

Guide to Workplace Safety for Roof Truss Installation



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This Guide is not intended to replace the Occupational Health and Safety Act or Regulations nor does it constitute legal advice.

Portions of another publication from The Infrastructure Health & Safety Association has been used in creating this Guide, with appreciation.

INTRODUCTION

The installation of trusses can be dangerous and requires careful planning and communication between all parties on a construction site. This guide provides practical information for contractors, workers, suppliers of trusses, crane and lift operators, builders, and other building contractors who are involved in truss installation. The information is primarily for residential and low rise builds; however, it may apply to other types of construction. It is based on the applicable workplace safety legislation in Prince Edward Island and best practices for truss installation.

Legislation and Enforcement

This guide is not a substitute for the *Occupational Health and Safety (OHS) Act,* regulations, or Canadian Standards Association (CSA) or other standards relating to the handling and installation of trusses.

With respect to this guide, the laws enforced by OHS Officers mainly include:

- Occupational Health and Safety Act
- Occupational Health and Safety General Regulations
- Fall Protection Regulations
- <u>Scaffolding Regulations</u>

During a routine inspection, an OHS Officer will look at the workplace, the activities, and the overall management of health and safety on site to ensure the workplace is in compliance with health and safety laws. Officers have the legal right to enter any workplace without notice. The Officer may talk to workers, contractors and others on site. The Officer will provide a report for each site inspection, and may issue orders to correct an unsafe situation or to stop work if there is immediate danger.

All legislation above is available on the Workers Compensation Board (WCB) website at <u>wcb.pe.ca.</u> CSA standards cited in OHS legislation can be viewed for free online by visiting <u>Community.csagroup.org</u>.

Health and Safety Responsibilities

All parties on a construction site have responsibilities under PEI's OHS Act and Regulations.

The basis of the *OHS Act* is the Internal Responsibility System. This means that everyone in the workplace has a role to play and a duty to actively ensure everyone is safe. For example, employers are responsible for maintaining safe environments by providing adequate equipment and training about hazards and safe practices. Workers are responsible for reporting safety hazards and following safe work practices. Workers also must conduct themselves safely at work in order to keep themselves and fellow workers safe. It is important that everyone is aware of and understands their responsibilities. This helps ensure that installation procedures and handling methods are carried out as safely as possible. When everyone works responsibly, risks are identified and managed so that everyone on site can go home safely each day.

Manufacturer/Supplier:

- Ensure trusses are constructed according to the local building codes
- Ensure trusses are properly stored, handled and delivered

Operators of Lifting Equipment:

- Ensure trusses are properly handled, loaded and hoisted
- Ensure hoisting area is clear of tripping hazards and no one is underneath a raised load
- Ensure a clear communication system is in place between the equipment operator and worker(s) guiding the load
- Ensure lifting equipment and hoisting/rigging components are regularly inspected and replaced if damaged

Competent Person

- A "competent person" means a person who
 - (i) is qualified because of that person's knowledge, training and experience to do the assigned work in a manner that will ensure the health and safety of persons in the workplace, and
 - (ii) is knowledgeable about the provisions of the Act and the regulations that apply to the assigned work, and about potential or actual danger to health or safety associated with the assigned work.



Assembling a roof on the ground and then hoisting it into place requires a communication system between the crane operator and the workers who are guiding the load.

