OTTAWA CONCRETE PROS

Patios & Pads

Poured concrete patios, pads and shed bases: base, mix, finish, permits and soft landscaping rules in Ottawa

7 Expert Answers from Concrete Pro IQ

ottawaconcretepros.ca/construction-brain

Table of Contents

1. What water-cement ratio does the Code set for an Ontario patio?
2. Should my Orleans patio quote mention control joints?
3. Should a concrete patio go over a septic area in rural Ottawa?
4. What base should go under a concrete patio in Kanata?
5. What should the base be for a hot tub pad in Kanata?
6. Do I need a locate before digging for a patio in Kanata?
7. When can patio furniture go back on new concrete in Kanata?

Q1

What water-cement ratio does the Code set for an Ontario patio?

The 2024 Ontario Building Code sets a maximum water-to-cementing-materials ratio of 0.45 for garage floors, carport floors and all exterior flatwork, under section 9.3.1.7(1). That is the Code number for exterior concrete.

Whether that ratio binds a patio built without a permit is a different question. The City's list of projects not requiring a building permit includes landscaping, and the words patio, walkway and concrete do not appear on that list. The City's patio page sets out conditions under which a patio structure is exempt from a building permit. We found no City statement on whether the Building Code legally applies to a patio built under that exemption. Calling 0.45 the Code standard for exterior flatwork is accurate; saying it is enforceable law for every backyard patio is a step we cannot take on the information available.

What is clear is that the ratio matters in practice regardless of permit status. The Code's appendix note to section 9.3.1.7 says adding water to concrete on site may make it easier to place but can reduce strength and increase porosity and the propensity to shrinkage cracking. Section 9.3.1.6(1) sets a minimum compressive strength of 32 MPa after 28 days for all exterior flatwork. Those two numbers, the 0.45 ratio and the 32 MPa strength, belong in the contractor's written specification for any exterior slab, and you should ask to see them there before signing.

A few things to ask for in writing before the work starts:

- the maximum water-to-cementing-materials ratio the contractor will hold to
- the specified 28-day compressive strength
- the base preparation and depth
- the plan for rain or cold weather during the pour and curing period

Start with the contractor: ask them to put the mix specification in the quote. If the job involves steps or a landing that serves the entrance to the house, ask the City's Building Code Services whether a permit is needed, because the City's Building Code Services advisory on landscaping structures says those can require a permit, and the Code's requirements would then apply without question.

Q2

Should my Orleans patio quote mention control joints?

Control joints are not mentioned in the 2024 Ontario Building Code sections we researched for exterior patios, and we found no City of Ottawa rule requiring them in a residential patio specification. That said, asking your contractor

to describe their joint plan in writing is reasonable, and here is why it matters for your Orleans job.

The 2024 Ontario Building Code sets 32 MPa as the compressive strength standard for exterior flatwork, and references CSA A23.1 for mix and placement requirements. We found no Code thickness, reinforcement or joint-spacing requirement for a freestanding patio. Those details come from the contractor's written specification, and that is exactly where a joint plan should appear.

A quote worth signing should spell out at minimum: the concrete strength (32 MPa for exterior flatwork is the Code standard), the base preparation and depth, how removal and disposal of any existing concrete is handled, cold-weather protection if the pour falls when the air temperature is below 5 °C, and who will submit the locate request to Ontario Dig Authority before any digging starts. Locates are free and required under the Ontario Underground Infrastructure Notification System Act, 2012 for any work that breaks ground.

On the City side, the contractor doing work on your patio in Orleans needs a City of Ottawa Hardscaping Contractor Licence, which has been required since March 1, 2026 for businesses installing concrete pads, patios, walkways and steps on private property. The licence requires the contractor to carry commercial general liability insurance of not less than $2,000,000 and to give you a copy of the City's Landscaping Education Guide. Ask to see the licence and check the contractor's name against the City's published list yourself; Ottawa Concrete Pros does not verify anyone's licence or insurance.

For pricing context, plain broom-finish concrete runs about $9 to $15 per square foot installed, and small jobs often hit a minimum charge of about $5,500, according to Ottawa price pages.

Before you sign, ask the contractor to show you in writing exactly where they plan to place joints, what spacing and depth they are using, and what the specification says about base preparation and concrete strength.

Q3

Should a concrete patio go over a septic area in rural Ottawa?

Placing a concrete patio over a septic system or its leaching bed is something we found no City of Ottawa concrete rule addressing directly, but it raises concerns under Ontario's septic and environmental rules that sit outside the scope of concrete flatwork. The short answer on the concrete side is: we found no City statement permitting or prohibiting it, and the decision is not primarily a concrete question.

The governing rules for septic systems in rural Ottawa fall under the Ontario Building Code (Part 8, On-Site Sewage Systems) and are administered by the City of Ottawa's Building Code Services. A concrete slab over a leaching bed can interfere with how the bed functions and with access for inspection, pumping and repair. We found no

specific setback or coverage rule in the concrete sections of the Code, but Part 8 sets requirements for the system itself, and any work that could affect it may require a permit or approval under those rules. Ask the City's Building Code Services before any work begins.

