



eSafetyLine

Personal Fall Arrest Systems

Fall Protection

OSHA requires at least one type of fall protection for workers that are exposed to a fall of 6 feet or more. There are three options to choose from:

- Guardrail Systems
- Safety Net Systems
- Personal Fall Arrest Systems

This talk will deal with Personal Fall Arrest System or PFAS. According to OSHA a PFAS is a "system used to arrest (stop) an employee in a fall from a working level. This system is a passive protection system and only begins working when a fall occurs, quite similar to how a seatbelt restrains the wearer only when a crash occurs.

A PFAS will typically consist of three basic parts. First there must be a fall-arrest anchorage. This is used for the attachment of the PFAS and must be unrelated to any other anchorage being used to support or suspend platforms being used at the jobsite. The point of anchorage must be capable of supporting a minimum of 5,000 pounds for every worker attached to that anchorage site. In other words, if there are 3 workers attached to the same anchorage site it must be able to support at least 15,000 pounds. The next component of the system is a full-body harness that is designed to spread the force of a fall over the thighs, hips, waist and shoulders of the wearer. This is slightly different than previous requirements; as of 1 January 1998 body belts were no longer acceptable as part of a PFAS.

The body belt had a built in danger of causing internal injuries when stopping a fall. The webbing of the harness must be made from synthetic fibers that have a minimal chance of fraying. Any body harness used must be equipped with a connector at the center of the wearer's back, near shoulder level for attaching a fall-arrest connecting device. The connector, which can be a D-ring or O-ring, must have smooth surfaces and edges to prevent damage to the other parts of the system.

The last piece of the PFAS is a fall-arrest connecting device such as a lanyard, deceleration device, lifeline or any combination of these equipped with locking snap-hooks. When using lanyards or lifelines they must have a minimum breaking strength of 5,000 pounds and be protected against being cut or worn. Each employee working in the area needs to be attached to a separate lifeline. A few important suggestions for the safe use of a PFAS from OSHA include:

- A PFAS should be rigged so that an employee can neither free fall more than 6 feet or come in contact with any lower level.
- A PFAS needs to bring an employee to a complete stop and limit the deceleration distance to 3 ½ feet.
- The entire PFAS must be inspected before each use for wear or damage and any defective components removed from service.
- Never attach a PFAS to a guardrail system.

Discussion Questions

What are the main components of a PFAS?

Are body belts an accepted part of a PFAS?

MEETING / TRAINING ATTENDANCE ROSTER

COMPANY: _____

_____ SAFETY MEETING

JOB/DEPT: _____

_____ SAFETY TRAINING

DATE: ___/___/_____

TIME: _____

TOPICS ADDRESSED: _____

EMPLOYEE'S SIGNATURES

_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

EMPLOYEE SUGGESTIONS AND RECOMMENDATIONS: _____

ACTION TAKEN: _____

Supervisor's Signature

_____/_____/_____
Date

Safety Coordinator's Signature

_____/_____/_____
Date