CALGARY ROOF REPAIRS

Asphalt Shingles

Architectural vs 3-tab shingles, brands and warranties, lifespan in Calgary's sun and chinooks, curling and granule loss

5 Expert Answers from Roof IQ

calgaryroofrepairs.com/construction-brain

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Q1

What does a 30-year shingle really last in Alberta?

The "30-year" label is a marketing lifespan measured under controlled laboratory conditions, not a Calgary-weather guarantee. In Alberta's climate, a mid-grade architectural shingle realistically lasts roughly 18 to 25 years on most houses, and a premium architectural or Class 4 impact-resistant shingle might reach 25 to 30 years if the attic is well-ventilated and the roof escapes a direct hail hit.

Why Alberta Shortens That Number

Calgary sits in what the City of Calgary calls "hail alley," the most hail-prone part of Canada. A single severe storm, like the August 2024 event that generated roughly $2.8 to $3 billion in insured losses according to the Insurance Bureau of Canada, can granule-strip a shingle roof that was otherwise halfway through its life. Beyond hail, Calgary averages about 128 freeze-thaw cycles a year. Snow melts on a south-facing slope on a chinook afternoon and refreezes overnight, working water under shingles and lifting tabs over time. UV intensity at roughly 1,045 metres elevation also accelerates the oxidation that makes shingles brittle.

Attic ventilation is the single biggest factor a homeowner controls. The National Building Code requires vent area of at least 1/300 of the insulated ceiling area, with at least 25% at the top and 25% at the bottom. A poorly vented attic traps summer heat that bakes shingles from below and winter moisture that causes frost and rot in the deck. A roofer who replaces shingles without checking ventilation is setting the new roof up to underperform.

Eave protection matters too. The code requires it to extend at least 900 mm up the slope and to a line at least 300 mm inside the inner face of the exterior wall. Skimping here is where freeze-thaw cycles do the most damage, because ice dams push water back under the starter course.

Pitch and exposure also play a role. A steep south-facing slope sheds water fast but takes more UV and hail impact directly; a low-slope section holds snow longer and is more vulnerable to ice damming. Hip roofs generally hold up better than gable roofs in wind and hail.

The practical takeaway: treat the warranty term as a ceiling, not a promise. Ask any roofer quoting the job what realistic lifespan they expect given your specific pitch, ventilation and the product they are proposing, and get that in writing alongside the manufacturer's warranty terms. A Class 4 impact-resistant shingle costs roughly 10 to 20% more than a standard architectural shingle but is far more likely to survive Calgary hail seasons intact, and the Insurance Bureau of Canada notes that a majority of insurers offer discounts of up to 50% for hail-resistant materials, so ask your insurer what applies to your policy before choosing a product.

After the job is done, keep the manufacturer's warranty certificate, the contractor's workmanship warranty in writing, the invoice showing the exact product installed, and any permit or inspection documents: that paperwork is what

makes a warranty claim or an insurance conversation go smoothly years from now.

Q2

What is a laminated shingle and is it good for Calgary?

Laminated shingles, also called architectural or dimensional shingles, are the standard choice for Calgary homes today, and for good reason. They are made by bonding two layers of fibreglass-reinforced asphalt together, which creates the thick, textured profile that mimics wood shake or slate. That extra thickness is what sets them apart from the older single-layer three-tab shingle.

Why laminated shingles suit Calgary well

Calgary's climate is genuinely hard on roofing. The city sits in what the City of Calgary calls "hail alley," the part of Canada that sees the most hail, and the August 2024 storm alone caused an estimated $2.8 to $3 billion in insured damage according to the Insurance Bureau of Canada. On top of that, Calgary averages roughly 128 freeze-thaw cycles a year, meaning snow melts on a warm chinook afternoon and refreezes overnight. Laminated shingles handle that cycle better than three-tab shingles because the bonded layers resist lifting and cracking under repeated thermal movement.

For standard architectural laminated shingles, expect to pay roughly $5 to $8.50 per square foot installed in Calgary, which works out to about $10,000 to $24,000 for a typical detached house with tear-off included. That range moves depending on roof size (measured in squares, each being 100 square feet), pitch and height, how many layers need to come off, the condition of the decking underneath, and what flashings and vent boots need replacing.

If hail is your main concern, the better option is a Class 4 impact-resistant laminated shingle, rated under UL 2218 or FM 4473. The City of Calgary notes these reduce the chance of hail damage roughly 15 times compared to standard shingles and, on average, save about $3 for every $1 of added cost over their life. They run about 10 to 20 percent more than standard architectural shingles, so roughly $13,000 to $25,000 for a typical house. The Insurance Bureau of Canada says a majority of insurers offer discounts of up to 50 percent for hail-resistant materials; call your insurer before you sign anything to find out what discount applies to your policy.

