NEW BRUNSWICK INSULATION

Blown-In & Loose Fill

Blown-in cellulose, fibreglass, and dense-pack insulation for attics, walls, and enclosed cavities

18 Expert Answers from Insulation IQ

newbrunswickinsulation.com/construction-brain

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Q1

How many days should I allow for blown-in cellulose installation in a Moncton bungalow?

Most blown-in cellulose installations in a typical Moncton bungalow take just one day to complete, though the timeline depends on your specific project scope and existing attic conditions.

For a standard **attic-only cellulose top-up** (bringing existing R-20 to R-50/R-60), professional installers typically complete an 800-1,200 square foot bungalow in **4-6 hours**. This includes setup, blowing the cellulose, cleanup, and a final inspection. The actual blowing process is quite fast — a two-person crew can cover most residential attics in 2-3 hours once they're set up.

Dense-pack wall cellulose (drilling through exterior siding to fill wall cavities) takes longer — typically **1-2 full days** for a bungalow depending on the wall area and complexity. The crew needs to drill access holes every 16 inches, blow cellulose into each cavity at 3.5+ pounds per cubic foot density, plug the holes, and touch up the exterior. Brick or stone veneer adds time since drilling requires masonry bits and more careful hole placement.

Air sealing before cellulose installation can add **half a day to a full day** to your project timeline, but it's critical work that shouldn't be rushed. Sealing pot light housings, plumbing stacks, electrical penetrations, and the attic hatch properly takes time but provides 50% or more of your total energy savings. Many Moncton contractors offer this as a package with the cellulose installation.

Weather considerations matter in Moncton's Maritime climate. Cellulose installation should be avoided during active precipitation since the material can absorb moisture if the attic has any roof leaks. Late fall through early spring is actually ideal timing — you'll see immediate comfort improvements during heating season, and spring is perfect for identifying any ice dam issues that proper insulation helps prevent.

Preparation time affects your schedule too. Clear storage items from the attic access area, ensure the crew has vehicle access close to your home (cellulose trucks need to park within 150 feet of the attic hatch), and plan for some dust despite professional equipment. Most crews lay protective plastic over furniture near the access point.

When to hire a professional: While some Moncton building supply stores rent cellulose blowing equipment, professional installation ensures proper density, coverage, and integration with air sealing work. Dense-pack wall installation absolutely requires professional equipment and experience — improper density won't provide the air sealing benefits that make cellulose wall retrofits worthwhile.

Need help finding a professional cellulose installer? New Brunswick Insulation can match you with experienced local contractors who understand Moncton's building stock and Maritime climate requirements.

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Q2

What is the settling rate difference between blown-in cellulose and blown-in fibreglass over 20 years in a Fredericton attic?

Blown-in cellulose settles approximately 15-20% over its lifetime, while blown-in fibreglass settles only 2-5% — a significant difference that affects long-term R-value performance in Fredericton's climate.

The settling difference between these materials comes down to their physical properties and how they respond to Fredericton's temperature cycling and moisture conditions. **Cellulose is made from recycled newspaper fibers that compress under their own weight over time**, especially when exposed to the thermal cycling that occurs in NB attics where temperatures can swing from -25°C in winter to +50°C in summer. The borate fire retardant treatment adds weight to cellulose, contributing to settling as gravity pulls the fibers together.

Fibreglass, being made from spun glass fibers, maintains its loft much better over decades. The glass fibers are more resilient and don't compress as readily under their own weight. However, fibreglass is more susceptible to wind washing — where air movement through the attic can disturb loose-fill fibreglass, reducing its effective R-value even without settling.

In Fredericton's specific climate conditions, with approximately 4,900 heating degree days and significant seasonal temperature swings, **both materials face thermal stress that can accelerate settling**. The freeze-thaw cycles common in the Saint John River valley, combined with moisture from ice dams (common in older Fredericton homes), can cause cellulose to compact more than in drier climates.

Professional installers account for settling by initially installing cellulose at higher densities and depths. A quality cellulose installation targeting R-50 will typically be blown to R-55-60 initially, knowing it will settle to the target value. Fibreglass installations require less over-filling but need proper wind baffles to prevent air movement

through the insulation.

For Fredericton homeowners, this means cellulose may need a top-up after 15-20 years, while fibreglass typically maintains its performance longer. However, cellulose offers superior air sealing properties during installation due to its ability to fill small gaps and cracks that fibreglass cannot reach. The choice often comes down to whether you prioritize long-term stability (fibreglass) or superior initial air sealing and thermal performance (cellulose).

Both materials should be installed by professionals with calibrated blowing equipment to achieve proper density and coverage, especially important given Fredericton's challenging winter conditions where any gaps or thin spots become thermal weak points.

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Q3

How much does blown-in cellulose insulation cost in Moncton NB? | Insulation IQ?

Blown-in cellulose is one of the most cost-effective ways to increase attic insulation in the Greater Moncton area, and prices have remained relatively stable in the region over the past few years. **For a typical Moncton home with an unobstructed attic, you can expect to pay $1,500–$3,500 for a blown cellulose upgrade, though the final number depends heavily on the existing R-value, the square footage, and the accessibility of the space.**

To put that in more concrete terms: a 1,000 square foot attic floor currently sitting at R-12 (about 4 inches of older fibreglass batts) brought up to the NB Building Code minimum of **R-50 for attics in Climate Zone 6** will require

roughly 16–18 inches of cellulose. At a material density of approximately 1.5 lbs per square foot for settled cellulose at that depth, the material cost alone runs $600–$950. Labour in the Moncton market — including blower setup, temporary baffles at eave vents to maintain airflow, and post-job cleanup — typically adds $600–$1,200. Most Moncton contractors also include a thermal scan or inspection of existing air leakage before blowing, and comprehensive air sealing of penetrations (pot light boxes, plumbing stacks, top plates) prior to blowing adds $300–$700 to the total but is strongly recommended for maximum energy savings.

Starting from a fully uninsulated attic is more expensive because you need greater total depth. Achieving R-60 — which is what many energy auditors recommend for new construction in Moncton given our heating degree days — requires approximately 20–22 inches of settled cellulose. In that scenario, the total installed cost for a 1,200 sq ft attic ranges from $2,800 to $4,500 depending on contractor and complexity.

A few variables specific to Moncton and the surrounding Westmorland County area can push costs higher. **Cathedral ceilings or finished attics** with limited access require smaller bags and more labour time, potentially adding 30–50% to the blown-in cost. Homes in the older Moncton neighbourhoods around Victoria Street or the Shediac Road corridor often have knee-wall attic configurations and blocked eave channels that require more prep work. If mould is discovered on existing sheathing — not uncommon in older Moncton homes where bathroom exhaust fans were historically vented into the attic — remediation must occur before insulation work, adding $500–$2,000 depending on extent.

NB Power's Home Energy Efficiency Upgrade programme currently offers rebates for attic insulation upgrades. As of recent programme years, attic insulation rebates have ranged from $0.10 to $0.15 per RSI added, which for a significant upgrade can translate to $400–$900 back in your pocket. The programme requires a pre-retrofit NB Power home energy assessment (approximately $150–$200 if not subsidised), so factor that into your overall cost-benefit analysis. The **Canada Greener Homes Grant** (check current federal funding status) offered up to $5,600 for insulation measures including attic cellulose when combined with a registered EnerGuide assessment.

Cellulose is produced from recycled newsprint and treated with borates for fire and pest resistance. Its **settled R-value is approximately R-3.5 per inch**, meaning a 15-inch depth gives you roughly R-52. Unlike fibreglass batts, cellulose fills irregularly shaped joist bays completely and provides marginally better resistance to air movement within the insulation layer — a meaningful advantage in Moncton's cold winters where wind-washing through fibreglass can degrade effective performance.

When comparing quotes, make sure each contractor specifies the **installed depth and the settled R-value they are guaranteeing**, not just the initial blown depth. Cellulose settles 15–20% after installation, and the quote should account for this with an overshoot. Also confirm that the contractor will properly dam the attic hatch and seal bypasses at the top of partition walls — these two items alone account for a disproportionate share of heat loss in Moncton homes.

For current pricing from insulation contractors serving the Greater Moncton area — including Dieppe, Riverview, and Shediac — New Brunswick Insulation and the New Brunswick Construction Network are good resources for connecting with experienced professionals.

