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UPVC DOORS & WINDOWS SPECIALISTS

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OFFICIAL INSTALLATION GUIDE

uPVC Residential & French Door Fitting Guide

A comprehensive step-by-step guide for a safe, secure and professional installation of your new uPVC door.

Read Before You Start - All goods are checked before leaving the factory. Do NOT begin installation if you find any damage or incorrect sizing. Any shortages or damages must be reported within 48 hours of delivery.
Note: This product range is designed for home installation. Where this guide specifies, if unsure of any step, consult a qualified installer.

SECTION 1

Before You Begin

Do not remove your old door until you have:

- Confirmed the new unit is the correct size
- Cleared the area for trade operations (Some vehicles may require access to all sides)
- Verified all components are present: handles, cill, glass, fixings
- Tested the door operation - Only the frame that is protected by foam feet must operation

CORRECT STORAGE

Correct Storage
Keep frames and glass units **vertically** on soft surfaces such as wooden blocks or carpet. Keep indoors or undercover, away from direct sunlight.

Protective Film
Remove protective film from the inside of the frame before installation. Leave the film in place until all external sealing work is complete.

Never Lean Against Sharp Objects
Sharp edges can permanently damage uPVC profiles and glazing units. Never lean frames against nails, brickwork, or other sharp surfaces.

No Direct Sunlight
Prolonged direct sunlight before installation can cause thermal distortion of uPVC frames. Ensure store is the shaded or covered. If storing outdoors, cover to protect from sunlight as the frame has not yet sealed to the site.

SECTION 2

Safety & Compliance

Manual Handling — Two People Required
uPVC doors are heavy and awkward to lift — never work unsafely. Always use two people for lifting and positioning the frame, offset hinge side installation.

Working at Height
Use stable, secure scaffolding or an approved step or mobile tower. Ladders alone are not permitted. Never stand on windowsill or frame such as optimal installation or unsecure platform.

Personal Protective Equipment
Wear safety glasses when drilling or cutting, gloves when handling glass. Wear **cut-resistant gloves** when handling sharp edges or frame. Steel toe capped footwear is recommended.

SECTION 3

Pre-Installation Checklist

Complete every item on this list before beginning the physical installation. Rushing this stage is the single most common cause of remedial work.

- [ ] Measure the brick opening width in three places: top, middle, and bottom. Note the smallest measurement
- [ ] Measure the brick opening height in three places: left, centre, and right. Note the smallest measurement
- [ ] Measure both diagonals of the opening — they should be equal. A difference greater than 2mm indicates an out of square opening requiring correction.
- [ ] Verify the floor level is consistent across the full width of the opening
- [ ] Confirm a suitable, load-bearing lintel is in place above the aperture.
- [ ] Confirm the new frame is approximately 10mm smaller than the aperture on all sides.
- [ ] All component present: handles, cill, glass units, fixings, packers, and caps.
- [ ] Remove protective film from the inside of the frame.
- [ ] Remove all old frame debris, sealant residue, and masonry dust from the opening.

SECTION 4

Tools & Materials

Spirit Level · Level Check
Power Drill · Masonry bits
Rubber Mallet · Non-abrasive
Jiffee Knife · Glass Scraper
Tape Measure · Measuring
Sealant Gun · Sealant Nozzle
Glazing Wedge · Glass Lift
Frame Packers · Hardwood Packers

Material	Specification	Required?
Frame Fixers	7.5mm × 132mm minimum	Required
Glazing Packers	Aqua Pad Twin 4mm thickness	Required
Silicone Sealant	Low-modulus neutral cure silicone	Required
Cill Fixing Screws	50mm self-tapping screws	Required
Expanding Foam	Low-expansion PU foam for gaps >15mm	Optional
uPVC Frame Trim	To cover foam/silicone edges (sold separately)	Optional

SECTION 5

Measuring & Preparation

The 10mm Rule
Your new uPVC frame should be approximately 10mm smaller than the brick opening on all four sides. This allows for the mandatory 5mm expansion gap on each side, plus room for packing and adjustment.

ALL SIDES
5mm
Minimum expansion gap on every side of the frame

FRAME SMALLER BY
10mm
Approx. width: 5mm expansion each side (total gap: 10mm)

THRESHOLD LEVEL
0mm
Floor must be perfectly level. Use packer or shim if necessary to ensure.

DIAGONAL DIFFERENCE
<2mm
Opening is considered square if both diagonals are within 2mm of each other

Out-of-Square Openings
If the brick opening is diagonally out-of-square, do not attempt to force the frame into a distorted shape. Use packers strategically during installation to keep the new frame perfectly rectangular even if the surrounding brickwork is not.

