

Portable Ladders

GENERAL DISCUSSION

Did you know that even a six-foot fall from a ladder could kill you? More often, you might break an arm or leg. When you fall off a ladder on a construction site, you can land on almost anything, so internal injuries are common.

Falls from ladders happen because you slip or because the ladder slips. If you're in a hurry, there's more chance of falling. Take the time to use the right ladder the right way.

You or a crewmember may want to add a personal story about portable ladders.

Explain: The main topic today will be portable ladders. They may be either metal or wood. On many construction sites there are also fixed ladders. The safety rules for fixed ladders are a little different, and we won't cover them today.

Next, discuss with the crew what types of portable ladders will be used at this particular job site, and where:

Ask the Crew these Questions

After each question, give the crew time to suggest possible answers. Use the information following each question to add points that no one mentions.

1. More than half of all ladder accidents happen because the ladder slips. What are some ways to keep a ladder from slipping?

- Place the ladder on a firm, level surface that isn't slippery.
- Use a ladder with safety feet, especially if you're setting it on a smooth floor.
- Always secure a portable ladder. Nail it to a permanent structure, tie it off, or block it.
- Make sure the ladder's supports (feet and upper risers) are free of grease and mud.

- If the ladder is leaning against a smooth surface, have wall grips on the risers to prevent sideslipping.
- Make sure the ladder is leaning against something secure (not a gutter, window sash, window pane, or anything that can move).
- Don't set a ladder on top of boxes or other movable objects.
- Never use a ladder in high winds.
- Barricade a ladder if it's in an area where it could get bumped. For example, don't use a ladder in front of a door that might open, unless there is a barricade or guard.
- Make sure your ladder is at the correct angle not too steep and not too horizontal.

2. What's the correct angle for a ladder?

- Set it one foot out for every four feet of ladder length.

3. Nearly a third of all ladder accidents happen because a person slips. What are some things you can do to keep yourself from slipping?

- Use a ladder with non-skid treads (or a nonskid coating) on the rungs.
- Make sure the rungs are free of mud, grease, and other slippery material.
- Make sure your shoes are free of mud and grease.
- Don't stand or work on the top three rungs of a straight ladder unless you're using a safety belt. At the top, there's nothing to grip.
- Don't step on any rung above a ladder's upper support. It may cause the bottom of the ladder to kick out.
- Don't stand or work at the top of a stepladder.
- If you use a stepladder, make sure it's fully open and locked.
- When you're on a ladder, don't lean too far out -- never beyond arms length.
- When going up or down a ladder, always:
 - Face the ladder.
 - Use both hands.
- Don't try to adjust an extension ladder when you're standing on a surface above it.

4. How should you carry tools or materials up or down a ladder?

- Use a tool belt to keep your hands free.
- Pull equipment and materials up with a line.

5. To make sure your ladder is in good repair, you should inspect it before and after each job. When you inspect a ladder, what should you look for?

Make sure that:

- All rungs are connected securely to the side rails.
- No rungs or side rails are missing, loose, broken, cracked, or corroded.
- No nails, screws, or rivets are sheared off or missing.
- There are no splinters.

6. What if a ladder is defective?

- If you ever notice an unsafe ladder, report it right away.
- The employer should remove defective ladders from service and tag them.
- Some employers destroy defective ladders to make sure no one uses them.

7. People say to use the right ladder for the job. What are some things to keep in mind when you're choosing a ladder?

- Use a ladder that is safety-approved. Look for a label showing that it meets American National Standards Institute (ANSI) safety requirements.
- Use a ladder of the right length. The side rails should extend at least three feet, but not more than four feet, above the ladder's upper support.
- Use a ladder that's strong enough for you and the job.
- Never splice two ladders together.
- Don't let more than one person at a time on a ladder unless you're using a ladder that's specially designed for that purpose.
- Don't use a metal ladder near live electrical parts or within six feet of high voltage electrical lines. (Increase the distance for very high voltage). Remember that electricity can arc. Portable metal ladders should have a warning label on them to remind you.
- Don't use a ladder for anything but its intended purpose. For example, don't use it as a brace or skid. Don't use it horizontally as a walkway or scaffold.

OSHA Regulations

Explain: OSHA requires most of the safety measures we've talked about. We have to take these precautions it's the law. I have a Checklist of the OSHA regulations on portable ladders. If you'd like to know more, see me after the meeting.

Company Rules

(Only if applicable.) Besides the OSHA regulations, we have some additional company rules about portable ladders. Discuss company rules:

Comments from the Crew

Ask the following: Do you have any other concerns about portable ladders? Do you see any problems on our job? (Let the steward answer first, if there is one.)

What about other jobs you've worked on? Have you had any experience with portable ladders that might help us work safer on this job?