Constructor/General contractor:

- Ensure communication of safety information occurs between all employers and workers on site
- Ensure that all persons on site are complying with health and safety legislative requirements
- Ensure a competent person(s) on site is available to oversee the installation and inspect the condition of trusses, fall arrest equipment, scaffolding, work platforms and other equipment on site

Employer/Contractor (includes each subcontracted company):

- If working at heights, ensure workers are properly trained in fall arrest and that all equipment is available and used
- Ensure a fall protection plan is in place and available upon request
- Ensure workers know to avoid working underneath scaffolds and other elevated work areas and raised loads
- Ensure the correct equipment is selected for the task.
- Ensure all equipment is working safely and is used properly
- Ensure safe work procedures are known and followed for all equipment being used when working at heights, including ladders, scaffolding, elevated work platforms and fall arrest equipment
- Ensure specifications provided by the manufacturer or certified by a professional engineer for all equipment, including scaffolding, are available on site
- Ensure trusses, when delivered, are inspected and undamaged
- Ensure the structure, including the framing system, bearing locations and related installation locations are examined to ensure it is safe to proceed with installation
- Report any damage to trusses and ensure installation begins only after any unsatisfactory conditions have been corrected

• Ensure appropriate weather and site conditions are favourable for the work and monitor future weather forecast for changing conditions that may arise before the work is complete

Workers:

- Cooperate with the employer to receive adequate training regarding working at heights, safe operation of equipment, and tool safety
- Wear personal protective equipment as required, even if others are not doing so. Lead by example!
- Practice good housekeeping on site to keep work areas clear of tripping and other hazards
- Know and follow all safe work procedures
- Know load capacities and operational requirements for all equipment you are using and operating
- Avoid working underneath raised loads or other workers
- Inspect equipment daily and report any damages or malfunctions immediately
- Report any hazards to the employer, contractor or constructor immediately
- If you are asked to perform a task that you feel is dangerous, discuss with your supervisor and enact your right to refuse unsafe work if necessary (for more information on the right to refuse unsafe work, see section 28 of the <u>OHS Act</u>)

For an downloadable resource to discuss safety responsibilities on site, view the <u>Safety Talk:</u> <u>Internal Responsibility System</u> on our website.



Regular toolbox meetings to review the work hazards and requirements across all trades is a good practice.

PLANNING BEFORE YOU START/MINIMIZING THE RISKS

There are several ways to erect roof trusses safely. Whether lifting trusses with lifting equipment, moving them by hand, or building the roof on the ground first, there are many risks involved. It is important to consider and plan for risks on each site.

Falls from heights:

One of the most significant hazards involved in installing trusses is working from heights. Even if it involves only a few metres, a fall from that height can be fatal. In Prince Edward Island, working at heights 3m or above requires the use of fall arrest equipment, guardrails or other means of fall protection, including a written fall protection plan.

When installing trusses, working at heights will generally be required. In order to reduce the risk of falling, minimize the amount of time and/or people working at heights as much as possible, and always ensure workers are provided with and properly using a safe means of fall protection.

Truss collapse:

Even if working at ground or floor level, where there is no risk of falling, if a truss collapse occurs, it can be fatal. The best way to minimize a collapse is to properly brace the structure **before** placing trusses.

To read about a residential roof truss collapse in PEI, visit the Hazard Alert: Truss Collapse on our website.

Equipment failure:

When working at ground level or working safely at heights, equipment failure can cause materials to strike and injure workers. Whether the task involves using a tag line, hoisting equipment or fall protection, it is important to ensure the proper equipment is being used for the task. Ensure equipment is inspected frequently for wear or damage. Follow the manufacturer's specifications for the required maintenance schedule.

Manual handling injuries:

Lifting equipment should be used to place trusses if the size, weight and position of the roof trusses pose a risk for health and safety. Ensure walls are adequately braced to ensure they can withstand wind and construction loads. Discuss the loading and unloading sequence of the trusses as early as possible since this can significantly reduce the risk of manual handling injuries.

Successful installation depends on good planning, and a critical part of planning is communication. The principal contractor should consult daily or more frequently as required with workers to ensure that work is properly arranged to minimize disruptions and situations that could affect safety.

