NEW BRUNSWICK INSULATION

Insulation Problems & Repair

Insulation damage, moisture problems, mould from poor vapour barriers, vermiculite and asbestos concerns, UFFI, and insulation replacement

19 Expert Answers from Insulation IQ

newbrunswickinsulation.com/construction-brain

Table of Contents

Q1

Why does my Dieppe home's attic insulation seem to compress and lose R-value every spring after a harsh New Brunswick winter?

Your attic insulation is likely experiencing moisture-related compression from ice damming, inadequate air sealing, or ventilation problems that are common in Dieppe's Maritime climate. This seasonal compression indicates that your insulation is getting wet during winter freeze-thaw cycles, then compacting as it dries in spring.

Moisture is the primary culprit behind insulation compression in New Brunswick homes. During our long winters with temperatures regularly hitting -20 to -30°C, warm, moist air from your heated home finds every gap and crack to escape into the attic. When this air contacts the cold attic surfaces, it condenses into water or frost. As spring arrives and temperatures fluctuate above and below freezing, this moisture cycles between ice and liquid water, saturating your insulation. Wet insulation loses its loft and thermal resistance — fibreglass can lose 50% of its R-value when moisture-laden, and even after drying, compressed insulation never fully recovers its original thickness.

Air leakage is likely the root cause of your moisture problems. Most Dieppe homes built before 2000 have significant air leakage through unsealed pot light housings, bathroom fan ducts, plumbing stacks, electrical penetrations, and attic hatches. These gaps allow warm interior air (which carries substantial moisture from cooking, bathing, and breathing) to escape into the attic where it immediately condenses on cold surfaces. The solution isn't just adding more insulation — it's sealing these air leaks first with acoustical sealant, expanding foam, or weatherstripping, then ensuring you have adequate insulation depth.

Ice damming compounds the problem in many Dieppe homes, particularly those near the Petitcodiac River where temperature fluctuations are more extreme. When heat escaping through your poorly insulated attic melts snow on the upper roof, the meltwater refreezes at the cold eaves, creating ice dams that back water up under your shingles. This water can saturate attic insulation directly, causing the compression you're observing each spring. Ice dams are always evidence of insufficient attic insulation and air sealing — the attic should stay cold enough that snow doesn't melt on the roof surface.

Ventilation imbalance is another common issue in Maritime New Brunswick. Your attic needs balanced airflow from soffit vents (intake) to ridge vents (exhaust) to remove moisture that does make it into the attic space. Many homes have blocked soffit vents (from previous insulation work), inadequate ridge ventilation, or blown-in insulation that has buried the soffit baffles. Without proper ventilation, moisture accumulates in the attic space and saturates your insulation throughout the winter.

The fix requires a systematic approach. First, conduct thorough air sealing of the attic floor — seal every penetration with appropriate materials (acoustical sealant for small gaps, expanding foam for larger openings, rigid covers for attic hatches). Second, ensure balanced ventilation with clear soffit-to-ridge airflow and proper ventilation

baffles. Third, upgrade your insulation to R-50 to R-60 using blown-in cellulose or fibreglass, which provides better coverage than batts and helps with minor air sealing. The investment typically runs $1,500-$3,500 for a complete attic upgrade in a typical Dieppe home, but reduces heating costs by 25-40% while eliminating the moisture problems causing your insulation compression.

This is professional work — while you can add batt insulation yourself, proper air sealing and blown-in insulation require experience and specialized equipment. A blower door test before and after the work will quantify the air leakage reduction and is required for NB Power rebate eligibility (up to $5,000 for comprehensive insulation upgrades).

Need help finding a professional insulation contractor? New Brunswick Insulation can match you with experienced contractors in the Dieppe area who understand Maritime climate challenges and proper moisture management techniques.

Q2

How long does moisture damage repair and re-insulation of a Rothesay basement typically take?

Moisture damage repair and re-insulation of a Rothesay basement typically takes 2-6 weeks from start to finish, depending on the extent of damage, drying time required, and scope of the insulation upgrade.

The timeline breaks down into several critical phases that cannot be rushed. **Moisture assessment and source elimination** takes 3-7 days and involves identifying all water entry points — foundation cracks, poor grading, failed window wells, or plumbing leaks. In Rothesay's clay-heavy soils near the Kennebecasis River, hydrostatic pressure against foundation walls is common, and proper exterior waterproofing may be required before any interior work begins.

Contaminated material removal and drying is the most time-sensitive phase, typically requiring 5-14 days. Any water-damaged insulation, drywall, or framing must be removed immediately to prevent mould growth. Professional remediation contractors use industrial dehumidifiers and air movers to bring moisture levels below 15% in wood and 60% relative humidity in the air before proceeding. In NB's humid Maritime climate, this drying phase often takes longer than in drier regions — rushing this step guarantees future mould problems hidden behind new insulation.

Structural repairs and waterproofing add another 3-10 days depending on scope. Foundation crack injection, interior drainage systems, or sump pump installation may be necessary. Rothesay homes built in the 1960s-1980s often have minimal foundation waterproofing, and addressing this properly prevents recurring moisture issues that

would destroy new insulation within months.

Re-insulation work typically takes 2-5 days for a standard Rothesay basement (800-1,200 square feet). The most effective approach is **2 inches of closed-cell spray foam directly against the foundation walls** (providing R-12 to R-14 plus vapour barrier and air sealing), followed by framed walls with additional batt insulation if finishing the space. This hybrid approach costs $4,000-$8,000 but provides superior moisture protection compared to traditional batt-and-poly systems that failed originally.

Seasonal timing matters significantly in the Rothesay area. Spring moisture damage repair (April-June) allows the full summer for thorough drying and prevents winter freeze-thaw cycles from worsening foundation cracks. Fall projects (September-November) must account for NB's 4-5 foot frost depth — any exterior foundation work must be completed before ground freeze-up.

Professional coordination often extends the timeline but ensures proper sequencing. Moisture remediation specialists, waterproofing contractors, and insulation professionals must work in the correct order. Many Rothesay homeowners attempt to skip the waterproofing phase and proceed directly to re-insulation — this always fails and typically costs double when the work must be redone properly.

Permit considerations may add 1-2 weeks if structural changes are involved, though basic insulation replacement rarely requires permits. However, if the moisture damage compromised structural elements or electrical systems, full building permits and inspections extend the timeline significantly.

For comprehensive moisture damage repair and re-insulation in Rothesay, budget 4-8 weeks total and $8,000-$20,000 depending on the extent of damage and waterproofing required. The investment is substantial, but properly executed moisture remediation and insulation prevents recurring problems and typically reduces basement heating costs by 40-60% — critical in NB's expensive heating market.

Always hire professionals for moisture damage assessment and remediation — the consequences of incomplete drying or missed moisture sources include hidden mould growth, structural rot, and complete insulation failure within 2-3 years.

Need help finding moisture remediation and insulation professionals in the Rothesay area? New Brunswick Insulation can match you with experienced contractors who understand Maritime climate challenges and proper moisture management techniques.

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

- moose luxury painting

- Brunswick insulation & roofing
- Arctic Fox Construction Inc.
- Gionetterenovations
- Thirty Four Renovations

View all contractors ?

Q3

What are the signs that spray foam insulation has shrunk or pulled away from framing members in a New Brunswick home, and how does this compare to rigid foam delamination?

Spray foam shrinkage and rigid foam delamination are both serious insulation failures that create thermal bridges, air leakage paths, and moisture problems — but they present different warning signs and occur for different reasons in New Brunswick's challenging climate.

Spray Foam Shrinkage Warning Signs

Visual indicators are the most obvious signs of spray foam problems. Look for **gaps between the foam and framing members** — you'll see daylight, feel air movement, or notice the foam has physically pulled away from studs, joists, or sheathing. The foam may appear **cracked, crumbly, or have a different texture** than properly cured foam, which should be uniform and firmly bonded to all surfaces.

Temperature differences on interior walls during NB's cold winters often reveal shrinkage problems. Use an infrared thermometer or simply feel the wall surface — areas where foam has pulled away will be noticeably colder because the thermal bridge is now uninsulated. You might also notice **increased condensation** on windows or walls in rooms where spray foam has failed, as the compromised building envelope allows more moisture-laden air to reach cold surfaces.

Higher heating bills without explanation can indicate spray foam shrinkage, especially if your home was recently spray foamed. A properly installed spray foam job should reduce heating costs by 20-40% in most NB homes. If your energy bills haven't improved or have actually increased, the foam may have shrunk or was improperly applied.

Odour issues often accompany spray foam shrinkage because the same conditions that cause shrinkage (off-ratio mixing, improper temperature during application, contaminated chemicals) also create persistent chemical odours.

If you notice ongoing smells months after installation, the foam likely didn't cure properly and may be shrinking.

Rigid Foam Delamination Signs

Rigid foam delamination presents differently because the foam boards physically separate from the substrate rather than shrinking. You'll hear **hollow sounds** when tapping on walls where rigid foam has delaminated from foundation walls or exterior sheathing. The foam boards may **bow outward** or show visible gaps at the edges where they've pulled away from the surface.

Moisture problems are more common with rigid foam delamination because the air gap behind the foam creates a perfect condensation zone. Look for **water stains, mould growth, or musty odours** behind delaminated foam boards. In basement applications, you might see **efflorescence** (white mineral deposits) on the foundation wall where moisture has been trapped behind failed foam.

Mechanical damage is easier to spot with rigid foam — boards that have delaminated are more vulnerable to impact damage and may show **cracks, dents, or complete breaks** that weren't present originally.

