

OTTAWA STUCCO

Waterproofing & Drainage

Moisture management for stucco systems including weather barriers, drainage planes, weep screeds, flashing, and below-grade waterproofing.

3 Expert Answers from Stucco IQ

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What is a kickout flashing and why is it critical on stucco homes in Ottawa?

Kickout flashing is a specialized piece of metal flashing that directs water away from the intersection where a roof meets a sidewall, and it's absolutely critical for preventing water damage behind stucco in Ottawa's harsh climate. Without proper kickout flashing, water running down your roof can get trapped behind the stucco system, leading to rot, mold, and expensive structural repairs.

Understanding Kickout Flashing Function

Kickout flashing works by capturing water that flows down a roof slope and "kicking" it out and away from the building rather than allowing it to run down the wall surface. At roof-to-wall intersections, standard step flashing alone isn't enough because water can still flow behind the wall cladding. The kickout flashing piece extends beyond the wall plane and includes a hemmed edge that forces water to drip away from the building. This is especially important with stucco because **stucco systems are designed to shed water, not handle concentrated flows** from roof runoff.

In Ottawa's climate, this detail becomes even more critical because of our **intense freeze-thaw cycles and ice dam formation**. When water gets trapped behind stucco and freezes, it expands and can cause the stucco to crack, spall, or delaminate entirely. I've seen Ottawa homes where missing kickout flashing led to complete stucco failure and thousands of dollars in repairs within just 3-5 years of installation.

Proper kickout flashing installation costs between \$150 and \$300 per location when done during initial construction or roofing work. However, retrofitting kickout flashing on existing homes can cost \$400 to \$800 per location because it often requires removing sections of stucco, siding, or roofing materials. The investment is minimal compared to the potential damage - **stucco repairs from water infiltration typically run \$3,000 to \$8,000 per affected wall section** in Ottawa.

The Ontario Building Code requires proper flashing at all roof-to-wall intersections, and kickout flashing is considered best practice even where not explicitly mandated. Many Ottawa contractors now install kickout flashing as standard practice on all stucco homes because they've seen the damage that occurs without it. **EIFS systems are particularly vulnerable** because the foam insulation can retain water and create hidden damage that isn't visible until it's extensive.

Installation timing is crucial in Ottawa's climate - kickout flashing must be installed during dry conditions and properly sealed before winter weather arrives. The flashing needs to integrate with the water-resistive barrier behind the stucco and should extend at least 4 inches beyond the wall surface. Common materials include aluminum, galvanized steel, or copper, with copper lasting longest in our corrosive winter salt environment.

If you're planning stucco work or roof replacement, ensure your contractor includes proper kickout flashing at all roof-to-wall intersections. For existing homes showing signs of water staining or stucco damage near roof lines, have a professional assess whether missing or failed kickout flashing is the culprit. You can browse experienced contractors familiar with proper flashing details through the Ottawa Construction Network directory at justynrookcontracting.com.

Q2

What flashing details are needed where a flat roof meets a stucco wall in Ottawa?

Proper flashing at the roof-to-wall junction is absolutely critical in Ottawa's extreme freeze-thaw climate.

This intersection is one of the most vulnerable points on any building envelope, and inadequate flashing here will lead to water infiltration, ice dam formation, and expensive structural damage within just a few freeze-thaw cycles.

Critical Flashing Components for Ottawa Conditions

The flashing system requires multiple integrated components to handle Ottawa's harsh conditions. **Step flashing** must be installed where the roof membrane meets the wall, with individual pieces of flashing woven into each course of roofing material. In Ottawa, this step flashing should be a minimum of 6 inches wide, extending at least 4 inches up the wall and 2 inches onto the roof surface. The flashing material should be heavy-gauge galvanized steel, aluminum, or copper — never use thin aluminum or plastic flashing in Ottawa's climate.

Counter flashing must be installed over the step flashing and embedded into the stucco wall system. This counter flashing should extend a minimum of 4 inches up the wall and overlap the step flashing by at least 2 inches. The counter flashing must be properly sealed into a reglet (groove) cut into the stucco, not simply surface-mounted. A high-quality polyurethane or silicone sealant rated for Ottawa's temperature extremes (minus 40 to plus 50 degrees Celsius) must seal the reglet.

The **roof membrane** itself must extend up the wall a minimum of 8 inches above the roof surface, and in Ottawa conditions, 12 inches is preferred. This creates a continuous waterproof barrier that can handle ice dam backup and wind-driven rain. The membrane must be properly adhered to the wall substrate and protected by the flashing system above.

Drainage considerations are especially important in Ottawa because ice dams can force water up and under inadequate flashing. The roof-to-wall intersection should include a slight slope away from the wall to encourage drainage. Any flat areas that might pond water must be eliminated. Consider installing a **cant strip** — a triangular

filler piece — at the base of the wall to create a smooth transition and eliminate the sharp 90-degree angle where debris and ice can accumulate.