One code point worth knowing: the National Building Code, 2023 Alberta Edition, requires eave protection (commonly called ice-and-water shield) extending at least 900 mm up the slope and to a line at least 300 mm inside the inner face of the exterior wall on any shingle roof in Calgary. Given the city's freeze-thaw cycles, a good roofer will run it further. Make sure your quote spells this out.

A like-for-like replacement of asphalt shingles with asphalt shingles needs no City of Calgary building permit under Alberta's Permit Regulation, as long as there is no structural work involved.

Before you hire, confirm the roofer holds an Alberta prepaid contracting licence (searchable through Service Alberta) if any deposit is required before the work is complete, and ask for a WCB-Alberta clearance letter. Your written contract should itemise the product name and grade, tear-off and disposal, a per-sheet price for any decking that needs replacing beyond an included allowance, eave protection, flashings, vent boots, start and completion dates, and a holdback until the work passes your inspection.

Q3

My shingles are 15 years old and bald in spots, Calgary, replace?

Fifteen-year-old shingles with bare spots are telling you they're done. In Calgary, a full asphalt shingle replacement runs roughly **$10,000 to $24,000** for a typical detached house, based on about $5 to $8.50 per square foot of roof area.

Is replacement the right call?

Granule loss that exposes the mat underneath is not cosmetic. Those granules shield the asphalt from UV and shed water; once they're gone, the shingle dries out, cracks and curls quickly. At 15 years, most architectural shingles are past the halfway point of their useful life in Calgary's climate. Patching bald spots buys a season or two at best, and a roofer quoting repairs will likely tell you the same after seeing the rest of the roof. A full replacement is almost always the better investment at this stage.

What moves the price for your job: roof size in squares (a "square" is 100 square feet), pitch and height, how many layers are already on the deck, and the condition of the sheathing underneath. If there's a second layer of old shingles, tear-off adds roughly $1 to $4 per square foot. Damaged or soft decking boards run about $2 to $4 per square foot to replace, usually quoted per sheet beyond a small included allowance. Flashings, valley metal, vent boots and ridge venting are separate line items; ask that each one be listed in the quote.

Calgary's climate adds a couple of things worth knowing. The city sits in what the City of Calgary calls "hail alley," so this is a good moment to ask about Class 4 impact-resistant shingles. They cost roughly 10 to 20% more than standard architectural shingles, but the Insurance Bureau of Canada says a majority of insurers offer discounts of up to 50% on home insurance premiums for hail-resistant materials. Ask your insurer what discount applies before you choose a shingle. The National Building Code also requires a continuous eave protection membrane (ice-and-water shield) extending at least 900 mm up the slope and to a line at least 300 mm inside the inner face of the

exterior wall on Calgary roofs; confirm that's included in every quote, not just the cheapest one.

On permits: replacing asphalt shingles with asphalt shingles is like-for-like re-roofing. Under Alberta's Permit Regulation, that does not require a building permit from the City of Calgary, provided there's no structural work and no change to the type of material.

Before you sign anything, check that the contractor holds an Alberta prepaid contracting licence (searchable on Service Alberta's website) if they're asking for any deposit before the work is finished. Also request a WCB-Alberta clearance letter; if a worker is injured on your property and the contractor has no WCB coverage, you could be responsible for outstanding premiums. The contract itself should spell out the shingle product and class, tear-off and disposal, decking allowance and the per-sheet price beyond it, eave protection, flashings, start and completion dates, payment schedule, and warranty terms. Keep a written holdback until the work passes your inspection.

Bald patches are a good reason to get quotes this season rather than next, and our form is a free way to start.

Q4

Do algae streaks happen on shingles in dry Calgary?

Yes, algae streaks do appear on Calgary roofs, though less often than in humid eastern or coastal cities. The dark staining, usually caused by a cyanobacterium called Gloeocapsa magma, needs moisture to grow, and Calgary's dry air and roughly 330 sunny days a year keep most roof surfaces dry enough to slow it down considerably. That said, north-facing slopes, shaded areas under overhanging trees, and spots where debris collects stay damp long enough after rain or snowmelt to support growth. Chinook cycles make this more complicated: a warm chinook melts snow in an afternoon, the melt sits in sheltered spots, then overnight temperatures drop and the cycle repeats. That repeated wetting and partial drying is enough to feed algae colonies over several seasons.

