5mm expansion gap around the perimeter.

2.2

Once you're sure your measurements are correct, proceed to remove the old window frames.

2.3

Run a sharp blade around the inside perimeter of the window to break the bond between frame and the plaster. This will also minimise the damage to any interior decoration.

2.4

Remove as much glazing as possible, this will help to reduce the weight and allow easier handling.

2.5

Remove and old fixings and break the external silicone seal with a blade. Also remove the external brick corners, to release the old frame.

2.6

After the removal of the frame, remove all sealant and debris from the brick work.

2.7

Check that mortar bed has sufficient clearance, if not remove it.

2.8

Prepare the external cill for fitting to the new frame. This can be done one of two ways, either fitted full width or rebated around the brick work to achieve a neat finish.

3. PREPARATION OF APERTURE

GENERAL PREPARATION

Before removing the existing window the replacement frame should be measured and tolerances checked against the aperture (i.e. 5mm on either side of the window and 5mm on the top and bottom). Windows should be installed plumb and square without twist, racking or distortion of any member to ensure that they operate correctly after installation. Eurocell window frames should be manufactured accurately to the specified outer frame dimensions and have opening lights to fixed frame clearance for operational efficiency.

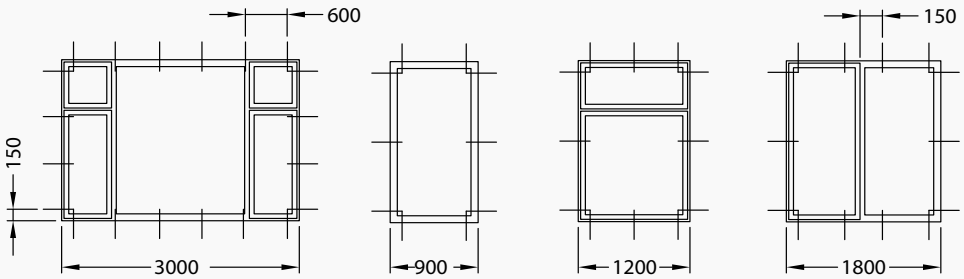
Distortion of any frame or sash member will reduce performance and create a security risk. The choice of fixing cleats or plastic sheathed fixing bolts is usually dependent on whether the opening is already plastered. Fixing bolts are sometimes preferred to minimise redecoration in existing houses where windows are being replaced. Both methods are suitable for new installations.

New build

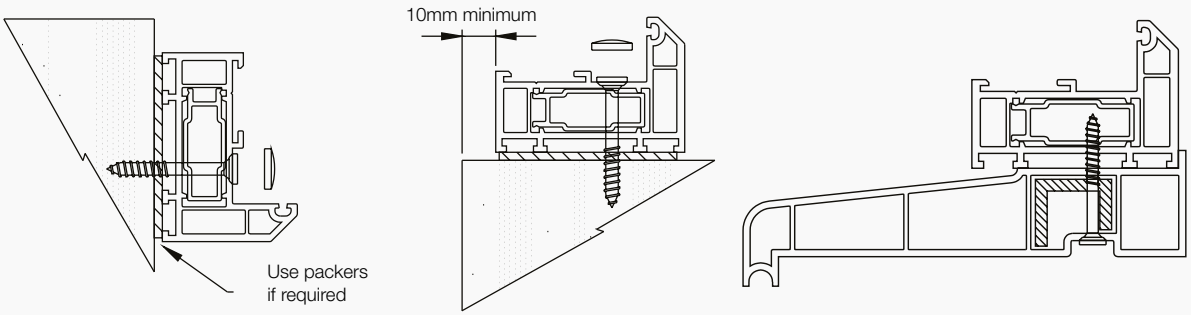
Templates should be used in apertures to avoid damage to the pre-finished EWS product until the building work has been completed (i.e. lintel correctly installed and DPC's fitted).

Replacement of windows into existing building

When replacing windows attention should be paid to the checking of the surround of the aperture regarding loose brickwork and plaster.



If fixing cleats is the chosen method of installation they should be attached to the outer frame starting at 150mm from the corner and thereafter at a maximum of 600mm centres. The cleats should be screwed into the mainframe in the central reinforcing chamber.