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Q4

Is blown-in cellulose or fibreglass better for attics in New Brunswick? | Insulation IQ?

Both blown-in cellulose and blown-in fibreglass are legitimate choices for New Brunswick attics, but when you weigh their respective strengths against the province's Climate Zone 6 conditions, most building-science professionals give cellulose a modest edge for the majority of residential applications. **That said, the right choice depends on your specific attic geometry, existing moisture history, and budget — and either material can perform excellently when properly installed.**

Thermal performance per inch is the starting point for any comparison. Blown cellulose settles to an R-value of approximately **R-3.5 per inch**, while blown fibreglass lands at **R-2.2–R-2.7 per inch** depending on density and product. The NB Building Code requires R-50 minimum for attics in Climate Zone 6, meaning you need roughly 14–15 inches of settled cellulose or 18–22 inches of blown fibreglass to meet code. That difference in required depth has real implications in attics with shallow eave clearance — common in Fredericton-area bungalows and in many 1950s–1970s homes throughout the Saint John River Valley — where you simply may not have 20 inches of headroom available at the eave.

Air movement resistance is where cellulose tends to outperform fibreglass in NB's climate. Blown fibreglass is a relatively low-density material, and when wind enters an attic through soffit vents and flows along the attic floor, it can penetrate the fibreglass insulation layer and reduce its effective R-value — a phenomenon called **wind-washing**. Dense-pack cellulose, with its tighter fibre matrix and higher installed density, resists wind-washing more effectively. Given that New Brunswick regularly experiences Nor'easter winds driving cold air through attic ventilation systems, this is not a trivial concern, particularly for homes in exposed coastal communities near Saint John, Sackville, or along the Fundy shore.

Moisture behaviour is the most nuanced part of this comparison for NB specifically. Cellulose is hygroscopic — it absorbs and releases moisture — and **treated cellulose can buffer moderate humidity swings without losing structural integrity**, provided moisture levels stay below approximately 25–28% by weight. The borate treatment that fire-retards cellulose also inhibits mould. However, in attics with a history of ice-damming, bathroom exhaust fans venting into the space, or inadequate vapour control from below, repeated wetting and drying cycles will degrade cellulose over time. Fibreglass, being inorganic, does not absorb moisture in the same way and will not mould — but wet fibreglass loses essentially all its R-value temporarily and can compress permanently if saturated severely enough.

The practical implication for New Brunswick homeowners: **if your attic has any history of moisture intrusion, identifying and correcting the source takes priority over insulation choice.** Once the moisture issue is

resolved, either material performs reliably. If there is ongoing condensation risk you haven't yet fully controlled, fibreglass may offer slightly more forgiving long-term behaviour.

Cost is a meaningful factor. In the Moncton, Fredericton, and Saint John markets, blown cellulose is typically **$0.10–$0.25 per board foot cheaper** than blown fibreglass, primarily because raw cellulose (recycled newsprint) costs less than glass fibre. For a 1,000 sq ft attic upgraded to R-50, that translates to a cellulose job costing roughly $1,500–$2,500 versus fibreglass at $1,800–$3,200 depending on the specific products and contractor overhead. The cost gap narrows for smaller jobs where setup time dominates.

Settling is a common concern raised about cellulose. Quality cellulose products today are pre-treated to limit settling, and a professional installer will blow to a depth that accounts for the expected 15–20% post-installation settlement, guaranteeing the contracted R-value at settled depth. Blown fibreglass also settles, though somewhat less. Either way, the performance guarantee in the contract — specifying R-value at settled depth — is what you should hold the contractor to, not the initial blown depth.

For **rebate purposes**, both materials qualify under the **NB Power Home Energy Efficiency Upgrade** programme and the **Canada Greener Homes Grant** (check current funding availability) when installed to the programme's minimum R-value requirements. There is no rebate preference between the two materials; the upgrade depth and resulting RSI improvement determine your rebate amount.

In summary, for most New Brunswick attics, blown cellulose offers a better value proposition — higher R-value per inch, better wind-washing resistance, and lower cost — while blown fibreglass may be preferable in attics with chronic moisture challenges or very limited depth at the eaves. Either way, thorough air sealing before the blow is more important than which material you choose.

New Brunswick Insulation and the New Brunswick Construction Network can connect you with local insulation professionals who can assess your specific attic and recommend the right approach for your home.

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Q5

Can I rent a blowing machine and install loose-fill insulation myself in NB? | Insulation IQ?

Yes, you can rent a blowing machine and install loose-fill insulation yourself in New Brunswick — and for straightforward open attic situations, it's one of the more accessible DIY insulation projects available to homeowners. That said, there are important considerations around code compliance, vapour barriers, and rebate eligibility that you should understand before picking up the rental unit.

Most major building supply retailers and equipment rental companies in Moncton, Fredericton, and Saint John will loan or rent a blowing machine when you purchase a minimum quantity of loose-fill insulation — typically around 20 bags or more. The machines themselves are relatively simple to operate: a hopper holds the material while a blower forces it through a long flexible hose into the attic space. Manufacturers usually include a bag-count chart on the packaging that estimates how many bags you need to reach a target R-value at a given depth, so the math is done for you.

For a standard vented attic in New Brunswick, you're targeting a minimum of **R-50** under the 2015 NB Building Code and National Energy Code for Buildings (NECB) requirements for Climate Zone 6. That typically means **16 to 20 inches of blown-in cellulose** or slightly more of blown-in fibreglass, depending on the settled density of the product you choose. Always install depth markers (small rulers or rods staked into the attic floor every few feet) before you start blowing — these let you confirm you've reached target depth and are required if you're applying for NB Power rebates or the Canada Greener Homes Grant.

Before blowing anything in, you need to handle a few critical prep steps. First, **seal all air leakage points** from below — around pot lights, plumbing stacks, electrical boxes, and attic hatch frames. Air sealing is arguably more important than the insulation itself, and it must be done before you bury everything under loose fill. Second, check that your **vapour barrier** on the warm side of the ceiling (typically 6-mil polyethylene) is intact and continuous. New Brunswick's cold climate means moisture drive is strongly inward-to-outward in winter, and any gaps in the vapour retarder can allow humid air to reach the cold attic deck and cause condensation or mould.

There are situations where DIY blown-in is not the right approach. **Cathedral ceilings**, flat roofs, enclosed wall cavities, and any space with active moisture issues all require professional assessment. Blowing into an enclosed wall from the exterior (requiring hole drilling and plugging) is a skilled task. Similarly, if your attic has knob-and-tube wiring, most codes and fire marshals' guidelines require it to be decommissioned before loose-fill insulation is installed over it — blown-in material traps heat around the conductors and creates a fire risk.

On the rebate side, both **NB Power's Home Energy Savings Program** and the **Canada Greener Homes Grant** can provide meaningful financial assistance — historically $500 to $2,000 for attic insulation upgrades, depending

on the R-value improvement achieved. However, most rebate programs require a pre- and post-upgrade energy audit by a certified energy advisor. DIY work is eligible for rebates as long as the work meets code, the depth markers confirm R-value targets were reached, and receipts are provided. Do not skip the pre-audit step; you must have it done before the upgrade, not after.

For most homeowners in Fredericton or Moncton with a simple open attic and a good sense of comfort working in confined, dusty spaces, DIY blown-in insulation is a realistic weekend project. Wear a properly rated respirator (N95 minimum), safety glasses, and cover all skin — both cellulose and fibreglass are irritating. Work from the far end of the attic toward the hatch so you're never walking on freshly blown material.

If you have any doubts about air sealing, vapour control, or the condition of your existing insulation, a consultation with a qualified insulation professional is worth the time. **New Brunswick Insulation** connects you with vetted local contractors through the New Brunswick Construction Network who can assess your specific attic and ensure the job qualifies for available rebates.

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Q6

How deep should blown-in insulation be in a Fredericton attic to meet code? | Insulation IQ?

Fredericton sits firmly in **Climate Zone 6** under the National Building Code of Canada and National Energy Code for Buildings (NECB), and that classification drives the minimum thermal performance requirements for attic insulation in the city. For most residential attics, the target you need to meet is **R-50** — and in many cases, upgrading beyond that minimum is cost-effective given how cold New Brunswick winters get.

