Heron Joinery®

PRODUCT TECHNICAL DETAIL

WINDOW AND EXTERNAL DOORSET

Delivery, Storage, Handling and Installation Recommendations

WHO ARE WE

Crafting Beauty & Warmth

Quality You Can Trust

At Heron Joinery, we have been crafting timber windows and doors for over 60 years. We understand that choosing the right windows and doors for a house is one of the most important decisions that a homeowner has to make. Whether your home is contemporary or traditional, our timber range of windows and doors give you the choice of colours and styles that will add beauty, warmth and value to your home.

Timeless Elegance

We believe in the beauty of wood, crafted and finished to the highest standards. Energy saving, low maintenance and friendly to the environment our doors and windows are made to last. That means unbeatable long-term value too.

Outstanding Choice

We offer a fabulous range of 14 stylish windows and doors. Whether you're a private homeowner looking for beauty and warmth or an architect specialising in conservation, we can tailor each product to meet your needs. You ask - we deliver!

Person To Person

Friendly and flexible, your needs are our priority. We guarantee fast lead-in times, a speedy delivery and can refer you to a further network throughout the UK and Ireland. Just pick up the phone or email us at info@heronjoinery.com Our welcoming customer care representatives are waiting to hear from you.

WINDOW AND EXTERNAL DOORSET

Delivery, Storage, Handling and Installation Recommendations

1. Delivery, Storage & Handling on site

Windows, Door sets and ancillary items should be checked upon delivery to ensure they comply with the order, the delivery is complete and there are no visible signs of damage to the products or to the protective wrapping.

Our joinery products are delivered on pallets with secure banding and packaging. Unloading by manual methods should always be carried out with adequate labour in accordance with current Health and Safety guidelines, or alternatively with the use of a forklift truck. Care should be taken that no damage is inflicted upon the product by the forks or during the unloading process.

Windows and Door sets should be lifted by the outer frame, not by the opening sashes, ironmongery, or decorative/ solid glazing bars. They should be carried vertically to avoid any tendency to twist or distort the outer frame and cause damage to the connecting joints. Particular care should be taken when handling large or composite frames. The use of metal containers for site storage is not advised as this can lead to extreme conditions being created within, which will be detrimental to the performance of our products. Where containers are used, ensure that adequate air circulation can be allowed to flow freely to all products on the pallet and avoid storage in direct sunlight.

Stack inside on at least 3 level, full-width, evenly distributed bearers in a dry shaded area and keep clear of ground. If our products are required to be stored outside, ensure they are protected from the elements with a waterproof cover such as a heat resistant tarpaulin or equivalent, and allow air circulation clearance between products. Where products are supplied on a pallet or shrink-wrapped, ensure that adequate air circulation can be allowed to flow freely to all products on the pallet and avoid storage in direct sunlight.

Products should not be stored in a room or building where excessive moisture levels will be present. In particular, where plastering work is to be carried out as the drying of the plaster pushes lots of moisture in to the atmosphere in the room.

Avoid storing our products flat as the factory applied surface coatings and factory glazing systems have been developed for vertical or angled drainage away from the wetted surface. Any period of time spent with water lying on a horizontal window or door will cause swelling of the timber, poor operation of opening/closing and will invalidate any warranty of that product.

The storage and handling of doors must be in accordance with the guidance given by BS 8000 Part 5: 1990.

Protective wrapping should not be removed until the products are ready for installation or until absolutely necessary. Caution must be shown when using sharp objects such as knives etc. to remove packaging so as not to cause damage to or from projecting to the product or paint finish.

Regularly inspect the products whilst in storage to ensure the correct conditions are being met and to check the base coat, primer or finish coats are in good condition.

Remove products from pallet by lifting not dragging, and avoid damage to or from projecting ironmongery or fittings.

Our joinery products are manufactured to carefully controlled moisture content in line with the requirements to BS 942. Should additional moisture be allowed to come into contact with our products whilst in storage or during installation, this may result in distortion or the operating, mechanisms or components, leading to long term or lasting damaged and possible degradation of the overall appearance/finish.

