

**PURPOSE/APPLICATION**

This safe work practice governs the erection, use, maintenance, inspection, and dismantling of scaffolding, which is used to provide a secure platform for elevated work locations, or access/egress to/from a work area. At Canadian Plains Energy Services (CPES), the most common types of scaffold used are tube-and-clamp, and Safeway or access scaffold.

**PPE**

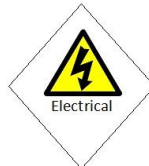
- CPES minimum requirements
- Fall protection equipment as determined by hazard assessment

**TRAINING**

- Fall protection training (where applicable)

**HAZARDS & CONCERNS**

- Gravity (falls, falling objects, scaffold collapse)
- Overhead equipment
- Hazards involving material loading, handling, storage
- Electrical (overhead powerlines)
- Motion (traffic, equipment)
- Rescue access

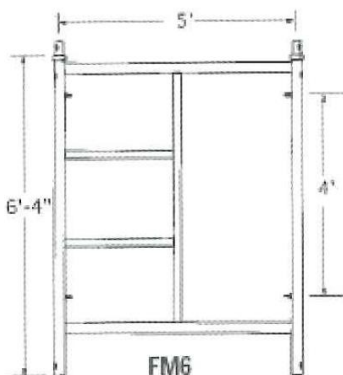


**PRECAUTIONS**

The scaffolding and temporary platforms erected to provide a safe work area during construction, demolition, alteration or repair of buildings or other structures must:

- Comply with manufacturer’s specifications, engineering specifications, CSA standards, site/client requirements, and OH&S legislative requirements (province-specific).
- Be installed by competent worker(s), or under the direct supervision of a competent worker.
- Note that in industry, although some incidents are caused by poorly constructed scaffolding, the majority involve incorrect use of the scaffold.

**Common Scaffold Types (CPES) (Figure 1)**



Tubular Welded



System (Modular)



Tube & Clamp

**Assign a competent person to coordinate scaffolding activities:**

Workers must be suitably qualified in the proper selection, use and care of scaffolding equipment and materials. Workers must have a basic knowledge of scaffolding safety.

- CPES will ensure that scaffolds used by workers are in a safe condition and are able to withstand the load regardless of who erected the scaffold.
- CPES will ensure that the components of a scaffold have been visually inspected for defects by a competent person prior to erection.
- Any component found to be defective is to be replaced before the scaffold is used.
- Only a competent person will maintain/inspect scaffolding.

**Installing/Erecting Scaffolding – General Considerations:**

- Ensure all hazards and controls identified in the hazard assessment are in place.
- CPES recommends that tubular welded (“Safeway”) scaffold not be higher than three lifts. If taller scaffold is required, it is recommended that a different style be selected.
- A tagging system must be used. Tags may be valid for a maximum of 21 calendar days unless a deficiency that requires the tagging to be reissued sooner is identified.
- Flagging or signage should be in place (e.g. Danger – Overhead Work) to warn workers of overhead hazards, during erection, use, and dismantling of scaffold.
- Build on a firm, level base, using mud sills where required.
- Wheeled or rolling scaffolds must have castor wheel locks or chocks, which must be engaged to secure scaffold against movement, prior to use.
- Ensure that a scaffold platform is secured against movement.
- The platform of each scaffold must be a minimum width of 20 in (50 cm).
- Overlapped platforms (i.e. scaffold planks) must extend at least 12 in (30 cm) beyond a ledger.
- A minimum 1” thick x 6” wide toe board, installed flush with the platform, is required on all temporary platforms higher than 10 ft/3 m, where material or tools are being stored on the scaffold, and/or where work on the scaffold poses a risk to workers below.
- All openings, including stairway openings, must be appropriately guarded to prevent a worker from falling.
- All scaffolds must have a platform perimeter handrail installed 36”/0.9m to 42”/1m above the platform complete with a mid-rail.
- All scaffolds must be provided with an access ladder attached to the scaffold (**Note:** Most metal access-type scaffolds are manufactured with ladder rungs integral to the design).
- Maintain established minimum clearance from all power lines.
- A scaffold must be grounded if:
  - it is a metal scaffold and is located close to a high voltage energized electrical conductor or equipment and/or;
  - a hazardous level of electrical charge is likely to be induced in the scaffold.
- All lumber used to construct scaffold must be graded and marked according to the Standard Grading Rules for Canadian Lumber.