CILLS

Cills AC180, AC150, AS85 should normally be fixed to the bottom edge of the mainframe prior to installation of the window. The fixing screws should penetrate upwards into the reinforcement section in the central chamber. The cill should be placed on to a bed of mortar or silicone sealant.

4.1

Remove any packaging from the new frame and screw the cill onto the bottom of the frame. Make sure you select a screw that will not penetrate the inner skin of the frame.

4.2

Be sure to seal the ends of cill and frame assembly to prevent moisture from tracking along the cill and into the brickwork.

4.3

Carefully position the new frame into the aperture. Centralise it and insert packers underneath to level it and maintain the 5mm expansion gap.

4.4

Check that frame is both level and plumb, then drill fixing holes into the frame sides. These should be drilled approximately 150mm from the top and bottom corners and approximately 600mm in between (a minimum of 2 fixings per side)

4.5

Fix the side of the frame to the wall. Use packers at the fixing points to avoid distortion to the frame and to maintain the 5mm expansion gap.
Do not over tighten the fixings!

4.6

On wider frames don't forget to fix the top and bottom of the frames, this will help prevent deflection in windy conditions. Ensure that any holes drilled in the bottom of the frame are sealed with silicone to prevent moisture absorbing into the brick work.

4.7

Using a chisel, break off the excess ends of the packers to create a neat finish.

4.8

Before reaching the final stages, clean any brick dust or debris from the frame and surrounding areas.

5. FITTING THE GLAZING

5.1

Commence glazing the frame, ensuring that appropriate glazing platforms are fitted around each aperture. These centralise the glass and allow free passage of water to run to the drainage slots.

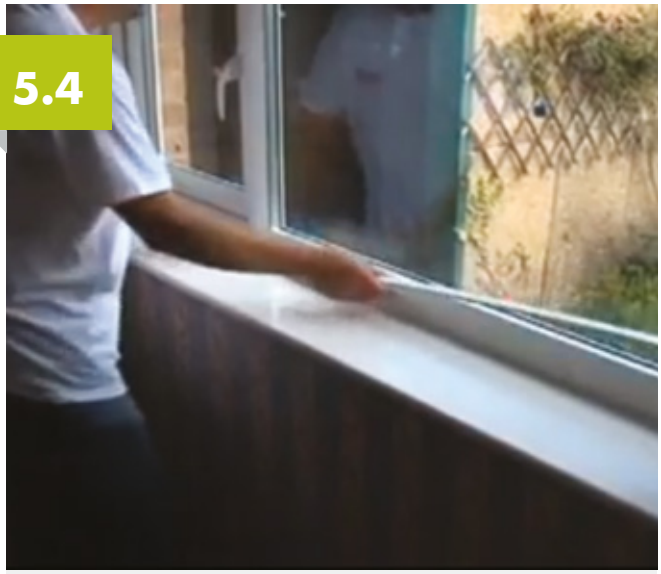
5.2

Place each pane into position, noting that where opening casements are hinged from the sides they should have the glass packed at diagonally opposing corners to hold the casement square.

5.3

As each pane is positioned, the beading can be installed using a nylon mallet and tapped securely into place.
It is recommended that horizontal beads are installed first and that the beads are refitted to their original position.

5.4



Make sure the area is clean and free from dust and debris. Measure and fit any internal trims that may be required. Trims maybe fitted using a suitable PVC-U adhesive or silicone.

5.5

Prior to sealing the frame to the internal wall, clean the frame and glass so it is free from dirt and grit. When using cleaning agents be sure to keep the room well ventilated.

5.6

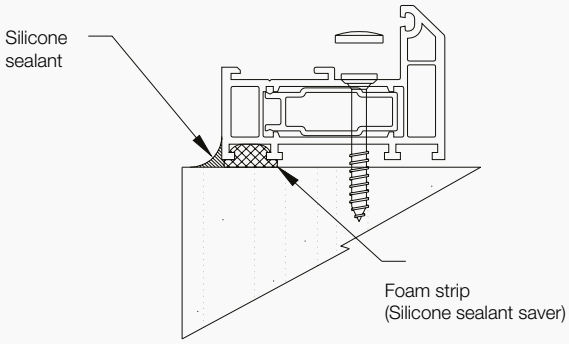
Run a strip of masking tape around the frame, then apply a bead of sealant between the frame and the wall. Remove the tape before the sealant sets. Apply this step to all four sides of the frame.