What the streaks actually mean for your roof

The black or dark grey streaking itself is mostly cosmetic at first. The organism feeds on the limestone filler in asphalt shingles, so long-term colonisation does gradually degrade the shingle surface, but it works slowly. The bigger concern in Calgary is what grows alongside it: moss and lichen, which physically lift the shingle edges and hold moisture against the deck. Moss is more common on cedar shake roofs, where the texture and organic material give it a foothold, but it does appear on asphalt shingles in persistently shaded spots.

From the ground or with binoculars, look for dark streaking running down from a ridge or a chimney, green patches near the eaves, or shingles that look slightly raised at the edges. Check the attic too: if algae and moisture have been sitting on the deck for years, you may find staining or soft spots in the sheathing.

Cleaning a streaked roof is not a DIY project if it requires you to walk the slope. Alberta's OHS Code requires fall protection for anyone working at 3 metres or more above the level below, measured from the eave. A professional roof cleaner with proper anchor points and a low-pressure wash (high pressure strips granules) is the right call. A zinc or copper strip installed near the ridge is a common preventive measure: rainwater carries trace metals down the slope and inhibits regrowth.

When it is time to replace, many asphalt shingles now include copper-based granules that resist algae. If your current roof is showing streaks alongside granule loss, cupping or cracking, it is worth having a roofer assess whether cleaning buys another few years or whether replacement makes more sense. Given Calgary's hail exposure, that conversation should also include whether Class 4 impact-resistant shingles are worth the roughly 10 to 20 percent premium over standard architectural shingles, particularly if your insurer offers a discount for them.

For a purely informational question like this one, a paid inspection in the $150 to $400 range gives you a written condition report rather than a sales pitch, which is useful if you want an honest read on whether streaking is the only issue or a symptom of something deeper.

Q5

Why did hail knock granules off my Panorama Hills shingles?

Granule loss from hail is one of the most common complaints after a Calgary storm, and it matters more than it looks.

What hail actually does to a shingle

Asphalt shingles are made of a fibreglass mat coated in asphalt and then embedded with mineral granules. Those granules do three jobs: they protect the asphalt from ultraviolet degradation, add fire resistance, and give the shingle its colour. When a hailstone strikes, it delivers a sharp impact that dislodges granules from the asphalt matrix. The larger and harder the stone, the more granules it knocks loose. Calgary sits in what the City of Calgary calls "hail alley," the part of Canada that sees the most hail, and the August 2024 storm alone generated roughly $2.8 to $3 billion in insured losses across the city. Panorama Hills, in Calgary's northwest, is fully exposed to the hail tracks that move through that corridor.

A few things make the damage worse on any given roof. Shingles that are already 10 or more years old have lost some of the adhesive bond holding granules in place, so the same storm hits them harder than a newer roof. Steeper pitches take a more glancing blow and tend to fare better than low slopes, which receive hail nearly straight on. The direction the roof faces matters too: a slope facing the storm's approach loses more granules than the sheltered side.

The reason granule loss is serious is that once the asphalt is exposed, UV breakdown accelerates quickly. A shingle that looks cosmetically damaged today can crack, curl and leak within a few seasons if the granule layer is gone over a significant area.

What to do next in Panorama Hills.

Start by checking your attic for any water stains or daylight, and look in your eavestroughs for a heavy accumulation of granules, which is a reliable sign of widespread impact damage. Photograph everything from the ground; do not walk the roof yourself after a storm.

Contact your home insurer before authorising any repair work. Standard home insurance covers hail damage, and the insurer will send an adjuster to scope the loss. A roofer's inspection report, with photos and measurements, helps you compare the adjuster's scope against what the contractor found. Be cautious of door-to-door offers in the days after a storm; confirm who the contractor is and whether your insurer referred them before signing anything.

If the claim proceeds, this is a good moment to ask your insurer about a Class 4 impact-resistant shingle. The City of Calgary says these shingles reduce the chance of hail damage roughly 15 times and save about $3 for every $1

of added cost over their life. A majority of insurers offer premium discounts of up to 50% for hail-resistant materials, though the exact figure varies by policy, so ask your own insurer directly.

For a full asphalt shingle replacement in Calgary, budget roughly $10,000 to $24,000 for a typical detached house, or $13,000 to $25,000 if you upgrade to Class 4 shingles. A like-for-like shingle replacement does not require a City of Calgary building permit.

A second set of eyes before the adjuster visits is worth having, and local roofers can inspect through a free match on this site.

Disclaimer: This guide is provided for informational purposes only by Calgary Roof Repairs. It does not constitute professional advice. Always consult qualified, licensed contractors and your local building authority (the City of Calgary or your own municipality) before starting any roofing project. Information is current as of November 1, 2026 and may change. Visit **calgaryroofrepairs.com** for the latest answers.