Glazing

All products glazed in our factory undergo strict quality checks before being installed, and again prior to leaving our factory. The responsibility is with the installer to ensure that windows and doors are adequately protected against site activities that may pit, mark or scratch the glass surfaces. Should the glass surface become contaminated do not use sharp instruments or abrasive pads to remove the contaminate from the glass surface. Following the revision to the building regulations 1991 Approved Document N1 for the glazing into critical locations, the responsibility is with the customer to indicate

whether factory glazed windows are required to be supplied to conform to critical locations as defined by this revision.

Our 10 year guarantee covers only units that have been factory glazed and have not been subsequently deglazed. Where joinery is supplied unglazed, the following recommendations should be followed.

- All insulated glass unit should meet the requirements of BS EN1279 and use a dual seal system.

- Methods of glazing should be in accordance with the recommendations of the glass and Glazing Federation
- Glazing rebates and faces of glazing beads should that will be hidden upon fixing should receive a coat of sealer or two coats of the intended topcoat prior to the intended area being glazed.

- When fitting patterned glass, the smoother of the two glass surfaces should be to the outside, which will improve the weather sealing contact to any sealing gaskets.

For further glazing information please refer to: BS 8000 Part 7 1990, BS6262 Glazing in Buildings, NHBC Standards Charter 6.7.

2. Installation Guidance

The majority of Heron Joinery windows and doorsets remain designated for installation directly into relevant structural opening without the need for a sub-frame.

However, as openings differ from property to property, with structural wall openings (the opening into which the window or doorset is to be installed) being constructed of a variety of materials, thickness and configurations, this guide is deliberately of a general nature and is intended to be of assistance to installer(s) to handle various conditions that may apply.

3. Planning and Preparation for the Installation

Installers shall ensure they

- Have received copies of all necessary drawings, survey detail etc. and the same is fully understood, in addition for any other information necessary to affect a satisfactory installation i.e. any special needs relating to installation.
- Carry within the installation vehicle sufficient numbers of fixings, sealants, and architraves/trims for the numbers of windows and doorsets requiring installation.
- Ensure the availability of adequate numbers of dustsheets or other compatible forms of protective coverings, for both use in the immediate vicinity of the installation, and covering all walkways to the same area.
- Have adequate availability of suitable hand tools, portable powered tools, and personal protective equipment for use.
- Where the installation necessitates the use of portable access equipment etc. for working at height, the installer(s) must ensure the safety of occupier and general-public.
- Plan to install and seal the new windows and doorsets on the same day that the existing windows or doorsets is removed.
- Have in place arrangements for ensuring that when unavoidable circumstance arises or for instances where adverse weather appears imminent, structural openings, windows, and doorsets can be made secure and weather tight.
- Give the installation premise occupier sufficient notice of the sequence of installation and for the removal of any furniture, fittings or fixtures that may impede or otherwise be subject of possible damaged during the installation.

4. Removal of Existing Windows and Doorsets

Prior to the commencement of window or doorset removal, measure both existing structural opening, and the new window or doorset, for dimensional compatibility. Ensuring any survey discrepancies or concern for the structural opening allowing for correct fitting, have been fully addressed before removal of the existing window or doorset.

The safe and efficient removal of existing windows and doorsets is a critical stage of the installation. Whilst it is inevitable, that damage may be caused to the reveals, reasonable care and time is taken to avoid unnecessary damage to the structural opening and its surrounding finishing's will result in time saved on making good on window or doorset installation completion – prevention is better than cure.

The exposure of any unknown materials during the stage of existing window or doorset removal must result in the installer(s) immediately stopping work and informing the Company of the same, for guidance on the appropriate action(s) to be taken.

Removed windows and doorsets remain hazardous even after removal, and therefore the installer should remove them from the installation premise to a location of safe storage for eventual approved disposal.

