

Toolbox Talk Training: Avoiding Electrical Hazards When Using Portable Ladders

You would never intentionally touch a metal object to an energized power line, and the same principle applies when using portable ladders near electricity. Metal ladders and other conductive materials can provide a direct path to ground, creating a serious risk of electrocution if they contact energized power lines or electrical equipment. Today's toolbox talk reviews important safety practices for preventing electrical accidents while working with portable ladders.

- **Use non-conductive ladders near electricity.** Whenever work is being performed near overhead power lines or energized electrical equipment, use a ladder with non-conductive side rails. This helps reduce the risk of electrical shock if accidental contact occurs.
- **Choose the right ladder material.** Fiberglass and fiber-reinforced plastic ladders are generally the safest choices for electrical work because they do not normally conduct electricity.
- **Be cautious with wooden ladders.** Dry, well-maintained wooden ladders are considered non-conductive under normal conditions. However, wood can conduct electricity if it becomes wet, waterlogged, or contaminated with moisture and dirt.
- **Maintain safe clearance from power lines.** When setting up a ladder, position it far enough away from overhead electrical lines so that neither the ladder nor the worker could contact the line if the ladder shifts or falls.
- **Consider the materials you are handling.** Long conductive materials such as metal trim, gutters, conduit, or cable can accidentally contact energized lines even if the ladder itself is safely positioned. Reposition the ladder as needed to maintain a safe working distance.
- **Remember that electricity can arc.** Direct contact with a power line is not always necessary for electrocution to occur. Electrical current can arc, or jump, through the air over several feet depending on the voltage involved. Always maintain the required minimum clearance distance from energized lines. In many cases, this distance may be at least 10 feet or more.
- **Follow additional safety controls when necessary.** Some work situations may require lockout/tagout procedures, de-energizing equipment, or coordination with the utility company to install protective coverings or insulation on overhead lines before work begins.

Electrical hazards can be deadly, so always plan ahead and use the proper equipment when working near energized systems.

Does anyone have additional tips or experiences related to ladder safety around electrical hazards? Thank you for participating in today's toolbox talk. Please remember to sign the training certification form before leaving so you receive credit for attending today's training session.

