**Ladders SWP**

**Background:**

Falls from ladders are one of the leading causes of injuries to workers in British Columbia. Proper use of ladders is critical to preventing serious injuries or even fatalities. Always ensure that you are using the right ladder for the right job, and that you have training in how to set that ladder up and use it properly. Never use a ladder with any type of defects.

The ladders described in this document include:

* Extension ladder
* Single Ladder
* Step ladder

**Hazards:**

* falls from ladders
* struck by falling ladders or materials falling from ladders
* tripping over ladders (erect or lying on floor)
* lifting heavy ladders
* striking persons or objects when carrying ladders
* contact with electrical equipment

**Ladder Overview:**

Use only NFPA, CSA or ANSI Standard approved heavy duty ladders or job built ladders built to Worksafe BC Standard LDR 1-2004. Always ensure that your ladder and work practices comply with Part 13 of the Worksafe BC Regulations.

Aluminum ladders may have sharp edges or burrs which can hurt workers’ hands. Aluminum ladders should never be used near electrical lines or equipment because they can become electrical conductors.

**PPE Required:**

* Safety vest
* Gloves (If needed)
* Eye protection (if needed)
* CSA approved protective footwear with good ankle support
* Hard hat, if necessary
1. **Pre Set-Up:**
* Inspect area for debris
* A ladder and associated components must be inspected before use on each shift, and after any modification, and any condition that might endanger workers must be remedied before the equipment is used.
* Ensure that the ladder can be set up on a level surface.
* Ensure that ladder has proper footing and is in good working order.
1. **Procedure:**

**Portable Step Ladders:**

* Fully open stepladder on a level surface and lock it’s spreaders in place.
* Never use a stepladder folded up and leaning against a surface (as a straight ladder)
* Never try to work from the top two steps of a step ladder or consider them steps

**Portable Straight & Extension Ladders:**

* To prevent slipping or tipping, place the ladder at an angle so that the distance from the ladder base to the vertical of its support is about ¼ the working length of the ladder (***Four vertical to one horizontal)****.*
* It should have sufficient length to project approximately 1 m (3 ft) above the upper landing to which it provides access,



* One of the following measures must be taken to hold a portable straight ladder stable:
1. Equipment with non-slip bases such as shoes spikes or spurs. The upper part of an extension must have a non-slip base in contact with the object it rests against.
2. A second person can heel the bottom of the ladder.
3. Tie, hook or otherwise anchor the ladder at the top.
* In addition to the aforementioned straight ladder procedures, the following rules must be followed for extension ladders:
	1. Use lanyard to extend the ladder to desired height and tie-off lanyard to rung at lower section of the ladder.
	2. Ensure dogs on extension ladder are engaged.
	3. On slippery surfaces, tie ladder or nail cleats to floor to prevent slipping.

**Safety Principles Applicable To All Ladder Types:**

* Use the right ladder for the job. All portable ladders should be strong enough to support any expected load.
* If work cannot be done from a ladder without hazard to a worker, a work platform must be provided.
* Never overreach or lean to one side while using a ladder.
* Inspect ladder before and after use. Check design and materials for uniformity and spacing of steps. The rungs, cleats or steps must always be parallel and even.
* The steps should be spaced evenly throughout the length of the ladder and not more than 12 inches apart. The reason for 12 inch spacing is so workers do not have to reach for the next step.
* Use a three-point contact climbing method (e.g.: 1 hand and 2 feet).
* Tag and remove defective ladders for repair.
* Do not place a ladder in front of a door unless the door is blocked, locked or guarded.
* Keep rungs free of slippery materials such as oil, grease, water and paper.
* A worker must not carry up or down a ladder, heavy or bulky objects or any other objects which may make ascent or descent unsafe

**Proper Maintenance of All Types or Portable Ladders:**

* All bearings, lock, wheels and pulleys should be lubricated frequently.
* Inspect to ensure that all hardware and fittings are securely attached.
* Inspect to ensure movable parts operate without catching or wobbling.
* Ensure the joints between steps and the side rails are tight.
* Destroy any ladders with broken or faulty equipment if it cannot be repaired, to prevent someone taking it home or using it.
* If stored in a horizontal position, ladders must be supported to prevent sagging.
1. **Post Procedure/Take Down**
* Inspect ladder before returning to storage. Ensure all ladders are returned in good working order.
1. **Summary:**
* Wear all PPE
* Be aware of your surroundings and the possible hazards that could occur.
* Use the right ladder for the right job
* Never stand on the top rung
* Inspect for defects before use