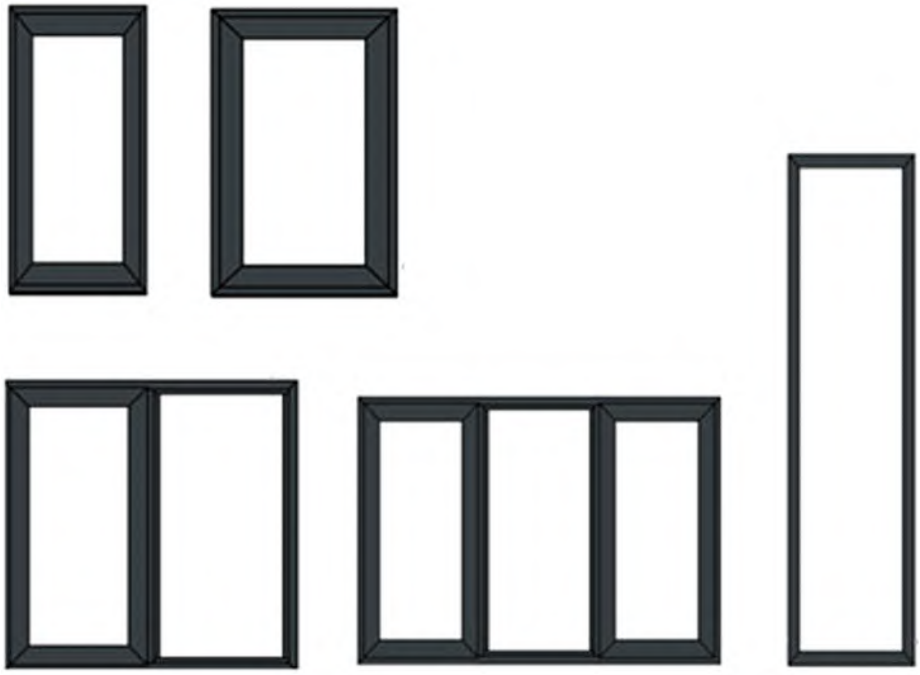
ALUMINIUM CASEMENT WINDOWS

Assembly Instructions



About your windows

All products must be installed in accordance with accepted good trade practice (and in accordance with supplied instructions where applicable) and maintained in accordance with these procedures or else the warranty shall be void.

The advice given in this document assumes fitting will be carried out by a qualified professional following the Code of Practice for the Survey and Installation of Windows and External door sets, where applicable.

Important information

All our external aluminium windows, glazed units and hardware components are guaranteed for a full 10 years against the occurrence of manufacturing faults and the powder coating finish is guaranteed for 15 years, all subject to correct installation, regular maintenance and care in use as detailed below.

We recommend that a competent trades person(s) installs this product. Where applicable a single person should never carry out the installation, as some of the components are heavy.

Handling and Storage

Take care when unloading the products as they may have shifted during transportation. The products are heavy. Always wear gloves, use specialized equipment such as glass lifting suction cups and have at least two people to unload / carry them.

You are responsible for safe handling of the products, and for selecting appropriate handling equipment.

Conduct a thorough inspection of the product(s) immediately after receiving them, including temporarily removing any protective tape, and then reapplying before installation.

Important: All damages or missing parts must be reported within 72 hours of receipt and before commencing installation.

When storing the windows, frames and glass before installation, and once all items have been fully checked, they should be handled with care and stored in a dry, ventilated building.

Loose glass should never be placed directly onto hard floors such as concrete, but should be placed on cardboard, sheeting or wooden batons, on edge rather than flat. The glass should be stored on its edge and at a 3–6-degree angle.Glass should not be stored horizontally or on top of each other and should not come into contact with anything harder than itself.

Installation

The windows are designed to be installed by competent trades persons with good knowledge and previous experience of installing windows and doors. Thoroughly read and understand these instructions before you begin installation. It is presumed that the installer possesses basic skills and an understanding of door, window, wall and roof installation, and joint sealant guides.

Before commencing the installation, carry out a final check to make sure the aperture is the correct height and width to accommodate the outer frame size. The brickwork opening should be approximately 10mm greater in both height and width than the outer frame size when measuring at the tightest points.

Our aluminium windows are designed for simple on-site assembly by experienced trades persons. The outer frame needs to be securely fixed into the opening perfectly square and level on all planes.

Important: All frames must be installed perfectly plumb, square, and level on all planes, and fully secured and sealed into the opening to ensure optimal performance and longevity.

Additionally, all windows must be correctly toe and heeled by an experienced glazier. This is essential to ensure smooth and proper operation of the units.

About your windows (Cont)

Care and Maintenance

Aluminium window Components

All our aluminium sliding door sets are supplied fully powder coated providing a high quality and durable finish, unless otherwise stated.

