

CAL OSHA PORTABLE LADDER SAFETY ETOOL

1. Provide Employee Training

All persons using portable ladders must be trained on ladder safety (as per sections: 3203, 1509, and 1510 – Injury and Illness Prevention Program and Training Requirements).

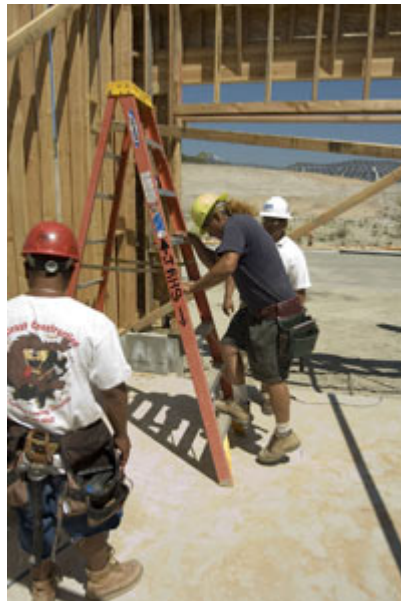


How to Provide Training

To be effective, training must be provided in a language and at a level that employees understand. Make your training specific to the actual work employees will be doing when using ladders. Effective training methods include:

- practical demonstrations of ways of using ladders safely when working
- asking open ended questions to encourage employees to think about how to work safely when using a ladder. For example, you could ask, what are the hazards in your job when using a ladder? What could be done to make you safer when working with a ladder?
- small group discussion and exercises

To make sure your training is effective have employees talk to you about the newly learned material and demonstrate that they understand the information.



2. Select the Correct Ladder for the Specific Job

Selecting the correct ladder depends on the specific job and work being performed. Seek advice from your “competent person” and get trained on how to choose the appropriate ladder for the job.

Always use approved portable ladders (those built in accordance with the regulations and standards) which are the correct length and type for the specific job. Don't use a metal, wet wooden or fiberglass ladder to do electrical work while working on or near energized electrical conductors or systems. Water from wet ladders makes the ladder conductive to electrical current and causes a slip and fall hazard.



3. Inspect Ladders Before Use

Cal OSHA requires ladders to be inspected.

Before use, employees should always inspect both Self Supporting and Not Self Supporting ladders for the items checking:

- for damage, lack of structural integrity, missing components or loose parts
- that labels are intact and readable.
- that accessories (e.g., leg levelers, paint shelves, stand-off shelves) are in good condition.
- for even feet (to avoid backward or sideways slipping out at the bottom).
- for slip resistant material on the base or nonskid feet



- on extensions ladders that:
 - ropes and pullers are in good condition
 - stops are on rails of the top section to ensure it will not fall, and on are on both rails of the bottom section to ensure enough overlap between the sections. The sliding section (s) (the “fly”) should overlap the bottom section (the “base”) by at least:

- 3 feet on ladders up to 32 feet long
- 4 feet on ladders 32 – 36 feet long
- 5 feet on ladders 36 - 48 feet long
- 6 feet on ladders longer than 48 feet



- **DAMAGED OR WORN LADDERS SHOULD BE DESTROYED**

- for Metal Ladders inspect for:

- loose rungs, nails, bolts screws and other metal parts
- bent or dented rungs or rails
- sharp edges, corners and burrs
- damage from corrosion

- for Wood Ladders inspect for:

- integrity of rungs and rails
- chips, splits, cracks and splinters in the rails
- holes and knots
- loose / wiggly parts

- for Fiberglass or Plastic Ladders inspect for:

- breaks, cracks, chips and splinters
- deformed rails or rungs from heat, chemical or environmental exposure

- for Self Supporting Step Ladders:

- in addition to the items mentioned above, verify that the two front legs are the same length and that the two hind legs are the same length

4. Position Ladders Correctly

- rest the base of ladders on firm, level, dry, non slippery surfaces away from hallways, passageways, doorways, driveways or heavy traffic areas.

- use leg levelers or mudsills when necessary to provide firm support



- keep the top and base areas of ladders clear of any obstruction

- to provide the correct angle so extension ladders won't slip, place the base of the ladder **one foot away** from whatever the top of the ladder leans against, **for every four feet in height of the ladder**
 - To check, put your feet at the base of the ladder and extend your arm straight out. If you can touch the closest part of the ladder without bending your arm, or bending over, the ladder is at the correct angle. If not, the ladder is not at a safe angle



Use Safe Work Practices

- always follow manufacturer's recommendations for proper use
- tie, block or otherwise secure the ladder to prevent it from being displaced
- when climbing, descending or working on ladders always face the ladder and keep 3 alternate contact points (two feet and one hand or two hands and one foot)



- whenever possible perform your work in-line with the ladder, not on either side
 - if you need to perform work on either side of the ladder have a co-worker hold the ladder
- only use extension ladders to access and come down from elevated landings and work surfaces
 - extend the ladder used for access at least 36 inches above the elevated landing or work surface

- make sure hinges on stepladders are fully open and locked



- have co-workers hand up tools and equipment instead of carrying them when on a ladder



- wear shoes with slip resistant soles
- clean mud and other slippery substances off your shoes and ladder rungs before climbing the ladder
- only one person at a time should be on a given ladder unless the ladder is specially designed to hold more than one person at a time (e.g., double sided or mechanics ladders)
- when moving an extension ladder always retract the “fly” section(s)
- when carrying a ladder keep the back section(s) lower than the front
- store ladders to protect them from weathering effects
- when using extension ladders consider using fall protection systems

DON'T

- use damaged or defective ladders or ladders inappropriate for the specific job

- hand carry loads or equipment while on a ladder



- reach to the point where you lose your balance; move the ladder instead
- stand or work on the top cap or the step below the top cap of a stepladder
- stand or work on the top 3 rungs of an extension ladder



- place ladders on boxes, barrels, pick-up trucks or scaffolds or equipment



- use portable ladders in a horizontal position as a plank, platform, runway, or scaffold
- splice together short ladders to make longer ladders
- use ladders with only a single rail
- use ladders in high winds

Ladder Regulations and Design Standards:

- California Code of Regulations Title 8 (CCR) Sections [1629](#), [1675](#), [1676](#), [1678](#), [3276](#), [3278](#), [3279](#) and [3280](#).
- The American National Standard Institute (ANSI), A14.1, 2, 5-1982; A14.3-1984; A14.4-1979; A14.5-1982; A14.4-1979.