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NYC Construction Codes:
Chapter 33 Key Revisions
Suspended and Supported Scaffolding
Special Riggers Association Technical Meeting

2014 Construction Code:
Chapter 33 Key Revisions

NYC
Buildings

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Effective Date Chapter 33: Site Safety Sites vs Non-Site Safety Sites

Type of Chapter 33 Work	Trigger	2008 Code (BC 33)	2014 Code (BC 33)
Non-Site Safety Jobs: New Buildings, Alterations, & Partial Demolitions	Construction docs submitted <i>before</i> Dec 31, 2014	✓	
	Construction docs submitted <i>on or after</i> Dec 31, 2014		✓
Site Safety Jobs: New Buildings, Alterations, and Partial Demolitions	Site safety plan approved <i>before</i> Dec 31, 2014	✓	
	Site safety plan approved <i>on or after</i> Dec 31, 2014		✓

Effective Date Chapter 33: Demolition Sites

Type of Chapter 33 Work	Trigger	2008 Code (BC 33)	2014 Code (BC 33)
Full Demolitions: (Non-Site Safety & Site Safety Jobs)	Demolition permit issued <i>before</i> Dec 1, 2014	✓	
	Demolition permit issued <i>on or after</i> Dec 1, 2014		✓

Key Revision To Chapter 33

- Presentation covers ONLY KEY changes to the Chapter 33 of the NYC Construction Codes related to scaffolding.
- DOB website contains a 300+ page document covering all Chapter 33 changes in detail, in addition to a full version of the 2014 Construction Codes.

www.nyc.gov/buildings

- Codes & References > 2014 Construction Codes.
- This presentation, with related talking points, will be made available to the public and industry on our website in a few days.
- Hand outs of industry notices and select rules are available today

BC 3301.2: Safeguarding Public and Property

3301.2 Safety measures and safeguards. Contractors, construction managers, and subcontractors engaged in construction or demolition operations shall institute and maintain all safety measures required by this chapter and provide all equipment or temporary construction necessary to safeguard the public and property affected by such contractor's operations.

BC 3301.1.3: Manufacturer's Specifications

3301.1.3 Manufacturer specifications. All equipment shall be used in accordance with the specifications of the manufacturer, where such specifications exist, and the requirements of this code. Where there is a discrepancy, the stricter requirement shall apply.

BC 3301.8: Notification--Accident and Damage

3301.8 Accidents and damage to adjoining property.

The department shall be notified immediately by the permit holder, or a duly authorized representative, of an accident at a construction or demolition site, or of any damage to adjoining property caused by construction or demolition activity at the site.

EOC Hotline: 212-566-3199

BC 3302.1: Definition of Accident

3302.1 Definitions. The following words and terms shall, for the purposes of this chapter, have the following meanings.

ACCIDENT. An occurrence directly caused by construction or demolition activity or site conditions that result in one or more of the following:

1. A fatality to a member of the public, or
2. Any type of injury to a member of the public; or
3. A fatality to a worker; or
- 4. An injury to a worker that requires transport by emergency medical services or requires immediate emergency care at a hospital or offsite medical clinic; or**
5. Any complete or partial structural collapse or material failure; or
6. Any complete or partial collapse or failure of pedestrian protection, scaffolding, hoisting equipment, or material handling equipment; or
7. Any material fall exterior to the building or structure.

BC 3310.8.2.1: SSM-SSC Notification Requirements

3310.8.2.1 Notification of conditions to the department.

The site safety manager or coordinator shall immediately notify the department directly if he or she discovers any of the following conditions in the routine performance of the job:

BC 3302.1: Definition of Competent Person

3302.1 Definitions. The following words and terms shall, for the purposes of this chapter, have the following meanings.

COMPETENT PERSON. One who is capable of identifying existing predictable hazards in the surroundings or conditions that are unsanitary, hazardous or dangerous, and who has authorization to take prompt corrective measures to eliminate such hazards.

BC 3302.1: Definition of Qualified Person

3302.1 Definitions. The following words and terms shall, for the purposes of this chapter, have the following meanings.

QUALIFIED PERSON. A person who by possession of a recognized degree, certificate or professional standing, or who by knowledge, training and experience, has demonstrated his or her ability to solve or resolve problems related to the subject matter, the work or the project.

BC 3308.6.1.3: Horizontal Netting—Façade Work

3308.6.1.3 During façade construction, alteration, maintenance, or repair. Where unique hazards associated with the construction, alteration, maintenance, or repair of a façade exist to the public and property, horizontal safety netting shall be provided as required by the commissioner.

