



# Protocol #16

## Elevating Work Platforms

### DGS Accident and Illness Prevention Program (AIPP)



## **A. Policy Statement**

The following protocol covering the use of elevating work platforms is official policy for the PA Department of General Services (DGS) and all its employees. Authority and responsibility for its execution are pursuant to the DGS Secretary's "[Safety Program Policy Statement](#)," [PA Management Directive 530.31 Workplace Safety and Health Program, PA Code Title 34 Chapter 129](#) and "[Element C](#)" of the DGS Accident and Illness Prevention Program (AIPP).

This policy includes material that applies directly to DGS operations. It is based on resources kept on file by the DGS Safety Coordinator, including material from the Occupational Safety and Health Administration (OSHA), the National Safety Council and other credible safety resources. This policy shall be considered together with DGS Protocol #11 – Preoperational Process Review since many instances of elevated work involve new or altered processes.

## **B. Application and Purpose**

This protocol applies to any situation in which an employee is elevated or supported by any platform or other means more than four feet above a floor or other permanent approved surface. This includes the use of scissor lifts, man lifts, articulating lifts and any other machine or device that elevates workers.

Elevated work operations using elevating work platforms requires the use of fall restraint or fall arrest equipment. [P-19 \(Fall Hazard Prevention & Control\)](#) and P-29 Scaffolding should also be consulted. This protocol excludes ladder use; refer to P-31 for use of ladders.

The purpose of this protocol is to protect DGS employees from injury at those times when they must be elevated or supported by any platform or other means more than four feet above a floor or other permanent approved surface. In addition to following the guidelines included here, employees should be familiar with and observe the fundamentals outlined in all applicable elements and protocols within the DGS AIPP since many operations they cover may occur in conjunction with elevated work.

## **C. Definitions**

**Breaking strength** – the load-weight at which a specific material or object will destabilize, deform or break.



**Competent person** – someone designated by management as capable of identifying existing and predictable hazards in the surroundings or working conditions which are unsanitary, hazardous or dangerous to employees and who has authorization to take prompt corrective measures to eliminate them, including stopping work until corrective measures are completed.

**Elevating work platforms** – platforms that raise and lower a worker or workers to or from a work site.

**Elevated work operations** – any work that involves workers being four feet or more above a floor or other permanent approved surface.

**Fall arrest equipment** – equipment that stops a fall after it has happened, including body harnesses, lanyards, and related equipment.

**Fall restraint equipment** – equipment that prevents employees from reaching places from which they could fall, including guardrails, body-belts, harnesses, lanyards, and related equipment.

**Load** – the total superimposed weight on the elevated work platform.

**Permanent approved surface** – floors and other surfaces that workers and others usually walk or stand on that are properly protected from elevation changes, openings, defects and other obstacles (refer to [P-31, Walking, Working Surfaces.](#))

**Personal protective equipment (PPE)** – specialized clothing or equipment worn by an employee for protection against a hazard.

**Safe working load** – the maximum allowable working load established by the manufacturer of any piece of equipment or accessory used in the process of raising a worker above a floor or other permanent approved surface.

**Safety zone** – an area established on a case-by-case basis surrounding a work area to prevent incidental entry by persons not involved in the work.

**Side loading/side pulling** – the application of horizontal forces on an elevating work platform's boom, usually occurring when a lift is commenced while the load is not directly beneath its connection to a platform, but can also result from operating a machine while off-level (note: only those machines approved for such use in writing by the manufacturer or an engineer may be used to lift loads other than workers.)



**Suitable equipment** – machinery, platforms and any other equipment used to raise or support a worker that have passed pre-job inspection, are within any applicable expiration date (including periodic preventive maintenance due dates) and are rated in writing by their manufacturer or an engineer for the functions they will be used to perform.

**Work area** – an area encompassing the job site and the areas where employees will need to maneuver to complete the work.

