

APPLICATION

NYU Langone Health

PURPOSE

To minimize the hazards associated with the use of ladders, scaffolds, and mobile elevating work platforms.

To comply with federal, state, and local laws and regulations, including the Occupational Safety and Health Administration (OSHA) standards 29 CFR 1910 subparts D and F and 29 CFR 1926 subparts L and X; New York State (NYS) Industrial Code Rule 23; and the NYS and New York City (NYC) Building Codes where applicable.

POLICY

1.0 Application

NYU Langone Health (NYULH) refers to the NYU Langone Health System, NYU Langone Hospitals, NYU Grossman School of Medicine, NYU Long Island School of Medicine, the Family Health Centers at NYU Langone, and all entities controlled by them.

This policy applies to:

- All indoor and outdoor areas of all NYULH owned and leased facilities
- All employees and contractor personnel of NYULH

2.0 Definitions

- **Competent person** means one who is 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.
- **Mobile Elevating Work Platform (MEWP)** means a machine or device intended for moving persons, tools, and material to work positions, consisting of at least a work platform with controls, an extending structure, and a chasis (e.g., scissor lift, articulating boom lift).

3.0 Responsibilities

3.1 Environmental Health and Safety (EH&S) is responsible for:

- Developing the policy and updating it as needed
- Responding promptly to questions and concerns about the use of ladders, scaffolds, and MEWPs
- Maintaining a list of consultants who can provide both training and competent/qualified persons relative to ladders, scaffolds, and MEWPs
- Periodically evaluating the effectiveness of the policy and recommending changes as needed

3.2 Vice Presidents and Directors are responsible for compliance within their departments/divisions.

3.3 Managers, Foremen, Project Managers (PMs), and Contractors are responsible for:

- Informing personnel about the requirements of this policy and enforcing policy requirements
- Ensuring personnel receive training on the proper use of ladders, scaffolds, and MEWPs prior to use
- Ensuring MEWPs receive required inspections, maintenance, and repairs
- Ensuring personnel have the required fall protection equipment (e.g., full body harness and self-retracting lifeline) and training on its proper use

3.4 Personnel who work with ladders, scaffolds and MEWPs are responsible for:

- Following the requirements of this policy
- Attending user training
- Using fall protection equipment when required
- Reporting work hazards to the competent person or person in charge

4.0 General Requirements

- Ladders shall be used in accordance with manufacturers' instructions, OSHA 1910 Subpart D, and OSHA 1926 Subpart X.
- Scaffolding shall be erected, used, and disassembled in accordance with manufacturers' instructions, OSHA 1926 Subpart L, and all state and local regulations.
- MEWPs shall be used in accordance with the manufacturers' instructions, OSHA 1910 Subpart F, and OSHA 1926 Subpart L, and:

- American National Standards Institute (ANSI) standards A92.5 and A92.6 (until December 9, 2019)
- Industrial rope access and single point suspension scaffolds

5.0 Requirements for Ladders

- 5.1 All personnel who use ladders shall receive safety training. Training shall consist of recognition of hazards associated with ladder use, means of inspecting ladders, and safety precautions to be taken when using ladders.
 - The FOCUS eLearning module, Safe Use of Extension Ladders, may be used as part of the training.
- 5.2 Where the task to be performed does not allow the worker to maintain 3 points of contact on the ladder, a more stable and protected work platform shall be used.
- 5.3 Personnel shall use the right size and type of ladder for the work being performed. Only ladders with a Type 1 (250 lb. limit) or Type 1A (300 lb. limit) rating shall be used. The capacity of the ladder (combination of the user's weight and the tools, material, and equipment being carried) shall not be exceeded.
- 5.4 Due to the electrical hazard that metal ladders pose, only fiberglass or wood ladders shall be used.
- 5.5 Ladders shall be set up on a stable and level surface capable of supporting the anticipated load.
- 5.6 Personnel shall inspect each ladder prior to use. Damaged ladders shall be removed from service immediately and discarded. Personnel shall not attempt to repair a damaged ladder.
- 5.7 Ladders shall only be used by one worker at a time unless specifically designed to support multiple workers simultaneously.
- 5.8 A ladder shall not be moved with a worker on it.
- 5.9 Personnel shall face the ladder while ascending, descending, and working from it.
- 5.10 Workers shall not stand on the top two steps or rungs of a ladder.
Exception: platform ladders
- 5.11 A-frame ladders shall not be used in the closed position. Workers shall not sit atop or straddle an A-frame ladder.
- 5.12 Extension ladders shall only be used with both sections joined together.