Why These Failures Occur in New Brunswick

Spray foam shrinkage in NB typically results from **off-ratio application** during cold weather installation. When spray foam is applied in temperatures below 15°C (common during NB's long heating season), the chemical reaction doesn't proceed properly unless the substrate is pre-warmed and the chemicals are heated to proper temperature. Many contractors rush installation or lack proper heated spray equipment, resulting in foam that initially looks good but shrinks as it fully cures over several weeks.

Moisture during application is another major cause in NB's humid Maritime climate. Spray foam applied to damp foundation walls or during high-humidity periods may not bond properly and will eventually shrink and pull away. This is especially problematic in coastal NB communities where humidity remains high year-round.

Rigid foam delamination occurs when the adhesive fails due to **substrate moisture, temperature cycling, or improper surface preparation**. NB's freeze-thaw cycles put tremendous stress on adhesive bonds, and foundation walls that weren't properly cleaned or dried before foam installation will eventually lose adhesion. **Hydrostatic pressure** from NB's wet soils can also push moisture through foundation walls, causing adhesive failure from behind.

Performance Comparison and Consequences

Spray foam shrinkage is generally more serious because it affects both insulation value and air sealing simultaneously. A 1/4-inch gap around the perimeter of a spray foam cavity can reduce the effective R-value by 25-40% and eliminate most of the air sealing benefit. In NB's cold climate, this creates ice dam conditions in attics and

condensation problems in wall cavities.

Rigid foam delamination primarily affects insulation value rather than air sealing (assuming proper air barrier installation behind the foam). However, the air gap created by delamination can actually make the assembly perform worse than no insulation at all by creating convective loops that actively transport heat away from the building.

Professional Assessment and Remediation

Both failures require professional assessment because the extent of the problem is often hidden behind finished surfaces. A qualified insulation contractor can use thermal imaging to identify problem areas and determine whether partial repair or complete removal and reinstallation is necessary.

Spray foam remediation typically requires complete removal and reinstallation because shrunk foam cannot be "topped up" effectively — the new foam won't bond properly to the old. This is expensive ($4-8 per square foot) but necessary for proper performance.

Rigid foam delamination can sometimes be addressed by removing failed sections, cleaning the substrate, and reinstalling with proper adhesive and mechanical fasteners. However, if moisture problems caused the original failure, those must be addressed first through foundation waterproofing or improved drainage.

The key lesson for NB homeowners is that **proper installation is more important than insulation type**. Both spray foam and rigid foam can perform excellently in our climate when installed correctly by experienced contractors who understand Maritime moisture conditions and cold-weather application requirements.

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

- Brunswick insulation & roofing
- 3Tone Construction Ltd
- Arctic Fox Construction Inc.
- moose luxury painting
- Gionetterenovations

View all contractors ?

Q4

What are the signs of poor insulation in a Saint John home? | Insulation IQ?

Saint John sits in one of the most thermally demanding environments in eastern Canada. The city's position on the Bay of Fundy exposes it to sharp wind chill, persistent coastal dampness, and significant temperature swings across the heating season -- conditions that expose insulation deficiencies faster and more painfully than almost anywhere else in the province. Recognizing the signs of poor insulation in a Saint John home early can save you thousands in heating costs and prevent the kind of moisture damage that becomes structural if left unaddressed.

The most common and immediately obvious sign is **uneven heating across rooms**. If certain rooms -- particularly those on exterior walls, above a garage, or over a crawl space -- are noticeably colder than the rest of the house, the insulation in those areas is likely insufficient, damaged, or missing entirely. In older Saint John homes, particularly the Victorian-era and early twentieth-century houses common in the South End and the Lower West Side, original wall insulation was either non-existent or has settled and degraded over decades, leaving large voids in the thermal envelope.

Cold floors are another reliable indicator. If your main floor feels cold even with the heat running, the issue is usually poor or absent insulation in the crawl space or basement below -- either in the floor joists or along the foundation walls. In Saint John's climate, uninsulated rim joists are among the single largest sources of heat loss in a house. They are small in area but exposed to exterior temperatures on all sides and frequently riddled with air gaps.

Ice damming on the roofline is a serious red flag. When heat escapes through an under-insulated attic, it warms the roof deck and melts snow from the underside. That meltwater runs down to the cold eaves and re-freezes, forming ice dams that back water up under shingles and into the structure. Saint John homeowners who see heavy icicle formation along the eaves or ice buildup behind the fascia during winter should treat it as a strong signal of inadequate attic insulation, often combined with insufficient attic ventilation. The **NB Building Code** and **Climate Zone 6** best practices both target a minimum of **R-50 in the attic** -- many older Saint John homes are running at R-12 to R-20 or less.

High heating bills relative to comparable homes or prior years are another clear sign. If your home is consuming significantly more heating fuel or electricity than expected for its square footage, poor insulation and air leakage are the two most likely culprits. An EnerGuide energy assessment can pinpoint exactly where heat is escaping and quantify how much it is costing you. **NB Power** offers rebates for improvements made following an energy audit, so the assessment cost is largely recoverable.

Moisture and condensation problems are particularly telling in Saint John's coastal climate. Condensation forming on interior walls or window frames, water staining on ceilings near exterior walls, or unexplained **mould**

growth in corners, closets, or along baseboards can all indicate that the insulation layer is allowing cold surfaces to form within the building envelope where warm interior air is depositing its moisture. This is especially common in rim joist areas and in poorly sealed wall cavities. Mould in a Saint John home is not just a comfort issue -- it is a health and structural concern that needs to be addressed promptly.

Drafts near outlets, baseboards, or windows often point to air leakage through insulation gaps. In many older Saint John homes, the insulation was installed without proper air sealing, meaning warm interior air can flow through the insulation layer into wall cavities and escape outward. Holding your hand near electrical outlets on exterior walls on a cold day is a simple field test -- if you feel cold air, the wall assembly behind the outlet is failing.

Pest intrusion can also degrade insulation performance invisibly. Mice and squirrels nesting in attic insulation compress and displace the material, dramatically reducing its effective R-value. If you have had pest activity in your attic, a visual inspection is warranted.

If any of these signs are present in your Saint John home, an insulation assessment is a worthwhile investment. Professionals listed through **New Brunswick Insulation** can evaluate your home's envelope and recommend targeted upgrades that address the root causes, not just the symptoms.

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

- Arctic Fox Construction Inc.
- 3Tone Construction Ltd
- Thirty Four Renovations
- Gionetterenovations
- Brunswick insulation & roofing

View all contractors ?

Q5

Why is my New Brunswick home cold even with the heat turned up? | Insulation IQ?

If your New Brunswick home feels cold despite the thermostat being cranked up, the problem almost certainly isn't your furnace — it's your building envelope. New Brunswick's **Climate Zone 6** winters are harsh, with Fredericton

regularly dipping below -25°C and Saint John and Moncton experiencing sustained cold snaps that expose every weakness in a home's thermal defence. Heat doesn't just disappear; it escapes through specific, identifiable pathways, and understanding those pathways is the first step to actually solving the problem.

The single most common culprit is **inadequate attic insulation**. Heat rises, and if your attic doesn't meet the minimum **R-50 to R-60** value recommended for New Brunswick's climate, warmth is streaming out through your ceiling around the clock. Many older homes in Fredericton, Moncton, and the surrounding rural areas were built to standards that called for only R-20 to R-28 in the attic — values that were considered acceptable decades ago but are now woefully insufficient by today's codes and energy realities. If you can see or touch your attic joists from above, you almost certainly need more insulation.

Beyond the attic, **air leakage** is frequently the hidden villain. Insulation slows conductive heat loss, but it does relatively little to stop air movement. Cold outside air infiltrating through gaps around pot lights, attic hatches, electrical boxes, plumbing penetrations, and rim joists creates a constant stream of chilled air that no furnace can fully overcome. In an older New Brunswick home, total air leakage can be equivalent to leaving a window wide open all winter. A **blower door test** performed by an energy auditor will quantify exactly how leaky your home is and pinpoint the worst offenders.

Rim joists — the band of framing where your floor system meets the foundation wall — are chronically under-insulated in homes across New Brunswick. These narrow cavities are often filled with nothing more than fibreglass batts that have pulled away from the framing, leaving cold air channels running directly against the foundation. Spray foam applied to rim joists is one of the highest-return insulation upgrades available, often costing $800 to $2,000 for a typical home and delivering immediate comfort improvement.

Wall insulation is another factor, particularly in homes built before the 1980s. Pre-1970 construction in New Brunswick sometimes has little to no cavity insulation at all, meaning exterior walls act almost like thermal fins, shedding heat directly into the cold. Even well-insulated walls can suffer from **thermal bridging** through wood studs, which have an R-value of only about R-1 per inch — far lower than the surrounding insulation material.

Basement and crawlspace insulation also plays a major role. An uninsulated or poorly insulated basement foundation wall can pull enormous amounts of heat out of the floor above, making ground-floor rooms perpetually cold. The NB Building Code recommends **R-20 to R-24** for basement walls, but many homes fall far short of this.

Finally, consider your **windows and doors**. Even with excellent insulation, single-pane windows or poorly sealed door frames create radiant cold surfaces and air infiltration points that make nearby spaces uncomfortable regardless of air temperature.

The good news is that most of these issues are fixable, and **NB Power's home energy efficiency programs** and the **Canada Greener Homes Grant** (up to $5,600 in rebates) can offset a meaningful portion of the upgrade costs.

Getting a professional energy audit — which NB Power subsidizes — gives you a prioritized roadmap rather than guesswork.