On the concrete side, a few things are worth knowing. The 2024 Ontario Building Code sets 32 MPa as the standard for exterior flatwork. We found no Code thickness, base depth, reinforcement or vapour barrier requirement for a free-standing patio, so those details belong in the contractor's written specification. Zoning By-laws 2008-250 and 2026-50 both apply to applications deemed complete on or after March 11, 2026, with the most restrictive provisions from each governing; confirm the soft landscaping and yard rules for your lot with the City. The City's patio page says a patio is exempt from a building permit if it is supported directly on the ground, does not have an occupant load exceeding permitted limits, and does not adversely affect existing exiting or barrier-free access, but that page is not written only for houses, and a septic-area complication could change the analysis.

Before anyone digs, whoever does the excavating is an excavator under the Ontario Underground Infrastructure Notification System Act, 2012 and must submit a locate request through Ontario Dig Authority at least five business days before breaking ground. Locates are free. Ask who will submit the request and whether any private lines, including any electrical or plumbing serving the septic system, will be separately located.

The City's Hardscaping Contractor Licence has been required since March 1, 2026 for businesses installing concrete pads and patios on private property. Ask any contractor to show you their City licence and check their name against the City's published list yourself. Ottawa Concrete Pros does not verify anyone's licence or insurance.

Plain broom-finish concrete runs about $9 to $15 per square foot installed; small jobs often hit a minimum charge of about $5,500, according to Ottawa price pages. Get the base depth and thickness in writing, the concrete strength (32 MPa for exterior flatwork is the Code standard), the finish, and whether removal and disposal of any existing material is included, before you sign anything.

When you set two written quotes side by side, look at whether each one specifies the base depth and compacted thickness, the concrete strength in MPa, the exact finish, and what happens to any excavated material or old concrete, including whether disposal is itemized separately.

Q4

What base should go under a concrete patio in Kanata?

For a floor-on-ground, Ontario's 2024 Building Code sets not less than 100 mm of coarse clean granular material beneath floors-on-ground generally, though the Code says that layer need not be installed under slabs in garages, carports or accessory buildings. For a patio, we found no Code thickness or base depth requirement; the Code standard for exterior flatwork is 32 MPa concrete, and we found no statement on whether that provision binds a patio built without a permit. The base specification for your patio comes from the contractor's written quote, not from a code section.

The National Research Council's Canadian Building Digest 182 notes that coarse-grained soils such as sands and gravels do not heave, while clays, silts and very fine sands will support the growth of ice lenses. The 2024 Ontario Building Code's appendix adds that clay soils are most prone to expansion and contraction due to moisture. Ask the contractor what soil is under your yard and how that affects the base depth and material they are specifying, and get the answer in writing.

Before anyone digs, a locate request must go through Ontario Dig Authority. Under the Ontario Underground Infrastructure Notification System Act, 2012, an excavator shall not dig until each member has responded, and a standard request is submitted at least five business days before the dig is expected to start. Locates are free. Ask who will submit the request and whether any private lines to a garage, shed or outdoor lights will also be marked.

On the City side, the hardscaping contractor licence has been required since March 1, 2026 for any business installing a concrete patio, walkway or steps on private property. The City requires that licensed contractors carry commercial general liability insurance of not less than $2,000,000 and automobile liability of not less than $2,000,000, provide a written contract, and give you a copy of the City's Landscaping Education Guide. Ask to see the contractor's licence and check the City's published list yourself. For zoning, both By-law 2008-250 and By-law 2026-50 apply to applications deemed complete on or after March 11, 2026, with the most restrictive provisions of both applying; confirm the soft landscaping rules for your lot with the City before you finalise the patio size.

A few things worth asking the contractor to spell out in the quote before you sign: the depth and material of the base, what excavation and removal of existing material is included, whether cold-weather protection is covered if the pour happens when the air temperature is below 5 °C, and whether the minimum charge applies to your job size. Ask the contractor to show you exactly what the line item for base preparation covers.

Q5

What should the base be for a hot tub pad in Kanata?

We found no specification in the 2024 Ontario Building Code for the base beneath a free-standing concrete pad, and no City of Ottawa rule that sets a gravel depth or base type for a hot tub pad specifically. The base depth and composition come from the contractor's written specification, and you should ask for those details in writing before work starts.

That said, a few Code provisions are relevant context. Section 9.16.2.1 of the 2024 Ontario Building Code requires not less than 100 mm of coarse clean granular material beneath floors-on-ground, though that section applies to floors inside buildings. Section 9.16.2.2 says material susceptible to volume changes from freezing shall not be used as fill beneath floors-on-ground that will be subjected to freezing temperatures. Ask the contractor what depth and gradation of granular fill they are specifying, and why.

On concrete strength, the 2024 Ontario Building Code sets 32 MPa as the standard for exterior flatwork. That is the benchmark to ask about. We found no Code requirement for mesh, rebar or a vapour barrier under an exterior pad, so ask the contractor whether reinforcement is included and what their reasoning is.