BC 3309.10: Roof Protection

3309.10 Protection of roofs. Whenever any building is to be constructed or demolished above the roof of an adjoining building, it shall be the duty of the person causing such work to protect from damage at all times during the course of such work and at his or her own expense the roof, skylights, other roof outlets, and equipment located on the roof of the adjoining building, and to use every reasonable means to avoid interference with the use of the adjoining building during the course of such work, provided such person causing such work is afforded a license in accordance with the requirements of Section 3309.2 to enter and inspect the adjoining building and perform such work thereon as may be necessary for such purpose; otherwise, the duty of protecting the roof, skylights, other roof outlets, and equipment on the roof of the adjoining building shall devolve upon the owner of such adjoining building.

Adjoining roof protection shall be secured to prevent dislodgement by wind. Where construction or demolition work occurs at a height of at least 48 inches (1219 mm) above the level of the adjoining roof, adjoining roof protection shall consist of 2 inches (51 mm) of flame-retardant foam under 2 inches (51 mm) of flame-retardant wood plank laid tight and covered by flame-retardant plywood, or shall consist of equivalent protection acceptable to the commissioner, and shall extend to a distance of at least 20 feet (508 mm) from the edge of the building being constructed or demolished.

BC 3309.13: Overhead Protection—Adj Spaces and Equipment

3309.13 Protection of adjoining equipment and spaces. Whenever a major building is constructed or demolished, and provided such work requires a site safety plan in accordance with Section 3310, it shall be the duty of the person causing such work to protect from damage, at all times during the course of such work and at his or her own expense, all mechanical, electrical, and similar equipment on the adjoining property that are within 20 feet (508 mm) from an unenclosed perimeter of the major building, and to protect all publically accessible spaces on the adjoining property that are within 20 feet (508 mm) from an unenclosed perimeter of the major building, and also to use every reasonable means to avoid interference with the use of such equipment and spaces during the course of such construction or demolition work, provided such person causing such work is afforded a license in accordance with the requirements of Section 3309.2 to enter and inspect the adjoining property and perform such work thereon as may be necessary for such purpose; otherwise, the duty of protecting such adjoining equipment and spaces shall devolve upon the owner of such adjoining property.

Exception: Equipment on an adjoining roof shall be protected in accordance with Section 3309.10.

BC 3302.1: Key Definitions—Major Building

MAJOR BUILDING. An existing or proposed building 10 or more stories or 125 feet (38 100 mm) or more in height, or an existing or proposed building with a building footprint of 100,000 square feet (30 480 m²) or more regardless of height, or an existing or proposed building so designated by the commissioner due to unique hazards associated with the construction or demolition of the structure.

BC 3310.8.3: SSM-SSC Inspection Duties

3310.8.3 Inspections. It shall be the responsibility of the site safety manager or coordinator to inspect personally, on a regular basis throughout the day while active work is occurring, the site to ensure compliance with the requirements of this chapter. At a minimum, inspections shall consist of those prescribed in rules promulgated by the commissioner, with such inspections performed personally by an individual certified by Chapter 4 of Title 28 of the *Administrative Code* as a site safety manager or coordinator.

1 RCNY 3310-01: SSM Duties and On-Site Presence

Key Revisions:

- Modified the requirements to have a full-time SSM on site for typical façade alterations (rehabs).
- Set a new requirement for a full-time Qualified Person for Site Safety (QPSS) whenever the site is not covered by a full-time SSM.
- Set out detailed inspection duties of the SSM/QPSS for façade jobs

1 RCNY 3310-01: SSM On-Site Presence

(i) The site safety manager must, at a minimum, visit the site after required sidewalk sheds, fences, pedestrian protection, and roof and adjoining property protection have been installed, but prior to the commencement of the project.

(ii) The site safety manager must be present while the following work is performed:

(A) Supported scaffold installation or removal, but not including the relocation of existing deck planking or guardrails to a different level of the scaffold provided any such relocation is designated on the scaffold design documents;

(B) Mast climber installation or removal; or

(C) Other work as directed by the commissioner.

(iii) The primary or alternate site safety manager must visit the site within 24-hours of the issuance of a hazardous violation by the department.

(iv) The site safety manager must be present when the following rigging work is performed, and such rigging work is not performed by or under the direct and continuing supervision of a licensed rigger:

(A) Suspended scaffold installation or removal;

(B) Suspended scaffold use; or

(C) Hoisting machine installation/assembly/erection, climbing/jumping, removal/disassembly, or a relocation requiring modifications to tie-backs, counterweights, or connections to the base building/structure

Qualifications of the QPSS

Qualification of QPSS

- (i) Completed the orientation and training required by Section 3310.10 of the Building Code;
- (ii) Beginning July 1, 2016, completed a department approved site safety manager training course that is least 40 hours in length, and every three years thereafter, complete a department approved site safety manager refresher course that is at least 7 hours in length;
- (iii) Beginning July 1, 2016, completed the training required by Section 3314.4.5.1 of the building code for supported scaffold installers;
- (iv) Beginning July 1, 2016, completed the training required by Section 3314.4.5.3 of the building code for suspended scaffold supervisors;
- (v) Beginning July 1, 2016, completed a course that is at least 30 hours in length and approved by the United States Department of Labor Occupational Safety and Health Administration (OSHA) in construction industry safety and health; and
- (vi) If the qualified person is not a licensed rigger or a rigging foreman, be approved by the primary site safety manager.

