

Selecting and Implementing a Fall Protection System for Aerial Work Platforms

This document was created to assist in understanding your responsibilities when selecting a fall protection system.

Aerial Work Platform (AWP) equipment has a primary fall protection system, the guardrails which surround the platform. Where necessary, secondary fall protection systems may be required by the manufacturer. Some secondary fall protection systems are now mandatory (e.g. restraining harness and lanyard on boom lifts).

OSHA regulation 1926.502(d)(16)(iii) requires that anchorages ‘*be rigged such that an employee can neither free fall more than 6 feet, nor contact any lower level*’.

Additional fall protection measures, i.e. over and above mandatory requirements, must be assessed and selected by a ‘qualified’ person. Hazards should be identified, and appropriate fall protection equipment should be selected, with the proviso that OSHA regulations shall establish the *minimum* level of protection.

Implementation of a fall protection system has two components:

1. Identification of hazards and selection of appropriate fall protection measures
2. Implementation of the fall protection measures

Appropriate fall protection measures should take into account the following:

- Primary fall protection systems (e.g. guardrails) should be properly installed. Fall arrest should never be used to replace a poorly installed or partially installed primary system.
- ‘Fall restraint’ should be the primary objective over ‘fall arrest.’
- Fall hazards should be identified by a qualified person and all identified fall hazards shall be abated.

Fall protection measures should be assessed by a qualified person and should take into account jobsite/task specific hazards, identification of the associated risk, and stipulate adequate control measures. The table below provides examples of this process:

HAZARD	RISK	CONTROL MEASURE
Boom lift struck by other vehicle	Ejection from platform	Restrict work area around base
Climbing on platform mid-rail	Loss of balance causing fall	Training and fall restraint
Over-reaching	Loss of balance causing fall	Training and fall restraint
Uneven ground	Ejection from platform	Training and fall restraint

NOTE: This is not an all-inclusive list, rather it is an example assessment list demonstrating the analysis requirements of job-specific hazard assessment to be carried out by a qualified person

Questions to ask in selecting an appropriate fall protection system:

- Did you perform a risk/hazard assessment?
- Are you qualified to perform a risk/hazard assessment?
- Have you assessed the attachment locations?
- What is the rescue plan?
- Have you determined free fall distance and total fall distance?
- Are there any additional manufacturer's requirements or limitations?
- How do you avoid swing falls?
- Will there be a change in circumstances which could prompt a review?

Implementation of fall protection measures should take into account the following:

- What is the fall distance from the anchorage to the next lower level?
- Who is exposed to the hazard?
- Is there sufficient anchorage available for all personnel who are exposed?
- Is the maximum arresting force per person 1,800 lbs or less?
- Will the system bring a falling employee to a complete stop and limit maximum deceleration travel to 3-1/2'?
- How will the operator/occupant be promptly rescued if suspended in a personal fall arrest system?
- Is there someone at ground level who can assist in the rescue (e.g. someone who has been training in how to bring the machine safely to the ground using either the ground controls or the manual descent system)?
- Has the operator/occupant been trained in self rescue techniques and does he or she have the necessary equipment available for self rescue?
- Has the operator been trained in the proper use and inspection of fall protection equipment?
- Are there circumstances which may prompt a review of the fall protection system?

Through the OSHA and Scaffold & Access Industry Association (SAIA) Alliance, SAIA developed this Tip Sheet for informational purposes only. It does not necessarily reflect the official views of OSHA or the U.S. Department of Labor. August 2013.