For guidance on identifying where your home is losing heat and which upgrades will deliver the best comfort and energy savings, the professionals listed on **New Brunswick Insulation** can assess your specific situation and recommend the right solution.

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

- Arctic Fox Construction Inc.
- Thirty Four Renovations
- 3Tone Construction Ltd
- Gionetterenovations
- moose luxury painting

View all contractors ?

Q6

What causes ice dams on New Brunswick homes and how does insulation help? | Insulation IQ?

Ice dams are one of the most visible and destructive consequences of poor attic insulation, and they're a common sight across New Brunswick during and after the heavy winter storms that regularly hit Moncton, Fredericton, Saint John, and the Miramichi. Understanding what creates them — and why insulation is the real solution — can save homeowners thousands of dollars in roof and interior damage.

An **ice dam** forms when heat escaping from the living space below warms the underside of a snow-covered roof deck. The snow at the upper portion of the roof melts and flows down toward the eaves. When that meltwater reaches the eaves — which extend beyond the heated envelope of the house and remain at outside temperatures — it refreezes into a wall of ice. As more meltwater accumulates behind this ice barrier, it backs up under shingles, around flashings, and eventually into the wall cavity or ceiling, causing water staining, mould growth, insulation damage, and structural deterioration.

The root cause is almost always **insufficient attic insulation combined with inadequate air sealing**. When the attic floor lacks proper insulation — the current New Brunswick recommendation is **R-50 to R-60** for Climate Zone 6 — heat from the living space bleeds through the ceiling, warms the attic air and roof sheathing unevenly, and sets the melt-and-refreeze cycle in motion. Even if a homeowner has some insulation, **bypasses around pot lights, attic hatches, and ceiling penetrations** allow warm air to jet directly into the attic, creating hot spots on the roof deck that are particularly prone to ice dam formation.

Proper soffit-to-ridge ventilation is the other half of the equation. An adequately ventilated attic allows cold outside air to flush through continuously, keeping the entire roof deck at a uniform, near-outside temperature. This eliminates the differential melting that creates dams in the first place. Ventilation baffles — channels installed between roof rafters to maintain an unobstructed airflow path from soffit vents to the ridge — are essential, especially when insulation is being increased.

From an insulation standpoint, addressing ice dams typically involves two parallel steps. First, **air sealing all ceiling penetrations** before adding insulation — this is the most important step, because no amount of bulk insulation fully compensates for uncontrolled air leakage. Second, **bringing attic insulation up to code minimums**, typically by adding blown cellulose or blown fibreglass on top of existing material. In a typical New Brunswick home, upgrading from R-20 to R-50 in the attic can cost $1,500 to $3,500 depending on attic size and access, and the impact on ice dam formation is usually dramatic.

For homes where ice dams have already caused damage, the repair sequence matters. Water-damaged insulation must be removed and replaced — wet fibreglass batts lose most of their R-value and can harbour **mould** — before new material is installed. Any mould on sheathing should be addressed by a qualified professional before the attic is re-insulated.

It's worth noting that de-icing cables installed along the roof edge are a temporary symptom-management tool, not a solution. They address the ice after it forms rather than eliminating the heat loss that creates it, and they consume electricity continuously throughout winter.

The **Canada Greener Homes Grant** offers rebates up to $3,500 specifically for attic insulation upgrades, and **NB Power's Total Home Energy Savings** program can provide additional incentives when improvements are bundled together. A pre-retrofit energy audit is required to access most grant programs and typically costs $150 to $400, with NB Power subsidizing a portion.

If ice dams are a recurring problem on your roof, it's a clear signal that your attic needs professional attention. The qualified insulation contractors listed through **New Brunswick Insulation** can assess your attic's current condition and provide the air sealing and insulation work needed to eliminate ice dams for good.

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

- moose luxury painting
- 3Tone Construction Ltd
- Brunswick insulation & roofing
- Thirty Four Renovations
- Gionetterenovations

View all contractors ?

Q7

How do I fix wet or water-damaged insulation in my Fredericton basement? | Insulation IQ?

Wet insulation in a Fredericton basement is not a problem you can simply dry out and leave in place. Unlike most building materials, **fibreglass batt insulation loses the vast majority of its thermal performance when saturated**, and it does not recover fully even after drying. More importantly, moisture trapped within wall or floor cavities creates ideal conditions for **mould growth**, wood rot, and long-term structural deterioration — all of which are significantly more expensive to remediate than the insulation itself.

The first step before any repair work is **identifying and eliminating the moisture source**. Wet basement insulation in Fredericton typically originates from one of three places: **foundation wall seepage** (water pushing through poured concrete or block walls during the spring thaw or heavy rain events), **condensation** forming on cold surfaces when warm humid air contacts the cool foundation, or **plumbing leaks** from pipes running through or near the insulated cavity. Until the moisture source is addressed, replacing insulation is futile — you'll be doing the same job again within a year or two.

Inspect the exterior drainage situation. In Fredericton's freeze-thaw climate, soil grading that directs water toward the foundation is extremely common, particularly around older homes where the ground has settled over decades. Downspout extensions, regrading, and proper window well drainage resolve a large proportion of basement seepage problems before any interior work is needed.

Once the moisture source is controlled, **removal of the damaged insulation** is the next step. For fibreglass batts on basement walls, this typically means pulling out the existing material, disposing of it (wet fibreglass cannot be recycled), and thoroughly inspecting the framing behind it. Any wood showing dark discolouration, soft spots, or visible mould growth should be treated with an appropriate fungicide and allowed to dry completely — typically requiring several weeks with a dehumidifier running in the space — before new insulation is installed.

The **replacement insulation choice matters significantly in a basement context**. Traditional fibreglass batts installed in stud wall cavities are actually a poor choice for basement walls in New Brunswick's climate because they allow moisture movement and provide no drainage plane if water does enter the wall system again. Current best practice — and what the **NB Building Code** increasingly encourages — is to use **rigid foam board** (extruded polystyrene or polyisocyanurate) directly against the foundation wall, which creates a thermal break and is inherently resistant to moisture. A typical basement wall in New Brunswick should achieve **R-20 to R-24**, which can be achieved with 3 to 4 inches of XPS foam followed by a framed wall with additional batt insulation.

Spray polyurethane foam applied directly to the foundation wall is another excellent option for basement walls that have recurring moisture issues, as closed-cell spray foam creates both an air barrier and a vapour barrier

simultaneously while achieving R-values around **R-6 to R-7 per inch**. For a full basement in Fredericton, spray foam application to walls typically runs $2,500 to $5,000 depending on square footage and conditions.

For **basement floors**, wet carpet or foam underlayment should be removed entirely. If concrete slab insulation is desired — which greatly improves comfort on above-grade floors — rigid foam panels topped with sleepers and subfloor panels are the appropriate solution, providing thermal performance while tolerating any residual moisture vapour transmission through the slab.

During and after repairs, running a **dehumidifier** in the basement through the humid summer months is essential for any New Brunswick home. Fredericton summers bring significant humidity, and basement spaces that are cool and unventilated concentrate moisture quickly.

If the damaged area is larger than a few square feet or if you've discovered visible mould on the framing, it's worth engaging a professional for the remediation phase. The **Canada Greener Homes Grant** and **NB Power** programs may offer partial rebates on the re-insulation work once remediation is complete and the space is dry.

For professional guidance on basement insulation repair and moisture management in Fredericton, the contractors listed on **New Brunswick Insulation** can assess your specific situation and recommend the right approach.

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

- 3Tone Construction Ltd
- Gionetterenovations
- Brunswick insulation & roofing
- Thirty Four Renovations
- Arctic Fox Construction Inc.

View all contractors ?

Q8

Can old insulation contain asbestos in a New Brunswick home built before 1990? | Insulation IQ?

Yes — and this is a question that every New Brunswick homeowner with an older property should take seriously. **Asbestos-containing insulation materials were widely used in Canadian construction from the 1930s**

through the late 1980s, and New Brunswick is no exception. Homes built or renovated before 1990 in Fredericton, Saint John, Moncton, Bathurst, and communities throughout the province may contain one or more forms of asbestos insulation, depending on the construction period and original builder practices.

The most notorious product is **Zonolite attic insulation**, a vermiculite-based loose-fill insulation that was sold under various brand names across Canada. Zonolite was manufactured primarily from ore mined at Libby, Montana, which was contaminated with **tremolite asbestos** — one of the most hazardous asbestos fibre types. If your New Brunswick home has a grey, pebble-like, accordion-shaped loose fill in the attic that was installed before the early 1990s, there is a high probability it contains asbestos. Health Canada and the US EPA both advise treating all vermiculite attic insulation as if it contains asbestos until proven otherwise. **Do not disturb it, sweep it, or attempt to remove it yourself.**

Beyond vermiculite, **pipe and duct insulation** is another major concern in older New Brunswick homes. Asbestos-containing wrap insulation was applied extensively around heating pipes, boilers, and hot water systems, particularly in homes with older steam or hot water radiator systems. This material appears as a grey or white corrugated wrap, sometimes wrapped with canvas or painted over. As it ages and becomes friable (crumbly), it releases fibres into the living environment.

Spray-applied insulation and fireproofing used in some commercial and multi-unit residential buildings of the 1960s and 1970s also commonly contained asbestos. Homeowners who purchased converted buildings or older apartment units in Saint John or Fredericton's heritage districts should be particularly aware of this.

How to determine if your insulation contains asbestos: The only reliable method is laboratory analysis. You cannot identify asbestos by sight, smell, or feel. A certified asbestos assessor will take a small, carefully contained sample and submit it to an accredited laboratory — results typically come back within 2 to 5 business days. In New Brunswick, sampling and testing through a qualified professional typically costs $200 to $500 depending on the number of samples required.

