**Quick Tips for the Personal Fall Arrest Systems (PFAS) Attachment B**

**Personal Fall Arrest Systems (PFAS)**

Personal Fall Arrest Systems (PFAS) are designed to protect workers that suffer a fall. PFAS employ the use of a full-body harness, a connecting lanyard, and a suitable anchor point.

* All fall protection equipment must meet applicable ANSI and OSHA standards.
* The anchor point must be capable of supporting at least 5000 lbs. for each employee attached.
* Rig the fall arrest system such that an employee can neither free fall more than 6 feet, nor contact any lower level.
* The anchor point should be overhead and as close as possible to reduce fall arresting forces in the event a fall should occur.
* Avoid anchor points where a fall may result in a pendulum motion that could cause serious injury.
* Inspect all fall protection equipment before use and use per the manufacturer instructions.

**Harnesses**

Obtaining the correct fit of a harness is vitally important. A harness that doesn’t fit properly, or is worn improperly, is less likely to be used.

* Inspect harnesses before each use. Conduct and document an annual inspection.
* The following should be considered when using and maintaining harnesses:
  + Properly store harnesses in a location that is free from moisture and away from extreme temperatures. It is recommended that harnesses be stored by hanging or laying flat or neatly folded.
  + Most harnesses are rated for users that are between 130 and 310 pounds. Some employees may require specialty harnesses outside of this range. Check with manufacture for further recommendations and/or specialty harness for weight, electrical and environmental hazards.
  + Fall protection harnesses have a usable service life.  Refer to harness manufacturer for end of service life.  In the event of a fall, harness must be taken out of service.

**Lanyards, ropes, and deceleration devices**

Self-retracting lanyards (SRL) are available in a variety of configurations: single and double legged made of cable, synthetic webbing, or rope. Whenever possible, SRL should be used with the anchor point overhead. In the event an overhead anchor is not possible, then an SRL can still be used but extra care must be taken to ensure adequate room is available for swing fall. Additionally, it is important that the user is aware of different SRL classifications as follows:

* Standard SRL – best used for situations where the free fall is two feet or less and there are no obstructions and the anchor is overhead.
* SRL – R – This SRL has ‘rescue’ capabilities where the user can activate a mechanism that can slowly lower them to the ground.
* SRL – LE – These SRLs are designed to be used on leading edges or whenever the anchor is at foot level. These devices can resist cutting if falling over a sharp edge.

**Additionally, SRLs are in two classes:**

* Class A – allow for a maximum of 24” deceleration distance and average arresting force of 1350 pounds.
* Class B – allow for maximum of 54” deceleration distance and average arresting force of 900 pounds.

If not using an SRL, then an energy/shock absorbing lanyard MUST be used. These lanyards are typically six feet in length and the energy/shock absorber is 3.5 feet in length. It is critical that the user understands how far they will fall using an energy/shock absorbing lanyard. Typically, the user needs 17.5’ – 18.5 feet of clearance, measured from their anchor point by the competent person.

**Anchor points**

Anchors must be capable of supporting 5,000 pounds per person or 2 times the intended load as determined by a Qualified Person. The user should always try to anchor at chest height or higher.  If the anchorage is located overhead, try to keep it directly overhead to prevent a swing fall.

**Designated Areas using Warning Lines**

Employers may establish designated areas which comply with the provisions of this paragraph as an alternative to installing guardrails, where the Competent Person demonstrates that employees within the designated areas are not exposed to fall hazards. In addition, the following conditions and requirements must be met in order to use designated areas in lieu of other fall protection measures:

* The work must be of a temporary nature, such as maintenance on roof top equipment.
* The designated area, or any other area where warning lines are used, shall consist of rope, wire, or chain and supporting stanchions erected in accordance with the following criteria:

**1) Strength**

* c) After being erected with the line (such as rope, wire or chain) attached, stanchions shall be capable of resisting, without tipping over, a force of at least 16 pounds applied horizontally against the stanchion. The force shall be applied 30 inches above the work surface and perpendicular to the designated area perimeter, and in the direction of the unprotected side or edge;
* d) The line shall have a minimum breaking or tensile strength of 200 pounds, and after being attached to the stanchions, shall be capable of supporting the loads applied without breaking; and
* e) The line shall be attached at each stanchion in such a way that pulling on one section of the line between stanchions will not result in slack being taken up in adjacent sections before the stanchion tips over.

**2) Height**

* f) The line shall be installed so at its lowest point, including sag, is not less than 34 inches and not more than 39 inches above the walking-working surface

**3) Visibility**

* g) Is clearly visible from 25 feet away, and anywhere within the designated area

**4) Location**

* h) Shall be erected as close to the work area as the task permits
* Shall be erected not less than 6 feet from the roof edge for work that is both temporary and infrequent, or not less than 15 feet for other work.
* j) Access to the designated area shall be by a clear path, formed by two lines, attached to stanchions, which meet the strength, height and visibility requirements of [1910.29(D).](https://www.osha.gov/laws-regs/regulations/standardnumber/1910/1910.29)