

OTTAWA SOUNDPROOFING

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# Doors, Windows & Gaps

Acoustic doors, seals, flanking path closure

14 Expert Answers from Sound IQ

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## Can I add a soundproof glass panel to my existing transom window above the front door?

Yes, you can add a secondary acoustic glass panel to the interior side of your existing transom window, and it is one of the most effective ways to reduce noise coming through that opening without replacing the original window. This approach — sometimes called an interior storm panel or acoustic window insert — involves mounting a separate pane of glass in a sealed frame on the room side of the transom, creating a trapped air gap of 2–4 inches between the existing glass and the new panel. That air gap is critical for sound isolation and can boost the assembly's performance to STC 40–48, a significant improvement over a single-pane transom that might only rate STC 22–26. The key to making this work is choosing the right glass and ensuring an airtight seal. For the interior panel, laminated glass is far superior to standard tempered glass for sound blocking. A 1/4-inch laminated glass panel with a PVB interlayer provides excellent acoustic damping and costs roughly \$25–\$40 per square foot for the glass alone. For even better performance, use asymmetric glass thicknesses — if your existing transom has standard 3mm glass, make the interior panel 6mm or 8mm laminated. Different thicknesses resonate at different frequencies, which means the combination blocks a wider range of sounds than two identical panes would.

**Installation Options and Ottawa Considerations** There are two main approaches for Ottawa homeowners. The first is a custom-built fixed panel mounted with magnetic strips or compression-fit gaskets into the transom opening. Companies that specialize in acoustic window inserts can fabricate these to your exact dimensions — expect to pay \$300–\$700 per transom window including materials and installation. The panel should be removable for cleaning but seal tightly when in place. The second option is a hinged or sliding interior storm panel built into a wood or aluminum frame, which costs \$500–\$1,000 but allows easier access for cleaning and ventilation. If your home is in one of Ottawa's Heritage Conservation Districts — parts of the Glebe, New Edinburgh, Sandy Hill, or Lowertown — adding an interior panel is an excellent choice because it does not alter the exterior appearance of the building. Heritage restrictions typically govern exterior changes, so an interior-mounted acoustic panel generally does not require heritage approval. That said, you should confirm with your local heritage committee if you have any doubt. Since the transom is not a structural element and you are not altering the existing window, a building permit is typically not required for this type of addition, though it is always wise to check with the City of Ottawa through 3-1-1 if your project involves any unusual circumstances. One practical tip: make sure the perimeter seal between the new panel and the frame is done with acoustic-grade silicone or neoprene gaskets, not standard weatherstripping foam. Ottawa's temperature extremes from -30°C to +35°C will degrade cheap foam seals within a year, while silicone and neoprene maintain their flexibility and seal integrity through decades of freeze-thaw cycles. For the best results on a project like this, consider having a soundproofing professional take precise measurements and recommend the optimal glass type for your specific noise problem — the Ottawa Contractor Directory at [justynrookcontracting.com/directory](http://justynrookcontracting.com/directory) can help you connect with experienced acoustic glazing specialists in the

area. Looking for experienced contractors? The Ottawa Construction Network connects homeowners with qualified professionals: Justyn Rook Contracting, RenoMotion Inc., Somar Contracting Inc., Leeds Property Maintenance, Whole Home Beauty (WHB). View all contractors ?

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Q2

## How much noise reduction do acoustic blinds provide compared to heavy soundproof drapes?

Acoustic blinds typically reduce noise by 5–10 dB, while heavy soundproof drapes can achieve 10–18 dB of reduction depending on the fabric weight, coverage, and mounting method. Neither product is a true sound barrier — both primarily reduce high-frequency noise like traffic hiss, conversation, and general urban ambient sound. For the deep rumble of buses on Rideau Street or bass from a neighbour's stereo, neither option will make a dramatic difference on its own, but drapes consistently outperform blinds because they offer more mass, better coverage, and superior edge sealing. The reason comes down to basic physics: mass and air-sealing block sound. Acoustic blinds, even the honeycomb cellular variety marketed as "soundproof," typically weigh 1–3 pounds per panel and leave gaps at the sides and bottom where sound easily leaks through. Heavy soundproof drapes — sometimes called acoustic curtains or sound-blocking drapes — weigh 5–15 pounds per panel depending on the material. Products like Moondream acoustic curtains or industrial-grade mass-loaded curtains use multiple layers including a dense vinyl or MLV core sandwiched between fabric layers. The heavier the curtain and the more completely it covers and seals around the window opening, the better it performs. Getting the Most From Window Treatments in Ottawa For Ottawa homeowners dealing with street noise — common in Centretown condos, Sandy Hill apartments, and Byward Market lofts — here is how to maximize the performance of drapes or curtains. First, mount the curtain rod 6–12 inches above the window frame and extend it 6–8 inches past each side. The curtains should puddle slightly on the floor or sill to eliminate the bottom gap. Use a wraparound or ceiling-mounted track rather than a standard rod to keep the curtain edges close to the wall. This approach can push a good acoustic curtain to its full 15–18 dB potential, whereas the same curtain on a standard rod with side gaps might only achieve 8–10 dB. Cost-wise, quality acoustic blinds run \$150–\$400 per window in Ottawa, while serious soundproof drapes range from \$200–\$600 per window for consumer-grade products and \$400–\$1,000 per window for commercial-grade mass-loaded curtains. Given that drapes outperform blinds by a meaningful margin, they generally offer better value for noise reduction per dollar spent. However, keep in mind that neither option replaces proper window upgrades — if you are dealing with serious noise intrusion, adding a secondary interior window pane or upgrading to triple-glazed windows will deliver STC 35–45, which is in a completely different league. For Ottawa's climate, acoustic drapes have the added benefit of providing meaningful thermal insulation during our cold winters, potentially reducing heat loss through windows by 25–40 percent. This makes them a practical dual-purpose investment. If your noise

problem is moderate — say, general traffic on a residential street in Kanata or Barrhaven — heavy drapes combined with weatherstripping around the window frame may be sufficient. For more serious noise issues, consider speaking with a soundproofing professional who can assess whether window treatments alone will solve your problem or whether a more comprehensive approach is needed. Looking for experienced contractors? The Ottawa Construction Network connects homeowners with qualified professionals: Homeupgraders JC Carpentry The Next Reno REJUVENATION RENOVATIONS ALTIOR CONSTRUCTION View all contractors ?

