OTTAWA FIREPLACES

Chimney Repair, Relining & Restoration

Masonry repair, chimney relining, crown restoration,
and tuckpointing for Ottawa chimneys

25 Expert Answers from Fireplace IQ

ottawafireplaces.com/construction-brain

Table of Contents

20. Our chimney flashing is leaking after Ottawa's spring thaw — should we repair the existing flashing or replace it entirely?

21. How much does it cost to install a stainless steel chimney cap in Ottawa, and will it prevent ice and animal entry?

22. Do I need an Ontario building permit to reline my chimney, or does my Ottawa contractor handle that as part of the job?

23. What's the typical cost for chimney tuckpointing on a two-storey Ottawa home with deteriorated mortar joints from ice storm damage?

24. Our chimney crown cracked after last winter's freeze-thaw cycles — can it be repaired or does it need full replacement in Ottawa?

25. How much does chimney relining cost in Ottawa, and is a stainless steel liner worth the extra investment over aluminum?

Q1

What causes white powder efflorescence on my chimney bricks and how much does it cost to fix in Ottawa?

White powder on your chimney bricks is efflorescence — mineral salts that leach out of the masonry when water penetrates the brick and mortar, then evaporates and leaves behind crystalline deposits. This is extremely common on Ottawa chimneys due to our harsh freeze-thaw cycles, and while the white residue itself is cosmetic, it signals that water is infiltrating your chimney structure, which can lead to serious deterioration if not addressed.

Ottawa's climate creates perfect conditions for efflorescence because water enters through microscopic cracks in mortar joints, brick faces, or the chimney crown during rain and snow, then repeatedly freezes and thaws throughout our long winter. Each freeze-thaw cycle widens these entry points and draws more mineral-laden water through the masonry. The Ottawa Valley's limestone bedrock and clay soils also contribute high mineral content to groundwater, which intensifies efflorescence when that water moves through masonry materials.

The white powder itself can be cleaned with a stiff brush and water, or for stubborn deposits, a mild muriatic acid solution (1 part acid to 10 parts water, applied by a professional wearing proper protective equipment). However, cleaning only addresses the symptom — the real solution is stopping water infiltration at its source. This typically involves repairing or replacing the chimney crown ($300 to $1,200), installing or upgrading the chimney cap ($200 to $600), tuckpointing deteriorated mortar joints ($500 to $2,500 depending on extent), and applying breathable masonry waterproofing ($250 to $600). For severe cases where freeze-thaw damage has compromised the chimney structure, partial or complete rebuilding may be necessary ($3,000 to $20,000 depending on scope).

The key warning sign is if efflorescence appears suddenly or increases dramatically — this often indicates accelerating water damage that requires immediate attention. Ignoring efflorescence in Ottawa's climate can lead to spalling bricks, crumbling mortar, and eventually structural instability of the entire chimney. The longer you wait, the more expensive repairs become, as surface waterproofing that costs $600 today may require a $8,000 chimney rebuild if water damage progresses unchecked.

When you're ready to address both the efflorescence and its underlying cause, you can browse experienced masonry and chimney contractors through the Ottawa Construction Network directory to get proper assessments and quotes for permanent solutions.

Q2

My chimney has an offset section that's hard to inspect — how much does an Ottawa contractor charge to repair a chimney offset?

Chimney offset repairs in Ottawa typically cost $800 to $3,500 depending on the extent of damage and accessibility, with most homeowners paying $1,200 to $2,200 for standard mortar joint repairs and minor masonry work. Complex offset rebuilds can reach $4,000 to $8,000 if the entire offset section requires reconstruction.

Chimney offsets — where the flue changes direction to navigate around roof framing or other obstructions — are particularly vulnerable to deterioration in Ottawa's freeze-thaw climate because they create stress concentration points in the masonry. Water tends to pool at the horizontal ledges created by offset construction, and the repeated expansion and contraction from temperature swings can crack mortar joints and separate brick courses. The inaccessible nature of most offsets means problems often go undetected until they become serious structural issues or water leaks into the house.

A WETT-certified chimney inspector can assess offset damage using specialized cameras and mirrors, but repairs almost always require scaffolding or aerial lift equipment to safely access the work area. Common offset repairs include tuckpointing deteriorated mortar joints ($15 to $25 per square foot), replacing damaged bricks ($8 to $15 per brick), sealing cracks with appropriate masonry sealers ($200 to $500), and rebuilding severely damaged offset sections ($2,000 to $6,000). The offset's location on the chimney affects pricing significantly — offsets near the roofline are more accessible than those higher up the chimney stack.

Critical safety warning: Never attempt offset repairs yourself. This work requires proper fall protection, structural masonry knowledge, and understanding of how offset modifications affect chimney draft and structural integrity. Improper offset repairs can compromise the entire chimney's stability or create dangerous draft problems that allow carbon monoxide into your home.

Most offset repairs in Ottawa are scheduled for late spring through early fall when weather permits safe masonry work. Get quotes from at least three contractors, and ensure they specify exactly which sections need repair, what materials they'll use, and whether scaffolding or lift rental is included in their pricing. You can browse experienced chimney contractors through the Ottawa Construction Network directory to compare local professionals who understand the specific challenges of offset repairs in our climate.

Q3

How much does it cost to install a chimney cricket on my Ottawa roof to divert water away from the chimney?

A chimney cricket installation in Ottawa typically costs $800 to $2,500, depending on the size of your chimney, roofing material, and complexity of the installation. Most Ottawa homeowners pay around $1,200 to $1,800 for a professionally installed cricket on a standard residential chimney.

Chimney crickets are particularly important in Ottawa's climate because they divert water and snow away from the uphill side of your chimney where it penetrates the roof. Without a cricket, water pools behind the chimney during Ottawa's frequent freeze-thaw cycles, creating ice dams and forcing water under shingles and flashing. This pooled water is the leading cause of chimney leaks in Ottawa homes, especially during spring melt when large volumes of water run off roofs rapidly. A properly installed cricket creates a peaked diversion that channels water around both sides of the chimney rather than allowing it to collect.

The cricket itself is typically constructed from the same material as your roof — asphalt shingles for most Ottawa homes, or metal for standing seam roofs. The frame underneath is built from treated lumber and plywood, then waterproofed with ice and water shield before the finish roofing material is applied. Proper flashing integration between the cricket and chimney is critical — this is where many DIY attempts fail and create worse leak problems than the original issue. The work requires removing shingles around the chimney, building the cricket frame, installing new flashing, and carefully integrating everything with your existing roof system.

Installation timing matters in Ottawa's short construction season. This work should be done during dry weather between May and October when temperatures consistently stay above 5 degrees Celsius — roofing adhesives and sealants don't cure properly in cold weather. Many Ottawa roofers get booked solid for cricket installations after homeowners discover leaks during spring melt, so scheduling the work in late summer or early fall avoids the rush. Never attempt this as a DIY project — working at height around a chimney requires proper safety equipment, and improper flashing installation will create expensive water damage inside your home.

When you're ready to address water diversion around your chimney, you can browse experienced roofing contractors who specialize in chimney flashing and cricket installation through the Ottawa Construction Network directory at justynrookcontracting.com/directory.

Q4

How much does it cost to rebuild the top three feet of a deteriorating chimney above the roofline in Ottawa?

Rebuilding the top three feet of a deteriorating chimney above the roofline in Ottawa typically costs $3,000 to $6,000, depending on the chimney size, complexity of the masonry work, and accessibility. This price includes demolition of the deteriorated section, new brick or block construction, mortar, a properly sloped chimney crown, and installation of a new chimney cap and flashing.

Ottawa's extreme freeze-thaw cycles are particularly brutal on the exposed portion of chimneys above the roofline. Water penetrates small cracks in mortar joints and brick faces during fall and spring, then expands approximately 9 percent when it freezes during our -25 to -30 degree winter nights. This expansion forces cracks wider each freeze-thaw cycle, leading to spalling brick, crumbling mortar, and eventually structural failure of the chimney top. The chimney crown — the concrete or mortar cap that sheds water away from the flue opening — takes extraordinary punishment in Ottawa's climate and often needs complete replacement during a rebuild.

The cost breakdown typically includes $1,500 to $2,500 for labour (skilled masons command premium rates for working at height in Ottawa's weather), $800 to $1,500 for materials including matching brick, mortar, and a new crown, $300 to $600 for a quality stainless steel chimney cap, $200 to $400 for new flashing where the chimney meets the roofline, and $200 to $500 for scaffolding or equipment rental. Chimneys with multiple flues, decorative corbelling, or heritage brick that requires special matching will push costs toward the higher end of the range.

Timing is critical for chimney rebuilds in Ottawa. Masonry work requires consistent temperatures above 5 degrees Celsius for proper mortar curing, limiting the work season to roughly April through November. Smart homeowners schedule chimney rebuilds in late spring or early fall to avoid the rush of emergency calls when the first cold snap hits. A deteriorating chimney top that survives one Ottawa winter may not survive the next — water infiltration accelerates rapidly once the protective mortar joints begin failing.

When you're ready to get quotes for chimney rebuilding, you can browse experienced masonry contractors and chimney specialists through the Ottawa Construction Network directory to compare local professionals who understand the specific challenges of Ottawa's climate.

Q5

What is a chimney anchor plate and how much does it cost to install one on my Ottawa home?

A chimney anchor plate is a steel reinforcement system that secures a deteriorating masonry chimney to your home's structure, preventing it from separating from the house or collapsing during Ottawa's severe freeze-thaw cycles. The anchor plate bolts through the chimney wall into the home's structural framing, creating a mechanical connection that stops lateral movement and provides crucial stability when the mortar joints have weakened but the chimney doesn't require complete rebuilding.

In Ottawa's extreme climate, masonry chimneys face relentless punishment from temperature swings of 60 degrees or more between summer and winter. Water infiltration followed by freeze-thaw cycling gradually destroys mortar joints, and chimneys can begin to lean away from the house or develop dangerous cracks where they meet the roofline. An anchor plate system addresses this structural instability without the expense of tearing down and rebuilding the entire chimney above the roofline.

The installation involves drilling through the chimney masonry at the roofline level and securing heavy-duty steel plates with long bolts that extend into the house's structural members — typically the rim joist or wall framing. The exterior plate distributes the load across multiple bricks or blocks, while the interior connection ties directly into the home's frame. This work requires careful assessment of the chimney's condition, proper structural engineering, and precise installation to avoid creating new water infiltration points where the bolts penetrate the masonry.

Chimney anchor plate installation in Ottawa typically costs $800 to $2,500 depending on chimney size, accessibility, and the complexity of connecting to your home's specific framing system. Multi-storey chimneys may require multiple anchor points, increasing the cost. This is specialized structural work that requires experience with both masonry and framing systems — improper installation can create water leaks or fail to provide adequate structural support.

If your chimney shows signs of separation from the house, leaning, or cracking at the roofline connection, you can browse experienced masonry and chimney contractors through the Ottawa Construction Network directory to get professional assessments and quotes for anchor plate installation or other structural chimney repairs.

Q6

Birds keep getting into our chimney every spring in Kanata — what type of cap prevents this permanently?

A **chimney cap with 1/8-inch mesh screening** is your best defence against birds and other wildlife getting into your chimney, especially during Ottawa's spring nesting season when birds are actively seeking sheltered cavities.

Here's why this matters in Ottawa specifically: Our region's mild springs (temperatures reaching 10 to 15 degrees Celsius in April and May) trigger nesting behaviour in starlings, sparrows, swallows, and other birds that view open chimneys as ideal nesting sites. Once birds nest inside your chimney, they block flue gases, create fire hazards, and leave debris that accumulates quickly. The problem gets worse if you don't address it early — by mid-May, some birds have already built nests deep in the flue where they're difficult to remove humanely.

The most effective solution is a **top-mounted chimney cap with 1/8-inch stainless steel mesh on all four sides**. This allows smoke and heat to escape while preventing any bird larger than a sparrow from entering. The mesh opening is small enough to block birds but large enough to maintain proper draft and avoid creosote accumulation. For a standard masonry chimney in Kanata or the surrounding area, installation costs $200 to $600 depending on chimney height and whether your existing cap needs replacement.

