

I spend a fair amount of my week peering at foggy windows. People call them misted units, failed seals, blown double glazing — different names for the same headache. The glass has fogged internally, sometimes with telltale beads of water, other times with a milky haze that never wipes away. The first question I hear on the doorstep is almost always the same: can you fix this without ripping out the whole window? The short answer is yes, in many cases you can replace the glass and keep the frames. The longer answer is where the money and comfort get decided.

What “blown” really means, and why it happens

A double glazed unit is two sheets of glass separated by a spacer bar and a sealed perimeter. The void is filled with dry air or argon, and a desiccant in the spacer absorbs any trace moisture. That sealed edge is the hero of the system. It keeps moisture out and the gas in, which is why the inner faces of the glass stay dry.

When that seal fails, moisture gets in and the desiccant eventually saturates. On colder mornings, the water vapor condenses on the inside faces. You see misting between the panes, sometimes a halo pattern around the spacer where the desiccant has given up. Other signs include streaks that look like smoke inside the unit and little pools at the bottom edge once the sun warms it. If it's a small breach, the misting can be seasonal, worse in autumn and winter.

Why does the seal fail? Age and UV exposure, thermal movement, frame movement, manufacturing defects, and poor drainage in the frame all contribute. I often find units made in the late 2000s that lasted 12 to 15 years, which is about average. Coastal properties tend to see quicker degradation because salt and wind accelerate wear. On uPVC windows, clogged drainage slots can trap water against the unit edge. On timber, a lack of painting or a failing bead seal lets water sit where it shouldn't.

The fix that preserves your frames

Most homeowners don't need new frames. If the sash opens, closes, and seals properly, and the jambs aren't rotten or twisted, you can usually replace just the sealed unit. The trade term is a “glass-only replacement” or “unit swap.” It is one of the most common Double Glazing Repairs and a good value when the frames are structurally sound.

Here's what the work looks like from my side. I remove glazing beads or trims, ease out the old unit, clean the rebates, check drainage routes, and then install a new unit made to the exact size, thickness, and spec. I use setting and location blocks to support the edges, then refit beads and seal where needed. On a straightforward uPVC casement, this takes 30 to 60 minutes once the unit is ready. Timber and older aluminum can be trickier, but the principle is the same: the frame stays, the glass changes.

The cost lands well below a full window replacement. As a rough range, a standard clear uPVC casement unit might run 80 to 160 per pane size up to about 800 by 1,000 millimetres, with larger or high-spec units more. Toughened safety glass, laminated, patterned, or specialized coatings add to that. Argon fill and warm-edge spacers usually make sense, and they don't spike the price the way people fear. Installers vary by region, but the labor on one window is often a modest part of the bill.

When you should keep the frames — and when you shouldn't

I'm happy to repair glass into existing frames when I can tick a few boxes. The hinges are snug, the locks pull the sash tight, the gaskets are supple, and the frame squareness is within a few millimetres across the diagonals. If the sash closes without dragging and the weatherseal compresses evenly, the frame deserves to stay.

The main reasons to reject a glass-only fix sit at the frame level. Split or rotten timber, bowed aluminum, cracked uPVC welds, or sash movement that breaks contact with the weatherseal will make a shiny new unit a poor investment. I also look for water pooling in the bottom of the frame, stripped screw holes on the hinges, and bead grooves that have been butchered by earlier work. If the frame is an antique of odd dimensions with worn-out balances or a plan to replace all windows in a year, I'll usually counsel saving the budget for a proper upgrade rather than throwing money at a stopgap.

There's an edge case that crops up with very old units: non-standard thickness. A lot of 1990s windows used 14 mm or 16 mm units with narrow rebates. Modern energy-efficient glass might bump you to 24 mm or 28 mm, which won't physically fit unless you change beads or modify the sash. In these cases, you can still replace like for like at the old thickness, but the energy performance will be modest. If the house already runs warm and you just want clarity, that's fine. If you're chasing heat loss and condensation improvements, the frame might be the limiting factor.

