OTTAWA SIDING CONTRACTORS

Wrap, Flashing & the Wall Behind

What goes behind siding: sheathing membrane, flashing, sealant, furring and drained gaps under the 2024 Ontario Building Code

4 Expert Answers from Siding IQ

ottawasidingcontractors.ca/construction-brain

Table of Contents

1. Siding over rigid foam with no house wrap in Ottawa, allowed?
2. Siding over brick on part of a Nepean wall, what joins them?
3. House wrap missing behind old siding in Nepean, must it be added?
4. Is house wrap behind siding on an Ottawa house actually waterproof?

Q1

Siding over rigid foam with no house wrap in Ottawa, allowed?

The 2024 Ontario Building Code allows siding to go directly over rigid foam without a separate layer of sheathing membrane, but only under specific conditions. Whether those conditions are met on your wall is the first thing to sort out before any work starts.

The general rule is that at least one layer of sheathing membrane conforming to CAN/CGSB-51.32-M is required beneath siding (9.27.3.2.). The exception is in (9.27.3.4.): the membrane is not required where non-wood-based rigid exterior insulating sheathing, or insulating sheathing with an integral membrane, is installed, with joints sealed or lapped and detailed to drain. So the foam must be non-wood-based, its joints must be sealed or lapped, and the assembly must be detailed to drain. If those three things are in place, the membrane layer can be omitted.

There is a second layer of rules that applies whenever low-permeance foam goes on the outside of a wall. Sheet or panel materials with low air leakage and low water vapour permeance trigger (9.25.5.1. and 9.25.5.2.): the foam must either sit on the warm face of the wall, or the ratio of outboard to inboard thermal resistance must meet the table in (9.25.5.2.), or the foam must be outboard of a drained and vented air space at least 10 mm deep behind the cladding. Ottawa's heating degree-days fall between 4,440 and 4,520, which puts it in the under-4,999 band where the table ratio is 0.20. A material with water vapour permeance of at least 30 ng/(Pa·s·m²) and thermal resistance of at least 0.7 (m²·K)/W in a location under 6,000 degree-days is exempt from that rule under (9.25.5.1.(4)). Whether your foam meets those permeance and resistance numbers is a question for the manufacturer's data sheet and a designer, not a guess.

The Code's explanatory notes also say a drained space at least 10 mm deep is recommended behind siding on walls other than masonry; that is a recommendation, not a requirement. Natural Resources Canada notes that strapping allows a drainage plane to be installed. Natural Resources Canada recommends removing the existing siding first so that any work to the structure, cavity insulation, and the vapour and air barrier can be done before adding exterior insulation.

The wall still needs both planes of protection (9.27.2.2.(4)): the cladding as the first plane, and a drainage plane with flashing as the second. Flashing is required at every horizontal junction and offset, and sealant goes between the siding and any window or door frame (9.27.4.).

Ask the City's Building Code Services before starting, particularly because exterior insulation is involved.

After the job is done, keep the written contract, the itemized quote, the manufacturer's warranty for both the foam and the siding, and photos of the wall taken before it was covered.

Q2

Siding over brick on part of a Nepean wall, what joins them?

Where two different cladding materials meet on the same wall, the 2024 Ontario Building Code (Div. B, 9.27.4.1.) requires sealant at vertical joints between different cladding materials unless the joint is lapped or flashed. That joint is where the new siding meets the existing brick.

The Code's two-plane rule (9.27.2.2.(4)) also applies to the new siding section: the wall behind it needs a first plane of protection (the siding itself) and a second plane that intercepts any water that gets past and dissipates it to the exterior. That second plane is a sheathing membrane conforming to CAN/CGSB-51.32-M, with joints lapped not less than 100 mm and upper sheets overlapping lower sheets (9.27.3.2., 9.27.3.3.). Ask how the membrane will be detailed where it meets the brick.

Flashing is required at every horizontal junction between cladding elements and where substrates change (9.27.3.7., 9.27.3.8.). Where the new siding sits above or below the brick, or where there is a horizontal offset between them, flashing is required unless the upper cladding overlaps the lower by at least 25 mm. The Code's minimum flashing materials include 0.33 mm galvanized steel, 0.46 mm aluminum and 1.02 mm vinyl, among others. Flashing must extend not less than 50 mm up behind the sheathing membrane, slope not less than 6% to the exterior and have end dams not less than 25 mm high.

The attachment rules also matter here. The new siding is fastened to framing, furring or blocking (9.27.5.1.); how it lines up with the brick face is a design question to ask the contractor about.

A few things worth asking any contractor who quotes this job:

- How they will detail the membrane where it meets the brick, and what material they will use for the transition.
- What flashing profile they plan at the horizontal junction, and how they will form the end dams.
- What fastening they propose and whether the framing behind the brick section is accessible.
- What the written quote says about what happens if damage is found behind the old section once work starts.
- Whether they carry WSIB coverage, and whether the crew's Working at Heights training is current.