Things to discuss on site:

- Size and type of lifting equipment needed for lifting trusses
- Access, egress and safe positioning of vehicles and other equipment on site
- Type and perimeter of the scaffolding needed on site
- Weather conditions and how it will impact the work and safety of everyone on site
- Manual handling and lifting risks (older and new workers are the most vulnerable and need additional supervision)

Another important component to good planning is ensuring everyone has received adequate training. Before starting work, everyone erecting trusses should have basic safety training, on the following:

- working at heights/wearing fall protection
- safe handling of heavy or difficult loads
- electrical power / contact risks
- sun, heat, rain, wind, slippery surfaces
- safe use of power tools
- working with or around lifting equipment
- housekeeping

Good planning and communication are powerful tools for safety. Taking the time to assess and address hazards can prevent an unfortunate incident that may result in serious injuries.

Before you raise your first truss, make sure you have:

- Identified and assessed the risks
- Ensured all equipment is working safely and used properly
- Ensured everyone is properly trained

See Appendix C for a sample Hazard Assessment template.



WORKING AT HEIGHTS

In Prince Edward Island, working at heights 3m or above requires the use of fall arrest equipment, guardrails or other means of fall protection. This can include:

- Fall arrest equipment
- Guardrails
- Safety nets

Fall arrest equipment

The benefit of fall arrest systems is that they provide flexibility and freedom of movement in the work area. Important things to remember when using fall arrest systems:

- The employer must ensure the proper equipment is provided, and the workers must wear it.
- Training is required by a competent person, and training records must be kept for at least 2 years.
- Fall arrest systems must be secured to an appropriate anchor or lifeline and must meet CSA standards. Anchors can be a permanent or temporary structure and must be capable of withstanding any fall arrest forces of 17.8 kilonewtons (kN) or greater.
- The lanyard length must be calculated properly so it does not exceed a worker's fall distance. Determining fall distance and clearance requirements is a necessary component of fall protection training and may need to be adjusted each time the worker adjusts their positioning.
- Most anchor points are designed to hold only one worker; ensure that each worker is using their own independent anchor point.
- Fall arrest systems must be inspected by a competent person prior to each work shift and any defective components must be taken out of service.
- A written comprehensive fall protection plan must be developed and available on site (see Appendix B for a sample fall protection plan).

The truss system is designed to operate as a complete system. Any part of an inadequately braced truss system, used as an anchor point for a personal fall arrest system, is dangerous and will increase the risk of serious injury.

Never anchor to the following structures or equipment:

- A wooden truss that is not properly braced
- Roof vents or hatches
- Small pipes and ducts
- Metal chimneys
- Antennas
- Stair or balcony railings
- Fixed access ladders
- Railings of a power/aerial lift



Components of a fall arrest system



Temporary fixed support anchor

Guardrails

Guardrails are useful when working at heights as another means of fall protection. They can be made from lumber, wire rope railing, or pre-manufactured following an engineered design. Exterior bracket scaffold guardrails cannot be used as a substitute for fall protection unless it can be shown that it can withstand a load of 17.8 kN, which is not typically the case.





Safety net securely installed under trusses

Safety Nets

Personnel safety nets, while not commonly used in residential construction, can be a safe alternative to a fall arrest system for workers who are installing trusses.

For full requirements on fall arrest systems, guardrails and personnel safety nets, consult with the following:

- OHS Fall Protection Regulations
- Guide to Fall Protection Regulations

Written Fall Protection Plan

When the selection of a means of fall protection includes a fall arrest system or a safety net, the employer is required to have a **written fall protection plan** in accordance with Section 3(11) of the *Fall Protection Regulations*. The plan must specify the procedure to assemble, maintain, inspect, use and disassemble the fall arrest system or personnel safety net. This plan must be followed and available on the site.

In addition, the plan must include a procedure to rescue a worker who has fallen and is suspended by the system. Fall protection plans must be specific to the site where they are being used, as the requirements and equipment used will change from site to site.

