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Construction News Sense

Ladder Safety -

Fresh and in Your Face!

Falls from ladders are a serious hazard in the construction industry. Let me share a personal story relating to ladder hazards. I have a relative who is an electrician at a prison and owns a small electrical company. Two years ago, after finishing his regular job, he went to one of his evening jobs. He was working alone and it was beginning to snow. He doesn't remember much, but we know he was in a hurry, the surface was slippery, and he did not tie off the ladder. He fell from a 20-foot extension ladder on to a concrete surface. After lying in the snow and in and out of consciousness for five hours, his son noticed he was not home and started looking for him. He found him, unconscious and covered in three inches of snow with two broken bones and some severely bruised organs. Fortunately, he has completely recovered, but he could not return to his normal job for two months. His coworkers had to pick up his workload and his sons had to finish his after-hours work.

Fall Facts

- Falls from elevated surfaces account for almost 700 occupational deaths annually; 15% of all occupational deaths.
- More than 90,000 people receive emergency room treatment for ladder-related injuries every year.
- OSHA believes 100% of all ladder accidents could be prevented with proper attention to equipment and climber training.
- Over the last 10 years the number of ladder-related injuries has increased 50%.
- According the Bureau of Labor Statistics, 50% of all ladder-related accidents were due to individuals carrying items as they climbed.
- The most common type of ladder-related injury is fracture (32%).

Types of Ladder Accidents

Ladder accidents are extremely common even though they are entirely preventable. The following four causes account for most. If the simple loss prevention tips for each cause are followed, ladder accidents can be almost eliminated.

1. Selecting the Wrong Ladder Type

- Choose the right ladder for the job, inspect it, use it correctly, and place it correctly. Each ladder is designed to support a maximum weight limit. Consider how much the ladder has to support.
- Consider the necessary ladder height. Many injuries occur because ladders are too short for a specific task. Instead of selecting the correct ladder for the job, workers place the ladder on something to extend its reach or stand on the top rung to gain the necessary height. Both scenarios are dangerous and can result in serious injuries.

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2. **Using Worn or Damaged Ladders**

   - Do not use old, worn, or damaged ladders. After a couple of years the stress of being climbed on causes ladders to wear out and break.
   - Thoroughly inspect each ladder before using it. If you find any damage, do not use the ladder until it has been replaced or safely repaired to the manufacturer's specifications.

3. **Incorrect Ladder Use**

   - Human error is by far the leading cause of ladder accidents. Never use a ladder in any way other than what the manufacturer intended. Do not lengthen or alter a ladder in any way.
   - While using a ladder **always maintain three points of contact** with the ladder to ensure stability. Never attempt to reach for something while on the ladder; it is much safer to get off the ladder, move it, and then climb back up.
   - Do not stand on the top rung of a ladder.
   - Slow down; don't hurry when using a ladder.

4. **Incorrect Placement of Ladders**

   - Make sure the ground you place the ladder on is level and firm. Ladders should never be placed in front of an unlocked, unblocked, or unguarded door.
   - Always have a helper support the base while using a ladder. If the ladder cannot be held by someone else make sure it has an appropriate foot to prevent it from slipping. Stake the ladder's feet if you are using it outside and no one is available to support the feet of the ladder.

Responsibility

The duty to provide a safe workplace is not dependent on who provides the paycheck. The duty to initiate safe practices is yours to the degree you create a hazard, control it, or have the responsibility for correcting it. Ladder purchase, inspection, repair, disposal, and training are all duties of a delegated specialist trained to recognize hazards and respond correctly.

There is a program to provide fall protection. If you use a repetitive process, conduct a survey of climbing jobs. Determine what type of ladder to use and whether a ladder is the right tool for the job. A survey includes an assessment of the need for personal restraint systems and engineering of tie-off points at an elevated position when you need them.

The Competent Person

Employers now have a legal duty to inspect the site where their employees will work. This can be a shared responsibility. When the work of ten or more employees involves climbing, a single competent person should be responsible for climbing safety. At least one competent person must understand the process. This employee must be able to identify hazardous or dangerous conditions and evaluate the risk of falls and must be trained to use personal protective equipment, including the selection of anchor points and application of personal restraint systems. He doesn't repair equipment themself, he should supervise a competent carpenter. He should know how to detect hidden defects. Ladders are a deceptively complex subject. The competent person must have specific competencies in the purchase, inspection, and repair of ladders.

In most situations, a ladder is the correct tool. Always take the time to evaluate whether a scaffold or lift is a better selection for the task. Remove a ladder from service before it breaks or becomes too shaky for use. Follow requirements for a ladder routine inspection and the tag-out policy for suspected ladders. Address all ladder concerns as they come up. Follow the safety tips listed above. If you see someone using a ladder incorrectly, speak up.

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