

## **TOOLBOX TALK #35**

### **PORTABLE LADDERS – ASSESS HAZARDS AND CHOOSE**

Ladder safety is sometimes taken for granted because ladders are used for so many common activities in homes and other applications outside the workplace. Stored in closets, garages and sheds, they are just grabbed when needed, often without a second thought. Even children can use them without much training or oversight. Because using a ladder is such a familiar skill that most people gain long before they enter the workforce, it can be easy to overlook the need for safe operating procedures in the workplace. However, ladders continue to be a contributing factor in more than 150 fatalities and 20,000 non-fatal workplace injuries each year, making the need for ladder safety programs real.

#### **Hazard assessments**

Some jobsites choose to address ladder hazards by eliminating the use of ladders entirely. Instead of ladders, they use mobile elevated work platforms, scaffolds and stairs to reach areas that would otherwise require the use of ladders. But for many sites, it's not possible or practical to completely eliminate the use of ladders. Identifying all of the areas where ladders are currently being or could potentially be used throughout the jobsite is the first step in assessing hazards. Because ladders are often used for non-routine tasks that happen infrequently, this can be slightly more difficult than assessing the hazards of a common task. For each task that requires a ladder to be used, determine any special circumstances that may accompany the need. For example, if the ladder will be used for electrical work, procedures for its use will need to include the instruction not to use a metal ladder.

#### **Ladder choices**

Chances are good that more than one type of ladder will be necessary for the variety of tasks that need to be performed. Creating an inventory of all ladders onsite will help determine if all of the climbing needs on the site can be met. The most common ladder materials are wood, aluminum and fiberglass. Each has characteristics that make it desirable for certain tasks. These same characteristics can also make it unsuitable for some applications.

- Aluminum ladders are corrosion resistant and light weight. This makes them easy to maintain, carry and maneuver. They are, however, not suitable for any type of electrical work because they will conduct electricity.
- Wooden ladders are also not suitable for electrical work because although wood is non-conductive, most wooden ladders have metal braces and fasteners that can conduct electricity.
- When clean and dry, fiberglass ladders are a good choice when working with or near electricity. They are strong and durable, but do weigh more than aluminum ladders.

In addition to the materials that make up a ladder, the style of a ladder must also be considered.

- Step-ladders have A-frame designs with locking spreader bars that provide support. They commonly range from 2 to 20 feet in height and have a top cap that can be used to place tools or other items that the person using the ladder needs while they are on the ladder.
- Extension ladders typically range from 20 to 60 feet in height. They also commonly use rope and pulleys to make extending and retracting the ladder easier. When extension ladders are extended, the sections of the ladder must overlap by at least 3 feet, but sometimes as much as 5 feet on longer ladders. Extension ladders require the support of a wall or roof for use.

Another consideration for all types of ladders is their weight capacity. Each ladder should be labeled with a duty rating. These ratings can range anywhere from 150 to 375 pounds. The weight of the person as well as any tools and equipment that they will be using on the ladder should be considered when choosing the necessary duty rating.