



Weekly Safety Meeting

Your Safety Is Our Business®

Volume 2, Issue 27

July 5th, 2015

Personal Fall Protection

Falls are the second leading cause of occupational fatalities and disabling injuries in the United States. Each year, over 500 workers die in fall-related accidents and over 300,000 workers suffer a disabling injury. According to the National Institute of Occupational Safety and Health (NIOSH), most of these fatalities and disabling injuries are the result of falls from elevations of six feet or less.

Where a fall hazard exists, there are two acceptable options--either eliminate the hazard, or provide protection against it. Ideally, it is best to totally eliminate the hazard.

Falls can take place at any time and during a variety of elevated work tasks. According to a recent Bureau of Labor Statistics (BLS) study:

- Seventeen percent of the workers who fell were loading and unloading material when the fall occurred.
- Thirteen percent of the workers who fell were involved in operating, repairing, cleaning, or installing equipment.
- Ten percent of the workers were performing carpentry tasks.
- The remaining activities that resulted in falls included painting, welding, roof work, sheet metal work, and bricklaying.

The BLS survey also asked participants to describe their specific movements at the time of the fall.

- Twenty eight percent of the workers who fell said they were climbing up or down from an elevated position or location.
- Thirteen percent of the workers were walking at the time they fell.
- Eleven percent of the workers were stepping from one surface to another.
- Ten percent of the workers were moving backwards.

Most of the fatalities and injuries reported in the BLS study could have been avoided by the effective use of fall protection and equipment. Fall protection is defined as any means or system used to protect employees from falling from an elevated walking/working surface. Fall protection involves the elimination, prevention, and/or control of fall hazards.

Whenever feasible, employers should always set up temporary floors, guardrails, toeboards, or other physical barriers to falls instead of having workers rely on nets and tying off for fall protection. When not feasible, personal fall protection or safety nets must be used. No work should proceed unless the necessary fall protection is in place. The use of fall protection can prevent serious injury and save your life.

Fall protection equipment is broadly divided into two categories:

- One is fall prevention equipment. Guardrails and coverings at floor openings and safety-interlock gates on elevated platforms are designed to prevent falls. A body harness worn by the worker can also be used to tether him/her to an area away from the fall hazard.



- Fall arrest equipment is designed to save the worker if he/she falls. He/she may wear Personal Protective Equipment consisting of a body harness and lanyard attached to a lifeline or an anchor point; or a net slung below the work area may protect him/her.

Fall Restraint:

Fall Restraint includes such items as a guardrail or parapet wall. It can also consist of a personal fall restraint system which keeps you from reaching an unprotected “fall” point. Guardrails (on scaffolds, aerial lifts, and on the perimeter of buildings) are considered to be a Fall Restraint type of fall protection

Fall Arrest:

Fall Arrest STOPS you if you’re falling. If you are at risk for falling 6 feet or more, you must use appropriate fall protection equipment. One type of appropriate fall protection equipment is the personal fall arrest system. The entire personal fall arrest system must be capable of withstanding the tremendous impact forces involved in a fall. A person without protection will free fall 4 feet in ½ second and 16 feet in 1 second!

A personal fall arrest system includes a full body harness, a shock absorbing lanyard or a rope grab and vertical lifeline, and a sound anchorage able to support a load of 5000 pounds.

DO

- Pick an anchorage point that will support 5000 lbs. per worker (strong enough to support a pickup truck).
- Fall arrest systems should be rigged so employees can't free fall more than 6 feet (or contact any lower level).
- Tie off above your head. A six foot person who ties off at the feet could free-fall as much as 12 feet.
- Place your anchorage directly above/behind your work area to avoid potential swing fall hazards.
- Use the shortest lanyard possible. The shorter the tie-off, the shorter the fall.
- Have anchorage points selected by a competent person.

DON'T

- Do not tie off to vent pipes or a non-structured, non-designated area.
- Do not tie a knot in a lanyard. This will reduce its strength.
- Do not use water pipes, electrical conduits, light fixtures, or guardrails as anchor points.
- Do not use any lanyards without self-locking snap hooks.
- Do not join multiple lanyards together to reach an anchorage.
- Do not allow more than one worker to tie-off to the same anchorage unless it is designed and approved by an engineer.
- Do not unhook from fall protection while exposed to a fall greater than 6 feet.
- Do not allow someone else to rig your equipment unless you verify that it has been done correctly.
- Do not use an anchorage that is not independent of any anchorage used to support or suspend platforms.

Working safely may get old...but so do those who practice it!!