The profiles may have protective tape applied to interior and exterior surfaces to protect them during manufacturing and handling. Protective tape must be fully removed before or on installation. Protective tape and masking tape should not remain on exterior surfaces for an extended period of time. They will begin to fuse to the surface making the adhesive residue difficult to remove. Failure to remove tape may permanently damage the frame finish.

To maintain the external aluminium powder-coated finish, wash regularly with soapy water and then dry off with a soft lint-free cloth. As a minimum, the external surfaces must be washed at least every three months, and monthly if within five miles of the sea or in an industrial area. Our general recommendation would be to wash the external aluminium every time you clean your windows, which should normally be more regularly than the minimum requirement.

The powder coating is not guaranteed unless the doors are installed at least 800 metres away from the sea.

The opening vents should be kept clear of debris and regularly cleaned, which can be done whilst cleaning the windows and glass.

Important: We cannot accept any claims for damages, including scratches to the powder coating and aluminium reported 72 hours following delivery, and / or after installation has commenced.

Hinges & stays

Using a microfibre cloth, wipe down the visible surfaces with warm soapy water and then rinse off by wiping with a clean,damp cloth. Applying a thin film of light machine oil or silicone spray, wiping with a dry cloth to remove any excess, will help maintain the original lustre of the metal finish. Be careful not to get these liquids on the aluminium as this may affect the powder coating.

Locks & Handles

All moving parts should be lubricated using a silicone spray. The handles should be regularly cleaned with a soft damp microfibre cloth to remove any dust or grime taking care not to scratch the surfa**ce.**

Window Operation

All our aluminium windows have been pre-assembled in our factory, where they are inspected and then fully operated, including checking the window(s) lock and unlock smoothly. If you experience any difficulty operating your windows including, opening, closing, locking or unlocking of your windows, do not continue to use your windows as this may cause further issues and damages, and invalidate your guarantee.

If you are having operational issues, first eliminate actual locking problems by opening the window, rotating the handle and then turning the key. If this can be done, the lock is operating normally, and the problem is likely to be due to incorrect alignment. Please contact a member of our Aftercare team so we can assist you further if required.

Glazing Units

All glass is supplied to the GGF (Glass and Glazing Federation) standards.

To reduce carbon emissions from the home and to keep heating and cooling bills down, the government has recommended that all manufacturers use a special Low E thermal glass within the sealed units to comply with Building Regulations Part L.

About your windows (Cont)

This glass is coated with a special substance to comply with the above and occasionally, and in certain light conditions, may produce transient visual effects, this can sometimes look like a transparent film or haze, and make the glass appear cloudy. This is very infrequent and only affects a minority of glazing units. As a company, we do have to comply with the new regulations which are for the benefit of all, and this is not a detect.

Due to demands for better thermal efficiency, it is normal for condensation to form on the outside of the glazing units, to the exterior side of the property. This demonstrates that the glass is performing as it should by reducing the transfer of heat from the internal side of the property to the external side of the property, this is not a defect. For any condensation forming to the inside of the property, this is normally due to high levels of moisture in the air and / or insufficient ventilation in the room, the moisture is then forming on the cold surface. If condensation is forming inside the glazing unit (between the panes of glass) it is likely that the glazing seal has been compromised.

Tempered glass means it has been toughened to be up to five times stronger than normal glass. It is unusual to break such strong glass, but sharp objects hitting the glass at certain points can cause breakage. Tempered glass is also known as safety glass. This means that if it breaks it will shatter into smaller fragments which are less likely to cause injury, unlike non-tempered glass which breaks into large, sharp fragments.

Laminated glass is also called safety glass and comprises of multiple layers of glass sandwiched together. Due to its high strength, this prevents the glass from breaking into large pieces. If the glass breaks, it will produce a 'spider web' effect similar to what is commonly seen in shattered car windscreens. Laminated glass will also increase the sound rating insulation.

Glass must be regularly maintained and cleaned to stop break down of the glass or seals. This can be done using a mild solution such as washing-up liquid diluted in water. Do not use abrasive cleaning solutions as this may cause scratching.

Visual distortions caused by reflections in toughened glazing units are a natural phenomenon and not a fault.

Laminated, toughened or coated glass is acceptable if bubbles or blisters, fine scratches no more than 2.5cm long and / or minute particles are neither obtrusive or bunched. The glass used in sealed units is processed glass, therefore certain blemishes are unavoidable. More blemishes maybe visible in laminated glass due to its layered construction.

For carrying out glass inspections, stand at least 3 metres away from the glazing, view at a 90-degree angle and look directly through the sealed unit(s). The glass must be viewed in natural daylight but not with the sun directly on it. Any moisture must be removed from the surface of the glass before inspecting.