Performance gains from a simple swap

Replacing a failed unit gives you much more than a clear view. A blown unit leaks its insulating gas and lets moisture film inside. That film has a thermal conductivity much higher than dry air, so your U-value goes up in the bad direction. I've measured surface temperatures on winter mornings where a misted unit sits two to three degrees colder than a healthy unit next to it. You can feel the cold falling off it when you stand close.

A well-specified replacement can actually outperform whatever was there originally. Most homeowners now choose a low-E coated inner pane, warm-edge spacer, and argon fill as a baseline. That package helps in two ways: it reduces conductive loss through the unit and keeps the inner pane a touch warmer, which reduces the risk of room-side condensation. In a typical semi, replacing a handful of misted units on the north elevation trims drafts perceptibly, even though none of the sashes have been changed.

Noise is a side note that matters if you live near traffic. If you're already upgrading the unit, consider increasing the glass thickness difference, for example 4 mm outer and 6 mm inner, or specify laminated on one side. Those variations dampen different frequencies. You won't get full acoustic performance without rethinking frames and seals, but I've seen two to three decibels shaved with nothing more than a thoughtful unit spec.

The truth about "repair kits" and drilling techniques

Every so often the internet cycles a trend promising to fix misted double glazing by drilling tiny holes in the glass, flushing the cavity, and plugging it with vents. I have tested these methods on non-critical doors and garage windows out of professional curiosity. Can they clear the fog temporarily? Sometimes. Do they [Misted Window Repairs](#) restore the insulating integrity of the unit? No.

A sealed unit is engineered to be sealed. Once you breach that, you might relieve moisture, but you also open a path for ambient humidity. Over a season or two, you're back where you started, often with ugly plugs in the corners and a void that no longer holds gas. Insurers and glazing manufacturers won't recognize a drilled and vented unit as sound. If resale or long-term performance matters, spend the money on a proper replacement. The only "repair" that lasts is a new sealed unit.

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Matching glass and frames without a visual mismatch

People worry that a new unit in an older frame will stand out. Most times, once the beads are back on and the edges sealed, you can't tell. If you're sensitive to the look, match the external tint of the original. Some older units had a slightly darkened outer pane or a bronze tint in the spacer. Modern warm-edge spacers come in black, gray, and brown, so there's usually a close match.



On Georgian or astragal bars, order the new unit with the same internal grid pattern or external applied bars. Get your installer to measure the bar widths and spacings carefully. A 2 mm change can be obvious from the

pavement. If in doubt, I pop an adjacent bead to measure overall thickness and bar layout directly rather than trusting a tape from the outside.

Timber, uPVC, and aluminum each have their quirks

Timber frames like to breathe, and poorly sealed beads let water run behind them. When a timber window has misted units, I check the bead seal and the paint line. A light scrape and reseal around the beads, plus a good primer and top coat, will add years to the new unit's life. I've re-glazed sash windows from the 1940s where the wood was solid and the ropes were healthy. The new units modernized performance while the joinery kept its charm. The weakness tends to be at the sill ends and lower rails. If those are spongy, you're inching toward a bigger job.

uPVC frames are faster to service, but they hide their sins. Look for cracked corner welds, chalky brittle beads that snap when removed, and shrunken gaskets. Drainage slots must sit clear of debris. I've pulled out units where a family of spiders had dammed the hole with husks and web, and the unit lived in a bath every time it rained. A few minutes with a pick and a gentle flush helps the new unit live a happier life.

Aluminum is durable, but older thermally unbroken frames conduct cold like a radiator in reverse. If you own mid-1970s to early-1980s aluminum, you might be replacing units into frames that will still feel cold along the edges. If you're chasing comfort rather than strictly solving misting, this is the moment to weigh the benefit of a modern thermally broken frame. If the budget says no, fit a high-spec unit and consider foam gaskets and quality trims to tame any whistling in wind.