The rescue procedure is a critical component of a fall protection plan that is often overlooked. When fall protection requires workers to use a fall arrest system, a procedure must be in place which provides for the quick rescue of any fallen/suspended worker and the safety of the rescuers. When putting a plan in place for rescue, ensure the simplest and safest form of rescue be considered first (man lifts, bucket aerial devices, mobile work platforms). The first responder system (9-1-1) should not be the first line of defense. This should only be used as part of an emergency plan when all rescue efforts have failed.

See Appendix B for a sample Rescue Plan template.

For additional resources on fall protection, visit our website:

- PEI's Fall Protection Regulations made under the Occupational Health and Safety Act
- Guide to PEI's Fall Protection Regulations
- Safety Talk: Fall Protection

Ladders:

Falls from ladders are common to all trades and pose one of the most serious safety risks in construction. When installing trusses, a ladder should only be used to go from one elevation to another. It should not be used as a work platform.

The following are leading causes of ladder injuries:

- Ladders are not held, tied off, or otherwise secured.
- Workers do not grip ladders properly when climbing up or down (e.g. maintain three-point contact).
- Workers do not position themselves properly on ladders (e.g. leaning out too far).
- Ladders do not have secure footing at the base or are placed at improper angles.
- Weather conditions cause rungs or steps to become slippery.
- High winds cause ladders to topple.

It is important to remember the following safe practices while using a ladder:

- Ensure the ladder is strong enough to support supplied load (this includes the worker's weight plus gear/equipment).
- Extend the ladder at least 3 feet above the landing.
- Where possible, secure the top of the ladder to prevent movement.
- Inspect the ladder regularly and remove from service if defects are found.
- Avoid working from the top 3 rungs of a single or extension ladder.
- Avoid placing ladders in front of doorways or openings.
- Use 3 point contact when ascending and descending.
- Avoid using metal ladders where electrical hazards are present.

For an additional resource on the safe use of ladders, view our <u>Safety</u> <u>Talk: Ladder Safety</u> on our website.

Remember:

- Never use ladders on any type of scaffolding or work platform.
- Never move a rolling scaffold while a worker is on it.



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WORK PLATFORMS

There are many different work platforms available when working at heights. Conventional scaffolding, engineered bracket scaffolds that hang off the top plate, and aerial lifts are some examples of work platforms that can be used. Risk of injury to workers is minimized by selecting the right equipment for the job, keeping platforms in safe working order, and ensuring workers are properly trained and supervised.

Scaffolding

Regardless of the type of scaffolding being used, there are general safety requirements to consider:

- Never use scaffolding as a means of fall protection as it is not designed to withstand the load of falling worker.
- Follow manufacturer's specifications or engineered specs when installing, dismantling, inspecting and maintaining scaffolding.
- Ensure there is a competent person to oversee the installation and dismantling of a scaffold system. A competent • person has the knowledge, training, and experience to conduct the assigned work in a safe and healthy manner. This person knows and applies the Act and Regulations associated to the assigned task.
- Ensure all workers are trained in how to properly work from scaffold systems. ٠

For full legislative requirements on scaffolding, visit the Scaffolding Regulations on our website.

Exterior Bracket Scaffold

An exterior bracket scaffold is a scaffold consisting of engineered and manufactured brackets which are hung or otherwise suspended from the wall framing to the outside perimeter of the building. The use of an exterior bracket scaffold, hanging from the top plate of an adequately braced and supported wall, can facilitate the installation of trusses in low-rise construction. It provides workers with a safe work platform and walkway, and allows the work to be carried out at a comfortable and ergonomically correct height.

Interior Bracket Scaffold

Similarly, an interior bracket scaffold consists of engineered and manufactured brackets which are hung or otherwise suspended from an adequately braced and supported wall that can facilitate the installation of trusses.

Aligning and squaring trusses, toe-nailing and securing can be done from the platform.

Both exterior and interior brackets are used to support planks and guardrails in order to create a work platform that complies with the Occupational Health and Safety Act and Regulations.