4.1 Removal of Timber Windows and Doorsets

Timber opening lights should be removed first, complete with their glass, by levering the screws from the window or doorset frame, or unscrewing the hinges, or by cutting through the hinges. This provides working space, and reduces the weight.

Safe removal of fixed light glazing is imperative, this will preferably be carried out by removing the putty, sprag's or fixing nails and removing the glazing completely. Alternatively, the glass should be carefully broken, so that the fragments are on the outside of the structure, whilst wearing adequate eye protection and ensuring no one is within range of possible

flying fragments.

After removal of the opening lights and fixed light glazing, cut through any mullions and transoms and remove them from the outer frame. Where original fixing nails or screws cannot be located and removed, it will be necessary to cut twice through the outer frame to remove a small central piece of the outer frame. Then carefully lever the frame from the surrounding aperture to cause the minimum of damage to the structural opening.

4.2 Removal of Metal Windows and Doors

There are two distinct types of metal windows and doorsets requiring removal.

Aluminum: Generally set into timber sub-frames, locate the screws holding the frame to the timber sub-frame, and remove them. This might require the removal of glass. Then remove the timber sub-frame as described for timber windows above.

Steel: Often set directly into brickwork or concrete and secured in place by lugs attached to the outer frame, remove any opening lights, then cut through any transoms and mullions to remove with an angle grinder (taking extra care to protect the Customer property), or hacksaw. Locate the screws holding the frame to the fixing lugs and either unscrew or punch through the frame using a suitable punch, before levering the frame over the lugs.

4.3 Removal of Plastics Windows and Doors

Following the removal of glazing beads, and the release of any glazing tape via the use of a knife blade between frame and edge of glazing unit, remove all glazing before further removing opening lights by unscrewing their hinges.

Remove any trim profiles around the window or doorset frame to allow easier access and to determine the presence of fixing type. Plastic windows and doorsets are often subject of securing via through-frame fixings or by fixing brackets. Through-frame fixings can usually be unscrewed to allow removal the frame from the structural opening.

Where use has been made of fixing brackets to secure the window or doorset, it will be necessary to remove any mullions and transoms and following the cutting of the outer

frame, each section levered out. Attempt to unscrew the fixings from the brackets for removal otherwise each individual fixing bracket should be removed by carefully levering out separately.

4.4 Removal of Sub-Cills

Sub-cills and sometimes heads, window boards, and mullions are often 'horned' into the fabric of the structural opening.

Great care is to be taken when cutting and levering out the items, in order to reduce damage to plaster, renders, and brickwork to a minimum. Where any DPC is damaged then it must be effectively repaired or replaced.

5. Replacement Window and Door Installation

Generally the positioning of the replacement window or doorset should match the existing internal finishes e.g. reveal linings, window board, or other determining factor such as:

- Presence or absence of a wall cavity or relative position of the window/doorset frame and cavity
- Nature and condition of any cavity
- New cill in relation to the wall below
- Window or doorset in relation to a retained cill and the requirement for fixing
- Positioning of the window or doorset into newly prepared structural openings, so that it's inside face coincides with the plane of the vertical damp proof membrane.

5.1 Window and Doorset Installation

Please use guidance from BS8213 pt4 – Code of Practice for Survey and Installation of Windows and External Door sets.

All joinery items are recommended to be fitted as soon as practical after delivery to site. Correct installation of our products is vital to ensure proper performance now and in the future. All joinery products should be fitted into preformed openings at least 10mm larger (5mm all round) than the

overall frame size and not built in as the work proceeds. In timber-framed buildings, openings should allow for differential shrinkage as guidance given in NHBC Standards Chapter 6.2S2.

If French doors or Sliding patio doors are to be installed into New Build locations, then a suitable former should be used to ensure the opening to receive the frame is square and gives the correct tolerances. Prior to installation, if frames have been requested to have only a base coat stain or primer, it is necessary that the plaster check faces of the frame be decorated with a coat of external grade paint or a suitable high build to give the necessary protection.

