MONMOUTH UNIVERSITY
POLICIES AND PROCEDURES

Policy: Fall Protection Program

Original Issue Date: Unknown **Revision Date: January 30, 2013**

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I. INTRODUCTION

A. On occasion, Monmouth University employees may be required to perform work in areas that cannot be accessed from the ground or from solid construction. The University is dedicated to the protection and safety of its employees from on-the-job injuries. The purpose of this Fall Protection Plan is to ensure that each employee is trained and made aware of the safety provisions which are to be implemented when working on elevated surfaces such as scaffolding, ladders and/or lifts. This Plan complies with the requirements set forth in OSHA 29 CFR Subpart D, Sections 1910.21 through 1910.30.

II. SCOPE AND APPLICATION

A. This standard applies to all employees at the University who, in the performance of their responsibilities, may be required to work on walking or working surfaces with exposure to falling four (4) feet or more from an unprotected side or edge. OSHA notes that there are some activities that may be classified as either general industry or construction depending on other activities occurring at the same time or same site. When these activities are conducted as part of general maintenance work, the fall protection requirements of the general industry standards, as set forth in OSHA 29 CFR 1910, shall apply.

III. POLICY

A. Fall Protection is defined as any means used to protect workers from falls during work in areas where fall hazards exist. This plan is designed to enable University employees to recognize the fall hazards on a particular job and to establish the procedures that are to be followed in order to

prevent and control falls to lower levels or through holes or openings in walking/working surfaces. Each employee shall be trained in these procedures and be expected to strictly adhere to them, except when doing so would expose the employee to a greater hazard.

B. Safety policy and procedure on any one project cannot be administered, implemented, monitored and enforced by any one individual. The total objective of the University is to provide a safe and accident free work environment. This objective can only be met if a concerted effort is put forth by all individuals involved in the project. Each employee must understand the objective of the safety policy and procedures and what their individual role is in administering, implementing, monitoring and complying with this policy.

IV. TYPES OF SURFACE HAZARDS

A. Below is a list of common hazards that could be found throughout the University and have the potential to cause slips, trips, or falls:

1. Surface structure
    a. Surfaces made with slipper material
    b. Holes in the surface
    c. Cracks
    d. Loose boards
    e. Splintering floors
    f. Protruding fasteners (such as nails)
2. Housekeeping
    a. Ice
    b. Snow
    c. Water
    d. Chemical spills
    e. Oil
    f. Grease
    g. Debris
3. Passageways and obstructions
    a. Inadequate space for passage of both moving equipment and employees
    b. Storage of materials in walkways
    c. Physical obstructions

4. Floor loading

   a. Not adhering to load ratings of surfaces such as dock boards

V. TRAINING

A. The University shall provide a fall protection training program for University employees as soon as possible after the initial assignment. The training shall instruct employees in the designated job descriptions, who might be exposed to fall hazards, how to recognize such hazards and how to minimize them. In addition, employee training shall cover the following areas:

1. The nature of fall hazards in the work area;
2. The correct procedures for erecting, maintaining, disassembling and inspecting fall protection systems;
3. The use and operation of controlled access zones, guardrails, personal fall arrest, warning line, safety net and safety monitoring systems;
4. The role of each employee in the safety monitoring system when system is in use;
5. The limitations of mechanical equipment during the performance of certain roofing work;
6. The correct procedures for equipment and materials handling and storage and the erection of overhead protection;
7. Employee's role in fall protection plans; and
8. Emergency response procedures as outlined in the University Emergency Action Plan.

B. Employees working in the following positions will receive Fall Protection Training:

1. Facilities Management
   a. Auto Mechanics
   b. Carpenters
   c. Directors (Construction, Operations)
   d. Fire and Safety Personnel
   e. General Maintenance Mechanics
   f. Groundskeepers
   g. HVAC
   h. Plumbers

2. Information Operations

   a. Director of Multimedia Operations

   b. Multimedia Specialists

   c. Hardware Technicians

   d. Technician Supervisor

   e. Network Analysts

3. Athletics

   a. Student Videographers (who will use scissor lifts)

C. Training will consist of ladder, scaffolding, mobile elevated work platform, and scissor lifts, as required by the task performed. Supervisors will ensure that appropriate training is coordinated with the Office of Compliance and completed.

D. Refresher training is required only when the employer has reason to believe that an employee lacks the skill or understanding needed to safely erect, use or dismantle scaffolds, or when changes at the worksite present a new hazard for which the employee has not been trained, or when changes in the type of fall protection equipment, scaffolding or other equipment presents a hazard for which the employee has not been previously trained.

VI. FALL PROTECTION SYSTEMS

A. There are many situations at work that have the potential for creating fall injuries. Fall protection systems can reduce employee injuries if they are properly maintained, installed and used. Fall protection systems include:

1. Guardrail systems;
2. Handrail and stair rail systems;
3. Safety net systems; and
4. Personal fall arrest systems.

B. **Guardrail systems** are the primary means of fall protection and include top rails, midrails and toe boards. Guardrail systems must be installed along all open sides and ends of platforms and must be in place before the scaffold is released for use, with the exception of erectors and dismantlers. Guardrails must contain surfaces to prevent punctures or lacerations and snagging of clothing.

C. **Midrails**, screens, mesh, intermediate vertical members, solid panels or equivalent structural members shall be provided between the top rail of the guardrail system and the work surface. They must be able to withstand a

force of at least 150 pounds applied in any downward or horizontal direction at any point along the midrail or other member.

