

OTTAWA WINDOW PROS

Condensation & Drafts

Fixing drafty windows, condensation issues, seal failure, and air leaks

10 Expert Answers from Construction Brain

ottawawindowinstall.ca/construction-brain

Table of Contents

1. Why do my windows fog up only on the coldest mornings?
2. Is condensation on the inside of windows a problem?
3. Can failed argon gas seals be refilled?
4. What causes drafts around windows even when they're closed?
5. What is causing the black mold around my windows?
6. My windows are foggy - can they be fixed or do I need new ones?
7. Why is there condensation between my window panes?
8. My window won't stay open - can this be fixed?
9. Why do my windows whistle when it's windy?
10. Why is there frost on the inside of my windows?

Q1

Why do my windows fog up only on the coldest mornings?

Window fogging on cold mornings happens because of the temperature difference between your warm, humid indoor air and the cold window surface. When warm air hits the cold glass, the moisture in that air condenses into water droplets - just like how your breath fogs up a car window in winter.

Condensation forms when the window surface temperature drops below the dew point of your indoor air. On the coldest Ottawa mornings, single-pane windows or older double-pane windows with poor insulation get extremely cold on the interior surface. If your home has typical winter humidity levels (30-50%), that cold glass becomes a magnet for moisture. The colder the outdoor temperature, the more dramatic this effect becomes.

This is actually a sign that your windows aren't providing adequate insulation. Quality triple-pane windows with Low-E coatings keep the interior glass surface much warmer, dramatically reducing condensation. In Ottawa's Climate Zone 6, where we regularly see -20°C to -30°C temperatures, proper window insulation is crucial for comfort and preventing moisture issues.

The fogging typically happens in the morning because overnight temperatures are coldest, and humidity builds up from cooking, showering, and even breathing while you sleep. Once the sun comes up and outdoor temperatures rise slightly, or your heating system warms the glass surface, the condensation evaporates.

If you're seeing heavy condensation regularly, it's time to consider window replacement. Modern ENERGY STAR certified windows with U-factors of 1.22 or lower will virtually eliminate this problem while reducing your heating costs. For a free assessment of your windows' energy performance and condensation issues, Ottawa Window Pros can evaluate your specific situation and recommend the best solution for your home.

Q2

Is condensation on the inside of windows a problem?

Yes, condensation on the inside of windows is definitely a problem that indicates excess humidity and poor ventilation in your home. While occasional light condensation during extreme temperature differences is normal, persistent interior condensation can lead to mold growth, wood rot, and structural damage.

Interior window condensation occurs when warm, humid indoor air meets the cold glass surface, causing water vapor to condense into droplets. This is most common during Ottawa's cold winter months when the temperature difference between inside and outside is greatest. The condensation typically appears first on the

coldest part of the window - usually the bottom of the glass or around the frame edges.

The root causes are usually excess humidity combined with poor air circulation. Common humidity sources include cooking, showering, houseplants, aquariums, and even breathing. In tightly sealed homes, this moisture has nowhere to go. Single-pane windows and older double-pane windows with poor insulation values are particularly prone to condensation because their interior glass surface stays much colder.

In Ottawa's climate, persistent interior condensation often signals that your windows have poor energy efficiency. Windows with U-factors above 0.30 (common in older windows) create cold interior surfaces that encourage condensation. Modern triple-pane windows with Low-E coatings maintain warmer interior glass temperatures, significantly reducing condensation risk while improving energy efficiency.

To address the problem, start by reducing indoor humidity to 30-40% during winter months using exhaust fans, dehumidifiers, and proper ventilation. However, if condensation persists even with controlled humidity, your windows likely need replacement. Modern ENERGY STAR certified windows designed for Ottawa's Climate Zone 6 will eliminate most condensation issues while reducing your heating costs.

For a comprehensive assessment of your windows and humidity issues, Ottawa Window Pros can evaluate whether window replacement or other solutions would be most effective for your home.

Q3

Can failed argon gas seals be refilled?

No, failed argon gas seals cannot be refilled - once the seal fails and the gas escapes, the entire insulated glass unit (IGU) needs to be replaced.

