

Loss Control Bulletin

*A Policy of Working Together
for a Safer Tomorrow*

Portable Ladders

According to the U.S. Consumer Product Safety Commission, there are more than 164,000 injuries every year relating to ladders that must be treated in emergency rooms. Even though a ladder appears to be a simple product to use, it is very often, the most misused product in the workplace. By following proper safety precautions many of these injuries could be prevented.

Most ladders are constructed of wood, metal or fiberglass. Fiberglass ladders are the most prevalent in use today because of their strength, durability and resistance to electricity. Metal ladders should never be used when working with or near electricity.

The most common types of portable ladders are stepladders and straight ladders (which includes extension ladders.) Stepladders can range in height from 3 to 20 feet. Individual sections of straight ladders cannot exceed 30 feet, two section ladders cannot exceed 48 feet and more than two section ladders cannot exceed 60 feet.

Ladders are designed with weight limitations or duty ratings in mind. This includes the weight of the person plus any tools or materials that are carried onto the ladder. It is a common misunderstanding that the weight limitations are just for the weight of the person using the ladder.

Ladder duty ratings are as follows:

- **Type III – Light Duty** (household type use) — 200 lbs
- **Type II – Medium Duty** (general light construction) — 225 lbs
- **Type I - Heavy Duty** (construction and industrial) — 250 lbs
- **Type IA – Extra Heavy Duty** (construction and industrial) — 300 lbs
- **Type IAA – Special Duty** (construction and industrial) — 375 lbs

Ladders should not be loaded beyond their maximum intended load nor the manufacturer's rated capacity.

General Requirements

The width between side rails of a stepladder at the top shall be not less than 11 ½ inches wide and the spread shall increase from top to bottom at least 1 inch for each foot of the stepladder. The minimum width between side rails on a straight or extension ladder shall be 12 inches.

The step spacing on stepladders shall be uniform. When the stepladder is in the open position, the steps shall be parallel and level.

Stepladders shall have a metal spreader or other locking device which will hold the front and back sections of the ladder open. The spreaders should be inspected prior to each use for any signs of damage.

All ladders used on slippery surfaces shall have slip-resistant feet or be secured to prevent against accidental movement.

General Maintenance and Inspections

Ladders should be inspected prior to each use. Ladders must be maintained in good working condition. If ladders are exposed to oil, grease or other slippery material they shall be cleaned immediately.

Wood ladders shall not be painted which could hide defects in the wood. Painting or writing letters and numbers as identifiers (such as company name) is permitted.



Portable ladders, *continued*

Damaged or defective ladders should be taken out of service, tagged or marked and destroyed as soon as possible, unless the ladder is sent back to the manufacturer for repairs. Repairs to a ladder done by someone other than the manufacturer may void the manufacturer's warranty.

Safety Precautions

Ladders shall be used for their designed purpose. Straight or extension ladders should be placed at an angle where the distance from the base to a vertical wall is one-fourth the working length of the ladder. Wood job-made ladders should be used at an angle where the distance from the base to a vertical wall is one-eighth the working length of the ladder.

Use the appropriate sized ladder for the job. Tying or lashing two or more ladders together, unless designed for that purpose, is prohibited.

Ladders should not be placed in front of doorways unless the door is blocked, locked or guarded. Ladders used in passageways or other areas where there is workplace activity or traffic should be secured or a barricade should be used to keep this activity or traffic away from the ladder.

Always face the ladder when ascending or descending. Follow the "three point of contact" rule. Always keep at least 2 hands and 1 foot or 2 feet and 1 hand in contact with the ladder at all times to maintain balance and stability. Tools and materials should be raised by a rope after the climber has reached the working position.

Never lean too far to either side of the ladder. Take the time to get down and move the ladder. While on the ladder, do not attempt to "walk"



or "jump" the ladder to a new spot or to further extend the ladder.

To prevent slips and falls, the area around the bottom of a ladder should be kept clear.

When using a straight or extension ladder to access an upper working or landing surface the ladder must extend at least 3 feet above the upper working surface. If this extension is not possible, the ladder shall be secured at the top and a grasping device or grab rail must be provided.

The top two steps of a stepladder should not be used as a step. Cross-bracing members shall not be used for climbing unless the ladders were designed for that purpose and have steps on both sides.

After being positioned, straight or extension ladders should be securely tied off to a building or other fixed object to prevent the ladder from moving.

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