

## **APPLICATION**

NYU Langone Medical Center (“NYULMC”)

### **PURPOSE**

- To prevent employees and construction personnel from falling off, onto, or through surfaces;
- To protect patients, staff, and the public from being struck by falling objects; and
- To comply with Occupational Safety and Health Administration (“OSHA”) fall protection standards, including 29 CFR 1910 subpart D and F and 1926 subpart M.

## **POLICY AND GENERAL INFORMATION**

### **1.0 Policy**

All employees shall be protected against falls from heights greater than 4 feet at all times in accordance with OSHA 1910 subpart D and F and the American National Standards Institute (“ANSI”) Z359 (latest version).

All construction personnel, including scaffold erectors and ironworkers, shall be protected against falls from heights greater than 6 feet at all times in accordance with the OSHA 1926 subpart M only (not subparts L or R).

Use of active fall protection systems is limited to situations where elimination and passive fall protection systems cannot provide adequate protection or are not feasible.

Personnel shall not use active fall protection systems without written approval from Environmental Health and Safety (“EH&S”).

### **2.0 Application**

This program applies to:

- All indoor and outdoor areas of all NYULMC-owned facilities, and all areas under the control of NYULMC in leased facilities;

- All employees of NYU Hospitals Center and New York University School of Medicine, an administrative unit of New York University; and
- All contractors and subcontractors.

The primary departments and divisions impacted by this program are:

- Environmental Services;
- Facilities Operations and HJD Facilities Engineering (collectively "Facilities");
- Real Estate and Housing; and
- Real Estate Development and Facilities ("RED+F") Design and Construction.

### 3.0 **Definitions**

**“Authorized person”** means an employee assigned by his/her employer to perform duties at a location where that employee will be exposed to a fall hazard. Authorized persons are responsible for inspecting their fall protection equipment prior to each use and for properly storing and maintaining it.

**“Competent person”** means an individual who, through training and knowledge, is capable of identifying, evaluating and addressing existing and potential fall hazards, and who has the authority to take prompt corrective action with regard to such hazards. Competent persons are responsible for supervising the selection and use of structural anchorage and fall protection system components, conducting inspections of structural anchorage and all fall protection system components prior to each use, and immediately removing damaged equipment from service.

**“Fall protection hierarchy”** refers to the following fall prevention and protection methods in the following order:

- **“Elimination”** refers to pre-fabricating components and lifting them into place or utilizing tools and equipment that avoid placing a worker at height.
- **“Passive fall protection system”** refers to systems that do not require the wearing or use of personal fall protection equipment (e.g., installation of stationary guardrail (and catwalk) systems; guardrail systems present on scaffolds and aerial lifts;

engineered vertical fall protection systems; proper protection of floor openings; and use of engineered and tested horizontal personnel netting systems).

- **“Active fall protection system”** refers to systems that require authorized persons to wear or use fall protection equipment and attend fall protection training, and include fall or travel restraint systems or a personal fall arrest systems, as defined below.
  - **“Fall or travel restraint system”** means a fall protection system requiring an authorized person to wear a body harness and a lanyard (secured to a proper anchorage point) short enough to prevent him/her from reaching a fall hazard.
  - **“Personal fall arrest system”** means a system used to arrest an authorized person’s fall. It consists of an anchorage, connectors, and a body harness and may include a lanyard, deceleration device (e.g., grab rope or self-retracting lifeline), lifeline or combination of these.

**“Qualified person”** means a person with a recognized degree or professional certificate and extensive knowledge, training and experience in fall protection and rescue. Qualified persons are responsible for supervising the design, installation and inspection of fall protection equipment and non-structural anchorage products/devices.

#### 4.0 **Responsibilities**

##### 4.1 **EH&S** is responsible for:

- Developing the Fall Prevention and Protection Program (the “Program”) and collaborating with others to implement and maintain it;
- Providing senior leadership within RED+F with information needed to support decisions about fall protection;
- Training RED+F managers and project managers on the requirements of the Program;
- Maintaining a list of consultants who can provide competent persons and qualified persons;
- Responding promptly to questions and concerns about fall protection; and

- Monitoring the effectiveness of the fall protection program and providing recommendations for improving it.
- 4.2 **Vice Presidents and Directors** are responsible for implementing the Program within their departments and divisions. Their responsibilities include, but are not limited to, communicating the requirements of this policy to their employees and contractors.
- 4.3 **RED+F Program Directors and Project Executives** are responsible for working with the Project Managers (“PMs”) assigned to their projects to implement the Program.
- 4.4 **Managers and PMs (e.g., design, construction, renovation, operations, maintenance, and cable management)** are responsible for implementing and maintaining the Program on their projects. The Managers’ and PMs’ responsibilities include, but are not limited to:
- Communicating the requirements of this policy to their employees and contractors;
  - Assessing the need for fall protection during the design phase of a new project and for existing day-to-day tasks. For anticipated work at heights, working with a competent person to select fall protection and develop specifications based on consideration of the fall protection hierarchy;
  - Ensuring a competent person supervises the use of engineered horizontal or vertical fall protection systems and active fall protection systems;
  - Coordinating pre-planning sessions with appropriate personnel, including a qualified person, at least one week in advance of any work that involves active fall protection systems; and
  - Conducting routine inspections of their projects for proper use of fall protection and immediately following-up on identified issues.
- 4.5 **Contractors** whose personnel work at heights are responsible for:
- Ensuring workers tether their tools to prevent them from falling to a lower level;

