Climb Your Way to Safe Ladder Use



What's at Stake?

Of all occupational injuries, falls are the second leading cause of death next to highway crashes. Falls remain a leading cause of unintentional injury mortality and over 40% of fatal falls in the last decade have involved a ladder. At work, approximately 20% of fall injuries involve ladders and among construction workers, an estimated 81% of fall injuries treated in emergency departments involve a ladder.

What's the Danger?

Ladders are such a common sight at work and at home that it's easy to get too comfortable with their use. This comfort often leads to a slack in safe use and set up and too often ends up in someone being seriously hurt. Overloaded ladders can break and collapse. Improper set up can cause a ladder to slip or tip, or even lead to shock if the ladder is too close to power lines.

How to Protect Yourself

Capacity and Balance

Losing one's balance accounts for 18% of ladder falls that would be less likely to occur if the ladder itself is stable.

- Know the capacity limits of the ladder you're on and don't exceed that limit. Remember to include your weight and the weight of any tools or equipment on you.
- Maintaining three points of contact while you are climbing up or down the ladder and while on the ladder can help prevent loss of balance.

The Right Angle

40% of ladder falls resulted from the ladder itself moving. The large majority of these cases involve the bottom of the ladder moving.

- Non-self-supporting ladders, which must lean against a wall or other support, must be positioned at such an angle that the horizontal distance from the top support to the foot of the ladder is about 1⁄4 the working length of the ladder. In the case of job-made wooden ladders (when and if allowed), that angle should equal about 1⁄8 the working length.
- Secure the top and bottom of the ladder if possible, or have someone hold the ladder steady while you climb or are on the ladder, to prevent it from slipping.

Rungs

24% were attributed to slips on the rungs of the ladder.

- Inspect the steps to make sure they are free of any slippery material and wear appropriate footwear along with choosing ladders with anti-slip surfaces on the rungs.
- Ladders are to be kept free of oil, grease, wet paint, and other slipping hazards.
- Ladder rungs, cleats, or steps must be parallel, level, and uniformly spaced.

Other Precautions

- Inspect all ladders before you use them.
- Never use a ladder for any purpose other than the one for which it was designed.
- The area around the top and bottom of ladder must be kept clear.
- Take precautions, such as blocking off the area around the bottom of the ladder, to keep pedestrian and vehicle traffic a safe distance away.
- Metal ladders must never be used around or while working with electricity.
- Get off the ladder before you move it – don’t try to “bunny hop”, even if it’s just a few inches.
- Carry tools in a tool belt or use a hoist – don’t carry them in your hands.
- Face the ladder when climbing and descending and never overreach while on a ladder. To prevent this, keep your body within the side-rails.
- The spreader or locking device on foldout or stepladders must be in an open and locked position when in use.

Final Word

Resist the urge to become a safety slacker when it comes to ladder use; and follow procedures for safe set-up and use.