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Q3

## What's the best way to soundproof a garage-to-house door that also meets fire separation requirements?

The best approach is to replace your existing garage-to-house door with a solid-core, fire-rated steel door (minimum 20-minute rating) that also incorporates acoustic sealing on all four sides. Under the Ontario Building Code, the door between an attached garage and the living space must maintain a fire separation — this is non-negotiable and means any soundproofing solution must preserve or enhance that rating, never compromise it. A quality fire-rated steel door with a solid mineral core already provides decent sound blocking in the range of STC 35–40, but the real performance gains come from how well you seal around it. Start with the door itself. A 1-3/4 inch solid-core steel door with an insulated mineral core is the standard for garage-to-house applications in Ottawa. These run \$400–\$800 for the door slab alone, or \$800–\$1,500 installed with a fire-rated frame. To push the acoustic performance higher, look for doors that carry both a fire rating and a published STC rating — some manufacturers offer doors rated at STC 45–50 specifically for this application. Avoid any door with a glass lite or window insert, as these dramatically reduce both the fire and acoustic performance. Sealing Is Where Most Projects Fail The biggest sound leak in any door assembly is the perimeter — the gaps between the door and the frame, and especially the gap at the bottom. Install a fire-rated automatic door bottom (sometimes called a drop seal) rather than a standard door sweep. Brands like Pemko or National Guard make models that are both fire-rated and acoustically effective, typically \$60–\$120 each. For the sides and top, use fire-rated acoustic gasket weatherstripping — silicone-based compression seals work well and maintain their flexibility through Ottawa's extreme temperature swings from -30°C to +35°C. Standard foam weatherstripping degrades quickly in our climate and loses its seal within a season or two. Pay attention to the threshold as well. A fire-rated adjustable threshold paired with your automatic door bottom creates a reliable seal at the floor. If your existing concrete garage floor is uneven — common in older Ottawa homes, especially in neighbourhoods like Alta Vista or Westboro — you may need to pour a small self-levelling patch to get the threshold to sit flat. The combination of a properly sealed fire-rated door with acoustic gaskets on all four sides can achieve STC 45–50, which is a dramatic improvement over the typical hollow-core or poorly sealed door most Ottawa homeowners have between their garage and house. One

important detail: make sure the wall surrounding the door is also properly insulated and sealed. Sound will flank around even the best door if the surrounding wall has gaps or is under-insulated. Fill the stud cavities with Rockwool Safe'n'Sound and ensure the drywall is caulked to the frame with acoustic sealant. For a project like this, it is well worth consulting with a soundproofing professional who can ensure the fire rating is maintained while maximizing acoustic performance — the Ottawa Contractor Directory at [justynrookcontracting.com/directory](http://justynrookcontracting.com/directory) is a good place to start your search for qualified installers in the area. Looking for experienced contractors? The Ottawa Construction Network connects homeowners with qualified professionals: Reno's by Daniel Frauwallner, RenoMotion Inc., Regimbal, JMY Renovations, Valcor Construction. View all contractors ?

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## How do I seal and soundproof an attic hatch that lets noise travel between floors?

An unsealed attic hatch is a major sound leak between floors because it is essentially an uninsulated, ungasketed hole in your ceiling. Sound travels up through the opening, bounces around the attic space, and can even transmit back down into other rooms below the attic. Properly sealing and soundproofing the hatch involves adding mass, weatherstripping, and a compression latch system to turn that loose panel into a tight-fitting acoustic barrier. The Complete Attic Hatch Soundproofing Method Start with the hatch panel itself. Most Ottawa homes have a thin plywood or drywall hatch that weighs almost nothing and blocks almost no sound. Replace it or upgrade it by laminating a layer of 5/8-inch Type X drywall to the attic side of the existing panel using Green Glue Noiseproofing Compound between the layers. One tube of Green Glue at \$15 to \$22 is enough for a standard 22 by 30 inch hatch, and a cut piece of drywall costs under \$5. This sandwich of drywall, Green Glue, and existing panel dramatically increases the mass and damping of the hatch, which are the two properties that block airborne sound. For even better performance, add a layer of mass loaded vinyl (MLV) on top of the drywall, bringing the total material cost to roughly \$50 to \$80. Next, address the air seal around the perimeter. This is where most of the sound leaks through. Install a continuous strip of closed-cell EPDM rubber weatherstrip around the frame opening so that when the hatch sits in place, it compresses against the seal. Use a bulb or D-profile weatherstrip that provides consistent compression, and make sure the corners are carefully mitered or overlapped so there are no gaps. A roll of quality EPDM weatherstrip for this purpose costs \$10 to \$20 in Ottawa. For the seal to work acoustically, the hatch must press firmly against it, which is why the next step is critical. Install toggle latches or cam-action compression latches that pull the hatch panel tightly against the weatherstrip when engaged. Two latches on opposite sides of the hatch, at \$8 to \$15 each, create enough compression to maintain the seal. Without latches, gravity alone does not provide enough force, especially in Ottawa where stack effect during winter creates significant upward air pressure through any ceiling opening. The warm air inside your home naturally wants to rise and escape through the attic, pulling sound along with it and making an unsealed hatch even worse during the coldest months. While you have the hatch open, inspect the insulation around the hatch frame. In many Ottawa homes built before the 2000s, the area immediately around the attic hatch has thin or missing insulation because the original installer worked around it. Add Rockwool batts or rigid foam insulation around the frame, and consider building a small insulated box on the attic side that sits over the closed hatch, creating an additional thermal and acoustic barrier. A simple foam-board box costs \$30 to \$60 in materials. This entire project can be completed as a DIY weekend job for under \$150 in materials, making it one of the most cost-effective soundproofing improvements available. However, if your attic hatch is in a fire-rated ceiling assembly, such as in a townhouse or semi-detached home, the modification must maintain the fire rating, which may require professional guidance. The Ottawa Contractor Directory at [justynrookcontracting.com/directory](http://justynrookcontracting.com/directory) can help you find a soundproofing or insulation