Important considerations: Some homeowners install simple spark arrestor caps (which have larger openings) thinking they will exclude birds — they won't. The mesh must be 1/8-inch or smaller. You should also ensure your chimney cap is properly secured and doesn't have gaps around the edges where determined birds can squeeze in. If birds have already nested in your chimney, you need a WETT-certified chimney sweep to remove the nest before installing a cap — never seal a nest inside with birds still present, as this creates a fire hazard and is inhumane.

Check your cap condition now, before the warm weather arrives and birds start nesting. If you're in Kanata or nearby areas and need a professional inspection or cap installation, you can browse fireplace and chimney contractors through the Ottawa Construction Network directory to find local specialists who can evaluate your specific chimney and recommend the right cap style for your setup.

Looking for experienced contractors? The Ottawa Construction Network connects Ottawa homeowners with qualified professionals:

- Apple HVAC and mechanical
- The Egress Group Inc
- JMY Renovations
- Innovation Concrete Grind & Polish
- Coliseum concrete & interlock

View all contractors ?

Q7

How much does a stainless steel chimney liner cost compared to a clay tile reline in Ontario?

A stainless steel chimney reline typically costs **$2,000 to $5,000 installed** in Ottawa, while a full clay tile reline (complete chimney rebuilding) runs **$8,000 to $20,000 or more** — making stainless steel dramatically more affordable and practical for most Ottawa homeowners.

However, comparing these two options requires understanding what each actually involves, because they are fundamentally different solutions to different problems.

Stainless steel relining is the modern standard for most chimney repairs in Ottawa. The process involves inserting a flexible or rigid stainless steel liner (typically 6-inch diameter for wood-burning appliances, 4-inch for gas) into your existing chimney flue. This seals off deteriorating clay tile, creosote buildup, and cracks without requiring external masonry work. The cost depends on chimney height (a 30-foot chimney costs significantly more than a 20-foot one), whether the liner is flexible or rigid, whether the chimney needs cleaning or debris removal first, and whether additional insulation is required around the liner. Most stainless steel relining jobs in Ottawa cost between $3,000 and $4,500 for a typical residential chimney of 25 to 35 feet in height.

Clay tile relining is not actually a reline — it is a complete chimney rebuild. The original chimney structure is either partially or fully dismantled, and new clay tile sections are installed in a fresh mortar bed. This is only performed when the chimney masonry itself is so deteriorated (severe spalling, crumbling mortar joints, structural cracks) that a simple liner cannot safely seal the flue. In Ottawa's brutal freeze-thaw climate, this unfortunately happens more often than in milder provinces. A partial rebuild above the roofline costs $3,000 to $8,000, while a full rebuild from foundation to cap costs $8,000 to $20,000 or more. The work requires specialty masonry contractors, multiple visits across the outdoor construction season (May through October), and extensive scaffolding for safety.

Why stainless steel wins for most Ottawa chimneys: Stainless steel liners work brilliantly when the underlying chimney structure is fundamentally sound but the clay tile is cracked, spalling, or missing sections. This is the typical scenario — an 30 to 50-year-old chimney with original clay tile that has taken a beating from Ottawa's freeze-thaw cycles but whose masonry walls and structure remain intact. A stainless steel reline restores the chimney's ability to safely vent appliances and resists creosote buildup without the cost and disruption of a full rebuild. Stainless steel is also compatible with all modern appliances — wood stoves, gas inserts, and gas fireplaces all work perfectly with stainless steel liners.

When clay tile relining becomes necessary: If your chimney has visible structural damage — large horizontal cracks in the exterior masonry, missing bricks, severely deteriorated mortar joints exposing gaps, or a leaning chimney — a simple reline may not address the underlying problem. Water will continue infiltrating the damaged

masonry, and the chimney will continue deteriorating even with a new liner inside. In these cases, a partial or full rebuild with new clay tile and fresh mortar is the only way to restore structural integrity.

The Ontario Building Code and permit implications: A stainless steel reline typically does not require a building permit if the work is purely interior and the chimney structure itself is not modified. A clay tile rebuild almost always requires a building permit because it involves structural masonry work. Always check with the City of Ottawa Building Code Services before starting any chimney work — the cost of a permit ($150 to $300) is far less than the cost of having unpermitted work flagged during a home sale inspection or insurance claim.

The insurance and inspection angle: Before committing to either option, have a WETT-certified chimney inspector evaluate your chimney with a Level 2 inspection ($350 to $600 in Ottawa). The inspector will determine whether your chimney is a good candidate for relining or whether structural rebuilding is necessary. Many homeowners discover during inspection that their chimney damage is worse than they thought, which changes the entire cost picture. Getting that diagnosis upfront prevents expensive surprises later.

Stainless steel relining is the practical choice for most Ottawa homeowners because it restores function at a fraction of the cost of rebuildiing. However, if your chimney's masonry is severely compromised, relining may be a temporary fix that delays the inevitable rebuild. A professional inspection tells you which category your chimney falls into and gives you a realistic cost figure for moving forward. You can browse fireplace and chimney contractors through the Ottawa Construction Network directory if you need to connect with a WETT-certified inspector or chimney technician who can evaluate your specific situation.

Looking for experienced contractors? The Ottawa Construction Network connects Ottawa homeowners with qualified professionals:

- 613Bins
- JC Carpentry
- Coliseum concrete & interlock
- Eastern Residential Solution
- Prism Services

View all contractors ?

Q8

Our Sandy Hill duplex has a shared chimney between units — who pays for the tuckpointing repairs?

The responsibility for shared chimney repairs in a duplex depends on your property deed, condominium declaration (if applicable), and local bylaws — but the short answer is that you'll likely need to split the cost with your neighbour, and the specific terms should be clearly outlined in your property documents.

In most duplex situations, a shared chimney is considered a "common element" that both units depend on, similar to a shared roof or foundation wall. This typically means both owners are jointly responsible for maintaining it and splitting the cost of necessary repairs. However, some deeds specify that one unit owns the chimney exclusively while the other has an easement or right to use it — in those cases, the owning unit bears full responsibility. The only way to know for certain is to review your deed, property survey, or any condo documents if your duplex is registered as a condominium.

The practical approach is to have a WETT-certified chimney inspector examine the chimney and provide a detailed report on the extent of tuckpointing needed. Tuckpointing costs in Ottawa typically run $500 to $2,500 depending on the height of the chimney, the number of mortar joints that need repointing, and whether the work includes chimney crown or cap repair. Once you have a clear scope of work and price, contact your neighbour with a copy of the inspection report and discuss cost-sharing. In Sandy Hill, many duplexes built in the early 20th century have masonry chimneys that are particularly vulnerable to Ottawa's freeze-thaw cycle, so this is a conversation worth having sooner rather than later — a small tuckpointing job today prevents a catastrophic chimney rebuild in five years.

If your neighbour refuses to cooperate or disputes the cost-sharing arrangement, you may need to consult your property deed or contact a real estate lawyer to clarify the legal responsibility. Some municipalities also have bylaws requiring property owners to maintain chimneys to prevent hazards — the City of Ottawa could potentially require repairs regardless of who pays.

One critical point: before scheduling any tuckpointing work, ensure the contractor is also inspecting the chimney crown (the concrete or mortar cap at the top). The crown is often the root cause of moisture infiltration that damages mortar joints. Repointing the sides of the chimney without fixing a cracked crown is like painting over mold — you are addressing the symptom, not the disease. A complete assessment costs $250 to $450 for a Level 1 WETT inspection and will clarify exactly what needs to be done.

You can browse fireplace and chimney contractors through the Ottawa Construction Network directory to find WETT-certified inspectors and masons experienced with shared chimney situations in Sandy Hill heritage properties.

Looking for experienced contractors? The Ottawa Construction Network connects Ottawa homeowners with qualified professionals:

- Luxe Painting and Renovations
- The Egress Group Inc
- Beauty of gardens
- Transitions Renovations
- Humble Homes - property maintenance

View all contractors ?

Q9

What does a WETT-certified chimney inspection cost in Ottawa and how often should it be done?

WETT Inspection Costs and Frequency in Ottawa

A WETT inspection in Ottawa costs between **$250 and $450 for a Level 1 (basic visual) inspection**, **$350 to $600 for a Level 2 (more detailed) inspection**, and **$500 to $1,000 or more for a Level 3 (invasive) inspection** that involves partial demolition of wall coverings to examine concealed chimney sections. Most Ottawa homeowners will need a Level 1 inspection annually, making the typical recurring cost $250 to $450 per year.

Why WETT certification matters in Ottawa is crucial to understand. While WETT certification is technically voluntary in Ontario, virtually every insurance company in the National Capital Region now requires a Level 1 WETT inspection before they will insure a home with a wood stove, wood-burning fireplace insert, or traditional open fireplace. If you have a wood-burning appliance and lack documentation of a current WETT inspection, you may find your claim denied or your policy cancelled — a real financial and legal risk in a city where extended wood-burning season means heavy reliance on these appliances for supplemental heat.

Ottawa's extreme climate and heavy heating loads make annual WETT inspections genuinely essential rather than optional. Homeowners burning 4 to 8 cords of wood per season in a wood stove or fireplace generate significant creosote deposits, especially during the shoulder seasons of spring and fall when cooler temperatures and lower burn rates create ideal conditions for glazed creosote formation. A Level 1 WETT inspection includes visual examination of the chimney interior using a video camera, assessment of creosote buildup, evaluation of the appliance installation, review of clearances to combustibles, inspection of the hearth pad, and verification that the entire system is safe to operate. The certified inspector produces a written report detailing any deficiencies, safety

concerns, or maintenance needs.

Level 1 inspections are suitable for annual maintenance checks on a wood stove or fireplace that is performing normally, has had no visible issues, and has been professionally cleaned and maintained. Schedule a Level 1 inspection every 12 months — this is both the insurance requirement and the safety standard that prevents dangerous creosote accumulation and allows early detection of deterioration in Ottawa's freeze-thaw climate.

Level 2 inspections are more thorough and are recommended when purchasing a home with an existing wood-burning appliance, after a chimney fire, when there has been a significant change in how the appliance is used, or when a Level 1 inspection has identified a concern that needs deeper investigation. A Level 2 inspection examines the entire chimney system more carefully and may include limited invasive investigation to assess hidden areas.

Level 3 inspections involve removing wall coverings or dampers to directly examine concealed chimney sections and are typically performed only when serious deterioration, obstruction, or damage is suspected, or when a chimney must be evaluated before conversion to a new appliance type.

Ottawa-area WETT-certified chimney sweeps and inspectors are generally available year-round, but scheduling is tightest from September through November when homeowners prepare for winter heating season. Smart Ottawa homeowners schedule their Level 1 inspection and annual chimney cleaning together in May or June, after the heating season ends and before summer activities take priority, or in late August, before the autumn rush. This advance scheduling eliminates the scramble for appointment slots in October and November when the first cold snap triggers dozens of last-minute calls.

One practical consideration: most Ottawa chimney professionals bundle the Level 1 WETT inspection with the annual chimney cleaning in a single visit, often at a combined cost of $350 to $550. This makes sense logically — the chimney sweep is already on site, the camera equipment is available, and you gain both the safety documentation required by your insurance and the creosote removal essential for winter burning. If your chimney has been neglected or if you are unsure of its condition, hire a professional for both services together rather than trying to save money by skipping the inspection.

When the time comes to find a qualified WETT-certified chimney inspector or sweep in Ottawa, you can browse fireplace and chimney professionals through the Ottawa Construction Network directory, which connects homeowners with local specialists across the National Capital Region.

Looking for experienced contractors? The Ottawa Construction Network connects Ottawa homeowners with qualified professionals:

- Justyn Rook Contracting

- JC Carpentry
- Geerts Roofing Inc
- East Coast Sheet Metal Inc
- Somar Contracting Inc.

View all contractors ?

Q10

Is an interior chimney less prone to cracking than an exterior one during Ottawa's minus-thirty winters?

Yes, an interior chimney is significantly less prone to cracking than an exterior one in Ottawa's extreme freeze-thaw cycles, and this is one of the most practical reasons why interior chimneys perform better in our climate.