When argon gas seals fail, you'll typically notice **fogging or condensation between the glass panes** that can't be cleaned from either side. This happens because the hermetic seal that keeps the argon gas trapped between the panes has been compromised, allowing moisture and air to enter the space. The argon gas, being heavier than air, gradually escapes and gets replaced by regular air and water vapor.

The insulated glass unit is manufactured as a sealed system where the argon gas is injected during production and the edges are sealed with specialized sealants and spacers. Once this factory seal breaks down - whether from age, temperature cycling, or structural settling - there's no practical way to restore it in the field. Even if someone could somehow inject new argon gas, the underlying seal failure would remain, causing the gas to escape again.

In Ottawa's climate with significant temperature swings, **failed seals are particularly noticeable during winter months** when the temperature difference between inside and outside creates more condensation. The good news is that often just the glass unit needs replacement, not the entire window frame. A quality double or triple-pane replacement IGU with fresh argon fill will restore your window's insulating performance.

Most reputable window manufacturers offer warranties on their sealed units - typically 10-20 years against seal failure. If your windows are still under warranty, the IGU replacement may be covered. For a professional assessment of your window's condition and replacement options, request a consultation from Ottawa Window Pros.

Q4

What causes drafts around windows even when they're closed?

Drafts around closed windows are typically caused by worn weatherstripping, poor installation, or settling that creates gaps between the window frame and the rough opening. The most common culprit is deteriorated weatherstripping around the sash, but air can also leak through gaps in the frame itself or around the perimeter where the window meets the wall.

Weatherstripping Problems Over time, the rubber or foam weatherstripping around your window sash compresses, cracks, or pulls away from the frame. This is especially common in Ottawa's climate where extreme temperature swings cause materials to expand and contract repeatedly. You'll often feel drafts most noticeably around the meeting rails of double-hung windows or along the sides of casement windows where the weatherstripping has failed.

Installation and Structural Issues Poor original installation can leave gaps between the window frame and the rough opening that were never properly sealed with spray foam or caulking. House settling over time can also create new gaps or enlarge existing ones. In older Ottawa homes, you might also have single-pane windows with loose-fitting sashes that simply can't seal tightly due to their age and design.

Ottawa Climate Considerations Our harsh winters make even small air leaks very noticeable, and the temperature differential between inside and outside air creates strong pressure differences that pull cold air through any available gaps. Ice damming and freeze-thaw cycles can also damage exterior caulking around window frames, creating new pathways for drafts.

Solutions and Next Steps Start by checking and replacing weatherstripping - this is a DIY-friendly fix that costs under \$50 per window. For gaps around the frame perimeter, you'll need exterior caulking or interior spray foam. However, if multiple windows are drafty or you're dealing with old single-pane units, replacement with modern triple-pane windows will eliminate drafts while dramatically improving energy efficiency. For a comprehensive assessment of your window draft issues and energy-efficient replacement options, request a consultation from Ottawa Window Pros.

Q5

What is causing the black mold around my windows?

Black mold around windows is typically caused by excess moisture and poor ventilation, creating the perfect environment for mold growth in these naturally cooler areas of your home.

The primary culprit is **condensation**. When warm, humid indoor air meets the cooler surface of your window glass or frame, water droplets form. This moisture, combined with dust and organic matter, provides everything mold needs to thrive. In Ottawa's climate, this problem is especially common during winter months when the temperature difference between inside and outside is greatest.

Poor window sealing is another major factor. If your windows have failed weatherstripping, damaged caulking, or gaps in the frame, outside moisture can penetrate and get trapped. This creates persistent dampness that's ideal for mold growth. Older windows with single-pane glass or poor insulation properties are particularly prone to this issue because they create more condensation.

Inadequate ventilation around windows compounds the problem. Areas with poor air circulation - like corners, behind curtains, or near furniture placed too close to windows - trap moisture and prevent proper drying. High indoor humidity levels (above 50%) throughout your home also contribute significantly to window condensation and subsequent mold growth.

In Ottawa's climate, **energy-efficient windows with proper installation** can dramatically reduce this problem. Triple-pane windows with Low-E coatings stay warmer on the interior surface, reducing condensation. Proper air sealing during installation prevents moisture infiltration, while adequate ventilation ensures any moisture that does form can dry quickly.

