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INSURANCE BROKERAGE INCORPORATED

Ladder Use and Behaviors

Ladders can be one of the best tools of the trade; however, industry data also shows that ladders are the source of a high number of injuries and fatalities.

In 2017, Oryx has experienced a number of ladder related injuries, which may have resulted from improper ladder use.

The most common misuses of ladder safety involve these behaviors:

- standing on the top two steps of the ladder
- leaning too far, left or right, over the sides
- not securing a straight ladder top and bottom (extension type)
- leaning a step ladder
- using an under-rated ladder (min must be 250 lbs capacity)

The Bureau of Labor Statistics, an organization within OSHA, tabulated data for ladder injuries and fatalities. The most recent data shows there were 113 fatalities and 15,460 injuries from ladder use. 81% occurred to men. 56% of all injuries, including fatal injuries, occurred to workers between 45 to 64 years of age.

The results show that nearly 10% of ladder related fatalities and 25% of ladder injuries occur while using ladders at six (6) foot or less.

Between heights of 6 to 10 foot, the ladder fatalities rose to nearly 30%, with 50% of the non-fatal injuries occurring from this height. When the ladder height increases to between 11 and 15 foot, the fatality percentage is 20% and the injuries are 15%. From the 16 foot to 30 foot height, there are only fatalities that occur, accounting for the remaining 50% of fatalities from ladder falls.

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Ladder use requires training according to the OSHA standards. Most OSHA training is 'performance based', which means the person must perform to the training received, otherwise be considered untrained. This is an exposure for the company, both for citation from OSHA and when a worker falls and becomes injured.

Step ladders are a seemingly simple and safe tool, however consider the information you have just read. A safer alternative to ladders, such as scissor lifts or scaffolds, is suggested whenever possible.

Reinforce safe work behaviors and discuss safe ladder use. Do not tolerate behaviors of risky ladder usage.

Never borrow a ladder from another employer and never loan out your ladder to another employer's worker. Remember, it is the employer's responsibility to ensure workers are trained in safe ladder usage and that ladders must be free from defects before they are used.

For more information on safe ladder use, contact your Oryx Loss Control representative.

Data used from publication titled: Occupational Ladder Fall Injuries – United States 2011. Published by CDC on April 25, 2014 with Bureau of Labor Statistic (BLS) and NIOSH Data.

Ladder Safety

Falls from portable ladders are a major source of injury in the workplace. Anyone who uses a ladder should have hands-on safety training to learn about the various risks involved and the precautions necessary to prevent falling.

Choosing the Right Ladder

Using a ladder for purposes not anticipated in its design is the most common cause of falls. Workers select among the ladders that are made available to them by the employer, but these are not necessarily what safety would dictate. Safety regulations give specific measurement requirements. Companies and individuals need to focus more on the importance of choosing an approved ladder of appropriate strength, type, and length for the task. Ladder inspection and setup, climbing techniques, safety precautions and common sense are also important factors that must be considered.

Inspecting a Ladder

Use a portable ladder only if you're sure it can support you. Inspect the ladder before and after using it. Pay close attention to painted wooden ladders; the paint could be hiding defects. If the ladder is defective, tag it and have it either repaired or thrown out.

Setting Up a Ladder

Once you've inspected your ladder and established that it's in good condition, it's important to know where and how to set up the ladder, and where and how not to. Before setting up a ladder, check for overhead electrical wires. Clear the area around the base and top of the ladder of debris, tools, and other objects.

If you must use a ladder in passageways, driveways or other high-traffic areas, set up suitable barricades. If you're using a ladder in a doorway, lock the doors shut. Place the ladder feet 1/4 of the ladder's working length away from the base of the structure (*e.g. if the ladder measures 8 feet between its base and its support point at the top of a wall, there should be 2 feet between the base of the ladder and the foot of the wall*). Rest both side rails on the top support and secure the ladder to prevent slipping. If you will be stepping onto a higher platform (*e.g. a roof or scaffold*) from the ladder, make sure the ladder extends at least 1m (3ft) above that platform.

Place the ladder on a firm, level footing. Secure the bottom to prevent it from slipping. Have someone hold the ladder if possible, especially if the ladder doesn't have slip-resistant feet or secure blocking. Do not set up a ladder on a box, cart, table or scaffold; on ice; or on any other unstable or slippery surface. Stand a ladder on both side rails, not on any of its rungs.

Climbing a Ladder

By following these tips you can climb with greater comfort and security: Grasp the rungs of the ladder, not the side rails. The rungs are easier to hold onto in case your foot slips. Face the ladder when going up or down and when working from it. Keep the center of your body within the side rails.

Maintain three-point contact by keeping two hands and one foot, or two feet and one hand, on the ladder at all times. Do not carry objects in your hands while on a ladder. Instead, hoist materials or attach tools to your belt.

Staying on a Ladder

Adopt these rules: Tie yourself off with a safety harness when working 3m (10ft) or more off the ground or when working with both hands. Do not work from the top three rungs. The higher you go on a ladder, the greater the possibility that it will slip out at the base. Wear protective footwear with slip-resistant soles and heels. Before mounting a ladder, make sure your footwear is in good condition, and wipe off the soles if necessary. Don't climb a ladder if the soles of your shoes or boots are wet, muddy or slippery. Ensure that only one person is on a single-width ladder. A double-width ladder should have no more than one person on each side. Don't straddle the space between a ladder and another object. Don't overreach from a ladder; step down and move the ladder as required. You might need to take a rest break after awhile, since frequent climbing is hard work on the legs. Keep your balance. If you're doing work that requires you to look up and reach above your head (*e.g. to wash windows or paint a wall*) rest frequently to avoid arm fatigue and disorientation. If you become dizzy or panicky, drape your arms over a rung and rest your head against another rung or side rail. Climb down slowly.

Other Safety Precautions

Ensure that all electrical equipment used during ladder work is in good condition and properly grounded. Do not join two short ladders to make a longer ladder. The side rails are not strong enough to support the extra load. Do not allow anyone to stand under a ladder. Do not use a ladder placed in a horizontal position as a scaffold plank or runway. Do not use a chair, barrel, box or anything else as a makeshift ladder. If you have access to a fixed stairway or scaffold, use it instead of a portable ladder.