An exterior chimney is exposed to the full force of Ottawa's temperature swings — from -30 degrees Celsius in January to +35 degrees in July, a 65-degree temperature range that occurs multiple times per year. When water enters the masonry through microscopic cracks or pores, it freezes solid in that extreme cold. Water expands approximately 9 percent as it freezes, and this expansion happens inside the mortar joints and brick pores, progressively widening cracks and breaking apart the masonry from the inside out. An exterior chimney experiences this freeze-thaw punishment on all four sides simultaneously throughout the winter season — potentially 50 or more freeze-thaw cycles per season in Ottawa. Over a decade, this relentless cycling can reduce a sound exterior masonry chimney to a crumbling, unsafe structure.

An interior chimney, by contrast, sits within the conditioned space of your home. Even if the outside temperature plummets to -30 degrees, the inside surface of an interior chimney stays closer to room temperature — typically 15 to 20 degrees Celsius, depending on how much fire is burning. This dramatically reduces the severity of freeze-thaw cycles at the masonry surface. Yes, the outside of an interior chimney that extends above the roofline still experiences freezing, but the bulk of the chimney mass is thermally buffered by being inside the home. Water may still infiltrate at the roofline flashing and the chimney crown, but the lower portions of an interior chimney experience far fewer freeze-thaw cycles and remain more stable.

The reality is that no Ottawa masonry chimney — interior or exterior — survives decades without proper maintenance and waterproofing. Even interior chimneys require a sound, properly sealed crown (the concrete cap at the very top), intact flashing where the chimney penetrates the roof, and mortar joints that are properly sealed to repel water. The chimney crown is the critical first line of defence against water infiltration, and it bears the brunt of Ottawa's ice, snow, and repeated freezing. Over time, even a well-maintained crown can crack, especially if it was built from pure mortar rather than a concrete mix with proper slope, which is common in older Ottawa homes.

If you are choosing between installing an interior chimney or an exterior one — for example, during a major renovation or new construction — interior placement is the smarter choice for Ottawa's climate. If you already have an exterior chimney, invest in a professional inspection (WETT-certified chimney sweep, $250 to $450) to assess crown condition, mortar joint integrity, and water penetration risk. Budget for chimney crown repair ($300 to $1,200) and waterproofing ($250 to $600) every 10 to 15 years, and plan for a full chimney relining or rebuild once spalling becomes extensive. These are not optional expenses in Ottawa — they are the cost of keeping an exterior chimney

safe and functional through our brutal winters.

When you are ready to discuss chimney relining, crown repair, or waterproofing with an experienced local contractor, you can browse fireplace and chimney professionals through the Ottawa Construction Network directory.

Looking for experienced contractors? The Ottawa Construction Network connects Ottawa homeowners with qualified professionals:

- Luxe Painting and Renovations
- RenoMotion Inc.
- Denys Builds Designs Renovations
- Grunt Work 4 Grunts
- Eastern Residential Solution

View all contractors ?

Q11

How much would it cost to fully demolish an unused exterior chimney on a two-storey Ottawa home?

Removing a full exterior chimney from a two-storey Ottawa home typically costs **$3,000 to $8,000**, with most straightforward demolitions landing around **$4,000 to $6,000**. The final price depends heavily on the chimney's construction (masonry or metal), whether the fireplace or stove inside the home also needs to be removed, roof condition, and what you plan to do with the opening where the chimney penetrated the roof and foundation.

Why Chimney Removal Costs Vary in Ottawa

A two-storey chimney is a significant structure — it's not just the visible exterior portion but also the internal flue, the foundation base, and the roof opening. The removal process involves safely demolishing the chimney from top to bottom, managing heavy debris (a brick chimney can weigh several tons), properly capping or sealing the roof penetration to prevent water leaks, patching any foundation work where the chimney base is removed, and disposing of all debris responsibly. In Ottawa, where winters are harsh and the freeze-thaw cycle punishes any exposed opening, roof closure is critical — a poorly sealed roof penetration will lead to ice damming, water infiltration, and interior damage that costs far more to fix than the proper chimney removal.

If the chimney services an active fireplace or wood stove inside your home, you'll need to decide what to do with that appliance before removal begins. Are you converting to a gas fireplace in a different location, keeping the fireplace but closing it off, or removing it entirely? These decisions add to the overall project scope and cost. A chimney that has been unused for years but still has an active appliance connected inside is more complex to safely disconnect than a truly abandoned chimney.

Additional cost factors include: chimney height (a full two-storey chimney is taller and requires more demolition labour), whether the chimney is lined with asbestos-containing material (older chimneys sometimes are, requiring specialized abatement — this adds $500 to $1,500 or more), whether the chimney is tied into the roof structure with multiple penetrations or flashings (complicating removal), foundation depth and soil conditions (Ottawa's deep frost penetration means chimney foundations sometimes go 1.5 metres or more into the ground), and whether you want the foundation excavated completely or left in place below grade.

Typical Removal Breakdown

A standard two-storey brick chimney removal in Ottawa typically breaks down like this: chimney demolition and debris removal ($2,000 to $3,500), roof opening closure and flashing ($800 to $1,500), foundation sealing or removal ($500 to $1,500), and permits and inspection ($300 to $600). Haul-away costs for brick and debris run separately and are usually absorbed in the main demolition quote, though some contractors charge per load.

Removal of a metal chimney or stainless steel flue pipe (if you had a gas fireplace or newer installation) is less labour-intensive and typically costs $2,000 to $4,000 total, since there is less structural mass and the debris is easier to transport.

Important Considerations

Before pursuing removal, confirm that the chimney is truly unused. If it's still connected to a heating appliance — whether a fireplace, wood stove, or gas insert — you cannot simply remove the chimney without addressing the appliance first. Disconnecting an active gas line requires a TSSA-licensed gas fitter. Sealing off a wood stove without proper venting can trap carbon monoxide in your home and is dangerous.

Also understand that removing the chimney does not automatically improve your home's appearance or resale value if the removal is done sloppily. A poorly sealed roof penetration becomes a visible eyesore and a water damage liability that turns buyers away faster than an unused chimney ever would. The roof closure must be flashed properly, shingles must match, and the sealing must be watertight for Ottawa's climate — this is not an area to cut corners or hire the cheapest contractor.

Permits are required in Ottawa for chimney demolition. Contact the City of Ottawa Building Code Services (call 3-1-1) to understand permit requirements for your specific situation — your contractor should handle this.

Alternatives to Full Removal

If removal feels too expensive or disruptive, consider capping the chimney rather than removing it. A proper chimney cap and crown repair can seal the structure from weather while leaving it in place, which costs only **$200 to $600** and preserves the exterior appearance. However, a capped but unused chimney still requires annual inspection to ensure water is not infiltrating the system, and a deteriorating capped chimney offers no real functional advantage — it is just a deferred problem.

If the chimney is structurally sound but unused, another option is converting it to a gas fireplace vent. A modern direct-vent gas fireplace can be installed against the exterior wall with its vent terminating where the old chimney once stood, giving you both the functional heating benefit and the aesthetic continuity of a fireplace. This costs $3,500 to $7,500 but provides actual value — you gain a heating appliance rather than simply losing a structure.

For experienced demolition contractors who understand Ottawa's specific challenges with chimney removal and roof closure in a freeze-thaw climate, you can browse the Ottawa Construction Network directory for local professionals ready to discuss your project in detail.

Looking for experienced contractors? The Ottawa Construction Network connects Ottawa homeowners with qualified professionals:

- Luxe Painting and Renovations
- The Egress Group Inc
- Demontigny Carpentry
- Beauty of gardens
- L.L. Renovation

View all contractors ?

Q12

Our heritage home in the Glebe has original limestone chimneys — can they be restored without losing character?

Yes, original limestone chimneys in Glebe heritage homes can absolutely be restored while preserving their character, but the approach requires understanding both masonry craftsmanship and heritage conservation principles — this is where generic fireplace advice completely breaks down.

The Limestone Challenge in Ottawa's Climate

Limestone chimneys in heritage Ottawa homes are beautiful and historically significant, but they face unique vulnerabilities in our freeze-thaw climate. Limestone is more porous than brick, which means it absorbs water readily. Once water enters the stone through microfractures or deteriorated mortar joints, the -30 degree Ottawa winters do their destructive work — that absorbed water expands as it freezes, spalling the limestone surface and widening cracks from the inside out. The problem accelerates because limestone's higher porosity means more frequent freeze-thaw cycling at the surface. A Glebe chimney that was perfectly sound in 1920 may show serious spalling by 2010 if it has not been properly maintained or waterproofed over the past decade.

The good news is that limestone chimneys respond well to careful restoration. The key is addressing the root cause — water infiltration — rather than just cosmetically patching visible damage.

Proper restoration involves several layers: First, the chimney crown (the cap at the top where weather does the most damage) must be rebuilt or replaced with a durable, breathable material that sheds water while allowing moisture vapor to escape. A proper crown should slope away from the flue, have a drip edge to direct water away from the chimney face, and ideally be made from lime-based mortar or specialized crown sealers rather than modern Portland cement, which is too rigid and traps moisture in the limestone. Second, any cracked or missing mortar joints should be repointed with lime mortar matching the original composition — this is critical for heritage preservation and for allowing the masonry to breathe properly. Modern high-strength Portland cement mortar is harder than limestone and will actually accelerate damage by preventing moisture from escaping. Third, the entire exterior should be treated with a high-quality, breathable masonry waterproofing product — not a film-forming sealer, but a penetrating sealer that allows vapor transmission. This prevents water infiltration while letting the stone breathe.

Heritage considerations in the Glebe: The Glebe is a designated heritage conservation district, which means exterior modifications to chimneys may require approval from the City of Ottawa's heritage planning office. You cannot simply slap a modern metal cap on a historic limestone chimney or paint over original limestone without potentially running afoul of heritage guidelines. The good news is that heritage-sensitive restoration — careful repointing with lime mortar, proper crown rebuilding, and subtle waterproofing — often aligns perfectly with what the chimney actually needs to survive another century. Heritage rules often *prevent* the worst modern shortcuts that homeowners might otherwise take.

Before you begin any work, contact the City of Ottawa's Heritage Planning Services to confirm what modifications require approval. In many cases, conservative restoration work (repointing with matching mortar, crown repair, waterproofing) is approved readily because it protects the heritage asset rather than changing its appearance.

Specific restoration steps for limestone chimneys: Have a WETT-certified chimney inspector examine the chimney in detail to assess the extent of spalling, mortar deterioration, and water damage. They can advise whether the chimney can be restored or whether relining is necessary. If relining is needed, a stainless steel liner can be installed *inside* the chimney, leaving the original limestone exterior completely intact — this is the gold standard for heritage homes because it preserves the historic exterior while creating a safe, modern flue. Stainless steel relining typically costs $2,000 to $5,000 in Ottawa depending on chimney height and condition.

If the limestone exterior is structurally sound (no deep spalling, no major cracks), focus on repointing and waterproofing. Have a masonry contractor experienced in heritage work remove and replace deteriorated mortar with lime mortar that matches the original composition — not just in color, but in actual lime-to-sand ratio. This usually costs $500 to $2,500 depending on the extent of deterioration. Once repointing is complete, apply a breathable masonry sealer (cost: $250 to $600). Rebuild or seal the crown properly — this is where 80 percent of water infiltration begins.

What to avoid: Do not paint over original limestone — painted limestone cannot breathe, traps moisture, and looks wrong for a heritage home. Do not use hard Portland cement mortar for repointing — it will damage the limestone. Do not install a modern metal chimney cap over historic stonework without exploring heritage-sensitive alternatives first. Do not use a high-build film-forming sealer that prevents vapor transmission.

Timeline and cost for restoration: A comprehensive limestone chimney restoration in the Glebe — including inspection, repointing with lime mortar, crown repair, and waterproofing — typically runs $1,500 to $4,000 depending on chimney height, extent of deterioration, and whether relining is needed. Add $2,000 to $5,000 if the chimney requires stainless steel relining. Plan this work for late spring (April-May) or early fall (September-October) when masonry contractors have good scheduling and mortar curing conditions are optimal. Avoid winter and summer extremes.