- 5.13 Extension ladders shall be set up at the proper 4 to 1 angle, extend 3 feet above the level they are servicing, and be properly secured at the top to prevent movement.
- 5.14 Ladders shall not be positioned at building perimeters, leading edges, or other locations which create a significant fall exposure for the worker (see Safety Policy 160, Fall Prevention and Protection Program).
- 5.15 Portable ladders shall not be positioned in front of, or close to a door, unless the door is locked or a worker is present below to direct others.
- 5.16 In pedestrian areas, an exclusion zone shall be established around the bottom of the ladder to protect the worker and persons walking below.
- 5.17 Workers shall not lean out beyond a ladder's side rails.
- 5.18 Workers shall not carry items in their hands while climbing up or down a ladder.
- 5.19 Ladders shall not be set up or used during wind or other adverse weather events; in close proximity to overhead power lines or unprotected electric sources; or where other hazards exist.
- 5.20 Workers shall only use ladders which belong to their employer.
- 5.21 Plan for installation or replacement of fixed ladders and stairs shall be reviewed and approved by facilities management (e.g., Facilities Operations or the Engineering Department) and EH&S. Unless otherwise specified, fixed ladders shall be installed at a 90 degree angle and fixed stairs shall be installed at a 30 to 50 degree angle. Fixed ladders and stairs shall comply with all OSHA 1910 subpart D requirements.

6.0 Requirements for Scaffolds

- 6.1 All personnel, including erectors and dismantlers, shall be protected against falls from scaffolds greater than 6 feet at all times in accordance with OSHA 1926 Subpart M (**not** Subpart L) and Safety Policy 160, Fall Prevention and Protection Program.
- 6.2 All supported scaffolds, including mobile frame and baker scaffolds, greater than 1 frame in height, shall have a guardrail system (e.g., top rail, mid rail, toe board) installed at all working levels.
- 6.3 Baker scaffolds greater than 2 frames in height shall have the manufacturer-supplied outriggers installed, to prevent tipping.
- 6.4 The wheels on baker and mobile frame scaffolds shall be locked when the scaffolds are in use.
- 6.5 Baker and mobile frame scaffolds shall not be moved with personnel on them.

- 6.6 If there is a gap of more than 14 inches between a supported scaffold and a structure, an inner guardrail system shall be installed to eliminate the fall hazard.
- 6.7 Each suspended scaffold user shall be tethered by rope grab to an independent vertical lifeline properly secured to a structural member or to an anchor point specifically designed for fall protection and has been pull tested.
- 6.8 Chafing protection shall be used wherever fall protection system components come into contact with sharp edges.
- 6.9 Where a parapet clamp is used as a fall protection anchor point, the clamp shall be specifically designed and rated for this purpose, have the required blocks, and be attached to a proper tieback cable to prevent movement.
- 6.10 A controlled access zone shall be established below scaffold work areas where the potential for falling material, equipment, or debris exists. All workers at height shall tether their tools.
- 6.11 All personnel who use a supported scaffold on a construction site, regardless of size, shall provide proof of training. In NYC, a valid 4-Hour Supported Scaffold User card is required.
- 6.12 All personnel who erect, modify, or dismantle a supported scaffold in excess of 40 feet shall provide proof of training. In NYC, a valid 32-Hour Supported Scaffold Installer & Remover card is required.
- 6.13 All personnel who work on a suspended scaffold shall provide proof of training. In NYC, a valid 16-Hour Suspended Scaffold User Card and a Certificate of Fitness from the DoB licensed Special Rigger by whom they are employed is required.
- 6.14 All suspended scaffold operations shall be supervised by a qualified rigging foreman. In NYC, the rigging foreman shall be registered with the DoB, have a valid 32 hour training card, and a designated Rigging Foreman card issued by the Special Rigger by whom they are employed.
- 6.15 Supported scaffolds in excess of 40 feet in height shall be designed by a NYS registered design professional. In NYC, they shall be approved by the DoB. Vertical netting attached to the scaffold shall be flame-retardant and depicted on the drawing to ensure that the “sail effect” of the netting has been factored into its design.
- 6.16 Use of a building parapet to support a cornice (“C”) hook suspended scaffold or fall protection anchor requires a letter from a NYS licensed Professional Engineer (PE) attesting to the integrity of the parapet(s) from which they are to be hung. Use of outriggers to support a suspended scaffold requires PE drawings. In NYC, these drawings shall be approved by the NYC DoB.

