Ladder Safety

Being conscious of ladder safety is one way to prevent workplace accidents and keep workers safe on the job. Portable ladders are one of the handiest tools available to perform a variety of tasks. While they seem like simple tools to use, planning and care are critical to using them safely. Each year in the U.S., accidents involving ladders cause an estimated 300 deaths and 130,000 injuries requiring emergency medical attention.

Ladder Hazards

Ladder accidents are normally caused by improper selection, care or use, and not necessarily by manufacturing defects. Some of the more common hazards involving ladders, such as instability, electrical shock and falls, can be prevented. Prevention requires training, correct ladder selection, good work procedures and adequate ladder maintenance. The hazards involved with the use of ladders are varied and can occur at any time:

- Falls
- Slips
- Reaching too far
- Weather conditions
- Oil or grease
- Insecure placement
- Contact with electricity
- Falling objects
Injury Prevention Tips

By following the tips below, you and your co-workers can be safe while using ladders on the job.

- Use ladders for their intended purpose.
- Only one person may be on a ladder at any given time.
- Face the ladder when ascending or descending.
- Use both hands to grip the side rails whenever possible.
- Don’t hand-carry loads on a ladder.
- Don’t try reaching so far that you lose your balance; instead move the ladder.
- Use ladders with non-skid feet or spurs to prevent a ladder from slipping.
- Don’t stand on the ladder’s top three rungs.
- The base should be spaced one foot away for every four feet it reaches up.
- The top of the ladder should be 36 inches higher than the level at which the employee is working.
- Extension ladder locks (dogs) must function properly to prevent overload on the rail.
- Securely spread open step ladders.
- Never use a folding step ladder in an unfolded position.
- Keep metal or wet wooden ladders away from electrical wires.
- Keep ladders secured/barricaded.
- Keep areas around the top and bottom of the ladder clear.
- Store ladders in designated areas.

There are some key elements to identifying these hazards that can go far to prevent accidents. Inspect each ladder before use and ensure the following:

- Steps and rungs are all in place, intact and free from grease or oil.
- Support braces, bolts and screws are tight and in place.
- Metal parts are lubricated.
- Rope is not worn or frayed.
- Locking device or spreaders are in place.
- Safety feet are in place.
- Metal ladders are not dented or bent.

If the ladder has any defects, tag it and remove it from service immediately.

Ladder Selection

Select the ladder to be used based on the type of work that will be done. Be sure to review weight limits — remember, they include you and any equipment you will carry:

- I-A (heavy duty) holds 300 pounds.
- I (heavy duty) holds 250 pounds.
- II (medium duty) holds 225 pounds.
- III (light) holds 200 pounds (generally used at home).

Also be sure to review maximum ladder-length limits:

- Step ladder: 20 feet high
- One-section ladder: 30 feet high
- Extension ladder: 60 feet high with section overlap

Ladder Setup

- Place the ladder on a level surface.
- Ensure the safety feet at the base of the ladder are in position to prevent the ladder from slipping or set the feet parallel with the surface the ladder will rest against.
- Extend the ladder so there are at least three feet above the top support.
- Anchor the top and have someone hold the bottom or tie it securely.
- Do not rest the ladder on a window.
- Position the ladder in front of a door only if the door is locked and cannot be opened.
- Position the ladder base from the wall approximately one-fourth the length of the ladder.
- Position an extension ladder before it is extended.