## **D. Requirements**

1. Pre-operational planning according to DGS [AIPP protocol P-11](#) shall be conducted before any new, unique or potentially hazardous elevated work operations begin. The competent person who will be present during elevated work shall participate in the pre-operational planning, which will include fall protection planning.
2. Elevating work platforms shall not be used as hoists, anchors for hoists or other lifting devices unless approved for such uses in writing by the manufacturer or an engineer.
3. All platforms and their associated supports and equipment will meet the definition of suitable equipment and be operated within specific safe working load limitations or breaking strength. To prevent the failure of elevating work platforms, the load limits, wind speed if operated outdoors and other instructions in manufacturers' operating manuals shall be obeyed at all times.
4. Elevating work platforms are designed to operate on stable, level surfaces and lift loads vertically before moving them horizontally. Off-level operations and side loading must be avoided because they place horizontal forces on machinery that can result in catastrophic failure.
5. Managers or supervisors in charge of the use of elevating work platforms shall make sure that the following information is available during pre-operational planning and elevated work operations for each piece of equipment to be used:
  - a. Manufacturer's operating manual, instruction manual, and/or other documents needed to allow for safe and proper operation.
  - b. Load-bearing capacity rating of all machinery, equipment and rigging.
  - c. Inspection requirements and records.
  - d. Up-to-date certificates for any equipment requiring them.



7. If the approved plan does not adequately minimize or eliminate hazards, the competent person must stop the work and a new plan of action must be developed. Management will consult with the Fire, Safety and Environmental Division if they need help devising a safe plan.
8. Under no circumstances may a person be underneath a raised platform or any portion of any machine that raises a platform or within the descent path of any moving machinery or object.
9. Only employees trained and necessary for elevated work operations may be present within the safety zone and their presence must be carefully controlled by the competent person in-charge. The competent person in-charge shall direct employees to leave the safety zone as soon as their presence is no longer necessary or if risk levels rise to an unacceptable level. The safety zone boundaries are to be established on a case-by-case basis by the competent person in-charge based upon the characteristics of the job.
10. All employees involved in elevated work operations will wear DGS-provided PPE including hardhats, gloves and safety glasses while working or being in the vicinity prior to the job's conclusion.
11. Fall restraint or fall arrest equipment and procedures shall be used in every instance where an employee is in the basket of a lift other than a scissor lift that encloses the basket occupant on all sides with guardrails:
  - a. Body belt with a tether attached to the approved anchorage point in the boom or basket for fall restraint, or
  - b. Body harness with a tether attached to the approved anchorage point for fall restraint, or
  - c. Body harness with a lanyard attached to the approved anchorage point for fall arrest, and
  - d. Occupant must always keep both feet on the floor of the basket, and
  - e. Training shall be provided for employees on the use of fall restraint/protection systems that they are expected to use.

## **E. Communication of Hazards**

1. Physical barriers, such as portable sawhorses with ropes, shall be set up to mark the safety zone at the site of any elevated work operations so that neither employees nor passersby will incidentally enter it.



2. Signs warning of hazards such as moving machinery, falling objects, etc. shall be posted along with the physical barriers cordoning off the safety zone.

## **F. Training**

1. Training sufficient to allow for the safe use of elevating work platforms shall be arranged by the manager or supervisor in charge. If a planned operation is unique, training needs should be determined by the manager or supervisor in charge during pre-operational planning and delivered prior to the job's commencement.
2. The purposes of pre-job training are to make employees aware of their role(s) in the process and to familiarize them with the proper use and limitations of the machinery, platforms, rigging and tools that they will use.
3. Training should also include the review of this protocol with each participating employee.

## **G. Recordkeeping**

1. Manufacturer's operating manuals, instruction manuals, and other materials required by this protocol and training materials shall be kept on file by the managers, supervisors and foremen responsible for elevated work operations.
2. Training records shall be kept on file by managers in charge of elevated work operations when new training or re-training is required, and a copy of the sign-in sheet shall be provided to the DGS Safety Coordinator. Completion of the attached form (Appendix A) along with a brief summary of the job in question shall constitute an acceptable training record.

