UNIVERSITY OF GEORGIA
Facilities Management Division

# Fall Protection Program

## Program Description

The purpose of the fall protection program is to specify procedures and training for the safety of UGA employees while working on elevated surfaces and ladders. The University employees who work at heights of six (6) feet or greater are required to attend regular training on fall protection. Additionally, employees working on aerial platforms, scissors lifts or other elevated platform equipment must receive training and certification on the use of such equipment.

## Scope

All University employees that perform duties on an elevated work surface where there is a fall hazard of 6 feet or more to a lower level must follow the guidelines in this Fall Protection Program. Employees will not be allowed to perform any duties which require the employee to get closer than 6 feet to an unprotected edge, platform, walkway, or utilize elevated equipment unless the employee is using proper fall protection.

Additionally, this program applies to all employees in order to minimize slips, trips and falls on the same elevation or level surfaces. All employees should eliminate fall hazards in their work area by maintaining good housekeeping and shall report conditions that may lead to slips, trips and falls to the FMD Work Control desk (2-7456) to report conditions which need repair. Until repair can be conducted, the area should be marked with a traffic cone or barricade tape.

Contractors working on campus are required to comply with all applicable OSHA workplace safety regulations. Contractor's safety programs shall be available for review upon request by representatives of UGA.

## Definitions

**Aerial lift device:** Equipment such as aerial ladders, powered platforms, vehicle-mounted elevated and rotating work platforms, extensible boom platforms, articulating boom platforms, vertical towers and powered industrial truck platforms.

**Anchor point:** A secure point of attachment for lifelines, lanyards or deceleration devices.

**Body harness (Full-body harness):** An ANSI approved device used to secure a person in a manner that distributes the fall arrest forces over at least the thighs, pelvis, waist, chest, and shoulders with a means for attaching the harness to other components of a personal fall arrest system.

**Deceleration device:** An ANSI approved mechanism, such as a rope, grabbing device, rip stitch lanyard, specially woven lanyard or automatic self-retracting lifeline/lanyard, which serves to dissipate a substantial amount of energy during a fall arrest, or otherwise limits the energy imposed on an employee during fall arrest.

**Deceleration distance:** The distance a falling person travels, excluding lifeline elongation and free fall distance, before stopping, from the point at which a deceleration device begins to operate.

**Designated area:** A space which has a structurally sound perimeter barrier erected to warn employees when they approach an unprotected side or edge.

**Fixed ladder:** A ladder, including an individual rung ladder, which is permanently attached to a structure.

**Guardrail:** A barrier at least 42 inches high, with a mid rail and toe board, which is erected to prevent personnel from falling from working levels more than 30 inches above the floor, ground, or other working areas of a building.

**Hole:** A void or gap in a walking surface that is 2 inches or more in its least dimension in a floor, roof, or other walking/working surface.

**Ladder:** A device typically used to gain access to a different elevation levels consisting of two or more structural members crossed by rungs, steps, or cleats.

**Lanyard:** An ANSI approved rope or strap that generally has a connector at each end for connecting the body harness to a deceleration device, lifeline or anchor point.

**Lifeline:** An ANSI approved flexible line for connection to an anchorage at one end to hang vertically, or for connection to anchorages at both ends to stretch horizontally. This serves as a means for connecting other components of a personal fall arrest system to the anchorage.

**Low Slope Roof:** A roof having a slope of less than or equal to 4 to 12 (vertical to horizontal) or 19.5° slope or less.

**Lower Levels:** Surfaces to which an employee can fall. Such areas include, but are not limited to, ground levels, other floors, platforms, ramps, runways, excavations, pits tanks, material, water, equipment, etc.

**Opening:** Typically known as a gap or void 30 inches or more high and 18 inches or more wide in a wall or partition, through which personnel can fall to a lower level.

**Positioning device system:** A rigged body harness system that allows an employee to be supported on an elevated vertical surface such as a wall to work with both hands free.

**Personal fall arrest system:** An ANSI approved fall protection system used to arrest an employee in a fall from a working level. It consists of an anchorage, connectors, and body harness and may include a lanyard, deceleration device, lifeline, or suitable combinations of these.

**Restraint line:** An ANSI approved device, which is attached between the employee and an anchorage point to prevent the employee from walking or falling off an elevated surface.

**Roof:** Exterior, weather resistant surface on the top of a building or structure.

**Rope grab:** A rope technique that is used as a deceleration device that travels on a lifeline and automatically, by friction, engages the lifeline and locks to arrest a fall.

**Scaffold:** A temporary, elevated or suspended platform used for supporting employees, materials or both.

**Self-retracting lifeline/lanyard:** An ANSI approved deceleration device containing a drum-wound line which can be slowly extracted from, or retracted onto, the drum under minimal tension during normal movement and which, after onset of a fall, automatically locks the drum and arrests the fall (usually within two feet or less).

**Standard railing:** A vertical barrier erected in accordance to ASHA Standard which is constructed along exposed edges of a floor opening, wall opening, ramp, platform, or runway to prevent falls.

**Locking snap hook:** A hook-shaped connector with a normally closed keeper, or similar arrangement, which may be opened to permit the hook to receive an object and, when released automatically closes to retain the object. *Only locking snap hooks are permitted at UGA.*

**Toe board:** The vertical barrier along the floor edge that prevents material and equipment from falling to lower levels.

**Tie-Off:** Connecting the worker, via fall protection, directly or indirectly to an anchorage point.

**Unprotected sides and edges:** Any side or edge of a working surface (floor, roof, ramp, or runway) where there is no wall or guardrail system in place that meets the 42-inch height requirement.

**Walking/working surface:** Any surface, whether horizontal or vertical, on which an employee walks or works including, but not limited to floors, roofs, ramps, bridges, catwalks or runways.

