

LADDER SAFETY

Falls from portable ladders (step, straight, orchard, combination and extension) are a leading cause of occupational injuries. To prevent injuries, use the following procedures:



A. SELECT PROPER LADDER- Choose the ladder based on work to be performed

1. Step Ladders- Work at lower heights from 3 to 20 feet and inside buildings on level flat surfaces. Best for their light weight and uncomplicated use for tasks nearer the ground. A shelf holds tools or paint.



2. Orchard Ladder- Used frequently in orchards and for landscaping. Ladder has two front legs like a regular step ladder and one rear leg which allow getting into trees, bushes and on uneven ground. **Tripod/electrician's** ladders are similar but have a spreader bar and are convenient when working around equipment.

3. Straight/Extension Ladders- For work at greater heights (e.g. 10 to 40 feet). These ladders are light for their size, easy to set up, and more rigid than multiuse models when used as a straight ladder.



4. Ladder material- Ladders are constructed of wood, aluminum or fiberglass. Use the material best suited for the job. Avoid electrical hazards and do not use aluminum ladders near power lines or when performing electrical work.

B. USE LADDERS WITH THE PROPER LOAD RATINGS- The weight of the person and the equipment being used on the ladder must not exceed the load rating. Look for the load rating of the ladder on the sticker on the ladder.

TYPE	DUTY RATING	WORKING LOAD
1AA	Industrial- Special heavy duty	375 pounds maximum
IA	Industrial- Extra heavy duty	300 pounds maximum
I	Industrial- Heavy duty	250 pounds maximum
II	Commercial- Medium duty	225 pounds maximum
III	Household- Light duty	200 pounds maximum



C. INSPECT THE LADDER BEFORE USE

- Wood ladders-** Look for splits, cracks, chips, and loose rungs or steps. Don't use painted ladders as paint may hide a defect in the wooden ladders.
- Aluminum ladders-** Should have no sharp edges, dents, or bent steps, feet, or rails. Check for loose rivets.
- Fiberglass-** Check for cracks, chips, and missing components. Because they can cause the ladder to suddenly fail, any of these problems signals the need for a new ladder.
- Keep ladders clean and dry. Wipe away water, oil, and other slippery substances from steps and rails before you try to climb the ladder, and wipe the ladder clean after each use to prevent deterioration.
- Tighten reinforcing rods beneath steps, hinges, and other parts, such as bolts, but do not over tighten.
- Check the rope and pulley on extension ladders for wear and fraying. If you need to replace them, follow the manufacturer's instructions.
- Tag defective ladders "DEFECTIVE - DO NOT USE" and remove them from service.

D. GENERAL LADDER SAFETY

- Set up your ladder on a firm, level surface.
- Avoid electrical hazards! Look for overhead power lines before extending a ladder. Do not use an aluminum ladder near power lines or when working on exposed energized electrical equipment.
- Don't set up a ladder near doorways and other high-traffic areas. If you block a doorway or walkway with a ladder, barricade the door/walkway and post warnings. Do not allow people to walk under the ladder.
- Do not exceed the maximum load rating of the ladder.
- Always face the ladder and use both hands when ascending and descending. Use the three points of contact rule, 2 hands and 1 foot or 1 hand and 2 feet shall always be in ladder contact. Never work backwards from a ladder.
- Do not lean over the side of the ladder. Your belt buckle should not extend beyond the side rail.
- Don't use ladders in high winds, rain or thunderstorms.
- Do not attempt to move or reposition a ladder by walking it or while still standing on it. Always climb down and move your ladder while standing on the ground.



E. STEP LADDERS

1. Set-up

- Before using a stepladder, make sure it is fully open, and the spreaders or braces between the two sections are fully extended and locked. Never use a stepladder when folded- it's not an extension ladder.
- Whether inside or outside the house, do not place stepladders or utility ladders on boxes, countertops or unstable surfaces to gain additional height.
- Make sure that the legs on **orchard ladders** are securely planted in the ground creating a climbing angle of 70 to 75°.



2. Use

- Do not stand higher than the second step from the top of a stepladder.
- Do not sit or stand on the top cap, the pail shelf, or on the back of a stepladder.
- Do not straddle the front and back of a stepladder.
- No more than one person is allowed on a ladder, unless the ladder is designed for additional persons.

F. STRAIGHT/EXTENSION LADDERS

1. Set-up

- Raise the extension ladder to the desired height and make sure that the locks on both sides are properly engaged.
- **4 to 1 Rule-** The bottom of the ladder should be 1 foot away from the wall for every 4 feet that the ladder rises. For example, if the ladder touches the wall 16 feet above the ground, the feet of the ladder should be 4 feet from where the ladder touches the roof.
- Ladder must extend at least 3 feet above the roof or top landing when used as access to an elevated work area/roof. If this is not possible secure the ladder to a rigid support.
- The upper and lower sections of an extension ladders must overlap a minimum of three rungs to be stable.

2. Use

- Never stand on the top three rungs of a straight or extension ladder.
- When collapsing a telescoping ladder, grip securely on the sides of the ladder. This will help prevent the descending sections from injuring fingers and hands.

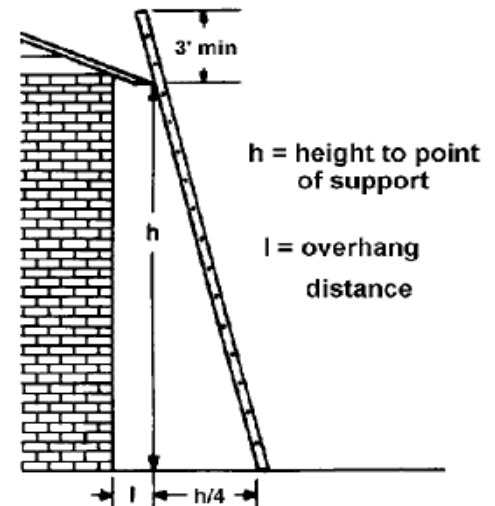


Figure 2. The base of a straight ladder should be one foot out of every four of height to the point of support