THE ABC'S OF PERSONAL FALL ARREST SYSTEMS (PFAS)

SAFETY TIP Sheet

Chesapeake Employers Insurance
Your workers' compensation specialist

Individually, these components will not provide protection from a fall. However, when used properly and in conjunction with each other, they form a Personal Fall Arrest System that becomes vitally important for safety on the jobsite.

Employers may require their workers to use a Personal Fall Arrest System (PFAS) when they are working on a supported scaffold or when they are working in a bucket truck, aerial lift, or at an elevation. There are three major components of a Personal Fall Arrest System (PFAS):
A - Anchorage
B - Body harness
C - Connecting device

Anchorage

An anchorage is more commonly referred to as a tie-off point (example: I-beam). An anchorage connector is used to join the connecting device to the anchorage (example: cross-arm strap). An anchorage must be independent of any anchorage used to support or suspend platforms, and it must be able to support at least 5,000 lbs. per worker attached to it.

Body harness

The body harness is the personal protective equipment worn by the worker. For all situations in which workers could actually fall, workers need to wear a full-body harness. The attachment location of the body harness must be in the center of the back, near the shoulder level. D-rings and snap hooks must have a minimum tensile [load] strength of 5,000 lbs. Snap hooks must be a locking-type (they are generally double-locking) and designed to prevent the snap hook from opening and slipping off the connector. Snap hooks cannot be directly connected to webbing, rope or wire, to each other, to a D-ring to which another snap hook or other connector is attached, to a horizontal lifeline, or to any other object that could cause the snap hook to open.

Connecting device

The connecting device is the critical link which joins the body harness to the anchorage/anchorage connector (example: shock-absorbing lanyard or retractable lifeline). A lanyard could also include a deceleration device. Make sure to use components from the same manufacturer to ensure that the system works as it should. If not, any substitution or changes must be evaluated or tested by a competent person to ensure that it meets the standard. Connectors must be made from steel or equivalent materials, with a corrosion-resistant finish, and the edges must be smooth. Vertical lifelines or lanyards must have a minimum breaking strength of 5,000 lbs., and be protected against cuts and abrasions. The webbing must be made of synthetic fibers.

Additionally, you, yhe employer, must designate a competent person to monitor the safety of other employees and ensure that PFAS are inspected prior to use for wear, damage, and defects. If there are defects in the equipment, or if someone has taken a fall, the PFAS must be removed and replaced. See OSHA Standard 1926.502(d) – Personal Fall Arrest Systems in Construction https://www.osha.gov/laws-regs/regulations/standardnuber/1926/1926.502.
For more information on PFAS, see https://www.osha.gov/SLTC/fallprotection/construction.html.

Source: Construction Safety & Health Fall Hazards, Central New York COSH, 2007, OSHA grant product. Adapted with permission.

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