professional if you want expert installation or need to ensure code compliance. Looking for experienced contractors? The Ottawa Construction Network connects homeowners with qualified professionals: Justyn Rook Contracting, JC Carpentry, The Granite shop, Dreamwood Construction & Renovations, Jaiko Cleaning Services. View all contractors ?

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Q5

## What's the best sound-rated glass option for a patio door replacement in my Ottawa home?

For a patio door replacement where sound control is a priority, laminated glass in an asymmetric insulated glass unit (IGU) delivers the best acoustic performance you can get in a residential product. A standard double-pane patio door with two identical panes of glass achieves roughly STC 28 to 31, while upgrading to a laminated asymmetric configuration can push that to STC 34 to 38, which represents a very noticeable reduction in traffic noise, neighbour sounds, and general outdoor disturbance. Understanding Your Glass Options Laminated glass consists of two layers of glass bonded to a polyvinyl butyral (PVB) or acoustic PVB interlayer. This interlayer dampens vibration and absorbs sound energy, particularly in the mid-frequencies where human speech and traffic noise are most prominent. Standard PVB provides some acoustic benefit, but acoustic PVB interlayers from manufacturers like Saflex or Trosifol are specifically engineered for sound reduction and perform measurably better. A patio door with one pane of acoustic laminated glass and one pane of standard glass in an asymmetric configuration costs \$2,500 to \$5,000 installed in Ottawa, depending on door size, frame material, and brand. The asymmetric configuration is key to acoustic performance. When both panes of glass are the same thickness, they vibrate at the same frequency and can actually amplify certain sound frequencies through resonance, a phenomenon called the coincidence effect. By using different thicknesses, say 6mm laminated on the exterior and 4mm on the interior, each pane resonates at a different frequency, so they do not reinforce each other's weaknesses. This simple change can improve STC by 3 to 5 points over a symmetric configuration at minimal additional cost. For Ottawa homes, your patio door glass must also handle thermal performance. A triple-pane IGU with one laminated pane offers both excellent sound control and superior insulation, with U-values that significantly outperform double-pane units. Given that a patio door is often the largest glass opening in a home, the thermal benefit during Ottawa's -25 to -30 degree Celsius winters is substantial. Triple-pane patio doors with acoustic laminated glass run \$3,500 to \$7,000 installed in Ottawa, but the energy savings and comfort improvement justify the premium. Brands like Marvin, Pella, and Lepage Millwork offer configurations with acoustic glass options suitable for the Ottawa market. Beyond the glass itself, the door frame and sealing system are equally important for sound performance. The best glass in the world will not help if the frame has poor weatherstripping or if the sliding mechanism leaves gaps. For maximum sound control, a hinged or French-style patio door seals more tightly than a sliding door because compression weatherstripping around a hinged panel creates a more consistent seal than the

brush or fin seals used on sliding tracks. If you prefer a sliding configuration, look for doors with multi-point locking systems that pull the panel firmly against the frame at multiple heights. A patio door replacement is a significant investment, and the right glass specification depends on your specific noise exposure, budget, and energy goals. A soundproofing professional can measure your current noise levels and recommend the most cost-effective glass configuration. Check the Ottawa Contractor Directory at [justynrookcontracting.com/directory](http://justynrookcontracting.com/directory) to find window and door specialists who can help you make the right choice for your home. Looking for experienced contractors? The Ottawa Construction Network connects homeowners with qualified professionals: [613BinsJC Carpentry](#) [Speedy Pete's Inc](#) [ALM Construction & Landscaping Inc](#) [Transitions Renovations](#) [View all contractors ?](#)

