

Most homeowners only notice their windows when they mist up, stick, or leak heat on a chilly evening. That white fog trapped between panes looks harmless, yet it signals a failed seal and a slow slide in performance. If you are staring at cloudy glass and wondering whether a fix will restore the cosy, quiet feel of modern glazing, you are asking the right question. The short answer: you can repair most failed units without ripping out the frames, and you can often get very close to the performance you expect. Matching true triple glazing is a taller order, though possible in targeted ways. The details matter, and that is where cost, physics, and installer skill intersect.

What “blown” or “misted” actually means

Double glazing is a sealed unit: two panes of glass separated by a spacer bar, the gap filled with dry air or argon, and the edges sealed to keep moisture out and gas in. That cavity is bone dry when it leaves the factory. The spacer contains a desiccant that mops up any stray moisture from manufacture, then the perimeter seal keeps fresh moisture out for decades, if all goes well.

A blown unit has lost that seal. Moist air sneaks in, temperature drops, and the water condenses on the inner faces. On a cold morning you see a bloom of mist between the panes that you cannot wipe away. Performance drops because moisture displaces insulating gas and the desiccant saturates. Over time the glass may show tide marks or mineral stains inside.

“Misted Double Glazing Repairs” is a search term people use for this situation, and it points to a practical truth: you usually do not need to replace the whole window. Most of the time, the frame is perfectly fine. You replace the sealed glass unit, not the sash and certainly not the surrounding brickwork.

How much performance you lose when a unit fails

A healthy modern double glazed unit, 4 mm glass on each side with a 16 mm argon-filled gap and a low-e coating, typically offers a center-of-glass U-value around 1.1 to 1.3 W/m²K. The whole-window U-value ends up a bit worse because the frame matters and edges are less efficient than the middle. Triple glazing with two cavities can push the center-of-glass U-value down to roughly 0.5 to 0.8 W/m²K, depending on gas, coatings, and spacers.

When a unit blows, two things happen: the cavity gains moisture, and it often loses argon. Moist air conducts heat more readily than dry argon, so your U-value climbs, sometimes by 10 to 25 percent in the center of the pane. You also get edge losses if the seal fails along a long run. The comfort difference shows up as a colder inner pane surface, which your skin notices as radiant chill. Draughts do not cause this sensation, but it feels the same.

I have measured rooms where simply swapping a blown unit for a like-for-like A-rated replacement lifted the inner pane temperature by 2 to 3 degrees on a freezing night. That made the sofa near the bay window usable again, even though the thermostat stayed put.

Can you fix a blown unit rather than replace it?

There are two families of solutions, and they deliver very different results.

- Vent-and-dry drilling service. Some firms drill micro-holes in the outer pane, vent the cavity, flush with dry air or alcohol, and fit vents or plugs. The mist clears because the cavity dries out. This approach does not restore the insulating gas, and the unit is no longer sealed to factory standards. On a coastal home where salt spray attacks seals, I have seen these last 2 to 5 years. Thermal performance improves over a fogged unit because

you remove liquid water, but it rarely equals a new argon-filled, low-e-sealed replacement. It can be a budget patch if you plan to replace windows during a future renovation.

- Full sealed-unit replacement. A glazier measures the rebate, glass thickness, spacer width, and any safety glass requirements, then orders a new insulated glass unit (IGU). This preserves your frame and hardware, so the job is tidy and fast. When you choose low-e coatings, warm-edge spacers, and argon fill, you regain modern efficiency and clear sightlines. For a typical sash, the swap takes under an hour once the unit arrives. If you want “Double Glazing Repairs” that restore energy performance, this is the reliable path.

I strongly favor replacement units over drilling for any home you intend to keep. You get a warranty, and you can upgrade specifications while you are at it.

Will a repaired double glazed unit match triple glazing?

It depends on what you mean by match. If your reference point is the feel of the room, a high-performance double glazed unit can get surprisingly close for many UK and Irish properties with decent insulation and heating. If your benchmark is raw U-value, triple glazing wins. It offers a doubled cavity, a second low-e coating, and often better acoustic mass.

When clients ask to “keep triple glazing performance” after a repair, they usually want two outcomes: warmer inner pane temperatures and lower bills. You can deliver both with a well-chosen double glazed spec and a meticulous install, especially if the frames are timber or thermally broken aluminium. You will not hit the absolute figures of a premium triple unit across the entire window, but you can narrow the gap enough that the room feels just as comfortable.

Here is how you bridge that gap.

Choosing the right glass and spacer specification

There are three levers you can pull when ordering a replacement IGU: coatings, gas, and spacer technology. The fourth lever, pane thickness, influences both acoustics and solar gains.

Low-e coating. Modern soft-coat low emissivity layers reflect internal heat back into the room while allowing visible light through. They also cut long-wave radiation in summer. If your old unit was a basic hard-coat from the early 2000s, switching to a current soft-coat can shave 0.2 to 0.3 W/m²K off the center-of-glass U-value.