There are two principal methods of fixing available for use separately or in combination i.e. through frame fixings and lug fixings. Where lug fixings are used they should be of a suitable material to resist corrosion, whilst for through frame fixing, fixings shall be of a size to enter into solid substrate by a minimum of 25mm for timber, 40mm for plugged holes in brick, block, or masonry. Alternately for requirement of fixing into steel up to 2mm thickness i.e. folded sheet lintels, with appropriate thread cutting screws and for steel over 2mm thickness with power-driven hardened self drilling screws.

Framed products should be installed plumb and square using metal fixings or perimeter battens. Fixings should not be over tightened and surrounding brickwork should abut the frame only slightly so as not to distort the frame. We recommend the frame into the brickwork. Before final fixing, check that opening sashes have equal clearance on both sides. Mullions of multi-light windows MUST be supported to avoid sagging. Any packing pieces should be located at fixing points where necessary and should not distort the frame preventing correct operation of any opening doors or sashes. When using gap-filling foams avoid injecting excessive amounts as this may deflect the head and jambs and induce an acceptable bow. Lintels should be kept clear of the head. In replacement situations reveals should be sterilised before new joinery is installed.

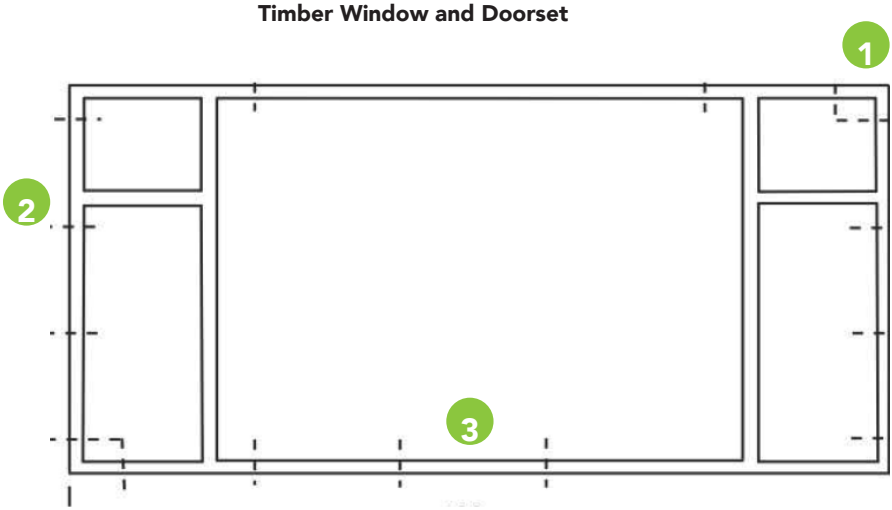
Note: Fixings for use in window or doorset installation must be corrosion–resistant to BS EN 1670:2007, Grade 3.

Before offering up the window or doorset to the structural opening, mark selective fixing points to pick up solid

substrate. Place the window or doorset into the structural opening using shims to pack, plumb and square. Shims must also be inserted at all fixing points to ensure that window or doorset distortion does not occur. Ensure that through frame fixings to the bottom of the window or doorset do not enter any drainage channel and that all fixings through the bottom of the window or doorset are sealed.

Secure the four sides of the window and doorset frame using the following guidelines for fixing spacing.

Timber Window and Doorset



Key:

1 Corner fixings to be a minimum of 150mm, and a maximum of 250mm in from the external corner.

2 No mullion or transom fixing to be closer than 150mm or further than 250mm from the centreline of a mullion or transom.