If asbestos is confirmed, you have two general options depending on the condition of the material. **Encapsulation** — sealing the material in place so it cannot release fibres — is sometimes appropriate for asbestos insulation that is in good condition and not being disturbed. This is common for intact pipe wrap insulation that doesn't need to be moved. **Full abatement** (removal) is required when material is damaged, friable, or when renovation work will disturb the area. Asbestos abatement in New Brunswick must be performed by **licensed abatement contractors** following the regulations set out under the **New Brunswick Occupational Health and Safety Act** and its associated regulations, which govern containment, personal protective equipment, air monitoring, and waste disposal.

For homeowners undertaking renovations — adding new insulation, finishing a basement, or opening walls — **asbestos testing before any work begins is not just advisable, it is legally required** in New Brunswick for any demolition or renovation work on buildings of suspect vintage. Disturbing asbestos-containing material without proper controls is a serious health and legal risk.

The **Government of Canada** previously offered a **Vermiculite Insulation Removal Program** through NRCan for qualifying homeowners, and some energy efficiency grant programs allow for asbestos remediation costs to be bundled with subsequent insulation upgrades. It's worth checking current NB Power and federal program guidelines to understand what financial assistance may be available.

If you suspect your older New Brunswick home may contain asbestos insulation, don't guess — get it tested before any renovation work proceeds. The insulation professionals listed on **New Brunswick Insulation** can connect you with qualified assessors and abatement specialists who understand the provincial regulatory requirements.

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

- Gionetterenovations
- Brunswick insulation & roofing
- Arctic Fox Construction Inc.
- Thirty Four Renovations
- moose luxury painting

View all contractors ?

Q9

What should I do about mould on insulation in my Moncton attic? | Insulation IQ?

Finding mould in your Moncton attic is alarming, but it's also one of the most common attic problems in New Brunswick — and it's almost always a symptom of a fixable underlying cause. The key is to address the mould and its root cause together, because treating the visible growth without eliminating what's feeding it will result in a return visit within one to two seasons.

Mould grows in attics when warm, humid air meets cold surfaces. In Moncton's climate, the mechanism is straightforward: humid air from the living space below finds its way into the attic through gaps around pot lights, bathroom exhaust fans, ceiling penetrations, and the attic hatch. Once in the attic, that warm moisture-laden air contacts the cold underside of the roof sheathing — which in winter sits just above freezing — and the moisture condenses. Repeated condensation cycles create persistently damp wood, and mould follows within weeks. **This is not a ventilation problem first — it is an air leakage problem first.** Simply adding roof vents to a leaky attic pulls in even more warm air from below and often makes things worse.

Before any remediation work begins, a thorough **attic inspection** is needed to identify the air bypass locations, assess the extent of mould growth, evaluate the condition of existing insulation, and check that bathroom and kitchen exhaust fans actually vent through the roof rather than terminating inside the attic (an unfortunately common situation in older Moncton homes and a massive contributor to attic mould).

For the **mould remediation itself**, the approach depends on the extent of growth. Surface mould on sheathing that covers less than 10 square feet is generally considered manageable without professional abatement, though most homeowners wisely hire professionals anyway given the health implications. Mould covering larger areas, or any situation where black or greenish-black growth is visible across multiple roof panels, warrants a **professional mould remediation contractor**. In New Brunswick, while there is no provincial licensing specifically for mould remediation (unlike asbestos), reputable contractors will follow **Health Canada's guidance on indoor mould** and the **IICRC S520 standard** for mould remediation.

Remediation typically involves containment of the attic space, HEPA vacuuming to remove loose spores, wire brushing or sanding affected sheathing, application of an appropriate fungicide (commonly borate-based solutions or commercial antimicrobial treatments), and in severe cases, replacement of badly damaged sheathing sections. After remediation, the treated surfaces are typically sealed with an encapsulant.

Mould-affected **fibreglass batt insulation** between attic joists cannot be cleaned and must be removed entirely. Fibreglass is not a food source for mould but it traps moisture and organic debris that mould will colonize. All contaminated insulation should be bagged, sealed, and disposed of as per Moncton's waste guidelines.

With the attic clean and dry, the **permanent fix requires air sealing before new insulation is installed.** Every penetration from below — pot lights, exhaust fan housings, junction boxes, plumbing and wiring chases — needs to be sealed with acoustical caulk or spray foam. The attic hatch must be weatherstripped and insulated. This work can be tedious but it is the single most important thing you can do to prevent recurrence. **Bathroom exhaust fans must be ducted in rigid insulated pipe to a proper exterior roof cap**, not flexible uninsulated duct that may terminate mid-attic.

Once air sealing is complete, new attic insulation should be installed to bring the assembly up to the **R-50 to R-60** target appropriate for New Brunswick's Climate Zone 6. Blown cellulose or blown fibreglass are both appropriate for attic floor applications. Adequate **soffit-to-ridge ventilation baffles** must be maintained at every rafter bay so that air can move freely from the eaves to the ridge, keeping the roof deck dry and at uniform temperature.

From a cost perspective, professional attic mould remediation in Moncton typically runs $1,500 to $4,000 depending on severity and attic size, with re-insulation adding $1,500 to $3,500 on top. The **Canada Greener Homes Grant** and **NB Power** efficiency programs offer rebates that can offset a portion of the insulation upgrade costs, though grant programs do not cover remediation work directly.

For qualified help addressing attic mould and insulation in Moncton, the experienced professionals listed on **New Brunswick Insulation** understand both the remediation and the building science sides of this problem.

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

- 3Tone Construction Ltd
- Thirty Four Renovations
- moose luxury painting
- Brunswick insulation & roofing
- Arctic Fox Construction Inc.

View all contractors ?

Q10

How do I tell if animals have damaged my attic insulation in NB? | Insulation IQ?

Animal intrusion is one of the most destructive and frequently overlooked causes of insulation failure in New Brunswick homes. Squirrels, raccoons, mice, bats, and starlings all find attic spaces attractive year-round — particularly during our harsh winters — and the damage they leave behind is far more serious than most homeowners realise. The good news is that with careful inspection, the signs are usually unmistakable.

The most obvious indicator is **visible nesting material**. Animals tear apart fibreglass batts and loose-fill cellulose to create warm nesting pockets, leaving behind shredded clumps that are displaced far from their original position. Blown-in insulation is especially vulnerable because animals burrow through it easily, creating tunnels and voids that destroy its thermal continuity. If your attic floor looks lumpy, uneven, or has obvious depressions, animal activity is a strong suspect.

Droppings and urine staining are critical warning signs that go well beyond aesthetics. Rodent droppings are small, dark, and pellet-shaped, often concentrated around nesting areas or along rafters where animals travel. Raccoon latrines — areas where they repeatedly defecate in one spot — produce larger droppings and extremely strong ammonia odours. Urine soaks deep into cellulose and fibreglass, and both the odour and the microbial contamination can spread through your home's air supply. Any insulation that has been urinated on has lost R-value in the saturated zone and presents a health risk that goes beyond insulation performance.

Odour alone is a reliable early indicator. A persistent musky, ammonia-heavy, or decomposing smell coming from ceiling fixtures, attic hatches, or upper-floor rooms often points to active or recent animal occupation before any visual inspection has been done. In New Brunswick homes with older, naturally drafty construction — common in older neighbourhoods of Fredericton, Moncton, and Saint John — odours from attic spaces can migrate through light fixtures, plumbing chases, and ceiling cracks.

Entry points and structural damage around the attic perimeter tell the story of how animals got in. Look for chewed wood at soffit edges, torn or bent venting screens, displaced roof shingles near the ridge, or gaps around pipe penetrations. Squirrels and mice can enter through openings as small as a quarter; raccoons need about the diameter of a softball but will aggressively enlarge existing gaps. If you find entry points, assume the interior has been compromised until proven otherwise.

Heat loss patterns can confirm damage even when direct visual inspection is limited. An infrared camera scan — increasingly offered by energy auditors and insulation contractors throughout NB — will reveal cold voids in the insulation plane where material has been displaced or compressed. NB Power's Home Energy Assessment program can include thermal imaging that makes animal damage zones immediately visible as dark (cold) patches against the warm ceiling plane.

Attic inspection safety deserves emphasis. Before entering a confined attic space, wear an N95 or P100 respirator — raccoon roundworm eggs (Baylisascaris procyonis) can become airborne when droppings are disturbed, and hantavirus is associated with rodent waste. Disposable coveralls and gloves are strongly recommended. If you encounter active nesting with young animals or a bat colony, contact a licensed wildlife removal professional before touching anything.

Once an animal problem is confirmed, the remediation process typically involves: professional wildlife removal and exclusion to seal all entry points, removal and safe disposal of all contaminated insulation, disinfection and deodorising of the attic structure, and then re-insulation to restore NB Building Code minimums — currently **R-50 for attics** in Climate Zone 6. The cost of contaminated insulation removal and reinstallation in a typical NB home typically runs $2,000–$5,500 depending on attic size, extent of contamination, and insulation type selected.

Homeowners insurance in New Brunswick may cover animal damage remediation under certain policy riders, though this varies significantly by provider and typically excludes gradual rodent damage. Review your policy carefully and photograph everything before starting remediation.

If you suspect animal damage but aren't certain about scope, connect with a qualified insulation specialist through **New Brunswick Insulation** or the **New Brunswick Construction Network** to arrange a proper attic assessment before the damage worsens.

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

- 3Tone Construction Ltd
- Arctic Fox Construction Inc.
- Thirty Four Renovations
- moose luxury painting
- Brunswick insulation & roofing

View all contractors ?