In practical terms, R-50 translates to different depths depending on the type of loose-fill product you install. **Blown-in cellulose** (made from recycled paper treated with borate fire retardants) settles to a working R-value of roughly **R-3.5 to R-3.7 per inch** at typical installed densities. To reach R-50, you need approximately **14 to 15 inches** of cellulose — though most installers target 16 inches to account for settling over time and to ensure a comfortable margin above the minimum. **Blown-in fibreglass** performs at about **R-2.2 to R-2.5 per inch** at standard densities, meaning you'd need roughly **20 to 22 inches** to hit R-50. The depth difference is significant and affects how much headroom you lose in the attic space.

The 2015 NB Building Code references the NECB Zone 6 requirements, which set R-50 (RSI 8.8) as the effective thermal resistance target for ceilings below attics. Some energy-efficient home programs — including those used in Fredericton EnerGuide rating assessments — recommend R-60 or higher for maximum lifecycle savings, particularly if you're also doing air sealing work at the same time and want to qualify for the highest rebate tiers under the **Canada Greener Homes Grant** or **NB Power's Home Energy Savings Program**.

One important detail that Fredericton homeowners often overlook: the **installed depth is measured after settling**, not at the time of blowing. Freshly blown cellulose can be fluffy and may show 18 to 20 inches immediately after installation, only to settle to 14 to 15 inches within a year. This is why installers use **depth markers** — small labeled rulers or stakes placed every few feet across the attic floor. These markers serve two purposes: they let the installer confirm adequate depth during installation, and they provide documented evidence of R-value for rebate applications and building inspections.

Before focusing on depth, there's a step that matters even more: **air sealing**. The NB Building Code requires a continuous air barrier on the warm side of the ceiling assembly. In older Fredericton homes — particularly anything built before the mid-1980s — the ceiling vapour barrier may be incomplete, and penetrations around pot lights, electrical boxes, and attic hatches can be substantial sources of air leakage. Blown-in insulation does not stop air movement; it only slows conductive heat transfer. If warm, humid air from the living space bypasses the insulation through gaps, you'll get condensation on the cold attic deck regardless of how deep the insulation is. Addressing air leakage before adding insulation is critical in a Climate Zone 6 location like Fredericton, where interior-to-exterior moisture drives are very high in winter.

For homes with existing insulation below the target depth, **top-up blowing** is common and straightforward. If your attic currently has 6 inches of old fibreglass batts sitting on the floor, you can blow cellulose directly over them to bring the total system up to R-50. The existing material is usually considered to retain most of its rated value as long as it's dry and not compressed.

If you're unsure what depth you currently have or whether your attic assembly meets code, a certified energy advisor can assess this as part of an EnerGuide home evaluation — which is also the required first step for most rebate programs. The combination of air sealing and insulating to R-50 or R-60 in a Fredericton attic typically

produces the best return on investment of any building envelope upgrade.

For homeowners ready to move forward, the **New Brunswick Construction Network** lists local insulation contractors serving Fredericton who are familiar with both provincial code requirements and available rebate programs.

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Q7

Does blown-in cellulose settle over time in New Brunswick homes? | Insulation IQ?

Yes, blown-in cellulose does settle over time — and in New Brunswick's climate, understanding how much settling to expect and how to account for it is important to ensuring your attic insulation performs as intended over its full service life.

The settling process is a function of **gravity and gravity alone**. Cellulose is made from densely processed recycled paper fibres that are ground into a light, fluffy mass. When installed at low density (as is typical for open attic blowing), the fibres are not interlocked tightly, and over weeks to months they gradually compress under their own weight. The amount of settling depends on the **installed density** and **depth**. In typical open attic applications, cellulose loses roughly **15 to 20 percent** of its installed height through settling. So if you blow in cellulose to an initial depth of 18 inches, you can expect it to settle to approximately 14 to 15 inches at equilibrium — which is close to, but still above, the R-50 threshold for a Climate Zone 6 New Brunswick attic.

This is why professional installers always account for settling in their calculations. The **CGSB (Canadian General Standards Board) settling factor** is built into the bag-count charts provided by manufacturers. When the packaging says "X bags covers Y square feet at R-50," that estimate already factors in settling to the settled depth, not the freshly blown depth. This means if you follow the bag-count instructions correctly, you should still hit your target R-value after settling has occurred. Where homeowners sometimes go wrong is under-installing — stopping when the loose material looks deep enough without counting bags — and then finding after a year that the settled depth falls short of the target.

Depth markers are the standard tool for monitoring this. Stakes or small rulers are placed throughout the attic floor before blowing begins, and they remain permanently in place. After settling, you can poke your head into the attic and read the settled depth at multiple points. For NB Power's Home Energy Savings Program and the Canada Greener Homes Grant, installed depth at settled measurement is used to verify R-value compliance.

One condition that accelerates or worsens settling in New Brunswick is **moisture intrusion**. Cellulose is treated with borate compounds that give it fire resistance and some resistance to mould, but if the material gets wet — from a roof leak, inadequate vapour control, or condensation due to air leakage — the fibres can mat and compact significantly. This is a concern in older Moncton and Saint John homes where roof flashings may be aging or where the ceiling vapour barrier has gaps. Wet cellulose also loses much of its R-value temporarily, and while it can dry out and recover some performance if the moisture source is eliminated, repeated wetting cycles degrade the material. A roof leak that allows liquid water to reach the cellulose can create a dense, low-R-value mass that sits flat against the ceiling deck.

Compared to blown-in fibreglass, cellulose settles more noticeably but still delivers excellent long-term performance when properly installed. Fibreglass loose fill settles very little (fibres have more internal spring), but it performs at a lower R-value per inch, so you need more depth to start with. In terms of long-term thermal performance per dollar, cellulose remains competitive and widely used by New Brunswick insulation contractors for attic retrofits.

A few practical points worth noting: cellulose handles **thermal bridging** across framing better than fibreglass batts because it fills irregularly shaped spaces and flows around obstructions. It also has better sound attenuation properties, which some homeowners in denser urban areas like Fredericton or Saint John find valuable. Its environmental footprint is low — it's one of the highest recycled-content insulation products available.

If you're doing a top-up over existing insulation in an older New Brunswick home, cellulose is generally compatible with any existing loose-fill material and most batt products. Just ensure the existing material is dry before adding on top, and verify that the total installed system will reach R-50 or better after settled depths are accounted for.

For a proper assessment of what your attic needs and how much material to install, a consultation with a local insulation professional is the most reliable approach. **New Brunswick Insulation** can connect you with experienced contractors through the New Brunswick Construction Network.

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Q8

What is the R-value per inch for blown-in fibreglass vs cellulose in NB? | Insulation IQ?

Understanding R-value per inch is essential when comparing blown-in insulation options for a New Brunswick home, because the two most common loose-fill products — **blown-in fibreglass** and **blown-in cellulose** — perform very differently in terms of thermal resistance per unit of depth, and that difference directly affects how much material you need to buy and how much attic space the installation will consume.

Blown-in cellulose delivers approximately **R-3.5 to R-3.8 per inch** at typical installed densities for open attic applications. The slight variation in that range depends on the specific product brand, moisture content at the time of installation, and installed density (measured in kg/m³). At the standard reference temperature (10°C per ASTM C518 testing protocols), most Canadian cellulose products sold through retailers in Fredericton, Moncton, and Saint John are tested and labelled around R-3.6 to R-3.7 per inch. To reach the **R-50 minimum** required for Climate Zone 6 attics under the New Brunswick Building Code, you'd need roughly **14 to 15 inches** of settled cellulose.

Blown-in fibreglass performs at approximately **R-2.2 to R-2.5 per inch** at typical open attic densities. Fibreglass is a lower-density material and its loose-fill form has more air space between fibres, which reduces its per-inch thermal resistance compared to cellulose. To reach R-50 with blown fibreglass, you'd need approximately **20 to 23 inches** of depth — significantly more than cellulose. That depth difference is meaningful in attics with low truss heels, vents near the eaves, or limited clearance.

There's an important nuance here that affects real-world performance in New Brunswick winters: **cold temperature performance**. Fibreglass can lose some of its rated R-value at very low temperatures because cold air can move more freely through the low-density fibre structure — a phenomenon sometimes called **thermal drift** or **wind-washing**. In extremely cold attics (common across New Brunswick from December through February), blown fibreglass may underperform its rated value unless a wind baffle or air-impermeable layer is present. Cellulose, being a denser material, is somewhat less susceptible to wind-washing, though proper attic ventilation baffles near the eaves should be used with either product.