Bracket scaffold is restricted to being used as a work platform only and NOT to be used as a means of fall protection when working on a roof or top plate as it is not designed to bear the load of a worker during a fall.





Properly designed planks must be used for the platform and not lumber or other materials. A competent person shall oversee the installation and dismantling of a scaffold system. The manufacturer's instructions, *Occupational Health and Safety Act*, and Regulations must be followed. If field conditions vary and create situations beyond the scope of the manufacturer's instructions, additional engineering may be required.

For all bracket scaffolding, follow these guidelines:

- Prior to placing brackets on the exterior of the building, ensure that the area below is clear of workers. It is beneficial to post warning signs at ground level and at access points of the building.
- Ensure that a competent person supervises the installation and dismantling of the scaffold.
- Ensure that brackets do not exceed the maximum allowable distance. Supports for wood planks should not be more than 3m apart.
- If required, use a portable ladder from the inside of the building to place and secure brackets over the top plate according to manufacturer's instructions.
- When using a ladder supported against the top plate, always keep your feet at least 914mm (3ft) below the top plate so it can guard against a fall to the outside.
- If a worker installing components is exposed to a fall 3m or above, the worker must be trained in fall protection and a fall protection system must be used. For a complete list of conditions requiring workers to use fall protection, see Section 2 of the Fall Protection Regulations.
- Always use manufacturer's original parts or approved replacements. Do not replace damaged or missing parts with non-approved materials unless certified by a professional engineer.

Rolling Scaffold

Scaffold that needs to be moved frequently is often equipped with casters or wheels. Rolling scaffolds can be used as an interior scaffold while installing trusses, but must only be used on firm, level ground. If a rolling scaffold is used, it must be equipped with functional braking and locking devices that prevent tipping, sliding, acceleration or any other dangerous or sudden movement.

Installing rolling scaffold must be done by, or under the supervision of, a competent person and in accordance with the manufacturer's specifications and the OHS Scaffolding Regulations. It must be assembled with diagonal bracing, at every level and on each side, and in the horizontal plane, at every 4.65m. The braking and locking devices must be applied prior to and while a worker is using the scaffold.

Similar to bracket scaffold, if the rolling scaffold work platform is 3m or above, workers must be trained in fall protection and a fall protection system must be used.



Unless a scaffold has a guardrail as pictured here, workers must use fall arrest equipment when working 3m or above.

Power/Aerial Lifts

Only a competent person who have been trained and familiarized in the operation of a power or aerial lift can operate one. This includes knowledge in inspecting the lift and recognizing and avoiding hazards associated with its operation.

The work platform must be equipped with a guardrail. Workers must use a fall arrest system at all times while in the lift, whether the lift is above 3m or not, and are not permitted to work from the guardrail even when wearing a fall arrest system. Fall arrest equipment must be secured to an engineered anchor point in the lift and not connected to the guardrail.

Power elevated work platforms must have the load capacity affixed to it and must not be loaded in excess of rated loads. The operator's manual and owner information must be available on the equipment, as well as a schedule of regular inspections.





Elevated Scissor Lift

POSITION, ERECT AND BRACE TRUSSES

When trusses are being delivered to your site, arrange with the truss manufacturer to have them stacked and delivered in the order that they will be installed.

Temporary Bracing of Walls

At this stage, walls should be adequately braced. Temporary bracing of walls is very important for ensuring stability of the walls to withstand wind and construction loads as construction proceeds. Do not remove bracing until the building has been closed in and all permanent bracing has been installed.

To ensure your building is properly braced, you must:

- Follow local and national building codes that apply.
- Review and understand component supplier's bracing notes.
- Comply with any engineer's notes and recommendations.



Truss anchors (spreaders) can be used as an anchor ONLY if trusses are properly braced and can support at least 17.8kN (4000 lbs). Not to be used for standing trusses.



Walking on the top plate is not a safe option while installing trusses. Use a safe work platform instead.