Glass must be regularly maintained and cleaned to stop break down of the glass or seals. This can be done using a mild solution such as washing-up liquid diluted in water. Do not use abrasive cleaning solutions as this may cause scratching.

Contents

Standard Items

Window Frame(s) and Vent(s) - pre-built

Glass – pre-glazed or temporary glazed / loose (as per order agreement)

Glazing Gasket – Qty 1 roll (temporary glazed / loose glass only)

Handle(s) – Qty 1 per opening vent

Optional Extras

Cill – Qty 1 (per window)

Cill End Caps – Qty 2 (per window)

Trickle vents – loose

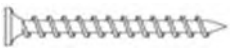
Installation Kit (Optional):

HSS Drill Bit 6.5 x 100mm – Qty 1

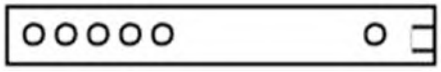
Masonry Drill Bit 6.5 x 210mm – Qty 1

¼ Hex Torx T30 Bit – Qty 1

90mm Direct Frame Fixing Screws – Qty 28



Window Fixing Straps – Qty 1 pack



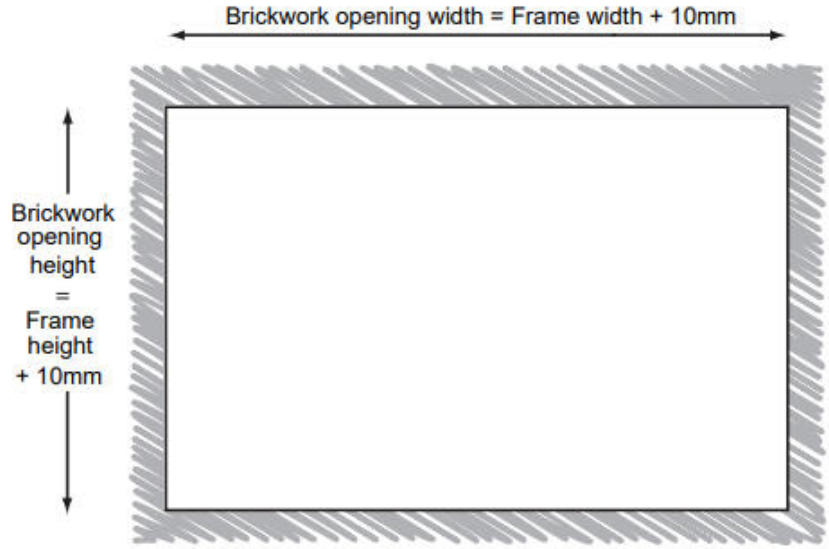
Silicone – Qty 1

Assorted Packers – Qty 1

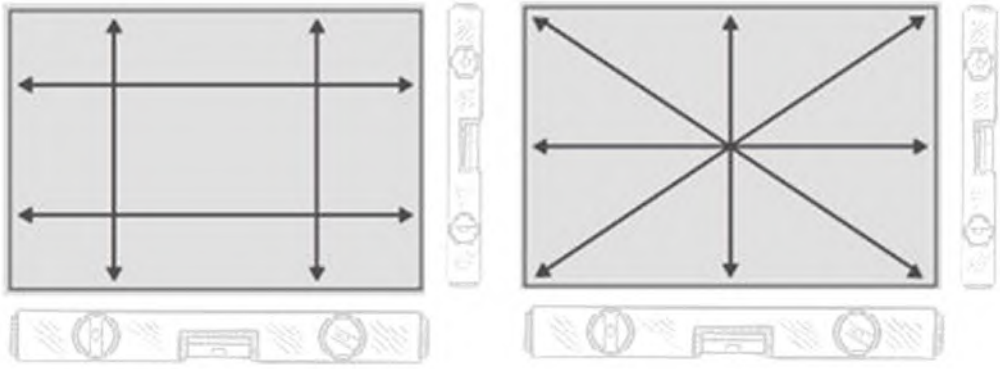
Important: The assembly and installation method as detailed in this manual is based on the purchase and use of the optional installation kit. If you have not chosen to purchase an installation kit, please ensure you use appropriate fixings suitable for external door and window installations.

Preparing the site

Brickwork opening: When preparing the site please prepare the brickwork opening to be 10mm more in height and width than the outside assembled frame size of the window frame.



It is essential that all 4 internal surfaces of the brickwork be levelled before installation. Please ensure that all dimensions are correct for installation before proceeding, as the window must be installed plumb, square and level on all planes into the opening.



Check the aperture to make sure there is no loose plaster or brickwork, and that it is free of any debris or brick dust. Ensure that a solid, level base is present at the required dimensions and can provide packing points at 150mm – 200mm centres and fixing points at 600mm centres.

