

OTTAWA EPOXY FLOORS

Concrete Repair & Preparation

Diamond grinding, shot blasting, crack repair, spall patching, and surface profiling required before epoxy or coating application.

3 Expert Answers from Epoxy IQ

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What is the price for full diamond grinding of a two-car garage floor in Barrhaven?

Diamond grinding for a standard two-car garage floor in Barrhaven typically costs between \$800 and \$2,400, or \$2 to \$4 per square foot, depending on the concrete condition and level of preparation required.

Diamond grinding is the gold standard for concrete surface preparation before epoxy coating application. This mechanical process uses industrial grinders equipped with diamond-embedded segments to remove the top layer of concrete, exposing fresh aggregate and creating the proper surface profile for maximum coating adhesion. In Barrhaven's newer subdivisions, garage floors are often power-troweled smooth during construction, creating a dense surface that absolutely requires diamond grinding before any coating system will properly bond.

The process removes laitance (the weak, dusty surface layer), opens the concrete's pores, and creates a uniform surface profile measured in mils. Most epoxy manufacturers require a Concrete Surface Profile (CSP) of 1 to 3, which diamond grinding reliably achieves. The grinding also removes any existing sealers, curing compounds, or light oil stains that would prevent proper adhesion.

Cost factors significantly impact the final price in Ottawa's market. A basic single-pass grind on relatively clean concrete runs \$2 to \$2.50 per square foot. Heavily contaminated floors requiring multiple passes, oil stain removal, or significant concrete repair push costs to \$3.50 to \$4 per square foot. The typical two-car garage ranges from 400 to 600 square feet, so expect total grinding costs between \$800 and \$2,400. Additional charges apply for moving stored items, extensive crack repair, or accessing tight corners that require hand grinding.

Ottawa's climate creates specific challenges that affect grinding requirements. Barrhaven's clay soil and seasonal moisture fluctuations often cause concrete settlement cracks and surface scaling from freeze-thaw cycles. Road salt tracked into garages during winter creates surface contamination that requires more aggressive grinding. Spring is the busiest season for this work as contractors address winter damage, potentially affecting scheduling and pricing.

Professional diamond grinding requires specialized equipment, dust collection systems, and WSIB-covered operators. Most contractors include grinding as part of a complete epoxy system rather than offering it as a standalone service. When combined with epoxy coating, the grinding cost is often bundled into the total project price of \$5 to \$12 per square foot for the complete system.

For your next steps, get quotes from at least three contractors who can assess your specific garage conditions. Many factors like existing coatings, oil stains, or concrete damage will affect the grinding requirements and final cost. You can browse experienced flooring contractors familiar with Barrhaven projects through the Ottawa Construction Network directory at justynrookcontracting.com using the flooring trade filter.

How much does it cost to remove tile thinset from a concrete floor before epoxy in Ottawa?

Removing tile thinset from concrete before epoxy application in Ottawa typically costs between \$3 to \$8 per square foot, depending on the thickness of the adhesive, the type of thinset used, and the concrete condition underneath. This preparatory work is absolutely essential because epoxy cannot bond properly to thinset residue, and any shortcuts here will lead to coating failure within months.

The removal process requires aggressive mechanical preparation, usually diamond grinding or shot blasting equipment. **Diamond grinding is the most common method in Ottawa, using industrial grinders with diamond-embedded wheels to mechanically remove thinset down to bare concrete.** This creates the proper concrete surface profile (CSP 2 to CSP 3) that epoxy needs for maximum adhesion. Shot blasting uses steel shot propelled at high velocity to strip thinset and simultaneously texture the concrete surface.

For a typical 400-square-foot garage floor, expect thinset removal to cost \$1,200 to \$3,200 before any epoxy application begins. Thicker thinset layers, especially those used under ceramic or stone tile, require more aggressive grinding and drive costs toward the higher end. Some contractors charge a flat rate of \$4 to \$6 per square foot for standard removal, while complex jobs with multiple thinset layers or epoxy-based tile adhesives can reach \$8 to \$10 per square foot. The concrete condition after removal also affects pricing – if grinding reveals cracks, spalls, or other damage requiring repair, add another \$2 to \$4 per square foot for concrete restoration.

