

# RUNNING AN EFFECTIVE SAFETY PROGRAM

presented by

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#### DESCRIPTION

This course will clarify the revisions/additions to the 2014 Code in the new 2020 Code as it relates to Chapter 33 using case studies to review construction-related safety incidences, common errors and omissions that contribute to site failures. A review of these Code revisions will highlight expectations of the new requirements, when to apply, and which Code to apply to your project. Further, an explanation of the revisions to the requirements will reinforce and promote safe site safety practices, as well as help the site safety professional better understand the expectations in managing a safe construction project.





- 1. Safety! Safety! Safety!
- 2. Permits
- 3. Plans
- 4. Required Logs
- 5. Construction Superintendent Log Requirements per Chapter 33
- 6. Buildings Bulletin 2019-11
- 7. Summary



#### **THE BASICS**

Every job requires site safety as an element of construction. The personnel listed are designated as Safety Professionals for the projects:

- 1, 2, 3 Family Contractor Licensee
- Construction Superintendent (CS) (4 to 9)
- Site Safety Coordinator (SSC) (10 to 14)
- Site Safety Manager (SSM) (15 or more)



### **COMPETENT PERSON**

#### Someone is always responsible for safety on a site.

- In the absence of the main Safety Professional there must always be a competent person on site.
- I, 2, 3 Licensee = Competent person
- Construction Super = Competent person (changes 1/1/26)
- Construction Super Major Building = Alternate Construction Super (November 2022)
- SSC = Alternate SSC or SSM
- SSM = Alternate SSM



### UPCOMING CHANGES IN THE LAW

- As of June 1, 2022 the Construction Super will be limited to 5 jobs reducing to 3 jobs in 2024 and will eventually be limited to 1 full time job in 2026.
- Major Buildings, as defined, will change in 2025 and includes all buildings 7-stories or more requiring site safety plan submission to the Department.
- All Major Buildings will require a full time Construction Super in addition to a Safety Professional effective November 7, 2022.



### **BEFORE YOU START**

- Make sure you obtain the appropriate permits for the work you are planning to start.
- DO NOT exceed the work authorized by one permit if a different permit is required.
- Work is restricted to 7AM to 6 PM Monday through Friday.
- An After Hour Variance (AHV) is required outside these hours or weekends.
- An AHV is required for each permit type.
- Work without an AHV or violating what is permitted may lead to suspension of future AHVs.



## **DOB PERMITS**

#### Temporary Construction

- Fence
- Sidewalk Shed
- Sidewalk Closings

#### Mechanical Equipment Permits in Demos

- This permit is **required** when mechanical equipment is used to:
  - fully/partially demolish an above-grade structure
  - remove a foundation while the mechanical equipment is supported on an existing structure, except for a slab on grade (slab supported by soil); or
  - move material or debris within a structure.



#### **FDNY PERMITS**

- Flammable and Explosive Material Storage
- Hot Work Permits
  - Multiple types; for any work requiring an open flame.



#### **DOT & DEP PERMITS**

#### DOT

- Road Closure
- Sidewalk Closure
- Sidewalk Crossing

#### DEP

- Use of Hydrant
- Dewatering
- Hazardous Materials Handling
- Confined Space





After permits have been obtained

What is the next most important mandatory compliance issue?



### **IMPORTANT COMPLIANCE ITEMS**

Failure to have any of the following will lead to an **AUTOMATIC STOP** WORK ORDER!!!

- Do you have approved and stamped plans for your project on site?
- Does your staff know where the plans are?
- Are the plans current?
- Are the plans accessible?
- Are the plans readable?





All plans must be available on site:

- Demolition Plans
- Excavation Plans
- Construction Plans
- Plumbing Plans
- Electrical Plans
- Mechanical Plans



## **ADDITIONAL PLANS**

- Tenant Protection Plan (TPP)
- Occupancy Protection Plan (OPP)
- Associated Plan Documents:
  - CCD1
  - CD5
  - Design Drawings (DD) for temporary construction work



### PLANS

#### Site Safety Plan (SSP)

- All SSPs are mandatory on all work scopes requiring a registered Construction Super, Site Safety Manger or Site Safety Coordinator and must meet minimum standards.
- DOB site safety plan review and approval is required for all Major Buildings.
- The plans must be available on site.
- If a higher-level safety professional is required on the overall project, the safety professional must be identified on the underlying permits.



