



## **LADDER SAFETY PROGRAM**

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### **PURPOSE**

This **Ladder Safety Program** describes methods and practices for care and use of stairways and ladders that can be read and understood by all managers, supervisors, and employees at Norfolk State University. This plan is intended to be used as follows:

- Create an awareness of the hazards among our workforce,
- Standardize procedures for use and care of the equipment,
- Provide a consistent format for training employees on the proper procedures to be used,
- Minimize the possibility of injury or harm to our employees, and
- Demonstrate compliance with stairway and ladder requirements in Subpart D of 29 CFR 1910.

The procedures established are guidelines to be followed whenever an employee is working with a ladder.

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### **Administrative Duties**

Environmental Health, Safety and Risk Management is responsible for developing and updating the Ladder Safety Program in conjunction with Facilities Management personnel. The Ladder Safety Program will be stored for review at the following locations: Department of EHS& RM and the NSU Safety and Risk Management website.

Employees who have ideas to improve the Ladder Safety Program are asked to contact the Department of Environmental, Health, Safety, and Risk Management. All suggestions are encouraged to provide a safe workplace for all employees, and a safe and effective ladder safety program. NSU strives to provide training, clear understanding, implementation of safe work practices, and involvement in the program from the university community.



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### **Fixed Industrial Stairs**

Fixed industrial stairs are provided within facilities for the following circumstances:

- Access from one structure level to another where operations necessitate regular travel between levels.
- Access to platforms operating at any equipment that require attention routinely during operations.
- Access to elevations is daily or at each shift for such purposes as gauging, inspection, regular maintenance, etc., where such work may expose employees to acids, caustics, gases, or other harmful substances, or for which purposes the carrying of tools or equipment by hand is normally required.
- All fixed industrial stairs are provided according to OSHA specifications for stair strength, stair width, angle of stairway rise, stair treads, stairway platforms, railings and handrails, and vertical clearance.

The following departments/areas have fixed industrial ladders:

- Facilities Management Motor Pool,
- Bozeman Hall
- Gills Gym
- Wilder
- Wilson Hall
- Scott Hall
- Rosa Hall
- Marty Miller Baseball Field
- West Café
- Bowser Building
- Robinson Tech
- Brown Hall
- Student Services Building
- Gill Gym
- Madison Hall
- Wood Science
- Residential Complex
- Mid-Rise Hall
- Spartan Station
- Lee Smith Hall
- Charles Smith Hall

### **Portable Ladders**

- All portable ladders provided by approved vendors for use by employees are constructed according to OSHA specifications in order to insure safety under normal conditions of usage.
- The following department(s) in Facilities Management use portable ladders: Housekeeping, Maintenance, Carpentry, Painter, and Mechanics



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**Portable Wood Ladder** wood parts are free from sharp edges and splinters, sound, and free from visual defects such as shake, wane, compression failures, decay, or other irregularities.

Portable Metal Ladders are designed without structural defects or accident hazards such as sharp edges, burrs, etc; sufficient strength to meet the test requirements; and protected against corrosion unless inherently corrosion resistant.

### **Work Practices**

- When ascending or descending, the climber must face the ladder.
- Portable ladders are designed as a one-man working ladder based on a 200-pound load and will be used accordingly.
- Portable rung and cleat ladders will be used at such a pitch that the horizontal distance from the top support to the foot of the ladder is one-quarter of the working length of the ladder (the length along the ladder between the foot and the top support).
- The ladder will be so placed as to prevent slipping, or it will be lashed, or held in position. The ladder base section must be placed with a secure footing.
- Employees will equip all portable rung ladders with nonslip bases when there is a hazard of slipping. However, nonslip bases are not intended as a substitute for care in safely placing, lashing, or holding a ladder that is being used on oily, metal, concrete, or slippery surfaces. These nonslip bases can be obtained from approved Micro SWAM vendor.
- The top of the ladder must be placed with the two rails supported, unless equipped with a single support attachment.
- On two-section extension ladders, the minimum overlap for the two sections in use will be according to OSHA specifications.
- Portable rung ladders with reinforced rails will be used only with the metal reinforcement on the underside.
- The bracing on the back legs of step ladders is designed solely for increasing stability and not for climbing.