For a project of this importance to your home's heritage value and long-term structural integrity, connecting with a masonry contractor who has specific experience with heritage limestone chimneys in Ottawa is essential. You can browse fireplace and chimney contractors through the Ottawa Construction Network directory, where you can find professionals with heritage restoration experience and stone masonry credentials. The difference between a contractor who knows heritage limestone and one who treats it as generic masonry can mean the difference between a chimney that lasts another century and one that deteriorates within a decade.

Looking for experienced contractors? The Ottawa Construction Network connects Ottawa homeowners with qualified professionals:

- Homeupgraders

- RenoMotion Inc.
- Leeds Property Maintenance
- JMY Renovations
- Nic’s D.U.C.T Works Inc

View all contractors ?

Q13

We have raccoons nesting in our chimney in Westboro — what's the safe removal and capping process?

Raccoon removal from a chimney is a wildlife management issue first and a chimney maintenance issue second — you'll need a licensed wildlife control operator to safely extract the animals before any permanent chimney work can happen.

Here's why this matters urgently in Ottawa: raccoons in a chimney create multiple serious problems beyond the obvious noise and nuisance. They damage chimney liners with their claws while climbing and nesting, they block the flue with debris and waste, they create biohazard conditions inside the chimney (their droppings can harbour rabies virus and parasites), and they can damage the interior structure of your chimney and home as they move around. More importantly, you cannot use your fireplace or wood stove at all while raccoons are nesting — attempting to start a fire will trap them in a confined space and create a dangerous situation for both the animals and you. In Westboro and across Ottawa's residential neighbourhoods, raccoon activity peaks in spring (March–May when females seek denning sites for kits) and again in fall (September–October as families forage before winter). Timing matters: removal is far easier and less costly in spring before kits are born.

The safe removal process involves three steps: First, call a licensed wildlife removal service — firms like Skedaddle Humane Wildlife Control, Critter Control, or local independent operators serve the Westboro area and are trained in humane trapping and relocation. Do not attempt DIY removal; raccoons can bite and carry rabies, and improper removal methods can harm the animals and leave mothers and kits separated. A licensed operator will assess chimney access, set one-way door traps that allow raccoons to exit but not re-enter, and monitor the situation until all animals have left (typically 3–7 days, though this varies). Expect to pay $400 to $800 for professional removal, depending on the number of animals and the complexity of your chimney setup.

Once the raccoons are confirmed gone, you'll need chimney work to prevent re-entry. This is where Ottawa Fireplaces' network of WETT-certified chimney professionals becomes essential. The permanent solution is a **chimney cap with an animal-exclusion design** — a sturdy metal cap with a 1/4-inch mesh or similar screening that prevents raccoons, squirrels, birds, and other wildlife from entering while allowing smoke and gases to exit freely. A properly installed chimney cap costs $200 to $600 installed in Ottawa, depending on your chimney diameter and roof pitch. The cap must be installed securely with stainless steel fasteners (critical in Ottawa's freeze-thaw cycle, which can loosen ordinary fasteners over time), and the mesh or screening must be properly sealed at the edges so animals cannot peel or push it back.

Beyond the cap, a WETT-certified chimney inspector should assess the condition of your chimney liner and chase (the structure housing the chimney). Raccoons can damage clay tile liners from inside, creating gaps or cracks that

compromise draft and venting safety. If the liner is damaged, relining with a stainless steel liner ($2,000 to $5,000 installed) may be necessary before you can safely use the fireplace again. The chimney should also be inspected for any gaps or damage where the chimney penetrates the roofline or exterior wall — raccoons and other pests exploit these openings. Chimney flashing inspection and repair (if needed) costs $300 to $800 and prevents both wildlife entry and water leaks.

Important considerations: Wildlife removal and chimney sealing are two separate services, though they work together. The wildlife operator removes the animals; the chimney professional prevents their return and repairs any damage. Coordinate timing so the cap is installed shortly after removal is confirmed, while the animals are still fresh in mind and the urgency is high. In Ontario, all wildlife removal must be performed humanely and in accordance with provincial regulations — reputable operators relocate trapped animals rather than euthanizing them, though regulations vary by species and location. Ask your wildlife operator about their relocation practices and ensure they hold proper provincial licenses.

Also note that if you've been unable to use your fireplace during the raccoon occupation, you may have a buildup of debris or deterioration in the flue. Once removal is complete and the cap is installed, schedule a full WETT Level 1 inspection ($250 to $450) and professional chimney cleaning ($175 to $350) before using the fireplace again. A WETT-certified chimney sweep will ensure the flue is clear and safe for operation.

A critical prevention step going forward: keep tree branches trimmed back from your roofline (raccoons are excellent climbers and can leap from branches to roof and gutters), ensure your roof is in good repair with no gaps or holes, and address any other potential entry points around your home's exterior. Raccoons are remarkably persistent, and a single poorly sealed gap can invite them back next season.

For professional chimney assessment and cap installation in the Westboro area, you can browse fireplace and chimney contractors through the Ottawa Construction Network directory at justynrookcontracting.com/directory — several firms specialize in chimney caps, closures, and wildlife-exclusion work and can get you scheduled once the animals are safely removed.

Looking for experienced contractors? The Ottawa Construction Network connects Ottawa homeowners with qualified professionals:

- Justyn Rook Contracting
- The Egress Group Inc
- Ottawa Demolition Corp.
- JMY Renovations
- Canadian Diamond Products

View all contractors ?

Q14

What's involved in waterproofing an exterior chimney that's exposed to Ottawa's freeze-thaw cycles?

Waterproofing an exterior chimney in Ottawa is absolutely essential — it's the difference between a chimney that lasts 50 years and one that crumbles into uselessness within a decade. Ottawa's freeze-thaw cycle is relentless and destructive: water enters microscopic cracks and pores in mortar and brick, then expands about 9 percent when it freezes below zero, which happens 50-plus times every winter. This expansion breaks apart mortar joints and spalls brick from the inside out. Without proper waterproofing, you're watching your chimney self-destruct in slow motion.

Why Ottawa's Climate Makes Waterproofing Non-Negotiable

Most Canadian cities have freeze-thaw problems, but Ottawa's location in the Ottawa Valley creates particularly harsh conditions. We see temperature swings of 60 degrees or more between winter and summer, we get over 200 centimetres of snow annually, and frost penetrates 1.2 to 1.5 metres deep into the ground. A brick chimney is constantly wet from snow melt, rain, and condensation, and it dries very slowly during Ottawa's short spring and fall seasons. This prolonged moisture combined with repeated freezing is why you see so many century-old chimneys in Ottawa showing severe spalling and crumbling mortar by age 40 or 50.

The chimney is also exposed to wind-driven rain and snow on all four sides, and chimneys that face northwest — catching winter wind off the Ottawa River — deteriorate fastest. The roofline and the junction where the chimney flashing meets the roof is where most water penetration occurs, so that interface needs special attention.

The Four Essential Components of Chimney Waterproofing

The chimney crown is your first line of defence and the most critical component. The crown is the concrete or mortar cap at the very top of the chimney, and in Ottawa, it takes extraordinary punishment. A properly constructed crown should have a slight slope to shed water away from the chimney, an overhang on all sides to direct water away from the brick face below, and a gap between the crown and the flue liner. Many older Ottawa chimneys have cracked or deteriorated crowns or chimneys built without proper crowns at all — just mortar dabbed over the top. If your chimney crown is cracked, missing sections, or doesn't overhang the brick face, it's failing and water is pouring directly down inside the chimney structure. Crown replacement or repair typically costs **$300 to $1,200** depending on the chimney's accessibility and size. For a chimney that's 30 feet high or sits on a steep roof, expect the higher

end. A new crown should be cast concrete or proprietary crown repair material, not mortar — mortar cracks too easily in Ottawa's freeze-thaw cycles.

The chimney flashing is the metal seal where the chimney passes through the roofline. Flashing is installed under the roof shingles where they meet the chimney, and it directs water down the roof rather than into the junction between the roof and chimney. Flashing fails when it rusts, separates from the roof, or when roof shingles are installed incorrectly around it. Failing flashing is one of the most common sources of water leaks that damage both the chimney interior and the house interior directly below. Flashing replacement must be done by a roofer and typically costs **$400 to $1,200** depending on chimney size and roof pitch. This is often a hidden problem — you might not realize the flashing is failing until you see water stains on the ceiling or walls inside the house. If you suspect flashing issues, get a roofer to inspect it.

Chimney brick and mortar sealing involves applying a breathable waterproofing coating to the exterior masonry. This is where most homeowners' waterproofing efforts focus, and it's important but not a complete solution on its own. The coating creates a water-repellent surface that allows the masonry to breathe (letting trapped moisture escape as vapor) while preventing liquid water from soaking in. The most effective products for Ottawa chimneys are siloxane-based masonry sealers or penetrating silicone sealers — these are breathable, last 5 to 10 years, and cost **$250 to $600** to apply professionally to a typical chimney. Do not use acrylic coatings or paint-like sealers, which trap moisture inside the masonry and accelerate freeze-thaw damage. The sealer must be applied to dry masonry by a professional who understands masonry chemistry — this is not a DIY job. Weather conditions matter: the application needs 48 hours of dry weather after application before rain.

Tuckpointing deteriorated mortar joints is necessary on many older Ottawa chimneys. Tuckpointing involves carefully removing failed mortar joints and replacing them with fresh mortar mixed to match the original. This is specialized masonry work that requires skill — improper tuckpointing can actually accelerate water infiltration. The cost depends on how many joints need repointing: minor tuckpointing on one or two sides might run **$500 to $1,500**, while extensive repointing of a full chimney could reach **$2,500 or more**. The mortar used must match the original in composition and hardness — modern hard Portland cement mortar is often too hard for older chimney brick and can cause more spalling than it prevents. A skilled mason will test the original mortar and match it appropriately.

The Complete Waterproofing Approach

The mistake many homeowners make is applying a chimney sealer without addressing the crown and flashing first. That's like painting the hull of a sinking boat — it doesn't stop the water coming in from above. A comprehensive waterproofing strategy in Ottawa needs all four elements working together:

Start with a WETT Level 2 inspection (cost: **$350 to $600**) to identify exactly where water is entering. Get the crown inspected for cracks and proper overhang — if it's failing, that's priority one. Have a roofer inspect and repair the

flashing if needed. Then address mortar joints if they're visibly deteriorated. Finally, apply a breathable masonry sealer to lock everything in. The total cost for a complete professional waterproofing job on a typical Ottawa chimney runs **$1,500 to $3,500** depending on chimney condition and size.

Timing matters significantly in Ottawa. Spring is the ideal season for chimney work because you can address problems before summer rains and before the brutal freeze-thaw cycle of next winter

---

Looking for experienced contractors? The Ottawa Construction Network connects Ottawa homeowners with qualified professionals:

- Justyn Rook Contracting
- JC Carpentry
- TIER 1 HVAC SERVICE'S INC
- Ottawa Caulking
- Anchor Home Comfort

View all contractors ?

Q15

How much does it cost to reline a prefab chimney versus a masonry chimney in Ottawa?

Chimney relining costs in Ottawa differ significantly between prefab (metal) and masonry chimneys, mainly because the work required, materials used, and underlying structural conditions are fundamentally different. A prefab chimney reline typically costs $1,500 to $2,500, while a masonry chimney reline runs $2,000 to $5,000 for standard stainless steel installation or $4,000 to $8,000 for cast-in-place cement relining. The price gap exists because masonry chimneys usually require more extensive inspection and often have underlying deterioration that prefab chimneys do not.

Why prefab and masonry relining costs diverge

Prefab chimneys — typically insulated metal chimneys from the 1980s onward — have a much simpler internal structure. The original liner is usually an aluminum or single-wall steel pipe that sits inside an insulated outer shell. When a prefab liner fails, it can often be replaced by removing the old liner and inserting a new one without disturbing the exterior casing. This is straightforward work that takes a few hours, which is why prefab relining stays

in the lower price range.

