# COMPLIANCE 101: Take 7 Steps to Comply with Scaffold Requirements



Scaffolds are useful pieces of equipment that, when used properly, allow workers to safely access and work on areas they couldn't otherwise reach. But when scaffolds aren't used properly, workers could get seriously injured or killed. For example, the scaffold could collapse or workers could fall off of it. So the OHS regulations across Canada contain detailed requirements on the construction and use of scaffolds. Here's a look at seven steps you should take to comply with these requirements and ensure the safety of workers using this equipment.

**SCAFFOLDING INSPECTION CHECKLIST:** Go to OHSInsider.com to download a scaffolding inspection checklist that a 'competent person' can use to inspect all scaffolds to ensure that they comply with the OHS requirements and are safe for workers to use.

### TAKE 7 STEPS

The OHS regulations in each jurisdiction have requirements for scaffolds, often in a section devoted to scaffolds, temporary work platforms and related equipment, such as ladders. Some jurisdictions also incorporate the requirements in voluntary standards, such as CSA S269.2-M87 Access Scaffolding for Construction Purposes and CSA Z797 Code of Practice for Access Scaffold. So review the requirements in your jurisdiction's OHS regulations and, if appropriate, any incorporated standards. But given that the scaffold requirements are very similar across jurisdictions, taking the following basic steps will generally help you comply:

# Step 1: Determine if Scaffold Is Needed

First, determine if you need to provide a scaffold for workers. OHS regulations typically require use of a scaffold or elevated work platform for work that can't be done from the ground, unless the work is of short duration and can be done safely from a ladder (such as changing a light bulb in an overhead light fixture).

Step 2: Select Appropriate Type of Scaffold

If you determine that use of a scaffold is required, you must select the appropriate type of scaffold. There are numerous kinds of scaffolding, including:

- Bracket scaffolds;
- Single'pole and double'pole scaffolds;
- Needle'beam scaffolds;
- Outrigger scaffolds;
- Rolling or freestanding scaffolds;
- Half-horse scaffolds;
- Ladderjack scaffolds;
- Suspended scaffolds; and
- Swingstage scaffolds.

The OHS regulations usually include detailed definitions of each type of scaffold they cover. And note that some jurisdictions may specifically bar the use of certain kinds of scaffolds.

# Step 3: Ensure Scaffold Is Properly Designed and Constructed

Once you've selected the appropriate type of scaffold for the work to be done from it, ensure that the scaffold is properly designed and constructed. In some cases, you may need to have the scaffold designed by a professional engineer. For example, under Sec. 325(3) of Alberta's OHS Code 2009, an employer must ensure that a scaffold used to carry the equivalent of an evenly distributed load of more than 367 kilograms per square metre is designed and certified by a professional engineer, and constructed, maintained and used in accordance with the certified specifications. You may also need to have the scaffold built or erected by a 'competent' or qualified person. For example, Sec. 3.10(1) of the federal OHS regulations requires the erection, use, dismantling or removal of a scaffold to be carried out by or under the supervision of a qualified person. (For more on who qualifies as a 'competent person,' see 'Compliance 101: What Makes a Worker a 'Competent Person' under OHS Laws'')

In terms of the design and construction of scaffolds, the OHS regulations often include general requirements that apply to all types of scaffolds as well as requirements for specific types of scaffolds. The general requirements usually cover areas such as:

- Materials, such as the type of lumber permitted for use in wood scaffolds;
- Supports and beams;
- Brackets:
- Planks and platforms;
- Guarding, including use of guardrails and toe boards;
- Ladders; and
- Bracing.[/learn\_more]

# Step 4: Ensure Scaffold Can Carry Expected Load

One of the most critical steps is to ensure that the scaffold can carry the load or weight expected to be placed on it. Otherwise, the scaffold could collapse. In general, an employer should ensure that a scaffold is:

• Designed to support and capable of holding at least four times the load that's likely to be on it; and

 Not used for a load that's heavier than 25% of the load for which it's designed.

So how do you determine the load that's likely to be on a scaffold' Some OHS regulations spell out exactly how you should calculate the load. For example, Sec. 28.6(2) of Manitoba's Workplace Safety and Health Regulation says that the maximum load of a scaffold is to be determined in reference to the actual weight of all the scaffold's components combined with the following loads that will be or are likely to be imposed on it:

- The actual weight of the workers using it, including their tools, materials and equipment; and
- Wind, wind gusts and other environmental conditions.

