

Safety Bulletin February 2024

Ladder Safety: A Hidden Hazard

Falls from portable ladders (step, straight, combination and extension) are one of the leading causes of occupational fatalities and injuries. As simple as using a ladder seems

to be, the injury statistics indicate that it is one of the most abused tools we have. Accidents, particularly in the domestic setting, are frequently caused by overreaching or overextending from ladders to complete certain tasks, rather than doing the safe thing—climbing down and moving to a better access point. OSHA studies have shown that 100% of ladder related accidents could have been prevented using proper safety. Safety hazards associated with ladder



use include slips and falls, tip-overs, electric shocks, failure due to defects and damage, and failure from overloading. Examples of improper safety include using one that is too short, using the wrong type of ladder, not using a ladder when one should be used, reaching too far to the side, and using not as intended.

Ladder Safety Tips and Precautions

Working Near Electrical Lines

Before handling a ladder look for electrical hazards such as overhead power lines. Do not use a metal ladder near power lines or exposed energized electrical equipment. Ladders must be free of any slippery material on the rungs, steps, or feet. Make sure there are not power cords or rope that can get tangled in the rungs.

- ✓ Maintain minimum clearance distances for maximum voltage listed.
- ✓ Use shortest ladder available that will reach the target area.
- ✓ Consider the heights of conductive materials that must be extended beyond the ladder.

Avoiding Electric Shock

- ✓ Use a ladder made of non-conducting material the safest are the newer fiberglass reinforced plastic (FRP) types.
- ✓ Avoid using aluminum or metallic ladders.
- ✓ Avoid using wooden ladders around power sources since wood absorbs moisture and can become a conductor.
- ✓ Avoid using any kind of ladder that is wet when there is the possibility of an electric exposure.
- ✓ Use non-conducting ladders with power tools.
- ✓ Use double insulated and properly grounded tools avoid all contact between a ladder and power transmission and distribution lines.
- ✓ Be careful when changing ladder locations near any energized conductor

equipment and tools.

Reducing Fall Hazards

- ✓ Identify fall hazards.
- ✓ Conduct safety inspections regularly.
- ✓ Recognize/avoid unsafe ladder conditions and practices.
- ✓ Use protective equipment.
- ✓ Never force a worker to climb a ladder.

Another common hazardous workplace situation involves ladders being used in busy areas such as passageways, doorways, or driveways. The danger exists that the ladder and the worker using it can be displaced by workplace activities or traffic. To help prevent falls or other accidents in these situations, install a barricade around the area you are working to keep traffic or activities away and ensure the ladder is secured to prevent movement, or have someone direct traffic away from the area. If feasible to do so, a personal fall arrest system may be additionally employed as a precaution.

Preventive Measures

Read the labels: Before you get on a ladder, always read, and follow all instruction and warning labels. Check for weight limits. Ladders are designed to hold a certain amount of weight, which is the weight of the individual climbing the ladder along with all additional weight from tools, equipment, and carry-on weight.

<u>Check for stability</u>: Check to see that the ladder is sturdy with no cracked or damaged parts. Aluminum is a stronger and lighter material than wood. All bolts and screws should be secured and working properly. If damaged, remove from service until repaired or discarded. If possible, choose a ladder with stabilizers on the feet.

<u>Check your positioning</u>: Make sure to position the ladder on firm and level ground such as concrete. When positioning a ladder to a wall, make sure the angel is no wider than 75 degrees or about four feet from the ground to the wall.

<u>Follow the 3-point rule</u>: Maintain three points of body contact with the ladder, either two hands and a foot or two feet and a hand when climbing. Make sure to step on the middle of the step and face the ladder. If you need different tools, wear a tool belt to hold them.

<u>Dress properly</u>: Wear a hardhat or safety helmet when working on a ladder. Wear work boots or shoes with tread. It is easy to slip if you are wearing smooth soled shoes. Never wear sandals or go barefoot when working on a ladder. It is not difficult and it could save your life. Wear footwear that is in good repair, with heels and skid-resistant soles.

Be aware of your movements: Never stand on the top few rungs. Choose an extension ladder that is long enough to provide proper safety. The top of the ladder should reach past your belt when standing near the top. Standing too close to the top is one of the major causes of injuries. Never lean out or overreach from either side when working, leaning will throw you and the ladder off balance and you should keep your center of gravity aligned.

- ✓ Dismount before moving a ladder.
- ✓ Keep top and bottom ladder areas clear of clutter.
- ✓ Do not carry loads that prevent you from using both hands on the ladder.
- ✓ Carry tools on work belt or hoist rather than in your hands.
- ✓ Make slow and cautious movements.





DON'T stand above the second step from the top of a stepladder or the fourth rung from the top of an extension ladder. DON'T climb on the back of a stepladder. DON'T stand or sit on a stepladder top or pail shelf.





Properly set-up and use the ladder in accordance with safety instructions and warnings. Wear shoes with non-slip soles. Center body on the ladder and keep belt buckle between the rails while maintaining a firm grip. OSHA has a Quick Card available on ladder safety. This could be a topic for a tailgate safety meeting. https://www.osha.gov/sites/default/files/publications/portable-ladder-gc.pdf

ICRMA Training Update

University Session – March 28, 2024. Topic – Mandatory Reporting

Please consult the ICRMA 2023-24 Risk Control Plan for added trainings and webinars.

If you have questions about either of these programs contact Bob May, Director of Loss Control. Phone – 760.221.8205 or biem47@outlook.com