Masonry chimneys, by contrast, are built from brick, stone, or concrete block with an internal clay tile flue liner. Ottawa's extreme freeze-thaw cycle is particularly brutal on masonry — water penetrates mortar and brick, freezes, expands, and causes spalling (surface deterioration). By the time a masonry chimney needs relining, the mortar is often compromised, the brick may be crumbling, and the chimney crown (the concrete cap at the top) is likely cracked or missing. A WETT inspector will often discover that relining alone is not enough — you also need chimney crown repair, tuckpointing (regrouting the mortar joints), or even partial rebuild work. This drives the total cost up dramatically.

Stainless steel versus cast-in-place relining for masonry

For masonry chimneys, you have two main relining approaches. Stainless steel relining ($2,000 to $5,000 installed in Ottawa) involves inserting a flexible stainless steel liner down the flue, anchoring it at the top, and sealing the gap between the liner and the chimney walls with a special packing material. Stainless steel is the industry standard — it handles both wood stove and gas appliance venting, is durable for 30+ years, and is less invasive than alternatives. The cost depends mainly on chimney height and diameter, plus the complexity of navigating bends or obstructions.

Cast-in-place cement relining ($4,000 to $8,000 installed) involves spraying or pouring a cementitious material down the chimney to create a new monolithic liner that bonds to the interior walls. This method actually strengthens a deteriorating masonry chimney by reinforcing the flue from the inside out. Cast-in-place is particularly valuable if your masonry is severely spalled or the original clay tiles are fragmenting — it addresses the underlying structural problem, not just the venting issue. However, it is more expensive, requires specialized equipment, takes longer to cure, and can reduce the interior diameter of the flue slightly. It is also overkill for a chimney with only minor deterioration.

The hidden costs of masonry relining

Many Ottawa homeowners get a quote of $2,500 for stainless steel relining, then discover during the project that crown repair ($300 to $1,200), tuckpointing ($500 to $2,500 for moderate extent), flashing repair ($400 to $800), or partial rebuild work is also needed. A WETT Level 2 inspection ($350 to $600) before committing to a reline is essential — it will reveal whether hidden issues will add $2,000 or $5,000 to your final bill. Never accept a reline estimate without a professional inspection first. Ottawa's climate means that a reline quote that does not account for crown condition, mortar deterioration, and flashing integrity is essentially a guess.

Prefab chimneys rarely have these hidden costs because the exterior shell is typically intact and weatherproof. You are paying for the reline itself, not for accompanying structural repairs.

Timing and seasonal considerations

Both prefab and masonry relining work can be done year-round if the interior work is the only component, but exterior masonry repairs (crown, tuckpointing, cap replacement) should be scheduled between April and October when temperatures stay consistently above 5 degrees Celsius for mortar to cure properly. If you are planning a reline plus exterior chimney work, schedule the project for spring or early fall to avoid winter mortar curing issues and the rush of last-minute calls in October.

When you are ready to get this work done, you can browse fireplace contractors through the Ottawa Construction Network directory, which includes chimney technicians experienced with both prefab and masonry relining in Ottawa's climate conditions.

Looking for experienced contractors? The Ottawa Construction Network connects Ottawa homeowners with qualified professionals:

- Homeupgraders
- The Egress Group Inc
- Callandgone
- Somar Contracting Inc.
- ALM Construction & Landscaping Inc.

View all contractors ?

Q16

How often should Ottawa homeowners have their chimney mortar joints inspected given our harsh winters and frequent ice storms?

Ottawa homeowners should have their chimney mortar joints inspected at least once per year, ideally in early spring (March to April) after the freeze-thaw cycle has done its worst. For chimneys older than 20 years or those showing visible signs of deterioration, twice-yearly inspections — once in spring and again in early fall — are a smart investment given our extreme climate.

Here's why Ottawa's winters make regular mortar inspection non-negotiable: our freeze-thaw cycle is relentless and brutal. Water penetrates mortar joints through microscopic cracks and pores in the masonry, then expands roughly 9 percent as it freezes below zero. Ottawa regularly dips 50 or more times per winter to -25 degrees Celsius or lower, and we receive over 200 centimetres of snow annually. Each freeze-thaw cycle widens existing cracks and creates new ones, progressively destroying the mortar that holds your chimney together from the inside out. A chimney with sound mortar joints in October can show significant spalling and joint deterioration by May — and the damage only accelerates in subsequent winters if it is not addressed.

What to look for during a mortar inspection: Visible gaps or recessed joints where mortar has washed away (mortar should be flush with or slightly recessed from the brick face, never deeply recessed), white powdery deposits or efflorescence on the chimney exterior (a sign that water is being drawn through the masonry), crumbling or missing mortar in horizontal bed joints (the most vulnerable spots in a chimney), cracked or broken brick faces around the mortar joints, and any signs of mortar that has been re-pointed with obviously different colour or texture (an indication of previous poor repairs). Pay special attention to the mortar joints below the roofline, where water runoff concentrates, and at the chimney crown where water meets mortar at the steepest angle.

A Level 1 WETT inspection or a visual inspection by a qualified chimney professional costs $250 to $450 in Ottawa and will document the condition of your mortar joints. If joints are recessed more than 1 to 1.5 inches deep or show active deterioration, tuckpointing (removal and re-pointing of damaged mortar) is typically required. Tuckpointing costs vary dramatically — $500 to $1,000 for isolated repairs on a few joints, or $1,500 to $2,500 for more extensive work across a significant section of the chimney. The key is catching deterioration early. A chimney that receives modest tuckpointing in year five of ownership will cost a fraction of what a full chimney rebuild costs in year ten.

Ottawa's ice storms compound the problem. Heavy ice accumulation on the chimney crown and at the roofline traps water and increases the freeze-thaw stress on mortar joints. The weight of ice can also shift masonry slightly, creating new cracks where none existed before.

Timing matters strategically in Ottawa. Spring inspections (late March through April) let you see what winter damage has occurred and schedule tuckpointing or crown repair before summer. Early fall inspections (September) catch any deterioration that may have developed over summer and allow repairs before the next winter assault begins. Attempting exterior mortar repair work in winter or during freeze-thaw conditions is pointless — mortar requires temperatures consistently above 5 degrees Celsius to cure properly, which is why professional masons typically work April through November in Ottawa.

If you have not had a chimney inspection in over a year, or if your chimney is 25 years old or older, schedule one now — the cost of an inspection is trivial compared to the cost of emergency chimney rebuilding after structural failure. You can browse experienced chimney technicians through the Ottawa Construction Network directory when you are ready to schedule that inspection or any necessary repairs.

Looking for experienced contractors? The Ottawa Construction Network connects Ottawa homeowners with qualified professionals:

- Apple HVAC and mechanical
- The Egress Group Inc
- Renovo Construction
- McLaren Masonry
- Galico Home Comfort Inc.

View all contractors ?

Q17

Is a WETT-certified inspection required in Ontario before relining a chimney that serves a wood-burning fireplace in Ottawa?

A WETT inspection is not legally mandated by Ontario law before chimney relining, but it is practically essential in Ottawa and increasingly required by insurance companies — and it should absolutely be part of your planning before relining work begins.

Here's the nuance: the Ontario Building Code does not explicitly require a WETT Level 2 or Level 3 inspection as a prerequisite for chimney relining. However, any competent chimney contractor performing relining work in Ottawa will conduct a thorough assessment of the chimney's condition to determine what liner size, material, and installation method are appropriate. This assessment is effectively a WETT-level inspection, even if it is not formally

documented as such. A responsible contractor will visually inspect the flue, measure dimensions, assess structural integrity, check for obstructions, evaluate the chimney crown condition, and determine whether the existing chimney can safely accommodate a new liner or requires additional structural repair first.

The real issue is insurance. Most homeowners insurance policies in Ontario now require a WETT Level 2 inspection on file before they will cover a home with a wood-burning fireplace or insert. If you plan to have your chimney relined to serve a wood-burning fireplace, you will almost certainly need a formal WETT inspection — either before or shortly after the relining work — to maintain insurance coverage. Some insurers will not even write or renew a policy on a home with a wood-burning appliance without documented WETT certification. This is not a suggestion — it is a practical requirement for protecting your home and family.

A WETT Level 2 inspection typically costs $350 to $600 in Ottawa and involves a detailed visual examination of the appliance, flue, chimney structure, clearances to combustibles, hearth protection, and overall system condition. The inspector will identify any safety issues, code violations, or conditions that must be addressed before the wood-burning appliance can be safely operated. If the inspection reveals structural problems — cracked masonry, deteriorated mortar joints, separation between the chimney and house framing — the contractor can then determine whether relining alone will solve the problem or whether additional tuckpointing, crown repair, or structural rebuilding is necessary first.

The practical sequence in Ottawa is: (1) hire a qualified chimney contractor to assess whether relining is appropriate; (2) have the contractor perform a detailed inspection as part of their scoping process (this is not a separate cost — it is part of their evaluation); (3) get a written proposal specifying the liner size, material (stainless steel is the standard choice for wood-burning applications), and installation method; (4) complete the relining work; and (5) arrange for a formal WETT Level 2 inspection to document the completed system for your insurance company and your own records.

Stainless steel relining for a wood-burning fireplace in Ottawa typically costs $2,000 to $5,000 installed, depending on chimney height, existing condition, and whether additional repairs are needed. If the inspection reveals significant structural damage, the cost can climb higher if tuckpointing, crown repair, or partial rebuilding is required before the liner is installed.

One critical point: relining a chimney that has experienced a creosote fire or shows signs of stage 3 glazed creosote (hard, shiny black coating on the flue) requires extra care. A WETT inspector can identify this condition and recommend whether the flue needs to be cleaned or even recoated before a new liner is installed. Some severe creosote glazing requires chemical treatment or mechanical removal before relining can proceed safely.

If you are considering chimney relining in Ottawa, connect with an experienced chimney contractor who can assess your specific chimney, recommend the right liner material and size, and coordinate with a WETT inspector to

ensure the completed work meets insurance requirements and keeps your wood-burning fireplace safe for years to come. You can browse fireplace contractors through the Ottawa Construction Network directory to find professionals experienced with relining in Ottawa's climate.

Looking for experienced contractors? The Ottawa Construction Network connects Ottawa homeowners with qualified professionals:

- 613Bins
- RenoMotion Inc.
- Ottawa Masonry Contractor
- McLaren Masonry
- Titley Construction

View all contractors ?

Q18

What does full chimney masonry restoration cost in Ottawa when the brick is spalling from years of freeze-thaw exposure?

A full masonry chimney restoration in Ottawa with significant spalling damage from freeze-thaw cycles typically costs **$8,000 to $20,000 or more**, depending on the chimney's height, the extent of deterioration, whether the chimney is accessible, and how much structural damage has occurred inside. If the damage is limited to the exterior brick and mortar joints (tuckpointing and partial rebuilding), you might stay in the $3,000 to $8,000 range. But if the spalling has penetrated deep enough to compromise the structural integrity of the entire chimney above the roofline or if the interior clay tile liner has cracked and shifted, a full rebuild can easily exceed $15,000.

Why Freeze-Thaw Spalling Is So Aggressive in Ottawa

Ottawa's extreme continental climate — with winter temperatures dropping to -25 to -30 degrees Celsius and the ground freezing 1.2 to 1.5 metres deep — creates conditions that are nearly perfect for destroying masonry chimneys. When water enters the brick's pores and mortar joints through microscopic cracks, it freezes and expands approximately 9 percent in volume. This happens 50 or more times per winter, and over 10 to 15 years it can reduce a sound masonry chimney to a crumbling hazard. The chimney crown and cap — the concrete or mortar cap at the very top — take the most punishment because they sit directly exposed to rain, snow, ice, and

constant cycling. Water pools on a damaged crown, infiltrates the mortar beneath, and the freeze-thaw cycle does the rest.

Once spalling starts, it accelerates quickly. Small cracks in the crown allow water to penetrate the mortar joints between the brick courses. Water moves downward and inward, weakening the structural bond. Brick faces can spall and separate from the wythe (the inner wall of the chimney). If you ignore it, the deterioration will eventually make the chimney unsafe — bricks can fall from the exterior, the chimney can lean, or the interior can deteriorate to the point where it cannot safely vent gases from your fireplace or heating appliance.