The explanation guide to Alberta's *OHS Code 2009* goes further, distinguishing between live and dead loads:

Live load. This load is the maximum combined weight of all workers, tools and materials placed on the scaffold platform at any given time. When estimating the live load, the guide says to assume a weight of 91 kilograms (200 pounds) for each worker and 22.7 kilograms (50 pounds) for the worker's tools and accessories, resulting in a combined weight of 113.7 kilograms (250 pounds) per worker on the scaffold. Multiply the number of workers on the platform by this value and add to it the estimated weight of any material placed on the scaffold.

**Dead load.** The dead load is the weight of the scaffold itself and includes the weight of all bases, frames, posts, tubes, clamps, guardrails, toe boards, ladders or stairs, platforms or planks, and any accessories. Calculate it by multiplying the total number of scaffold parts by the weight of each part and adding the sum of the resulting values.

**Insider Says:** Workers must be informed of the load limits for any scaffold on which they'll work. A good way to ensure they have this information is to post the load limits on the scaffold itself.[/learn more]

[learn\_more caption="Step 5: Safely Locate Scaffolds"]

To ensure the stability of scaffolds, try to place them on flat, level ground and on a foundation that's capable of supporting their weight. And rolling scaffolds should be on a floor or surface that's free from pits, holes, depressions and obstructions.

In addition, avoid placing scaffolds, especially those made of metal, in the vicinity of overhead power lines. Otherwise, you expose workers to the risk of getting an electrical shock. If the scaffold must be placed near an overhead power line due to the nature of the work, have the line turned off or ensure that the scaffold is properly grounded.

# Step 6: Inspect Scaffolds

You may be required to inspect scaffolds before workers use them to ensure that they've been properly constructed and are safe to use. Even if the OHS regulations in your jurisdiction don't contain this requirement, it may be considered a best practice to conduct such inspections anyway. A scaffold inspection should generally be done by an engineer or someone considered a

'competent' person. For example, Sec. 23.9(1) of Nova Scotia's Workplace Health and Safety Regulations says an employer must ensure that a scaffold used at a workplace is inspected daily by a competent person or engineer.

You should definitely ensure scaffolds are inspected before they're used for the first time. But you should also inspect them:

- At regular intervals, such as daily or at least once a year;
- As recommended by the manufacturer, installer, engineer or designer;
- After an incident, such as a piece of mobile equipment striking the scaffold; and
- After any maintenance and repair work has been done on it or modifications made to it.

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### Step 7: Set Safe Work Practices

Taking steps to ensure the scaffold itself is safe for workers to use is only part of your duty. You must also set safe work practices or rules for the workers who'll be working on this equipment. For example, your safe work practices may do the following:

- Require workers to wear proper fall protection while on a scaffold and when required by your OHS regulations;
- Bar workers from working from the ladders on scaffolds rather than the platforms or planks;
- Require workers to lock the wheels on rolling or movable scaffolds;
- Spell out how scaffolds should be cleaned and otherwise maintained;
- Bar workers from using scaffolds in storms or high winds;
- Require workers to secure materials, tools and other items to prevent them from falling off the scaffold and endangering other workers, visitors or passersby; and
- Address emergency response and rescue procedures if the scaffold fails or there's a safety incident involving a scaffold.[/learn\_more]

### **BOTTOM LINE**

Unsafe use of scaffolds create all sorts of safety issues. Improperly erected scaffolds can topple over, especially in windy conditions. Workers who fail to use fall protection on a scaffold can fall off and get seriously injured or killed. Tools or materials can also fall from scaffolds and endanger anyone in the vicinity. And placing or moving a metal scaffold near overhead power lines creates the risk of electrocution. So if you use scaffolds in your workplace, make sure you take these steps to comply with the scaffold requirements in the OHS regulations and protect your workers.

## Scaffold-Related Spot the Safety Violations

One of the most popular features of OHS Insider is the Spot the Safety Violation, in which we use a picture of an actual safety hazard or dangerous situation to illustrate the OHS requirements and best practices as to the

hazards or safety issues depicted.