From a cost standpoint, **cellulose is generally less expensive per R-value achieved**. In New Brunswick, installed costs for blown-in cellulose in an open attic typically run in the range of **$1,500 to $3,500** depending on attic area, access difficulty, and any air sealing work included. Blown-in fibreglass may cost similarly per bag but requires more bags to reach the same R-value, so the total installed cost is often higher for equivalent performance. That said, pricing varies by contractor and market conditions, so getting quotes from multiple insulation companies in your area is always the right approach.

One area where **blown-in fibreglass holds an advantage** is in situations with moisture risk. Fibreglass is inorganic and does not absorb moisture or support mould growth, whereas cellulose — though treated with borate fire retardants that also resist mould — can absorb moisture and mat if exposed to liquid water or persistent high humidity. In attics with any history of condensation issues, a roof leak, or inadequate vapour barrier, some contractors prefer fibreglass for that reason.

Both products are eligible for **NB Power Home Energy Savings Program rebates** and the **Canada Greener Homes Grant** as long as the upgrade meets the minimum R-value improvement thresholds and is documented with an EnerGuide audit. Neither product is inherently preferred by rebate programs — what matters is achieving the target R-value and having it verified by a certified energy advisor.

Dense-pack cellulose — used for blowing into enclosed wall cavities rather than open attics — operates at higher density (around 55 kg/m³) and a correspondingly lower R-value per inch of about R-3.4 to R-3.5, but it provides excellent air resistance in that application.

For most New Brunswick homeowners doing an open attic upgrade, cellulose offers the better combination of depth efficiency, cost, and air resistance. The right choice for your specific home depends on attic geometry, existing conditions, and your contractor's recommendation.

The **New Brunswick Construction Network** lists qualified insulation professionals across the province who can evaluate your attic and recommend the best product for your situation.

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Q9

Can blown-in insulation be added on top of existing attic insulation in Saint John? | Insulation IQ?

Yes — adding blown-in insulation on top of existing attic insulation is one of the most common and cost-effective retrofit upgrades for Saint John homeowners, and in most cases it's entirely feasible without removing or disturbing what's already there. The process is often called a **top-up** or **attic insulation upgrade**, and it's a standard service offered by insulation contractors throughout the greater Saint John area.

The first thing to assess before any top-up project is the **condition of the existing insulation**. Material that has been exposed to moisture — from a past roof leak, condensation due to air leakage, or plumbing issues — can become matted, compressed, or in the worst cases mouldy. Blowing new material over degraded or wet insulation doesn't fix the underlying problem; it buries it. A basic inspection involves visually examining the attic for water staining on the roof deck or trusses, checking whether the insulation appears unusually flat or discoloured, and confirming there are no active moisture sources. If you find evidence of moisture, that needs to be addressed before the top-up proceeds.

Assuming the existing insulation is dry and in reasonable condition, the **existing R-value is retained** and the new blown-in layer adds directly on top. The combined system is what matters. Many older Saint John homes — particularly those built in the 1970s and 1980s — were insulated to R-20 or R-28, often with fibreglass batts laid between the joists. The **New Brunswick Building Code for Climate Zone 6** requires attic insulation equivalent to R-50 (RSI 8.8) for new construction and code-compliant upgrades. That means if your existing insulation measures R-20, you need an additional R-30 from the top-up layer — roughly 8 to 9 inches of blown-in cellulose at R-3.6 per inch, or 13 to 14 inches of blown fibreglass at R-2.3 per inch.

There's an important step that should be done **before blowing**, not after: **air sealing**. In older Saint John homes, the ceiling plane typically has numerous penetrations — pot lights, plumbing and electrical stacks, attic hatches, and interior wall top plates — all of which can allow warm, humid air to bypass the insulation entirely and cause condensation on the cold roof deck. Blown-in insulation does not stop air movement; it only slows conductive heat loss. If air sealing is skipped, homeowners often find that their new insulation doesn't perform as expected, and in some cases frost or ice damming develops along the eaves in winter. Using caulk, acoustical sealant, or spray foam to seal penetrations from inside the attic before blowing is a non-negotiable step for maximizing performance.

One situation that requires attention is when **existing fibreglass batts are present and unfaced** (no kraft paper or foil facing). Blown-in cellulose can be added directly over unfaced batts without issue. However, if the batts have a **kraft paper or foil vapour barrier facing**, that facing can trap moisture between layers depending on how it's oriented. Most older Saint John installs have the facing toward the warm side (down), which is the correct position — in that configuration, adding blown cellulose on top is fine. If you're unsure, a knowledgeable insulation contractor can quickly assess the existing assembly.

Knob-and-tube wiring in older Saint John homes is another condition to check before blowing. The fire codes and manufacturer guidelines for loose-fill insulation generally prohibit covering active knob-and-tube circuits with blown insulation, as the material traps heat around the conductors. If your home still has active knob-and-tube wiring in the attic space, an electrician should upgrade it before the top-up proceeds.

On the financial side, attic top-ups are among the most strongly supported upgrades under both **NB Power's Home Energy Savings Program** and the **Canada Greener Homes Grant**. Rebates typically require an EnerGuide pre-

inspection by a certified energy advisor, followed by the upgrade, and then a post-inspection to confirm R-value improvement. Historically, homeowners upgrading from R-20 to R-50 in the attic have qualified for rebates in the $500 to $2,000 range depending on house size and R-value improvement achieved.

For a home in Saint John with reasonable attic access, good existing conditions, and no electrical complications, a top-up is typically a one-day project. **New Brunswick Insulation** can connect you with qualified local contractors through the New Brunswick Construction Network who can evaluate your attic, confirm compatibility with existing materials, and help you navigate available rebate programs.

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Q10

Is blown-in insulation a fire hazard in New Brunswick homes? | Insulation IQ?

Blown-in insulation is not a fire hazard when it is properly installed using code-compliant materials — and in fact, certain blown-in products offer better fire resistance than some traditional batt insulation. However, there are important distinctions between the two main types used in New Brunswick homes: fiberglass and cellulose.

Fiberglass blown-in insulation is non-combustible. The glass fibres themselves will not ignite or sustain a flame, making this material inherently fire-safe. It carries a Class A fire rating and is widely used in New Brunswick attics for this reason. If a fire occurs in the attic space, fiberglass loose-fill does not contribute fuel to the blaze.

Cellulose blown-in insulation is made primarily from recycled paper or wood fibre, which is naturally combustible. However, all cellulose insulation sold in Canada must be treated with fire-retardant chemicals — typically boric acid, ammonium sulphate, or aluminium sulphate — to meet the requirements of CAN/ULC-S703, the Canadian standard for cellulose fibre thermal insulation. When properly treated, cellulose achieves a Class A fire rating as well. The fire retardants slow ignition significantly and reduce the material's ability to support sustained burning. Independent testing has shown that treated cellulose actually performs comparably to fiberglass in fire scenarios, and some studies suggest it can slow the spread of flame through a wall cavity better than unfaced batts.

The **New Brunswick Building Code** (which adopts the National Building Code of Canada) requires that any insulation installed in contact with occupied spaces be separated from the interior by a thermal barrier — typically 12.7 mm (half-inch) drywall. This applies in wall cavities and, where applicable, in attic hatch openings. The drywall acts as the fire separation, not the insulation itself, so the combustibility of the insulation is largely mitigated by code-mandated construction.

There are a few practical concerns worth noting. **Old cellulose that has lost its fire-retardant treatment** — typically in homes from the 1970s or earlier where the product may have been applied without adequate treatment — can pose a higher risk. If you are inspecting or renovating an older home in Fredericton, Saint John, or Moncton and find loose grey material in the walls or attic, it is worth having a professional assess whether it meets current standards. Signs of compromised cellulose include clumping, heavy settling, or a dusty, degraded appearance.

Another concern involves **recessed light fixtures** (pot lights) that penetrate the attic floor. These fixtures must be **IC-rated** (Insulation Contact rated) if blown-in insulation will come into contact with them. Non-IC pot lights generate enough heat that contact with any insulation — blown-in or batt — creates a fire risk. This is a common issue in Quispamsis and Riverview homes where pot lights were added after original construction. Blown-in cellulose or fiberglass must be kept clear of non-IC fixtures, typically by building a dam or using a pre-made baffle cover.