What Full Restoration Actually Involves

A complete masonry restoration typically includes several components, each contributing to the total cost. **Chimney cap or crown replacement** ($300 to $1,200 for a standard installation, or up to $2,000 for a custom built-up crown) removes the damaged cap and installs a new one — ideally a sloped concrete cap with a drip edge and overhang to shed water away from the brick. **Tuckpointing** ($500 to $2,500 depending on how much mortar is missing or deteriorated) involves cutting out failed mortar joints and repacking them with fresh mortar matched to the original colour and composition. A masonry contractor will inspect the depth of deterioration — if mortar is crumbling throughout multiple courses, tuckpointing a significant portion of the chimney becomes expensive and labour-intensive.

Partial brick replacement ($1,500 to $5,000+) removes severely spalled bricks and replaces them with new bricks matched to the original as closely as possible. This is tricky work because historic bricks in older Ottawa homes were often custom-fired and vary slightly in colour and texture — a contractor may need to source reclaimed bricks or carefully match new ones to maintain the chimney's appearance.

Chimney relining ($2,000 to $5,000 for stainless steel, $4,000 to $8,000 for cast-in-place cement) becomes necessary if the interior clay tile liner has cracked or shifted. A stainless steel liner is installed inside the existing chimney by running a flexible liner down from the top and securing it at the base — this works well if the exterior masonry structure is still sound. Cast-in-place relining involves pouring a cement mixture down the interior of the chimney to create a new, monolithic liner — this also reinforces the surrounding masonry, which can actually help stabilize a deteriorating chimney from the inside. Both options are expensive, but a damaged flue liner is a serious hazard that must be addressed before you can safely use the chimney.

Chimney waterproofing ($250 to $600) applies a breathable, water-repellent sealant to the exterior brick and mortar joints. This is critical in Ottawa — a quality waterproofing treatment significantly slows future water infiltration and freeze-thaw damage. The sealant should be breathable (allowing moisture trapped inside the masonry to evaporate out) rather than a film-forming sealant that can trap moisture and accelerate deterioration. Waterproofing should be applied after all masonry repairs are complete.

If the chimney has leaned, the flashing where the chimney meets the roofline is severely damaged, or multiple sections of brick have separated, you may be looking at a **full or partial rebuild** of the section above the roofline, which can cost $3,000 to $8,000 for the section above the roof, or $8,000 to $20,000 or more if the entire chimney needs reconstruction.

Assessing Your Specific Situation

Before you commit to a restoration budget, have a WETT-certified chimney inspector conduct a Level 2 inspection ($350 to $600) to determine exactly what you're dealing with. The inspector will examine the exterior for spalling, check the crown and cap, inspect the flashing, and assess the interior condition. They may recommend that you have a Level 3 inspection ($500 to $1,000 or more), which involves removing some exterior material to examine areas that aren't visible from outside — this is invaluable if you suspect the deterioration extends deep into the chimney structure or behind the flashing.

Once you have the inspection results, get written quotes from at least three masonry contractors who specialize in chimney work. Insist that each quote specify exactly which components are being addressed (crown replacement, tuckpointing, brick replacement, relining), what materials will be used, the timeline, and the warranty. A reputable contractor will never give you a vague estimate — they will lay out the scope of work clearly because the extent of hidden deterioration directly affects cost.

Timing & Seasonal Considerations

Masonry work on chimneys requires temperatures consistently above 5 degrees Celsius for mortar to cure properly, which limits restoration work to roughly April through November in Ottawa. Spring and early fall are ideal — you avoid the rush of pre-winter repair calls and give yourself time to plan properly. If you discover spalling damage in mid-October and your chimney needs

---

Looking for experienced contractors? The Ottawa Construction Network connects Ottawa homeowners with qualified professionals:

- Justyn Rook Contracting
- RenoMotion Inc.
- Floor-2-Wall Inc
- MAK Construction and Development Inc
- Ottawa Caulking

View all contractors ?

Q19

How does Ottawa's deep frost line affect chimney foundation settling, and what are the signs my chimney footing is shifting?

Ottawa's exceptionally deep frost line — which penetrates 1.2 to 1.5 metres (4 to 5 feet) into the ground — is one of the most destructive forces working against chimney foundations in Canada. Unlike milder climates where frost penetration may reach only 60 to 90 centimetres, Ottawa's deep freeze cycle creates dramatic soil movement that directly translates into chimney structural stress, settling, and in severe cases, catastrophic failure.

How Ottawa's Frost Line Damages Chimney Foundations

When soil freezes, it expands — a phenomenon called frost heave. If a chimney footing does not extend below the frost line, the unfrozen soil beneath the footing freezes during winter, expanding upward and pushing the chimney foundation up with tremendous force (sometimes several centimetres). As spring arrives and that soil thaws, it contracts, and the footing settles back down — but not always evenly. This repeated annual cycle of heave and settlement concentrates stress at the point where the footing transitions to the above-ground chimney structure. Over 20 or 30 years, this cyclical movement adds up to significant differential settling, where different parts of the chimney base move vertically by different amounts.

The problem is compounded by water. Soil expands more dramatically when it is wet and then freezes. Ottawa's combination of deep frost, heavy spring snowmelt, and summer thunderstorms creates persistent moisture in the ground near the chimney base. If the chimney footing lacks proper drainage, water accumulates around and beneath the footing, freezes solid during winter, and contributes to dramatic heave pressures.

Older chimneys built before modern building codes were established often have shallow footings — sometimes only 60 to 90 centimetres deep, well above the frost line. These chimneys are ticking time bombs in Ottawa's climate. Modern code requires footings to extend at least 15 centimetres (6 inches) below the frost line, meaning a properly built chimney footing in Ottawa should be at least 1.65 to 1.65 metres deep.

Signs Your Chimney Footing Is Shifting

Watch for these specific warning signs that your chimney foundation is experiencing frost-related settling or heave:

Vertical cracks in the chimney structure itself — particularly cracks that run vertically through the mortar joints or through the masonry units themselves. Diagonal or stair-step cracks (running from one mortar joint to the next in a diagonal pattern) indicate differential settling, where the chimney is tilting or one corner is settling faster than others. Horizontal cracks across the chimney are less common from settling but indicate different stresses. These cracks typically begin 30 to 60 centimetres above the roofline first, where the stress concentrates as the footing

heaves and the above-ground structure resists.

Visible tilting or leaning of the chimney — step back and view the chimney from multiple angles to see if it is plumb (truly vertical) or if it leans noticeably away from vertical. A slight lean — even 2 to 3 degrees — suggests foundation movement. Some older chimneys lean slightly as a normal condition of age, but new or recent tilting is a red flag. Tilting is particularly dangerous because it concentrates compression stress on one side of the footing and tension stress on the other, accelerating deterioration.

Mortar joint separation, especially at the base — where the chimney meets the foundation or where the chimney exits the roofline, watch for mortar joints that are opening up, pulling away from the masonry units, or showing daylight. This is a direct sign of movement and stress between the structural components. Mortar that has been recently repointed but is cracking again within a few years suggests the underlying foundation is moving.

Water infiltration or dampness at the chimney base — frost heave cracks the footing and allows water to seep upward into the masonry, creating dark staining, efflorescence (white mineral deposits on the brick), or visible moisture. Damp masonry near the base of an interior chimney, especially on the coldest winter nights, suggests water is wicking up through a damaged footing.

Separation between the chimney and the house structure — if your chimney is built as an exterior wall (not tied into the house), look for gaps opening between the chimney and the adjoining house wall, or cracks in the mortar where the two structures meet. This is classic differential settling — the chimney footing is moving differently than the house foundation, because they may be at different depths or on different soil types.

Cracking in the chimney crown or cap — the concrete or mortar cap at the top of the chimney may crack if the footing is heaving. This is less direct than cracks in the chimney shaft, but it is a sign the entire structure is under stress.

Smoke or combustion gases spilling into the attic or living space — if the chimney is tilting or the mortar joints are separating, combustion gases may find a path into the house rather than up and out the flue. This is a serious safety concern requiring immediate attention.

What To Do If You Suspect Foundation Problems

First, do not panic — a single vertical crack in the mortar is not necessarily an emergency, and slow settling is normal in any building. However, **active movement or multiple warning signs warrant immediate professional evaluation**. Contact a qualified chimney technician or structural engineer experienced with masonry chimneys in Ottawa's climate. They can assess the extent of movement, determine whether it is historical (settled long ago and now stable) or active (ongoing), and recommend appropriate repairs.

A WETT-certified chimney professional can perform a thorough visual inspection and diagnose the severity. For serious foundation issues — significant tilting, active cracking, or water intrusion — you may need a structural engineer's assessment. This costs $500 to $1,500 but provides the documentation you need for insurance claims and repair planning.

Repairs depend on severity. Minor settling with stable, non-progressive cracks may only require tuckpointing (repointing the mortar joints) and chimney crown repair, running $500 to $2,500. Significant settling or tilting may require underpinning — excavating below the existing footing and installing a deeper, reinforced foundation. Underpinning is expensive ($5,000 to $15,000 or more) and complex, but it is the permanent solution for deep frost issues. In extreme cases, complete chimney rebuilding may be required if the structural integrity is compromised.

Prevention is always better than repair. If you are planning a

---

Looking for experienced contractors? The Ottawa Construction Network connects Ottawa homeowners with qualified professionals:

- Apple HVAC and mechanical
- JC Carpentry
- Humble Homes - property maintenance
- JMY Renovations
- Capitalstoneworks

View all contractors ?

Q20

Our chimney flashing is leaking after Ottawa's spring thaw — should we repair the existing flashing or replace it entirely?

Whether you repair or replace your chimney flashing depends on the extent of deterioration, the age of the existing flashing, and what caused the leak — but in most cases, Ottawa homeowners are better off replacing it entirely rather than patching an aging system that has already failed.

Why Chimney Flashing Fails in Ottawa

Chimney flashing is the metal seal where your chimney intersects the roofline, and it takes extraordinary punishment in Ottawa's climate. The freeze-thaw cycle is relentless: water seeps into gaps between the flashing and the chimney or roof, freezes, expands by 9 percent, and breaks the seal further. Every spring thaw in Ottawa exposes weaknesses in flashing that have been developing all winter long. Flashing typically lasts 20 to 30 years in mild climates but often deteriorates faster in Ottawa because of the intense temperature cycling — if your flashing is more than 15 years old and actively leaking, replacement is usually the more economical long-term choice than repeated repairs.

The original flashing on many older Ottawa homes was installed with lead or bitumen caulk, which hardens and cracks over time. Modern step flashing (individual metal pieces that overlap like shingles on each side of the chimney) is far superior, but it must be properly sealed with silicone or urethane caulk, not roofing tar. If your existing flashing uses old tar caulk or bitumen, replacement with modern materials is your best investment.

Repair vs Replace: The Decision

Repair your existing flashing if: the flashing is less than 10 years old, the leak is clearly from a single cracked caulk joint or small gap that can be cleanly resealed, the flashing itself is not rusted or bent, and you are willing to monitor it closely for a few years. A professional can repoint and reseal deteriorated caulking with quality silicone or polyurethane caulk for $250 to $600, which is significantly cheaper than replacement. This works well as a short-term fix on relatively new systems.

Replace your entire flashing if: the flashing is more than 15 years old, water is entering around multiple sides of the chimney (indicating systemic seal failure), the flashing is visibly rusted, bent, or separating from the roof or chimney, you have a history of repeated leaks in the same location, or the caulk is cracked and deteriorated across the entire chimney-to-roof transition. Replacement is also the better choice if your roof is being replaced or reroofed — it makes no sense to install new roofing around deteriorated flashing. Full chimney flashing replacement in Ottawa runs $800 to $2,000 depending on chimney size, roof pitch, and whether the roofer must remove and reinstall shingles around the chimney.

What the Work Involves

Professional flashing replacement requires removing roofing shingles around the chimney, removing the old flashing, cleaning the roof deck and chimney base, installing new step flashing on all sides of the chimney (typically aluminum or galvanized steel), properly lapping and sealing each flashing piece, and installing new roofing shingles over the flashing. This is not a job for DIY — it requires safe roof access at height, knowledge of proper flashing overlap and installation order, and understanding of how water flows around a chimney during heavy rain. Roofing leaks and chimney water damage can cost thousands to repair internally if the flashing is installed incorrectly.