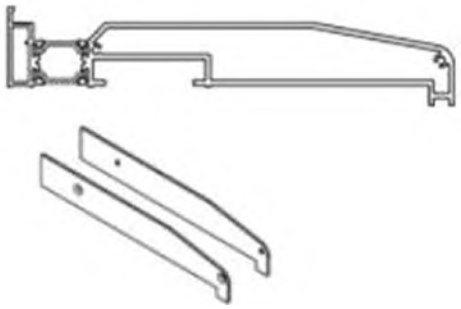
Example sizes:

Outer Frame:	**Brickwork Opening:**
620mm W x 1190mm H	620mm W x 1200mm H
905mm W x 1190mm H	915mm W x 1200mm H
1190mm W x 1190mm H	1200mm W x 1200mm H
1760mm W x 2090mm H	1770mm W x 1200mm H
620mm W x 2090mm H	630mm W x 2100mm H

The brickwork opening is classed as a finished opening size, so it is important you have allowed for any additional plaster work, trims, architraves, etc. Finishing around the frame is a personal preference and should be decided between yourself and the installer. Insulated cavity closer's may be required.

Fitting the optional drip cill

If you have ordered a cill, first locate the drip cill and the Qty 2 cill end caps, glue and seal the cill end caps onto each end of the cill.



The cill can either be fixed to the underside of the frame prior to installation or installed into the opening first.

When fitting the cill to the frame, ensure appropriate fixings have been used and silicone dipped and sealed. Ensure the touching faces of the window frame and cill are silicone sealed along the front and back edges, and sides to prevent any water ingress. Do not block any drainage slots.

Temporarily lift the cill into the opening packing accordingly. Use a laser level and / or long spirit level, to ensure the cill is sitting perfectly level in the opening. The cill should be positioned so the frame jambs will sit a maximum of 5-10mm back from the face of the brickwork.

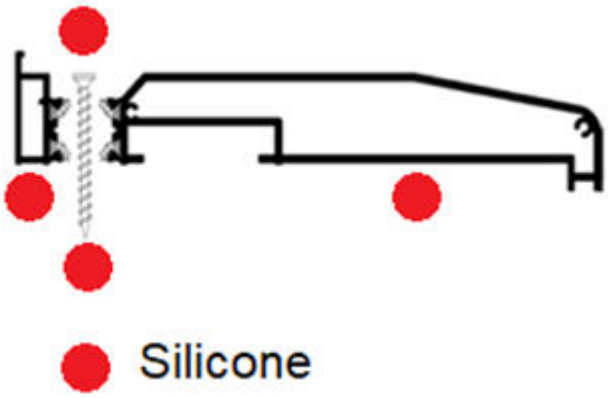
The bottom cill must be fully supported from front to back, and levelled without dips or raises, with the cill overhanging the brickwork for drainage. Ensure the cill is level and sufficiently packed to support the sliding door set along its full width.

Remove the cill and create a bed of silicone or mortar for the cill to sit on. Silicone any packers in place. Lift the cill back into the opening ready for securing to the brick work.

If the surface is uneven then a mortar bed may be necessary. If a mortar bed is not required, then seal along the edges using silicone sealant.

Once the cill position is level and fully supported, use a 6.5mm HSS drill to drill a hole at each end of the cill through the thermal break. Use a 6.5mm SDS masonry drill to drill through these holes into the masonry.Finally fix the cill in place using Qty 2 direct frame fixings.

Important: All fixings and drill holes must be silicone dipped.



