

## Department-Approved Course Requirements: 1-Hour Stairways and Ladders

**Purpose:** This course is a general elective course that can help fulfill the requirement for

an individual applying for a Site Safety Training Card. THIS IS AN

AWARENESS-LEVEL TRAINING ONLY and does not provide any other qualification or authorization outside of the Site Safety Training Card.

**Duration:** 1 Hour of instructional time, excluding breaks

Class Size: 1-40 Trainees

**NYC Requirement**: In order to continue to operate in the City of New York, the designated

construction worker is required to complete a minimum number of hours of approved site safety training and to carry site safety identification cards as proof of completion of the training (As per New York City Local Law 196 of 2017 also known as 'LL196' or 'Local Law'). This course provides one hour towards the

satisfaction of that requirement.

Facility Requirements:

The Training Facility used by the Course Provider must:

- Have sufficient room to accommodate all expected attendees and the equipment needed to perform hands-on exercises where required as part of the course.
- Make provisions for the presentation of training material in all media types (computer, projectors, video/DVD players, etc.); and
- Comply with all applicable laws, rules 'regulations relating to occupancy, zoning, egress, fire detection, fire suppression, light, ventilation, cleanliness, sanitary facilities, emergency notification 'evacuation procedures.

Training may be held at construction sites, provided the above requirements are met.

Instructor Requirement:

To deliver this course the instructor(s) must demonstrate that he or she is credentialed or trained in instructional methods and learning processes. The instructor(s) must also successfully demonstrate his or her ability to solve or resolve problems relating to the subject matter by possession of a recognized degree, certificate, licensure or professional standing, or by extensive knowledge, training, and experience, in the subject matter being taught. To the extent that the course instructor(s) holds, or has held, a trade license issued by the Department, it must be in good standing and not be surrendered to, suspended by or revoked by the Department.

The instructor(s) must also be authorized by the Occupational Safety and Health Administration ('OSHA') as a trainer(s) for its Construction and Outreach Program.

Curriculum Requirement:

All **topics** listed under **Course Content Outline** must be covered using the listed **Instructional Delivery Method**. The time dedicated to each outline topic should be appropriate for the course content and can vary depending on the trade or job performed by the trainee. The **Instructional Delivery Materials** used in this course must contain all current applicable NYC Construction Code references, current rules, policies 'bulletins.



Course Curriculum Proposal Package Review: A comprehensive review will be performed by the **Department of Buildings** to

determine compliance with these Course Curriculum Requirements.

## **Instruction Delivery Method**

Media: Lecture/Discussion, Slide Presentation

Handouts: Slides, references and handbook

Guided Learning:

Trainees exercise calculating a correct ladder slope, and a stair rise (math)

## **Course Content Outline**

- 1. Introduction
  - Instructor introduces topic and describes their qualifications and relevant experience for training this
    module.
  - b. Establish that all trainees can hear and fully understand you i.e. 'raise your hand if you fully understand me' or 'clap your hands if you fully understand me'
  - c. State basic classroom rules, bearings and decorum
    - i. Inform trainees of duration or training and breaks (if any)
    - ii. Remind trainees about limiting distractions (phone use, texting, sidebar conversations)
    - iii. Emergency procedures (location and means of egress, exits or other contingencies)
    - iv. Location of restrooms
  - d. Training Objectives and Expectations:
    - i. Trainees will become generally familiar with the parts of ladders and stairs
    - ii. Trainees will be able to recognize and avoid hazards associated with stairs and ladders
    - iii. Trainees should become aware of administrative safety requirements associated with stairs and ladder safety
- 2. Provide occupational statistics concerning stairs and ladders
  - a. Describe types of injuries
    - i. Falls to below
    - ii. Trips
    - iii. Electrical shock and electrocution
  - b. Defined and classify the different slopes (angles) associated with:
    - i. Ramps
    - ii. Stairs
    - iii. Ladders
- 3. Illustrate and describe the basic stair parts, components and rules associated respectively, rise and run etc.
  - a. Risers and treads
  - b. Carriages
  - c. Handrails
  - d. Landings
  - e. Maximum riser heights
  - f. Maximum deviation of risers
  - g. Width and maximum loads



- 4. Define and Provide examples of different types of ladders along with respective safety tips and rules:
  - a. Extension ladders
  - b. A-frame self-supporting ladder
  - c. Platform ladder
  - d. Fixed ladder
  - e. Ship's ladders
  - f. Job-made ladders
  - g. Pass-through ladders
- 5. How to choose the right ladder for the task
  - a. Inspection the landing area
  - b. Slippery and wet areas
  - c. Properly footing a ladder
  - d. Capacity of landing
- 6. Electrical hazard concerns when using ladders
  - a. Choosing a Non-conductive ladders (wood and fiberglass)
  - b. What is a safe distance from overhead electrical
- 7. Inspecting a ladder before use
  - a. Capacity of ladder
  - b. Integrity and Condition of ladder
  - c. Surface and Landing Conditions
- 8. Ascending and Descending ladders
  - a. Maintaining 3-points of contact
  - b. Accessing a ladder from a platform or landing
  - c. Minimum landing widths
- 9. Proper Ladder Placement and Configurations During Concrete Heating Operations Concrete
- 10. Stairs and Means of Egress
  - a. Sizes
  - b. Riser heights
  - c. Riser Uniformity
  - d. Handrail Requirements
  - e. Illumination
  - f. Debris Accumulation
  - g. Accessibility
  - h. Maximum distance of reach and travel
  - i. When permanent stairs must be in place
- 11. Issues surrounding Means of Egress in Occupied Buildings
  - a. Maintaining adequate number of means of egress
  - b. Blocking a means of egress



- c. Storage
- 12. Stair towers
  - a. Competent Person Inspection
- 13. Resources:
  - a. Worker's Rights (See OSHA: https://www.osha.gov/Publications/OSHA3146.pdf)
  - b. OSHA Regional Map: https://www.osha.gov/html/RAmap.html
- 14. Debriefing (Informal evaluation)
  - a. Guided by instructor, trainees, in a class discussion talk about the course's content and means of delivery and provide verbal feedback to the instructor.
  - b. Instructor takes notes (either committing them to writing during discussion or ascribing them later into noted-comments).
  - c. Instructor applies lessons learned from debriefing to future trainings.
- 15. Written (Multiple Choice) Assessment