Placing and Securing Trusses

Use lifting equipment (if possible) to place trusses on top of the completed wall. When using lifting equipment, it is essential that it is properly stabilized, all physical obstructions are cleared, and proximity to electrical power lines is known. The footing area of the lifting equipment should be level, firm, properly graded, free from obstruction, and drained to prevent settling and tipping. The relationship between the weight of the load, the angle of the boom and the hoisting process must be considered to prevent tipping. Use special care in adverse weather conditions. High winds, icy conditions and lightning can pose serious risks.

When workers are guiding the trusses in place with a tagline, ensure the tagline is of sufficient strength and in safe condition. Ensure the walls have been adequately braced and floor openings are covered before trusses are lifted and guided into place.

Smaller, more lightweight trusses can be moved in place by hand but this may increase the risk of manual handling injuries to workers. From the interior walking platform and bracket scaffold, pull trusses from the pile and spread them over the structure. From the interior walking platform and bracket scaffolds, erect and brace the trusses according to the manufacturer's instructions. As the trusses are put in place, workers will generally have to bend down to walk under them, or climb down from the work platforms and walk across the floor. Climbing up and walking on the top plate or on the trusses is not a safe option. At no time is it considered acceptable to work 3m or above without the use of some type of fall protection system. Fastening the trusses to the wall top plates must be performed from a safe work platform or approved scaffolding inside or outside the walls or from ladders if it is safe to do so. Workers on the exterior bracket scaffold may align and anchor the trusses, place the fascia board, and place the first row of sheathing. After the first row of sheathing is installed, place anchor points in appropriate locations for workers to use personal fall arrest systems while completing the installation.

Remember, all permanent bracing must be installed for the truss system to be structurally sound. Therefore, prior to using the trusses for a fall arrest anchor, all permanent braces must be installed according to the truss manufacturer's instructions.

Temporarily Bracing Trusses

Erecting trusses will always present hazards. Following proper temporary bracing techniques will reduce the risk of a truss system collapse. The following example provides instructions for bracing common Howe and Fink style truss systems. Installers must always refer to the manufacturer's instructions for proper temporary bracing procedures.



1. Prior to installing the first truss, install temporary vertical supports ("strong backs") to the side of the building. Secure the first truss to the strong backs. When standing trusses, it is important to accurately plumb the first truss and to brace it substantially as additional trusses rely on the first one for stability and alignment.



than 10ft apart.

3. Install the third truss by bracing it laterally to the second truss while also ensuring bracing is secured no more than 3m apart.





2. Proceed with installing the second truss. Once in place, install top chord braces laterally ensuring braces are installed no more than 3m apart. Install bottom chord bracing ensuring braces are installed no more than 3m apart.



4. After installing lateral bracing, install cross braces on the first three trusses. The cross bracing is placed on the webs of the trusses as close to the top and bottom chord bracing as possible. Cross bracing should be installed at least every 6m and at each end of the building. This bracing will create a rigid unit from which the remaining trusses are supported. Continue installing all trusses and add an additional diagonal top chord bracing at least every 6m.

Temporary Bracing System Using Pre-Fabricated Braces

On some projects, it may be impractical to brace the first truss to the side of the building with strong backs. If this is the case, hoist the second truss into position and brace using pre-fabricated braces. Next, place the first truss into position along the end wall and brace it to the second truss that was installed. Secure the truss with bracing at no more than 3m intervals. Install the third truss and brace to the first truss installed and cross brace the first three trusses and continue the installation.



Safe Loading

When the trusses are in place, builders often temporarily stack bundles of sheathing and other materials on installed trusses. If done improperly, this load may cause the truss system to collapse and workers can be seriously injured or killed.

Trusses by themselves are very unstable and have **no capacity** to carry a load until they are properly braced. Use extreme caution when placing construction loads and only stack reasonable amounts of materials. Avoid stacking roofing materials in concentrated areas on trusses which could overload a single or small group of trusses, causing a collapse. Rather, ensure load is distributed over as many trusses as possible.