Vapour barrier integrity is another consideration. Polyethylene vapour barriers are required in Climate Zone 6 (all of New Brunswick), and blown-in insulation in attics sits above the barrier in the attic floor assembly. This placement is correct and does not create a fire concern. However, if blown-in insulation is being retrofitted into walls via drill-and-fill, any penetrations through existing vapour barrier must be properly sealed to maintain both fire integrity and moisture control.

In practice, blown-in insulation in a properly installed New Brunswick home presents no meaningful fire hazard above that of other insulation types. The bigger risk factors — non-IC fixtures, compromised fire-retardant treatment in old stock, and unsealed penetrations — are all addressed during a professional installation assessment.

If you have questions about the safety of existing blown-in insulation in your home, a certified energy advisor or insulation contractor can assess the material type and condition. New Brunswick Insulation's network lists vetted professionals throughout the province who work with current code-compliant materials.

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

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Q11

How long does it take to blow in attic insulation in a Quispamsis home? | Insulation IQ?

For most Quispamsis homes, blowing in attic insulation is a single-day job — and in many cases, a crew can complete the work in just a few hours. The actual timeline depends on the size of your attic, the target R-value, existing insulation levels, and whether any preparatory work is needed before blowing begins.

Typical time frames by house size:

- A small to mid-size bungalow (1,000–1,400 sq ft attic footprint): 2–4 hours

- A two-storey home with a 1,200–1,800 sq ft attic footprint: 3–5 hours
- Larger homes over 2,000 sq ft of attic area: 4–7 hours

These estimates assume a two-person crew operating a truck-mounted or trailer-mounted blowing machine, which is standard for most professional jobs in the greater Saint John area (Quispamsis is in Kings County and close to the Saint John market). One person feeds bags of insulation into the hopper outside while the other directs the hose inside the attic.

Preparatory work is often the biggest time variable. Before any insulation is blown, a professional crew will typically:

- **Seal air leaks** at top plates, around electrical boxes, plumbing penetrations, and attic hatch frames. This air sealing step is critical for performance and is often required under NB Power's Home Energy Savings Program rebate conditions. It can add 1–3 hours depending on how many penetrations exist.
- **Install baffles** at every rafter bay along the eaves to maintain the 50 mm (2 inch) minimum clear airway from soffit to ridge required by the building code. In older Quispamsis homes built in the 1970s–1990s, this step is almost always necessary and can add 1–2 hours.
- **Remove or reposition old insulation** if existing batts have shifted, are moisture-damaged, or are blocking eave ventilation.
- **Cover or dam non-IC pot lights** so blown-in insulation doesn't contact them.

When you add all preparatory steps to the actual blowing time, a thorough professional installation on a typical Quispamsis split-entry or two-storey home often takes **a full morning or afternoon** — roughly 4–6 hours for a two-person crew.

Target R-value affects material volume and time. New Brunswick sits in **Climate Zone 6**, and the NBC/NBBC requires a minimum of R-38 for attic insulation in new construction. The current best-practice recommendation — and the threshold for many NB Power rebates — is **R-50 to R-60**. If your attic currently has R-12 worth of old fiberglass batts and you are upgrading to R-60 total, the crew needs to blow approximately 380–400 mm (15–16 inches) of additional blown-in fiberglass or cellulose on top of existing material. This takes more bags and more time than topping up from R-30 to R-50.

For context, achieving R-50 in cellulose requires roughly 380–400 mm of settled depth. Fiberglass blown-in requires a greater depth — approximately 460–480 mm — for the same R-50 value because of its lower density. Either way, the blowing machine operates continuously once set up, so added depth adds minutes, not hours.

NB Power rebates are available for attic insulation upgrades that bring your home to a defined threshold (typically R-40 or better, with higher rebates for deeper upgrades). A pre-retrofit assessment by an energy

advisor must be booked before work begins to qualify. The Canada Greener Homes Grant previously covered up to $600 for attic insulation; as of 2025, the grant has transitioned into the Canada Greener Homes Loan program, so check current federal program availability with an energy advisor.

For a Quispamsis homeowner, the practical answer is: book the job for a morning, expect to have full use of your home by early afternoon, and plan for slight disruption while the crew works in the attic space. Most installers will cover the attic hatch area and use a flexible hose that can navigate tight spots without requiring you to vacate the house.

For vetted insulation professionals serving Quispamsis and the greater Saint John region, the directory at New Brunswick Insulation connects you with contractors familiar with local home styles and NB Power rebate procedures.

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Q12

Does blown-in insulation attract mice or pests in New Brunswick? | Insulation IQ?

Pest attraction is one of the most common concerns New Brunswick homeowners raise about blown-in insulation, and the answer depends significantly on the material type and the condition of your building envelope. Understanding the difference between fiberglass and cellulose blown-in insulation — and what actually draws pests into attics and walls — helps put this question in the right context.

Fiberglass blown-in insulation does not attract mice or insects. Glass fibres have no organic content and nothing edible or nutritious for rodents. Mice do not seek out fiberglass as a food source, and it does not retain

moisture in a way that supports insect colonies. That said, mice will absolutely **nest in fiberglass** if they gain access to your attic or wall cavities. The material is soft, compressible, and warm — ideal nesting conditions. So fiberglass doesn't attract pests, but it does not repel them either. Once inside, mice will use it freely.

Cellulose blown-in insulation is made from recycled paper and wood fibre, which some homeowners assume would be a direct food source for rodents. In practice, **treated cellulose is not particularly attractive to mice as food.** The boric acid and other fire-retardant chemicals used to treat all CAN/ULC-S703-certified cellulose also act as a mild insecticide and desiccant. Insects like cockroaches, ants, and silverfish that come into contact with cellulose in adequate concentrations can be deterred or killed by the boric acid. This is one of the understated advantages of cellulose: it has inherent pest-deterrent properties that fiberglass lacks.

However, **rodents are a different story.** Mice and squirrels are not deterred by boric acid at the concentrations present in cellulose insulation. They will nest in cellulose just as readily as in fiberglass if they have access. This is a common issue in older New Brunswick homes in Fredericton, Woodstock, and rural areas where gaps around the foundation, soffits, or roof penetrations provide easy entry points.

The real issue is building envelope integrity, not insulation type. Both blown-in fiberglass and cellulose are reactive — they respond to the access conditions of your home. If you have gaps where the sill plate meets the foundation, open soffits, deteriorated fascia boards, or unsealed plumbing penetrations in the attic floor, pests will find their way in regardless of what insulation is present. A professional insulation job in New Brunswick should include an inspection of common entry points before and during installation.

Some specific vulnerabilities common in NB homes include:

- **Soffit vents without screening** — standard in many homes built before the 1990s, these allow both insects and small rodents to enter the attic.
- **Gaps around service entries** — cable and electrical conduit penetrations through the rim joist or roof deck are favourite entry points for mice.
- **Deteriorated wood at the roof-wall intersection** — common in older Saint John and Moncton homes with complex rooflines.
- **Uncapped chimneys or attic hatches with poor seals** — wildlife entry points in rural New Brunswick.

  One practical consideration specific to dense-pack blown-in cellulose is that when installed at proper density (approximately 48–56 kg/m³) in wall cavities, it is physically difficult for mice to tunnel through. This is a genuine structural advantage over fiberglass batts, which offer almost no physical resistance to rodents. Properly dense-packed cellulose in a wall cavity can limit rodent movement even if they do gain access to the stud bay from another location.

For attic insulation — where blown-in material sits at a loose density — this advantage disappears. A mouse can run across the surface of either material equally easily.

In summary: blown-in insulation does not attract pests in any meaningful way, but it will not stop them if your building envelope has openings. The best pest-control strategy is thorough air sealing and mechanical exclusion (screening, caulking, and flashing) at the same time as insulation is installed. Cellulose has a mild edge on insect deterrence. For rodent resistance specifically, dense-pack wall applications offer better physical resistance than batt or loose attic applications.

If you're dealing with existing pest damage in your insulation, remediation and reinstallation is best handled by a professional. New Brunswick Insulation's directory lists contractors across the province who can assess your situation and recommend the appropriate approach.