Before a contractor arrives, stand back from the wall and note where exactly the brick section ends and the other cladding begins, whether there are any visible gaps or stains near that joint, and whether any interior walls on that side show water marks or staining below windows.

Q3

House wrap missing behind old siding in Nepean, must it be added?

When siding is removed and new siding goes on, the 2024 Ontario Building Code (Div. B, 9.27.3.2. and 9.27.3.3.) requires at least one layer of sheathing membrane conforming to CAN/CGSB-51.32-M beneath the new cladding, with joints lapped not less than 100 mm and upper sheets overlapping lower sheets where the membrane runs horizontally. The absence of wrap behind the old siding does not change that: the new installation is new work, and new work is done to the current Code.

There are two situations where the membrane requirement shifts. If non-wood-based rigid exterior insulating sheathing is installed with joints sealed or lapped and detailed to drain, or if the sheathing has an integral membrane, the separate wrap layer is not required under 9.27.3.4. If there is no sheathing at all, two layers of membrane are required instead of one (9.27.3.5.). Once the wall is open, ask the contractor which situation applies; the quote should account for it.

The Code also requires that both a first plane of protection (the cladding itself) and a second plane (the membrane and flashing assembly behind it) be maintained at every wall penetration, including windows, doors, ducts and outlets (9.27.2.2.(4), 9.27.3.1.). Flashing is required at every horizontal junction between cladding elements and at horizontal offsets, and sealant goes between the siding and adjacent window and door frames (9.27.4.). The Code's explanatory notes say a drained space at least 10 mm deep behind the cladding is recommended for walls other than masonry, though no Ontario cladding clause makes that gap a requirement.

A fair quote for this job should spell out, in writing, what it includes for each of these items:

- the membrane: product, number of layers, how joints will be lapped
- flashing at every horizontal junction and at openings where required
- sealant at windows, doors and other penetrations
- what happens if structural sheathing is found to be damaged or missing once the old siding comes off, and how any additional cost will be agreed before work continues
- removal of the old siding and disposal, including who arranges it
- the manufacturer's written installation instructions for the new cladding, and the written warranty

Once the job is done, keep the signed contract, the itemized quote, the manufacturer's warranty documents, and photos taken of the bare wall before the new membrane and siding went on: those records are the clearest evidence of what was done and what was agreed.

Q4

Is house wrap behind siding on an Ottawa house actually waterproof?

No, house wrap is not waterproof. The 2024 Ontario Building Code's explanatory notes say directly that sheathing membrane is not a waterproof material, and the Code's standard for it, CAN/CGSB-51.32-M, is titled "Sheathing, Membrane, Breather Type."

What the Code actually asks house wrap to do

The 2024 Ontario Building Code (Div. B, 9.27.2.2.(4)) requires that exterior walls enclosing residential space be protected by a cladding assembly with two planes of protection. The first plane is the siding itself, with its trim, accessories and fasteners. The second plane, described in 9.27.2.3. and 9.27.3.1., intercepts rain and snow that get past the first plane and dissipates it back to the exterior. The second plane is a drainage plane with an appropriate inner boundary and flashing (9.27.3.1.); house wrap is part of it.

The Code requires at least one layer of house wrap beneath siding, with horizontal joints lapped not less than 100 mm and upper sheets overlapping lower sheets (9.27.3.3.). Where no sheathing is used, at least two layers are required (9.27.3.5.). The Code also allows the membrane to be omitted where non-wood-based rigid exterior insulating sheathing with sealed or lapped joints is used instead (9.27.3.4.), or under certain face-sealed cladding assemblies (9.27.3.6.), though the Code's explanatory notes say face-sealed assemblies need more intensive and ongoing maintenance.

Flashing is required at horizontal junctions and offsets in the cladding and over certain wall openings (9.27.3.7., 9.27.3.8.), and sealant goes between siding and adjacent window or door frames (9.27.4.). The Code asks for the lapped membrane, the flashing and the sealant together.

The Code's explanatory notes also say that a drained space at least 10 mm deep behind siding is recommended for walls other than masonry, and that vinyl and metal strip siding installed with discontinuous drained spaces have shown acceptable performance. The notes describe this as best practice, not a requirement, so it is something worth asking a contractor about rather than something the Code mandates.

Line up the written quotes and check that each one spells out what it includes for removal and disposal of the old siding, the membrane, flashing at every opening and offset, trim and corners, and what the contractor will do and charge if damage is found in the sheathing or framing once the old cladding comes off.

Disclaimer: This guide is provided for informational purposes only by Ottawa Siding Contractors. It does not constitute professional advice. Always consult qualified contractors and your local building authority (the City of Ottawa or your own municipality) before starting any siding project, and have old siding on a house built before 1990 tested before it is disturbed. Siding work in Ontario must meet the 2024 Ontario Building Code (O. Reg. 163/24). Information is current as of November 15,

2026 and may change. Visit **ottawasidingcontractors.ca** for the latest answers.