

PORTABLE LADDERS 29 CFR 1910.25 - 26

The chief hazard when using a ladder is falling. A poorly designed, maintained, or improperly used ladder may collapse under the load placed upon it and cause the employee to fall.

A ladder is an appliance consisting of two side rails joined at regular intervals by crosspieces on which a person may step to ascend or descend.

The various types of portable ladders include:

- Stepladder - A self-supporting portable ladder, non-adjustable in length, having flat steps and hinged back.
- Single Ladder - A non self-supporting portable ladder, nonadjustable in length, consisting of but one section. Its size is designed by overall length of the side rail.
- Extension Ladder - A non self-supporting portable ladder adjustable in length.

OSHA's requirements for portable ladders include:

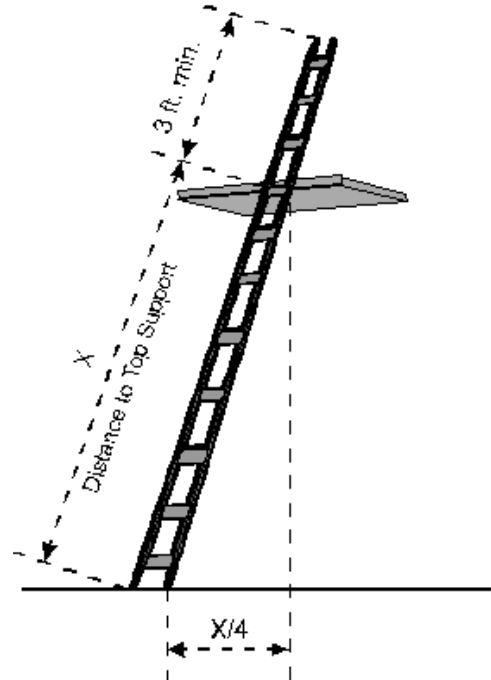
- Portable stepladders longer than 20 feet shall not be used.
- Stepladders shall be equipped with a metal spreader or locking device of sufficient size and strength to securely hold the front and back sections in open position.
- Single ladders longer than 30 feet shall not be used.
- Extension ladders longer than 60 feet shall not be used.
- Ladders shall be maintained in good condition at all times.
- Ladders shall be inspected frequently and those which have developed defects shall be withdrawn from service for repair or destruction and tagged or marked as "Dangerous, Do Not Use."

Proper use of ladders is essential in preventing accidents. Even a good ladder can be a serious safety hazard when used by workers in a dangerous way.

OSHA standards require the following safety precautions for ladder use:

- Ladders shall be placed with a secure footing, or they shall be lashed, or held in position.
- Ladders used to gain access to a roof or other area shall extend at least 3 feet above the point of support.
- The foot of a ladder shall, where possible, be used at such a pitch that the horizontal distance from the top support to the foot of the ladder is one-quarter of the working length of the ladder (the length along the ladder between the foot and the support). See figure below.
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- The worker shall always *face* the ladder when climbing up or down.

- Short ladders shall not be spliced together to make long ladders.
- Ladders shall never be used in the horizontal position as scaffolds or work platforms.
- The top of a regular stepladder shall not be used as a step.
- Use both hands when climbing or descending ladders.
- Metal ladders shall never be used near electrical equipment.



FIXED LADDERS **29 CFR 1910.27**

A fixed ladder is a ladder permanently attached to a structure, building or equipment.

A point to remember is that fixed ladders, with a length of more than 20 feet to a maximum unbroken length of 30 feet shall be equipped with cages or a ladder safety device.

A "cage" is a guard that is fastened to the side rails of the fixed ladder or to the structure to encircle the climbing space of the ladder for the safety of the person who must climb the ladder.

Cages shall extend a minimum of 42 inches above the top of a landing, unless other acceptable protection is provided.

Cages shall extend down the ladder to a point not less than 7 feet nor more than 8 feet above the base of the ladder.

A ladder safety device is any device, other than a cage or well, designed to eliminate or reduce the possibility of accidental falls and may incorporate such features as life belts, friction brakes, and sliding attachments.

Another feature of fixed ladders is the landing platform which provides a means of interrupting a free fall and serves as a resting place during long climbs.

When fixed ladders are used to ascend to heights exceeding 20 feet (except on chimneys), landing platforms shall be provided for each 30 feet of height or fraction thereof, when cages are used, except that, where no cage, well, or ladder safety device is provided, landing platforms shall be provided for each 20 feet of height or fraction thereof.

Ladder safety devices may be used on tower, water tank, and chimney ladders over 20 feet in unbroken length in lieu of cage protection. No landing platform is required in these cases.

As with all ladders, fixed ladders shall be maintained in a safe condition and inspected regularly.