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Q13

Can I use blown-in insulation in my walls without removing drywall in Oromocto NB? | Insulation IQ?

Yes — blown-in insulation can be added to existing walls without removing the drywall, and this technique is well-suited to the older housing stock found throughout Oromocto and the surrounding Fredericton region. The method is called **drill-and-fill**, or more specifically **dense-pack**, and it is one of the most effective ways to improve the thermal and air-sealing performance of a home that was built with under-insulated or empty wall cavities.

How drill-and-fill works: A technician drills a series of holes — typically 50–63 mm (2–2.5 inches) in diameter — through the interior drywall or exterior cladding, accessing each stud bay. A flexible fill tube is inserted to the bottom of the cavity and cellulose or fiberglass is blown in under pressure as the tube is slowly withdrawn. When done correctly using the **dense-pack method**, the insulation is compacted to a density of approximately 48–56 kg/m³ (for cellulose), which physically locks the material in place and prevents settling. The holes are then patched and finished so the repair is essentially invisible.

Interior vs. exterior drilling: In Oromocto, as with most of New Brunswick, the choice between drilling from inside or outside depends on what is easier to patch and whether the exterior cladding is sympathetic to patching. Vinyl siding is easy to remove temporarily and replace without drilling through at all — siding can often be unsnapped, holes drilled through the sheathing, and the siding re-snapped without any visible evidence. Older wood clapboard or brick veneer homes typically favour interior drilling because the patch repair is easier to execute invisibly on drywall than on historic exterior materials.

What can be insulated this way: Any standard stud-framed wall cavity — 2x4 framing (common in homes built before the 1980s) or 2x6 framing (more common post-1985) — can be dense-packed. **2x4 walls** provide a cavity depth of approximately 89 mm and, when dense-packed with cellulose, yield approximately R-13 to R-14. This is a significant improvement over an empty or partially filled cavity, though it falls short of the R-19 to R-22 typically achievable in a 2x6 wall. Many Oromocto homes built in the 1960s–1970s for military and government-affiliated residents have 2x4 walls with either no insulation or partially deteriorated fibreglass batt insulation, making them strong candidates for this upgrade.

Vapour control considerations in New Brunswick: New Brunswick's **Climate Zone 6** designation means that vapour control is important in any wall assembly. Existing homes with polyethylene vapour barriers already installed on the warm side of the wall are in good shape — the dense-pack fill completes the thermal layer without disturbing the barrier. However, many older Oromocto homes were built before vapour barriers were standard, relying on paint or kraft-faced batts as vapour retarders. When retrofitting these walls, it is important that the insulation installer understands the existing assembly and does not create a moisture trap by adding insulation that changes the dew-

point behaviour of the wall without addressing vapour diffusion.

Cellulose is often the preferred material for dense-pack wall retrofits precisely because it has a degree of **moisture buffering capacity** — it can absorb and release small amounts of vapour without structural damage, which gives older wall assemblies more tolerance for imperfect vapour control than rigid foam or fiberglass would.

Cost expectations: For a typical Oromocto home with 1,200–1,500 sq ft of wall area requiring dense-pack, costs generally range from **$2,500 to $5,000**, depending on cavity depth, material choice, drilling access, and whether exterior or interior drilling is used. Homes with large window counts or complex wall configurations at the higher end. The cost per stud bay is quite low given the labour savings from not gutting and refinishing interior walls.

Rebate eligibility: NB Power's Home Energy Savings Program covers wall insulation upgrades, but typically requires a pre- and post-retrofit energy assessment to confirm eligibility and qualify for rebate dollars. The Canada Greener Homes Loan program may also apply. A registered energy advisor should be consulted before work begins to ensure the installation qualifies — the dense-pack technique is widely accepted under these programs when installed to the appropriate density by a qualified contractor.

For homeowners in Oromocto, Grand Bay-Westfield, and the Fredericton corridor, the directory at New Brunswick Insulation connects you with contractors experienced in dense-pack wall retrofits and familiar with local housing stock.

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Q14

What are the advantages of dense-pack cellulose for older homes in New Brunswick? | Insulation IQ?

Dense-pack cellulose has become one of the most recommended retrofit insulation strategies for older New Brunswick homes, and for good reason. The combination of New Brunswick's cold Climate Zone 6 winters, the province's significant stock of pre-1980 housing in cities like Fredericton, Saint John, Moncton, and Campbellton, and the physical properties of dense-pack cellulose itself makes this an unusually well-matched solution.

What dense-pack cellulose actually is: Cellulose insulation is manufactured primarily from recycled newsprint and cardboard, treated with boric acid compounds for fire resistance and mild insect deterrence. In a dense-pack application, it is blown into enclosed wall or ceiling cavities under pressure at a density of approximately 48–56 kg/m³ — significantly higher than the loose-fill attic application density of 24–32 kg/m³. This elevated density is what distinguishes dense-pack from standard loose-fill and gives it its unique performance characteristics.

Air sealing is the primary advantage: Older New Brunswick homes — particularly those built before 1980 — were constructed without systemic air barriers. Stud bays communicate freely with attic spaces, basement rim joists, and exterior sheathing gaps. The result is that even homes with existing batt insulation can lose enormous amounts of heat through air infiltration rather than conduction through the insulation itself. Research has consistently shown that **air leakage accounts for 25–40% of heat loss** in typical older Canadian homes.

Dense-pack cellulose, installed at proper density, physically plugs stud bays and reduces convective looping within cavities to near zero. The material's fine particle structure fills gaps and corners that batt insulation simply cannot conform to. This air-sealing effect is one dense-pack's most valuable properties, and it does not require a separate air barrier installation — the insulation itself performs both thermal and air control functions when dense-packed correctly.

Moisture buffering in older assemblies: Pre-1980 New Brunswick homes were typically built without polyethylene vapour barriers. Many relied on kraft-faced batts, oil-based paint, or simply accepted some moisture movement through the wall. When you add new insulation to an older wall without addressing vapour control, there is a risk of shifting the dew point within the assembly in a way that causes condensation and mould growth.

Cellulose has a meaningful advantage here because it is **hygroscopic** — it can absorb and release moisture vapour without structural damage. This buffering capacity means that older wall assemblies with imperfect vapour control are more forgiving when filled with cellulose than with fiberglass, which offers no moisture buffering, or closed-cell foam, which can trap moisture on the cold side of the wall if installed incorrectly. For heritage homes in Saint John's South End or Fredericton's Garnet neighbourhood, this property makes cellulose a much safer choice than alternatives.

Physical performance in settled conditions: All insulation settles over time, but **dense-pack cellulose settles minimally** because it is already compressed at installation. Loose fiberglass batts are notoriously prone to slumping and void formation in wall cavities, particularly in older homes where framing members have shifted.

Settled batts leave uninsulated sections — cold spots — that reduce effective wall R-value dramatically. Dense-pack cellulose, once installed at correct density, holds its position and R-value for decades.

Thermal performance and R-value: Cellulose achieves approximately R-3.7 per inch, so a standard 2x4 wall cavity (89 mm / 3.5 inches) filled with dense-pack cellulose delivers approximately R-13. A 2x6 cavity yields approximately R-22. These values are comparable to fiberglass blown-in but slightly higher per inch. More importantly, the effective R-value of a dense-packed wall — accounting for its air-sealing effect — substantially outperforms a nominally identical R-value achieved with batt insulation that allows air movement.

Cost and environmental profile: Cellulose is typically **less expensive than fiberglass blown-in** for the same installed area, often by 10–20%. It is also one of the most environmentally sustainable insulation products available — up to 85% recycled content with relatively low embodied energy compared to mineral wool, fiberglass, or foam products. For homeowners in New Brunswick who are considering environmental impact alongside performance, cellulose is a strong choice.

Rebate eligibility: Wall insulation upgrades using dense-pack cellulose qualify for NB Power's Home Energy Savings Program when installed to code minimum depths by a qualified contractor with an accompanying energy assessment. Improvements that bring older wall assemblies up to current best-practice standards (R-22 in 2x6 or better) can attract meaningful rebate dollars. Combining wall dense-pack with attic upgrades in a single project can significantly increase total rebate eligibility.