### SITE SAFETY PLAN

Safety has a wide area of concern:

- Protects workers
- Protects the public
- Fire protection
- Evacuation from the site
- Protects adjoining properties
- Provides protection of infrastructure
- Reduces liability
- Reduces Stopped Work time

### **COMMON SSP ISSUES**

- FDNY connection location not indicated
- No sidewalk shed provided at temporary pedestrian walkway in the street
- Adjoining property protection missing or inadequate
- Suspended scaffold locations not indicated or installed per approved plan (Façade SSP)
- Scope of work is not clear (Alteration/Façade SSP)
- Safety netting systems as shown in plan, elevation, and jump schedule are inconsistent



### **COMMON SSP ISSUES**

- Critical dimensions missing (i.e., sidewalk widths, lot lines, setbacks, adjacent structures, etc.)
- 4ft solid barrier with wire screen missing at work/storage zones in street adjacent to a sidewalk shed
- Means and methods of securing controlled access zones not specified
- Equipment, bulkheads, skylights and other appurtenances at adjacent property roof not identified on plan
- Delivery loading docks not equipped with flagmen



#### IMPLEMENTING THE SSP

- The Safety Professional must cover a wide array of issues.
- Each area has the potential for serious injury.
- Failure to follow the plan can be disastrous.
- The Safety Professional is subject to personal violations for Failure to Carry Out Duties.



#### TRAINING

- Do your workers have Site Safety Training Cards as required under Local Law 196? (soon requiring My Comply issued cards)
- Are the cards counterfeit?
- Are the workers trained or oriented on the equipment they are using such as ladders, ramsets, scaffolds, mini cranes, cement buggies, core drills, A-frames, harnesses?
- Who checked the worker's certifications?



### SITE-SPECIFIC SAFETY MEETINGS

The permit holder **must** maintain a record of all orientations and refreshers conducted for the site. The record must be kept at the site and must include:

- the date and time of each orientation
- the date and time of each refresher
- name, title and company affiliation of each worker who participated
- name, title and company affiliation of the competent person who conducted the orientation or refresher; and
- the signature of the Safety Professional and qualified person.



### **PRE-SHIFT SAFETY MEETINGS**

The permit holder must maintain a record of at least one pre-shift safety meeting per week for each worker. The record must include:

- the date and time of each meeting
- name, title and company affiliation of each worker who participated
- name, title and company affiliation of the competent person who conducted the meeting
- the signature of the competent person who conducted the meeting

NOTE: Changes in the scope requires new meeting.



#### **PRE-TASK MEETINGS**

- Is the team assigned to the task holding a pre-task meeting?
- Are updated meetings held when a task is modified?
- Are the hazards adequately identified?
- Are the Safety Professionals aware that a particular task is occurring that has safety concerns?



### **CONTROLLED ACCESS ZONES**

- Are the Controlled Access Zones (CAZ) properly cordoned off and have appropriate warning signage?
- Are the workers instructed on the requirements to access those zones?
- Have the workers been trained and provided with safety equipment such as harnesses for the task located in a CAZ?
- Are there proper tie-off points?
- Who is watching for compliance with safety requirements?



### **SHAFTS & OPENINGS**

- Are there proper railings installed?
- Were the railings tested to meet the standards of the Code?
- Are holes covered and identified as a danger?
- Are the holes being inspected daily?
- If work has happened affecting those protections, have they been put back in place after completion of the task?
- Are the re-installation of safety devices being verified by the Safety Professional?



### **COLD FORM STEEL**

- Pre-task training on the elements of Cold Form Steel (CFS) should be given whenever it will be used.
- Local Law 148 of 2021 related to Cold Form Steel will be effective in November 2022.
- New detailed requirements should be reviewed.
- CFS must be shored and braced prior to permanent installation.
- **DO NOT** load temporary installations on CFS framing.
- OVERLOADING of unreinforced CFS installations has led to several fatalities and critical injuries.



### ADMINISTRATIVE DUTIES OF THE SAFETY PROFESSIONAL

- The Safety Professional **must** maintain the required logs.
  - Requiring updates to the logs also falls on the Safety Professional.
  - Log requirements will vary based on the size of the project.



#### **REQUIRED LOGS**

- Permit Log
- Site Safety Training (SST) Log
- Site Safety Manager (SSM) Log
- Construction Superintendent (CS) Log
- Fire Safety Manager (FSM) Log
- Concrete Safety Manager (CSM) Log



#### **REQUIRED LOGS**

#### **Special Inspections Log**

- Monitoring of Adjoining Property
- Controlled Inspections of Work Types in Progress

#### Temporary Construction Log

- Scaffolds Daily Pre-use Inspection
  - Suspended & Supported
- Sidewalk Shed Daily Inspection
- Horizontal Netting Daily Inspection



## CONSTRUCTION SUPER LOG BOOK REQUIREMENTS

Chapter 33
Buildings Bulletin 2019-11



#### **CS LOG BOOK REQUIREMENTS**

#### BC 3301.13.13 – Log

The Construction Superintendent **must** maintain a log at each job site for which they are responsible.