ASSEMBLING ROOF ON THE GROUND

The safest method of truss installation involves building all or part of the roof on the ground then hoisting it into place. If your construction project site has the space available for this type of installation, building the roof on the ground should be considered the first method of choice.

Written procedures are required for building, hoisting, and placing the roof. Workers who are involved at any stage of the procedure must be instructed on the procedures and must follow them.





Keep in mind:

- The truss manufacturer should provide the design assumptions (load) with their systems. Consult them to identify a method of hoisting the roof once it is assembled. This includes identifying the engineered lifting points.
- Ensure that the roof assembly will fit onto the constructed walls of the building. The safest place to make changes to the assembly is when it is still at ground level.
- Install fall protection anchors on the roof before the roof is raised into position. These anchors are needed for fall protection systems when workers are disconnecting hoist lines and finishing the roof. Follow manufacturer's instructions when installing anchors. If it is necessary for workers to access the roof to unhook the rigging system, they must connect to a fall protection system before getting up onto the roof.
- Define the weight of the roof, the distance to where it will be placed, rigging requirements, tag lines, etc.
- Consult with the hoisting company/operator and select the appropriate size and type of equipment. Ensure there is an adequate area to set up for the hoisting operation.
- Ensure the wind conditions are monitored closely during the entire hoisting operation.
- Ensure a competent person has inspected all hoisting components involved.
- Ensure there is a competent signal person available.

- Limit the number of workers in the building and in the hoisting area to only those needed to perform the work.
- Hoist the roof into position. Workers in the building must use tag lines to help land the roof on the walls. If minor repositioning is required, only use proper pry bars. Workers should NEVER position any part of their body between the top of a wall and the roof as it is descending.
- Unhook the rigging system from the landed roof. Workers performing this task MUST be protected with a fall protection system prior to getting on the roof.

Finish the roof (sheathing, shingling, miscellaneous work) using a fall protection system at all times. An exterior bracket scaffold is **not** to be used as a fall protection system.



Appendix A – Safety Checklists

SAMPLE - SCAFFOLDING SAFETY CHECKLIST

PROJECT					
SITE ADDRESS					
PERSON RESPONSIBLE FOR SCAFFOLDING ON THIS SITE					
SIGNATURE	DATE				

	Y	N	DETAILS
Design specifications for scaffolding are available on site			
Scaffolding is erected under the direction of a competent person* according to the design specifications			
Scaffolding is inspected daily by a competent person*			
Scaffolding and work platforms are capable of supporting 4X the maximum load it will be holding			
Scaffolding is properly level, securely in place and braced to prevent movement			
Brakes on rolling scaffolds are working and secured to prevent movement during use			
Braces, bearers and clamps are secured, and all sections pinned or appropriately secured			
There is a safe way to get on and off the scaffold			
Scaffold meets electrical safe limits of approach			
Measures are in place for unfavourable weather conditions, including high winds, rain, snow and ice			
Where the work platform on a rolling scaffold is 3m or higher, it is important that workers wear fall arrest equipment attached to a suitable anchor or that there is a guardrail that extends above the work platform			

*Competent person is defined in the OHS Scaffolding Regulations as a person who is qualified because of that person's knowledge, training and experience to do the assigned work in a manner that will ensure the health and safety of persons in the workplace, and is knowledgeable about the provisions of the OHS Act and the regulations that apply to the assigned work, and about potential or actual danger to health or safety associated with the assigned work.