- 6.17 Where feasible, workers are to climb in and out of a suspended scaffold on the ground, a sidewalk bridge, a setback roof, or other adequately sized, flat surface with perimeter fall protection. Where a worker must climb through a window or over a parapet to access or exit a suspended scaffold, the worker shall be tied off during the entire process.
- 6.18 Prior to erecting a supported scaffold, an assessment of the surface on which it is to be set up shall be made in order to confirm that it can support the intended load.
- 6.19 Supported scaffold components shall be from a single manufacturer. Scaffold components shall be free of damage (e.g., cracks, dents, and excessive rust).
- 6.20 Scaffolds shall be plumb and level.
- 6.21 Supported scaffold frames shall be joined together with the manufacturer's stacking pins (i.e., not with bolts or wire). The scaffold shall be properly tied back to the structure at the locations indicated on the PE drawing.
- 6.22 Supported scaffold platforms shall be fully planked with appropriate grade lumber or engineered scaffold planks. The planks shall properly overhang the scaffold supports and be secured against displacement.
- 6.23 An adequate number of stair towers shall be installed on stationary supported scaffolds to provide proper access for workers. Where it is determined by EH&S that installation of a stair tower is not feasible, access ladders shall be installed **within** the scaffold framing, with ladder sections offset at each level to eliminate a multi-level fall hazard (see NYS Industrial Code Part 23). Workers shall not climb on cross-bracing or scaffold framing (unless the frame is specifically designed for that purpose and meets OSHA 1926 Subpart L and X regulations).
- 6.24 Scaffolds shall not be loaded in excess of the manufacturer's specifications or the limits set forth in the PE drawing.
- 6.25 Working platforms shall only be erected and occupied where permitted by the PE drawing.
- 6.26 Supported scaffolds shall be inspected daily prior to use by the contractor's competent person. If the scaffold is suitable for use, the competent person shall initial the green tag posted at the base. A red tag shall be posted at the base of scaffolds under construction or otherwise not suitable for use.
- 6.27 Suspended scaffolds shall be inspected daily by the Rigging Foreman. A written log of these inspections shall be kept on site.

- 6.28 Scaffolds shall not be erected, used, or disassembled during wind or other adverse weather events; in close proximity to overhead power lines or unprotected electrical sources; or where other hazards exist.
- 6.29 Industrial rope access and single point suspension scaffolds shall only be employed where safer alternatives (e.g. supported scaffold, two point and multi-point suspension scaffolds) are determined to be infeasible.

7.0 Requirements for Mobile Elevating Work Platforms (MEWPs)

- 7.1 MEWPs used indoors shall be electric-powered. Fuel-powered MEWPs used outdoors shall meet the requirements of Safety Policy 120: Construction Safety Requirements.
- 7.2 Staff and contractor personnel shall receive safety training prior to using a MEWP.
- 7.3 Workers shall be positioned at the front and rear of a MEWP to lookout for pedestrians and vehicles during travel.
- 7.4 An adequate-size exclusion zone shall be established at the base of the MEWP to protect persons walking below. No work shall be performed directly above or below the exclusion zone with the MEWP is in use.
- 7.5 Prior to using a MEWP:
- An assessment of the area where it is to be set up shall be conducted to identify elevation changes, inclines, openings, and other hazards (e.g. subsurface voids) and to ensure that the surface can support the weight of the MEWP.
 - An inspection of the MEWP shall be completed.
- 7.6 On MEWPs that are so equipped, stabilizing devices (e.g. outriggers, expanding axles) shall be fully deployed at all times.
- 7.7 Any non-structural ramp or platform that a MEWP will operate on or travel over shall be engineered to ensure that it can support the intended load.
- 7.8 MEWPs shall not be moved with the work platform elevated.
- 7.9 MEWPs shall not be loaded in excess of the limit set by the manufacturer (e.g., combined weight of worker(s) + equipment + materials).
- 7.10 All tools, material, and equipment shall be kept within the MEWP's guardrail system. Tools shall be tethered to the worker or the MEWP.
- 7.11 MEWPs shall not be used as a crane or material hoist.

