

Safe Use of Extension Ladders

Ladder Safety

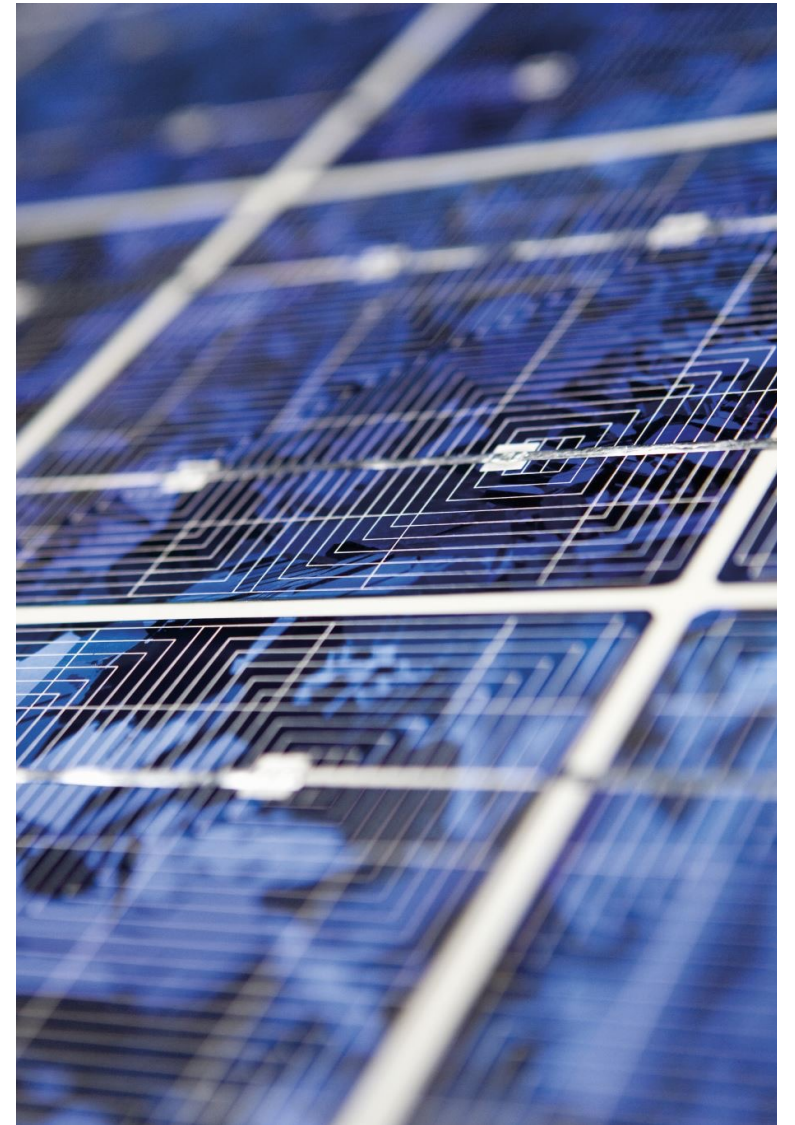


Risks

Workers who use extensions ladders risk permanent injury or death from falls and electrocutions

Majority of serious injuries from Ladder falls are from 10 ft or less

With proper training, ladder falls can be greatly reduced



Equipment

While there are many types of ladder, we are examining the risk mitigation from ladder falls using an extension ladder

There are two sections of an Extension Ladder that operate in brackets or guides allowing for the ladder to be adjustable

Extension Ladders are not self-supporting

- They require a stable structure that can withstand the intended load



Pre-Planning

Understand what will be going onto the ladder

- Your Weight
- Materials
- Tools

Inspect the ladder prior to use for:

- Missing Rungs
- Bolts
- Cleats
- Screws
- Loose Components



Defective Ladder

If the ladder is defective make sure the ladder is tagged as such

Defective Ladders may be fixed

- If fixed it must meet its original design criteria and strength



Setting Up the Ladder

- One of the main things to consider when setting up an extension ladder is the ladders angle
- When the ladder is set up next to a wall or a vertical structure, the bottom of the ladder should be $\frac{1}{4}$ of the ladders working length away from the wall
 - If the ladder is at 12 ft, it should be 3 ft away from the wall
- A quick way to tell is to put your feet at the base of the ladder legs and extend your arms out. If you can grab the rung without bending over it is set at the appropriate distance

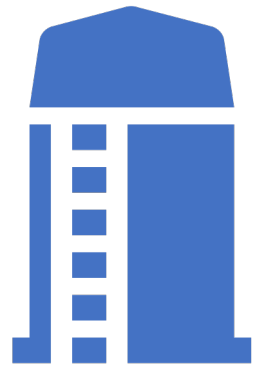
Placing the Ladder

- Set the base of the ladder so that:
 - The feet sit securely
 - Both side rails are evenly supported
 - Ladders rails should be squared to the structure in which it is leaning
 - Foot pads placed on a stable and level surface

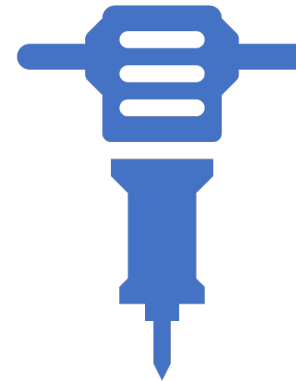
Climbing the Ladder

- Keep your mounting and dismounting area:
 - Clear of any objects
 - Allow enough space to get down or climb over
 - Identify if there is any objects that may impede you from getting off the ladder

Accessing an Elevated Surface



When using an extension ladder keep in mind the area in which you are trying to reach.

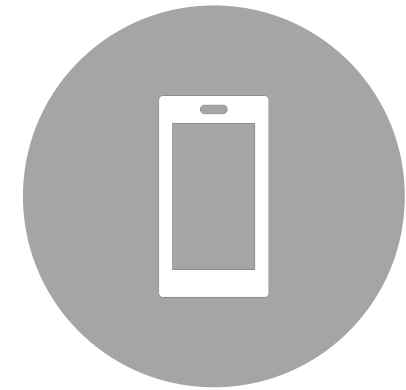


If you are reaching an elevated surface (i.e. AAP Roof) the ladder needs to be 3 feet extended above that surface.

Dismounting on an Elevated Surface



IF ACCESS IS OBSTRUCTED TO AN ELEVATED AREA, SECURE THE TOP OF THE LADDER TO A RIGID SUPPORT THAT WILL NOT DEFLECT



ADD A GRASPING DEVICE TO ALLOW SAFE ACCESS

Hazards



Always preview the area and scope out potential hazards that may impact your safety



Potential hazards exist in a high-activity or high traffic area:

If there is potential for someone to knock over the ladder, use objects to defer traffic away from the area



If the ladder is placed in front of a door:

Make sure the door is locked or blocked off
Label the door from the other side to prevent the door from being used

Safety Tips for Using the Ladder Safely

- Always face the ladder when climbing up and down the ladder
- Always maintain 3 points of contact
- Never carry tools in your hands as you will lose your 3 points of contact
- Never place ladders on tables, scaffolds or unstable bases
- Never tie two ladders together to make them longer
- Never lean out beyond the ladders side rails

Applications



[Falls in the Workplace: Ladder Safety Mobile App](#)
[| NIOSH | CDC](#)



This application is designed to help determine the proper angle in which to set up your ladder.