Fall Protection Basics

Did you know?

- Falls are the leading cause of fatalities in the construction industry.
- An average of 363 fatal falls occurred each year from 1995 to 1999, with the trend on the increase.
- In 2000, 1154 construction workers died on the job, with 32.4% or 374 of them, resulting from falls.

**OSHA Regulations: Height at which fall protection is required:**

- Construction Standard 1926.501 – 503 (Subpart M): 6 feet height
- Steel Erection Standard 1926.750: 15 feet height

Common Fall Protection Systems:

1. Passive Guarding
2. Fall Restraint
3. Fall Arrest

Fall Arrest System Requirements:

- Each component must support 5000 lbs load per worker
- Free falls must be limited to 6 feet
- Only double-action snap hooks are permitted
- All falls require shock absorbing lanyards
- Maximum permitting force on a fall victim is 1800 lbs. Most shock absorbing lanyards & self-retracting lifelines lower the load below 1000 lbs.
- Body belts for fall arrest are prohibited

Fall Arrest Components

- **Anchorage** – A secure means of attachment to which the personal fall arrest system is connected.
- **Body Support** – Harness designed to support the worker where a fall hazard exists or a worker has fallen.

Connecting Device – Attach the harness to the anchorage (lanyard, Rope Grab, SRL).
The Do’s and Don’ts of Fall Protection

The Anchor Point
(The Most Important Component)

- Pick an anchorage that will support 5000 lbs per worker.
- Always attempt to tie off above your head. A six foot person who ties off at the feet could free-fall as much as 12 feet.
- Always attempt to place your anchorage directly above your work area to avoid potential swing fall hazards.
- Always use the shortest lanyard possible. The shorter the tie-off, the shorter the fall.
- Don’t use water pipes, electrical conduits, light fixtures or guardrails as anchor points.
- Avoid connecting anchor straps and wrapping lanyards around sharp beams which could cut them during extreme loads.

The Connecting Device

- Never tie a knot in lanyard. This will reduce it’s strength.
- Always maintain 100% tie-off!
- Attach lanyards to the back D-Ring only for fall arrest.
- When using shock absorbing lanyards, attach the energy absorber end to the back D-Ring.
- Rope lanyards may be attached to side “D-Ring” for positioning only.
- Use only lanyards with double-action snap hooks.

The Body Support

- Full body harness should be snug but not binding.
- A harness is not completely donned until the chest strap and leg straps are fastened and properly adjusted.
- The chest strap should be in your mid-chest area.
- Do not punch holes in the harness to increase the size.
- Body belts must only be used for positioning or restraint, never for fall arrest!
- The back “Dorsal” D-Ring must be used for fall arrest.
- Side and front D-Rings are for positioning only!