

Ladders

The use of ladders is an everyday task in our shops and on job sites – so common, complacency can lead to letting your own guard down and an injury.

Be aware of these safety principles to reduce or eliminate the risks of injury from falling from using a portable step ladder or portable extension ladder.

Pause for Safety

- Hazards**
- Pinch points
 - Sprains, strains
 - Slips, trips
 - Falling from height
 - Ladder tipping over
 - Dropping materials/tools from height

PPE



Additional PPE



- Controls**
- Worker good judgment



Strategies and Procedures

Prior to using any access or egress equipment, assess the overall environment. Look for factors such as:

- The need to deliver tools or equipment to another level
- Uneven, unstable, slippery or muddy ground at the top or bottom of a ladder or stairway
- Rocks, materials, debris and other poor housekeeping
- Loose clothing
- Wet or soiled gloves
- Footwear in poor condition
- Duration and location of the task to be performed
- Other equipment in close proximity
- Height
- Weather conditions
- Perceived pressure to get a task done quickly
- Any other factor that could affect your ability to use the equipment safely

Before using any ladder, make sure that it is in good condition and is the right ladder for the job.

- Should a safer method of accomplishing the task without the use of a ladder, take that option.
- Ladders are to be maintained in good condition and be CSA approved.
- Look for mud, grease, oil, fuel, water, or ice on rails or steps
- Check the condition of aluminum
 - Not cracked or bent
 - Aluminum ladders must be equipped with a non-slip device at the foot.
- Check the condition of fiberglass
 - No cracks, blooming or delamination
- Do not use damaged ladders, site made ladders, or painted wooden ladders.

- Should you encounter these in your work, tag them out as unsafe and/or remove them from the worksite.



Working with extension ladders

- Inspect the condition of the ladder before using. Check the condition of the:
 - side rails
 - slide guides
 - end caps
 - rungs
 - gravity locks
 - safety feet/spurs
 - fly rope
- When setting up the ladder:
 - set the base on a stable surface
 - secure the base feet to prevent any movement
 - maintain a minimum extension overlap (amount of ladder above the platform) of 5 feet (1.5 meters)

- “walk” the ladder up vertically
- When in position, a portable ladder should protrude 3 feet (1 meter) above the intended landing point.
- The ladder should be set at the proper angle of 1 foot horizontal to every 4 feet vertical. (4:1 rise to run)
- Never work from any of the top three rungs of an extension ladder.



- When in the open position ready for use, the minimum incline of the front step section should be 1 horizontal foot to every 6 vertical feet. (6:1 rise to run)
- Tops of stepladders are not to be used as a support for scaffolds.

Implement controls and good practices

- Wear form fitting clothing and PPE as per manufacturers specifications
- Wear proper fitting footwear, in good condition, buckled up, laced or tied and clean of mud or snow.
 - Under no circumstances shall flat soled safety footwear be worn
- Do not carry items in hands when ascending or descending
 - use ropes and tools bags/belts or suitable hoisting equipment to raise or lower tools and equipment to working level
- Don't use wheel hubs, machine racks or door handles for mounting and dismounting
- Avoid rushing, short cuts do not save time

Working with stepladders

- Before use, check the overall sturdiness of the ladder.
 - Is it wobbly?
- Inspect the condition of the:
 - side rails
 - head tray
 - braces
 - steps
 - spreader arms
 - pail shelf (if applicable)
 - safety feet
- Only use on clean and even surfaces.
- Use only in the fully open position with the spreader bars locked.



Working with any ladder

- If a fall of 10 feet (3 meters) or more is possible, a personal fall arrest system (PFAS) must be used.
- Before mounting a ladder, make sure it is secured against movement at base, against kick out and the top lateral movement.
- The areas around the top and base of the ladder must be free from slipping or tripping hazards.
- Always mount and dismount facing the ladder
- Always use the three-point contact method when climbing or standing on the ladder.
 - Break the 3 point contact rule only when you reach stable ground, the cab, or platform
- Don't overreach while on a ladder - maintain center of gravity.
 - It is easier and safer to climb down and move the ladder over a few feet to a new position.
- Never work from any of the top three rungs of a ladder.
- Do not use metal ladders around electrical wiring or while working on or near electrical equipment.
 - Only ladders made from a non-conductive material may be used in these regions.
- All portable ladders including stepladders must extend at least 5 feet (1.5 meters) beyond the top of any excavation, platform, landing, etc.
- Ladders should be placed such that they do not project into doorways or passageways where other workers, moving equipment or materials could strike them.
 - Where such placement is not possible, barricades or guards should protect the ladder.
- Do not overreach or over extend when on a ladder, torso must remain inside rungs unless transferring to a platform or other work surface
- When using a ladder to access a work platform, always climb to the rung that is the same height or a little higher than the platform before stepping onto the platform.
 - Transferring to the platform in a horizontal movement reduces the chances of a slip and fall
- Use stepladders and extension ladders only for short duration tasks.
 - For long duration tasks a scaffold or elevating work platform is a better option
- Folding stepladders cannot be used to provide access or egress to another level - a solid mounted or extension ladder should be used
- Do not paint, glue or apply stickers or tape to any part of a ladder.
 - These might conceal defects.