A few other things to sort out before work starts:

- Locates: anyone who digs is an excavator under the Ontario Underground Infrastructure Notification System Act, 2012. A locate request goes through Ontario Dig Authority at least five business days before digging. Ask who will submit the request, and ask separately who will mark any private lines running to the pad area.
- Permit: the City's patio page sets out conditions under which a patio may be exempt from a building permit, including that it is supported directly on the ground and does not adversely affect exiting or accessibility. We found no City statement on a permit for the pad under a hot tub specifically; ask the City's Building Code Services before work begins.
- Hardscaping licence: the City of Ottawa's Hardscaping Contractor Licence has been required since March 1, 2026 for businesses that install concrete pads on private property. Ask the contractor to show their licence and check the City's published list yourself. The City's March 2026 guidance also says a licensed contractor will provide a written contract and give you a copy of the City's Landscaping Education Guide.
- Zoning: both Zoning By-law 2008-250 and Zoning By-law 2026-50 apply to applications deemed complete on or after March 11, 2026, with the most restrictive provisions from each applying. Soft-landscaping minimums for the rear yard may affect how much hard surface you can add. Confirm the rules for your lot with the City.

Get it on paper first: a written contract that sets out the scope, the base specification, the concrete strength, removal and disposal of any existing material, and the total price, along with any required permit and a copy of the City's Landscaping Education Guide from the contractor.

Q6

Do I need a locate before digging for a patio in Kanata?

Yes, a locate is required before digging for a patio in Kanata. Under the Ontario Underground Infrastructure Notification System Act, 2012, anyone who digs, grades or excavates is an "excavator," and that includes a homeowner breaking ground for a patio. You cannot start digging until you have submitted a locate request and each member has responded.

Submit the request through Ontario Dig Authority at least five business days before you expect to start. The Act says a standard request is not submitted more than 30 days before the dig is expected to begin. Locates are free: the Act says no fee is charged for submitting a request or for doing a locate. Ontario Dig Authority does not physically mark the lines itself; it relays the request to the buried infrastructure owners, who then mark their lines.

One thing to sort out before work starts: we found no statement on whether privately owned lines, such as a line running to a shed, a garage, a hot tub or outdoor lights, are located through the same process. Ask whoever is doing the work who will mark any private lines on your property, and get a clear answer before the first shovel goes in.

On the contractor side, the City of Ottawa's Hardscaping Contractor Licence has been required since March 1, 2026 for any business installing a concrete patio on private property. Ask to see the licence and check the City's published list of licensed hardscaping contractors yourself. The City's March 2026 guidance says a licensed contractor will also provide a written contract and give you a copy of the Landscaping Education Guide.

A few other things apply to a Kanata patio. The City's patio page sets out the conditions under which a patio is exempt from a building permit: the structure is supported directly on the ground, not raised or on deck blocks, and it does not adversely affect occupant load, exiting or barrier-free access. If your patio connects to steps serving the house, the City's Building Code Services advisory says those steps may need a building permit depending on elevation change and other factors, so it is worth asking the City before work begins. For applications deemed complete on or after March 11, 2026, Zoning By-laws 2008-250 and 2026-50 both apply, with the most restrictive provisions governing; both set soft landscaping requirements for front and exterior side yards, and to confirm what applies to your lot, check with the City.

Once the locate is booked, line up the written contract with the full scope and price, any required permit in hand, and a copy of the Landscaping Education Guide from the contractor, so everything is documented before concrete is ordered.

Q7

When can patio furniture go back on new concrete in Kanata?

We found no published source that gives a specific number of days or hours before patio furniture can go back on new concrete. The right answer depends on the mix, the weather and what the contractor specifies, so follow the contractor's written instructions for your particular pour.

What the 2024 Ontario Building Code does say is that when the air temperature is below 5 °C, concrete must be kept at not less than 10 °C for 72 hours after placing. That is a cold-weather protection rule, not a furniture rule, but it gives you a sense of how sensitive fresh concrete is in its earliest stage. The Code measures strength at 28 days, but that does not mean the slab is ready for furniture at 28 days or that it is not ready before then.

The Ready Mixed Concrete Association of Ontario, an industry association, advises keeping vehicles off freshly placed concrete for at least 7 days. That guidance is about vehicles, not patio furniture, so it is not a direct answer either.

A few things worth asking your contractor before the pour:

- What is the specified compressive strength of the mix, and when does the slab reach enough strength for light foot traffic and furniture?
- Will there be a written curing plan, and what protection is planned if temperatures drop below 5 °C in the days after the pour?
- At what point is it safe to place heavy items such as a stone-top table or a large planter?

The contractor who designs and places the slab is the right person to give you a date, because they know the mix design, the base conditions and the forecast.
Before the work starts, ask the contractor to show you their City of Ottawa hardscaping contractor licence and then check their name against the City's published list of licensed contractors yourself.

Disclaimer: This guide is provided for informational purposes only by Ottawa Concrete Pros. It does not constitute professional advice. Always consult qualified contractors and your local building authority (the City of Ottawa) before starting any concrete project, and request utility locates before anyone digs. Concrete work in Ontario must meet the 2024 Ontario Building Code (O. Reg. 163/24) where it applies. Information is current as of November 15, 2026 and may change. Visit **ottawaconcretepros.ca** for the latest answers.