

# Environmental Health and Safety

## Temporary Stairways, Ladders and Portable Ladders



THE UNIVERSITY OF  
CHICAGO

### Purpose

Ladder-related injuries account for about 150 deaths and send 180,000 people to the ER each year.

Some of the main causes include, sliding of the ladder base, and the ladder itself tipping sideways. Many people also sustain back injury as a result of improper carrying and/or setting up of the ladders.

The Temporary Stairways, Ladders and Portable Ladders Policy does not apply to ladders specifically manufactured for scaffold access/ egress and stairways not used by University employees for theatrical performances such as rope ladders, prop ladders or staircases.

### Applicability

#### Environmental Health and Safety is responsible for:

- ◆ Reviewing the policy to ensure compliance with current regulations
- ◆ Reporting any questionable conditions that are discovered to the responsible department; and
- ◆ Ensuring all affected employees are trained.

#### Departments affected by this policy:

- ◆ Ensuring affected employees are following safety procedures;
- ◆ Ensuring all maintenance and inspection practices are followed;
- ◆ Ensure training compliance; and
- ◆ Taking the appropriate corrective action in accordance with the University of Chicago's Personnel Policy on Progressive Corrective Action, Section 703 for employees not complying with this policy.

#### Employees affected by this policy :

- ◆ Completing online Ladder Safety Training;
- ◆ Complying with the practices within the Temporary Stairway, Ladder and Portable Ladder Policy; and
- ◆ Reporting any unsafe temporary stairways, ladder and portable ladders to your supervisor.

### General Requirements

#### Stairways

- ◆ Stairways shall be installed at an angle of not less than 30 degrees and no more than 50 degrees horizontally
- ◆ Stairway shall be free from all dangerous projections;
- ◆ Slippery conditions on stairways shall be corrected;
- ◆ All treads and landings shall be replaced when worn below the top edge of the pan; and
- ◆ Spiral stairways are prohibited, unless they are part of the permanent structure.

#### Stair Rails and Handrails

- ◆ Handrails are required on stairways having four or more risers, or rising more than 30 inches in heights, whichever is less;
- ◆ Midrails, when used, shall be located midway between the top of the stairway step and along the opening between top rail supports;
- ◆ Unprotected sides and edges of stairway landings shall be provided with standard 42 inch guardrail system;
- ◆ Handrails and the top rails of stair rail systems shall be able to withstand, without failure, at least 200 pounds of weight applied within two inches from any direction; and
- ◆ The height of handrails shall not be more than 37 inches nor less than 30 inches from the upper surface of the handrail to the surface of the tread.

#### Ladders

- ◆ Ladder rungs, cleats and steps shall be parallel, level and uniformly spaced when the ladder is in position for use;
- ◆ Ladders shall not be tied or fastened together to create longer sections unless they are specifically designed for such use;
- ◆ A metal spreader or locking device shall be provided on each step ladder to hold the front and back sections in an open position when the ladder is being used;
- ◆ Extra heavy duty type 1A metal or plastic ladders shall sustain 3.3 times the maximum intended load;
- ◆ Ladder components shall be smooth surfaced to prevent injury from punctures or lacerations and prevent snagging of clothing;
- ◆ A fixed ladder shall be able to support at least two loads of 250 pounds each, concentrated between any two consecutive attachments; and
- ◆ Wood ladders shall not be coated with any opaque covering .

#### Inspection

- ◆ Ladders shall be inspected by a department supervisor or designee for visible defects on a semi-annual basis and after any incident that could affect their safe use. ([Ladder Inspection Checklist](#))