

Department-Approved Course Requirements: 1-Hour Steel Erection

Course Required for:

Worker Training

Purpose: This course is a specialized 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 and regulations relating to occupancy, zoning, egress, fire detection, fire suppression, light, ventilation, cleanliness, sanitary facilities, emergency notification and 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 and 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: Instructor will guide trainees through the compliance sequence of steel erection

utilizing in Subpart R of OSHA Title 29 CFR 1926.750

Course Content Outline

1. Introduction

- a. 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 terms and steel erection processes and their associated safety hazards.
 - ii. Trainees should become aware of administrative regulatory safety requirements associated with steel erection in New York City
 - iii. Define OSHA's definition of Steel Erection (it's very specific)
 - iv. Statistically illustrate the importance of safe steel erection operations to worker and public safety and property.
- 2. Explain Fall Protection Rules as per Subpart R of OSHA Title 29 CFR 1926.750
 - a. 15 and 30 foot fall protection criteria (connecting and decking tasks)
 - b. Controlled Decking Zone Criteria
 - c. Controlled Decking Zone Training
 - d. Walkable and Working Decks
 - e. Roles and Responsibilities of 'Controlling Contactor'
 - f. Sequential order of compliance
 - g. Various Zones (swing, falls, controlled access, exclusionary, swing radius)
 - h. Review the different types of fall protections used during steel erection
 - i. Personal Fall Arrest systems
 - i. Fall Arrest with retractable systems
 - ii. Horizontal life line systems
 - iii. Positioning systems
 - iv. Fall Restraint systems
- 3. Describe the personnel involved in Steel Erection activities and their roles and responsibilities for:
 - a. Controlling Contractor
 - b. Lift Director
 - c. Qualified Persons and Professional Engineers



- d. Competent Persons
- e. Riggers
- f. Crane operator
- g. Signal Persons
- 4. Explain and illustrate the Code prescribed sequence of operations and safety controls employed during such activities.
 - a. Controlling Contactor's obligations under Code:
 - i. General Conditions of site
 - ii. Staging Areas
 - iii. Protections of public and workers
 - iv. Concrete strength verifications
 - v. Repaired anchorage
 - vi. Column anchorage and plumb
 - vii. Shop drawings and rules concerning 'hook release'
- 5. Explain rigging inspection process
 - a. Applicable OSHA & ANSI/ASME Regulations and Standards
- 6. Resources:
 - a. Applicable OSHA Standard Subpart R of OSHA Title 29 CFR 1926.750 and Subpart CC CFR Title 29 1926.1400
 - b. ANSI/ASME Regulations and Standards
 - c. Worker's Rights (See OSHA: https://www.osha.gov/Publications/OSHA3146.pdf)
 - d. OSHA Regional Map: https://www.osha.gov/html/RAmap.html
- 7. 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.
- 8. Written (Multiple Choice and fill-in) Assessment with illustrations of different crane and derricks along with component parts of such.