

Ladder Safety

Choosing the Right Ladder

The first step in doing any job correctly and safely is pre-planning.

In the context of ladder safety, that involves selecting the ladder that's appropriate for the job.

Ladders must be of the right:

- Length (it's important for workers to understand that the ladder length and the maximum working length or highest standing level are not the same);
- Strength (for example, some lightweight ladders are only designed to hold a maximum of 200 pounds);
- Type (it's important for workers to understand the differences between, say, step and extension ladders); and
- Materials (for example, metal ladders should never be used near electrical power sources).

The Importance of Inspecting Ladders

Remind employees to inspect ladders before using them, regardless of which ladder they choose for the job. Tell them to check:

- **The shoes - all of them!** First, employees should check their own shoes. Warn them not to wear leather soles because they're often slippery and unsafe and to ensure that their shoes are free of mud, grease, oil and snow. Tell them that if they're working with electrical equipment, they need to make sure there are no nails or screws lodged in the soles of their shoes. Once they're done checking their own shoes, workers need to check their ladders' shoes. Ladders should have non-skid safety feet and be in satisfactory condition. Warn employees not to use a ladder whose safety feet are loose or worn.
- **Inspect the whole ladder**, including the side rails for flaws and cracks, and the rungs for looseness. A twisted or distorted aluminum ladder (especially a long one) is extremely hazardous and should never be used.
- **Check for sharp edges** on side rails or rungs. These can usually be filed down. But if extensive repairs *are* required, they should always be done by a qualified service person.
- **Check pulleys and extension locks on extension ladders** to ensure that they're functional and in proper working order. Ropes should be replaced if they show signs of aging or wear.
- **Watch for dents, rust or corrosion.** Some chemical compounds such as potassium hydroxide, hydrochloric acid, sulfuric acid and ammonia are known to corrode and weaken aluminum over time.
- **Look for loose rivets and fastenings** and other signs that the ladder needs replacing.

10 Tips for Safe Ladder Use

Once employees choose and inspect their ladder, they must be sure to use it safely.

Here are 10 tips you can give them to ensure they do:

1. **Don't overreach.** One of the most common unsafe practices committed by ladder users is overreaching. This is especially likely to occur when the worker is painting or working on a project that progressively gets farther away from the ladder. A good rule to remember is to keep your belt buckle between the rails and move the ladder as the work requires.
2. **Place the ladder correctly.** Correct placement is a very important factor in ladder safety. When setting up a portable ladder, workers should place it on a solid, level base. A straight ladder should be placed so that the distance from the base of the ladder to the wall is equal to one fourth of the distance from the base to the point of support. (That is one foot out for each four feet of height.) The ladder should be long enough to allow three feet above the point of support.
3. **Secure the ladder.** Tell workers to anchor the top and either tie the bottom down or have someone hold it. Warn them not to attempt to move a ladder while they're still on it!
4. **Don't climb to the top.** Employees should understand that on a straight ladder, the top three rungs are for holding onto, not for standing on. When working on a step ladder, the spreaders should always be securely locked into place. Workers should never climb past the third rung from the top.
5. **Keep contact.** Explain that safe climbing demands both hands and both feet! When ascending or descending a ladder, workers should always be facing the ladder and take only one step at a time.
6. **Don't carry objects in your hands.** Employees should also wear a safety belt. Tell them to carry their tools on a belt or a pouch and not in their hands. Another solution to this problem is a tool basket. The climber needs only to carry up a hand line which can be then be used to pull tools up or down. This must be done carefully so tools are not dropped onto a person below.
7. **One at a time.** One person should be on a ladder at a time. Let employees know that if they must speak to someone, they should climb down the ladder and have their discussion on the ground.
8. **Don't paint ladders.** Remind employees that paint can conceal defects or cracks. Instead, use shellac or varnish as a preservative.
9. **Get rid of defective ladders immediately.** Inform your employees that defective ladders should be removed from service immediately and tagged to prevent even temporary use.
10. **Protect yourself.** Employees can't always control the actions of others, but there are certain things they can do to protect themselves while they are on a ladder. Explain that if they must work on a ladder near a doorway, they need to make sure to lock the door, barricade it or hang warning tape across it with a sign telling others they are behind the door. Rope off the area, allowing plenty of room to work in. Consider using a watchperson to guard the area and, if necessary, hold the ladder while the employee is on it.

Conclusion

Don't let the unsafe use of ladders be your employee's downfall! Learn how to use the right ladder for the job and how to inspect it for defects and teach others. Also make sure your employees knows the proper steps to report and replace defective ladders.

And please remember these safety tips when you are stepping on a ladder at home, too.