### **Ladders will not be:**

- Used in a horizontal position as platforms, runways, or scaffolds.
- Placed in front of doors opening toward the ladder unless the door is blocked open, locked, or guarded.
- Placed on boxes, barrels, or other unstable bases to obtain additional height.
- Tied or fastened together to provide longer sections. They must be equipped with the hardware fittings necessary if the manufacturer endorses extended uses.
- Used to gain access to a roof unless the top of the ladder extends at least 3 feet above the point of support, at eave, gutter, or roofline.
- Used as a brace, skid, guy or gin pole, gangway, or for other uses than that for which they were intended, unless specifically recommended for use by the manufacturer.
- Ladders for which dimensions are specified should not be used by more than one man at a time nor with ladder jacks and scaffold planks where use by more than one man is anticipated. In such



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cases, specially designed ladders with larger dimensions of the parts should be procured from an approved vendor.

- Ladders with broken or missing steps, rungs, or cleats, broken side rails, or other faulty equipment must not be used. Employees finding ladders with any of these conditions must remove them and report action to the Environmental Health, Safety and Risk Management Department. Improvised repairs shall not be made.
- Ladders made by fastening cleats across a single rail will not be used.
- Tops of the ordinary types of stepladders will not be used as steps.
- Middle and top sections of sectional or window cleaner's ladders will not be used for bottom section unless the user equips them with safety shoes.

### **Inspections and Maintenance**

- Ladders will be inspected by Compliance Safety Officer and/or Safety Officer to insure safety and serviceability.
- Ladders will be maintained in good usable condition at all times.
- The joint between the steps and side rails is kept tight, all hardware and fittings are securely attached, and the movable parts operate freely without binding or undue play.
- Metal bearings of locks, wheels, pulleys, etc., will be frequently lubricated.
- Frayed or badly worn rope will be replaced.
- Capacity limits shall be posted on all ladders
- Safety feet and other auxiliary equipment will be kept in good condition to insure proper performance.
- Ladders that have developed defects will be withdrawn from service for repair or destruction and tagged or marked as "*Dangerous, Do Not Use*".
- Should ladders tip over, Safety Officers will:
  - inspect the ladder for side rails dents or bends, or excessively dented rungs;
  - check all rung-to-side-rail connections;
  - check hardware connections; and
  - check rivets for shear.
- Ladders exposed to oil and grease, will be cleaned and kept free of oil, grease, or slippery materials.

### **Fixed Ladders**

The following department (s) within Facilities Management have fixed ladders: Housekeeping, Maintenance, Carpentry, Painter, and Mechanics

- Fixed ladders are provided according to OSHA specifications for design, clearance, and pitch.
- All fixed ladders are maintained in a safe condition.
- Fixed ladders are inspected by Compliance Safety Officer and/or Safety Officer monthly.



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### **Recordkeeping**

The Compliance Safety Officer is responsible for maintaining records of ladder inspections. These records are maintained in the Environmental Health and Safety Office.

### **Training**

All employees who work on ladders and stairways, are provided training by the Safety Officer. Elements included in the training program include safe work practices and other requirements of this written plan.

### **Disciplinary Procedures**

Constant awareness of and respect for stairway and ladder safety procedures and compliance with all safety rules are considered conditions of employment. Supervisors and individuals in Safety and Internal Audits reserve the right to issue disciplinary warnings to employees, up to and including termination, for failure to follow the guidelines of this stairway and ladder safety program.

### **Program Evaluation**

Program defects will be addressed to improve employee protection and encourage safe work practices. The Safety Officers is responsible for evaluating and updating this written plan. The evaluation will include a review of reported accidents, as well as near misses, to identify areas where additional safety measures need to be taken.

The Director of Environmental Health Safety and Risk Management will also conduct a periodic review to determine the effectiveness of the program. This review may include the following:

- Walk-through inspection of Facility Department ladders
- Interviews with employees to determine their knowledge of the Ladder Safety Program and if safety measures are being conducted.





