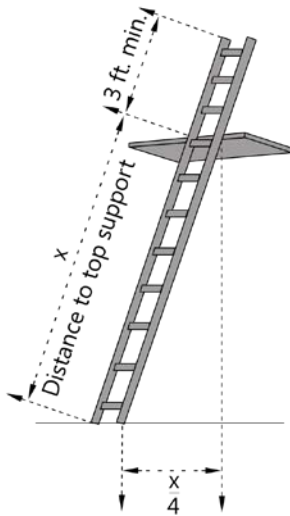


July 2021

OVERVIEW OF FACT SHEET

Although helpful in reaching elevated areas, ladders can pose a risk if not used properly and can lead to serious injury. It is important to remain aware of the hazards and take appropriate precautions to prevent falling.

Fixed, extension, and step ladders all have safety guidelines to follow. Labels and markings are essential to ensuring that an employee is using the correct ladder. Missing labels can be acquired from the manufacturer's website.



Please remember it is your responsibility as an employee to follow safe working practices and to report any unsafe conditions to your immediate supervisor. The campus has a goal of zero accidents and we need your support to ensure the safety of our campus community.

If you have any questions regarding ladder safety or another safety topic, please contact the [Environmental Health and Safety Office](#) at 704-687-1111.

# Ladder Safety - Types

Fixed Ladder

- Permanently attached to a structure, building, or piece of equipment
- Not adjustable in length
- May be equipped with cages or other ladder safety devices

Extension Ladder

- Has two or more sections that allows the ladder to be adjusted to different lengths
- Is not self-supporting, requires a stable structure to lean against to withstand load
- Maximum extended length is dependent on the number of sections and load capacity

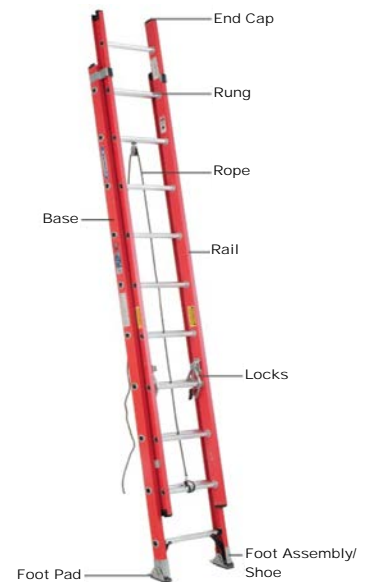
A-Frame (Step) Ladder

- Self-supporting, does not need to be attached or leaned against a structure
- One or both of the legs have rungs for climbing use (single-sided or double-sided)
- Can support various load capacities depending on individual load rating

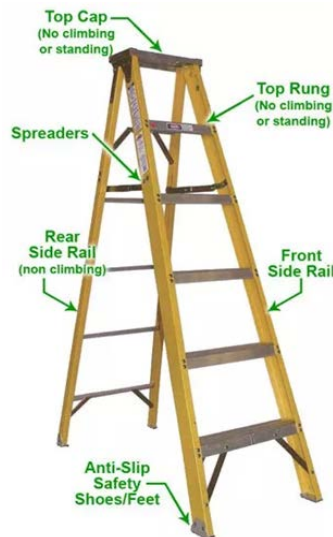
Fixed Ladder



Extension Ladder



Single-sided Step Ladder



Double-sided Step Ladder



# Ladder Safety - Guidelines

## Before beginning work:

- Assess the area for potential hazards, such as overhead power lines.
- Based on tasks to be performed, determine the height and type of ladder needed.
- Select ladder based on the appropriate load capacity.
  - Load capacity must be greater than the weight of employee plus the weight of their tools, materials, and equipment.

## Ladder Inspection Items

- Inspect the ladder prior to use for the items below. If any items are observed, or if the ladder has been recalled for any reason, the ladder must be tagged out and removed from service until repaired or replaced.
  - Wooden parts
  - Structural damage
  - Split or bent side rails
  - Broken or missing rungs
  - Bent or malfunctioning locking mechanisms
  - Missing or loose hardware, rivets or bolts
  - Grease, oil, paint, or other slippery material that could pose a slip hazard on the ladder's rungs
  - Missing or damaged labels/markings (extension and A-frame ladders)

## Ladder Set-Up and Work Area

- Place ladder on a stable and level surface that is not slippery.
- Fully open A-frame ladder and lock spreaders.
- Extension ladders are to be placed at a 4-to-1 ratio.
  - The base of the ladder should be 1 ft. away from the wall for every 4 ft. of height.
- Extension ladders must extend 3 ft. above the landing's surface.
- Barricade the area around the ladder if work will take place in a high traffic area, in front of a door, or where it can be disturbed.

## Using a Ladder – Do's

- Maintain a 3-point contact when climbing or descending a ladder.
  - 3-points means two hands and a foot, or one hand and two feet
- Face the ladder while climbing or descending.
- Stand on the ladder with both feet while working.
- Have a second person steady the ladder base if an extension ladder is 20 or more ft. tall. The ladder must be tied off to a sound anchor point at the top or bottom if a second person is not present to hold it.

## Using a Ladder – Do Not's

- Use a wooden ladder
- Stand on the top cap or end cap
- Reach too far forward or sideways beyond the side rails
- Use a metal ladder near electrical lines or sources
- Move or shift the ladder while a person or equipment is on it
- Use a ladder horizontally like a platform
- Climb the rungs on the rear of a single-sided A-frame ladder

## GROUP DISCUSSION TOPICS

- What types of ladders are present on campus?
- Is there a damaged ladder that needs to be taken out of service?
- What is the process for removing equipment from service because of damage?
- What should be done if a properly working ladder is missing safety labels?