### **CS LOG BOOK REQUIREMENTS**

The CS Log must include:

- the name of the Construction Super (printed and signed), time of arrival, and time of departure
- a brief description of the day's work (noting any foreseeable conflicts) and job site inspection results
  - per 3301.13.9, if any unsafe conditions are present, the conditions must be noted with time and location
- reports of incidents/injuries, accidents, fatalities, and damage to adjoining property or public property
  - all DOB enforcement actions
  - the name and signature of assigned competent person
    - if a new competent person is assigned, the name, date and time of change, and CS initials must be logged

### CFS BUILDINGS BULLETIN 2019-11

As part of the CS Log, record in the log:

- Cold-formed Steel (CFS) special inspections, including date and time of inspection, name of special inspector, special inspector identification or accreditation number, floors and areas inspected, and outcome of special inspection (i.e., deficiencies identified, or no deficiencies identified)
- Floors, or portions thereof, where persons, material, or equipment are authorized; and
- Deliveries to the site, or operations at the site, that results in materials or equipment being placed on decking (temporary or permanent).



### CFS BUILDINGS BULLETIN 2019-11

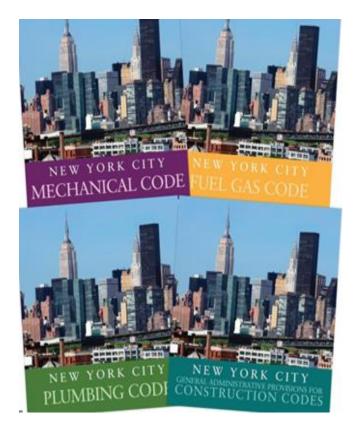
Record the following as part of the CS Log:

- Documentation of CFS Special Inspection: The construction superintendent must ensure written documentation provided by the special inspector and is maintained at the site with the construction superintendent's log.
- Record of Special Inspection: The special inspector shall produce and maintain records of special inspections in accordance with the applicable requirements. The special inspection agency shall maintain written documentation of which areas have passed special inspection and been accepted by the special inspector as complying with the approved construction documents. Such written document shall be provided to the permit holder and the construction superintendent and shall be made available to the Department upon request.

## **2022 NYC CONSTRUCTION CODES**



### 2022 CONSTRUCTION CODES REVISION PROCESS TIMELINE



- Local Law 99/2005 mandated the periodic revision of the Construction Codes to the latest International Code Council Codes
- Update to 2015 I-Codes
  - Referenced standards
- October 2017 Committee Work began
- Participation by 400+ stakeholders
- November 7, 2022, Enactment Date (Local Law 126/2021)



#### **EFFECTIVE DATE**

**Local Law 126/2021** is effective **November 7, 2022** for applications for construction document approval filed on or after November 7, 2022

Except:

- Amendments to the following sections or articles in the General Administrative Provisions would take effect on January 1, 2022:
  - Section 28-401.11 Term of License
  - Article 421 Elevator Agency Director License
  - Article 422 Elevator Agency Inspector License
  - Article 425 Elevator Agency Technician License
  - Article 303 Periodic Boiler Inspections
  - Article 304 Elevators and Conveying Systems; and
  - Article 323 Periodic Inspection of Parking Structures





#### **EFFECTIVE DATE**

**Local Law 126/2021** is effective **November 7, 2022** for applications for construction document approval filed on or after November 7, 2022,

#### Except:

- Amendments to 28-110.1 (Site Safety Plan) and Chapter 33 of the New York City Building Code shall apply to:
  - All work on major buildings for which a site safety plan is approved on or after November 7, 2022
  - All temporary construction equipment permits and all crane and derrick permits where the application for approval for such permit is filed on or after November 7, 2022



### **2022 CODES HIGHLIGHTS**

- New Materials Cross Laminated Timber (CLT) permitted for structural members (BC602.4, BC Chapter 23)
- New requirements for combustibles in façades (BC Chapters 7, 14, 17)
- Demolition design documents must include inspection interval for Structural Stability Special Inspections (BC1705.25)



### **2022 CODES HIGHLIGHTS**

- New Special Inspection for Tenant Protection Plan Compliance with weekly inspections required (BC 1705.26)
- More detailed requirements for underpinning and support of adjacent structures (BC 1817)
- Sidewalk sheds for Major Buildings will require more open designs with greater spacing for supports and bracing (BC 3307)



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