

A SAFETY MANAGEMENT APPROACH

Climbing the Ladder of Success

(Preventing Injuries Involving Ladders)

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Falls from ladders result in some of the most severe types of injuries. Truly, the use of ladders needs to be managed. There is much more to know about ladders than just using our common sense. Due diligence is needed including knowing safe ladder techniques.

Here are some useful techniques on how to manage a ladder safety program:

1. All ladders:
 - a. Select the right ladder for the job. Buy high-quality ladders.
 - 1) The ladder should be tall enough so the employee can reach the required objects without standing on the top or second-to-the-top rung/step of the ladder or putting the ladder on some other object to reach the required objects.
 - 2) The ladder should be made of a material conducive for the work to be performed, e.g., a wood or fiberglass ladder for working around electrical equipment rather than a metal ladder.
 - b. Use ladders only for their intended purpose, i.e., climbing up and down.
 - c. Maintain ladders in good condition. Ladders in disrepair should be either disposed (destroyed) or fixed.
 - d. Before climbing any ladder, check its condition:
 - 1) Nuts and bolts tight?
 - 2) Rungs secure?
 - 3) Spreaders working?
 - 4) Safety feet properly working?
 - e. Always face the ladder when ascending or descending, holding on with both hands.

- f. While working, hold on to the ladder with at least one hand.
 - g. Use a tool belt or a bucket attached to a hand line to pull tools up.
 - h. Do not extend the trunk of your body past the side of the ladder. Move the ladder if you have to reach outside this area.
 - i. Wear slip-resistant footwear.
 - j. Keep ladder rungs free of oil and grease.
 - k. Store ladders either hanging on strong hooks vertically or horizontally or if that cannot be done, secure them with chains or ropes so they are out of the way and do not create a trip or falling-over hazard.
2. Step Stools
- a. Ensure such short ladder-type devices have hand railings installed to ensure users have something to hold on to.
 - b. Keep them stored up and away when not in use so they are not trip hazards.
3. Step Ladders
- a. Make sure the spreaders are locked open before climbing.
 - b. Place a ladder only where it is safe to do so. For example, it is not safe to put a ladder in front of doors opening toward the ladder unless the door is blocked open, locked or guarded.
 - c. Keep at or below the second rung from the top on a step ladder.
4. Straight/Extension Ladders
- a. Use the 4 to 1 rule. Position the base of the ladder one foot out from the wall for every four feet of the ladder's height up to the support point. For example, the base of a 16-foot ladder should be four feet out from the wall.
 - b. Ensure the ladder extends at least 3 feet above the elevated surface to which you are climbing so there is always something to grab onto when getting off and on the ladder.
 - c. Place the base of the ladder so the ladder will not slip.

- d. Lash the ladder at the top to hold it in place. If at all possible, ask someone else to hold the ladder while the climber lashes it in place.
 - e. Adjust extension ladders while standing at the base, not while standing on the ladder or from a position above the ladder.
 - f. Keep at or below the third rung from the top on a straight or extension ladder.
5. Fixed Straight Ladders
- a. Maintain them in good repair. Since many of these ladders are outside and sustain extreme weather conditions or deep down in vaults, they are susceptible to damage from high heat, cold, and dampness. Literally check that these ladders are bolted securely in place.
 - b. Ensure fixed ladders that are longer than 20 feet have a caged installed.
 - c. Ensure fixed ladders that are longer than 30 feet have landing platforms installed.
 - d. Disregard b. and c. if ladder safety devices are installed and fall protection harnesses are worn and are required to be used.
 - e. Install three-foot high grab bars or ladder extension arms at the top of the ladder so the user always has something to grab onto when getting off and on the ladder.

A fall from any ladder can be devastating. Manage your ladder safety program by ensuring your ladders are the right ones for each task, are in good condition, employees know how to use each type of ladder, and they are correctly used. Train and observe.

For More Information:

To become part of discussions on topics like the one above, go to www.safetycenter.org to obtain information about Safety Center's *Safety Management Specialist Certificate*.

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