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Q6

## How do I stop wind whistling through casement window cranks during Ottawa winter storms?

That whistling sound from your casement window cranks is caused by air pressure forcing its way through tiny gaps in the crank mechanism and the operator track, and it is one of the most common winter noise complaints in Ottawa homes. The fix involves sealing the gaps around the operator hardware, improving the window's overall compression seal, and in some cases replacing worn components that no longer close the sash tightly enough against the frame. **Step-by-Step Solutions** Start by checking whether your casement windows are closing fully and locking tightly. Over time, the multi-point locking hardware on casement windows can go out of adjustment, especially in Ottawa where the repeated freeze-thaw cycles cause wood frames to shift and vinyl frames to expand and contract. When the sash does not compress firmly against the weatherstrip, wind finds its way through. Adjust the lock striker plates to pull the sash tighter, typically by loosening the screws and repositioning the striker inward by a millimetre or two. If your window has an adjustable cam lock, rotating the cam to a tighter position can restore the seal. These adjustments cost nothing and take a few minutes per window. The crank operator itself is often the culprit. The mechanism passes through a hole in the window frame, and the gap around it is rarely sealed from the factory. Apply acoustic caulk or silicone sealant around the exterior of the operator housing where it meets the frame, being careful not to get sealant into the moving parts. For the interior side, a thin bead of removable caulk or a gasket cut from closed-cell EPDM rubber can seal the gap without permanently bonding anything. This is particularly important in older homes in the Glebe, New Edinburgh, and Rockcliffe Park where original casement windows may be 20 to 30 years old and the operator housings have loosened over time. If the operator track at the bottom of the sash is the source, the track cover or operator guide may be cracked or missing its gasket. Replacement operator covers are available from window parts suppliers for \$10 to \$30 each, and they include a fresh seal. For Ottawa homeowners dealing with multiple whistling windows, ordering parts in bulk from a supplier like Basco or Truth Hardware saves money compared to buying individual pieces. When the weatherstripping

around the sash is worn, compressed, or cracked from Ottawa's extreme temperature swings, no amount of hardware adjustment will stop the whistling. Casement window weatherstrip is available in specific profiles for most major window brands at \$3 to \$8 per linear foot. Replacing it requires carefully removing the old strip, cleaning the channel, and pressing the new strip into place. A full casement window re-weatherstrip costs \$40 to \$80 in materials for a DIY job, or \$100 to \$200 per window if you hire a professional. For persistent whistling that survives all these fixes, the window frame itself may have gaps where it meets the rough opening. Removing the interior trim and applying low-expansion spray foam in the gap between the window frame and the framing lumber can eliminate hidden air paths. Use only low-expansion foam rated for windows, as high-expansion foam can bow the frame and make the problem worse. If multiple windows need attention or you suspect the frames have shifted, a window service professional can assess the situation efficiently. The Ottawa Contractor Directory at [justynrookcontracting.com/directory](http://justynrookcontracting.com/directory) includes window and weatherization contractors who handle these projects regularly. Looking for experienced contractors? The Ottawa Construction Network connects homeowners with qualified professionals: Reno's by Daniel Frauwallner, JC Carpentry, Whole Home Beauty (WHB), Sharp Lines, Custom By Arie, View all contractors ?

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## What's the best weatherstrip material for soundproofing that also handles Ottawa's extreme cold?

For Ottawa's extreme climate, closed-cell EPDM rubber weatherstripping is the best all-around choice for both soundproofing and cold-weather performance. EPDM (ethylene propylene diene monomer) remains flexible down to -40 degrees Celsius, maintains its compression seal through thousands of open-close cycles, and creates the airtight perimeter seal that sound blocking demands. Other materials like foam tape and felt deteriorate quickly in Ottawa's freeze-thaw conditions, losing their sealing ability within a single winter season. Material Comparison for Ottawa Conditions Closed-cell EPDM rubber is the professional standard and the material you will find in most high-performance door and window seal systems. It costs \$15 to \$40 for a full door perimeter kit in Ottawa, or \$2 to \$5 per linear foot for bulk material. EPDM resists UV degradation, does not absorb water, and will not crack or crumble when temperatures swing from -30 degrees Celsius in January to +35 degrees Celsius in July. For soundproofing specifically, look for EPDM strips with a bulb or D-profile shape that compresses tightly against the door or window sash, creating a continuous seal without gaps. Brands like Pemko, Zero International, and Frost King all offer EPDM options readily available through Ottawa building supply stores. Silicone weatherstripping is another excellent cold-weather performer, staying flexible down to -50 degrees Celsius and offering superior longevity. It is more expensive at \$4 to \$8 per linear foot, but it outlasts EPDM by several years and maintains a more consistent seal over its lifetime. For high-priority sound control areas like a home studio door or a bedroom facing a busy street in Vanier or Hintonburg, the extra cost is justified. Silicone also has better memory, meaning it springs back to its original shape after compression more reliably than rubber. Materials to avoid for Ottawa soundproofing include open-cell foam tape, which compresses permanently within months and absorbs moisture that freezes and destroys the seal; vinyl or PVC strips, which become rigid and brittle below -15 degrees Celsius and crack during Ottawa's coldest weeks; and felt strips, which offer almost no sound blocking even when new and deteriorate rapidly in wet or cold conditions. These cheap materials might seem like a bargain at \$3 to \$8 per door, but you will be replacing them two or three times a year, spending more in the long run while never achieving a proper seal. Proper installation is just as important as material selection. The weatherstrip must create continuous contact around the entire perimeter when the door or window is closed. Pay special attention to the corners where horizontal and vertical strips meet, as these are the most common gap points. For doors, combine perimeter weatherstripping with an automatic door bottom seal that drops down when the door closes, as standard door sweeps wear unevenly on Ottawa's tile and hardwood thresholds. For windows, consider adding V-strip (tension seal) weatherstripping in the channels where the sash slides, which seals against drafts and sound while still allowing the window to operate. Weatherstripping is one of the most cost-effective DIY soundproofing improvements you can make, but if you are tackling a whole-home project or dealing with older windows and doors that may need adjustment, a professional can ensure everything seals properly. Visit the Ottawa Contractor

Directory at [justynrookcontracting.com/directory](https://justynrookcontracting.com/directory) to find weatherization and soundproofing specialists in your area. Looking for experienced contractors? The Ottawa Construction Network connects homeowners with qualified professionals: 613BinsRenoMotion Inc. Jaiko Cleaning Services Dump n Dash Hauling ART DRYWALL AMD PAINTING View all contractors ?