Q11

Why are some rooms in my New Brunswick home colder than others? | Insulation IQ?

Uneven room temperatures are one of the most common comfort complaints in New Brunswick homes, and insulation deficiencies are among the leading causes — though the full answer is almost always multi-layered. Understanding the specific reasons rooms feel cold while others stay comfortable helps you target the right fix and avoid spending money on the wrong solution.

Thermal bypasses and air leakage are frequently the root cause behind rooms that feel cold even when the thermostat is set high. An air bypass is any gap, crack, or penetration that allows warm interior air to escape or cold exterior air to infiltrate. These are not always insulation problems per se, but they make insulation ineffective. Common bypass locations in New Brunswick homes include: behind knee walls in cape-style houses, around pot lights in insulated ceilings, at the top plates of exterior walls where they meet the attic, at rim joists in basements, and around pipe and electrical penetrations. A room above an unheated garage is especially prone to these issues since the floor assembly separating conditioned space from the cold garage is often poorly air-sealed.

Inadequate or missing insulation in specific zones explains many cases of uneven temperatures. Rooms at the ends of a house — particularly corners — have more exterior wall area relative to floor space, meaning more surface through which heat can escape. If your insulation was installed inconsistently, corners and end rooms may have received less coverage or may have had batts compressed or improperly fitted around obstructions like electrical boxes. Wall cavities in older Fredericton or Saint John homes built before the 1970s were commonly left uninsulated entirely, since wall insulation was not standard practice.

Cold rooms over unheated spaces are a specific pattern worth recognising. If your coldest room sits directly above an unheated basement, crawl space, or garage, the floor assembly is acting as the primary thermal boundary — and if it lacks adequate insulation (minimum **R-20 to R-28** for floors over unheated spaces in Climate Zone 6), cold will radiate up through the floor regardless of how warm the walls and ceiling are. This explains why residents in Moncton split-entries or raised bungalows often find the main-floor rooms over the garage feel cold even when the rest of the house is comfortable.

Window and door quality plays a role that is often mistaken for insulation failure. A room with older single-pane or early-generation double-pane windows will feel dramatically colder due to radiant heat loss and cold air convection currents along the glass, even if the surrounding insulation is perfectly adequate. The NB Building Code now requires windows meeting Energy Star zone C minimums for new construction, but older homes throughout the province still carry original single-pane windows that severely underperform. Standing near a cold window in January creates a perception of cold air even when the room temperature is technically adequate.

HVAC distribution imbalances are a heating system issue often confused with insulation problems. If certain rooms are on long duct runs, on upper floors served by a single furnace zone, or have been added as additions without proper duct sizing, they may simply not receive enough conditioned air regardless of how well insulated they are. A room that is consistently cold even in milder weather — not just during extreme cold snaps — is more

likely a duct balance issue than an insulation problem.

Cathedral ceilings and vaulted rooms are a specific vulnerability. These assemblies have limited cavity depth for insulation, making it difficult to achieve the R-50 attic target required in Climate Zone 6 without spray foam or high-density products. A room with a cathedral ceiling in a home built before 2010 may be insulated to only R-20 or R-28, which is noticeably inadequate during January cold snaps when temperatures in Fredericton, Edmundston, or Campbellton drop well below -20°C.

Diagnosing the specific cause matters because the solutions differ significantly in cost and scope. Air sealing alone can cost $800–$2,000 and resolve a significant portion of comfort issues. Adding insulation to an attic with insufficient coverage costs $1,500–$3,500 for a typical home. Addressing a floor over a garage or insulating wall cavities by injection can run $2,000–$6,000 depending on scope.

NB Power's Home Energy Assessment ($200, rebated back at completion) includes infrared scanning and blower door testing that will definitively identify where your cold zones originate. The Canada Greener Homes Grant provides up to $5,600 toward eligible upgrades.

For a structured diagnosis and accurate quotes in your area, **New Brunswick Insulation** and the **New Brunswick Construction Network** connect homeowners with experienced local professionals who understand how NB's climate affects building performance.

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

- Brunswick insulation & roofing
- Arctic Fox Construction Inc.
- Thirty Four Renovations
- moose luxury painting
- Gionetterenovations

View all contractors ?

Q12

Can I repair insulation myself or should I hire a contractor in Miramichi NB? | Insulation IQ?

It's a fair question, and the honest answer depends heavily on what kind of repair you're dealing with. Some insulation repairs in a Miramichi home are genuinely accessible to a confident DIYer; others are categorically not — either because of health hazards, technical complexity, or the risk of making things significantly worse. Knowing which category your repair falls into before you climb into the attic can save you considerable money and protect your health.

What homeowners can reasonably do themselves includes relatively simple tasks like adding loose-fill insulation to an accessible attic that is clean, dry, and free of contamination. If your attic currently sits at R-20 and you want to bring it up to the NB Building Code minimum of **R-50 for Climate Zone 6**, topping up with blown-in cellulose or fibreglass is genuinely achievable for a physically capable DIYer. Big-box rental centres in Moncton and Fredericton offer blower machine rentals (often free with a minimum bag purchase), and cellulose costs roughly $0.40–$0.65 per square foot installed by a professional — but DIY material-only costs can be 30–50% less if you're comfortable doing the labour. Replacing torn or displaced fibreglass batts in an accessible basement rim joist is similarly manageable if you can identify the correct R-value for the location (R-20 minimum for rim joists in NB).

Basic air sealing — caulking around electrical boxes, sealing plumbing penetrations with acoustic sealant, applying weatherstripping around attic hatches — is within DIY reach and often produces dramatic comfort improvements for under $200 in materials.

Where DIY quickly becomes inadvisable starts with any repair involving **contamination**. If your attic insulation has been exposed to water damage, mould growth, rodent droppings or urine, or raccoon latrines, the removal phase requires proper personal protective equipment including P100 respirators, disposable coveralls, and sealed disposal bags. Raccoon roundworm (Baylisascaris procyonis) is a genuine health risk — the microscopic eggs survive on surfaces for years and can cause serious neurological disease in humans. Hantavirus from rodent waste is a concern in attic spaces throughout New Brunswick. Without proper equipment and technique, disturbing contaminated insulation is more dangerous than leaving it in place.

Spray polyurethane foam (SPF) is not a DIY product in any meaningful sense. Two-component closed-cell or open-cell spray foam requires training, proper respiratory protection (organic vapour respirators with P100 particulate filters at minimum, and ideally supplied-air respirators during application), and careful mixing ratios to avoid off-ratio foam that off-gasses isocyanates for weeks. Small two-component kits (Handi-Foam and similar) are marketed to consumers but are only appropriate for very limited air sealing applications like rim joists or small gaps — not for filling wall cavities or insulating entire assemblies.

Attic access and working conditions in Miramichi-area homes are often more challenging than they appear from below. Many attics in older homes have minimal clearance, irregular joist spacing, unboarded floors, and electrical wiring running through the insulation plane. Falls through drywall ceilings are a real hazard, and a single misplaced step can cause hundreds of dollars in ceiling repair. If your attic has limited walking space, low pitch, or no proper

boarding, hiring a contractor who works in these conditions regularly is a sound investment.

Cost comparison for Miramichi puts professional insulation repair work in the range of $75–$120 per hour for labour, with most attic top-up jobs running $1,200–$3,500 for a complete upgrade including labour and materials. If you're eligible for NB Power rebates — which require a pre- and post-assessment through the Home Energy Assessment program — professional installation may be a condition of rebate approval. The **Canada Greener Homes Grant** similarly requires professional installation by a registered contractor for most eligible upgrades, meaning DIY work won't qualify you for up to $5,600 in grant funding.

The permit question is also relevant: in New Brunswick, spray foam work in certain configurations may require a building permit under the NB Building Code, particularly in new construction or significant renovation contexts. Purely remedial insulation top-up in an existing attic typically does not require a permit, but it's worth confirming with the City of Miramichi if you're uncertain.

For contamination removal, spray foam applications, wall cavity injections, or any repair that involves health hazards or complex building science considerations, hiring a qualified contractor is the right call. For **New Brunswick Insulation** professionals serving the Miramichi area, the **New Brunswick Construction Network** directory connects you with vetted local tradespeople who can assess your specific situation and quote accurately.

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

- Brunswick insulation & roofing
- Thirty Four Renovations
- Arctic Fox Construction Inc.
- 3Tone Construction Ltd
- Gionetterenovations

View all contractors ?

Q13

What causes frost buildup in attics during New Brunswick winters? | Insulation IQ?

Attic frost is one of the more alarming discoveries a New Brunswick homeowner can make — and it's more common here than in most of Canada, for good reason. Our climate routinely delivers the combination of conditions that makes frost formation almost inevitable in poorly performing attic assemblies: cold outdoor temperatures, high indoor humidity, and rapidly fluctuating weather patterns that bring freeze-thaw cycles throughout the winter. Understanding the mechanics of how frost forms is essential to fixing it properly.

The core mechanism is air and moisture intrusion, not simply cold temperatures. Warm, humid interior air from your living space finds its way into the attic through small gaps in the ceiling plane — around pot lights, at the top of partition walls, through plumbing and electrical penetrations, around attic hatches, and at any seam where the vapour barrier has been punctured or was never properly installed. When this warm, moisture-laden air contacts the underside of cold roof sheathing or cold rafters in January, it reaches its dew point and the moisture condenses — then freezes into frost crystals. On a particularly cold night in Fredericton or Campbellton, you can accumulate a visible white coating on roof sheathing within hours.

