UPVC WINDOWS Standard & Bespoke Sizes Assembly Instructions



UPVCWINDOWS-ISSUE A

About your UPVC windows

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

All Vufold, UPVC frames, double glazed sealed units and hardware components are guaranteed for a full 10 years against the occurrence of manufacturing faults, all subject to correct installation and regular maintenance and care in use, as detailed below, and the previously issued homeowner manual.

Handling and storage

Thoroughly read and understand these instructions before you begin installation. It is presumed that the installer possesses basic skills and an understanding of wall and roof installation, and joint sealant guides. Failure to install and maintain the products according to these instructions will void any warranty.

Take care when unloading the windows as they may have shifted during transportation. The windows 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 windows, and for selecting appropriate handling equipment.

Conduct a thorough inspection of the window products immediately after receiving them, including temporarily removing any protective tape, and then reapplying before installation. **All damages or missing parts must be reported within 72 hours of receipt and before commencing installation.**

When storing the windows and frames before installation, 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.

The glass must be inspected before being fitted into the frame(s). We cannot accept claims for any missing items, damages or scratched glass after 72 hours following delivery or after installation has begun.

Installation

Our windows are supplied with all the essential items and virtually everything pre-machined. This design allows for simple installation by a competent DIYer or experienced trades person(s).

All glass will be supplied loose (except glass with Georgian bars) and will require installation by a competent trade's person(s), experienced with installing glass into doors and windows.

IMPORTANT:

If you have not selected the optional fitting kit and/or any of the fixtures supplied are not suitable due to the aperture they are being installed into, please use alternative fixings and ensure a secure fixing is made into the opening. These fitting instructions are written on the assumption you've chosen to purchase our optional window fitting kit. When using alternative fixings please refer to the manufacturers recommendations during installation.

About your UPVC windows (Cont)

IMPORTANT: The frame needs to be installed perfectly square and level on all planes into the opening. All our windows have been pre-assembled in our factory, where they are fully operated, including checking they open and close smoothly.

Glazed windows will need fixing into the opening using appropriate window lug fixings / fixing straps (not supplied).

Care and maintenance

UPVC frames

UPVC window frames may have protective plastic 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 UPVC 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.

The UPVC frames should be cleaned on a regular basis using warm soapy water. Any stains that are hard to remove can be cleaned using a specialist UPVC cleaner, in-line with manufacturers guidelines. As a minimum, all external door and frame surfaces must be washed at least every three months, and monthly if within 5 miles of the sea or in an industrial area. The UPVC / finish is not guaranteed unless they are installed at least 800 metres away from the sea.

Hinges

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 to maintain the original lustre of the metal finish. Be careful not to get these liquids on the door and frame as this can cause staining.

Locks

All moving parts should be lubricated using a silicone spray and the surface cleaned with a soft damp cloth to ensure there is not a build-up of dust or debris that can damage the surface areas.

Double glazed sealed 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 special Low E thermal glass within the sealed unit to comply with Building Regulations Part L. 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 door sets, but as a company we do have to comply with the new regulations which are for the benefit of all, and this is not a defect.

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.

About your UPVC windows (Cont)

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.

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

Please check the contents of the packages to ensure that all parts are present before beginning assembly

UPVC Frames and Glass

Window frames (built up) Glass (loose) Cill & end caps- optional extra (loose) Trickle vents- optional extra (loose) Frame add-ons- optional extra (loose)

Optional Fitting Kit (these installation instructions are written based on the use of this fitting kit)

90mm Direct frame fixings – Qty 16 TX30 bit – Qty 1 6.5mm x 100mm HSS drill bit – Qty 1 6.5mm x 210mm SDS masonry drill bit – Qty 1 70mm self-drilling screw – Qty 4 5.3mm Washers – Qty 4 PH2 bit – Qty 1 Glazing / bridging packers Frame / flat packers Silicone (clear)

Preparing the site

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.



