# Ladder Safety Talk




## WHAT'S AT STAKE?

Falls from ladders are one of the leading causes of serious injury in business operations in any sector. Remember that ladders are essentially tools. Many of the basic safety rules that apply to tools also apply to the safe use of ladders.

## WHAT'S THE DANGER?

**The Basics**

At some point, you may have used a ladder incorrectly, even if it was only something you did as a child. Over the years, safety administrations, employers and ladder manufacturers alike have made it a priority to improve education regarding ladder safety to help keep others safe. Why? Because using a ladder incorrectly can come with a steep cost: injury or even death. If you aren't using your ladder the right way, you put yourself and others at risk.

**Ladders are so common that it's easy to forget the risks involved in using them.**

**OSHA** estimates that, for general industry companies, falls from ladders – step, straight, combination, and extension – account for 20% of fatal and lost workday injuries.

Most of these incidents would have been prevented by compliance with OSHA standards. Falling from heights, one of the most-cited **OSHA** violations, includes ladder safety violations.

Working with ladders involves a risk assessment before the use and implementation of ladders on the jobsite by workers. Injuries and even fatalities can occur where appropriate measures, decisions are not applied:

Examples of dangerous situations are as follows:

- If you feel tired or dizzy, or are prone to losing your balance, stay off the ladder.
- Do not use ladders in high winds or storms.
- Wear clean slip-resistant shoes.  Shoes with leather soles are not

appropriate for ladder use since they are not considered sufficiently slip resistant.
- Before using a ladder, inspect it to confirm it is in good working condition.
    - Ladders with loose or missing parts must be rejected. Rickety ladders that sway or lean to the side must be rejected.
- The ladder you select must be the right size for the job.
    - The Duty Rating of the ladder must be greater than the total weight of the climber, tools, supplies, and other objects placed upon the ladder. The length of the ladder must be sufficient so that the climber does not have to stand on the top rung or step.
- When the ladder is set-up for use, it must be placed on firm level ground and without any type of slippery condition present at either the base or top support points.
- Only one person at a time is permitted on a ladder unless the ladder is specifically designed for more than one climber (such as a Trestle Ladder).
- Ladders must not be placed in front of closed doors that can open toward the ladder. The door must be blocked open, locked, or guarded.
- Read the safety information labels on the ladder.

# HOW TO PROTECT YOURSELF

### The Three Point-of-Contact Climb

Factors contributing to falls from ladders include haste, sudden movement, lack of attention, the condition of the ladder (worn or damaged), the user's age or physical condition, or both, and the user's footwear.

Although the user's weight or size typically does not increase the likelihood of a fall, improper climbing posture creates user clumsiness and may cause falls. Reduce your chances of falling during the climb by:

- wearing slip-resistant shoes with heavy soles to prevent foot fatigue;
- cleaning the soles of shoes to maximize traction;
- using towlines, a tool belt or an assistant to convey materials so that the climbers hands are free when climbing;
- climbing slowly and deliberately while avoiding sudden movements;
- never attempting to move a ladder while standing on it;
- keeping the center of your belt buckle (stomach) between the ladder side rails when climbing and while working.  Do not overreach or lean while working so that you don't fall off the ladder sideways or pull the ladder over sideways while standing on it.

When climbing a ladder, it is safest to utilize **Three Points-of-Contact** because it minimizes the chances of slipping and falling from the ladder.  At all times during ascent, descent, and working, the climber must face the ladder and have two hands and one foot, or two feet and one hand in contact with the ladder steps, rungs and/or side rails.  In this way, the climber is not likely to become unstable in the event one limb slips during the climb.  It is important to note that the climber must not carry any objects in either hand that can interfere with a firm grip on the ladder. Otherwise, **Three Points-of-Contact** with the ladder cannot be adequately maintained and the chance of falling is increased in the event a hand or foot slip occurs.

# OSHA Regulations for Ladders

The OSHA general industry requirements for using ladders stipulate the structural requirements and usage restrictions for various types of ladders. They also include guidelines on ladder setup and usage and restrict unsafe behaviors like attaching ladders together to reach a greater height.

**Employer/Employee Responsibility**

If you're an employer, it's your responsibility to train your employees to use ladders safely. If an employee feels unsafe, they have the right to refuse work.

**The OSHA general industry ladder requirements:**

- Use one! A step stool or ladder is required when attempting to reach or perform tasks overhead. Don't step on chairs, boxes, bins, or other objects.
- Choose the right style, height, material, and performance (duty) rating required for the job.
- Inspect ladders before initial use and before each work shift: replace defective ladders.
- Set up and use your ladder according to the manufacturer's label.
- Climb and balance safely.
- Avoid hazards and misuse like ascending a closed ladder.
- Communicate ladder-related hazards like damaged or defective equipment.
- Train all employees on the above requirements.

## CHOOSE THE RIGHT LADDER

Using ladders safely begins with choosing the right one for the job. OSHA regulations list a few types, including stepstools, stepladders, rolling ladders, extension ladders, and self-supporting ladders. However, the standards are meant to apply to any portable ladder used by your employees, even when not expressly listed.

- 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.
- 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.

**DOWN TO THE BASICS**

The basics of ladder safety includes:

- Select right ladder for the job.
- Maintain three points of contact.
- Do not overreach.
- 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.

## FINAL WORD

Choosing or selecting the right ladder for a specific job is as important as how an employee ascends or descends on the ladder in pursuit of the job objective.