Bathroom and kitchen exhaust fans venting into attic spaces are one of the single most frequent causes of severe attic frost problems in New Brunswick homes. NB Building Code and national standards require all exhaust fans to vent directly to the exterior, but in countless older homes — and even some more recent renovations — the flexible duct from the fan terminates in the attic space rather than exiting through the roof or a soffit cap. A single bathroom fan running twice daily deposits enormous quantities of moisture directly into the attic air, producing the exact conditions for chronic frost buildup. Check this first: it's easy to diagnose and relatively inexpensive to fix.

Inadequate or missing vapour barriers compound the problem significantly. The NB Building Code (aligned with National Building Code requirements for Climate Zone 6) requires a **vapour barrier on the warm side of insulation** — typically 6-mil polyethylene — in all new construction ceilings. In older homes, this barrier may be missing entirely, degraded, or riddled with penetrations from decades of renovations. Without an intact vapour barrier, moisture migration from the conditioned space into the attic assembly is essentially unrestricted.

Insufficient attic ventilation is often blamed for frost but is more accurately described as a contributing factor rather than the primary cause. Proper attic ventilation — typically 1:150 of attic floor area using balanced soffit and ridge venting — does help remove moisture-laden air once it has entered the attic space. But if you have massive air leakage from below, no amount of ventilation will keep pace with the moisture input. Frost-heavy attics that show adequate ventilation ratios almost universally also have significant air leakage at the ceiling plane.

Blocked or insufficient soffit venting is a secondary ventilation problem specific to New Brunswick homes with deep insulation. If blown-in insulation has drifted toward the eaves and is covering soffit vents, air circulation from soffit to ridge is blocked, creating stagnant cold zones near the eaves where frost preferentially accumulates. Baffles (rafter ventilation channels) installed before insulation is blown in should maintain a minimum 2-inch airway from soffit to attic space, but they are missing in many homes throughout the province.

The consequences of unaddressed attic frost are serious and progressive. When frost melts during a January or February thaw, the liquid water saturates the attic insulation, dramatically reducing its R-value — potentially from **R-50 down to R-10 or less** when wet. The water can also saturate roof sheathing, leading to wood rot, mould growth, and structural degradation. Repeated freeze-thaw cycles accelerate this process. Homeowners in Moncton, Saint John, and the Saint John River Valley area are particularly exposed to this pattern given the frequency of mid-winter temperature swings that push well above zero for days at a time before dropping back to -15°C or below.

The remediation sequence matters: air sealing must come before adding insulation. If you add more blown-in insulation over an attic with significant air leakage, you are simply adding more thermally effective material for moisture to saturate when the frost melts. The correct repair sequence is: identify and terminate any exhaust fans venting into the attic, air-seal all penetrations at the ceiling plane, repair or install vapour barrier where accessible, confirm soffit baffles are installed and unobstructed, then add insulation to target levels.

NB Power's Home Energy Assessment identifies air leakage through blower door testing and thermal imaging, which locates ceiling bypass zones precisely. Repair costs vary but air sealing a typical attic ceiling in New Brunswick runs $800–$2,500, with insulation upgrades adding $1,500–$4,000 for a complete attic assembly.

For a proper diagnosis of your specific attic frost situation, **New Brunswick Insulation** and the **New Brunswick Construction Network** can connect you with professionals experienced in NB climate conditions.

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

- 3Tone Construction Ltd
- moose luxury painting
- Arctic Fox Construction Inc.
- Thirty Four Renovations
- Gionetterenovations

View all contractors ?

Q14

How do I deal with insulation that has been contaminated by raccoons in NB? | Insulation IQ?

Raccoon contamination is among the most serious insulation problems a New Brunswick homeowner can face, and it demands a careful, methodical approach. Raccoons are intelligent, persistent, and common throughout the province — from suburban Moncton and Fredericton to rural properties near Miramichi and Woodstock. When they establish themselves in an attic, the damage they leave behind creates both a significant health hazard and a complete insulation failure that cannot be remediated by simply adding new material on top.

The health hazard must be addressed first, before any remediation planning. Raccoon feces frequently contain the eggs of *Baylisascaris procyonis*, a roundworm parasite whose larvae can cause severe and potentially fatal neurological disease in humans if accidentally ingested. The eggs are microscopic, extraordinarily durable — surviving in soil or on surfaces for years — and become airborne when dried droppings are disturbed. This is categorically different from mouse or squirrel contamination. Anyone who has spent time in a raccoon-contaminated attic without proper respiratory protection and who develops unexplained neurological symptoms should seek immediate medical attention and disclose the exposure history.

Do not enter a confirmed raccoon-contaminated attic without proper PPE. This means a P100 full-face respirator (not a dust mask or N95), disposable Tyvek coveralls, double-layered nitrile gloves, and rubber boots that can be fully decontaminated. All PPE must be treated as contaminated waste when you exit the space. The stakes here are high enough that most homeowners should strongly consider hiring a professional remediation contractor for the removal phase rather than undertaking it themselves.

Step one is wildlife exclusion — confirming that all raccoons have been removed from the attic before remediation begins. In New Brunswick, raccoons are protected under provincial wildlife regulations, and relocation of live-trapped animals must comply with Department of Natural Resources and Energy Development guidelines. Humane exclusion typically involves one-way door devices placed over entry points so raccoons can exit but not re-enter, left in place for 5–7 days before entry points are permanently sealed. This work should be completed by a licensed wildlife removal operator.

Complete removal of all contaminated insulation is non-negotiable. Unlike smoke or water damage where affected sections can sometimes be isolated, raccoon contamination spreads throughout the entire attic by airborne particle distribution from the latrine areas. Partial removal that leaves contaminated material in place will continue to present a health risk and odour problem indefinitely. All removed material must be double-bagged in heavy 6-mil poly bags, sealed, and disposed of according to your municipality's requirements — the City of Moncton, the City of Fredericton, and other NB municipalities classify this as potentially hazardous waste.

Disinfection of the structural attic surfaces follows removal. This involves treating all exposed wood surfaces — roof sheathing, rafters, top plates, any framing members — with an enzymatic cleaner or hospital-grade disinfectant, then allowing adequate drying time before new insulation is installed. Some contractors use a fogger-applied disinfectant to ensure penetration into sheathing grain and crevices. The goal is to eliminate viable parasite eggs and bacterial contamination from the attic structure itself, not just the removed insulation.

Permanent entry point sealing must be verified before re-insulation. Walk the perimeter of the attic space and the exterior roofline with a flashlight, looking for gaps at soffit junctions, openings around fascia boards, any location where framing members create penetrable gaps, and areas of rot that raccoons may have enlarged. All entry points should be closed with metal flashing, hardware cloth, or steel wool packed into gaps — never foam sealant alone, which raccoons will chew through. If a wildlife contractor has not already performed this step, do it now.

Re-insulation should restore the attic to current NB Building Code standards for Climate Zone 6: a minimum of **R-50 for attic spaces**. Blown-in cellulose is a popular choice for reinstallation as it settles into irregular attic geometries effectively and has good performance characteristics once dry and properly installed. Fibreglass blown-in is also common. Closed-cell spray foam for air sealing at the ceiling plane prior to blowing in loose fill is a worthwhile upgrade at this stage — since the attic is already cleared out, it's the best possible time to air-seal every ceiling penetration before replacing the insulation.

Costs for full raccoon remediation in a typical New Brunswick home typically range from $3,500 to $8,000 or more, depending on attic size, extent of contamination, access difficulty, and insulation product selected. This includes wildlife exclusion ($500–$1,500), removal and disposal of contaminated insulation ($1,000–$2,500), disinfection ($300–$600), and re-insulation to R-50 ($1,500–$3,500). NB Power and the **Canada Greener Homes Grant** do not cover contamination removal costs, but new insulation installation following remediation may qualify for rebates if an NB Power assessment is completed.

For professional referrals serving your area of New Brunswick, **New Brunswick Insulation** and the **New Brunswick Construction Network** directory can connect you with experienced contractors who handle contaminated insulation removal safely and restore your attic to full performance.

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

- Thirty Four Renovations
- Brunswick insulation & roofing
- moose luxury painting
- 3Tone Construction Ltd

- Arctic Fox Construction Inc.

View all contractors ?

Q15

Why is my energy bill so high even after insulating in a Bathurst NB home? | Insulation IQ?

Adding insulation is one of the most impactful upgrades you can make to a home in Bathurst, but it is surprisingly common to complete an insulation project and still see little improvement on your NB Power bill. The reason is almost always that insulation alone cannot solve an air leakage problem — and in an older Bathurst home, those two issues almost always coexist.

Insulation slows the movement of heat through solid materials by a process called conduction. However, a large portion of heat loss in most New Brunswick homes does not move through walls and ceilings by conduction at all — it moves through gaps, cracks, and penetrations by **convective air movement**. Insulation has almost no effect on air leakage. If your attic hatch is unsealed, if there are gaps around pot lights, if your rim joists were not air-sealed before being insulated, or if your electrical and plumbing penetrations were left open, outside air can bypass your new insulation entirely and bring your heating costs right back up.

In Climate Zone 6 (where all of New Brunswick sits), the combination of long heating seasons and cold winters magnifies every weakness in the building envelope. Bathurst winters regularly see January lows well below -20°C, and stack effect — the tendency of warm indoor air to rise and escape through the upper parts of a house while cold air is pulled in below — operates at full force during those months. Even a small unsealed gap near the top of a wall or at the attic floor level can drive surprising heat loss.