For older homes throughout New Brunswick — whether a century-old heritage home in Fredericton, a mid-century bungalow in Riverview, or a 1970s split-entry in Rothesay — dense-pack cellulose offers a combination of air sealing, moisture tolerance, and settled-density stability that makes it one of the best available retrofit options. The directory at New Brunswick Insulation connects homeowners across the province with contractors who specialize in this technique.

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Q15

How does blown-in insulation perform in the humid climate of coastal New Brunswick? | Insulation IQ?

Coastal New Brunswick presents one of the most demanding environments for building insulation in Atlantic Canada. Communities along the Northumberland Strait — Shediac, Moncton, Sackville — and the Bay of Fundy shoreline near Saint John experience elevated year-round humidity, marine air infiltration, and dramatic seasonal temperature swings. Understanding how blown-in insulation behaves in these conditions is essential before committing to any attic or wall upgrade.

Blown-in insulation and moisture: the key tension

The fundamental challenge with all blown-in products in humid coastal climates is moisture management. Unlike rigid foam boards that act as vapour barriers themselves, blown-in materials are air-permeable to varying degrees. When warm, moist indoor air migrates into an attic or wall cavity and encounters the cold sheathing beyond the insulation layer, condensation can form. In a climate zone 6 province like New Brunswick, this is a year-round concern — in winter because of extreme indoor-to-outdoor temperature differentials, and in humid summers because of reverse moisture drive from the warm exterior.

Cellulose blown-in is made from recycled paper treated with borate compounds. It performs well in terms of air-sealing because it packs densely and can fill irregular cavities completely, reducing the convective loops that accelerate heat loss. Cellulose has a higher moisture buffering capacity than fibreglass — it can absorb and release modest amounts of moisture without immediate degradation. However, this buffering capacity is finite. If cellulose gets genuinely wet — from a roof leak, condensation on cold sheathing with inadequate vapour control, or wind-driven rain infiltration along coastal properties — it can mat, settle, and lose R-value. In Shediac or Bouctouche, where fog, heavy precipitation, and salt air are routine, ensuring a properly installed **vapour barrier on the warm side** (typically 6 mil polyethylene) is not optional — it is mandatory under the National Building Code as adopted by New Brunswick.

Blown-in fibreglass does not absorb water into its fibres the way cellulose does, which gives it an advantage in sustained-moisture scenarios. If liquid water does reach the fibreglass, it drains through rather than being held in the matrix. However, blown-in fibreglass is generally less effective at air-sealing than dense-pack cellulose — the fibres are lighter and more prone to settling over time, creating gaps at the top of the insulated depth. Air movement through the insulation layer is the number one enemy of thermal performance in coastal conditions, where wind pressure differentials across the building envelope can be significant.

Installation depth and R-value targets matter significantly in coastal NB. The NB Building Code (aligned with NBC 2015) requires attic insulation to achieve a minimum of RSI 8.67, equivalent to approximately **R-50**, in new

construction. Most coastal homes built before 2005 fall well below this target — commonly R-20 to R-28 in the attic. Topping up with blown-in cellulose or fibreglass from R-20 to R-50 in a 1,200 to 1,800 sq ft bungalow typically costs **$1,800 to $3,500** depending on existing depth, attic accessibility, and whether air-sealing work is included.

Air sealing before blowing is critical in coastal environments. Any penetrations — pot lights, plumbing stacks, attic hatch perimeters, chimney chases — must be sealed with acoustical sealant or spray foam before loose fill is applied. On the coast, stack effect pressures and wind-driven infiltration are stronger than in inland cities like Fredericton, meaning unsealed penetrations do far more damage to thermal performance in Miramichi or Richibucto than they might elsewhere.

NB Power's Home Energy Savings Program offers rebates for attic insulation upgrades, typically $0.10 to $0.15 per RSI improvement per square metre, with a cap that varies by program year. The **Canada Greener Homes Grant** (where available) also supports blown-in attic upgrades with grants up to $600 for insulation improvements tied to an EnerGuide assessment. Combining both programs can offset a meaningful portion of project costs for coastal homeowners.

With proper vapour control, thorough air-sealing at penetrations, and installation to code-minimum depths, blown-in insulation is a sound and durable choice for coastal New Brunswick homes. For guidance on the right product and depth for your specific property, connect with an insulation specialist through New Brunswick Insulation or the New Brunswick Construction Network.

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Q16

Is blown-in fibreglass better than cellulose for moisture resistance in Shediac NB? | Insulation IQ?

Shediac sits at the intersection of two moisture challenges: the high relative humidity of the Northumberland Strait coastline and the deep cold of a climate zone 6 winter. Choosing between blown-in fibreglass and cellulose for an attic or wall upgrade there is a genuinely nuanced decision, not a simple one-wins-all comparison.

What moisture resistance actually means for loose-fill insulation

When contractors or product salespeople say fibreglass is "more moisture resistant" than cellulose, they are usually referring to liquid water absorption. **Blown-in fibreglass** does not wick or hold water in its fibres. If a small roof leak reaches the insulation, the water drains through rather than being retained. Fibreglass fibres themselves do not rot, mould, or decompose. This is a real advantage in a scenario involving liquid water intrusion.

Cellulose, however, is treated with borate compounds during manufacturing, which gives it strong mould and pest resistance. Despite being paper-based, cellulose in a properly detailed attic with intact vapour control and no liquid intrusion does not typically develop mould. What it does do is absorb and buffer atmospheric moisture — it can take in a modest amount of humidity from air and release it again as conditions change. This buffering actually helps moderate moisture fluctuations within the assembly. The concern arises when that buffering capacity is exceeded — sustained wetness will cause cellulose to mat, compact, and lose both depth and R-value permanently.

The Shediac-specific context

In Shediac, the primary moisture threat in a properly built attic is not liquid water from leaks but **vapour-driven condensation** on the cold sheathing during winter. Warm, humid indoor air rises into the attic, passes through inadequate air barriers, and hits the cold roof deck. Both fibreglass and cellulose are vulnerable to this mechanism if vapour control on the warm side is inadequate. The NB Building Code requires a continuous **6 mil polyethylene vapour barrier** on the warm side of insulation in climate zone 6. Without it, neither product performs well in Shediac's humid winters.

Where fibreglass has a practical edge in Shediac is **settling and air permeability**. Blown-in fibreglass settles more than cellulose over time, which reduces the effective depth. However, its low density means it is slightly more permeable to air movement within the insulation layer. Dense-pack cellulose — installed at higher density into wall cavities or enclosed spaces — can dramatically reduce air movement through the insulated assembly, which translates to measurably better thermal performance in windy coastal conditions.

Cost comparison in Shediac

For a typical 1,200 sq ft attic in Shediac being topped up to R-50 (RSI 8.67, the NB Building Code minimum for new construction), material and labour costs generally run:

- **Blown-in cellulose**: approximately $1,600 to $2,600
- **Blown-in fibreglass**: approximately $1,800 to $3,000

  Fibreglass is typically 10 to 20 percent more expensive per installed R-value than cellulose. The premium is sometimes justified by the liquid-water-tolerance advantage, but for a well-maintained roof with intact vapour control, the practical performance difference in Shediac is marginal.

  What matters most in the real world

  Installation quality eclipses product choice in almost every real-world moisture outcome. An attic with cellulose blown to proper depth, with all penetrations air-sealed first and a continuous vapour barrier below, will outperform a fibreglass job where pot lights were left unsealed or the barrier has gaps at the perimeter. In coastal Shediac, **pre-installation air sealing** — foam around plumbing penetrations, acoustical sealant at junction boxes, rigid insulation over the attic hatch — is the single most impactful step for long-term moisture performance.

  NB Power rebates apply to both products equally under the Home Energy Savings Program. Both cellulose and fibreglass blown-in are eligible insulation types for the **Canada Greener Homes Grant** when paired with an EnerGuide assessment.

  For most Shediac homeowners with a sound roof and intact vapour control, dense-pack cellulose offers excellent value and slightly superior air-sealing characteristics. For homeowners with older roofs or a history of minor leaks, the liquid-water tolerance of fibreglass may tip the balance. A licensed insulation contractor doing a pre-installation attic inspection can assess your specific situation. Explore qualified local insulation professionals through New Brunswick Insulation or the New Brunswick Construction Network.

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

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Q17

How much blown-in insulation do I need for a 1500 sq ft attic in Rothesay? | Insulation IQ?