D. **Toe boards** shall be, at minimum, four (4) inches in height from its edge to the level of the floor, platform, runway or ramp. It shall be securely fastened in place with not more than ¼ inch clearance above the floor surface. Toe boards need to be either solid or have openings no greater than one (1) inch in diameter and shall be placed not more than ½ inch above the work surface.

E. **Handrail and stair rail systems** act as a support structure for workers in the event they lose their balance while performing work duties. Handrails are usually a single bar or pipe supported on brackets from a wall or partition, and provides a handhold in case of tripping. Stair rails are a vertical barrier erected along exposed sides of a stairway to provide a handhold in case of tripping.

F. **Safety net systems** are conventional arrest systems consisting of mesh nets including panels, connectors and other impact-absorbing components.

VII. PERSONAL PROTECTIVE EQUIPMENT/FALL ARREST SYSTEMS

A. Personal protective equipment (PPE) such as hard hats and safety glasses shall be used by scaffold workers whenever there is the potential for objects falling from a higher level. Persons working below a scaffold shall also wear the proper PPE to guard themselves from injury. Workers on scaffolds shall use one of the fall arrest systems listed below as protection against falling or malfunctioning of scaffold or its components:

1. **Full-body harness**: wraps around the waist, shoulder and legs; a "D" ring in the center of the back provides a connecting point for lanyards or other fall arrest connection devices.
2. **Lanyards**: used to both restrain workers in position and to arrest falls. When used as a restraining device, the length is kept as short as possible; fall protection lanyards can be made of steel, nylon rope or nylon and Dacron webbing; lanyards may include a built-in shock absorbing feature.
3. **Rope grabs:** a deceleration device which travels on a lifeline and the tension of the rope grab triggers the internal mechanism to arrest the fall.
4. **Lifelines**: a passive form of protection that allows workers to move along the length of the line; often used in conjunction with rope grabs.
5. **Lifeline anchorage points**: point wherein the lifeline or lanyard is attached to a structural support.

IMPORTANT NOTE

ANY EQUIPMENT EXPOSED TO A FALL MUST BE TAKEN OUT OF SERVICE AND NOT USED AGAIN FOR FALL PROTECTION

VIII. SCAFFOLDING

A. Training in connection with scaffolding is performance-based; however, there is a general overview that shall include the following:

1. Regulations and standards;
2. Erection/dismantling planning;
3. PPE and proper procedures;
4. Fall protection;
5. Materials handling;
6. Access;
7. Working platforms;
8. Foundations;
9. Guys, ties and braces; and
10. Emergency response procedures.

B. The table below details the types of fall protection needed with specific types of scaffold:

SCAFFOLDING TYPE	PERSONAL FALL PROTECTION	GUARD RAIL	GRAB ROPE
Boatswain Chair	X		
Catenary	X		
Crawling Board	X	X	X
Float	X		
Ladder Jack	X		
Needle beam	X		
Self contained	X	X	
Single point adjustable suspension	X	X	
Two point adjustable suspension	X	X	

IX. MOBILE ELEVATING WORK PLATFORM

A. Mobile elevating work platforms and powered industrial truck platforms are used to enable workers to perform tasks at high elevation.

1. The primary hazard when working with mobile elevated platforms is falling from elevation.

2. There are additional considerations such as:

   i. overloading of the platform or ladder;

   ii. debris or tools left on the platform; and

   iii. slippery, unstable or non-level work surfaces.

B. Self or manually-propelled scissor lift platforms require safety harnesses and/or fall protection equipment when elevating workers more than four (4) feet above the ground.

1. The University has a number of mobile elevating work platforms, including, but not limited to:

   i. Electrical Bucket Truck;

   ii. Electrical Aerial Platform Lift;

   iii. Genie Electrical Lifts (a one-man lift as well as a two-man lift); and a

   iv. Gar one-man lift.

C. Employees required to perform tasks that necessitate the use of powered lifts should be properly trained in the use of such equipment before operation.

1. All lift controls should be tested to determine if they are in safe working condition prior to use.

2. A body belt and lanyard should be worn and attached to the boom or basket.

3. Load limits specified by the manufacturer shall be strictly complied with.

X. LADDERS

A. Ladders shall be used only for the purpose for which they were designed.

B. Ladders shall not be loaded beyond the maximum intended load for which they were built or beyond the manufacturer's rated capacity.

C. Ladders shall be maintained free of oil, grease and other slipping hazards and/or have slip-resistant treads on all steps and landings.

D. Steps and rungs of ladders must line up vertically with each other between rest platforms as well as be in a position so that the bottom step is not more than two (2) feet above supporting level.

E. Ladders shall be used only on stable and level surfaces, not on slippery surfaces and shall not be moved, shifted or extended while occupied.

F. The areas around the top and bottom of ladders shall be kept clear at all times.

XI. MAINTENANCE AND INSPECTION

A. Fall arrest systems, like all equipment, must be regularly inspected for defects as follows:

1. cuts, tears, abrasions, mold or stretching;
2. damage due to deterioration;
3. contact with fire, acid or other corrosives;
4. distorted or faulty hook springs; and
5. loose, damaged or non-functioning parts.

B. Defective equipment must be immediately tagged and marked as unusable. Fall arrest equipment involved in the arrest of a fall must also be taken out of use.

C. Scaffold and scaffold parts and equipment must be stored in a dry and protected environment. Replacement parts must be ordered from the original manufacturer whenever possible.

XII. ACCIDENTS AND EMERGENCY RESPONSE

A. Emergency response procedures shall be followed by all employees and require immediate notification to the University Police at x 4444.