Common culprits in Bathurst homes include unsealed attic bypasses (spaces around interior wall top plates that allow warm air to flow directly into the attic), bathroom or kitchen exhaust fans that vent into the attic rather than outside, recessed pot lights installed directly in insulated ceilings with no air barrier, and **rim joist cavities** that were filled with batt insulation but never air-sealed. Rim joists are the band of framing that sits on top of your foundation wall, and they are one of the most significant sources of heat loss and cold-air infiltration in a typical NB basement.

Another possibility is that the insulation installed did not achieve the R-values you were promised. Blown-in attic insulation that was installed at the correct depth can settle over time, particularly if the attic has poor ventilation causing moisture fluctuations that compress the material. Batt insulation installed with gaps, compressions, or facing the wrong direction performs well below its rated R-value. The **NB Building Code** requires a minimum of R-

31 (effective) in ceilings for new construction in Zone 6, but many existing Bathurst homes still have R-20 or less in their attics.

Your NB Power bill history can give you clues. If consumption spiked in January and February but not in October or April, the problem is almost certainly air leakage combined with insufficient insulation at the attic level, since that is where stack effect is most intense. If your consumption is elevated year-round and you have central air conditioning, check whether your ductwork passes through unconditioned spaces — leaky ducts in an uninsulated crawlspace or attic can easily account for 20–30% of your total energy use.

The single most valuable step you can take is booking a **blower door test with a home energy audit**. A certified EnerGuide auditor will pressurize your home and use infrared imaging to identify every air leakage path. This audit is a prerequisite for accessing the **Canada Greener Homes Grant** (up to $5,600 for insulation and air sealing upgrades) and **NB Power's Home Energy Efficiency Program**, which offers rebates on air sealing and insulation. Audit costs in New Brunswick typically run $300–$500, but the grant reimburses up to $600 of that cost.

For most Bathurst homes built before 1990, the fix involves a combination of attic air sealing at the attic floor level, rim joist foam and seal in the basement, and verification that existing wall and ceiling insulation is performing as intended. Addressing air leakage before adding more insulation gives dramatically better results than simply piling on more batts.

If you are looking for qualified help assessing your home's thermal performance in the Bathurst area, the New Brunswick Insulation directory at New Brunswick Construction Network lists experienced insulation contractors who can identify exactly where your dollars are going.

Q16

How do I fix drafts around old windows in an insulated New Brunswick home? | Insulation IQ?

Drafts around windows are one of the most common and most frustrating comfort complaints in New Brunswick homes, particularly in older houses in cities like Fredericton, Saint John, and Miramichi where double-hung wood-framed windows from the 1960s through 1990s are still common. The good news is that most window drafts can be fixed without replacing the windows, and when addressed properly, the improvement in comfort and energy savings can be significant.

Understanding the source of the draft matters before you start applying caulk. **Window drafts come from two distinct sources**: air leakage through the window assembly itself (around the sash, through the glazing system, or via failed weatherstripping), and air leakage through the rough opening — meaning the gap between the window frame and the surrounding wall framing. These require different solutions.

For drafts through the window assembly, the primary fix is **weatherstripping replacement**. On older double-hung windows, the sash channels wear out over decades and no longer seal against the frame. Foam tape, V-strip bronze weatherstripping, or pile weatherstripping can be installed in the sash channel to restore the seal. Bronze V-strip is the most durable choice for New Brunswick's wide temperature swings — foam compresses and hardens after a few winters, while bronze holds its shape for decades. Expect to spend $10–$30 in materials per window for a DIY weatherstripping replacement.

For drafts coming through the **rough opening gap**, the situation is more involved. Every window is installed in a rough opening slightly larger than the window frame, and that gap must be filled with insulation and sealed with an air barrier. In older homes, this gap was often packed with fibreglass batts, which insulate against conducted heat but do nothing to stop air movement. Over time, the batts sag or shift, leaving uninsulated voids, and the inner and outer air barrier is often just a bead of caulk that has cracked and pulled away from the trim.

The correct fix for a rough opening draft involves carefully removing the interior window casing trim, inspecting the gap between the frame and framing, and either injecting **low-expansion spray foam** (never high-expansion, which can bow window frames out of square) or packing the gap tightly with a material that also acts as an air barrier. Low-expansion foam is ideal because it seals and insulates simultaneously. Once the foam has cured, reinstall the trim and apply a fresh bead of paintable caulk along every interior joint where trim meets wall and where trim meets window frame.

On the exterior, re-caulk the joint between the window flange (or brick moulding) and the exterior cladding. **Exterior caulk in New Brunswick should be rated for temperatures down to at least -40°C** and should be paintable if the window surround is painted. Polyurethane caulk outperforms latex in high-movement joints, which window

perimeters always are due to the seasonal expansion and contraction of wood framing.

Another overlooked source of drafts is the **interior window well itself** — the drywall or plaster returns that surround the window on the inside. Especially in walls with fibre or batt insulation, the interior of the wall cavity behind the window well can act as a conduit for cold air drawn down from the attic or up from the basement by stack effect. If resealing the window assembly and rough opening does not eliminate the draft, remove a section of the window well casing and inspect whether the insulation in the wall cavity above and below is continuous and air-sealed.

For windows on exterior walls that also show **condensation or frost on the glass**, this indicates the window glass or frame is too cold, which usually means the window itself has lost its thermal value (failed IGU seal in a double-pane unit) rather than just an air sealing problem. In those cases, the sash or entire window unit should be replaced. In Climate Zone 6, the **NB Building Code** requires windows with a minimum energy rating — a qualified installer can advise whether replacement makes more economic sense than continued repair.

Weatherstripping and caulking supplies are inexpensive — most homeowners can address 6–10 windows for well under $200 in materials. For homes where the rough opening gaps are extensive or where the windows are in difficult-to-access locations, professional air sealing contractors working in the Fredericton and Saint John area can complete this work efficiently, and it is eligible for reporting on an EnerGuide audit as part of a Canada Greener Homes Grant application. New Brunswick Insulation is a good starting point to find experienced contractors in your area.

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

- Brunswick insulation & roofing
- Thirty Four Renovations
- Arctic Fox Construction Inc.
- Gionetterenovations
- 3Tone Construction Ltd

View all contractors ?

Q17

What causes insulation to sag or fall out of basement walls in NB? | Insulation IQ?

Insulation falling or sagging out of basement walls is a very common problem in New Brunswick homes, and it is almost always a sign that the original installation method was inadequate for the conditions a basement presents. Understanding why it happens is the first step to fixing it properly and ensuring the replacement holds up for the long term.

The most frequent cause is **fibreglass batt insulation installed between basement wall studs without an adequate retainer**. Batts rely on friction — the slight oversizing of the batt relative to the stud cavity — to stay in place. In an above-grade wall, this works reasonably well because the wall is relatively dry and the studs remain dimensionally stable. Basements are different. Concrete and block foundation walls are **inherently damp environments**, and that moisture migrates into wood framing through condensation, capillary action, and vapour diffusion. When wood framing in a basement gets wet and then dries, it cycles through dimensional changes that gradually loosen the friction fit of the batt. After a few years of this, the batt hangs loose, slips down, and eventually falls to the floor.

Mould compounds the problem. Fibreglass itself does not support mould growth, but the paper facing on a kraft-faced batt absolutely does, and so does any wood or drywall the batt is in contact with. Once mould colonizes the back face of a batt, the fibres become matted and lose their loft, reducing the R-value and making the batt even more likely to fall out. In basements in cities like Moncton and Saint John, where groundwater tables can be high and existing drainage and waterproofing is often inadequate, this cycle plays out in almost every home with fibreglass batts between basement studs.

Another common cause is **improper vapour barrier placement**. In a basement wall, the vapour barrier should be on the warm-in-winter (interior) side of the insulation. When a poly sheet is installed between the concrete wall and the studs, or nowhere at all, the insulation ends up sandwiched between two surfaces that can trap moisture, promoting mould, rot, and the degradation of the batt's friction fit.

In older New Brunswick homes — particularly those built before the 1980s — basement insulation was sometimes simply stapled to the face of the studs rather than installed within the cavity. This stapled-face installation pulls away from the staples as the facing ages and the staples rust in the damp environment. Spray foam applied over top of it without addressing the underlying issue just conceals the problem temporarily.

Spray foam applied directly to a concrete or block wall (the continuous interior insulation approach) is the installation method least prone to sagging because it bonds mechanically to the substrate and has no batt to retain. Closed-cell spray foam at 2 inches provides approximately R-12 and doubles as a vapour retarder. This is the approach recommended by most building scientists for basements in Climate Zone 6. However, spray foam is

significantly more expensive than batts — typically $3.50–$6.00 per square foot installed in New Brunswick — and it is not a DIY product.

For homeowners who want to use rigid foam board as an alternative, **extruded polystyrene (XPS)** or **polyisocyanurate boards** cut to fit between studs and adhered or mechanically fastened to the concrete wall will not sag, provided they are properly fitted and the edges are foam-sealed. The key is ensuring there is no air gap between the back of the board and the concrete — an air gap allows convective circulation that undermines the thermal performance of the assembly.

Before replacing any fallen basement wall insulation, it is worth addressing the root cause. If the concrete wall is showing water staining, efflorescence (white mineral deposits), or active seepage, the water intrusion issue must be resolved first. No insulation system will perform adequately or remain in place in a wet basement. Interior drain tile systems, exterior waterproofing, or even improving grading and eavestroughs can reduce moisture loading enough to make a properly installed insulation system viable.