Ottawa's climate makes proper thinset removal even more critical because moisture infiltration through poorly bonded epoxy creates freeze-thaw damage that destroys the entire floor system. Spring and fall are ideal seasons for this work, as the concrete needs time to dry completely after grinding before epoxy application. Most contractors require 24 to 48 hours between thinset removal and coating application to ensure the concrete reaches proper moisture levels.

The removal process generates significant concrete dust, requiring proper containment and HEPA filtration equipment. Professional contractors should provide dust collection systems and plastic sheeting to protect adjacent areas. **Never attempt thinset removal with hand tools or small angle grinders – this creates an uneven surface profile and takes exponentially longer than professional equipment.**

After removal, the concrete must pass both visual inspection and moisture testing before epoxy application. A calcium chloride test should show moisture vapour emission rates below 3 pounds per 1,000 square feet per 24 hours. The surface should have uniform texture with no glossy or smooth spots where thinset residue remains.

Get quotes from at least three contractors for this specialized work, as pricing varies significantly based on equipment quality and experience level. Many epoxy contractors include thinset removal in their overall project

pricing, while others subcontract this work to concrete preparation specialists. You can find experienced flooring contractors who handle both thinset removal and epoxy application through the Ottawa Construction Network directory at justynrookcontracting.com, using the flooring trade filter to connect with professionals familiar with Ottawa's unique concrete preparation requirements.

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What is the price for vacuum shot blasting a large commercial floor in Ottawa?

Vacuum shot blasting for large commercial floors in Ottawa typically costs between \$3 to \$8 per square foot, depending on the concrete condition, required profile depth, and project size. This aggressive mechanical preparation method is the gold standard for commercial epoxy applications where maximum adhesion and durability are critical.

Understanding Vacuum Shot Blasting for Commercial Applications

Vacuum shot blasting uses steel shot propelled at high velocity to remove surface contaminants, open the concrete pore structure, and create the optimal surface profile for epoxy bonding. Unlike diamond grinding, shot blasting creates a uniform anchor pattern across the entire floor surface while simultaneously removing all dust and debris through integrated vacuum collection. For commercial floors in Ottawa, this process is essential when dealing with heavily contaminated concrete, existing coatings that must be completely removed, or when specifying high-performance epoxy systems that require a specific concrete surface profile (CSP 3 to CSP 5).

Large commercial projects over 5,000 square feet often see pricing at the lower end of the range due to equipment efficiency and reduced mobilization costs per square foot. Projects under 2,000 square feet typically fall toward the higher end. The concrete's hardness significantly affects pricing - Ottawa's local aggregate tends to be quite hard, which can slow shot blasting progress and increase steel shot consumption. Heavily contaminated floors with oil stains, previous coatings, or surface sealers require multiple passes and push costs toward the upper range.

Additional factors affecting Ottawa commercial shot blasting costs include access challenges in multi-story buildings, the need for dust containment in occupied buildings, and disposal requirements for contaminated debris. Many commercial facilities require after-hours work, which adds 20 to 30 percent to base pricing. The shot blasting contractor must also coordinate with the epoxy applicator to ensure proper timing - the prepared surface should be coated within 24 to 48 hours to prevent contamination.

Ottawa's climate creates specific timing considerations for commercial shot blasting projects. The work can proceed year-round in climate-controlled buildings, but unheated warehouses and industrial facilities face the same temperature limitations as epoxy application - ambient temperatures must remain above 10°C throughout the preparation and coating process. Spring and fall are peak seasons as businesses address winter damage or prepare for heavy winter use.

For commercial epoxy flooring projects requiring shot blasting, I'd recommend browsing contractors with both surface preparation and epoxy application capabilities through the Ottawa Construction Network directory at justynrookcontracting.com. Getting quotes from contractors who can handle both the preparation and coating phases often provides better coordination and competitive pricing for the complete project.

Disclaimer: This guide is provided for informational purposes only by Ottawa Epoxy Floors. It does not constitute professional advice. Always consult qualified, licensed contractors and your local building authority before starting any epoxy flooring, concrete coating, or floor resurfacing project. Information is current as of May 3, 2026 and may change. Visit ottawaepoxyfloors.com for the latest answers.