3 Intermediate fixings to be at centers no greater that 600mm and there is to be a minimum of 2 fixings on each jamb.

A minimum of two fixing points per side (depending on height) should be used. These should start between 100 & 200mm in from the corners. As a rough guide the minimum number of fixing points in height:

Below 1000mm = 2 per side*

1000 to 1600 = 3 per side*

1601 to 2100mm = 4 per side*

Over & above = Installer Responsible * ground level only

Do not use our joinery products in any way in order to provide support for the building or additional support for scaffold and avoid resting ladders etc. against the external faces. After installation it is advisable to fully open any doors and windows to ensure that they do not bind against the outer frame or perimeter reveal. When installing our traditional Cords & Weights vertical slider, care should be taken to avoid piercing the box with nails or fixings when fitting the decorative trims as this can interfere with the operation of the sliding weights

Any installation marks and similar construction damage should be made good and nail heads should be punched below the surface and filled with suitable filler, fit for the intended working environment. Where timber is cut or drilled, exposed grain must be liberally treated with preservative, end-grain sealant and the appropriate primer or basecoat before fitting and finishing.

Fitting of doors must be in accordance with the guidance as given by BS8000 Part 5: 1990. Ancillary locks and letter plates etc. should be fitted before the door is hung. If the door is of a type that has been preservative treated any cut or drilled areas for any ancillary locks and letter plates etc. must also be preservative treated before hanging and sealed with a proprietary sealer to prevent water ingress. It may be advisable that when installing external door sets in to severely exposed areas, consideration be given to the fitting of an extra protection by means of a decorative porch or canopy. Doors supplied ‘pre-hung’, ie without locks, hinges, fitted, etc should be hung as soon as possible on site. Pre-hung doors are supplied without warranty at the clients risk. Please refer to Annex C for instructions to adjust doors and espag locks on site.

If carrying out wet trades after our joinery products have been installed, it is essential to provide adequate ventilation

in order to dehumidify the area being worked. Failure to do so can lead to adverse distortion or swelling, leading to operating difficulties and high levels of condensation to the inside of the glass units. It is not recommended to install our factory double glazed windows or French/patio doors in areas of high humidity such as swimming pool or similar etc. Any gaps between the outer frame and the reveal, to the external face, should be filled with a non-setting suitably approved sealant to BS 5889.

Note: The presence of pre-cast concrete lintel may make the achievement of above specified fixing distances very difficult. In such instance, use of polyurethane foam has proven a useful support to mechanical fixing however, the use of polyurethane foam must not be the sole method of fixing the entire window or doorset into the structural opening.

6. On Site Glazing Requirements

All glazing must meet the requirements of Local or National Building Regulations, in case of doubt seek advice of the Company Surveyor. Carefully examine all glazing units for damage, especially at the edges prior to installation, do not install defective units.

For fixed window and top hung opening lights, remove factory fitted glazing beads and mark each one so as they go back into the same position. Check that drainage slots are clear of swart, are positioned correctly and fit bridge packers so those drainage slots are not blocked.

For window side hung, tilt/turn and doorset opening lights, it is important to transfer the weight of the glazing unit and window or doorset opening light to the hinge side (toe and heal), thus eliminating the dropping of the opening light etc. Using glazing corner packers or two standard glazing packers on the hinge side of the opening light, place the glazing packers in the bottom corner and into the opposite top corner. Insert glazing packers down the side to keep the glazing unit in a vertical position. The packing of the opening light is of the utmost importance to ensure correct distribution of loads in the window or doorset and required level of security and for no direct contact between the window or

doorset frame and the glazing unit.

Coupling

When items are sent to be coupled / jointed on site, we recommend you follow the instructions detailed in Annex B.

Note: In all cases glazing packers must be of a material that will not rot or change shape under load, they must be greater in width than the width of the glazing unit.

7. Making Good Internally and Externally

On completion of the installation, it is important to make good the surrounding perimeter of the structural opening and window or doorset outer frame.

7.1 Making Good Internally

Make good surrounding area damaged with a filler or plaster as appropriate and matched as closely as possible the materials and texture of the original, but allowing for differences due to being new material. Use of trims/ architraves offer considerable advantages for installed window and doorset visual finish, however, the intention of trims/ architraves is to serve a purely decorative function only, not to provide or enhance the weather- protection functions of the window or doorset, nor should they serve as an integral part of the window or doorset assembly.