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Q8

## Are magnetic interior window inserts effective for blocking LRT noise in my Centretown condo?

Yes, magnetic interior window inserts are one of the most effective and least invasive solutions for blocking LRT noise in a Centretown condo. They work by creating a sealed secondary glazing layer with an air gap between the insert and your existing window, and that air gap is where most of the sound reduction happens. For the Confederation Line rumble and station announcements that affect buildings along the O-Train corridor, homeowners consistently report reductions of 10 to 15 decibels with quality inserts, which is roughly equivalent to cutting the perceived loudness in half. How They Work and What to Expect Magnetic window inserts are clear acrylic or laminated glass panels set in an aluminum frame with a magnetic perimeter seal. The frame attaches to a thin steel strip that is bonded to your interior window casing with adhesive. When you press the insert into place, the magnets create a tight seal around the entire perimeter, and the air gap of 2 to 4 inches between the insert and your existing window acts as a sound buffer. The wider the air gap, the better the low-frequency performance, which is particularly important for LRT noise since rail vibration and wheel-on-track rumble are heavily weighted toward low frequencies. Products like Indow, Magnetite, and Soundproof Windows Inc. are among the better-known brands, with prices in Ottawa running \$300 to \$700 per window depending on size and glazing thickness. For Centretown condos, magnetic inserts have several practical advantages. They require no permanent modification to the window or building envelope, which is critical because most condo corporations will not allow you to replace or alter exterior windows. Installation is non-destructive, the inserts are removable for cleaning or if you move, and they do not affect the building's exterior appearance. Many residents in buildings along Albert Street, Queen Street, and Lyon Street have installed these without needing condo board approval since they are considered interior modifications. The effectiveness depends heavily on your specific situation. If your existing windows are single-pane or older double-pane units with failed seals, magnetic inserts will make a dramatic difference because your baseline is so poor. If you already have modern double-pane windows in good condition, the improvement will be more modest but still worthwhile for LRT noise. The critical factor is the seal quality: any gap in the magnetic seal creates a sound leak that undermines the entire insert. Professional measurement and installation ensure a precise fit, which is why custom-made inserts outperform off-the-shelf kits. One Ottawa-specific consideration: during winter, the air gap between the insert and the window can cause condensation issues if warm, humid indoor air

reaches the cold outer pane. To prevent this, ensure the magnetic seal is airtight and consider running a dehumidifier nearby during the coldest months when the temperature difference between inside and outside can exceed 50 degrees Celsius. Some Ottawa homeowners add small silica gel packets in the air gap as extra moisture protection. For a Centretown condo dealing with LRT noise, getting a professional acoustic assessment can determine whether magnetic inserts alone will solve the problem or whether additional treatments for walls and ceilings are needed. The Ottawa Contractor Directory at [justynrookcontracting.com/directory](http://justynrookcontracting.com/directory) lists professionals experienced with condo soundproofing projects in the downtown core. Looking for experienced contractors? The Ottawa Construction Network connects homeowners with qualified professionals: Reno's by Daniel Frauwallner, JC Carpentry, Pure Flow Water Solutions inc., Somar Contracting Inc. Kitchens by Michael o/a Michael Francis Home Improvements. View all contractors ?

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Q9

## How do I reduce noise coming through the mail slot in my front door on a busy Ottawa street?

A mail slot is one of the most overlooked sound leaks in older Ottawa homes, and if your front door faces a busy street like Bank Street, Bronson Avenue, or Carling Avenue, that small rectangular opening can let in a surprising amount of traffic noise, bus rumble, and general urban sound. The most effective solution is to seal the mail slot permanently and switch to an exterior wall-mounted mailbox, but if you need to keep the slot functional, there are several ways to significantly reduce the noise it transmits.

**Sealing and Dampening Options** If you can eliminate the mail slot entirely, that is the best acoustic choice. Have a contractor fill the opening with a solid wood or composite plug, seal it with acoustic caulk, and refinish the door surface. This costs \$150 to \$400 in Ottawa depending on whether the door needs refinishing and whether you install a new exterior mailbox. A wall-mounted Canada Post-compliant mailbox runs \$30 to \$100 and can be mounted beside the door or on a post. Many homeowners in Centretown, the Glebe, and Old Ottawa South have made this switch as part of broader front door upgrades, and the noise reduction is immediate and significant. If you prefer to keep the mail slot, install an interior mail slot cover with a brush or magnetic seal. Products like the Ecoflap or a heavy-duty internal letterbox cover create a secondary barrier on the inside of the door. The key is having a tight-fitting cover that seals against its frame, ideally with a compression gasket or magnetic strip. A quality interior mail slot cover costs \$40 to \$120 and can be installed as a DIY project in under an hour. For additional sound blocking, line the interior of the mail slot cavity with a strip of mass loaded vinyl (MLV), which adds mass and dampens vibration. A small piece of MLV for this purpose costs under \$10. Another effective approach is to create a mail slot sound baffle by installing a small interior box behind the slot. This is a rigid enclosure, roughly the size of a shoebox, lined with acoustic foam or mineral wool, with a hinged front panel that the mail carrier pushes open from outside and that falls closed under its own weight. The

enclosed space traps and absorbs sound energy before it enters your home. A carpenter or handyperson can build this for \$100 to \$250 in materials and labour. Keep in mind that if your front door is letting significant street noise through the mail slot, the door itself may also be a weak point. Many older Ottawa homes have original wood doors that are only 1-3/8 inches thick and lack modern weatherstripping. Upgrading to a solid-core insulated steel or fibreglass door at \$800 to \$2,500 installed, with no mail slot and proper perimeter seals, will deliver the biggest overall improvement. Combined with a storm door at \$300 to \$800, you create an air gap that acts as a sound buffer and also dramatically improves thermal performance during Ottawa's long winters. For front door upgrades that address both sound and energy efficiency, a professional assessment can identify where the biggest gains are. Check the Ottawa Contractor Directory at [justynrookcontracting.com/directory](http://justynrookcontracting.com/directory) for door installation and weatherization specialists serving your neighbourhood. Looking for experienced contractors? The Ottawa Construction Network connects homeowners with qualified professionals: Homeupgraders RenoMotion Inc. Valcor Construction Kitchens by Michael o/a Michael Francis Home Improvements Leeds Property Maintenance View all contractors ?