The **NB Building Code** does not mandate a specific insulation type for basement walls, but it does require that assemblies meet minimum effective R-values and that vapour control be handled appropriately. For existing homes undergoing renovation, the practical minimum for a Zone 6 basement wall is R-15 to R-20 effective. If you have sagging batts providing R-12 at best when new and considerably less now, you are almost certainly under-insulated as well as dealing with an installation failure.

Contractors listed through New Brunswick Insulation or the New Brunswick Construction Network can assess your basement conditions and recommend an insulation assembly that will actually stay in place and perform through the full range of a New Brunswick basement environment.

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

- moose luxury painting
- 3Tone Construction Ltd
- Brunswick insulation & roofing
- Gionetterenovations
- Arctic Fox Construction Inc.

View all contractors ?

Q18

Can missing insulation in one wall cause pipes to freeze in a Sussex NB home? | Insulation IQ?

Yes — a single wall cavity with missing or inadequate insulation is absolutely capable of causing pipes to freeze in a Sussex home, and it happens more often than homeowners expect. The mechanics of how this occurs are worth understanding, because the fix is straightforward once you know what you are dealing with.

Water supply pipes that run through exterior walls are in a thermally hostile location by design, and they depend entirely on the insulation in that wall cavity to keep them above freezing during a New Brunswick winter. Sussex sits inland, and the Kennebecasis River valley can produce cold snaps that push daytime highs well below -15°C and overnight lows toward -25°C or lower. At those temperatures, even a brief exposure to outdoor air temperatures through a gap in the insulation is enough to freeze a pipe.

The reason a single uninsulated or under-insulated wall cavity is so dangerous is **air convection**. When insulation is missing, the cold outer sheathing is only separated from the interior air by the stud cavity — an open column of air. Cold air is denser and sinks while warm air rises, creating a convective loop within the cavity. This loop pulls heat away from the pipe far faster than pure conduction through solid materials would. A wall with no insulation in one bay can expose a pipe inside that bay to conditions only a degree or two warmer than outside, which is completely insufficient when outdoor temperatures are in the -20s.

Rim joists are another critical location. In many Sussex homes built in the 1970s and 1980s, water supply lines run along the top of the basement wall near the rim joist before rising up into the home. Rim joist cavities that were never insulated or that had fibreglass batts fall out (a very common occurrence, as discussed in other answers) leave these supply lines directly exposed to cold air infiltrating through the rim joist gap. Pipes here can freeze even when the rest of the basement is reasonably warm, because cold outside air enters through the rim joist and pools near the floor of the first storey.

How to find the missing insulation is the practical question. In a finished home, you cannot see directly into wall cavities. However, several methods work well. First, feel the interior surface of exterior walls on the coldest day of the year — a wall cavity missing insulation will feel noticeably cold to the touch compared to an insulated wall beside it. Second, an **infrared thermal camera** used during a blower door test will show cold spots (blue or purple on the thermal image) corresponding to insulation voids or air leakage locations. Home energy auditors in the Sussex and Sussexvale area use this method routinely and can locate missing insulation without any destructive investigation.

If you already know which wall the frozen pipe is in, the solution depends on whether the wall is finished. In an unfinished basement or utility area, the fix is simple: stuff the stud cavity with cut-to-fit rigid foam board sealed at

the edges with spray foam, or inject blown-in insulation from the exterior through small holes drilled through the sheathing. **Blown-in dense-pack cellulose or fibreglass** is a widely used retrofit method that fills existing wall cavities without opening up the interior surface. A contractor drills a series of 2-inch holes in the exterior siding, fills each cavity, and patches the holes. This approach costs roughly $1.50–$3.50 per square foot of wall area in New Brunswick.

For accessible basement rim joists, the best fix is **closed-cell spray foam** applied to completely fill the cavity and create an air and vapour seal. This can be done as a targeted repair on the specific bay or bays near the pipe, and it takes only a few hours for a contractor to complete. Alternatively, cut-and-cobble 2-inch XPS board sealed with spray foam achieves nearly the same result at lower cost.

If the pipe has already frozen and you are dealing with a repair, be sure to address the insulation void as part of the repair — not just thaw the pipe and wait for it to happen again. Repeatedly freezing and thawing a pipe causes stress fractures that will eventually result in a burst.

Preventive steps while the insulation fix is in progress include leaving the cabinet doors under sinks open if the sink is on an exterior wall, and keeping the home heat above 15°C even during periods when the house is vacant. Sussex homes are sometimes left unheated during short trips in winter — this is a significant risk if any supply lines run through uninsulated exterior wall sections.

For homeowners dealing with recurring freeze issues or looking to assess whether other walls in the home have hidden insulation voids, New Brunswick Insulation and the New Brunswick Construction Network are good resources for connecting with qualified insulation contractors familiar with the specific construction patterns common in the Sussex area.

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

- Thirty Four Renovations
- 3Tone Construction Ltd
- Arctic Fox Construction Inc.
- Brunswick insulation & roofing
- Gionetterenovations

View all contractors ?

Q19

How do I check for insulation voids using a thermal camera in New Brunswick? | Insulation IQ?

Thermal imaging is one of the most powerful diagnostic tools available for assessing insulation performance, and New Brunswick's climate actually makes it an especially effective technique. The large temperature difference between indoors and outdoors during a NB winter creates strong thermal contrast that makes insulation voids easy to identify — provided the inspection is done under the right conditions and interpreted correctly.

How thermal imaging works for insulation inspection is straightforward in principle. An infrared camera does not see through walls. What it captures is the surface temperature of materials — the temperature of drywall, plaster, sheathing, or concrete as seen from the camera's position. When insulation is missing from a wall cavity, the drywall surface in that cavity cools down faster and to a lower temperature than the drywall over an insulated cavity beside it. On a cold New Brunswick day with the furnace running, an insulation void shows up on a thermal image as a distinctly cooler zone — blue or purple on the standard colour scale — against the warmer background of the insulated wall surface.

The most important condition for accurate thermal imaging is a **sufficient delta-T (temperature difference)** between inside and outside. Professional guidelines recommend a minimum of 10°C difference, but New Brunswick's climate regularly provides 20–30°C or more during January and February, which makes mid-winter the optimal time for this work in Moncton, Fredericton, Saint John, or anywhere else in the province. An inspection done on a mild autumn day with a 5°C difference will miss many voids that would be clearly visible in January.

Blower door depressurization greatly enhances the effectiveness of thermal imaging. By using a fan mounted in a door or window to depressurize the home to approximately 50 pascals below outside air pressure, the inspector forces outside air to move through any leakage paths at an accelerated rate. This dramatically amplifies the thermal signature of both air leakage and insulation voids, making small gaps visible that would be imperceptible under natural conditions. Every professional energy audit in New Brunswick that uses thermal imaging should be done in conjunction with a blower door test for this reason.

If you are doing a preliminary self-assessment with a consumer-grade thermal camera (cameras now attach to smartphones for $200–$400, or can be rented from some tool rental shops), follow these practical steps. First, **condition the house**: run the heating system normally for several hours before inspection so the interior temperature differential has stabilized. Aim to inspect on a day when outdoor temperatures are below -10°C. Walk along each exterior wall, scan from floor to ceiling, and look for patches that are visibly cooler than the surrounding wall surface. Pay particular attention to corners, areas around windows and doors, the band between the first and second floor, and anywhere pipes or wires penetrate from outside.

What you are likely to find in a typical older NB home includes: cold patches at the base of walls where rim joist insulation is missing or has fallen out, cool vertical bands corresponding to individual stud cavities where batts were never installed or have sagged, cold spots around electrical outlets and switch boxes on exterior walls (these are penetrations through the air barrier), and broad cold zones in attic access hatches that were never insulated. In attached garages, the wall and ceiling separating the garage from the living space is frequently under-insulated and will show up clearly.

Interpreting the images correctly requires some caution. Thermal bridges — areas where structural framing (studs, headers, joists) conducts heat more rapidly than the insulated cavities — appear cooler on thermal images even when insulation is correctly installed. Studs visible as regular vertical cool lines in a wall are normal and expected. What you are looking for is irregular cool patches, large cold zones, or areas where the pattern suggests an entire bay is uninsulated rather than just a stud.

For **attic inspections**, thermal imaging is best done from inside the attic looking down at the attic floor, or from the living space below looking up at the ceiling. Missing or thin insulation at the attic floor level — the most critical insulation location in a Climate Zone 6 home — shows up as warm patches in the ceiling seen from the attic in winter, as heat from below radiates through the thin spots. The **NB Building Code** requires effective R-31 or better in attic assemblies for new construction; many existing NB homes have R-12 to R-20, and thermal imaging can show which areas are worst.

For a formal audit that qualifies for the **Canada Greener Homes Grant** (up to $5,600 for insulation and air sealing) or **NB Power's Home Energy Efficiency rebates**, the thermal imaging must be conducted by a certified EnerGuide auditor. Audit fees in New Brunswick run $300–$500 for the pre-retrofit assessment, with up to $600 reimbursed through the Greener Homes program after upgrades are complete. The audit report documents insulation voids, air leakage rates, and prioritizes which upgrades will deliver the best return.

New Brunswick Insulation and the New Brunswick Construction Network can help you connect with insulation contractors and energy auditors who perform thermal imaging inspections across the province.

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

- Thirty Four Renovations
- moose luxury painting
- Arctic Fox Construction Inc.
- 3Tone Construction Ltd

- Brunswick insulation & roofing

View all contractors ?

Disclaimer: This guide is provided for informational purposes only by New Brunswick Insulation. It does not constitute professional advice. Always consult qualified, licensed contractors and your local building authority before starting any insulation project. Information is current as of April 5, 2026 and may change. Visit **newbrunswickinsulation.com** for the latest answers.