SECTION 6

Cill Fitting

- **Slim & Cut!** Cills are supplied with a 30mm lip on either side. Cut to the width of the brick opening, or leave oversized if preferred for a projected cill finish.
- **Sealing:** Apply a generous, continuous bead of low-modulus silicone to the rear lip of the cill where the frame will sit. This creates a weathertight seal between the cill and frame.
- **Fixing:** Secure the lip of the bottom of the frame using 50mm self-tapping screws. Position the first screw 150mm from each end, then space fixings no more than 500mm apart along the length.
- **End Caps:** Apply silicone to the inside of the end caps and push firmly into each horn of the cill. This prevents water from trickling behind the cill and into the brickwork — a common cause of damp.

End Cap Sealant is Critical
Never leave end caps unfitted or unsealed. Water that trickles behind the cill into the wall cavity can cause significant structural damage that is costly to repair.

SECTION 7

Frame Installation

A — PREPARATION

Remove Sashes & Pre-Fix Panels
Optionally remove the door sashes from the frame to reduce the overall weight before offering up into the opening. Pre-fix any side panels to the main frame if applicable before positioning.

Side Panel In Gardon
If your door includes side panels, place the 20mm decorrim in sections between the door frame and the side panel. A should fit snugly between the door frame and the side panel. Fix decorrim with the door frame and the side panel using 70mm self-tapping screws, alternating screw positions for maximum rigidity.

B — POSITIONING

Offer Frame Into the Opening
With a helper two people, carefully offer the frame into the brick opening. Support the bottom of the frame with timber wedges or the cill packers to hold it temporarily in position.

- Position the frame centrally within the reveal, front to back
- Do not fix the frame yet — this is a positioning step only
- Ensure the cill allows a left-and-and-exits into the opening all clearly

C — LEVELLING

Plumb, Level & Square the Frame
This is the most critical step of the entire installation. Take as long as necessary to achieve a perfectly plumb, level, and square frame before any fixings are inserted.

- Check the sill of the frame is level across its full width — adjust packers beneath its correct
- Check the hinge side jamb is plumb — pack behind the frame as required
- Check the lock side jamb is also plumb
- Check the frame head is level — adjusting corner packers if needed
- Measure both frame diagonals to confirm the frame is square (within 2mm)
- Place packers at all four corners and at the mid-point of each jamb

D — FIXING

Fix the Frame to the Masonry
Drill through the frame into the masonry and secure with frame fixers. Follow the fixing positions precisely for maximum security and structural integrity.

- Place fixings 150mm from each corner of the frame
- Maximum 500mm apart vertically along each jamb
- **Security Vertical:** On the locking side, place a fixing as close as possible to the multipoint lock keep (within plate)
- Fix the hinge side first, re-checking jamb after each fixing
- Do NOT over-tighten fixings — excessive torque will bow the frame and prevent the door from closing or locking correctly
- Always fix through packers — never into an unsupported void

Minimum Fixing Depth by Substrate

Brick / Block	≥65mm
Concrete	≥65mm
Timber Frame	≥65mm

SECTION 8

Glazing & Toe and Heeling

Toe and Heeling is Non-Negotiable
uPVC doors require a 10mm toe and heel heeling. The door itself will sag over time, causing it to fail locks and creating draughts. If a service call is requested and the door is found not to have been toe and heeled, charges will be incurred.

Understanding the Toe & Heel Positions

- **Step 1 — Place Toe Packers**
  Carefully lower the glass into the frame corner on the hinge side (the "Toe") that is closest to the door and in the reveal.
- **Step 2 — Insert the Glass Unit**
  Carefully lower the glass unit into the frame rebate, resting on the toe packers.
- **Step 3 — Lift & Pack the Heel**
  Pick a glazing wedge or lift the lock side of the door slightly. Insert packers into the flip handle side corner (the "Heel").
- **Result — Glass Rests On Door**
  The glass now rests on the door rebate with its weight transferred to the door and not the frame, ensuring the door will perfectly square and operate without force or sagging.
- **Step 4 — Fit the Glazing Beads**
  Snap beads back in using a rubber mallet — start above the 10mm heeling. Supply every corner up to 7 beads are cut off to fit.

Stubborn Glazing Beads?
If beads are difficult to snap in place, a light spray of soapy water (washing up liquid diluted in water) applied to the beadedge will act as a lubricant and help them sort correctly without damage.

SECTION 9

Hinge Adjustment

Our uPVC doors use **Flag Hinges** with three independent adjustment points, allowing fine-tuning in all axes without removing the door. Use a 4mm or 5mm Allen key for all adjustments.

Vertical Height
Raise or Lower The Door
Use the Allen key in the **bottom of the hinge**. Turning clockwise raises the door, anticlockwise lowers. Make small increments and check after each turn.

Lateral Side to Side
Move Door Closer To Frame
Use the screw on the **side of the hinge**. Turning clockwise moves the door closer to the frame. This controls the gap between the handle and strike plate, which causes the door to feel stiff to engage.