Immediate steps include cleaning existing mold with appropriate cleaners, improving ventilation around windows, using a dehumidifier to maintain 30-50% humidity, and checking for air leaks that need sealing. If the problem persists or your windows are old and inefficient, replacement with modern energy-efficient units may be the most effective long-term solution.

For a comprehensive assessment of your window moisture issues and energy-efficient replacement options, request a consultation from Ottawa Window Pros to address both the immediate problem and prevent future mold growth.

Q6

My windows are foggy - can they be fixed or do I need new ones?

Foggy windows can sometimes be repaired, but replacement is often the most cost-effective long-term solution. The answer depends on where the fogging is occurring and the age of your windows.

Interior fogging that wipes away easily is usually just condensation from indoor humidity and can be managed with better ventilation, exhaust fans, or a dehumidifier. However, **fogging between glass panes** indicates seal failure in

double or triple-pane windows, which is a more serious issue.

When the seal around insulated glass units fails, moisture enters the space between panes and creates that permanent foggy appearance. While some companies offer "defogging" services that drill holes to remove moisture and insert vents, this eliminates the insulating properties of the window and often provides only temporary results. The argon or krypton gas that provides insulation escapes, and fogging frequently returns.

In Ottawa's climate, properly sealed windows are crucial for energy efficiency. Windows with failed seals lose significant insulating value, leading to higher heating costs during our cold winters. If your windows are over 15-20 years old and showing seal failure, replacement typically makes more financial sense than attempting repairs.

Modern replacement windows offer substantial improvements over older units - triple-pane glass, Low-E coatings, and better sealing technology that can qualify for Canada's Greener Homes Grant (up to \$5,000 rebate). The energy savings from new windows often offset the replacement cost over time, especially with Ottawa's temperature extremes.

For a professional assessment of your foggy windows and to explore replacement options, request a quote from Ottawa Window Pros. We can evaluate whether repair or replacement makes the most sense for your specific situation and budget.

Q7

Why is there condensation between my window panes?

Condensation between window panes indicates a broken seal in your insulated glass unit (IGU), which means the window has lost its energy efficiency and needs replacement.

When you see fog, moisture, or water droplets between the glass panes of a double or triple-pane window, the hermetic seal around the perimeter has failed. This seal is designed to keep the space between panes completely airtight and moisture-free. Once it breaks, outside air and humidity enter the space between the glass, causing condensation that can't be wiped away from either side.

This seal failure is permanent and cannot be repaired. While the window may still open and close normally, it has lost most of its insulating value. The argon or krypton gas that was originally between the panes has escaped, and the Low-E coatings may become damaged by the moisture. In Ottawa's climate, this means significantly higher heating costs and reduced comfort during our cold winters.

The timing of when you notice condensation can vary - it might appear constantly, only during temperature swings, or primarily in morning hours when dew forms. Some windows show just light fogging while others develop heavy condensation or even mineral deposits between the panes. Regardless of severity, the energy performance is compromised.

For Ottawa homeowners, this is actually an opportunity to upgrade to more efficient windows. If your current windows are older double-pane units, replacing them with quality triple-pane windows will provide better insulation than your original windows ever had. You may also be eligible for the Canada Greener Homes Grant (up to \$5,000) or Enbridge rebates for energy-efficient window upgrades.

For a free assessment of your failed window seals and replacement options, request a quote from Ottawa Window Pros to discuss energy-efficient solutions for your home.

Q8

My window won't stay open - can this be fixed?

Yes, most window opening issues can be fixed, and many are simple repairs that don't require full window replacement. The solution depends on what type of window you have and what's causing the problem.

For double-hung windows (the most common type), the issue is usually broken sash cords, worn balance springs, or damaged window balances. In older homes with rope and pulley systems, the cords can snap over time.

Newer windows use spring-loaded or spiral balances that can wear out after 15-20 years of use. These components can typically be replaced without changing the entire window.

For casement windows that crank open, the problem is often a worn crank mechanism, stripped gears, or a broken operator arm. The window may also have settling issues where the frame has shifted slightly, preventing proper closure. Most casement hardware can be repaired or replaced.