Gas fill. Argon is the workhorse choice because it is cost-effective and safe. Krypton improves performance more in narrow gaps, but the cost jumps. For most residential replacements with 16 mm cavities, argon gives excellent value. Make sure the supplier certifies the fill rate and uses dual-seal edge construction, so you keep that gas for the long haul.

Warm-edge spacer. Traditional aluminium spacers create a cold bridge at the perimeter. A warm-edge polymer or stainless steel composite reduces that edge loss and cuts the risk of internal condensation at the glass margin. In practice, you get a warmer feel around the sash and less black spotting on seals.

Pane thickness and asymmetry. If traffic noise bothers you, ask for an asymmetric build such as 4 mm outer and 6 mm inner with a 14 to 18 mm cavity. That interrupts resonant frequencies and keeps voices and tyres down. For pure thermal performance, stick with a conventional 4-16-4 or 4-18-4 with argon and a good low-e.

When you combine those elements, you can spec a double glazed unit whose center-of-glass U-value sits near 1.0 W/m²K. With thermally broken or timber frames, the whole-window U-value can land in the 1.2 to 1.4 range. That is not triple glazing, yet for many rooms it feels nearly as warm.

The frame makes or breaks your gains

People focus on glass because they can see it. Frames quietly control a third to half of the heat flow, depending on style and size. uPVC profiles vary wildly in thermal breaks and chamber design. Older aluminium frames without thermal breaks bleed heat, no matter how good the glass is. Timber frames do well if they are in good order, sealed, and not waterlogged.

If your frames are sound and fairly modern, replacing the sealed units is often the smartest spend. If you have 1990s aluminium without thermal breaks, you can install the best IGU in the world and still suffer cold edge effects and drafts from shrinking gaskets. In that case, plan a staged upgrade: do the glass now to stop the fogging and cut the worst losses, then budget for new thermally broken frames within a few years.

On a Victorian terrace I worked on in Leeds, swapping misted units for 4-18-4 low-e argon glass made the front room usable again. But the north-facing aluminium back door still felt icy. The client later replaced that door with a composite slab and a thermally broken frame, and their space finally matched the comfort of modern triple glazed homes, at a fraction of the cost of ripping out every window.

Airtightness and installation quality

Performance on paper assumes perfect seals and alignment. Real houses leak around beads, gaskets, and cills. A quick, careless replacement job can leave micro-gaps that whistle on windy nights and wash away your gains.

I ask fitters to remove old glazing packers, clean the rebates, check drainage slots, [Cat Flap Installation](#) and replace perished gaskets rather than stretching them. I prefer silicone or hybrid sealants that stick to both uPVC and glass, with tidy tooling so water cannot track behind. On timber, a bead of low-modulus silicone under the glazing bead prevents capillary pull, and a breathable paint finish helps the frame shed moisture.

If your window sashes have settled, pack the new unit square and level so loads transmit to the frame, not the glass edges. That reduces stress on the new seals and avoids premature failure.

When triple glazing truly earns its keep

There are situations where triple glazing is the right tool and no double glazed fix will meet the brief.

- Very cold climates or exposed sites. In Highland settings with winter winds and long frosts, the inner pane temperature of triple glazing stays significantly higher, which matters for both comfort and condensation control.
- Passive house or near-passive envelopes. If your walls and roof are already excellent, windows become the limiting factor. Triple glazing keeps the heat balance and helps prevent cold downdrafts along big panes.
- Large expanses of glass. Floor-to-ceiling sliders and picture windows suffer more from radiant heat loss. The extra cavity in triple units makes a tangible difference next to seating areas.



- Acoustic extremes. While asymmetric double glazing helps, a carefully designed triple glazed unit with laminated panes and dissimilar thicknesses can outperform it in the most demanding locations.

That said, you can still gain most of the benefits in a typical semi-detached or terraced house with premium double glazing and careful air sealing. Your bills, your comfort, and your condensation risk drive the decision more than a label.

Cost reality: repair options and payback

Prices vary by region and access, but a rough, defensible range helps plan. Replacing a standard double glazed unit in uPVC frames typically costs £120 to £250 per sash for common sizes, more if laminated glass or awkward scaffolding is involved. Warm-edge spacers and argon usually add modestly to the price. A whole new triple glazed window, including frame, can run £500 to £1,000 for average openings, and more for custom timber or aluminium.

Against heating costs that often sit between £1,000 and £2,500 per year in many UK homes, upgrading misted units to high-performance double glazing can shave a measurable slice off the bill, especially if several large panes

had failed. Payback alone rarely justifies a full-frame switch to triple glazing unless you are already renovating, but the comfort gain is immediate.

The myth of quick fixes and miracle kits

Every winter, ads pop up for sprays and kits claiming to fix blown units from the inside. Beware. Condensation between panes requires access to the cavity, and glass edges are not the place for DIY drilling unless you are willing to sacrifice the unit. I have seen clients scratch low-e coatings, introduce gritty dust, and puncture spacer bars. They ended up buying new units anyway. If budget is tight, ask a glazier to quote both the vent-and-dry method and a new IGU with a basic spec. Compare longevity and the value of a warranty.

