

LADDERS – EXTENSION

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Things to Do Before Training

- Have an extension ladder ready to show to the work crew.
- Be prepared to talk about jobs on the project for which extension ladders will be used.
- In the index of the **Cal/OSHA Pocket Guide for the Construction Industry**, look up **Ladder** and read the pages listed.

Introduction

Falls are the leading cause of construction workplace deaths. One-third of fatal falls to a lower level are from ladders or scaffolds. Ladder accidents occur because workers slip or the ladder slips. Simple precautions can prevent falls from occurring.



QUESTIONS TO ASK

- Have you or someone you know had an injury related to an extension ladder? What could have been done to prevent it?
- What are some examples of potential extension ladder hazards on this job?
- What are the steps for setting up and using an extension ladder properly?
- What should we avoid doing when using an extension ladder?
- How should we get tools or materials up to the location where they are needed without carrying them up the ladder?
- Are there jobs on this site where it would be safer to use scaffolding, a scissor lift, or boom lift?

SAFETY  BREAK

ACTIONS TO TAKE

- Inspect the extension ladder together to make sure it is in good shape. If it is broken or defective, don't use it. Defective ladders should be disposed of properly.
- Discuss where and how the extension ladder will be used safely on the job.

Key Points to Keep in Mind

Examples of Hazards:

- Broken or defective ladders
- Ladders on slippery or uneven surfaces
- Ladder rungs that have mud, grease, or other slippery material on them
- Carrying tools or materials up or down a ladder
- Using metal ladders near live electrical parts or within 6 ft of high voltage electrical lines

Extension Ladder Do's:

- When using a ladder to climb onto a roof or platform, extend the ladder at least 3 ft past the edge it is resting against.
- Set up the ladder at a **safe angle**. Put your toes against the bottom of the rails and stretch your arms out at shoulder height. You should be able to grasp the rung with your hands (see front).
- Use an extension ladder **no longer than 44 ft**.
- On two-section extension ladders, the sections must overlap at least 3 ft. Overlap must be at least 4 ft for ladders over 33 ft.
- Locate or create a level and firm surface for the base of the ladder.
- Secure the top** and, when feasible, the bottom of the extension ladder.
- Keep areas at top and bottom clear of debris, material, and other obstructions.
- Set up a traffic barrier at the base of the ladder.
- When climbing up or down, always face the extension ladder and maintain **three-point contact** with two hands and a foot or two feet and a hand.
- Whenever possible, **use extension ladders for access** – not as work platforms. It is often safer to work from scaffolding, a scissor lift, or boom lift.
- It is a good idea to **wear a safety harness** and tie off to a well-anchored lifeline or other support (not to the ladder) when working higher than 10 ft.
- Be careful when erecting extension ladders near live overhead powerlines.

Extension Ladder Don'ts:

- Don't carry tools, equipment, or material in your hands while climbing. Instead **wear a tool belt** or use a hoist line or gin wheel for lifting and lowering.
- Never stand higher than the fourth rung** from the top.
- Never use metal or metal-reinforced ladders near electrical wires or equipment.
- Never reach far to do your work**. If you are leaning to the right, left, or backwards, you should move the ladder into a better position.