In Ottawa's climate, temperature changes cause window frames to expand and contract, which can affect how windows operate. Wooden windows are particularly susceptible to swelling in humid summer months and shrinking in winter. Vinyl and aluminum windows are more stable but can still develop issues with their operating mechanisms over time.

Simple fixes you can try include cleaning the window tracks, lubricating moving parts with silicone spray, and checking if paint or debris is preventing smooth operation. However, replacing window balances, sash cords, or casement operators typically requires some mechanical skill and the right replacement parts.

If your windows are over 20 years old and having multiple operational issues, it might be more cost-effective to consider replacement. Modern windows offer better energy efficiency and smoother operation. For a professional assessment of whether repair or replacement makes more sense for your situation, request a consultation from Ottawa Window Pros.

Q9

Why do my windows whistle when it's windy?

Whistling windows are typically caused by air leaking through gaps in the window frame, weatherstripping, or sash, creating a sound as wind passes through these small openings at high speed.

The most common culprits are **worn or damaged weatherstripping** around the window sash, gaps between the window frame and the wall, or warped window components that no longer seal properly. Even small gaps of just a few millimeters can create that distinctive whistling sound when Ottawa's strong winds hit your home. Older windows are particularly prone to this issue as their sealing components deteriorate over time.

Temperature changes in Ottawa's climate make this problem worse - the freeze-thaw cycles cause window materials to expand and contract, gradually creating larger gaps. Single-pane windows and older double-pane units are especially susceptible because they lack the advanced sealing systems found in modern windows. The whistling often becomes more noticeable during winter months when the temperature differential between inside and outside air is greatest.

Start by inspecting your weatherstripping - look for cracks, gaps, or areas where the rubber or foam sealing has pulled away from the frame. You can temporarily test for air leaks by holding a lit candle or incense stick near the window edges on a windy day - the flame will flicker or smoke will move where air is entering. Check both the sash weatherstripping and any caulking around the exterior window frame.

Simple weatherstripping replacement can often solve minor whistling issues and costs just \$20-50 per window. However, if multiple windows are whistling or the frames themselves are warped, it may be time to consider window replacement. Modern triple-pane windows with advanced weatherstripping systems virtually eliminate air infiltration and the associated noise. For a comprehensive assessment of your window air leakage issues, request a quote from Ottawa Window Pros to explore both repair and replacement options.

Why is there frost on the inside of my windows?

Interior window frost forms when warm, humid indoor air meets a cold window surface, causing water vapor to freeze directly onto the glass. This typically happens when your windows aren't providing adequate insulation against Ottawa's harsh winter temperatures.

The main culprit is usually **single-pane windows or older double-pane windows** that have lost their insulating properties. When outdoor temperatures drop below -10°C (common in Ottawa winters), even double-pane windows with poor seals can become cold enough for frost formation. The problem is made worse by high indoor humidity levels from cooking, showering, and everyday activities.

Poor window seals are another major factor. If the seal between glass panes has failed in double-pane windows, moisture can enter the airspace and the window loses its insulating value. You might also notice condensation between the glass panes, which is a clear sign the sealed unit needs replacement.

In Ottawa's Climate Zone 6, **triple-pane windows with Low-E coatings** are the most effective solution for preventing interior frost. These windows maintain a warmer interior glass surface even when it's -25°C outside. The inner pane stays closer to room temperature, preventing the condensation and frost formation that occurs with less efficient windows.

Immediate steps you can take include reducing indoor humidity with exhaust fans, ensuring proper ventilation, and checking that your windows are properly sealed around the frames. However, if frost formation is persistent, it's usually a sign that window replacement is needed for both comfort and energy efficiency.

For a comprehensive assessment of your windows and frost issues, Ottawa Window Pros can evaluate whether your current windows can be improved with weatherstripping or if replacement with energy-efficient triple-pane units would be more cost-effective.

Disclaimer: This guide is provided for informational purposes only by Ottawa Window Pros. It does not constitute professional advice. Always consult qualified, licensed contractors and your local building authority before starting any construction or renovation project. Information is current as of March 15, 2026 and may change. Visit ottawawindowinstall.ca for the latest answers.