The timing matters in Ottawa: flashing work should be done during dry weather and temperatures above 10 degrees Celsius so that caulk and roofing tar seal properly. Late April through September is ideal. If your flashing is leaking right now after the spring thaw, schedule an assessment immediately — by mid-May the weather should allow for proper installation, and you want the work done before the next rainy season.

Additional Considerations

While the flashing is being worked on, have a professional assess your **chimney crown** — the concrete cap at the very top of the chimney. If the crown is cracked or missing mortar, water will continue entering the chimney system even after the flashing is fixed. A compromised crown and failing flashing together accelerate interior water damage. A cracked crown costs $300 to $1,200 to repair depending on size and deterioration.

Also check whether your **chimney cap** (the metal grate at the top) is present and in good condition. A missing or rusted cap allows rain and snow directly into the flue, compounding the water problem. A properly fitted chimney cap costs $200 to $600 installed and is one of the cheapest ways to protect your chimney from Ottawa's weather.

If the leak has been ongoing, carefully inspect the **interior of your home** for water stains, soft drywall, mold, or deterioration in walls and ceilings adjacent to the chimney. Water damage to framing can take months or years to become obvious, and mold growth is a serious health concern. If you see interior damage, you may need professional assessment beyond flashing replacement.

Your Next Steps

Get quotes from at least two or three roofing contractors experienced with chimney flashing — they should visit in person to assess the condition of the existing flashing, the roof around the chimney, the chimney crown and cap, and any interior water damage. A good quote will specify whether they are repairing existing flashing or replacing it entirely, what materials they are using (aluminum step flashing with polyurethane caulk is the modern standard), whether they will inspect and address the chimney crown and cap, and what warranty they offer on the work.

Given the complexity of flashing work and the real risk of creating bigger leaks through improper installation, this is worth hiring a qualified professional rather than attempting DIY repairs. If you are ready to move forward, you can browse experienced roofing and chimney contractors through the Ottawa Construction Network directory to find professionals with experience on Ottawa homes.

Looking for experienced contractors? The Ottawa Construction Network connects Ottawa homeowners with qualified professionals:

- Homeupgraders

- The Egress Group Inc
- Beauty of gardens
- Home Front Services
- Rrenovatios

View all contractors ?

Q21

How much does it cost to install a stainless steel chimney cap in Ottawa, and will it prevent ice and animal entry?

A stainless steel chimney cap installation in Ottawa typically costs **$200 to $600 installed**, depending on the cap size, chimney height, roof pitch, and whether any preliminary chimney crown repair is needed. The cap itself runs $100 to $300, with labour at $100 to $300 for the installation.

Stainless steel caps are genuinely one of the best investments you can make for a chimney in Ottawa's climate, and they address two very real problems that Ottawa homeowners face: ice dam formation at the chimney crown and animal entry into the flue.

Why Chimney Caps Matter in Ottawa

Ottawa's extreme winter temperatures and heavy snow load create ideal conditions for ice dams to form around the chimney crown. Warm air rising inside the chimney melts snow on the roof around the chimney opening, but when that water reaches the unheated edges of the roof, it refreezes into ice. A proper chimney cap with a spark arrestor screen reduces this problem by directing water away from the crown and providing a defined lip that sheds precipitation before it pools. The screen also prevents snow from directly entering the flue opening, which is a real hazard when you have 200 centimetres of annual snowfall.

Animals — including raccoons, squirrels, birds, and the occasional chimney swift — routinely enter uncapped chimneys in the Ottawa area, especially from spring through fall. Once inside, they nest, leave droppings, die, or cause blockages that create serious carbon monoxide and draft problems. A quality chimney cap with a properly sized spark arrestor screen blocks animal entry while allowing smoke and gases to exit freely. Look for caps with 3/8-inch or 1/2-inch mesh screen, which keeps out small rodents while maintaining adequate draft.

What Makes a Good Stainless Steel Cap

The best chimney caps in Ottawa are made from 304 or 316-grade stainless steel, which resists rust and corrosion far better than galvanized steel or aluminum in our freeze-thaw climate. Galvanized caps often fail within 10 to 15 years as the zinc coating breaks down and rust works through the metal. Stainless steel will last 25 to 30 years with no rust concerns. Avoid cheap aluminum caps — they corrode quickly in Ottawa's moisture-laden winters and can develop pinhole leaks.

The cap should have a sloped crown roof that sheds water efficiently, a spark arrestor screen to block animals and embers, and clearance dimensions that match your chimney (round caps for round liners, square caps for square chimneys). The cap must be properly fastened with stainless steel fasteners — galvanized bolts will rust and fail, leaving the cap loose or falling off during a windstorm.

Installation and Caveats

Installation requires safe roof access at height, proper fastening, and confirming that the existing chimney crown is in good condition. If your chimney crown is cracked, deteriorated, or missing mortar joints, a cap alone will not solve the underlying problem — water will continue to penetrate through the damaged crown and cause interior damage. Many Ottawa chimneys built before 1980 have mortar crowns instead of concrete, and these are particularly vulnerable to freeze-thaw damage. If your crown needs repair, factor in an additional $300 to $1,200 for crown work before or as part of the cap installation.

A common misconception is that a chimney cap prevents all ice dam problems — it does not. If your chimney crown is severely damaged or if you have intense snow melt conditions, ice can still accumulate around the base of the cap. A well-functioning cap significantly reduces ice buildup, but it is one part of a larger strategy that includes keeping the chimney crown waterproofed and in good structural condition.

The cap must also be sized appropriately for your chimney liner diameter. If your chimney has been recently relined with a smaller-diameter stainless steel liner, your old cap may no longer fit properly. A professional installer will measure your chimney opening or liner size and recommend the correct cap.

When You Need Professional Installation

This is not a DIY project for most homeowners. Installing a chimney cap requires safe roof access at height — Ottawa's steep roof pitches and winter ice conditions make this genuinely hazardous. A professional chimney technician can assess your chimney crown condition, recommend any necessary repairs, select the correct cap size, and install it safely with proper fastening and sealing. Most WETT-certified chimney sweeps offer cap installation as part of their service menu, and costs should be clearly quoted upfront.

If your chimney is in good structural condition and you simply need a quality cap to block animals and improve water shedding, a straightforward stainless steel cap installation is one of the highest-value chimney projects you

can do. When you are ready to get this work done, you can browse fireplace and chimney contractors through the Ottawa Construction Network directory to find experienced professionals in your area.

Looking for experienced contractors? The Ottawa Construction Network connects Ottawa homeowners with qualified professionals:

- Apple HVAC and mechanical
- RenoMotion Inc.
- BFI Renovations
- Best Hand2Hand moving company
- ALTIOR CONSTRUCTION

View all contractors ?

Q22

Do I need an Ontario building permit to reline my chimney, or does my Ottawa contractor handle that as part of the job?

You do not typically need a separate building permit for a standard chimney relining project in Ottawa — most chimney relining work is considered maintenance or repair and falls under the scope of work your contractor should manage without requiring a city permit application. However, this depends on the extent of the work, and you should confirm with your contractor before starting the project.

When Permits Are Required vs. Not Required

Permit not typically required: Relining an existing chimney with stainless steel or aluminum liner to restore a deteriorated flue, replacing a cracked or missing chimney cap, installing a new liner for a gas fireplace conversion (assuming the chimney structure itself is sound), or repairing internal chimney damage that does not affect the exterior structure or clearances.

Permit likely required: Rebuilding a chimney above the roofline due to structural failure, adding a new chimney where one did not exist, modifying the chimney's height or position in a way that affects roof structure or clearances, relocating a chimney vent to a different part of the roof, or work in a heritage-designated area that involves visible exterior changes to the chimney profile, cap style, or materials.

The key distinction is whether the work involves structural changes to the house itself or modifications that affect building code compliance (clearances, height, exterior appearance in heritage areas). A straightforward interior relining that does not change the exterior profile typically does not trigger a permit requirement.

That said, **always ask your contractor upfront whether they will handle any permit applications and include that responsibility explicitly in your written quote.** Some Ottawa contractors automatically pull permits for all chimney work as a matter of standard practice; others assume the homeowner will apply if needed. This miscommunication is a common source of frustration — a contractor may discover mid-project that a permit was required and halt work, or a homeowner may later discover that unlicensed structural work was performed on their property. Getting this in writing protects both parties.

Why This Matters in Ottawa's Climate

Chimney relining is one of the most important maintenance projects you can do in Ottawa's brutal freeze-thaw climate. Once a chimney liner cracks or deteriorates, water infiltrates the flue, freezes during Ottawa's long winters, and accelerates damage to the surrounding masonry from the inside out. A proper relining with stainless steel liner typically costs **$2,000 to $5,000 depending on chimney height and liner diameter**, or **$4,000 to $8,000 for a**

cast-in-place cement liner that also strengthens deteriorating masonry. These are substantial costs, and you want the work done properly without unexpected permit delays.

The Professional Responsibility

A reputable Ottawa fireplace contractor should clarify upfront whether a permit is required for your specific chimney relining project by reviewing your chimney's condition, the scope of work, and City of Ottawa requirements. If your contractor is unsure, they can call the City of Ottawa Building Code Services at 3-1-1 or check ottawa.ca for guidance — this is a quick conversation that takes minutes and is part of a professional contractor's due diligence.

Include in your written quote: (1) the specific materials and scope of the relining work, (2) whether any permit applications are the contractor's or your responsibility, (3) the timeline (noting that any permit approval could add 5 to 10 business days), and (4) who pays any permit fees. A typical City of Ottawa building permit for chimney work runs $200 to $500 in permit fees, though this varies by project scope.

If you are working with a WETT-certified chimney contractor — which is strongly recommended for any chimney work in Ontario — they are accustomed to navigating these requirements and can advise you clearly on permit needs specific to your situation. When you are ready to get quotes, you can browse fireplace contractors and chimney specialists through the Ottawa Construction Network directory to find experienced professionals in your area.

Looking for experienced contractors? The Ottawa Construction Network connects Ottawa homeowners with qualified professionals:

- Apple HVAC and mechanical
- JC Carpentry
- JMY Renovations
- ComfortWay Plumbing Heating and Cooling
- Anchor Home Comfort

View all contractors ?

Q23

What's the typical cost for chimney tuckpointing on a two-storey Ottawa home with deteriorated mortar joints from ice storm damage?

Tuckpointing a two-storey masonry chimney in Ottawa after ice storm damage typically runs **$1,500 to $3,500**, though some cases with extensive deterioration can reach $4,000 or higher. The final cost depends heavily on how much of the chimney needs attention, whether the damage is concentrated or scattered throughout the structure, and whether your contractor discovers additional problems once they begin opening up the joints.

Why Ottawa's climate makes this worse than most places

Ice storms are a fact of life in the National Capital Region — we average one major ice storm every two to three years, and the weight of ice plus freeze-thaw cycling that follows causes real damage to mortar joints. Ottawa's extreme temperature swings (regularly -25 to -30 degrees Celsius in winter, then warming above freezing during January thaws) force water into mortar cracks repeatedly. That water expands roughly 9 percent when it freezes, pushing mortar out of joints and widening cracks even further. Over time, especially after an ice storm that shakes the entire structure, you end up with loose mortar that has to be professionally repointed before water penetration accelerates deterioration of the entire chimney.

The problem worsens if the damage extends below the roofline into areas that are difficult to access safely. A two-storey chimney means your contractor is working at significant height with proper safety equipment, which adds labour costs compared to a single-storey job. If the ice storm damage is concentrated to the exposed sections above the roofline — which is typical — you're looking at the lower end of that cost range. If mortar failure extends down the visible chimney face, or if your contractor discovers that the interior flue has also been compromised, costs climb significantly.

