OTTAWA INSULATION CONTRACTORS

Existing Walls

Blowing or dense-packing insulation into closed walls, exterior insulation, the moisture caution in the Code and opening walls

5 Expert Answers from R-Value IQ

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Q1

What should I check for in old walls before insulating in Alta Vista?

Before adding insulation to existing walls, there are several things worth checking, and a contractor or energy advisor is the right person to look at them in person. The Code's own note on insulating existing wood-frame walls says the work increases the likelihood of damage to framing and cladding from moisture accumulation, and it suggests sealing openings, coating the inside surface with a low-permeability paint, and checking and repairing the siding, flashing and caulking before the work begins.

Here is what to have someone look at before a quote turns into a contract:

- Whether the walls already contain any insulation, and what kind. Urea formaldehyde foam insulation was widely used in the 1970s and was prohibited from sale and importation in Canada after December 1980. If the house dates from that era, ask a contractor to check before drilling or cutting.
- The condition of the siding, flashing and caulking on the outside. The Code note points to these as things to repair first.
- Whether there is a vapour barrier on the warm side of the wall assembly, and whether it is continuous. Ontario's Building Code requires a vapour barrier with a permeance no higher than 60 ng/(Pa·s·m²) on the warm side of insulated walls separating heated space from outside air.
- Whether the air barrier is intact and its penetrations are sealed. Gaps at electrical boxes, plumbing and other openings are worth finding before new insulation goes in.
- Whether the wall cavities are accessible from inside, outside or the attic, since that affects which materials and methods are practical.

On materials, Natural Resources Canada gives design R-values per inch: blown cellulose at R-3.6 (settled thickness), blown mineral fibre at R-3, blown glass fibre at R-2.9. The Code permits loose-fill insulation in the wood-frame walls of existing buildings. Ask each contractor which material they propose, why, and what finished R-value the completed wall will reach.

On permits, insulation on its own is not named on the City of Ottawa's permit lists. If the work involves opening walls, removing or altering structure, or changing windows, those items do appear on the permit list. Ask the City's Building Code Services before walls are opened.

When you have two written quotes in front of you, set them side by side and compare the material named, the total wall area each quote covers, and the finished thickness and R-value each contractor is promising to deliver.

Q2

Should the siding be checked before blowing insulation into Ottawa walls?

Yes, the siding should be checked before any insulation is blown into existing walls. Ontario's Building Code includes a note on this directly: adding insulation to existing wood-frame walls increases the likelihood of damage to framing and cladding from moisture accumulation, and the Code suggests sealing openings, coating the inside surface with a low-permeability paint, and checking and repairing the siding, flashing and caulking first.

That note is attached to the clause that permits loose-fill insulation in the wood-frame walls of existing buildings. It is not a prohibition, but it does mean the condition of the exterior cladding matters before the work starts, not after.

What to ask the contractor to check before drilling and blowing:

- Siding, flashing and caulking for gaps, cracks or failed seals that could let water in once the wall assembly changes
- Whether the inside surface can be treated with a low-permeability paint, which the Code note identifies as one of the steps to take
- Whether openings can be sealed to reduce air movement through the assembly

Ask the contractor to walk through what they found during that inspection and what, if anything, they recommend repairing or sealing before the insulation goes in.
On the quote itself, make sure it states the material being blown in, the area covered, the target R-value, and what air and vapour barrier work is included. Natural Resources Canada lists blown cellulose at R-3.6 per inch (settled thickness) and blown mineral fibre at R-3, so the finished thickness matters for knowing what R-value you are actually getting. We found no two-source published price range for insulating existing walls, so compare at least two written quotes.

Make sure the contractor's written quote also spells out what siding, flashing or caulking repairs are included in the price, and what falls outside it, so there are no surprises once the work is done.

Q3

What does Ontario's Code warn about insulating existing wood-frame walls?

Ontario's Building Code permits loose-fill insulation in the wood-frame walls of existing buildings (9.25.2.4.(3)), and its note attached to that clause flags a specific concern: adding insulation to existing wood-frame walls increases the likelihood of damage to framing and cladding from moisture accumulation.

The note goes on to suggest three steps before the work is done: seal openings in the wall assembly, coat the inside surface with a low-permeability paint, and check and repair the siding, flashing and caulking first. These are the Code's own words, not a contractor's preference or a general recommendation from another source.

That note matters because it shapes what a contractor should do before drilling and blowing. A quote for existing-wall insulation should spell out what air-sealing and vapour-control work is included, whether the exterior cladding and flashing will be inspected as part of the job, and what the plan is if problems are found. Ask whether the quote covers any preparatory work the note describes, or whether that is priced separately.

A few other things worth confirming with the contractor:

- What material is being used, and what R-value will the finished wall reach?
- How will the inside surface be treated to limit vapour movement?
- Who checks with the City about whether a permit is needed, given that wall work can overlap with structural alterations?