- Wooden platform material must be sound, close-grained, unpainted and finished on all four sides, and inspected prior to being installed. Scaffold planks must be stamped to indicate certification for scaffolding.
- All connections between the parts of a scaffold must be secured against unintended release.
- A single pole or double pole scaffold must be supported against lateral movement by adequate bracing, anchored by one tie-in for each 4.6 meter vertical interval and one tie in for each 6.4 meter horizontal interval, anchored by one tie in for each 3 meter vertical interval and one tie in for each 3 meter horizontal interval if the scaffold is hoarded (hoarded masonry walk-through scaffolds have different anchor and tie-in space requirements), and set plumb on a base plate, jackscrew or other load dispersing device on a stable surface.
- Any scaffold component showing signs of defect must be tagged “out of service” and removed/replaced.

### Tagging Requirements:

All required scaffolding will be color coded using tags at each point of entry indicating the status and conditions as follows:

- A green tag with “Safe for Use” wording to indicate it is safe to access and use, or
- A yellow tag with “Caution: Potential Hazard” wording to indicate the presence of a potential or unusual hazard, or
- A red tag with “Unsafe for Use” wording, to indicate it is not safe to access or use.
- Scaffolding without a tag will be considered the same as a red tag and is not safe for use until it has been inspected and tagged by a competent individual
- The following will be recorded on the maintenance/inspection tag:
  - Date scaffold was erected
  - Date scaffold was last inspected
  - Weight limitation of scaffold (duty rating/load capability)
  - Name and signature of competent person who last inspected/maintained scaffold
  - Any precautions to potential scaffold users to be taken when working on scaffold
  - The expiry date of the tag (maximum 21 calendar days from being erected)



Figure 2. Example scaffold tags.

### Inspection/Maintenance:

- All scaffolding will be visually inspected by a competent worker prior to use. Scaffolding must be checked by the user daily when in use, for any defects, changes, or hazards.
- If a metal scaffold or a component of a metal scaffold is damaged, deteriorated, or weakened so that the strength and/or stability of the scaffold is affected, the employer or contractor shall ensure the scaffold is not used until the scaffold or component is repaired or replaced by a competent person in accordance with manufacturer’s or engineer’s specifications.
- The employer, contractor, owner, or supplier shall ensure that only competent persons maintain and inspect an aerial device, elevating work platform, personnel lifting unit or scaffold.

### Ladders

- Scaffold access ladders must:
  - Be securely fastened to the scaffold.

- Extend at least 1 meter above the uppermost working level of the scaffold.
- Be equipped with a ladder cage that begins within 7 ft 10 in (2.4 m) of the ground if the ladder is more than 20 feet (6.1 m) in height.

**Specific Safe Work Practices for Scaffold Users:**

**THE DO's:**

- **DO** Visually check scaffold and consult tag before use.
- **DO** Wear a fall protection harness and be tied off to an anchor point at shoulder height or above, with a shock absorber lanyard (fall arrest device), when required to work on a scaffold/platform where there is a risk that you could fall 10ft/3m or more, or there is an unusual possibility of injury if you were to fall less than 10ft/3m.
- **DO** Protect scaffold from being contacted by vehicles and powered mobile equipment, using concrete barriers or other means, where this hazard exists.
- **DO** Install warning devices/signs when scaffolding is installed above walkways/roadways.
- **DO** Keep platforms free of debris, ice and snow.
- **DO** Use tag lines when hoisting/lowering materials.
- **DO** Use tool bags c/w hand lines when hoisting/lowering tools.
- **DO** Minimize tool and material storage on platforms.
- **DO** HIAC the work area for proximity to exposed energized high voltage electrical conductors.
- **DO** Review the scaffold tag information before accessing scaffold and conduct your own HIAC or hazard reassessment of the work area and your specific work task.
- **DO** Maintain 3-point contact when climbing or descending scaffold access ladders.