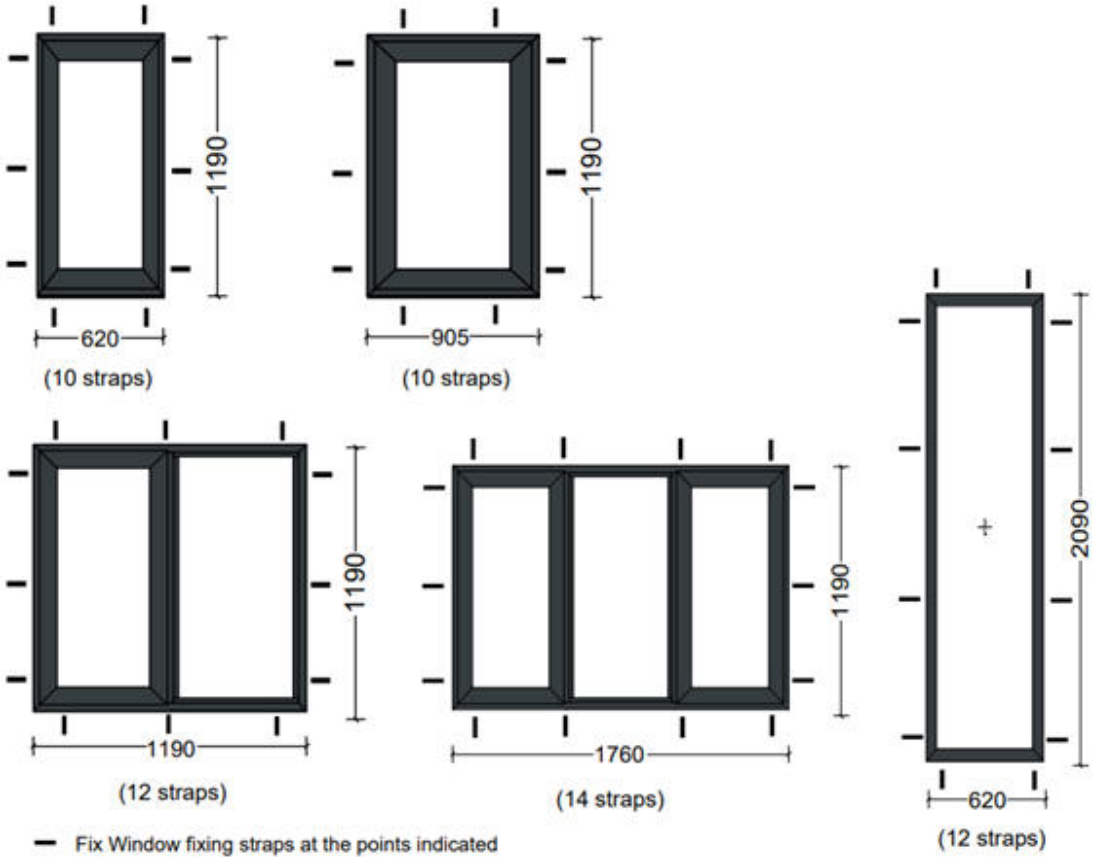
Installing the window(s)

Fixing strap method

Skip this step if direct fixing through the frame into the aperture.

Locate the fixing straps, push the crimped end of the fixing strap so the bend sits under the outer edge/lip of the window profile, positioning the 2 flat section outside/ on top of the profile. Using the closest single hole, secure in place using a No.8 self-tapping screw.

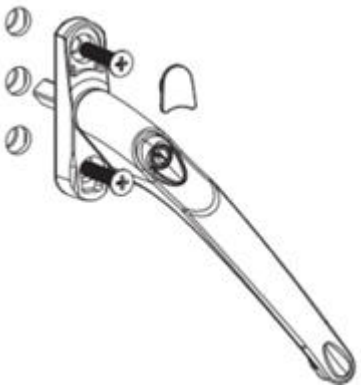
Locate the window straps 150mm in from each edge and centrally. See examples below –



The windows are now ready to be installed into the opening.

Fitting the handle

Fitting the handle Take the spindle from the handle pack and fit it into the handle. Locate the factory pre-machined holes on the inside of the window frame and fit the handle securing with the two fixings provided.



Installing the assembled frame

Before lifting the frame into the opening do one final check to ensure that the bottom of the brick work opening is completely level and packed accordingly as per the previous section ‘Fitting the Drip Cill’. Clear the aperture of any dirt / debris, ensuring you have a clean level surface to fix to.

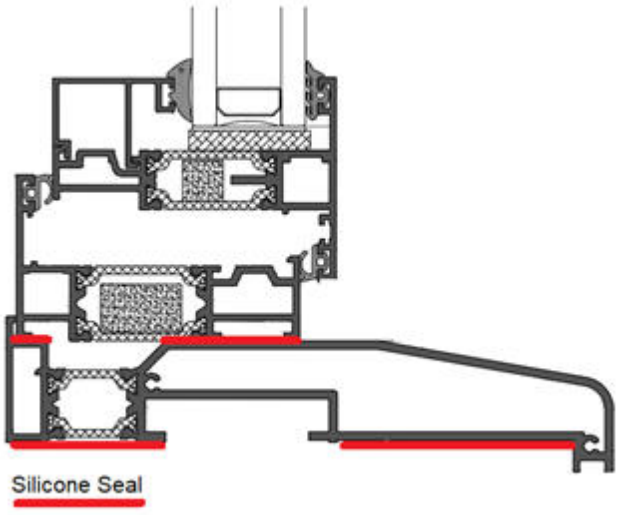
Important: During the installation, repeatedly check the alignment and squareness of the outer frame. Measure the distance across diagonally to check squareness. Without these checks the installation may be unsatisfactory, causing damage to the doors and / or incorrect operation.

Ensure you have the correct structural damp proof course in place.

Temporarily lift the frame into the opening.

The outer frame should be positioned in the brickwork opening with the jambs to the outer edge, up to a maximum 5mm - 10mm back from the face of the brickwork. Most importantly, the frame should have a secure fixing, with the cill (if selected) overhanging the brickwork.

