

## CONSTRUCTION

## EMPLOYER GUIDE

## LADDER SAFETY

Ladders are used extensively in virtually all industries, and workers falling from improperly used ladders are a major cause of workplace injuries and fatalities. You don't have to fall far to get hurt; most workers injured in falls from ladders are less than 10 feet above the ladder's base of support.

Most ladder falls involve portable ladders that move, tilt, or shift while a worker is climbing or descending. Unstable or slippery base surfaces are the primary reasons ladders fail. Other reasons include a misstep or a slip of the foot, loss of balance, an overreach, and being struck by a vehicle or other object.

### Types of Ladders

The most commonly used portable ladders are self-supporting (foldout) and non-self-supporting (leaning). Use ladders as the manufacturer intended.

Portable ladders must be able to support at least four times the maximum intended load, except extra-heavy-duty metal or plastic ladders, which must be able to sustain 3.3 times the maximum intended load.



Following the basic rules of ladder safety can prevent injuries or death. Workers can reduce ladder fall risks by doing the following:

- Frequently inspect and maintain ladders
- Select the right ladder
- Set up ladders correctly
- Climb and descend ladders properly

### Placing a Ladder

Select the appropriate ladder for your task or job. Inspect the ladder before you use it. Use the ladder as the manufacturer intended. Don't lean a foldout ladder against a wall and never use ladders horizontally to form working surfaces, platforms or scaffolds. Make sure the ladder is in sound condition – clean and undamaged.

Non-self-supporting ladders, which must lean against a wall or other support, are to be positioned at such an angle that the horizontal distance from the top support to the foot of the ladder is about 1/4 the working length of the ladder. (For each four feet of vertical height, bring the base out one foot. For example, the base of a 12-foot ladder would be three feet away from the wall.)



If you are accessing a roof, the ladder should extend at least three feet above the point of contact and should be secured or tied off to prevent slipping. Do not use metal ladders near power lines.

### Ascending and Descending

- Face the ladder at all times.
- Place both feet firmly on the ladder rungs and steps.
- Grasp the side rails with both hands; you have a better chance of avoiding a fall if a rung or step fails.
- Raise and lower heavy, awkward loads with a hand line or hoist.
- Attach light, compact tools or materials to the ladder or to yourself.
- Don't carry awkward loads when ascending or descending a ladder.
- Don't reach out over the side rails, lean, or turn excessively on a ladder.
- Don't stand or sit on the top two steps of a stepladder.
- Make sure only one person stands on, or works from, a standard ladder. (Use a scaffold or a second ladder if two or more people are doing the same task.)

### Precautions

- Immediately inspect any ladder that has collapsed, tipped over, or been exposed to oil or grease. Clean and repair the ladder if necessary.
- Don't use ladders with broken, patched, oily, or cracked rails, rungs, or steps.
- Remove defective ladders from service. Tag or mark defective ladders with the words: "Dangerous, Do Not Use."
- Make sure an extension ladder extends at least three feet above an access landing.
- Keep the area around the top and bottom of a ladder free of debris.
- Don't place a ladder in front of an unlocked, unguarded door; also, do not place a ladder on boxes, tables, trucks, or other moveable objects.
- Avoid climbing when your hands or shoes are slippery.
- Don't paint ladders. Paint conceals defects.
- Move the ladder near the work you're doing.
- Don't use a self-supporting ladder without first opening it up and securing the metal spreader or locking device.
- Protect the base of a tall, occupied ladder if it could be struck by vehicles or pedestrians.
- Rolling ladders should have wheel brakes that engage when stepped on.

