PFAS SAFETY: Personal Fall Arrest Systems
For Residential Construction Contractors

When is fall protection required for residential construction workers?
Fall protection must be provided to any employee working at a height of 6 feet or more above a lower level. The best fall protection is a passive system because it does not require active participation from the worker: these include guard rail systems and safety nets. But sometimes active fall protection is needed, such as a personal fall arrest system (PFAS).

What is a PFAS?
A PFAS (personal fall arrest system) consists of three major components:
• a full-body harness;
• a shock-absorbing lanyard or retractable lifeline;
• secure anchors.

When used according to the manufacturer’s instructions a PFAS can save a life should a fall occur, by stopping the worker from striking the surface below.

Despite the components, a PFAS is inexpensive and easy to use. Personal fall arrest systems cost around $150.

A PFAS must always be used with oversight from a competent person, and should be part of a fall protection program.

When is a PFAS required for residential construction workers?
A PFAS is required in any situation in which a worker
• is exposed to a vertical drop of 6 feet or more to a lower level; and
• cannot be protected by other fall protection, such as guardrails.

For example: A PFAS is required for construction workers performing roof work, work from aerial lifts, or any height work in which they cannot be protected by some other fall protection.

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The ABC's of PFAS
A PFAS must meet specific requirements. Some of these are described below. ***

A – Anchor Point
The anchor point (tie-off point) is a secure point of attachment for the fall arrest system’s lanyard or lifeline.
• Anchor point locations should be planned out before work begins.
• The anchor point should be attached to a substantial structural member, such as a beam, girder, roof truss or rafter.
• The anchor point must support either 5,000 pounds per worker (the weight of two small cars) or twice the intended load.
• When installing anchor points, follow the manufacturer’s instructions.

B – Body Harness
A full-body harness is required for a PFAS. The body harness distributes the force of a fall to reduce the chance of bodily injury. It includes shoulder and thigh straps, and a D-ring.
• Body belts should never be part of a PFAS.
• Make sure that D-rings are larger than the snap hook.

Note: The connecting D-ring in a properly fitted harness should be located in the center of the upper back.

C – Connecting Device
A retractable lifeline or shock-absorbing lanyard and its connectors are used to link a full-body harness to the anchor system.
• Never hook lanyards together unless manufacturer approved.
• Shock-absorbing lanyards and retractable lifelines are rarely compatible—do not connect.

Different types of connectors include carabiners, snap hooks, D-rings, and rope grabs. Connectors must have a minimum tensile strength of 5,000 pounds.

D – Descent & Rescue
You must have a plan for rescuing a worker whose fall has been arrested.
• The plan should be designed to raise or lower a worker to safety without any possibility of a free fall.
• The plan should be reviewed on a routine basis.

Training
All workers should be trained by a competent person on how to correctly use a PFAS.

A competent person, by way of training or experience, is well-informed of relevant standards, able to identify workplace hazards relating to the specific job, and has the authority to promptly correct any hazards to workers.

Inspection & Maintenance
Inspect a PFAS prior to each use for damage or other deterioration. If damage is found on any component, immediately remove the item from service and destroy it, or have it repaired by an authorized service center.

Equipment should be stored in a cool, clean, dry place out of direct sunlight.

*** This brochure highlights key points. Consult the OSHA standard 29 CFR 1926.502(d) for a complete list of PFAS requirements.