Compression
Tighten Against Seals
Use the screw on the **front or top of the hinge** to adjust how firmly the door presses against the weatherseal. This prevents draughts and improves thermal performance. Adjust equally on all hinges for an even seal.

Full Hinge Adjustment Guide Available Online
For a more detailed, illustrated hinge adjustment guide, please visit the Tech & Downloads section of www.justdoors.uk.com.

SECTION 10

Sealing & Insulation

- **Internal seal:** Use a low modulus silicone or acrylic decorator's caulk to seal the gap between the frame and the internal plasterwork. Smooth with a wetted finger for a clean finish.
- **External seal:** Wipe down both the brickwork and the uPVC frame with a clean cloth to remove dust and grease. Apply a bead of high-quality exterior grade polymer sealant around the full outside perimeter of the frame.
- **Low-gap (<15mm):** Fill with low expansion polyurethane foam filler, like Fixfoam or Soudal Fixfoam Classic, trim flush with a sharp knife. Then apply silicone sealant over the trimmed foam surface for a weathertight finish.
- **Remove sashes first:** Only remove the external protective film from the uPVC profiles once all external sealing is complete.

Low Low Expansion Foam Only
High expansion polyurethane foam exerts significant pressure as it cures and will bow and distort uPVC frames, creating stress impossible to close or lock correctly. Always use low-expansion foam around uPVC installations.

SECTION 11

Final Checks

- Open and close both doors — they should move smoothly and freely without catching, scraping, or requiring force at any point
- Check that all locking points (hooks and bolts) on the multipoint lock fully engage when the door is closed and the handle lifted
- Inspect the drainage slots in the bottom of the frame — clear any debris, frame residue, or silicone that might be blocking these slots. Blocked drainage causes water to pool inside the frame.
- Verify the handle operates the multipoint lock without binding or excessive stiffness — the mechanism should feel smooth throughout its full travel.
- Check the door compresses evenly against the weatherseal around the full perimeter — there should be no visible gaps.
- Remove all temporary packers, wedges, and bracing used during installation.
- Remove the external protective film from the frame profiles.
- Wipe down all uPVC surfaces with a clean, damp cloth — do not use solvents.

SECTION 12

Troubleshooting Guide

⚠ Doors catching or dragging at the bottom
Check the door sill. Repeated catching and scraping is a sign that the door is sagging on its hinges.
Fix: Raise the door using hinge screws, or adjust your height using the vertical adjustment at the hinges (Allen key, bottom of hinge).

⚠ Draughts felt around the door
Check the Weatherseal compression. Draughts felt around the weatherseal are most commonly caused by the weatherseal not being fully compressed.
Fix: Check compression adjustment on all hinges. Inspect the full perimeter weatherseal for damage, flattening, or trapped sections.

⚠ Lock won't engage / handle stiff to turn
Lubricate the multipoint locking points and check for misalignment. Stiff handles are most commonly caused by misalignment.
Fix: Adjust the lateral hinge screws (side of hinge) to move the offending door leaf closer to or further from the frame and test locking points again.

⚠ Frame bowing inward after frame curing
Check for high expansion foam in the cavities behind the frame. Excessive foam exerts significant pressure as it cures.
Fix: Remove the foam, repack carefully, and replace with low-expansion foam. Add spacer packers at the affected zone before re-framing.

SECTION 13

Aftercare & Maintenance

EVERY 6 MONTHS

- Wash uPVC frames with warm soapy water and a soft cloth
- Spray multipoint lock mechanisms with light machine oil or Silicon grease
- Oil cill hinges with light machine oil
- Wipe weatherseal gaskets with a damp cloth to keep supple
- Check drainage slots in the frame base are clear

ANNUALLY

- Inspect all locks for correct hooks — adjust if the door has settled or delaminated
- Check frame fixings have not loosened — re-tighten gently if needed
- Inspect glazing beds for signs of failure (condensation between panes)
- Re-check door alignment and adjust hinges as needed

AS NEEDED

- Replace worn or damaged weatherseal immediately
- Replace failed glazing units — contact supplier
- Lubricate door cylinder with graphite based lubricant (not oil)
- Replace any damaged glazing packers if door begins to sag

Do Not Use WD-40 For Long-Term Lubrication
WD-40 is a solvent, degreaser, and displacement oil. It will strip the lock mechanism over time and cause increased wear. Use light machine oil or white lithium grease for the lock and hinges. For the door cylinder/barrel, use a graphite based lubricant only — oil based lubricants attract grit and will damage the cylinder.

uPVC Cleaning — Never Use Solvents
Never use white spirit, methylated spirits, acetone, bleach, abrasive cleaners, or scouring pads on uPVC profiles. These will permanently discolour and damage the surface. Use only warm soapy water or a specialist uPVC cleaner.