

Crane safety update

A look at crane-related changes to Ontario's construction regulations.

Cranes are among the largest pieces of equipment used on construction projects. Safely installing and operating a crane on a jobsite is a complex task requiring detailed inspections, constant awareness of hazards, and multiple skilled workers. Because when things go wrong, the risk of serious injury or death is high.

In Ontario, at least a half-dozen major crane-related incidents have occurred since 2020. To help prevent future events, the Government of Ontario updated a number of crane-related provisions in the *Regulation for Construction Projects* (O. Reg. 213/91).

The amendments to sections 150 through 171 of the regulation were made with input from industry stakeholders and groups including IHSA. Many of the updates clarify and/or add design, installation, inspection, maintenance, and record-keeping requirements for tower and mobile cranes. The majority of the changes came into force in January 2024, though a handful of them have been subject to a one-year grace period and will become law on January 1, 2025.

Here are a few of the more significant changes that you should know about:

CSA standards

The crane-specific sections of O. Reg. 213/91 now refer to the Canadian Standards Association's national standards for tower cranes (CSA-Z248-17) and mobile cranes (CSA-Z150-16), which means that crane operators must be familiar with the standards—especially as they pertain to inspections, testing, and maintenance. The standards can be viewed for free at the CSA's website, [csagroup.org](https://www.csagroup.org).

Section 152

This section and its subsections now emphasize the responsibility of crane owners to keep a log book of "all inspections of, tests of, repairs to, modifications to, and maintenance of the crane." The owner's crane log must be given to the crane operator before the crane is used

at a project. If the log doesn't conform to the CSA standards, a full inspection must be performed.

Section 153(2)(b)(iii)

This revised sub-clause refers to movable platforms, buckets, baskets, loads, hooks, or slings that are attached to a crane's boom or supported by a cable, requiring them to be "equipped with a secondary means of suspension or support that is secured above the hook and does not impede the hoist line."

Section 156(c)

A new clause makes it the mobile crane operator's responsibility to consider ground bearing pressure before setting up their crane's outrigger or other stabilizing device. This is to ensure the ground upon which a crane rests can support its weight.

Section 157

This section spells out how specific types of tower cranes shall be erected at a project. Multiple new subsections clarify the requirements for an engineer to review, inspect, and prepare written reports on the foundation, shoring, bracing, and tie-ins for tower cranes. Shoring and bracing components and tie-ins must then be inspected by a competent worker before and after each climbing operation of the crane.

Sections 158, 159, and 161

These sections specify expanded requirements for an engineer to inspect not only the structural elements of a tower crane, but also its electrical, mechanical, and hydraulic components, and its control systems, before the crane is put into use at a project—and every 12 months thereafter. They also indicate crane parts that must be inspected by a competent worker on a daily, weekly, and monthly basis.



Improve crane safety with IHSA



LEARN more about the crane-related updates to O. Reg. 213/91 by viewing our webinar, *OHSA regulatory requirements to improve crane safety*: [youtube.com/@ihsa-worksafeforlife](https://www.youtube.com/@ihsa-worksafeforlife)



READ IHSA's industry-standard *Mobile crane manual* (MC001)—as well as our updated *Tower crane log book* (RF004) and *Mobile crane log book* (RF005), which specify all crane parts that must be inspected on a daily, weekly, monthly, and yearly basis: [ihsa.ca/products](https://www.ihsa.ca/products)