On that last point: insulation on its own is not named on the City of Ottawa's permit lists, but if walls are opened or altered as part of the job, that changes the question. The City's Building Code Services is the right place to ask before work starts.

Ask for the cladding and flashing check to appear on the quote as its own line, with what happens if repairs are needed.

Q4

What R-value goes in walls opened to the studs in Ottawa?

For walls opened to the studs in a new house or addition, Ontario's energy standard for housing, SB-12, sets the minimum at R-22 for above-grade walls in Zone 1, which covers Ottawa. For new houses, other SB-12 packages allow R-19 plus R-5 continuous insulation, or R-14 plus R-7.5 continuous insulation. Those values apply to new construction and additions only.

For an existing house being renovated, Ontario's Building Code takes a different approach. Section 11.3.1.1.(1) says that where an existing building system is materially altered or repaired, its performance afterward must be at least equal to its performance before the work. We found no Code number for walls in an existing home like the one SB-12 sets for new construction. Compliance alternative C207 also allows lesser amounts of insulation and vapour barrier where framing is being altered to match the existing framing.

What goes into the cavity depends on the material you and the contractor choose. Natural Resources Canada design values per inch are: glass fibre batt R-3.2, mineral fibre batt R-3.4, blown mineral fibre R-3, open-cell spray foam R-3.6, closed-cell spray foam R-6. The Code's note on insulating existing wood-frame walls says adding insulation increases the likelihood of damage to framing and cladding from moisture accumulation, and suggests sealing openings, coating the inside surface with a low-permeability paint, and checking and repairing the siding, flashing and caulking before the work is done.

The Code also asks for a vapour barrier on the warm side of the assembly and a continuous air barrier. Where insulation serves as the vapour barrier, it must be thick enough to meet that permeance limit. For spray-applied polyurethane foam, the Code states it must be installed in accordance with CAN/ULC-S705.2, the standard that sets installer requirements, so ask any spray foam contractor for proof they meet it.

A few things to ask before the work starts: whether the quote covers air sealing at all penetrations and at the top and bottom plates; what vapour barrier product is being used and where it sits in the assembly; and whether the siding, flashing and caulking will be checked before the walls are closed.

When you have two written quotes side by side, line up the material named, the total wall area in square feet, and the finished thickness and resulting R-value each contractor is promising, so you are comparing the same scope rather than the same price.

Q5

Can insulation be blown into closed walls of an older Ottawa house?

Yes, blown-in insulation can be added to the closed walls of an existing Ottawa house. The Ontario Building Code, at 9.25.2.4.(3), permits loose-fill insulation in the wood-frame walls of existing buildings.

The Code's note attached to that clause is worth knowing before you proceed. It says that adding insulation to existing wood-frame walls increases the likelihood of damage to framing and cladding from moisture accumulation. The note suggests sealing openings, coating the inside surface with a low-permeability paint, and checking and repairing the siding, flashing and caulking before the work is done. That is not a prohibition, but it is a caution the Code itself flags.

The practical side of the job turns on a few things the contractor has to assess in your specific walls. The material blown in, the condition of the existing wall assembly, what is already in the cavities, and whether the exterior cladding and any existing vapour barrier can handle the change all matter. Natural Resources Canada lists blown cellulose at about R-3.6 per inch and blown mineral fibre at about R-3, so ask the contractor what R-value the material will give in your wall cavities.

For an existing house, the Building Code's Part 11 renovation rule says that where an existing building system is materially altered or repaired, its performance afterward must be at least equal to its performance before. Ask the contractor how the air and vapour barrier will be kept continuous after the holes are drilled and plugged.

Before the work starts, ask the contractor to confirm whether your walls contain any old insulation already, and whether the exterior cladding, flashing and caulking are in good enough shape to proceed. Health Canada says to assume vermiculite produced before 1990 may contain some asbestos, so in an older house ask whether the existing wall insulation needs to be tested before anyone drills.

A fair quote for this work names the material, the area of wall being treated, the method of access (drilling from inside or outside), how the holes are patched and finished, and what the contractor will do about the vapour barrier. We found no published price range with two independent Ottawa sources for insulating existing closed walls, so get at least two itemised quotes to compare.

Before you commit to a contractor, ask them to walk you through exactly how they will address the moisture risk the Code's note describes, and what they will check in your specific wall assembly before drilling begins.

Disclaimer: This guide is provided for informational purposes only by Ottawa Insulation Contractors. It does not constitute professional advice. Always consult qualified contractors and your local building authority (the City of Ottawa) before starting any insulation project. Insulation on its own is not named on the City's permit lists, but work that comes with it can need a permit, so ask the City first. Information is current as of November 15, 2026 and may change. Visit **ottawainsulationcontractors.ca** for the latest answers.