5.7

Ensure that any trims are bonded to the frames to prevent dirt entering the joint.

5.8

Apply the end cap to the cill using a suitable adhesive.



Having manufactured and installed the window so that there is a 5mm gap (approx.) between mainframe and masonry, it may be necessary to insert a flexible foam strip to form a base for the silicone sealant.

Ensure that all the window/wall joints are properly sealed off neatly.

Finishing work may be necessary inside the window, i.e. re-plastering or a Eurocell finishing trim.

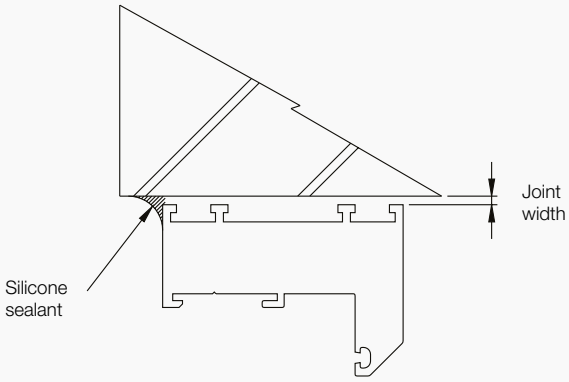
Internal Eurocell window board is also recommended both for replacement and in new buildings. For fixing of accessories to the inside of the window i.e curtain rails and nets etc.

Screw fixing can be used into the PVC-U frame as long as it is more than 20mm away from the welded joint. High-low threaded screws are recommended for this use. Any doubts please contact Eurocell Technical department.

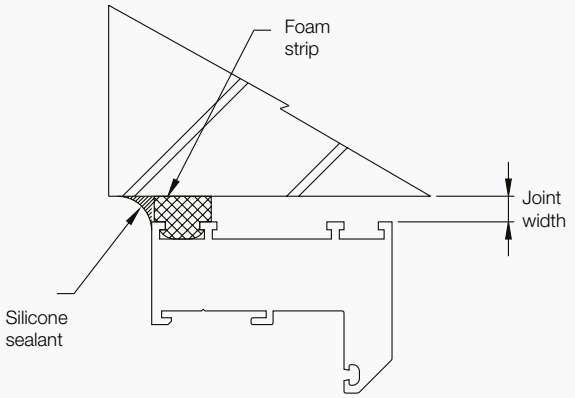
Frames both inside and outside should be washed down to clean off any residue of building material, using household detergents.

The use of solvent-based cleaners is not recommended.

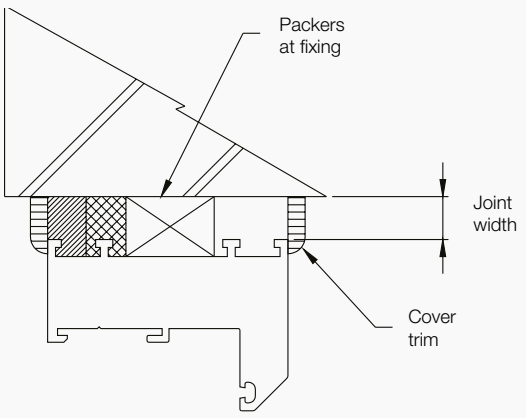
A: joint width less than 6mm.



B: joint width 6mm to 15mm.



C: joint width over 15mm.



EXAMPLES OF FRAME WEATHER SEALING

6. FINISHING OFF

6.1

Clean the external surfaces to remove the dirt and grit.

6.2

Apply a strip of masking tape to the frame perimeter. Apply a smooth bead of silicone sealant between the frame and brick work. Before the sealant sets, remove the making tape to create a neat finish.

6.3

It is important to remember to seal the below the external cill.

6.4

Once the area has been cleaned of all debris, step back and admire your newly fitted Eurocell window.