How to Choose a Ladder Meeting Kit

What's At Stake

Most fatal falls in the workplace are from ladders. Choosing the correct ladder for your work tasks is an important part of your ladder safety program that should include training, proper maintenance and storage, inspections, and safe work procedures.

What's the Danger

COMMON CAUSES OF LADDER FALLS

Unsafe actions when using ladders– People often do not follow the safe work practices when using ladders. Standing on the top step of a ladder is a common and deadly practice. Other actions like climbing up a ladder carrying objects, leaning to reach for something, and attempting to move the ladder while still on it are some common practices that lead to injuries.

No inspection prior to use– Problems such as cracked or broken rungs, loose bolts, non-approved fixes, etc. lead to injuries.

Not using the correct ladder– People will often use the same ladder for many different jobs and situations. Choosing a ladder that is too short for the job is often a problem that leads to an injury. Also choosing a ladder not stable enough for the ground conditions or one that is not rated properly for the job are issues that can lead to injury.

HOW TO PROTECT YOURSELF

SELECTION FACTORS.

First, assess the height of your work task. Steps tools and short ladders elevate you slightly. Stepladders and extension ladders can get you to further heights. What type of work will you be doing? Is the ladder used to enter and exit a work area, or will you be working from it?

Determine The Rated Capacity. Office and household ladders are not suitable for construction and heavy-duty work. Choose a ladder that can hold the weight of the worker and the load of materials or tools that they will carry up and down. Exceeding the weight capacity of a ladder can cause it to buckle, twist, and collapse.

Assess Ladder Material. Fiberglass ladders are sturdy, non-corrosive, and non-conductive if clean and dry, so use them for working around electricity. Aluminum

ladders are lightweight and durable but should not be used around electricity.

Accessories Needed. Stabilizing bars can hold extension ladders in place when you access rooftops. Trays hold tools and materials. Specialty footings or levelers provide stability on unusual or uneven surfaces.

LADDER TYPES

The first step in selecting the correct ladder is to choose the right ladder style.

Simple – Action Ladder. Used for thousands of years, the single-section ladder is useful for simple, level-ground applications where the top of the ladder is leaned directly against an object. The advantage of this ladder is that it is the lightest ladder available for a given length.

Stepladder. The stepladder is a single-section, fixed-length ladder with built-in stabilizing legs allowing applications for freestanding use. The legs fold compactly for storage. Stepladders are available in aluminum, fiberglass, and wood.

Extension Ladder. An extension ladder is a design that allows a series of single-section ladders to be deployed in a cascading manner, allowing higher ladder reach in a ladder that requires less storage space. Typically, an extension ladder has two single sections.

Telescopic Ladder. The telescopic ladder is the newest innovation in ladders and is similar to an extension ladder, except that the rungs collapse for an even smaller storage footprint. Telescopic ladders are available in aluminum.

Multi-Function Ladder. The multi-function ladder uses lockable hinge joints and extension ladder design to function in a number of ways, including a step ladder with even or uneven side lengths, a single- section ladder, or as a support for scaffolding functioning like a sawhorse.

MAIN TYPES OF LADDER ACCIDENTS

Ladder accidents are extremely common even though they are entirely preventable. Ladder accidents can come from a wide variety of issues, but the following four causes account for the vast majority.

1. Selecting the Wrong Type of Ladder. Like most other jobs, choosing the right tool can make all the difference when it comes to safety, and this is the same for ladders. One thing to consider when selecting an appropriate ladder is the ladder’s weight capacity. Each ladder is designed to support a maximum weight limit and if the climber exceeds that limit the ladder could break and cause the user to fall or become injured.
2. Using Worn or Damaged Ladders. Another common contributing factor to ladder accidents is the use of old, worn, or damaged ladders. Like everything else, ladders have a shelf life; after a couple of years the stress of being climbed up and down on causes ladders to break down.
3. Incorrect Use of Ladders. Human error is by far the leading cause of ladder accidents. Never use a ladder in any other way than what the manufacturer intended it to be used for. Also, do not lengthen or alter a ladder in any way.
4. Incorrect Placement of Ladders. Make sure that when positioning a ladder, the ground you place it on is level and firm. Ladders should never be placed in front of a door that is not locked, blocked, or guarded.

LADDER SAFE WORK PRACTICES FOR WORKERS

- Ensure you understand the hazards associated with the ladder you are using.
- Never stand on the top step if it is not designed to be a step.
- Do not lean or reach to grab something while on a ladder. Climb down and re-position the ladder closer to the object or area you were trying to reach.

- Do not carry objects up the ladder in your hands. Use a tool belt or a retrieval system to bring tools up to you once you have climbed the ladder. Always have your hands free when climbing so you are able to have three points of contact with the ladder.
- Always inspect a ladder before use. If there is any problems with it, immediately tag it out of use and find a properly functioning ladder.
- Use the correct ladder for the job. There are many types of ladders to work in different situations. Check weight ratings to ensure you do not overload the ladder during use.
- Always secure the ladder. Make sure the ladder is stable on the ground before climbing up. Tie off the ladder to the structure you are next to. Have someone hold the ladder to secure it.

FINAL WORD

Ladders are an essential tool on many job sites. Because of their widespread use and the inherent danger of working at heights, they are responsible for a significant number of injuries both on and off the job. Understanding the hazards of using a ladder, following the necessary safe work practices, and avoiding complacency can be a life saver.