GENERAL SAFETY REVIEW

This is a time to review all safety concerns, not just today's topic. Keep your notes on this page before, during and after the safety meeting.

Are you aware of any safety hazards from any other crews? Point out any hazards other crews are creating that this crew should know about. Tell the crew what you intend to do about those hazards.

Do we have any other safety business? Discuss any past issues or problems. Report any progress of investigations and action taken.

Have there been any accidents, near misses or complaints? Discuss any accidents, near misses, and complaints that have happened since the last safety meeting. Also recognize the safety contributions made by members of the crew.

Please remember, we want to hear from you about any health and safety issues that come up. If we don't know about problems, we can't take action to fix them.

ENDING THE MEETING

Circulate Sign-Off Form.

Assign one or more crew member(s) to help with next safety meeting.

Refer action items for follow-up.

Do you have any Safety Recommendations?

Do you have any Job Specific Topics you would like us to discuss?

Comments

SAFETY TALKS REVIEW

Inspections

The company has a written Safety and Health Program that meets all OSHA requirements. It includes identification of ladder hazards on the site, regular inspections, accident investigation, and correction of hazardous conditions.

- 0. All defective ladders are tagged and immediately removed.
- 0. Ladders have no broken or defective rungs or side rails, and rungs are firmly attached to side rails.
- 0. Ladders have no nails, screws, or splinters sticking out.
- 0. Rungs have no oil or grease on them.
- 0. Non-slip safety feet or bases on ladders are in good condition.
- 0. Non-slip safety material on ladder rungs is in good condition.
- 0. Interiors of open-end hollow rungs of metal ladders are free from corrosion.

Use of Ladders

- 0. Unless there are stairways or ramps, ladders are provided at all points in frequently traveled passageways, entries, or exits where there is a break in elevation of 18 inches or more.
- 0. Ladders are used for access to working surfaces above or below ground level only on a short-duration job before installing a permanent means of access.
- 0. Ladders are used for access to roof and attic work areas in wood frame buildings.
- 0. Ladders are used for access to points above the highest floor that has been planked or decked in steel frame buildings. (Stairways should extend to the highest planked floor.)
- 0. Ladders are used for access to scaffolds.
- 0. Ladders are used for access to levels in a vertical shoring system above the lowest floor in concrete buildings. (There must be at least two ladders in different locations for each floor, and ladders may not be used for more than three floors.)

Ladder Specification

- 0. Rungs are uniformly spaced no more than 12 inches apart vertically.
- 0. Stepladders do not exceed 20 feet.
- 0. Extension ladders do not exceed 44 feet when extended.
- 0. Extension ladders are not used fully extended. There is an overlap between sections, not less than 10% of the working length of the ladder.
- 0. Portable metal ladders are marked with a sign cautioning against use near electrical equipment.
- 0. Portable ladders purchased after July 1, 1992 are labeled as being in accordance with American National Standards Institute (ANSI) standards A 14.1 1982, Portable Wood Ladders, or A 14.2 1982, Portable Metal Ladders.

Correct Ladder Use

- 0. No portable metal ladder is being used for electrical work, near live electrical parts, or within six feet of high voltage electrical lines. (Increase the distance for very high voltage.)
- 0. Double cleat ladders are used if there is 2-way traffic or traffic by 25 or more workers. (Double cleat ladders should not exceed 30 feet in length.)
- 0. Single-rail ladders are prohibited on the site.
- 0. Short ladders are not spliced together to make a longer one.

Placement

- 0. Areas where ladders are placed are clear at the top and bottom, and are not greasy or muddy.
- 0. Ladders are placed on firm dry ground, so they won't slip or sink, and are not placed on boxes or other unstable bases.
- 0. Ladders are not placed where they can be bumped (for example, a doorway, passageway, or driveway). Ladders, which may be struck or displaced, are barricaded or guarded.
- 0. Portable ladders are tied, blocked, or otherwise secured.
- 0. Portable ladders are placed 1 foot out from the wall for every 4 feet of ladder length (75° pitch).

Work Practices

- 0. No one stands or works on the top three rungs of a ladder that has no handholds, unless the structure provides a firm handhold or the worker is tied off.
- 0. Workers face a ladder while climbing and descending.
- 0. Stepladders are always opened fully.
- 0. Workers do not stand or work on the top (cap) of a stepladder, or the step below the cap.
- 0. Planks are not placed on the top (cap) of a stepladder.
- 0. Workers use a ladder one at a time unless the ladder is specially designed for more people.
- 0. Ladders are not used as guides, braces, skids, gin poles, or for other than their intended purpose.
- 0. Workers adjust extension ladders only when standing at the base, not while on or above the ladder.
- 0. Ladders are placed so that side rails extend at least 3 feet above the landing or level they serve.
- 1. Workers do not carry tools, equipment, or materials (except on a tool belt) while on a ladder.