



WORKING AT HEIGHTS: LADDER AND SCAFFOLDING SAFETY

Introduction: Working at heights is one of the most hazardous tasks on a construction site. Falls from ladders and scaffolding are a leading cause of injuries and fatalities in the industry. Whether you're using a ladder or scaffolding, ensuring proper setup, use, and maintenance is essential for preventing accidents. Following the right safety procedures can save lives and protect you from serious injuries.

Key Hazards When Working at Heights:

- Falls from ladders due to improper setup or overreaching
- Scaffold collapse due to poor assembly or overloading
- Slips, trips, and falls while ascending or descending ladders and scaffolding
- Lack of proper fall protection equipment
- Working in windy or adverse weather conditions
- electrocution when ladders or scaffolds come in contact with power lines

Ladder Safety:

- **Inspect Ladders Before Use:** Check for defects such as cracked or broken rungs, split rails, or worn-out safety feet. Ensure the ladder is rated for the weight it will support, including both the worker and any tools or materials.
- **Proper Ladder Setup:** Always place the ladder on a stable, level surface. Avoid using ladders on uneven or slippery ground. Set the ladder at the correct angle – the base should be one foot out for every four feet in height (4:1 ratio). Secure the ladder at the top or bottom to prevent it from slipping. Never place the ladder in front of doors that could open and knock it over.
- **Safe Use of Ladders:** Maintain three points of contact (both hands and one foot, or both feet and one hand) when climbing up or down. Do not overreach. Move the ladder if you cannot reach your work area comfortably. Face the ladder while climbing and keep your body centered between the rails. Do not stand on the top rung or step of the ladder.
- **Ladders Near Power Lines:** Use non-conductive ladders (fiberglass or wood) when working near electrical equipment or power lines. Maintain at least a 10-foot distance from overhead power lines.

Scaffolding Safety:

- **Inspect Scaffolding Before Use:** Ensure the scaffold is erected by a qualified person according to manufacturer guidelines. Check for missing or damaged parts, including braces, guardrails, and platforms. Verify that the scaffold is level, fully planked, and secured properly.
- **Proper Scaffold Setup:** Erect scaffolds on a solid, level base, and ensure they are stabilized using base plates or mudsills. Use guardrails, midrails, and toeboards to prevent falls. Ensure the scaffold is capable of supporting its weight and at least four times the maximum intended load.
- **Safe Use of Scaffolds:** Never exceed the load capacity of the scaffold. Consider the weight of workers, tools, and materials when calculating the load. Do not use scaffolds in adverse weather conditions, such as strong winds or rain, which can make surfaces slippery and unstable. Use ladders or stairways to access scaffolds. Do not climb cross braces or frames. Never move scaffolding while someone is on it.
- **Fall Protection on Scaffolds:** Use fall arrest systems such as harnesses and lanyards when required, especially if working more than six feet off the ground. Ensure that fall protection systems are securely anchored to prevent falls.
- **General Safety Tips for Working at Heights:** Plan Ahead: Before starting work, assess the job site and determine the safest way to complete the task, whether using a ladder, scaffold, or other equipment. Use Fall Protection: Ensure proper use of guardrails, safety nets, or personal fall arrest systems when required. Adverse Conditions: Do not work at heights during high winds, storms, or other adverse conditions that could increase the risk of falling.
- **Emergency Procedures:** Know the location of first aid kits, and emergency rescue plans for fall accidents. In case of a fall, call for emergency assistance immediately, and do not attempt to move the injured person unless they are in immediate danger.

Discussion Topics:

- Are the ladders and scaffolds on this job site properly inspected and maintained?
- Do you know the weight limits for the ladders and scaffolds you are using?
- Are you using fall protection equipment as required?
- How can we improve ladder and scaffolding safety on this job site?

Takeaway: Working at heights requires strict adherence to safety protocols, especially when using ladders and scaffolding. By inspecting equipment, following safe use procedures, and using appropriate fall protection, we can minimize the risk of accidents and ensure everyone on the job site returns home safely at the end of the day. Always be cautious and prioritize safety when working at heights