For stucco walls specifically, the **weather-resistive barrier** behind the stucco must integrate properly with the roof flashing system. The barrier should extend down over the counter flashing and be sealed to create a continuous moisture barrier. This is where many Ottawa installations fail — the stucco system and roofing system are often treated as separate components instead of an integrated weather barrier.

Cost expectations for proper roof-to-wall flashing in Ottawa run **\$45 to \$85 per linear foot** depending on wall height, accessibility, and material choices. This includes step flashing, counter flashing, sealants, and integration with the stucco system. While this might seem expensive, it's a fraction of the cost of repairing water damage and structural issues that result from failed flashing.

Seasonal timing is crucial for this work in Ottawa. Flashing installation requires dry conditions and temperatures above 5 degrees Celsius for proper sealant curing. The work should be completed during the primary building season from May through October. Emergency temporary repairs can be made in winter, but permanent flashing installation should wait for appropriate weather conditions.

This type of complex flashing work requires coordination between roofing and stucco trades and should always be handled by experienced professionals. Browse contractors with both roofing and stucco expertise through the Ottawa Construction Network directory at justynrookcontracting.com to ensure proper integration of these critical building envelope components.

Q3

How do you prevent efflorescence from recurring on parging and stucco in Ottawa?

Efflorescence prevention in Ottawa requires addressing both the water source and the soluble salts that create those white, chalky deposits on your parging and stucco. The key is controlling moisture infiltration while ensuring proper drainage, which is especially critical in Ottawa's freeze-thaw climate where water movement through masonry accelerates dramatically.

Understanding Efflorescence in Ottawa's Climate

Efflorescence occurs when water dissolves salts within concrete, mortar, or stucco, then carries those salts to the surface where they crystallize as the water evaporates. In Ottawa's extreme climate, this process intensifies during

spring thaw and after heavy rains when foundation walls and above-grade stucco experience significant moisture cycling. The **freeze-thaw cycles** we experience — often more than 50 per season — create micro-cracks that allow water penetration, making efflorescence a persistent problem if not properly addressed.

The most effective prevention strategy starts with **moisture source elimination**. Check your foundation grading to ensure water flows away from the house with a minimum 6-inch drop over the first 10 feet. Clean and maintain gutters and downspouts, extending them at least 6 feet from the foundation. In Ottawa's clay soil conditions, poor drainage around foundations is particularly problematic because clay retains moisture and creates hydrostatic pressure against foundation walls.

For existing parging showing efflorescence, the surface must be properly prepared before applying preventive treatments. **Remove all visible efflorescence** using a stiff brush and clean water — avoid muriatic acid on parging as it can damage the cement matrix. Allow the surface to dry completely, which in Ottawa's humid conditions may take several days. Apply a high-quality **masonry sealer or crystalline waterproofing product** designed for cement-based surfaces. These products penetrate the substrate and react with moisture to form crystals that block water pathways.

Proper parging technique also prevents efflorescence recurrence. When re-parging is necessary, use a low-alkali cement mix with minimal lime content. Add a **concrete waterproofing admixture** to the parging mix — this costs an additional \$1 to \$2 per square foot but significantly reduces water absorption. Apply parging in thin, even coats rather than one thick application, allowing each coat to cure properly before applying the next.

For stucco walls, efflorescence prevention requires attention to the entire wall assembly. Ensure proper **flashing installation** at all penetrations, windows, and roof intersections. Install weep screeds at the base of stucco walls to allow moisture drainage. Consider applying an **elastomeric coating** specifically designed for stucco — these coatings cost \$3 to \$6 per square foot but provide excellent moisture protection while maintaining breathability.

Timing is crucial in Ottawa's climate. Sealer application should occur during dry weather with temperatures consistently above 10°C for at least 48 hours. The best window is typically late spring through early fall. Winter moisture infiltration followed by spring thaw often reveals efflorescence problems that developed during the cold months.

Interior moisture control also plays a role, particularly for foundation parging. Ensure proper basement ventilation and consider a dehumidifier during Ottawa's humid summer months. High interior humidity can drive moisture through foundation walls from the inside, contributing to efflorescence on exterior parging.

Professional assessment becomes necessary when efflorescence recurs despite proper surface treatment, when it appears with structural cracks, or when it covers large areas of your foundation. **Parging repair with efflorescence prevention** typically costs \$8 to \$14 per square foot, while **stucco sealing** runs \$4 to \$8 per square

foot depending on the product used and surface preparation required.

The Ottawa Construction Network directory at justynrookcontracting.com includes contractors experienced with moisture issues specific to our climate who can assess your situation and recommend the most effective long-term solution for your property's specific conditions.

Disclaimer: This guide is provided for informational purposes only by Ottawa Stucco. It does not constitute professional advice. Always consult qualified, licensed contractors and your local building authority before starting any stucco, parging, or exterior rendering project. Information is current as of May 31, 2026 and may change. Visit ottawastucco.com for the latest answers.