**THE DON'Ts**

- **DON'T** block up scaffold bases with blocks, bricks, lumber, etc.
- **DON'T** Drop or throw anything from scaffold.
- **DON'T** Carry tools or material while climbing a ladder. Use tool bags and/or taglines.
- **DON'T** Work from a scaffold access ladder.
- **DON'T** Use a ladder sloped against a scaffold unless it is secured against movement.
- **DON'T** Jump off a scaffold, or the access ladder.
- **DON'T** Use ladders, crates, pallets, etc. on top of scaffold platforms to increase the working height/reach of workers.
- **DON'T** Use scaffolding as an anchor point for fall arrest unless you are a scaffolder; only scaffolders are permitted to tie off to scaffolding.
- **DON'T** Use scaffolding for any rigging (chain falls, come-along's, etc.); it is not designed to be loaded in this way

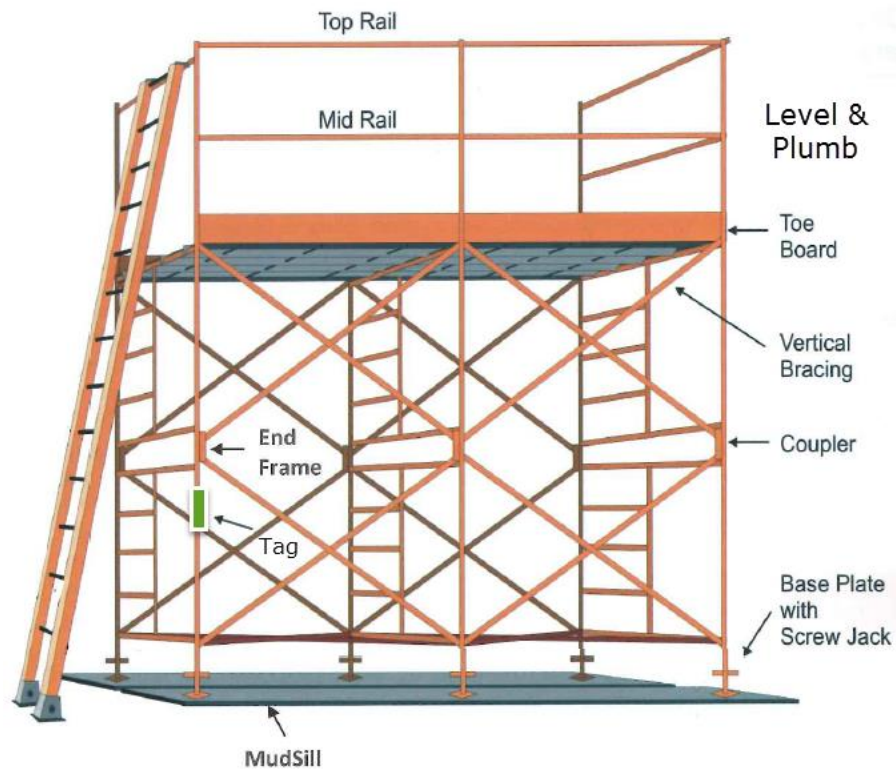


Figure 3. Typical components of scaffold.

### **Develop an Emergency Response and Rescue Plan:**

In the event of an emergency that requires a rescue from an elevated platform, a site-specific rescue plan must be developed and communicated to participating workers before the scaffold is used.

- Identify situations that would call for immediate implementation of an emergency response/rescue. (E.g. electrocution, fall, etc.)
- Determine if specialized emergency/safety services or equipment are required to be on site.
- Develop a list of emergency response numbers including:
  - Emergency services
  - Client contacts
  - CPES supervisors
- Identify the evacuation and emergency plan to transport injured workers.
- Identify first responders and define their roles and responsibilities.
- Identify workers with specific rescue responsibilities and clearly define what they are.
- Delegate First Aid responders.
- Define roles of all others in managing, controlling or assisting in an emergency.
- Determine what alarm and communication systems will be used.
- Determine the muster point location and how to account for all workers.



**REFERENCES / ADDITIONAL INFORMATION**

- Manufacturer’s specifications
- CSA Standard Can/CSA –S269.2-M87 (R2003)
- CF-S-25 – Safe Scaffold Checklist
- SWP – 24 Overhead Power Lines (Working Near)
- COP – 06 Fall Protection

**REGULATIONS**

- Consult Provincial OH&S Regulations for more specific information.

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