Don’t Fall for Ladder & Scaffold Hazards

Hundreds of construction workers are killed every year from ladders and scaffolds, and many thousand more suffer serious injuries that are permanently disabling.

But there is GOOD NEWS too. Almost all ladder and scaffold accidents are preventable. That is because most of these accidents are caused either by risky behavior or faulty setup of ladders and scaffolding. Both of these mistakes can be corrected.

You have the power to prevent ladder and scaffold falls, beginning with FIVE steps:

1. Inspect equipment carefully before use.
2. Follow safety rules and pay attention to instructions.
3. Use your common sense.
4. Avoid risky behavior.
5. Report safety problems right away.

Do not let these accidents happen to you.

A worker, who was standing on the top of a stepladder, fell when the ladder shifted. He suffered a spinal injury and was out of work for four months.

Another worker failed to secure an extension ladder at the top and fell 20 feet when the ladder slipped away from the wall.

Two men were working high up in a building atrium when their scaffold collapsed. They plunged four stories to a concrete deck. One man was dead on arrival at the hospital; the other was in critical condition.

When a three-story wooden scaffold collapsed, two workers fell to the ground, suffering serious neck and back injuries. A third man working under the scaffolding was also injured.

OSHA has strict requirements for Scaffolds including:

- Scaffolds must be made out of metal or stress-grade lumber. Never jury-rig one out of ladders and planks!
- Cross-bracing is required on metal scaffolds.
- Guys, ties, or braces are required to keep supported scaffolds from tipping over.
- Supported scaffolds must bear on base plates and mudsills.
- Scaffold platforms and walkways should be at least 18 inches wide.
- Supported scaffolds must be able to hold at least four times the intended load.
- Ropes for suspended scaffolds must be able to carry six times their intended load.
- Scaffolds must be erected a safe distance from any power lines.
- Safe access to scaffold platforms must be provided (for example, by ladders, stair towers, ramps).
- Fall protection is required whenever you work more than 10 feet above a lower level.
- All scaffolds must have guardrails or personal fall arrest systems to prevent falls.
- Top rails must be between 38 and 45 inches above the platform to be capable of supporting a minimum of 200 pounds.
- Toe boards at least 4 inches high are required on open sides to keep tools and materials from falling off the platform.
- Screens must be used between guardrails and toe boards if people will pass underneath the scaffold.
- Debris nets, catch platforms, canopies, or barricades might also be required if people are working or passing below a scaffold.
- If you work under a scaffold, you must wear a hard hat for additional protection.
Staying Safe on Ladders & Scaffolds

is no accident!

Unsafe use of ladders causes many accidents. These accidents don’t have to happen if you check that:

- Steps and rungs are in good repair, are free of grease and oil and have slip-resistant treads
- Side rails have no cracks or splits
- Metal parts are lubricated
- Rope is not worn or frayed
- Spreaders, or other locking devices, are in place
- Splinters or sharp edges have been removed or filed away
- Safety feet are solidly in place
- Fiberglass ladders are not “blooming” - exposed fibers sometimes deteriorate

Ladders DO’s:

- Secure the ladder firmly at the top and bottom.
- Place it on a level surface.
- Use the 4 to 1 ratio-bottom of ladder should be 1 foot away from wall for every 4 feet between base of the ladder and its support point
- Face the ladder when you climb up or down.
- Have at least 3 feet of extension above

Ladder DON’Ts:

- Don’t place the ladder against a weak surface or window.
- Don’t use metal ladders near live electrical lines.
- Don’t set ladders on boxes or other objects.
- Don’t get on a ladder if another person is on it.
- Don’t work on a ladder if it is very windy.
- Don’t reposition a ladder while you are on it.

Weight Limits

Labels on ladders list the rating of how much weight (you and your equipment) they can safely hold:

I-A = 300 pounds (heavy duty)
I = 250 pounds (heavy duty)
II = 225 pounds (medium duty)
III = 200 pounds (not usually used in workplace)

Work safely off the ground.

If your job requires you to work at heights, OSHA and your employer may require you to follow safety guidelines for your protection. By following them, you can help prevent falls and injuries.

Three fall protection systems:

1. Guardrails (barriers between you and an upper level edge)
   - At least 42” high
   - Able to withstand force of at least 200 lbs.
   - Materials won’t puncture, skin, or snag clothes.

2. Safety nets (catch you if you fall)
   - Must be 30’ or less below elevated workers or working area.
   - Have strong rope border with mesh openings smaller than 6” per side.
   - Strength tested by dropping a 400 lb. 30” diameter bag of sand.
   - Inspected each week for wear, damage, and deterioration.

3. Personal fall arrest System
   - Body harness connected to a fixed anchor by lanyard, lifeline, or deceleration device
   - Can’t be used to hoist materials
   - Must be inspected before use
   - Self-locking, self-closing connectors preferred
   - Anchor must support at least 5,000 lbs. per attached employee
   - Cannot connect to platform supports or suspension points, guardrails, or hoists
   - Avoid connecting to rough edges; tie to “H” or “I” beams only with webbing lanyard or lifeline with a wire core
   - Do not connect with hitch knot