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## What's the best approach for soundproofing a pet door that lets noise in along with the cat?

A pet door is essentially a hole in your sound barrier, and there is no way around the basic physics: any opening large enough for a cat to pass through will let sound through too. The best approach is to minimize the acoustic damage by choosing a pet door design with the tightest possible seal and adding supplemental sound blocking around it. You will not achieve the same STC rating as a solid door, but you can reduce the noise penalty from catastrophic to manageable.

**Strategies That Actually Work**

The most effective option is a magnetic flap pet door with a double-flap design. Products like the PetSafe Extreme Weather Door use two separate flaps with an air gap between them, which creates a rudimentary sound lock. The magnetic seals on each flap close tighter than gravity-only flaps, and the trapped air pocket between the two layers provides some additional sound attenuation. In Ottawa, these run \$80 to \$200 depending on size. For a cat, you need the smallest size available, which minimizes the opening and therefore the sound leak. A small cat flap opening of roughly 6 by 6 inches is far less damaging acoustically than a large dog door at 15 by 20 inches. For better performance, consider a microchip-activated pet door that stays locked and sealed until your cat approaches. Brands like SureFlap use a rigid panel that sits flush against a gasket when closed, providing a much tighter seal than flexible flaps. These cost \$150 to \$350 in Ottawa and have the added benefit of keeping neighbourhood cats out. When the door is in its locked and sealed position, it blocks significantly more sound than any flap-style door. The trade-off is that there is a brief moment of full opening each time your cat passes through, but for most of the day the opening is sealed. Installation location matters enormously. If possible, install the pet door in a door that leads to a buffer space rather than directly between your quiet room and the noise source. For example, in many Barrhaven and Kanata homes, you could route the cat through a laundry room or mudroom rather than putting the pet door directly in your office or bedroom door. This way, the buffer room absorbs and attenuates sound before it reaches your space. Even a small hallway with a closed door at each end and a pet door in each creates a surprisingly effective sound lock. If the pet door must go in an exterior door, Ottawa's winters add another consideration. Standard flexible flaps become stiff and brittle at -25 to -30 degrees Celsius, which means they do not seal properly in deep cold. Double-flap designs with thermal breaks handle this better, and they also reduce the cold air infiltration that every Ottawa homeowner dreads. Make sure the flap material is rated for temperatures below -30 degrees Celsius if you are installing in an exterior door. For the best results on a challenging pet door situation, an experienced contractor can help you plan the installation to minimize both sound and thermal impact. Browse the Ottawa Contractor Directory at [justynrookcontracting.com/directory](http://justynrookcontracting.com/directory) to find professionals who handle door modifications and weatherization projects in your area. Looking for experienced contractors? The Ottawa Construction Network connects homeowners with qualified professionals: Luxe Painting and Renovations, RenoMotion Inc., BFI Renovations, Renovo Construction, Dump n Dash Hauling. View all contractors ?

## My bifold closet doors let sound pass right through, what are better alternatives for noise control?

Bifold closet doors are among the worst performers for sound control because they combine thin, hollow panels with large gaps at the hinges, tracks, and where the two panels meet. Replacing them with a solid-core hinged door or a solid sliding door with proper seals will make a noticeable difference, especially if the closet shares a wall with a noisy room or if you are trying to contain sound from a music practice space or media room.

**Replacement Options Ranked by Acoustic Performance**

The best replacement is a standard solid-core hinged door with weatherstripping and an automatic door bottom. This gives you a tight seal around the entire perimeter and the mass needed to block sound. In Ottawa, expect to pay \$300 to \$600 for the door itself and \$300 to \$600 for professional installation including a new jamb if needed. The total investment of \$600 to \$1,200 delivers a dramatic improvement, taking you from essentially no sound blocking to roughly STC 28 to 35 depending on how well the seals are installed. This is the approach most acoustic professionals recommend for bedrooms in Centretown condos and Sandy Hill apartments where closets back onto shared walls. If you need to keep the sliding functionality because of space constraints, a solid-core bypass sliding door is the next best option. These are heavier panels that overlap in the centre, and while they will never seal as tightly as a hinged door, they offer significantly more mass than bifold panels. Adding brush or compression seals along the edges improves performance further. Expect to pay \$400 to \$900 installed for a pair of solid bypass doors in Ottawa. A third option gaining popularity is a pocket door with acoustic seals, which slides completely into the wall and can be fitted with perimeter gaskets. However, pocket doors require wall modification, adding \$500 to \$1,000 in framing work, and the wall cavity they slide into becomes difficult to insulate for sound. Before choosing your replacement, consider what is actually happening with the sound. If noise is coming through the closet wall from an adjacent room, replacing the door alone will not solve the problem. You may also need to insulate the shared wall cavity with Rockwool Safe'n'Sound mineral wool batts and seal any gaps around electrical outlets or HVAC penetrations. In many Ottawa townhouses built in the 1980s and 1990s, closet walls between units were built to minimum code standards and offer very little sound isolation. One practical tip that many homeowners miss: the closet itself can act as a buffer zone. A deep closet full of clothing and soft goods provides meaningful sound absorption. If you install a solid-core door and the closet is well-stocked, the combination of the door's mass and the closet contents' absorption can reduce perceived noise by 10 to 15 decibels, which is roughly the difference between clearly hearing a conversation and hearing only a faint murmur. If your closet shares a party wall in a condo or townhouse, a soundproofing contractor can assess whether the door replacement alone will be sufficient or whether the wall also needs attention. The Ottawa Contractor Directory at [justynrookcontracting.com/directory](http://justynrookcontracting.com/directory) can help you connect with professionals experienced in these types of projects. Looking for experienced contractors? The Ottawa Construction Network connects homeowners with qualified professionals: [Justyn Rook ContractingJC](http://Justyn Rook ContractingJC)

