

Building Construction Prevention Strategy



This building construction safety resource will help:

- Educate employers and employees on common regulations that apply to a typical project site.
- Communicate the focus of our building construction strategy so that employers and employees can plan appropriately and take action before starting a project.



PERSONAL PROTECTIVE EQUIPMENT

- Wear a hard hat and safety footwear at all times on the project site.
- Wear eye protection, hearing protection and respiratory protective equipment when exposed to a potential hazard.
- Wear a chinstrap when conditions could cause headwear to fall off.

[Section 38–48, General Regulation 91–191]



FALL-PROTECTION SYSTEM is a guardrail, a travel-restraint, a fall-restricting or a fall-arresting system designed to prevent or eliminate the risk of falling, restrain an employee who is at risk of falling, or stop an employee who has fallen.

[Interpretation of Regulation 91–191]

- Provide and continually use a fall-protection system when working from an unguarded work area 3 m or more above the nearest permanent safe level, or above any surface or object that could cause injury.
- Have a competent person train an employee in the use, maintenance and inspection of a fall-protection system for the task being performed, unless the fall-protection system is a guardrail.
- Ensure the competent person providing the training prepares a written training record that includes the name of the employee who received the training, the training date and the name of the competent person or agency.
- Ensure the employee inspects each component of a personal fall-protection system for defective or inadequate components before each use and periodically as recommended by the manufacturer’s specifications.
- Use an individual fall-arresting system when weatherproofing a roof 3 m or more above the ground or other safe working level that has a slope exceeding 4 in 12, and has an unguarded edge.
- Have a rescue plan and training in place before using a fall-arresting system.

[Section 49, 50, 105 and 106, General Regulation 91–191]



TOOLS

- Use, handle and carry the tool safely.
- Inspect the tool before use. Do not use a defective tool and report it to the employer.
- Where competent to do so, maintain the tool in proper working condition.
- Use the tool only for the specific purpose for which it is designed.
- Place the tool in a safe and appropriate container or place when not in use.
- Do not leave tools on floors, passageways, stairways or elevations from which they might fall.
- Do not point a tool that ejects pins, nails or any other projectiles at any other person.

[Sections 80–89, General Regulation 91–191]



GUARDRAIL is an assembly of components joined to form a barrier that is designed to prevent an employee from falling off the surface’s edge. [Interpretation, General Regulation 91–191]

- A guardrail must be made of wood (50 mm x 100 mm, No.2 grade or better), metal pipe, angle iron, wire rope, or pre-engineered.
- Its top rail must be between 900 mm and 1.07 m; its toe board must be 127 mm high with an intermediate rail. Its horizontal rails must be fastened to the inside of the vertical supporting posts. Its vertical supporting posts must not be more than 2.4 m apart, or not more than 3 m if used on scaffolding.

[Section 97, General Regulation 91–191]



OPENINGS

- Install guardrails around any opening on a work surface to prevent an employee from falling through. Another option is to securely fasten a protective covering that completely covers the opening, which is made from materials that can support any load and is labeled.

[Section 111, General Regulation 91–191]



ACCESS AND EGRESS

- Provide a safe means of access to and egress from all areas where work is performed.

[Section 113, General Regulation 91–191]



STAIRWAYS

- Ensure stairways are strong enough to sustain a live load of 4.8kPa (100psf).
- For stairways with four or more risers, install a handrail and supporting structure on any open side and a handrail on any enclosed side.
- Install permanent or temporary stairs where work on a building progresses to one storey or 4.5 m above the lowest floor level – whichever is the lower – from the lowest floor level to all the floors above.

[Sections 115–118, General Regulation 91–191]



PORTABLE LADDERS

- Ensure they are of adequate strength and length, clean and free of grease, and maintained in a safe condition.
- If working 3 m or more above the ground or floor level on a portable ladder, an employee may work without a fall-protection system if:
 - ♦ The work is a light duty task of short duration at each location.
 - ♦ The employee's centre of gravity is maintained between the ladder's 2 side rails.
 - ♦ The employee will generally have one hand available to hold on to the ladder or another support.
 - ♦ The ladder is not positioned near an edge or floor opening that would significantly increase the potential fall distance.
- Inspect the ladder before use, and report any unsafe condition to the employer.
- Face the ladder and use both hands when climbing or descending.
- When standing on the ladder, stand in the centre between the side rails.
- Secure the ladder against movement.
- Ensure the ladder's side rails extend at least 1 m above any platform or landing when using the ladder as a means of access.
- When using a stepladder, ensure the legs are securely held in position using metal braces or an equivalent rigid support.

[Sections 122–126, General Regulation 91–191]



GENERAL PROVISIONS APPLICABLE TO SCAFFOLDS (includes carpenters and walers bracket)

- Ensure it is capable of sustaining a minimum uniformly distributed load of 1.4 kPa (30psf); not subjected to a load exceeding the equivalent of 1/4 of the load for which it is designed; and designed and constructed to support at least 4 times the load that may be imposed on it.
- If it is over 3 m, ensure it has a guardrail that meets Section 97 requirements of Regulation 91–191.
- Ensure it is erected plumb and level; has vertical supports resting on a firm foundation or sills; is adequately secured at vertical intervals not exceeding 3 times the least lateral dimension of the scaffold measured at the base; prevent lateral movement; and has a platform that is at least 500 mm wide.
- Ensure the spacing of the scaffold's vertical supports and bearers do not exceed 3 m on centres.
- If used for bricklaying, masonry or other heavy work, ensure the spacing of its vertical supports and bearers do not exceed 2.1 m on centres.
- Ensure the wood plank is at least 50 mm thick by 250 mm wide; has a span no longer than 3 metres; extends between 150 mm and 300 mm beyond the supporting membrane; is laid flat with an overlap of 300 mm with the other plank and with the centre of the overlap directly over a bearer; and is secured to prevent movement.

[Sections 131–134, General Regulation 91–191]



METAL SCAFFOLDS

- Ensure they are erected, used, maintained and dismantled according to the manufacturer's specifications.
- If less than 6 m in height, ensure it is equipped with a continuous access ladder or stairway. If 6 m or more in height, ensure it is equipped with a continuous access stairway.
- Ensure it is regularly inspected for any damage, deterioration or loosening of the connections of its structural members that may affect its strength.
- While erecting the metal scaffold, install cross bracing and diagonal bracing at each level before moving to the next level.
- Ensure no employee works on a metal scaffold before the cross bracing and diagonal bracing is in place, except to erect the scaffold.

[Sections 136, General Regulation 91–191]



PUMP-JACK SCAFFOLDS

- If made of metal, ensure it is not more than 15 m in height and is erected, installed and used according to the manufacturer's specifications. If made of wood, ensure it is not more than 9 m.

[Section 139, General Regulation 91–191]



MOBILE ROLLING SCAFFOLDS

- Ensure it is not higher than four times the width of the smallest base dimension, unless it is secured at the top.
- Has diagonal and horizontal cross bracing installed at every level.
- Has a solid platform covering the entire area on which the employee works.
- Have lockable wheels.
- Has guardrails.

[Section 140, General Regulation 91–191]



ELECTRICAL EQUIPMENT

- Employers must ensure that electrical equipment and insulating material for electrical equipment is suitable for its use, and that it is installed, maintained, modified and operated according to the manufacturer's specifications.

[Section 286–298, General Regulation 91–191]