What the work actually involves: Tuckpointing is precise, labour-intensive masonry work. Your contractor carefully removes deteriorated mortar from joints (typically to a depth of 2 to 2.5 times the mortar joint width) without damaging the surrounding brick. Fresh mortar matching the original colour, composition, and strength is then packed tightly into the cleaned joints and finished to match the original profile. In Ottawa, this must be done when temperatures are consistently above 5 degrees Celsius — ideally 10 to 15 degrees — so the mortar cures properly. Work done in late fall or early spring when temperatures are borderline risks mortar failure.

Cost factors specific to your chimney

A two-storey chimney on an older Ottawa home (common in neighbourhoods like Rockcliffe, Sandy Hill, the Glebe, and New Edinburgh) typically means a masonry chimney roughly 25 to 35 feet tall and 24 to 36 inches wide. The total surface area exposed to weather is significant, and if ice storm damage affected multiple sides of the chimney, the scope expands. Your contractor will also assess whether the chimney crown (the concrete or mortar cap at the very top) has cracked or separated — a common ice storm casualty in Ottawa — because crown repair or replacement often runs $300 to $1,200 and is frequently needed alongside tuckpointing.

Heritage designation matters in Ottawa. If your home is in a heritage district (Glebe, Sandy Hill, New Edinburgh, Rockcliffe Park, or NCC-protected areas), your contractor may need to match the original mortar composition and joint profile precisely, which can limit material choices and add time. This might add $200 to $400 to the estimate, but it's worth doing correctly to maintain heritage value and ensure long-term durability.

Important considerations and common pitfalls

This is absolutely professional work — tuckpointing from a ladder or scaffold at height on a two-storey structure is not a DIY project. Beyond the safety risk, poor tuckpointing fails quickly in Ottawa's climate. If mortar is packed too loosely or finished incorrectly, water infiltration will resume immediately, and you'll be paying again in a few years.

Get at least three written quotes that specify: which sections of the chimney will be tuckpointed (ideally with a photo marked to show scope), what mortar type and colour will be used, whether the crown will be assessed and what crown work is included or excluded, the timeline (crucial for spring/fall work when weather windows are tight), and whether the contractor will warranty the work. Most reputable Ottawa masons offer a 5 to 10-year warranty on tuckpointing if mortar has been properly specified and the work is done in appropriate weather conditions.

One critical point: if you had an ice storm, your homeowner's insurance may cover chimney damage if it was directly caused by the ice load or falling ice. Contact your insurance company before hiring a contractor and ask whether this work qualifies for coverage. Even if it does, you'll typically have a deductible ($500 to $1,000 is common), so factor that into your planning.

When you're ready to move forward, you can browse experienced masonry contractors through the Ottawa Construction Network directory at justynrookcontracting.com/directory — they'll be able to assess whether your chimney needs tuckpointing alone or whether crown repair, flashing work, or other issues discovered during inspection need to be addressed.

Q24

Our chimney crown cracked after last winter's freeze-thaw cycles — can it be repaired or does it need full replacement in Ottawa?

A cracked chimney crown can often be repaired depending on the size and location of the crack, but in Ottawa's brutal freeze-thaw climate, the answer depends on how severe the damage is and whether you caught it early. Small hairline cracks (less than 1/8 inch wide) localized to one area can sometimes be sealed with a cement-based chimney crown sealant or elastomeric coating that flexes with temperature changes. Larger structural cracks, spalling (where pieces of the crown are breaking apart), or widespread damage across multiple areas typically require full crown replacement to prevent catastrophic failure over the next few winters.

The reason Ottawa homeowners face this problem so frequently is that the chimney crown takes the full brunt of the region's extreme seasonal temperature swings — from +35 degrees Celsius in summer to -30 degrees in winter, sometimes within a matter of weeks. Water infiltrates tiny pores and hairline cracks in the crown during spring snowmelt or summer rain. When temperatures drop below zero, that water freezes and expands by approximately 9 percent, forcing apart the mortar or concrete. This cycle repeats 50 or more times every winter, and after several seasons, small cracks become major structural damage. A cracked crown is not just a cosmetic issue — it is a direct pipeline for water into the chimney structure itself, where it accelerates deterioration of the mortar joints, bricks, and flue liner underneath.

Here is the practical guidance: First, get a close-up inspection of the crown. If you can safely access your roof, photograph the crack from multiple angles and note its width and location. If the crack is less than 1/8 inch wide, runs only in one small section, and does not involve any spalling or missing pieces, a professional chimney technician can sometimes repair it by cleaning out the crack, applying a flexible chimney sealant, and coating the entire crown with a waterproofing product — this costs roughly **$300 to $600** in Ottawa and buys you some additional time. However, this is a temporary measure. In Ottawa's climate, that patch will eventually fail because the underlying freeze-thaw stress continues every winter. You are essentially delaying the inevitable.

If the crack is 1/8 inch or wider, covers more than a small localized area, shows spalling (pieces breaking off), has mortar missing, or if water is actually leaking into the chimney or house interior, the crown needs full replacement. Crown replacement involves removing the old crown cap (which often means partial demolition of the top courses of brick if the crown was built up in mortar rather than poured as a separate concrete cap), rebuilding the crown with new mortar or pouring a new concrete cap, and properly waterproofing it. Full crown replacement typically costs **$600 to $1,200** for a standard masonry chimney, depending on chimney size, access difficulty, and whether any underlying brick damage needs repair as well. This is a permanent solution that will protect your chimney for the next 20 to 30 years, provided the rest of the chimney structure is sound.

Critical timing consideration: Chimney crown work must happen during the warm months when temperatures are consistently above 5 degrees Celsius for mortar to cure properly. May through October is the window for exterior masonry work in Ottawa. If you discover a cracked crown in November or December, you have two choices: either schedule the repair for early spring (and install a temporary tarp or cap over the crown for winter to prevent additional water infiltration), or call a professional immediately to at least apply emergency sealant to buy time until spring. Letting a severely cracked crown sit through an Ottawa winter will cause exponentially more damage.

Before committing to repair or replacement, have a WETT-certified chimney inspector or a professional chimney technician examine the entire chimney structure. Sometimes a cracked crown is only the visible symptom of deeper problems — deteriorated mortar joints, damaged flue liners, or structural settlement in the chimney itself. A Level 2 WETT inspection costs **$350 to $600** in Ottawa and will reveal whether crown repair is truly sufficient or whether you are facing a larger relining or rebuilding project. Many homeowners discover during inspection that the crown damage is accompanied by failing mortar joints or a cracked flue liner that also needs attention.

One more crucial point: **never leave a cracked crown unaddressed through another winter.** Ottawa's freeze-thaw cycle will double or triple the damage every season. A small repair now prevents a full chimney rebuild in a few years. Homeowners in Ottawa who ignore crown damage often end up needing a complete chimney reline (typically **$2,000 to $5,000**) or even a full chimney rebuild above the roofline (typically **$3,000 to $8,000**) because the water infiltration damaged the interior so severely that the flue liner cracked or the bricks spalled from the inside out.

If you are ready to move forward with a professional crown repair or replacement, you can browse experienced chimney technicians through the Ottawa Construction Network directory at justynrookcontracting.com/directory — they will be able to assess whether your specific crack can be sealed or requires full replacement, and provide a quote for spring or early fall work.

Looking for experienced contractors? The Ottawa Construction Network connects Ottawa homeowners with qualified professionals:

- Luxe Painting and Renovations
- The Egress Group Inc
- ARTEXPRO Tile & Finishes
- ZinoM Concrete & Landscaping
- Edenza Landscaping

View all contractors ?

Q25

How much does chimney relining cost in Ottawa, and is a stainless steel liner worth the extra investment over aluminum?

Chimney relining in Ottawa typically costs **$2,000 to $5,000 for stainless steel** (the most common choice) and **$1,500 to $3,000 for aluminum**, depending on your chimney height, liner diameter, and the condition of the existing structure. The difference between these materials is far more significant than the price gap suggests, especially in Ottawa's brutal climate — stainless steel is almost always the better investment for wood-burning appliances, while aluminum is acceptable only for gas appliances in very specific scenarios.

Why Stainless Steel Matters in Ottawa's Climate

Stainless steel liners are superior because they handle Ottawa's extreme temperature swings and creosote exposure far better than aluminum. When you light a fire in a wood stove or wood-burning fireplace during an Ottawa winter, the flue temperature can swing from room temperature to 400+ degrees Celsius in minutes, then cool back down rapidly as the fire dies. Aluminum expands and contracts more dramatically under this thermal stress, which can eventually cause sections to separate, buckle, or develop gaps that allow hot gases and smoke to escape into the chimney structure itself — a serious fire hazard. Stainless steel is more thermally stable and handles repeated heating cycles without warping.

Creosote accumulation is the second critical factor. Ottawa homeowners typically burn 4 to 8 cords of wood per season, and longer, cooler burns during shoulder seasons create ideal conditions for creosote deposits, especially the dangerous Stage 3 glazed creosote that looks like a hard, shiny black coating. Stainless steel resists creosote adhesion better than aluminum and is more durable when you're running a wire brush through it during annual cleaning. Aluminum is softer and can be scratched or compromised by vigorous chimney sweeping.

The freeze-thaw cycle itself also favors stainless steel. If water enters a gap between the liner and the chimney wall, it will freeze inside the gap and expand, potentially damaging the liner from the outside. Stainless steel's greater rigidity and thickness help it resist this stress.

When Aluminum Might Be Acceptable

Aluminum liners are sometimes recommended for direct-vent gas fireplaces where the flue temperature stays moderate (typically 120 to 200 degrees Celsius) and creosote is not a concern. However, even for gas applications in Ottawa, many contractors prefer stainless steel because it provides a safety margin if the homeowner ever considers converting to a wood-burning insert later, and it simply lasts longer. If you think there's any possibility you might switch to a wood-burning appliance in the next 10 to 15 years, stainless steel is the smarter choice.

What Affects Your Actual Cost

Your total relining cost depends on several factors. Chimney height is the biggest variable — a single-storey ranch home with a 25-foot chimney will cost significantly less to reline than a two-storey colonial with a 40-foot chimney because the technician needs more liner material and more labour at height. Liner diameter matters too — most residential chimneys use 6-inch or 8-inch diameter liners, and larger diameter liners cost more. The condition of your existing chimney structure affects pricing as well. If the chimney has deteriorating mortar joints or internal obstructions, the technician may need to spend extra time cleaning and preparing the interior before the new liner can be installed, pushing costs toward the higher end of the range. Some chimneys also need cleanout doors or chase covers modified, which adds $200 to $400.

Many Ottawa contractors now offer **cast-in-place cement liners** as an alternative ($4,000 to $8,000 installed). These are poured directly into the existing chimney and simultaneously reline the flue and repair deteriorating masonry from the inside. This is an excellent choice if your chimney has significant internal damage or spalling, because it addresses both the creosote problem and the structural problem in one project. It takes longer to cure (3 to 7 days depending on conditions and product), but the result is a chimney that is reinforced and waterproofed internally as well as relined.

The Real Value Proposition

The extra $500 to $2,000 you invest in stainless steel over aluminum is essentially insurance against a much more expensive problem down the road. If your aluminum liner buckles or separates in 5 to 8 years, you are looking at a full $2,000 to $5,000 relining project again — plus the risk of flue gases escaping into the house between now and then, which is a serious fire and carbon monoxide hazard. Stainless steel liners typically last 15 to 25 years with proper maintenance (annual chimney cleaning and inspection), making the per-year cost actually lower.

Schedule your chimney inspection and get detailed quotes that specify liner material, diameter, height, and whether any prep work or chimney crown repair is included. If you're browsing for an experienced chimney technician in Ottawa, the Ottawa Construction Network directory can connect you with local professionals who can assess your specific chimney and explain the relining options for your situation.

Looking for experienced contractors? The Ottawa Construction Network connects Ottawa homeowners with qualified professionals:

- 613Bins
- RenoMotion Inc.
- The Next Reno

- Ottawa Demolition Corp.
- Beauty of gardens

View all contractors ?

Disclaimer: This guide is provided for informational purposes only by Ottawa Fireplaces. It does not constitute professional advice. Always consult qualified, licensed contractors and your local building authority before starting any fireplace installation or chimney project. Information is current as of May 10, 2026 and may change. Visit **ottawafireplaces.com** for the latest answers.