SAMPLE - LADDER SAFETY CHECKLIST

LADDER TYPE	
INSPECTED BY*	
SIGNATURE	DATE

	Y	N	DETAILS
Load rating is identified on the ladder			
 Ladder is tall enough: Step ladder is tall enough to ensure user does not need to stand above the highest recommended step Extension ladder tall enough to extend at least 3 feet above a landing and user does not stand from the top 3 rungs 			
All parts are free of defects (cracks, dents, bends, breaks, splits, corrosion, rust, exposed fibreglass, rot decay or excess wear)			
Rungs, steps free of slippery conditions such as mud, grease, snow, ice			
Rungs, steps, side rails connected securely			
Safety shoes / feet / treads on ladder are in good repair and clean (not missing or loose)			
Bolts, rivets, nails and screws are secure			

*Inspect ladders before each use. Remove any ladder that is damaged or in poor condition and report it to a supervisor.

SAMPLE - FALL PROTECTION TRAINING CHECKLIST

PROJECT SITE				
PERSON RESPONSIBLE FOR TRAINING RECORDS				
SIGNATURE	DATE			

	Y	N	DETAILS
All workers required to work at heights 3m or higher are trained in fall arrest			
Training was performed by a competent person*			
Training included the use, care and inspection of the fall arrest system and a review of the provisions of the regulations applicable to fall protection			
Training records / certificates are available for an officer on inspection			
Training records are maintained for at least 2 years following the worker's employment			
Training records include: -name of worker -date of training -name of trainer -material provided during training			

* Competent person is defined in the Fall Protection Regulations as a person who is qualified because of that person's knowledge, training and experience to do the assigned work in a manner that will ensure the health and safety of persons in the workplace, and is knowledgeable about the provisions of the OHS Act and the regulations that apply to the assigned work, and about potential or actual danger to health or safety associated with the assigned work.

Appendix B – Written Fall Protection Plan Sample

Name of Employer:

Location of Work Site:

Designated First Aider on Site:

Start Date:

Brief description of the work project/task (sketch the project on the reverse page if desired):

Fall hazards specific to this work site:

Means of Fall Protection selected for this work:

- Fall Arrest
- Personnel Safety Net
- □ Guardrail System
- □ Other: _____

Describe the procedures to be used to assemble, maintain, inspect, use and disassemble the means of fall protection:

Describe the procedures for the rescue of a fallen worker:

Section 3.(11) of the PEI Fall Protection Regulations states, "Where an employer uses a fall arrest system or a personnel safety net as a means of fall protection, the employer shall have a written fall protection plan that specifies (a) the procedure to assemble, maintain, inspect, use and disassemble the fall arrest system or personnel safety net; and (b) the procedure for the rescue of a worker who has fallen and is suspended by the fall arrest system or personnel safety net, but is unable to effect self rescue."

Appendix C – Hazard and Risk Assessment Sample

Company name:

Date assessment was carried out:

Assessment carried out by:

WHAT IS THE HAZARD?	WHO MIGHT BE HARMED AND HOW?	RISK LEVEL (HIGH, MEDIUM,	WHAT CONTROLS ARE NEEDED TO REDUCE OR ELIMINATE THE RISKS?	PERSON RESPONSIBLE FOR CARRYING OUT	DATE
Eg. Working at heights	Eg. Workers over 3m or more and be injured	High	Eg. Fall arrest equipment, training, guardrail, etc.		
Eg. Hoisting materials	Eg. Workers guiding or working under the load -worker could be caught between or under a load and injured	High	Eg. Training for the operator and other workers		
Eg. Electrical contact	Eg. Lifiting equipment operator and workers within the danger zone – could cause electrocution injuries	High	Eg. Training on safe limits of approach		

For more information on how to do a hazard assessment, visit the **<u>Guide to Performing a Hazard Assessment</u>** on our website:

Appendix D – Additional Resources

Additional resources referenced in this guide can be accessed on our website at <u>www.wcb.pe.ca</u>, including the following:

- <u>Safety Talk: Internal Responsibility System</u>
- Hazard Alert: Roof Truss Collapse
- Guide to Fall Protection Regulations
- Safety Talk: Fall Protection
- Guide to Performing a Hazard Assessment













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