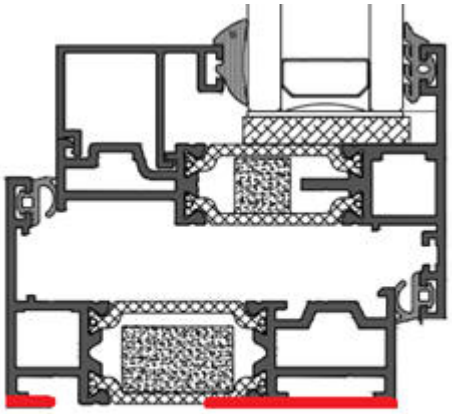
If you have already fitted a drip cill into the bottom of the brickwork opening, take care when lifting the outer frame on top not to damage the drip cill. You should have already levelled and fully supported your drip cill, meaning the threshold should automatically sit level on top. Silicone seal the cill at the front and back, and both ends of the cill before sitting the threshold on top.



Installing the assembled frame (Cont)

Where no drip cill is being used, level the frame using packers, starting at the bottom and insert the first packer DIRECTLY UNDER THE FRAME JAMB starting at whichever side of the frame looks highest. Please refer to section ‘Fitting the Drip Cill’ for levelling and sealing the threshold.

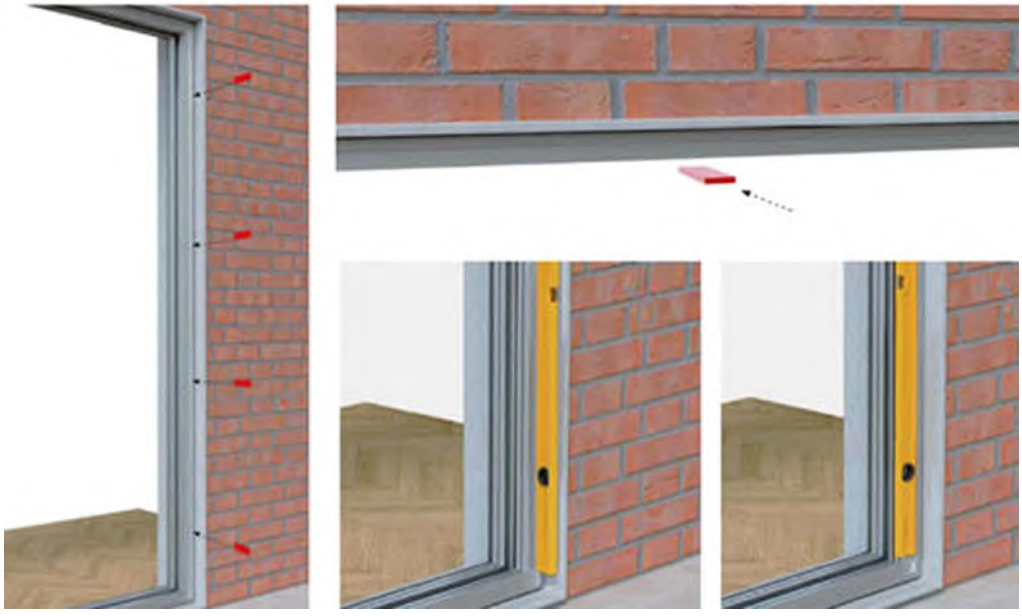
Remove the frame and create a bed of silicone or mortar for the frame to sit on the lift the frame into the opening ready for securing to the brick work. Ensure the frame is level and sufficiently packed along its full width, silicone any packers in place. If the surface is uneven then a mortar bed may be necessary.



Silicone Seal

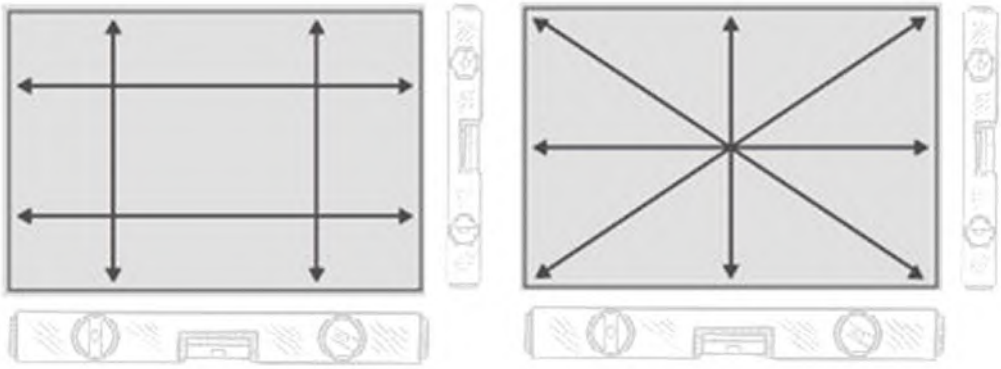
Lift the frame back into the opening.