Safety glass and compliance are not optional details

Any glass near doors, low to the floor, in bathrooms, or within critical zones defined by building regulations needs to be safety rated. That usually means toughened or laminated. If I'm surveying and I see an old non-safety unit within 800 mm of the floor, I flag it. When you replace, you must bring that unit up to standard. The cost uplift is modest compared to the risk of a crack turning into a hazard.

On entrance doors and side screens, laminated can add security while also improving sound attenuation. Toughened shatters into cubes, which is safer but also easier to breach. Laminated holds together when cracked, like a car windscreen, which slows attacks and keeps the opening intact while you arrange a permanent fix.

Energy ratings and realistic expectations

A lot of marketing wraps double glazing in alphabet soup, but the window's overall performance rating includes frame, spacer, and glass. When you swap only the glass, you're improving a big chunk of the equation, though not all of it. Expect noticeable comfort gains, especially near the unit on cold days. Expect some reduction in drafts if the old unit had internal convection currents from temperature differences. Do not expect a whole-house transformation if half your heat loss is from uninsulated loft spaces and leaky doors.

If your goal is to get as close to modern standards as your frames allow, choose low-E soft-coat on the inner pane, argon fill, a warm-edge spacer, and consider a slightly thicker build where the frame accepts it. Ask the glazier for center-pane U-values, not just marketing terms like "A-rated," which apply to complete windows. A center-pane U-value around 1.1 W/m²K is typical for double glazing with argon and low-E. Old basic double glazing often sat at 2.5 or worse.

A quick, honest way to decide between repair and replace

Here is a compact way to get to an answer without getting lost in jargon.

- If the frames are sound, open and close smoothly, and the only problem is internal misting: replace the sealed units and keep the frames.
- If the frames show rot, cracks, or warping, or they won't seal against the gaskets even after hinge and lock adjustments: consider full replacement.
- If you want higher energy performance but your frames only accommodate thin units and fragile beads: price both options, then decide whether incremental gains justify glass-only or if a new window makes more sense.
- If safety glass is required and the old units aren't compliant: factor the upgrade into the unit cost and proceed with glass-only if frames are good.
- If the property is listed or in a conservation area with strict appearance rules: glass-only often keeps inspectors happy while improving comfort.

What to ask your glazier before you say yes

Not all Double Glazing Repairs are equal, and a good set of questions separates careful trades from rushed jobs. Ask how they will measure and what tolerances they use. Raising an eyebrow if someone measures only the visible glass and not the rebate is fair. I like to pop a bead so I can measure exact sightlines, overall thickness, and spacer location. I also confirm the existing packer positions so the load from the sash goes where the hinges want it.



Ask about the spacer type and gas fill. Warm-edge spacers are standard now, and argon is cheap enough to be a near default. Get the low-E position correct — it belongs on the cavity face of the inner pane in our climate. Confirm safety glass where required, and if you have cats or dogs that climb on sills, laminated has a practical advantage because it resists scratches better than toughened. Clarify lead times; glass shops typically turn around units in 3 to 10 working days depending on complexity.

Finally, ask to see drainage slots cleared and beads reseated fully. Most callbacks I handle are drafty beads or a rattle from a bead that didn't snap correctly. If the house faces strong winds, a thin bead of quality silicone at the external interface can quiet things down. I avoid gobbing sealant where it interferes with future removal. Think of the next person who comes to service it, who might be you again.

The overlooked culprit: moisture around the frame

I see more failures from environmental moisture than from manufacturing faults. A south-facing window can hit high surface temperatures in summer, then swing down in a winter cold snap. That thermal cycling stretches and relaxes the seals constantly. If water sits in the frame, the cycles work against a saturated environment rather than a dry one. Clean the drainage routes twice a year. On uPVC, these are the small slots at the bottom of the outer frame. On timber, maintain the paint and keep the external bead sealed with a neat, continuous line, not blobs.