- 7.12 Staff and contractor personnel using a MEWP (scissor and boom lift) shall wear a full body harness with a self-retracting lifeline properly connected to a manufacturer-supplied anchor point.
- 7.13 Personnel shall not stand or climb on MEWP toe boards or guard rails or use any items to increase their height above the work platform.
- 7.14 MEWPs shall not be operated where winds exceed the limit set by the manufacturer, during other adverse weather events (e.g., lighting, ice, fog), in close proximity to overhead power lines or exposed electric; or where other hazards exist.
- 7.15 Use of a MEWP to perform live electrical work or electric arc welding shall be pre-approved by EH&S.
- 7.16 Maintenance, repairs, and modifications to a MEWP shall be performed by the facilities management (e.g., Facilities Operations or the Engineering Department) or contractor’s qualified vendor, not by staff or contractor personnel.
- 7.17 MEWPs shall not be used in close proximity to moving vehicles or powered-mobile equipment. Special care shall be taken when operating a MEWP adjacent to an active roadway.

Related Safety Policies

- 120: Construction Safety Requirements
- 160: Fall Prevention and Protection Program

Issue date	10/2020
Replaces	10/2019
Reviewed by	M. Ciferri, NYULH-Brooklen Facilities R. Cohen, Facilities Operations N. Ejaz, NYULH-Brooklyn Safety Officer B. Farrell, Real Estate S. Haney, Environmental Health and Safety B. Kenny, NYU Winthrop Hospital, Engineering D. Resnick, Construction D. Rubbo, NYU LOH Engineering NYULH Construction Safety Committee NYU Langone Hospitals Environment of Care (EOC) Committee NYU Langone Hospitals - Brooklyn EOC Committee NYU Langone Orthopedic Hospital EOC Committee NYU Winthrop Hospital EOC Committee Family Health Centers at NYU Langone EOC Committee

Summary of Revisions

Revision Date	Section	Changes
October 2020	1.0	Changes NYU School of Medicine to NYU Grossman School of Medicine
	5.15	Specifies Portable Ladder
September 2019	Throughout	-Changes Aerial Work Platform (AWP) to Mobile Elevating Work Platform (MEWP) -Edits wording for clarity
	1.0	Incorporates Winthrop and NYU Long Island School of Medicine
	2.0	Defines MEWP
	3.3	Adds responsibilities for equipment inspections, maintenance and repairs, and for training, and provision of fall protection equipment
	3.4	Adds responsibility to use fall protection
	4.0	Adds reference to ANSI standards
	5.20	Adds reference to OSHA standard
	6.21	Clarifies what is meant by proper access
	6.29	Adds language about use of industrial rope access and single point suspension scaffolds
	7.15 - 7.17	Adds new requirements
Reviewed by	Adds review by NYU Winthrop Hospital	
February 2017	Application	Changes NYULMC to NYU Langone
	1.0	Defines NYU Langone
	1.0	Formerly Section 2.0
	2.0	Formerly Section 3.0
	3.0	Formerly Section 4.0
	4.0	Formerly Section 1.0
	7.12	Adds use of an overhead structural member or other overhead anchor point meeting OSHA requirements
October 2016	2.0	Adds employees of NYU Langone Health System
	3.0	Adds examples of AWP
	5.16 - 5.19	New requirements for ladders
	6.7, 6.14, 6.24, 6.25	New requirements for scaffolds
	7.1, 7.3, 7.4, 7.7, 7.10	New requirements for AWP
	7.12, 7.14	Adds requirement to tie off in all AWP using a full body harness and “shock absorbing” lanyard or “self-retracting lifeline” secured to a lift anchor point or other OSHA approved overhead anchor point or structural member

		Adds “during other adverse weather events; in close proximity to overhead power lines or exposed electric; or where other hazards exist.”
	Reviewed by:	Adds Lutheran personnel
	Summary of Revisions	Adds summary