Continue to level up the frame using air wedges and / or packers. Ensure the frame does not bow in any direction, the internal frame dimensions are consistent, and the structural opening does not transfer any load onto the frame.



Carefully check the window is completely square and level in the opening, and that the vertical surfaces are level and plumb.

Installing the assembled frame (Cont)



Once the frame is secured in place you can now open any vents (if applicable) to allow access to the fixing points in the outer frame, ensuring you support the weight to prevent the frame from moving.

Re-check the levels.

Window fixing strap method

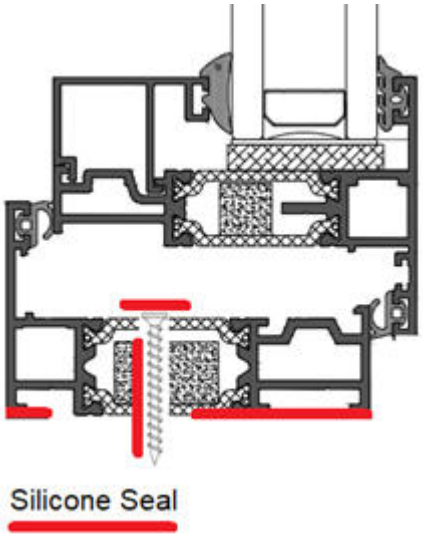
Bend the fixing straps to the inside brickwork. Using a 6.5 SDS masonry drill bit, drill through the holes in the straps into the masonry and use direct frame fixings to secure.

Direct frame fixing screw method

The direct frame fixings will screw directly into the brickwork. Use a 6.5mm HSS Drill Bit for piloting the holes in the aluminium frame sections and then a 6.5mm SDS Masonry Bit for the brick work, and Torx T30 bit to ensure a secure fixing. Where it is possible to direct fix, follow the same fixing points in the diagrams as shown in the ‘Window fixing strap method’ section.

Locate the direct fixing 150mm in from each edge and centrally.

Important: All bottom fixings must be silicone dipped.



Glazing the windows

Before glazed the window, check the opening vents are operating correctly.

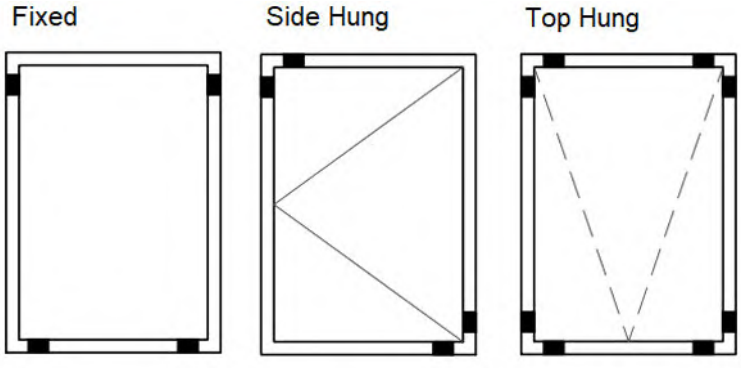
Do not proceed with glazing the doors if you are not experienced with this process.

Important: For large glazing units, glass lifters / suction cups must be used during the installation of these windows. The windows must be glazed / toe and healed by an experienced glazier.

It is the glaziers responsibility to ensure the glass has been packed and supported sufficiently with the correct type and placement of bridging and glazing packers. The incorrect balancing of the glass will affect the window operation.

Remove the temporary fitting glazing beads and place them to one side, taking note of their location.

Toe and heel the glazing units where required, packing and securing accordingly. Please see packer placement example below –

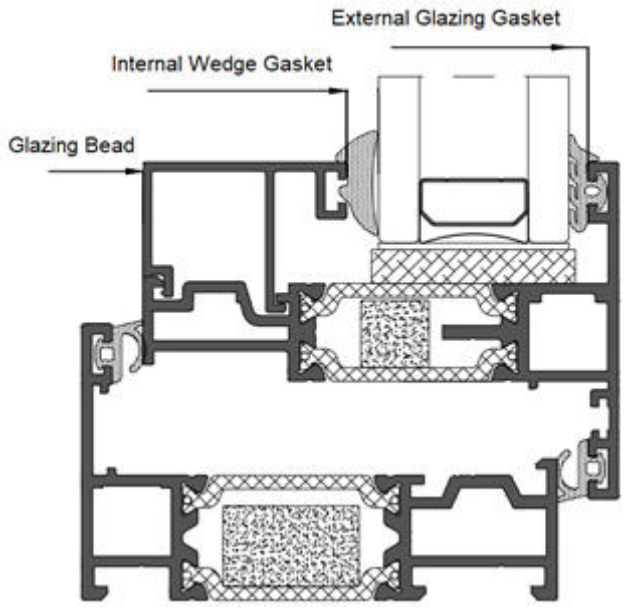


Locate the internal glazing bead and clip this into their original positions / locations, starting with the top and bottom first and then the sides.

