OTTAWA STONEWORK

Cold-Weather Masonry

Masonry in cold weather: the Building Code's 5°C for 48 hours rule, no frozen materials, covering unfinished work, and frost marks in mortar

4 Expert Answers from Masonry IQ

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Q1

What temperature is too cold for mortar work in Ontario?

Mortar work is too cold under Ontario's Building Code (9.20.14.1) when this rule cannot be met: mortar and masonry shall be maintained at a temperature not below 5°C during installation and for not less than 48 hours after installation. No frozen material shall be used in a mortar mix.

That is the Code's requirement. It sets no outdoor air temperature; it sets a threshold that must be met at the work face, which can mean heating and enclosing the work when the air is cold. The Code (9.20.14.2) also requires that the top of uncompleted masonry be completely covered with a waterproofing material whenever work is not in progress.

NRC building digest CBD-123 notes that set-accelerating and anti-freeze admixtures "should not be encouraged" in cold-weather masonry work.

A few things worth confirming with any mason quoting cold-weather work: how they plan to maintain the 5°C minimum at the wall (heated enclosures, blankets, propane heat), how long they will keep that heat in place after laying, and how the uncompleted work will be covered overnight. Get the method in writing as part of the quote.

Before you sign, ask the mason how the mortar and masonry will be kept at 5°C or warmer for the 48 hours after each day's work.

Q2

Is November too late for repointing in Ottawa?

November can work for repointing in Ottawa, but the window is narrow and the weather has to cooperate. The Ontario Building Code (O. Reg. 163/24, s.9.20.14.1) requires that mortar and masonry be kept at or above 5°C during installation and for not less than 48 hours after. That is the rule; whether a given November day meets it depends on the forecast, not the month.

A few things follow from that requirement. If temperatures are expected to drop below 5°C during the 48 hours after the mortar is laid, the mason needs to provide heat and enclosure to maintain that temperature. Section 9.20.14.2 also requires that the top of any uncompleted masonry be completely covered with a waterproofing material when work is not in progress. NRC building digest CBD-123 notes that set-accelerating and anti-freeze admixtures "should not be encouraged" for masonry work.

What to ask about before the job starts:

- How will the crew monitor temperature during and after installation?
- What heating and enclosure setup will they use if temperatures fall?
- How will uncompleted joints be covered at the end of each day?
- What happens to the schedule or price if a cold snap forces a pause?

Get the answers in writing as part of the quote.
November repointing is not ruled out by the Code, but it asks more of the mason and the planning.

Q3

For how long must new mortar stay above 5°C in Ontario?

The Ontario Building Code (9.20.14.1) requires that mortar and masonry be maintained at a temperature not below 5°C during installation and for not less than 48 hours after installation.

The same article adds that no frozen material shall be used in the mortar mix, and 9.20.14.2 requires the top of uncompleted masonry exposed to the weather to be completely covered with a waterproofing material when construction is not in progress. How a crew meets the 48-hour requirement in cool or freezing weather, whether through insulated blankets, enclosures or heated space, is a practical question for the mason doing the work.

Before agreeing to a price, ask the mason exactly how they plan to maintain the required temperature for the full 48 hours if overnight conditions drop below 5°C during or just after the work.

Q4

Signs that mortar froze after a late-fall Ottawa repair?

A National Research Council building digest (CBD-123) describes what to look for: "the familiar crows-foot pattern on the surface of a mortar joint indicates freezing," and "shelling of the mortar surface and general crumbling or powdering of mortar are evidence of advanced deterioration due to freezing."

The Ontario Building Code (9.20.14.1) sets the rule: mortar and masonry shall be maintained at a temperature not below 5°C during installation and for not less than 48 hours after installation, and no frozen material shall be used in the mortar mix. If temperatures dropped below that threshold during or right after the work, the signs above are what you would expect to see.

What to look for when you examine the joints:

- a fine network of cracks across the face of the mortar
- mortar that flakes or shells away in thin layers when touched
- powdery or crumbling sections

Keep in mind that a second digest (CBD-30) says salt damage is "very similar in appearance to that produced by frost action, and in many cases it is difficult to determine which mechanism has caused it." A mason looking at the wall in person can tell you whether the affected joints need to be cut out and redone.
If the repair was done under a written contract, check what warranty was provided and whether it covers failure caused by cold-weather conditions. Get any warranty terms in writing before agreeing to remediation work.

If you want a local mason to have a look, the request form on this page sends your details to Ottawa masons listed in the Ottawa Construction Network directory.

Disclaimer: This guide is provided for informational purposes only by Ottawa Stonework. It does not constitute professional advice. Always consult qualified contractors and your local building authority (the City of Ottawa) before starting any fence project. Fences in Ottawa must meet the City's Fence By-law, and a free locate is required before digging any post hole. Information is current as of November 15, 2026 and may change. Visit **ottawastonework.com** for the latest answers.