

ELECTRIC TRANSMISSION AND DISTRIBUTION WORK - FALL PROTECTION REGULATIONS



One-third of the fatalities in the construction industry and the fourth leading cause of fatalities in all industries can be attributed to falls. In an effort to prevent falls, the Occupational Safety and Health Administration (OSHA) established rules for fall protection. These rules are specific to the work performed and surface upon which you are working.

Whenever you are performing line maintenance work, you must abide by the OSHA Standard 1910.269. If the work is construction, it is OSHA Standard 1926.951. These regulations were updated to make them consistent with each other. Both regulations, basically, require 100% fall protection when climbing poles, towers, or similar structures. Whether a qualified climber or trainee, protection must be used when elevated more than four feet above the ground. In other areas Subpart M applies or equipment specific regulations apply.

For example, on loading docks or on electric equipment, such as transformers and capacitors Subpart M requires fall protection at 6 feet. The scaffolding regulations call for fall protection at 10 feet on that surface. In either case, fall protection can be accomplished through guardrails, safety nets or a personal fall protection. The type selected may be dictated by that environment, but, engineering controls (i.e. eliminating the hazard through means such as guardrails) must be used first if possible. Fall protection for ladders is associated with the proper use. This means setting it up properly and maintaining three-point contact when in use.

When personal fall protection is used, regardless of the surface, OSHA mandates certain general specifications. This begins with classifying the equipment as Work Positioning Equipment (WPE) and Personal Fall Arrest Systems (PFAS) or Fall Protection Equipment (FPE). WPE must limit free fall to 2 feet. Body belts and pole climbing equipment are common forms of WPE. PFAS are your body harness and lanyard. These systems must limit free fall to 6 feet and keep the arresting force to 900 pounds or less. Again, this is true whether these devices are used while working on poles, lattice towers, rooftops or other location.

However, there are some unique fall protection considerations associated with this equipment when performing electric transmission and distribution work. In addition to meeting the force requirements for strength and arrest, they must withstand the hazards associated with electricity. Work positioning straps must be capable of withstanding a dielectric test of 819.7 volts, AC, per centimeter (25,000 volts per foot) for 3 minutes without visible deterioration and a leakage test of 98.4 volts, AC, per centimeter (3,000 volts per foot) with a leakage current of no more than 1 mA. Personal fall arrest equipment must be capable of passing a drop test after being exposed to hazards from flames or electric arcs. The OSHA standard offers parameters that are more specific, but equipment meeting American Society of Testing and Materials *Standard Specifications for Personal Climbing Equipment*, ASTM F887-12 is acceptable.

To ensure your equipment meets the appropriate regulations:

- Be trained in the selection and safe use of the equipment/system.
- Identify the tasks to be performed,
- Conduct Fall Hazard Analysis (FHA)
- Inspect and use equipment in accordance with the OSHA regulations and manufacturer's instructions.

DISCUSSION QUESTION

What is the difference between WPE and FPE?

SAFETY TALK ATTENDANCE ROSTER



COMPANY: _____ JOB/DEPT: _____

DATE: ___/___/____ TIME: _____

TOPICS ADDRESSED: _____

EMPLOYEE'S SIGNATURES:

_____	_____	_____
_____	_____	_____
_____	_____	_____
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EMPLOYEE SUGGESTIONS AND RECOMMENDATIONS: _____

ACTION TAKEN: _____

Supervisor's Signature

___/___/___
Date

Safety Coordinator's Signature

___/___/___
Date