We advise spraying the units with a mild soap/water mixture or glass cleaner to make beading and fitting the gasket easier. Ensure you have toe & heeled/packed the units correctly.

Be careful not to scratch the paint profile.

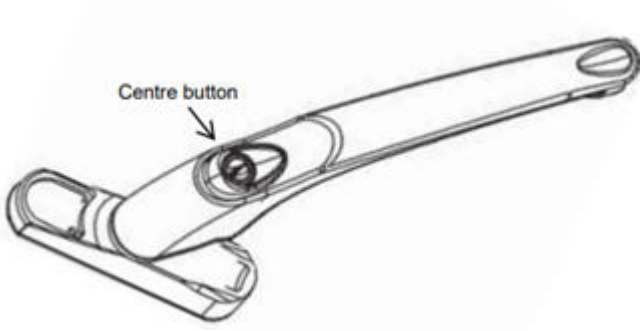
Finally, insert the internal wedge gasket to secure. The gasket will require compressing and pushing in to locate correctly. It is recommended that a glazing paddle is used to help with compression.



Operation of the handle / lock

Opening, closing and locking of the window is controlled by the handle. To close and lock, close the window and turn the handle to hold the window shut, then turn the key to lock.

To open the window, turn the key to unlock and then depress the centre button (with the keyhole unit) and turn the handle. The window sash can now be pushed open.



Finishing around the frame

Once you are satisfied with the correct installation of the frame and door operation, break off any protruding packers where necessary.

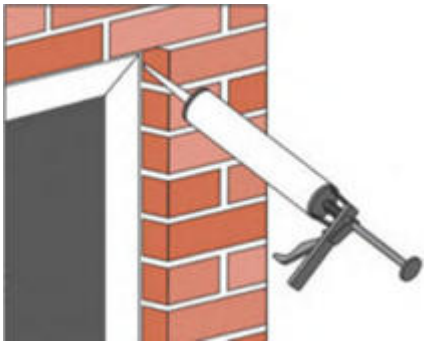
Remove any remaining temporary protective tape from all profiles. Clean down the aluminium and glass with warm, soapy water.

The final finish you wish to achieve comes down to personal preference and is to be discussed with your installer before commencing. Below is a general guide to sealing around the outer window frame.

Expanding foam can be used to fill any large apertures around the frame. Be careful not to overfill. Trim or silicone around outer frame and seal below external cill if applicable.

Ensure the frame is free from dust and debris before applying to ensure an adequate barrier is created to prevent any water or air leakage.

Seal under and around the outside of the cill, ensuring you do not block any of the drain holes. Repeat the frame sealing on the inside using decorators caulk and/or PVC trims. Take care to ensure any drainage holes are kept clear of debris and sealant.



Re- check the door for correct function and instruct the homeowner on their correct operation.

Trickle vents (optional extra)

Trickle vents will be supplied loose and will need screwing to the top of the window.

First identify the internal and external side of the trickle vent(s). The moveable / opening and closing vent will be to the inside.

Offer the vents up to the predrilled ventilation location, carefully mark the screw points by offering the loose trickle vent(s) up to the relevant location(s). Securely fix the trickle vents to the aluminium.

Operating the trickle vents

Hepworth
In Aluminium We Can

Macclesfield, Cheshire SK10 2BN

DECLARATION OF CONFORMANCE

DoC Nº: HEP/WINALICORC

Product Type:	Aluminium Casement Window
Intended Use:	For use in domestic and commercial premises Not intended for use on escape route
Declared System of Assessment Performance:	3
Provisions to which the Product Conforms:	Annex ZA of EN 14351-1:2006+A2:2016
Reference to Supporting Product Certification and/or Test Reports *(supportive of compliance)*:	BFRC - Thermal Report S158/20220906/003

Declared Performance:

Essential Characteristics	Performance
Resistance to Wind Load:	Class CE2400
Watertightness:	Class E1200
Dangerous Substance:	No emissions of dangerous substances emitted
Load Bearing Capacity of Safety Device:	Npd
Acoustic Performance	Npd
Energy Rating:	A
Radiation Properties:	Npd
Air Permeability:	Class 4

This declaration of performance is issued under the sole responsibility of JCI Limited.

Signed for and on behalf of the Company by

Name of Representative: Richard Steckles **Job Title:** Managing Director

Representative Signature: R. Steckles **Date of Issue:** 24 February 2023

Product CE Marking Detail:

UK CA

Hepworth Framework Limited

Macclesfield. SK10 2BN

23

EN 14351-1:2006+A2:2016

Aluminium
Casement Window

DoC Nº: HEP/WINALICORC

Not intended for use on escape route