Inside the house, consider humidity. Kitchens and baths load the air with moisture. If you have persistent room-side condensation on the inner pane, the relative humidity is likely high. Fans and trickle vents aren't glamorous, but they protect your new units and your health. I keep a 10 to 20 pound digital hygrometer in my kit and sometimes leave one with clients for a week. The numbers tell the truth. A steady 65 to 70 percent indoors in winter is a warning. Aim for 40 to 55 percent, with short peaks that exhaust fans quickly knock down.

Real-world examples from recent jobs

A couple in a 1998 uPVC semi called about three misted windows on the north side. The frames were fine, hinges a little loose. We replaced the units with 28 mm argon, warm-edge, low-E on face 3, and tightened the friction stays. Cost for all three was under a third of new windows. The homeowners reported the rooms felt less chilly, and the radiators cycled less frequently in the evenings. The units are still clear three winters later, and the homeowner emailed me a photo of frost on the outside pane during a cold snap, which always makes me smile because it means the insulation is working.



Another job involved timber casements from the 1950s, retrofitted with double glazing in the 1990s. The beading was a mess, paint flaking, and the drainage grooves had been blocked by putty. The misting was worst at the bottoms. We removed the units, cleaned rebates, recut drainage, refitted with new laminated low-E units at the same 18 mm thickness, sealed properly, and repainted. The owner is particular about aesthetics and wanted to keep the original profile, so this approach respected the joinery while solving the fog. It took more labor than uPVC, but it avoided a full frame replacement that would have altered the look of the facade.

I also had a case where we declined a glass-only fix. An aluminum sliding door had a bowed head, and the interlock had a 5 mm gap at mid-height. The glass was misted, but the drafts and water ingress were frame-related. Replacing glass would have been lipstick on a pig. We quoted a new thermally broken door instead, and the customer appreciated the honesty. There's no point installing premium glass into a structure that moves like a concertina.

How this ties into resale value and warranties

If you plan to sell, clear glass matters more than people admit. Buyers notice fogged units and assume the whole house needs work. Presenting the frames as sound, with receipts for Misted Double Glazing Repairs, eases surveyor comments and negotiations. A good installer will offer a glass warranty, commonly 5 years on the sealed unit against internal condensation, sometimes longer. Keep that paperwork.

On the flip side, if your frames still carry a manufacturer warranty, check its terms. Some require matching glass specs or approved contractors. If you're out of warranty, choose a glazier who is clear about what is and isn't covered. A new unit will not fix a crooked frame or a missing trickle vent. Expectations set clearly are expectations met.

What it feels like to live with the right decision

The day after fitting new units, most homeowners remark on silence they didn't realize was missing. The mid-frequency hum of outside traffic softens a notch. Mornings are clearer, literally. Sunlight stops smearing through haze. On the meter, internal pane temperatures sit a few degrees warmer in winter, which translates to less radiant chill when you sit near the window with a book.

On the practical side, the job is minimally disruptive. If the installer has pre-measured correctly, there is no need for scaffolding on ground and first floors, and no plaster repairs. Curtains can stay up, though I prefer to take them down to keep dust off. The room is tidy an hour later. For many families, that matters as much as theoretical energy numbers.

A straight answer to the question

Can you fix blown double glazing and keep the existing frames? In most cases, yes. Replacing the sealed units while retaining the frames is a sensible, cost-effective route that restores clarity and recovers much of the lost insulation. It sits firmly in the realm of practical Double Glazing Repairs and is often the fastest way to turn a chilly, misted room into a comfortable one again.

If the frames are tired, warped, or rotting, then a new unit would be throwing good money after bad. A short survey — preferably with a bead removed and a spirit level across the sash — can tell you which side of that line you live on. Don't let anyone talk you into drilling holes and "de-misting" a failed unit unless you're on a shoestring for a shed or a garage. It's a temporary parlor trick, not a fix.

If you take nothing else from a glazier's notebook like mine, take this: water management and specification are everything. Clear the drainage, choose an appropriate glass build, fit it well, and your new unit should give you a decade or more of faithful service. The view will be clear, your rooms will feel calmer, and your frames will keep doing their quiet job in the background.