Portable Ladder Safety Tips

During set-up or tear down or sometime during the meet a ladder may be needed. Many volunteers stand on chairs, tables or other readily available items to get the task completed. Tables and chairs are not rated to support weight not evenly distributed and can fail unexpectedly.

Did you know that improper use of a ladder can result injury or even death. Falls from portable ladders (step, straight, combination and extension) are one of the leading causes of occupational fatalities and injuries.

With the right ladder and proper use, working above ground level should be no problem. Make sure you have an appropriate ladder and use correct technique for placement and climbing.

Choose the Right Ladder

There are three basic portable ladder types:

- Type I – Industrial: heavy-duty with a load capacity not more than 250 pounds.
- Type II – Commercial: medium-duty with a load capacity not more than 225 pounds. (Suited for painting and similar tasks.)
- Type III – Household: light-duty with a load capacity of 200 pounds.

There are many types of ladders available on the market. If it is intended to be portable and used by a single person, it should fit into one of the three basic categories.

Only choose ladders with the UL seal from Underwriter’s Laboratory. Ladders commonly come in three materials: aluminum, wood, or fiberglass. Aluminum is the most durable, but will conduct electricity, making it dangerous for use around electricity. Wood may rot. Fiberglass is the best combination of durability and non-conductivity, but is also the most expensive.
Proper Use a ladder

- Read and follow all labels/markings on the ladder.
- Avoid electrical hazards! – Look for overhead power lines before handling a ladder. Avoid using a metal ladder near power lines or exposed energized electrical equipment.
- Always inspect the ladder prior to using it. If the ladder is damaged, it must be removed from service and tagged until repaired or discarded.
- Do not use a self-supporting ladder (e.g., step ladder) as a single ladder or in a partially closed position.
- Do not use the top step/rung of a ladder as a step/rung unless it was designed for that purpose.
- Always maintain a 3-point (two hands and a foot, or two feet and a hand) contact on the ladder when climbing. Keep your body near the middle of the step and always face the ladder while climbing (see diagram).
- Only use ladders and appropriate accessories (ladder levelers, jacks or hooks) for their designed purposes.
- Ladders must be free of any slippery material on the rungs, steps or feet.
- Do not use a self-supporting ladder (e.g., step ladder) as a single ladder or in a partially closed position.
- Do not use the top step/rung of a ladder as a step/rung unless it was designed for that purpose.
- Use a ladder only on a stable and level surface, unless it has been secured (top or bottom) to prevent displacement.
- Do not place a ladder on boxes, barrels or other unstable bases to obtain additional height.
- Do not move or shift a ladder while a person or equipment is on the ladder.
- An extension or straight ladder used to access an elevated surface must extend at least 3 feet above the point of support (see diagram). Do not stand on the three top rungs of a straight, single or extension ladder.
- The proper angle for setting up a ladder is to place its base a quarter of the working length of the ladder from the wall or other vertical surface (see diagram).
- A ladder placed in any location where it can be displaced by other work activities must be secured to prevent displacement or a barricade must be erected to keep traffic away from the ladder.
- Be sure that all locks on an extension ladder are properly engaged.
- Do not exceed the maximum load rating of a ladder. Be aware of the ladder’s load rating and of the weight it is supporting, including the weight of any tools or equipment.

Maintaining Ladders
Inspect ladders regularly. Stepladders and extension ladders should be inspected for broken or frozen joints or latches. Aluminum ladders should be inspected for cracks and broken welds. Aluminum ladders should also be inspected for rough spots and burrs before first use.
Wood ladders should be inspected for cracked wood, splinters, and rot. Look for broken or loose hardware. Protect wood ladders with linseed oil or clear sealant. Never paint a wooden ladder - the paint may hide imperfections such as rot or cracks.

Fiberglass ladders are protected with a clear sealant. If the fiberglass is damaged through the sealant, sand lightly before applying another coat of lacquer.

**Step Ladders**

**The most common type of ladder in the home is a stepladder.**

Everyone needs a stepladder around the home whether you’re hanging a picture or changing a light bulb, and choosing the one that’s right for you is critical for your safety. Using a chair for such purposes, as we often tend to do, is not only unsafe, but can place undue strain on your hip and knee joints.

A five foot standard stepladder is a very practical home essential and enables us to reach a considerable height for many tasks. However, standing on a regular ladder for a few minutes to paint or wash walls, can become uncomfortable.

There also comes a time, when a handhold is required to ensure a safe climb, and many chores only require a couple of steps to reach the area in question. For these purposes, a 2 or 3 step ladder with a high handle becomes a handy addition to your household. They are light to manage and require little storage space when closed.

**Choosing a stepladder is not as easy as it looks**

Looks can be really deceiving and safety should be your prime consideration when purchasing a stepladder. Before you buy, try it with store personnel assistance. Ensure that the mechanism locks in place when open, and that the whole unit feels stable and comfortable when you climb it. Consider the height and convenience of the handle.

If you are ordering over the internet, check out the return policies to ensure that you can easily return it within the return period, if you feel the least bit uncomfortable with your purchase.

Trying a stepladder before purchasing is the only way to really know that your purchase is right for you and that it will provide the stable assistance you need when you’re climbing.
Improper use of a ladder

**Note:** Always follow the manufactures recommendations for safe and proper use of ladders.

This information is provided to you by the IES Safety Committee.