

Using anchors in fall protection systems

An anchor is the secure point that workers connect their lanyards or lifelines to when using a fall protection system. It's important to follow applicable standards and requirements for selecting, installing, and using anchors. If you're using the wrong type of anchor or it has been installed incorrectly, the fall protection system can fail and lead to an injury or death. Similarly, it's important to follow the manufacturer's instructions and choose appropriate anchor points for the job.

Selecting anchors

An anchor may consist of a load-rated strap or a sling wrapped around a substantial structural member of a building. It may also be a manufactured component that's permanently or temporarily connected to a structure.

When selecting anchors, follow the requirements of an applicable CSA Group or ANSI standard, such as *CSA Standard Z259.17 Selection and use of active fall-protection equipment and systems*.

Anchors and other equipment used for fall protection systems must meet and be used in accordance with an applicable CSA or ANSI standard in effect when the equipment was manufactured, such as *CSA Standard Z259.15 Anchorage connectors*. The name of the specific standard must appear on the anchor's label.

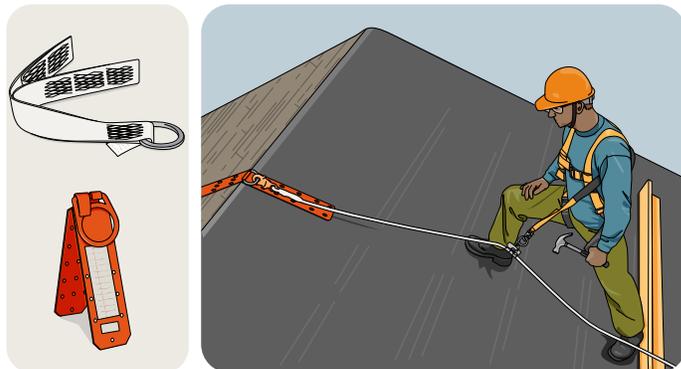
Installing anchors

There must be a safe work procedure for safely installing and removing anchors (e.g., first person up, last person down). Only adequately trained and instructed workers should install and remove anchors.

Always follow the manufacturer's instructions when installing anchors.

Planning and coordination

Owners (where there is no prime contractor), prime contractors, and employers have shared



Left: A synthetic webbed anchor strap and a metal roof anchor (ridge anchor). Right: Fall-restraint systems prevent workers from falling from a work position or from travelling to an unguarded edge.

responsibilities for planning and coordinating work activities. They must ensure that anchors and the rest of the fall protection system are:

- Selected and set up correctly
- Safe to use
- Appropriate for the work

Coordination includes planning and communicating among the trades that are typically expected to use anchors during their work.

Using existing anchors

Leaving compliant and functional roof anchors in place for other trades is one example of coordination. However, subsequent users are

responsible for verifying the reliability and integrity of any anchors left in place. The next user will need to get the manufacturer's instructions and make sure the anchors have been installed correctly.

For example, if framers leave anchors in place so the siding company can use them, the siding company is responsible for inspecting and using the equipment as per the manufacturer's instructions.

Always inspect anchors before using them to ensure they're still safe.

Engineering

CSA Standard Z259.17 requires engineering for permanent anchor points. Section 11.8 of the Occupational Health and Safety Regulation requires that permanent anchors and their installation be certified by an engineer.

Permanent and temporary anchors

Permanent anchors are anchors that are used during the life of a structure for maintenance or inspection.

Temporary anchors are anchors that have a specific purpose and will be removed after that purpose is fulfilled — for example, during the construction of a building.

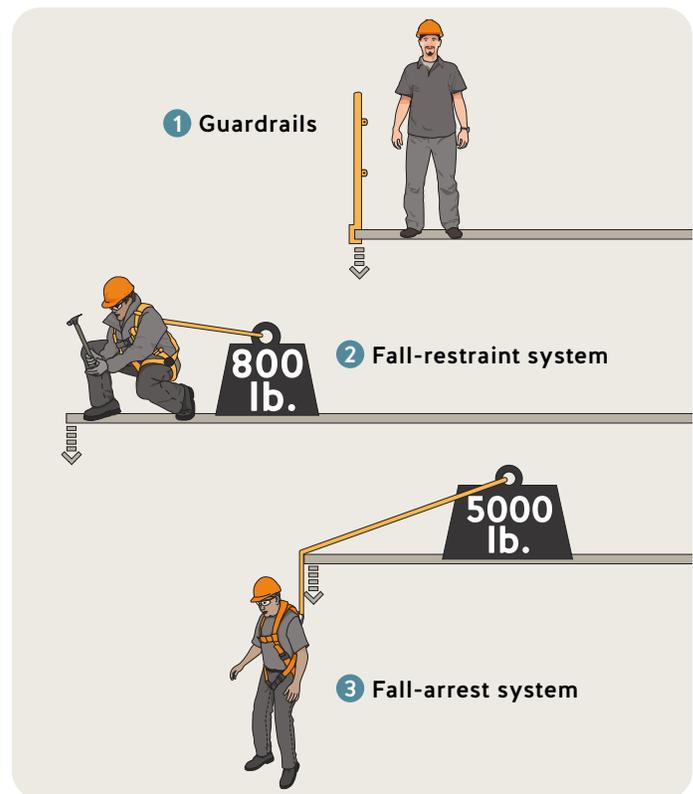
Responsibilities

- Employers must ensure workers are instructed in the use of anchors and all fall protection systems and procedures for the area.
- A qualified person must inspect anchors before they're used for each workshift and periodically, as per the applicable standards. Workers must also inspect anchors before each use.
- Employers and workers must follow manufacturer's instructions for selecting, installing, and using anchors.

Hierarchy of fall protection

Fall protection systems must be considered in the following order: guardrails, fall restraint, fall arrest, and work procedures acceptable to WorkSafeBC. This is the hierarchy for fall protection.

An anchor for fall restraint must have an ultimate



The first three options in the hierarchy for fall protection.

load capacity of at least 3.5 kN (800 lb.) or four times the weight of the worker connected to the system.

An anchor for fall arrest must have an ultimate load capacity of at least 22 kN (5000 lb.) or two times the maximum arrest force.

Regulation requirements

Refer to sections 21 to 24 of the *Workers Compensation Act* and to the following sections of the Occupational Health and Safety Regulation:

- [11.1, Definitions](#)
- [11.2, Obligation to use fall protection](#)
- [11.3, Fall protection plan](#)
- [11.6, Anchors](#)
- [11.8, Certification by engineer](#)

To search the Act and Regulation, visit [worksafebc.com/searchable-regulation](https://www.worksafebc.com/searchable-regulation).

For more information

For additional information and resources on fall protection, visit [worksafebc.com](https://www.worksafebc.com).