Rothesay sits in the Saint John River valley, where winters are reliably cold and heating seasons are long — a typical climate zone 6 location where attic insulation depth has a direct and measurable impact on energy bills. Calculating how much blown-in insulation you need for a 1,500 sq ft attic involves understanding your current depth, your target R-value, and the settled depth per bag for the product you are using.

Target R-value for Rothesay attics

New Brunswick follows the National Building Code (NBC 2015 as adopted provincially), which sets a minimum attic insulation requirement of **RSI 8.67 — equivalent to R-50** — for new residential construction. That said, many Rothesay homes built in the 1970s through early 2000s have R-20 to R-28 of existing insulation. Energy advisors and NB Power typically recommend upgrading to R-50 minimum, with R-60 providing incremental additional savings in colder stretches of the valley near Sussex or Norton.

Calculating the volume needed

The math starts with the difference between where you are and where you need to be. If your attic currently has R-20 of old fibreglass batts and your target is R-50, you need to add approximately **R-30 of blown-in** over the existing material.

For **blown-in cellulose**: one bag of cellulose (typically 25 lb) covers approximately 40 to 45 sq ft at a settled depth providing R-3.5 per inch. To achieve R-30 of added cellulose you need roughly 8.5 inches of depth. For 1,500 sq ft, that works out to approximately **65 to 75 bags** of cellulose.

For **blown-in fibreglass**: fibreglass is lighter and less dense. One bag (typically 19 to 22 lb) covers approximately 35 to 40 sq ft at R-2.5 per inch settled. Achieving R-30 of added fibreglass requires about 12 inches of depth. For 1,500 sq ft, expect approximately **75 to 90 bags**.

If starting from scratch in a completely empty attic and targeting R-50, the totals scale up accordingly: cellulose to R-50 requires roughly 14 inches of depth, meaning **110 to 130 bags** for 1,500 sq ft. Fibreglass to R-50 requires approximately 20 inches, meaning **140 to 160 bags**.

Practical cost estimates for Rothesay

For a professional blown-in installation in Rothesay, including pre-installation air sealing of penetrations (the most critical step before any blown-in work), labour, rental equipment, and materials, typical costs run:

- **Topping up from R-20 to R-50** (1,500 sq ft attic): approximately $1,800 to $2,800 for cellulose; $2,200 to $3,200 for fibreglass
- **Full installation from bare attic to R-50**: approximately $2,800 to $4,200 depending on attic accessibility, number of penetrations, and existing obstructions

  Attics with complex geometry — multiple dormers, low slopes, obstructions from HVAC equipment or ductwork — add to labour time and cost.

  Air sealing: non-negotiable before blowing

  In Rothesay, as throughout the Saint John area, many homes have older construction with unsealed electrical boxes, plumbing chases, and attic hatches. Before any blown-in material goes in, these penetrations must be sealed. Air sealing a typical 1,500 sq ft attic adds **$300 to $700** to the project but delivers as much energy benefit as the insulation itself in older homes. Do not allow a contractor to skip this step.

  Rebate programs that apply in Rothesay

  NB Power's Home Energy Savings Program covers attic insulation upgrades and pays based on the RSI improvement per unit area. For a 1,500 sq ft attic upgraded from R-20 to R-50, rebates in the $400 to $750 range are typical (exact amounts depend on current program parameters — check nbpower.com for the latest). The **Canada Greener Homes Grant** previously offered up to $600 for insulation improvements when paired with a pre- and post-retrofit EnerGuide home assessment.

  Settling allowance

  Both cellulose and fibreglass blown-in products settle after installation. Cellulose typically settles 15 to 20 percent within the first year. Contractors should install to a marked depth that accounts for this settling — do not accept a job installed to the settled R-50 depth without the settling allowance baked in.

  For a precise quote and product recommendation tailored to your specific attic in Rothesay, reach out to a local insulation professional through New Brunswick Insulation or browse contractors on the New Brunswick Construction Network.

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Q18

Can blown-in insulation be installed in cathedral ceilings in New Brunswick homes? | Insulation IQ?

Cathedral ceilings are one of the most architecturally appealing — and thermally demanding — design features in a New Brunswick home. The combination of a finished ceiling surface directly below the roof deck, climate zone 6 cold, and New Brunswick's long heating season creates a challenging assembly where insulation choices and installation methods matter enormously.

The fundamental constraint in cathedral ceilings

In a standard attic, blown-in insulation can be applied to any depth because the attic floor is the insulated plane and there is unlimited vertical space above. In a cathedral ceiling, the insulated plane is the roof cavity itself — the space between the ceiling drywall and the roof sheathing above. This cavity has a fixed depth determined by the rafter size. A common 2x10 rafter gives approximately 9.25 inches of usable space. A 2x12 gives 11.25 inches. That is all you have to work with.

To complicate matters, **ventilated cathedral ceiling assemblies** — the code-preferred approach under the National Building Code as adopted in New Brunswick — require a **minimum 63 mm (2.5 inch) continuous ventilation channel** between the top of the insulation and the underside of the roof sheathing. This channel runs from soffit to ridge vent and prevents moisture accumulation on the cold sheathing, which is a serious concern in New Brunswick's humid winters. After reserving that ventilation space in a 2x10 rafter cavity, you are left with roughly **6.75 inches** for insulation — approximately R-25 with cellulose or R-17 with fibreglass batts. Neither meets the current code minimum of R-50 for new construction.

How blown-in works in cathedral ceiling applications

Blown-in cellulose and fibreglass can absolutely be installed in cathedral ceiling cavities — but the approach differs depending on whether the assembly is ventilated or unventilated.

In a **ventilated cathedral assembly**, rigid foam baffles or pre-formed vent chutes are installed from the ridge down to the soffit first, creating the required air channel. Blown-in cellulose is then injected from below (through drilled holes in the drywall ceiling) or from above during construction, filling the remaining cavity. This is called **dense-pack** installation — the material is blown in at higher pressure to achieve a density of approximately 56 to 65 kg/m³ for cellulose, preventing settling in the vertical or angled cavity. Without dense-pack density, loose-fill in a sloped cavity will settle to the bottom over time, leaving an uninsulated void at the top.

In an **unventilated cathedral assembly** (sometimes called a hot roof), the ventilation channel is eliminated entirely and a continuous layer of **closed-cell spray foam** is applied directly to the underside of the roof sheathing. The spray foam acts as both insulation and vapour barrier, and blown-in insulation can then be added below it to achieve the required combined R-value. Under NB Building Code requirements, unventilated assemblies require the impermeable layer to provide a minimum ratio of R-value relative to the total assembly — in climate zone 6, the code-required ratio means that at least 40 to 50 percent of the total R-value must come from the impermeable (spray foam) layer.

Cost realities for cathedral ceiling insulation in New Brunswick

Dense-pack blown-in for a cathedral ceiling is labour-intensive compared to attic work. Costs for a typical home in Fredericton, Moncton, or Saint John with 600 to 1,000 sq ft of cathedral ceiling area run approximately:

- **Dense-pack cellulose (ventilated assembly)**: $3.50 to $5.50 per sq ft installed, or approximately $2,100 to $5,500 for 600 to 1,000 sq ft
- **Hybrid assembly (closed-cell foam + blown-in cellulose)**: $6.00 to $9.00 per sq ft installed, or $3,600 to $9,000 for the same area

  The hybrid unventilated approach is more expensive but achieves higher R-values within the same rafter depth and eliminates dependence on a functioning ventilation channel.

  Retrofit versus new construction

  In new construction, cathedral ceiling insulation design is straightforward — the cavity is accessible from above before sheathing. In retrofit situations on existing Fredericton or Sussex homes, dense-pack installation typically involves drilling a grid of small holes in the ceiling drywall, injecting material under pressure, then patching and repainting. A skilled contractor can do this cleanly, but it is a more involved process than attic top-up work.

  Vapour control requirements

  New Brunswick Building Code requires vapour control at the warm side of the insulation in climate zone 6. In cathedral ceilings, this is typically provided by a vapour barrier applied before the ceiling drywall is installed. In dense-pack retrofit work, this is an existing layer that should be verified before the job begins.

For cathedral ceiling insulation assessment and quotes in New Brunswick, connect with experienced insulation contractors through New Brunswick Insulation or the New Brunswick Construction Network.

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