

When should I use a ladder?

Responsible agencies in all jurisdictions across North America are concerned about a continuing, high rate of falls from heights, including falls from ladders, amongst professional users; however their approach to reducing the number of such incidents varies widely.

As a responsible member of Industry, Featherlite is committed to providing ALL users --Residential, Contractor, and Industrial-- with the general information and know-how necessary to properly select, set-up, inspect and safely use a portable ladder.

However, Featherlite defers to each nation's jurisdictional authorities to set out how, and the explicit conditions under which, portable ladders must be used. We urge you to click-on and follow the link associated with the responsible authority within your jurisdiction.

Links to Provincial & territorial Work Safe Agencies

Alberta:	http://humanservices.alberta.ca/working-in-alberta/274.html
British Columbia:	http://www.worksafebc.com
Manitoba:	http://safemanitoba.com
New Brunswick:	http://www.worksafenb.ca
Newfoundland & Labrador:	http://www.servicenl.gov.nl.ca/ohs
North West Territories & Nunavut:	http://www.wcb.nt.ca
Nova Scotia:	http://novascotia.ca/lae/healthandsafety
Ontario:	http://www.labour.gov.on.ca/english/hs
Prince Edward Island:	http://www.gov.pe.ca/psc/ohs
Quebec:	http://www.csst.qc.ca
Saskatchewan:	http://www.worksafesask.ca
Yukon:	http://www.healthandsafety.gov.yk.ca
Canada:	http://www.ccohs.ca
OSHA (US):	https://www.osha.gov

Meanwhile, we offer the following hazard assessment tool which may be of use in identifying, considering, ranking and managing the hazards, and associated risks and severities, associated with your next planned work at height event.

Some Guidance on Ladder Risk Assessment

An employer must ensure that the hazards associated with working from a ladder have been identified and assessed, and appropriate controls instituted to protect the health and safety of the worker.

This is best determined by performing a ladder risk assessment, wherein said assessment considers the PROBABILITY of occurrence of a potential hazard and the SEVERITY of each possible outcome. The procedure involves identifying and ranking each possible hazard, as a combination of hazard probability and severity, and then displaying each in a simple matrix (as shown below). Hazards falling under "critical" and "serious" categories MUST be extensively managed by elimination of the hazard wherever possible, or otherwise taking steps to reduce either the probability or severity of an occurrence. Hazards in the "moderate" category need also

be managed, typically by reducing one or other of risk of occurrence, or its severity. Hazards that fall in the “minor” or “negligible” are normally acceptable as is.

Risk Assessment Matrix

Probability vs. Severity of Occurrence		Hazard Probability			
		A	B	C	D
Hazard Severity	I	Critical	Critical	Critical	Moderate
	II	Critical	Serious	Moderate	Minor
	III	Serious	Moderate	Minor	Negligible
	IV	Moderate	Minor	Negligible	Negligible

Probability of occurrence of a potential hazard:

- A—immediate occurrence is highly likely.
- B—occurrence is highly probable with prolonged exposure duration.
- C—occurrence is possible with prolonged exposure duration.
- D—occurrence is only remotely possible, regardless of exposure duration.

Severity may range from:

- I—fatality or permanent total disability
- II—other serious injury
- III—minor injury without lost-time
- IV—minor medical treatment

Components of a ladder risk assessment should include, but are not limited to...

The ladder...

- is it the correct type & style of ladder for the job?
- is it of the correct material? i.e. NO Aluminum ladders in service near live electrical circuits!
- is it of a correct load rating to support all expected loads, including... the user’s clothed weight PLUS the weight of all gear, tooling, materials PLUS an estimate of the magnitude & direction of any load that may be applied to the ladder while working from it, such as while ... hammer drilling, or hoisting materials, etc.?
- is the ladder length sufficient to ensure that the worker does not have to overreach, or... stand above the highest allowed rung/step?
- Is the ladder long enough to project three (but not more than four) rungs beyond the top supporting surface? (e.g., straight or extension ladder)
- Has the ladder been inspected, maintained –and repaired if necessary?
- Has a straight/extension ladder been set-up at the prescribed 1:4 slope; or, has a stepladder been positioned on all 4-feet, on a firm level surface, and with both spreaders fully opened & locked?
- Can the ladder be used in specific accordance with the manufacturer’s guidelines, and generally recognized industry standard practices?

The Workers working on ladders...

- Have they been trained in general ladder safety, and safe-use practices specific to the ladder being used?
- Can they perform the proposed tasks without affecting their, or the ladder's, stability? (e.g., no forceful exertions or sudden forces, not using equipment such as hammer drills, not overreaching, or pushing/ pulling something, such as... cable through conduit)
- Can they safely climb the ladder using both hands and alternating feet?
- Can they face the ladder while climbing it?
- Can they stand on the ladder and receive or place materials/tools without over-reaching sideways, or below knee level, or leaning backwards?
- Can they maintain three-point contact while standing and working on the ladder? (e.g., not holding large, heavy, or otherwise awkward items that would require both hands to hold)
- Can they always keep both feet on the ladder while standing on it?
- Can they complete the proposed work by standing below a height of three metres? --otherwise fall protection is required

Why/how the ladders are used...

The primary use of ladders should be for access and egress to work areas above or below ground level. Work activities carried out using ladders can be divided into three types...

1. Climbing/descending a ladder
2. Receiving/placing/removing tools/materials while on a ladder
3. Working from a ladder

Each of these activities and associated tasks has similar inherent hazards that could affect the health and safety of the worker, but there are some hazards specific to each ladder-type. The risk assessment done by the employer should consider the type of ladder that is to be used and the work activities and associated tasks.

1. Climbing

Ladders are designed to provide access to work areas at different heights and allow workers to easily travel, from one to another level, of a structure or building --either above or below ground. Some factors that should be considered in the assessment...

- Is the worker using both hands while climbing/descending?
- Is the worker maintaining three-point contact?
- Is the worker facing the ladder?
- Has the worker received information, instruction, and supervision on safe climbing and material handling with respect to ladders?

2. Receiving/Placing/Removing Materials

A factor to be considered for workers handling materials while on ladders is whether the worker can receive items to one hand only, provided certain precautions and safeguards are in place, including...

- Worker has received information, instruction, and supervision on safe material handling while on a ladder
- One hand holds the rail at all times. (three-point contact must be maintained)

- Worker keeps both feet on the ladder at all times
- Worker's body-centre (belt buckle) stays within the side rails of the ladder
- Worker does not reach down below knee level
- Handling or placing of the object does not interfere with the worker's balance. (e.g., tools, or materials do not contact the ladder, worker doesn't have to lean backwards or sideways beyond the side rails of the ladder for tools/materials to clear the ladder)

3. While Performing Work

The types of factors to be considered for workers performing work while on portable ladders include...

- Can the worker achieve three-point contact, if necessary?
- Do the demands of the task, or the characteristics of held objects, allow a worker to grasp the side rail to attain/maintain balance?
- Will the worker's belt buckle remain within the side rails of ladder?
- Will any force be applied by the worker to the ladder? If so, is it of controllable low magnitude and non-impact in nature?
- Can the worker keep both feet on the ladder while working?
- Has the worker received information, instruction, and supervision in order to carry out the specific task safely?