OTTAWA COMMERCIAL EPOXY

Urethane Cement

Urethane cement for washdown, hot water and chemical exposure in kitchens, breweries and food production

4 Expert Answers from Coatings IQ

ottawacommercialepoxy.ca/construction-brain

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Q1

Urethane cement over old quarry tile in a Centretown kitchen?

Whether urethane cement can go over quarry tile in a commercial kitchen depends on whether the tile is still firmly bonded and on what the product's data sheet allows, so the contractor has to check it before quoting. Published 2025-2026 contractor ranges put urethane cement at or above premium epoxy, which runs about $8 to $15 per square foot installed; your quote will differ based on what the slab and tile beneath actually look like.

Ask the contractor how they will check that every tile is still bonded, and what they will do about loose or cracked tile. If tiles need to come up, old adhesive such as black mastic may contain asbestos: under OHSA s.30(1), you as the owner must determine whether any designated substances are present and give a prospective contractor that list before a binding contract is signed. Have old tile and mastic tested before any grinding or removal work begins.

The surface then has to be prepared to the profile the product's data sheet asks for; one urethane cement guide specification asks for ICRI CSP 3 to 5 on concrete, so ask what the data sheet for your product says about tile. Moisture testing follows: ASTM F1869 (calcium chloride) or ASTM F2170 (in-situ relative humidity probes) tells you what the slab is doing. One self-levelling urethane cement data sheet tolerates up to 99% RH and 20 lbs per 1,000 sq ft per 24 hours, but the data sheet for your specific product governs.

On the regulatory side, O. Reg. 493/17 s.7(1)(c) requires that a food premises floor be tight, smooth and non-absorbent in food preparation and service areas. A seamless urethane cement with an integral cove base is one way to meet that standard; it is not the only way, and the regulation does not name a specific system. Ottawa Public Health enforces that regulation and asks to be notified when you plan to significantly renovate a food premises. We found nothing that definitively says whether re-coating an existing kitchen floor counts as a significant renovation, so contact OPH before booking the work.

Ask for proof of liability insurance and references on comparable commercial kitchen floors.

With quotes in hand, compare the specific product and its data sheet, the prep method and target surface profile, whether a moisture test is included and what happens if the slab fails it, the number of coats and thickness from the data sheet, whether cove base is in scope, what anti-slip texture is specified, and the closure window the contractor is committing to.

Q2

Does urethane cement work in a freezer in Ottawa?

Urethane cement is marketed for freezers and cold storage, so whether it suits yours depends on the product's data sheet and your room. One urethane cement installer page lists an operating range of about -40 to 120 degrees C, and one self-levelling urethane cement data sheet lists tolerance up to 99% relative humidity and 20 lbs per 1,000 sq ft per 24 hours for moisture vapour. Those are single-product figures; the data sheet for the specific product your contractor proposes governs.

What makes a freezer floor different from a standard commercial floor comes down to a few things worth raising with any contractor:

- Application temperature matters: one data sheet lists a minimum surface temperature of about 4 degrees C for polyaspartic and 10 degrees C for epoxy. Ask what minimum surface temperature the urethane cement product requires and how the contractor plans to meet it.
- Moisture testing matters here. ASTM F2170 in-situ probes or ASTM F1869 calcium chloride tests show the slab's condition only at the time and location tested. Ask what the product's limit is and what the contractor will do if the slab exceeds it.
- Surface profile: one urethane cement data sheet asks for CSP 3 to 5 (ICRI scale). Ask how the contractor will achieve and verify that profile, and whether any old coating or adhesive needs to come off first. If old vinyl tile or black mastic is present, have it tested for asbestos before any grinding takes place.
- Return to service: one self-levelling urethane cement data sheet lists light foot traffic at 18 hours and heavy traffic, moisture and chemical exposure at 72 hours. Confirm the schedule against the actual product data sheet before planning any closure.

On the regulatory side, R.R.O. 1990, Reg. 851 (Industrial Establishments), s.11 says a floor used by workers shall not have any finish or protective material that is likely to make the surface slippery. Ask the contractor how the proposed finish addresses that in a wet or icy freezer environment.
Comparing quotes, put the product name and data sheet, the prep method and target surface profile, the moisture test method and the product's stated limit, the number of coats or the specified thickness, cove base scope, anti-slip texture, and the closure window from the data sheet side by side before you decide. The form on this page sends your request to local Ottawa floor coating contractors, who reply by email.

Q3

Why is urethane cement rough compared to epoxy in Ontario kitchens?

How rough a urethane cement floor feels depends on the product and how it is finished, and the data sheet for the specific product sets what finish is achievable.