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## How do I choose between a barn door and a standard swing door for soundproofing a home office?

If soundproofing is your priority, a standard swing door will outperform a barn door every time. Barn doors slide along an exterior track and never fully seal against the door frame, leaving gaps along both sides, the top, and the bottom that allow sound to pass freely. Even the most expensive barn door hardware cannot eliminate these gaps, which means you are essentially working with an open doorway from an acoustic perspective. A properly fitted solid-core swing door with perimeter weatherstripping and an automatic door bottom can achieve STC 30 to 35, while a barn door typically delivers only STC 15 to 20 at best. What Makes a Swing Door Effective for Sound Control The key to a soundproof swing door is a combination of mass and air sealing. Start with a solid-core door, which weighs roughly 50 to 80 pounds compared to 15 to 25 pounds for a hollow-core door. That extra mass blocks significantly more airborne sound. In Ottawa, a quality solid-core interior door runs \$250 to \$600 depending on size and finish, while installation with a new frame typically costs \$400 to \$800 in labour. Add acoustic weatherstripping around the entire perimeter, including a compression seal or magnetic seal system at \$40 to \$80 for a full door kit. An automatic door bottom sweep that drops down when the door closes and retracts when it opens is far superior to a standard door sweep and costs \$50 to \$120 for a quality unit from brands like Pemko or Zero International. For Ottawa home offices where you need to block household noise during work hours, or keep your video calls from disturbing family members, a solid-core swing door with proper sealing is usually sufficient. If you want to push performance further, consider adding a layer of mass loaded vinyl (MLV) to the back of the door, which adds roughly \$30 to \$50 in material and can boost performance by 3 to 5 STC points. Some homeowners in neighbourhoods like Kanata and Barrhaven also add a door gasket system with adjustable compression seals, which brings the total assembly closer to STC 38 to 40. If you absolutely love the barn door aesthetic, there are compromise solutions. A few manufacturers produce barn doors with perimeter seal systems that use a track-mounted compression gasket, but even these rarely match a properly sealed swing door. Another option is to install a swing door for acoustic performance and add a decorative barn door on the room side that slides open during the day for aesthetics. This approach costs more but gives you both form and function, which matters when your home office is a permanent part of your Ottawa home. For a home office soundproofing project that includes the door, walls, and potentially the ceiling, it is worth consulting with a soundproofing professional who can assess your specific noise issues and recommend the most cost-effective combination of treatments. The Ottawa Contractor Directory at [justynrookcontracting.com/directory](https://justynrookcontracting.com/directory) is a good starting point for finding acoustic and insulation specialists in the area. Looking for experienced contractors? The Ottawa Construction Network connects

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## What's the best way to seal the perimeter of an older Ottawa window that has settled and has gaps?

The best approach for sealing a settled window with perimeter gaps is a layered strategy: acoustic caulk for small gaps, backer rod plus caulk for larger gaps, and spray-foam-plus-caulk for the rough opening behind the trim. Older Ottawa homes — particularly those in the Glebe, Old Ottawa South, New Edinburgh, and Centretown built before the 1960s — commonly develop window gaps as the wood framing dries, shrinks, and shifts over decades of Ottawa's punishing freeze-thaw cycles. These gaps are simultaneously sound leaks, air leaks, and energy drains, so sealing them properly pays dividends on all three fronts. Start with the visible gap between the window frame and the interior trim or wall finish. For gaps up to about 6 mm (1/4 inch), apply a bead of acoustic caulk such as Tremco Acoustical Sealant or equivalent at \$8 to \$15 per tube. Acoustic caulk remains permanently flexible, which is critical — standard silicone or latex caulk hardens over time and cracks open again as the building continues to move seasonally. One tube covers roughly 8 to 10 linear metres in a thin bead. For gaps between 6 mm and 12 mm, press in a closed-cell foam backer rod (\$5 to \$10 for a 6-metre roll) first, then apply caulk over it. The backer rod gives the caulk something to bridge against and prevents it from sinking into the cavity.

### Addressing the Hidden Gap Behind the Trim

The most significant sound and air leak in a settled window is usually behind the interior trim casing, in the rough opening between the window frame and the structural framing. Carefully remove the interior trim (pry gently with a flat bar and putty knife to avoid damaging plaster or drywall) and you will likely find the original insulation — if any — has compressed, fallen away, or was never installed. In many pre-1970s Ottawa homes, this gap was stuffed with fibreglass or newspaper, neither of which provides an air seal. Fill this rough opening gap with low-expansion spray foam designed for windows and doors (labelled "minimal expanding" or "window and door" — never use standard high-expansion foam, which can bow the window frame and prevent it from operating). Products like Great Stuff Window & Door cost about \$8 to \$12 per can and one can handles three to four average windows. Apply in thin beads no more than half the gap depth, allow to expand and cure for 24 hours, then trim flush. Over the cured foam, apply a bead of acoustic caulk to create a complete air and sound seal before reinstalling the trim.

