



Ladder Requirements

Ladder Safety

All industries have the need to use a ladder from time to time. Whether it is to go on the roof, or just change a lightbulb, the ladder is the first response for many workers. Don't be fooled, it is not just common sense to use a ladder safely, it can be lifesaving. Employees must be safe and productive when ladders are being used.

Ladders are constructed under three general classes: Type I (industrial: heavy-duty) with a load limit of 250 pounds; Type II (commercial: medium-duty) with a load capacity of 225 pounds; and Type III (household: light-duty) with a load limit of 200 pounds. All ladders should have the Underwriters Laboratory (UL) seal.

Portable Ladder Specifics

- The ladder should be designed to have rungs/steps spaced not less than 10 inches or more than 14 inches apart.
- The rungs should be at least 11 ½ inches on portable ladders.
- The ladder should be made of metal, fiberglass or wood. The ladder must not be corrosive or covered with paint or anything that would hide a defect.
- The surface of the ladder should be free of defects like punctures, cuts, or lacerations.
- Inspection should take place before each shift or more as necessary to identify any visible defects.

- If the ladder is found to be defective, it should be removed from service and tagged DO NOT USE, and be removed from service until it is repaired or replaced.

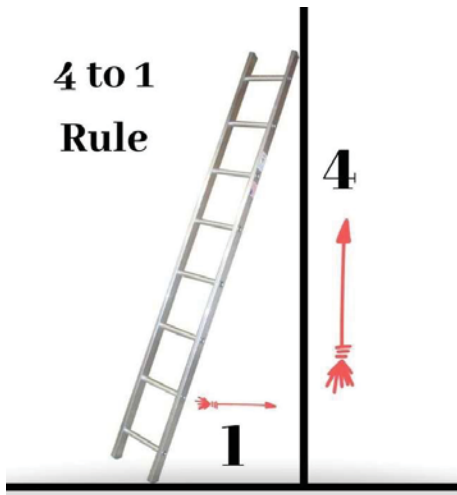
Fixed Ladders Specifics

Fixed ladders have more considerations. There are regulations regarding grab bars, hatch openings (if the ladder terminates at a hatch), clearances, and more.



Ladder guard and gate on a fixed ladder and hatch mounted system.

4 to 1 Rule



When using an extension ladder you must set the ladder on a solid surface and place the ladder by calculating the distance from the supporting wall as one foot from the wall for each four feet of the ladder's working length.

The ladder should also extend three feet above the top of the landing or roofline (three rungs).

- Fixed ladders are capable of supporting their maximum intended load;
- Grab bars do not protrude on the climbing side beyond the rungs of the ladder that they serve;
- For through ladders, the steps or rungs are omitted from the extensions, and the side rails are flared to provide not less than 24 inches and not more than 30 inches of clearance. When a ladder safety system is provided, the maximum clearance between side rails of the extension must not exceed 36 inches
- Fixed ladders may not have a pitch greater than 90 degrees;
- Fixed ladders that do not have cages or wells have: A clear width of at least 15 inches on each side of the ladder centerline to the nearest permanent object;



Different types of ladders require different guardrail systems. For example, a fixed ladder that goes up the side of the building can be used with a ladder guard at the top. This can include a safety gate that helps prevent or discourage access to the ladder.

Ladder fall protection may seem natural, but being safe while climbing is every bit as important as the safety precautions you take when you are working at height.

Employee Specifics

OSHA has some clear rules when it comes to how employees use ladders—here are a few of them:

- Faces the ladder when climbing up or down it.
- Use at least one hand to grasp the ladder when climbing up and down it (3 point contact).
- Do not carry any object or load that could cause you to lose balance.
- Ladders are to be inspected before initial use in each work shift, and more frequently as necessary, to identify any visible defects that could cause injury.
- Check the weight limit before using a ladder, and find an appropriate strength unit.
- Use ladders on stable level surfaces. (Not on boxes, barrels or other unstable bases.)
- A ladder that gains access to an upper landing (or roof) should extend at least 3 feet above the landing surface.
- Do not move, shift or extend a ladder with an employee on it.
- Do not reach past the center of gravity. (Keep your belt buckle between the ladder rails.)
- If placing in an area of activity (ie: doorway, passage way) block access while the ladder is in use.

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Additional Tips

- Keep at least one hand on the ladder at all times. Face the ladder when ascending or descending.
- Use the correct ladder for the task. Check for surrounding hazards, stable footing and proper angle.
- Mind your footwear when climbing ladders. Wear sturdy shoes or boots with nonslip soles and make sure your shoes are not greasy, muddy or wet before you climb a ladder.
- Use the 1:4 ratio rule. The base of the ladder should be 1 foot from the wall or support for every 4 feet of vertical extension.
- Secure side rails at the top of the ladder to a rigid support. The top of the two rails should be supported equally.
- Keep ladders as far as possible from electrical lines. Never use a metal ladder near power lines.
- Carry tools in a tool belt. If you need supplies or materials, raise or lower them with a rope and bucket.
- Be mindful of the weather conditions, rain, wind, etc.
- Do not put one foot on the ladder and the other on an adjacent surface or object.
- A ladder is to be used in an upright position, do not use it horizontally as a bridge or scaffold.



Fixed ladder with safety system, personal fall arrest system.

SAFETY TRAINING SIGN-IN SHEET

Company Name: _____ Date: _____

Subject: Ladder Requirements

The following employees participated in this training.

1. _____
2. _____
3. _____
4. _____
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