## Responsibilities

*Managers and Supervisors*

- Responsible for all requirements listed in the written program for fall protection are met
- Ensure new and existing employees receive fall protection training as applicable to their job duties
- Oversight of the program requirements
- Conducting periodic visits to elevated work locations to inspect equipment and to observe employees' procedures while working at elevated levels
- Responsible for arranging for required training of university employees in fall protection

*University Employees*

- Employees whose duties involve work activities at elevated locations are required to comply with the accepted safety practices outlined within this written program

## Program Components

The following work hazards are covered by the program for fall protection:

- **Ladders** - fixed, free standing, temporary, or roll away
- **Elevating Personal Platforms** – scaffolds, aerial platforms, scissors lifts, forklift-mounted platforms, cherry pickers, etc.
- **Elevated Surfaces** – roofs (closer than 6 feet to the edge), catwalks, skylights, boilers, chillers, etc.
- **Vertical Opening** - ground level entry into excavations, trenches, holes, pits, vessels, and other confined spaces.

Fall protection is required whenever work is performed in an area 6 feet above its surroundings. The use of fall protection systems includes:

- **Guardrails** – Safety compliant guardrails for fall protection consist of a top rail, located 42 inches above the floor, and a mid-rail. Screens or mesh may be used to replace the mid-rail, so long as they extend from the top rail to the floor.
- **Personal Fall Arresting Systems** - A personal fall arrest system includes a body harness, lanyard, lifeline, connector, and an anchorage point capable of supporting at least 5000 pounds. The system must include the weight of the worker and the maximum amount of equipment/tools in use.
- **Positioning Device Systems** - A body belt or harness rigged to allow work on a vertical surface, such as a wall, with both hands free.
- **Warning Line Systems** - Lines or ropes installed around a work area on a roof which act as a barrier to prevent those working on the roof from approaching it edges. Plastic "Caution" barricade tape should be used for temporary projects, and a more solid barricade such as a wood guardrail for ongoing work.
- **Covers** - Covers are used over holes in the working surface to prevent falls. The covers should be of adequate strength to withstand the potential workload.

*Where it can be clearly demonstrated that the use of these systems is infeasible or creates a greater hazard, alternative fall protection measures must be implemented.*

The following information is to be used as guidelines for University employees using specific equipment:

- Employees who work on ladders with a working height of 6 feet or more must have instruction on:
  - How to inspect ladders for visible defects and unsafe conditions
  - How to use ladders properly to eliminate unsafe practices
- Employees who use personal fall arresting systems to control fall hazards in their work area must have instruction on the following:
  - The working limits of the equipment
  - The proper hook-up, anchoring and tie-off techniques which will include the methods for determination of elongation and deceleration distance
  - Methods of use, inspection, storage and replacement of equipment

Personal fall arrest components including harnesses, lanyards, wire, ropes and hooks shall be inspected prior to each use for mildew, wear, rust, damage and

other deterioration. Defective components shall be removed from service immediately.

Fall arrest systems shall be inspected at least twice each year or according to manufacturer's recommendations. The date of the most current semi-annual inspection shall be recorded on an inspection tag which shall be attached to the harness and kept in the shop file. In addition, records shall be kept and maintained showing the date of purchase, dates when attachments were replaced, and dates when the entire harness assembly was inspected and by whom.

Employees who use aerial lifts must be certified for its use and shall be knowledgeable of the following:

- The manufacturer's operating and maintenance instructions
- Pre-use inspection of the lift
- A job hazard analysis of the work area for dangerous conditions such as uneven surfaces, overhead obstructions such as power lines, heavy traffic, or other hazards
- Load capacities for the equipment
- How to safely move the equipment on irregular surfaces
- How to prevent falls and use appropriate fall protection and other personal protective equipment
- Minimum safe approach distances when working near energized power lines

Employees who work on scaffolds shall be trained on the following:

- The project electrical hazards, fall hazards, and falling object hazards in the work area
- The correct procedures for dealing with electrical hazards and for erecting, maintaining, and dissembling the fall protection systems and falling object protection systems being used during the project
- The proper use of the scaffold, and the proper handling of materials on the scaffold to prevent loss and overhead hazards to others
- The maximum intended load and the load carrying capacities of the scaffolds as designated by the scaffolding design

University employees should always be aware of guidelines to minimize slips, trips and falls on the same elevation of walking/working surfaces.

- To prevent slips, trips and falls, all work environments including passageways, storerooms, and service areas must be kept clean, orderly and in a sanitary condition
- The work area floor will be maintained in a clean and, so far as possible, dry condition

- Where wet processes are used, drainage will be maintained, and false floors, platforms, mats, or other dry standing places must be provided

**Reporting Requirements**

Constant awareness and respect for fall protection procedures and compliance with all applicable safety rules is mandatory. All FMD employees are authorized to issue warnings to employees and stop unsafe work from continuing.

Supervisors may issue warnings and implement disciplinary actions up to and including termination for failure to follow the guidelines of this program, in compliance with the UGA Guide to Progressive Discipline.

Any employees can report a safety concerns to their supervisor or the FMD Safety Coordinator without fear of personal repercussion. We must work together and be safe in our work at all times.

**Training Requirements and Competency Assessment**

University employees will not be allowed to work in areas of high fall hazards, perform work requiring fall protection devices, or use fall protection devices until he/she has attended training in fall protection. This includes all employees regardless of previous experience.

The training program must include classroom instruction and operational training on recognition of fall hazards, how to use fall protection, safe work behavior and the components of this program.

Employees must be retrained under any of the following conditions:

- Changes in the workplace which render previous training obsolete
- Changes in the types of fall protection systems or equipment to be used
- Inadequacies in an employee's knowledge of use of fall protection systems, equipment or observed behavior.