For the exterior perimeter, inspect the caulk joint between the window frame (or brick moulding) and the exterior wall finish. Ottawa's UV exposure and temperature cycling from -30°C to +35°C degrades exterior caulk faster than in milder climates — expect to recaulk every 5 to 8 years. Use a high-quality polyurethane or hybrid sealant rated for exterior use and paintable if needed. Remove all old cracked caulk before applying new material — layering new over old is a temporary fix at best. If the window has settled to the point where the sash no longer sits square in the frame — you can see daylight through the gap or the lock no longer engages properly — sealing alone will not fully solve the problem. The window may need to be re-shimmed and re-levelled in its rough opening (\$200 to \$500 per window by a carpenter) or, if the frame itself is rotted or severely warped, replaced entirely (\$500 to \$1,500 per window installed for a standard double-hung). For heritage properties

in Ottawa's Heritage Conservation Districts, replacement windows may need to match the original profiles — check with the City of Ottawa heritage planning office before proceeding. Properly sealing settled windows is one of the highest-value improvements for both noise reduction and energy savings in older Ottawa homes. For a whole-house approach or windows with significant structural issues, consulting a professional ensures the work is done correctly and any building code or heritage requirements are met. The Ottawa Contractor Directory at [justynrookcontracting.com/directory](http://justynrookcontracting.com/directory) lists contractors experienced with both soundproofing and heritage window restoration in the Ottawa area. Looking for experienced contractors? The Ottawa Construction Network connects homeowners with qualified professionals: Reno's by Daniel Frauwallner, RenoMotion Inc., Estra Design, ARTEXPRO Tile & Finishes, Scott Smirle (Smirle Elite Contracting). [View all contractors ?](#)

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## How effective are secondary storm doors for reducing noise compared to replacing the main exterior door?

A secondary storm door can be surprisingly effective for noise reduction — typically adding 5 to 10 STC points to your overall door assembly — and in many situations it is more cost-effective than replacing your main exterior door. The key reason is the air gap between the two doors, which creates a decoupled double-barrier system similar in principle to the double-stud walls used in professional soundproofing. However, the storm door must be well-sealed to deliver real results, and there are situations where replacing the main door is the better investment. A standard exterior door — even a solid wood or insulated steel door — typically achieves an STC rating of 25 to 30 on its own, which is modest by soundproofing standards. Adding a quality storm door with good weatherstripping, a door sweep, and laminated or insulated glass creates a second barrier with a 7 to 15 cm air gap that can push the combined assembly to STC 35 to 40. That 10-point improvement represents roughly a 50% perceived reduction in noise, which is very noticeable. The air gap is what makes this work — it is not just the added mass of the second door, but the fact that sound must pass through one surface, cross an air gap (where energy dissipates), and then pass through another surface.

**When Storm Doors Excel and When They Fall Short**

Storm doors are the better choice when your existing exterior door is structurally sound but noise leaks primarily through the door assembly rather than through walls or windows. A quality storm door costs \$300 to \$800 installed in Ottawa, compared to \$1,500 to \$4,000 for a new high-performance exterior door with frame. For Ottawa homeowners in Centretown, Sandy Hill, and the Glebe dealing with street traffic noise, a storm door often delivers the best noise reduction per dollar spent — especially on heritage homes where replacing the original door may face restrictions under Heritage Conservation District guidelines. However, a storm door will underperform expectations if the main door has significant air gaps around its perimeter. Sound exploits the weakest path, and a 3 mm gap under a door transmits

as much noise as leaving several square centimetres of the door open. Before adding a storm door, ensure your main door has fresh weatherstripping on all four sides and a quality door sweep or automatic door bottom. This \$30 to \$80 improvement to the main door should always come first — it might even solve the noise problem on its own. Replacing the main door makes more sense when the existing door is warped, damaged, hollow-core, or poorly fitted in its frame. A new solid-core insulated steel or fibreglass door with a proper frame, multi-point locking hardware, and factory-applied magnetic weatherstripping can achieve STC 35 to 38 as a single unit. Adding a storm door on top of a new high-performance door pushes the system to STC 40 to 45, which approaches the performance of a soundproofed wall and handles even heavy Ottawa traffic noise from streets like Bank, Bronson, Carling, or the Queensway corridor. For the storm door itself, choose one with laminated glass rather than tempered glass — the plastic interlayer in laminated glass dampens vibration and provides better sound reduction at a modest price premium of \$50 to \$100. Ensure the storm door frame has compression weatherstripping and that the door closer pulls it fully shut against the seals. A storm door that does not seal tightly is just an expensive screen door from a soundproofing perspective. Whether you go with a storm door, a door replacement, or both depends on your specific noise source, budget, and the condition of your existing entry. A soundproofing professional can measure the actual sound levels and identify whether the door, windows, or walls are your primary weak point. Browse the Ottawa Contractor Directory at [justynrookcontracting.com/directory](http://justynrookcontracting.com/directory) for contractors who can assess your situation and recommend the most effective approach for your home. Looking for experienced contractors? The Ottawa Construction Network connects homeowners with qualified professionals: Reno's by Daniel Frauwallner, JC Carpentry, Green Property Restorations, Transitions Renovations, Nic's D.U.C.T Works Inc. View all contractors ?

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