7.2 Making Good Externally

Prior to making good the external perimeter, insert packing of a material that will not rot or change shape adjacent to all locking keeps and hinges, to give maximum support in the event of attempted forced entry. All Window and Doorset frames fully cleaned prior to applying silicone (mastic) finish and finishing trims. Make brickwork mortar joints, especially at cill ends good by using materials to match the existing finish, but allowing for differences due to being new material.

8. Final Inspection and Customer Training

After installation, a final inspection will be carried out by the

Installer(s) to ensure that the installation is of the highest standard. See 'Annex A' for suggested details for the same. Ensure such checks are carried out in the presence of the premise occupier(s) where feasible. During which demonstrated the method of operation of the installed window and doorset, features such as opening restrictors, key locks, shoot bolts and latches etc. Details for the same is available via Heron Joinery website, for Window and Door Operation Instructions'.

9. Cleaning and Maintenance

It is important to ensure as appropriate Customers are made aware of methods for cleaning the windows and doorsets installed and for the maintenance of the same. Details for the same is provided by Heron Joinery, via its 'Timber Window and Door Maintenance Recommendations' booklet.

ANNEX A

Installation Final Inspection

Visual:

Windows and doors installed plumb, square and vertical.

Appearance:

Exposed faces, including beads free from surface damage.

Window and doorset frames clean and all sealant, marks, smears removed.

Check for damage to surrounding aperture.

Check all internal trims installed correctly.

Glazing:

Glazing as specified on contract.

No cracks, scratches on glass, or signs of sealed unit failure.

Obscure glasses oriented correctly.

Top of sealed unit spacer bars not visible above glazing sight line.

Glazing not loose within the beading.

Operation:

All opening sashes open & close correctly.
No air gaps between seals and frames.
No scraping/rubbing between cams and strikers.
When doors slam, no mullion bounce, nor outer frame movement.
All operating gear correctly lubricated.
All hardware attached with correct number of fixings.

Sight Lines:
Visually correct.
Adjacent vents aligned.
Spacer bars straight.

Sealing:
Sealant joints have smooth finish, and be of correct shape.
Sealant to be continuous around frame run.

No excess sealant to be present on frame faces.
Sub-sill end caps in place, and attached firmly.

Bay Windows:
Ensure no settlement of structure when temporary supports removed.
Check that any flashing/DPC has not been disturbed/damaged.

ANNEX B

Frame Coupling Procedure

- Apply silicone to internal and external grooves as indicated in Fig 1.
- Insert jointing strips into central grooves.
- Couple frames together, drill countersunk hole and fix with appropriate length screw as Fig 2 & 3. Once fixed seal hole accordingly.
- Apply a coat of paint down the length of the joint to seal.
- If cover moulds are being used, cut to size, apply waterproof wood glue and fit with small panel pins punched home, fill nail hole and apply a coat of paint to the length and sides of covermoulds.

