



# **Portable Ladder Safety**

# Types of Portable Ladders

- Extension
- Single or straight ladders
- Step or folding ladders

These ladders are built from three basic materials; wood, fiberglass, and aluminum. They are used for different purposes, situations, and tasks. Some items to consider when choosing the correct ladder for the job include the environment where it will be used, length, and duty rating which is the ladder weight rating or maximum weight capacity the ladder can safely carry or support. Each type also has limits on their length.

- A stepladder should be no more than 20 feet high.
- A one-section single ladder should be no more than 30 feet.
- An extension ladder can go to 60 feet, but the sections must overlap.

## Categories of Duty Ratings:

### Working Load:

<u>Duty Rating</u>	<u>Ladder Type</u>	<u>Pounds</u>
Special Duty	I-AA	375
Extra Heavy Duty	I-A	300
Heavy Duty	I	250
Medium Duty	II	225
Light Duty	III	200

# Inspection

- Inspect ladders before each use
- Check for cracks, bends, splits, broken or missing pieces, corrosion, and other signs of wear
- Make sure the ladder has non-skid or slip resistant feet or pads that work and pivot properly
- Check for loose bolts, rivets, and other fittings
- Inspect spreader and support or gusset braces of step ladders and rung locks and braces on extension ladders to ensure they are present, have no defective parts, and are in proper working condition.
- Look at rope and pulley on extension ladders to make sure they work and the rope is not tangled or frayed and the pulley is properly attached to the rung.
- Ensure the label on the ladder is present and check the capacity of the ladder to make sure it is capable to hold you and the equipment you are wearing or taking up the ladder
- Inspect painted areas on ladders very carefully for hidden damage or defects. Wood ladders cannot be coated with any opaque covering
- Inspect for oil, grease, moisture, or other slipping hazards on the rungs and clean as necessary

# Set-up

- Position ladders near the work to avoid overreaching.
- Place ladders on a solid and level surface and ensure ladders are stable and plumb

- Position the ladder in safest location possible. Avoid building entry and exit areas or doorways and areas used for pedestrian and vehicular traffic and block off the area around the ladder
- Secure extension ladders at their top and bottom so they cannot be move away from the wall or move sideways.
- Keep the areas at the top and bottom of the ladder clear of debris, clutter, and other obstructions
- Never place ladders on concrete block or other unstable surfaces to obtain additional height
- Set extension ladders at a 75 degree angle. One-quarter the working length of the ladder or one foot away from the wall for every 4 foot in height
- Extend ladder side rails of extension ladders 36 inches above the upper landing surface which allows for safe movement from the ladder to the landing surface
- Look above areas before placing or setting up ladders for overhead power lines or other obstructions and keep ladders away from these areas
- Make sure the side rails of extension ladders are equally supported
- Never over extend an extension ladder
- Sections of extension ladders should overlap enough to retain the strength of the ladder.
- Each section of a multi-section ladder must overlap the adjacent section by at least 3 feet for ladders up to 36 feet and 4 feet for longer extension ladders.
- Do not set up or take a ladder down when it is extended
- Erect extension ladders so that the bottom section faces the wall and the upper section rests on and in front of the bottom section

# Usage

- Use the correct ladder for the job or task and for the ladders intended purpose
- Always face the ladder when climbing and never turn away from the rungs or steps
- Don't lean out past the ladder side rails. Follow the "belt buckle rule" keeping your body centered between the ladder side rails
- Never carry tools or other materials in-hand while climbing a ladder
- Climb one rung or step at a time and maintain a 3-point contact when climbing a ladder, meaning you always have one foot and two hands or two feet and one hand on the ladder while climbing
- Don't over reach, lean, pull, stretch, or make sudden moves while on a ladder
- Never try to move, shift, or extend a ladder while on it.
- Don't stand on the top two rungs of a step ladder or the top three rungs of an extension ladder
- Know the load rating and do not exceed the ladders maximum load rating capacity
- Climb only the rungs of a ladder and never the cross braces
- Allow only one person on a ladder at a time – wait for the person climbing the ladder to get off before you climb
- Be careful when stepping onto and off ladders from the ground and at heights
- Never work under ladders which are set up
- Don't use step ladders in a folded position or leaning up against a wall.
- Always lock the spreaders of step ladders
- Do not leave tools or materials on the top caps of step ladders

- Use only ladders of non-conductive material when electricity is present or any potential contact with electricity
- Always follow manufacturer's instructions and warnings
- Wear proper footwear when climbing ladders
- Don't use makeshift ladders or ladders with makeshift repairs
- Single ladders must not be tied or fastened together to provide a longer length



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