One installer page lists both self-levelling and trowel-applied urethane cement. Ask the contractor which they propose, what texture it will have, and why that suits your kitchen.

What Ontario rules actually say about kitchen floors

O. Reg. 493/17 (Food Premises), s.7(1)(c), requires that floors in food preparation, service and related rooms be "tight, smooth and non-absorbent." The regulation does not name any coating system, and it does not set a texture measurement. A seamless resinous floor is one way to meet "tight, smooth and non-absorbent" and to allow easy cleaning; it is not the only way, and the regulation does not require it.

R.R.O. 1990, Reg. 851 (Industrial Establishments), s.11(b), says a floor used by any worker shall not have "any finish or protective material used on it that is likely to make the surface slippery." That applies in a commercial kitchen where workers are present. No slip-resistance number is set in Reg. 851 or in the 2024 Ontario Building Code. A test value in a contractor's quote is a product claim to compare, not a legal threshold.

One coatings maker's article notes that epoxy is hard and chemical-resistant but "does not perform as well as other materials when exposed to thermal shock," and recommends cementitious urethane for commercial kitchens. That is one manufacturer's position, not a settled rule, and it does not address surface finish.

Before booking a kitchen re-floor, Ottawa Public Health asks to be notified when a food premises is being significantly renovated. We found nothing that says whether re-coating an existing kitchen floor counts as a significant renovation: ask OPH before booking the work.

When reviewing quotes, ask each contractor to provide the product data sheet and the safety data sheet (SDS) for every product they plan to use. Section 2 of the SDS covers hazards; Section 9 covers flash point, which matters if any solvent-based primer is involved. Ask what surface profile they will achieve, what the data sheet requires for that profile, and how the finished surface will meet the "tight, smooth and non-absorbent" standard in O. Reg. 493/17.

Before you sign, ask the contractor to show you a finished floor they have installed in a commercial kitchen in Ottawa and to explain how the surface texture on that floor meets both the Food Premises regulation and Reg. 851.

Q4

Hot water washdown at our Barrhaven meat shop, which floor?

For hot water washdown, one coatings maker's article recommends cementitious urethane for commercial kitchens because it says epoxy does not perform as well under thermal shock; that is one manufacturer's position, so compare the systems the contractors propose. Published 2025-2026 contractor ranges put urethane cement at or above premium epoxy, which runs about $8 to $15 per square foot installed; your quote will differ based on slab condition, area size, and the scope below.

O. Reg. 493/17 (Food Premises), s.7(1)(c) requires that floors in rooms where meat is prepared, handled, sold or displayed be "tight, smooth and non-absorbent." Section 7(1)(g) requires those floors be kept clean and in good repair. A seamless resinous floor with an integral cove base is one way to meet those requirements; the regulation does not require coving, drains or slope. Ask the contractor to confirm the product choice against your actual washdown temperatures and cleaning chemicals. One self-levelling urethane cement data sheet lists a moisture tolerance up to 99% RH and 20 lbs per 1,000 sq ft per 24 hours, but the data sheet for your specific product governs.

Ottawa Public Health enforces O. Reg. 493/17 and asks to be notified when a food premises is being significantly renovated. We found nothing that says whether re-coating an existing floor counts as significant; ask OPH before booking the work. The contractor must provide safety data sheets for every product used; under OHSA s.38(1.1) you must make those available to any of your staff who remain on site.

One urethane cement data sheet lists light foot traffic return at 18 hours and heavy traffic, moisture and chemical exposure at 72 hours. MMA systems cure in about one hour according to one 2010 brochure, but we found no published Canadian price range for MMA. Plan the closure window around the data sheet for the product actually specified, not a general estimate.

Ottawa.ca lists new flooring among projects that do not need a building permit, but does not say whether that covers commercial buildings; confirm with the City of Ottawa. If you are adding a floor drain, that is a plumbing alteration and needs a permit.

Once the quotes arrive, start with the product names and data sheets, then compare prep method and target surface profile, moisture test results and what each contractor proposes if the slab fails, number of coats or specified thickness, cove base linear footage and height, anti-slip texture type and broadcast rate, and the closure window each contractor is committing to from the data sheet.

Disclaimer: This guide is provided for informational purposes only by Ottawa Commercial Epoxy. It does not constitute professional advice. Always consult qualified contractors and your local building authority (the City of Ottawa or your own

municipality), and Ottawa Public Health for a food premises, before starting any floor coating project. Read the product's data sheet and safety data sheet before work starts. Information is current as of November 15, 2026 and may change. Visit **ottawacommercialepoxy.ca** for the latest answers.