Frame Coupling Detail

FIG. 1

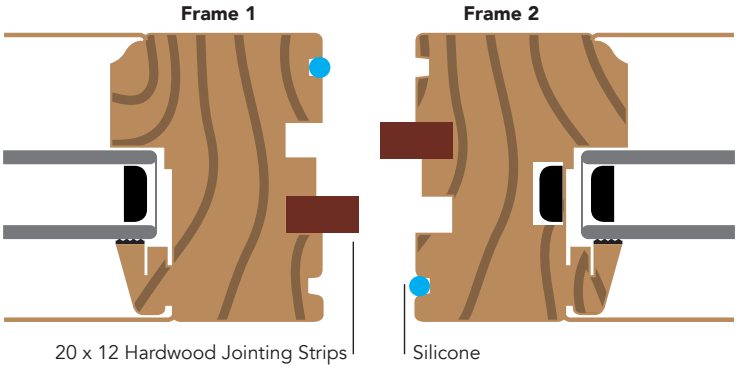


FIG. 2

Vertical Detail

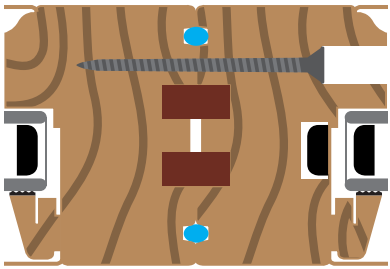
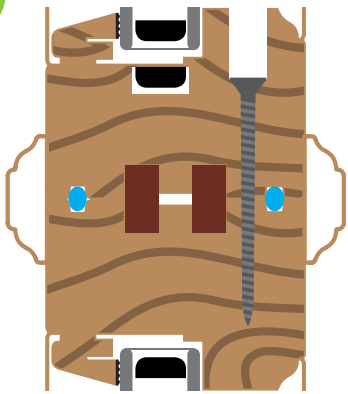


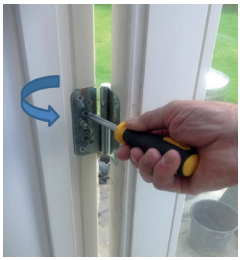
FIG. 3

Horizontal Detail

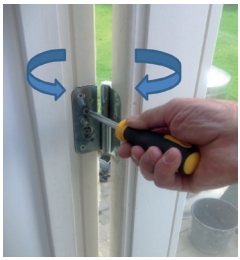


ANNEX C

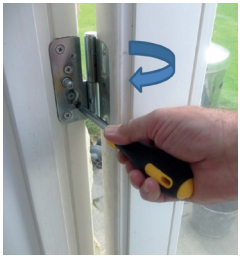
DOOR ADJUSTMENT



Release all 4 locking screws
1 turn anticlockwise



Turn both adjusting screws either clockwise or anticlockwise to move the hinge either in or out.



Tighten all 4 locking screws

Close door and check perimeter margin around the leaf and operation of the lock.

Repeat as necessary with each hinge.

ESPAG ADJUSTMENT

HERON
JOINERY

Traditional or contemporary, our joinery is always beautifully crafted from the finest sustainably sourced timber.

Our windows and doors give a distinctive stamp and warmth to a home and are ideal for any new build or refurbishment project.

Secured by Design
SBD
Official Police Security Initiative

FSC
www.fsc.org
FSC® C028859
The mark of responsible forestry

BlueSky Certified Manufacturer
WWW.BLUESKYCERT.COM

A member of
The **Wood Window** Alliance
Setting standards for high performance windows and doors

BLUESKY CERTIFIED MANUFACTURER
BS644
BSC
TGPW-006
WWW.BLUESKYCERT.COM

BLUESKY CERTIFIED MANUFACTURER
PAS 24
BSC
TESD-006
WWW.BLUESKYCERT.COM

BLUESKY CERTIFIED MANUFACTURER
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WINDOW AND DOOR **RANGE**

Heron Joinery®

Heron Joinery
2 St Patrick's Street
Draperstown BT45 7AL
Northern Ireland
T: 028 7962 7277
F: 028 7962 7022

London Office
88 Wood Street
London EC2V 7RS
England
T: 020 8528 1726

Glasgow Office
Taywood Enterprise Centre
Duchess Place, Rutherglen
Glasgow G73 1DR
Scotland
T: 0141 647 9825

E: info@heronjoinery.com
www.heronjoinery.com

Our window and doors are available as Double Glazed or Triple Glazed, with the option of internal or external glazing. They are factory finished in a colour of your choice.

Windows

- Flush Casement Window
- Stormproof Casement Window
- Traditional Sliding Sash Window using Cords and Weights
- Traditional Sliding Sash Window using a Spiral Balance
- Tilt and Slide Window
- Fully Reversible Window
- Tilt and Turn Window
- Dual Swing Window
- Aluclad Window

Doors

- Traditional Door Sets – single and double doors
- Sliding Patio Door
- Bi-Folding Door
- Aluclad Door

All windows and doors are crafted to the standards of the UK Q Mark (Timber Window and Door Quality Standard) and are Secure by Design Certified. They come with an extensive warranty covering timber, glass, paint and ironmongery.