Ladder Safety – By the Numbers



LADDER SAFETY

DID YOU KNOW?

Ladder-related citations have been a fixture on OSHA's annual "Top 10" list of most cited violations. In fiscal year 2016, the agency reported 2,625 total violations involving ladders, which made the standard (1926.1053) the No. 7 item on the list. The top sections of the standard cited by OSHA involved portable ladder access, using ladders for purposes other than those for which they were designed, using the top of a stepladder as a step, structural defects, and employees carrying objects or loads that could cause them to lose balance and fall.

- Ladder-related incidents also contributed to more than 150 workplace fatalities and more than 20,000 nonfatal workplace injuries among all industries that year, (BLS) data shows.
- There are more than 300 ladders-related deaths and over 130,000 emergency room visits related to ladders each year, as well as 2,000 ladder-related injuries every day.
- According the American Academy of Orthopedic Surgeons, every year 500,000 people are treated for ladder-related injuries and approximately 300 of these incidents prove to be fatal. In 2007 alone, more than 400 people died as a result of falls on or from ladders or scaffolding. -Liberty Mutual – Research Institute for Safety

More alarming statistics:

- Fatal falls, by type of fall, 2009, over one-third involved falls from roofs or ladders. Out of 617 falls, 20 percent were from the ladder, 18 percent were from the roof. -U.S. Bureau of Labor Statistics, U. S. Department of Labor, 2010
- Work-related fatal falls, by type of fall, 2010, nearly two-fifths involved falls from roofs or ladders. Out of 646 falls, 20 percent were from the ladder, 18 percent were from the roof. -U.S. Bureau of Labor Statistics, U. S. Department of Labor, 2011
- Ladder-related injuries per 100,000 people rose almost 27 percent during the 16-year study period – 97.3 percent occurred in non-occupational settings, such as homes and farms.

KEEP IN MIND

There are six goals safety professionals want to achieve in order to prevent ladders injuries:

1. Decrease the number of ladder-related injuries and fatalities.
2. Increase the number of ladder safety training certificates issued by ALI.
3. Increase the frequency of ladder safety training modules.
4. Lower the ranking of ladder-related safety citations on OSHA's annual "Top 10" list.
5. Increase the number of training sessions for competent ladder inspectors.
6. Increase the number of individuals and companies that inspect and properly dispose of old, damaged or obsolete ladders.

These laudable goals are achievable by the strict observance of **Four Cardinal Rules** that cover safe use of ladders.

1. PICK THE RIGHT LADDER

The ladder should be of the correct type and length. You will probably use an ordinary straight ladder for most purposes. An extension ladder may be required for high work. A step ladder is used when you need a free-standing ladder or one with a tool tray. Some situations may not require a ladder at all. Instead, you may need a scaffold. Never use a metal ladder around any electrical installation.

2. CHECK THE CONDITION OF THE LADDER

- Never use a damaged ladder. Make sure all parts of the ladder are in good working order, free from corrosion, rust, rot, cracks and other defects. Check the rungs, side rails, braces, hinges, ropes and pulleys. See that the rungs are free of slippery substances such as oil. Never use a painted ladder because the paint can hide defects. To protect it, use a clear preservative instead of paint.
- Make sure that the non-slip rubber feet are in good condition. Check overall for any signs of warping or twisting.

3. SET UP A LADDER

- With a straight ladder, walk it into position hand over hand. Make sure the base is solid. Tie the top if you can. A straight ladder should be placed against the wall at an angle so that the base of the ladder is one foot away from the wall for every four feet of height. You can remember this formula as the "four up, one out" rule.
- A stepladder should be locked into a fully-open position before you attempt to use it. Raising an extension ladder is a two-person job. There should be a considerable overlap between each section.
- When using a ladder to gain access to a roof, place the ladder so that it extends at least three rungs above the edge.

4. WORK SAFELY ON A LADDER

- When climbing or working on a ladder, maintain three-point contact. This means that two hands and one foot, or one hand and two feet should be in contact with the ladder at all times.

- Keep centered on the ladder. Here’s a way to remember to do so – your belt buckle should remain between the two side rails at all times. Never lean away from the ladder because you can cause it to topple.
- Do not carry tools or materials in your hands. Keep tools in a belt, or hoist objects up after you.
- Do not stand on the top few rungs of any ladder. Footwear should have clean soles made of a non-skid material. Leather is too slippery.
- Never move a ladder while you are on it.
- Move slowly and carefully on a ladder.
- Do not work on a ladder if you are ill, overly tired or possibly under the influence of alcohol or any drug. Stay off outdoor ladders during bad weather such as rain, wind or lightning.
- Certain work situations may require the use of fall prevention equipment such as safety belts or harnesses. Be sure to use this equipment as directed and keep it in good condition.