- Reporting all incidents involving fall of persons, material, equipment or debris, regardless of how minor, to NYULMC's manager or PM and EH&S;
- Implementing fall protection in accordance with the fall protection hierarchy;
- Providing the right equipment for working at heights and ensuring workers are properly trained to use it;
- Obtaining written approval from NYULMC for all active fall protection systems; and
- If NYULMC approves an active fall protection system:
  - Providing a written site-specific fall protection program;
  - Identifying and providing evidence of training for the competent person and authorized persons who will be engaged in the work;
  - Providing a detailed plan for prompt rescue if a worker falls and remains suspended;
  - Scheduling a pre-planning meeting, at least 1 week in advance, with NYULMC's PM and EH&S to ensure that all necessary equipment and protective measures are in place; and
  - If contractor's rescue plan relies solely on rescue by outside agencies (e.g., FDNY or NYPD), formally notifying the agencies at least one week in advance and coordinating with them..

4.6 **Employees** who work at heights are responsible for:

- Tethering their tools to prevent them from falling to a lower level;
- Using all required fall protection;
- Inspecting active fall protection system components and anchorage they are authorized to use prior to each use; and
- Notifying their supervisors of any pertinent problems.

**5.0 Requirements for passive fall protection systems**

- 5.1 Vertical and horizontal fall protection systems shall be designed and installed in accordance with the manufacturers' instructions under the supervision of a qualified person. Horizontal personnel netting systems shall be drop-tested prior to use in accordance with the requirements in OSHA 1926.502.
- 5.2 Guardrail systems shall be constructed and installed in accordance with the requirements in OSHA 1926.502 and Chapter 33 of the New York City Building Code.
- 5.3 Openings in floors, roofs and other walking surfaces shall be covered with material capable of supporting twice the maximum anticipated load (e.g., aerial lift) on the floor. These covers shall be marked "hole" or "cover." Openings greater than 4 feet by 4 feet shall be protected with a proper guardrail system, not a cover.
- 5.4 Personnel shall not remove passive fall protection systems (e.g., guardrail, scaffold, aerial lift, vertical protection system), or raise their work level above them, without notifying their competent person. Where the work requires this, an assessment shall be undertaken by the competent person to determine what additional fall protection measures shall be implemented. Any passive fall protection equipment that is removed in order to complete work shall be properly replaced prior to leaving the work area.

**6.0 Requirements for active fall protection systems**

- 6.1 A controlled access zone shall be established below locations where active fall protection systems are employed and where a potential for falling objects exists.
- 6.2 All fall restraint and personal fall arrest system components (e.g. body harness, lanyard, lifeline, declaration device, anchorage connector, anchorage point) shall be engineered and installed, inspected, used and maintained in accordance with the manufacturer's instructions.
- 6.3 All fall restraint and personal fall arrest system components shall be inspected daily prior to use by both the competent person and authorized person. Any damaged components shall be immediately removed from service.

- 6.4 Horizontal lifelines shall be designed, installed and used under the supervision of a qualified person.
- 6.5 Where feasible, active fall protection system components (e.g. horizontal lifelines, anchor points) shall be secured on structural members prior to these members being installed.
- 6.6 Personal fall arrest systems shall be rigged in a manner which prevents a worker from free falling more than 6 feet and making contact with anything below his/her work surface. These systems shall also be equipped with an energy absorbing device which limits maximum arresting force to 900 pounds or less.
- 6.7 Each worker shall be secured to an independent lifeline (horizontal or vertical) unless the lifeline is specifically designed to support more than one person.
- 6.8 The anchorage for personal fall arrest systems shall be independent of the anchorage for suspended platforms.
- 6.9 Knots shall not be tied in lifelines, lanyards or other active fall protection system components.
- 6.10 Concrete-embedded fall protection anchorage devices shall be designed and pull or drop tested by a qualified entity in accordance with New York City Department of Buildings regulations prior to use.
- 6.11 Chafing protection shall be used wherever fall restraint and personal fall arrest system components may come into contact with sharp edges.
- 6.12 Only shock absorbing lanyards shall be used. Lanyards shall be connected to the body harness D ring only. Lanyards shall not be tied back to themselves unless specifically designed for that purpose. Lanyards shall not be connected in series. Retractable lanyards shall be connected directly to the body harness D ring.

**Related Safety Policies**

- 120: Construction Contractor Safety Requirements
- 138: Confined space entry
- 163: Ladders, scaffolds and aerial lifts





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