Preparing the site (Cont)

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(s) must be installed plumb, square and level on all planes into the opening.

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 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.

Before fitting the cill into position, ensure the structural opening has been cleared of any debris, removing any old silicone, screws / nails if present as the cill will require sitting perfectly level.

Place the cill into the opening and level using packers if required until it is completely flat and level. Carefully remove the cill and silicone the packers into place and apply a bead of silicone for the cill to sit on. Reposition the cill and ensure it is flat and level.

Secure the cill in position using the direct frame fixings. Position 1 fixing at each end of the cill where the outer frame jambs will be positioned and then at a maximum of 600mm centres.

Drill through the back edge of the cill using the HSS drill bit and then use the SDS drill for the brickwork.

IMPORTANT: All fixings must be silicone dipped prior to securing to the opening



If preferred, the cill can be fitted to the frame before the whole unit is fitted into the opening. The cill will require screwing to the frame jambs and window profile (screws not supplied) from the underneath and appropriately sealed.

Installing the assembled frame

IMPORTANT: During the installation it is advised to 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 window(s) and / or incorrect operation.

Before lifting the frame into the opening and sitting it on top of the cill, check the cill is perfectly flat and level. Silicone all along the very back edge, corners and both sides of the cill creating a bed for the window frame to sit on.



Carefully lift the window and fit it into the brickwork opening, resting on the cill and bed of silicone.



IMPORTANT: The frame should not be pushed tight back to the plaster line as this can lead to the door being fitted in twist.

Temporarily secure in place using air wedges and / or packers, ensuring the frame is perfectly square and level on all planes.

Once the frame is secured in place you can now open the window vent (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 and then fix the frame into the opening using the direct frame fixings (alternative fixings, window lug fixings / fixing straps (not supplied) may be used to suit the individual dwelling). Please ensure the frame is securely fixed to the opening before proceeding.

Installing the assembled frame (Cont)

Frame fixing points will vary depending on the construction of the opening. It is recommended that corner fixings should be 150mm from the external corner and intermediate fixings should be at centres no greater than 600mm.

Insulated cavity closer's may be required before fitting the window frame(s).Example fixing points below



IMPORTANT: When drilling and fixing the frame into the opening, take extra care not to bend the UPVC frame.

Use the direct frame fixings as follows; -

Use the 6.5mm HSS drill to drill the holes in the frame head and jambs. -

Use the 6.5mm SDS masonry drill to drill into the brickwork. -

Use the Torx T30 bit to screw in the direct frame fixings.

Installing the assembled frame (Cont)

Fix the bottom of the window frame to the cill using the self-drilling fixings, washers and PH2 bit. Silicone dip the fixings and position them approximately 100 - 150mm from each corner and then at 600mm centres.



VERY IMPORTANT: When all the fixing points are secured, carefully check the frame is tightly fixed together and is square. Diagonals of the frame must be equal. Do not proceed with installation if the frame is not square and level on all planes.

Finally, remove any temporary wedges and tighten the fixings, leaving the packers in place, and do one last check with the spirit level.

Glazing the windows

Do not proceed with glazing the window if you are not experienced with this process. Opening vents will also require 'toe and heeling.'

Before glazing the window, check any opening window vents are operating correctly.

Remove any temporary fitted glazing beads, taking note of their location.

Secure the glass into the frames using packers and bridging packers where required.

Toe and heel opening window vents accordingly.

Fit the glazing gasket and beading.

Finishing around the frame

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.

If necessary, use expanding foam to fill the gap between the frame and the brick work taking care not to get it on the frame & door. Ensure just enough is used not to distort the frame when it expands.

Once this has dried it can be cut away and silicone sealant or similar used to seal around the outside perimeter of the door frame.



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. Remove any protective film before sealing.

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.

Trickle vents (optional extra)

Trickle vents will be supplied loose and will need screwing to the UPVC.

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). Security fix the trickle vents to the UPVC.