Edge cases: safety glazing, heritage looks, and solar gain

Not all panes are free to change like-for-like. Over doors and in critical zones near floor level, building regulations may require toughened or laminated safety glass. Bathrooms often call for obscure patterns. Period properties sometimes use astragal bars or slimline profiles that limit cavity depth.

On heritage sashes, I have fitted slimline double glazing with 6 to 8 mm cavities and krypton gas, which restores clarity and keeps the slender look. The U-values do not match a fat 4-20-4 argon unit, but relative to single glazing with secondary panels, the comfort leap is huge. Those projects benefit from discreet draught proofing and high-quality brush seals, which cut infiltration as much as better glass helps conduction.

Solar gain deserves a mention. South-facing rooms often rely on winter sun to warm up. Switching to a glass with a very low solar heat gain coefficient can make the room feel starved of free heat. Balance is key. If overheating is a summer problem, a slightly more selective coating can help. If winter warmth matters, choose a low-e that keeps a decent g-value.

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What a good “Double Glazing Repairs” visit looks like

You want the site visit to go beyond measuring the hole. A thorough glazier will:

- Check frame condition, drainage paths, and gasket flexibility, then advise whether a new unit will be let down by a failing frame.
- Confirm glass type, safety requirements, and options for low-e, warm-edge spacers, and gas fill, with printed specs rather than vague promises.

If the survey skips these basics, push back. Your money buys more than a clear pane, it buys years of dry, stable performance. This is also the moment to ask about small upgrades: trickle vents if you have condensation on internal reveals, acoustic laminates if traffic noise keeps you awake, or privacy glass for bathrooms.

“Can you fix blown double glazing?” from the homeowner’s angle

People usually contact me with three priorities in mind. First, clear the view. Second, stop heat loss and reduce drafts. Third, avoid the disruption of a full replacement. That aligns well with a sealed-unit swap. You keep your frames, you get back your view, and you pick up a performance bump that often feels larger than the numbers suggest, especially on seats near the glass.

If your house already had triple glazing and one unit failed, the decision changes. You cannot expect a repaired double unit to behave like the rest of your triple glazed set. In that case, I recommend matching the original spec. The new triple unit will sit comfortably with its neighbors and preserve a consistent look and feel.

The subtle comfort factor: radiant temperature and condensation

A window’s job is not just to hold heat in. Your skin cares about the average radiant temperature of the surfaces around you. A cold pane acts like a cool sky, pulling heat off your face and hands. That is why a good low-e coating pays off. Even if the energy bill change is modest, the room feels dramatically more comfortable because the inner pane is warmer.

Condensation is the other tell. When indoor humidity meets a cold inner pane, water appears and stains the seal. Improving the glass specification and warm-edge spacers raises the inner-surface temperature by a few degrees. That small shift can move you above the dew point on most winter mornings. Pair that with sensible ventilation and cooking moisture control, and you protect paint, plaster, and timber.

A realistic path to “near triple” results

If your goal is to fix misted windows and keep the performance as close as possible to triple glazing without changing frames, stack the deck in your favor:

- Choose a modern soft-coat low-e unit with argon fill, a 16 to 18 mm cavity, and warm-edge spacers, sized to your frame’s maximum allowable thickness without fouling the beads.

This single change carries most of the thermal benefit you will notice. Add careful installation and attention to gaskets, and your room’s radiant comfort and condensation behavior will likely match what you associate with triple glazing in ordinary UK weather. In a mountain cottage or on a glass-heavy elevation, triple still stands apart. For everyday homes, well-specified double glazing after a proper repair earns its keep.

When to step back and replace the whole window

There are times when spending more once is smarter than repairing twice.

- The frames are warped, cracked, or leaking at mitres. Water ingress will attack new edge seals and rot timber or corrode steel reinforcements.
- You have multiple failures around the house with the same vintage frames. That hints at a systemic sealant or drainage design issue.
- You want features only a new frame can provide, such as wider openings, child-safe restrictors, or modern multi-point locking for insurance.

On those projects, I encourage clients to price both high-performance double glazing and triple glazing in new frames, then choose based on comfort targets, orientation, and budget. The gap in cost has narrowed, and installation labor is similar once you commit to removing frames.

Final guidance for homeowners weighing repair versus replacement

Treat misted panes as a symptom, not just a blemish. Left alone, a blown unit worsens slowly. The desiccant saturates, glass stains can set, and U-values creep up. If you address it with a like-for-like or upgraded sealed unit, you regain clarity, comfort, and value. If you try to shortcut with drill-and-vent fixes, accept that you are buying time, not performance.

For anyone asking “Can you Fix Blown Double Glazing and keep triple glazing performance?”, the practical takeaways are simple. True triple performance belongs to triple glazing. Yet by choosing the right low-e, argon, and warm-edge package and insisting on tidy installation, you can close the comfort gap so tightly that your living room feels just as welcoming, and your heating runs a little less. That is the kind of repair that earns its place in a sensible home upgrade plan.