Notes Required On Site Safety Plan (SSP)

- A. This site safety plan submission is in compliance with the 2014 Building Code, Chapter 33
 - B. Site safety management is in accordance with 1 RCNY 3310-01, revised
 - C. 1 RCNY 3310-01 includes a detailed list of inspection duties specific to typical façade jobs that will be performed by the SSM and the Qualified Person For Site Safety (QPSS)
 - D. The contractor of record will designate the QPSS and alternates in a signed letter that will be kept on site and available upon request.
 - E. The designated SSM will endorse the chosen QPSS and alternates in a signed letter to be kept on site and available upon request.
- Exception:** Designated SSM does not need to endorse the QPSS when that QPSS is a licensed rigger or the rigger's true designated foreman.

Site Safety Plans/Professional Certification/A3

- As of July 2015, Site Safety Plans for typical façade jobs may be filed as Professionally Certified A3 applications.
- The A3 may be filed using efile or Hub Self Service
- Standard fees apply
- BEST review is NOT required

BC 3310.8.4: Site Safety Log

3310.8.4 Site safety log. A site safety log shall be maintained and kept at the site. The log, or where there is more than one log, the logs in total, shall, at a minimum, contain the following information

Scaffolding: Suspended and Supported



BC 3314.4.4.6: Scaffolds—Wind Restrictions

3314.4.4.6 Winds. Where sustained winds or wind gusts at the site exceed 30 miles per hour, the use and operation of scaffolds located on the roof of a building, exterior to a building or structure, on a working deck, or in an area with an unenclosed perimeter shall cease. If the manufacturer or designer of the scaffold recommends work to cease at a lower wind speed, such recommendation shall instead apply. Wind speed shall be determined based on data from the nearest United States weather bureau reporting station, or an anemometer located at the site, freely exposed to the wind, and calibrated in accordance with ASTM D5096-02.

BC 3314.2: Suspended Scaffolds—Permit Exceptions

Exceptions:

1. *A permit is not required for a two-point suspended scaffold suspended from a parapet using C-hooks.*

2. *A permit is not required for a suspended scaffold provided:*
 - 2.1. *The scaffold is installed and used in conjunction with a construction, alteration, or demolition project that holds a valid permit from the department for such project;*

 - 2.2. *The site is closed to the public and enclosed with a fence in accordance with Section 3307; and*

 - 2.3. *The installation, use, and removal of the scaffold is confined within the site or over an area protected by sidewalk sheds or roof protection.*

BC 3314.3: Suspended Scaffolds—Design Exceptions

3314.3.2 Suspended scaffolds. Suspended scaffolds shall be **designed** by a registered design professional.

Exceptions:

1. Design is not required for a single tier non-adjustable suspended scaffold whose platform is 40 square feet (12 192mm) or less in size.
2. In lieu of a registered design professional, a two-point, single tier, suspended scaffold may be designed by a licensed rigger provided:
 - 2.1. The scaffold or scaffold outrigger beam or suspension member support structure is not anchored to the building or structure, other than tiebacks; and
 - 2.2. The scaffold will not be loaded, or designed to be loaded, in excess of 75 pounds per square foot (366.15 kg/m²); and either
 - 2.2.1. The scaffold utilizes c-hooks; or
 - 2.2.2. The distance from floor or roof on which the support structure is located to the top of the outrigger beam or suspension member support structure is less than 15 feet.
3. In lieu of a registered design professional or a licensed rigger, a two-point, single tier, suspended scaffold meeting the requirements of Item 2 of these exceptions that is used exclusively for sign hanging work may be designed by a licensed sign hanger.

BC 3314.4: Suspended Scaffolds – Installation and Use

Supervision of the Installation of Suspended Scaffolds:

1. A licensed sign hanger/designated sign hanging foreman may supervise the installation of a suspended scaffold utilized exclusively for sign hanging.

2. A licensed rigger/designated rigging foreman or a competent person designated by the contractor may supervise the installation of a suspended scaffold utilized for either:
 - 2.1 New building construction
 - 2.2 Full demolition
 - 2.3 A vertical or horizontal enlargement; or
 - 2.4 Façade work on a major building with a site safety plan

3. For all other work, the installation of a suspended scaffold must be supervised by a licensed rigger/designated rigging foreman.

BC 3314.4: Suspended Scaffolds - Installation Inspection

Suspended Scaffold Installation Inspection

1. The suspended scaffold, along with support devices (such as c-hooks and outrigger beams), and the support surface (such as the roof or parapet) must be inspected prior to installation, and at the completion of installation by the:

- 1.1 Licensed rigger/sign hanger/designated foreman supervising the installation; or
- 1.2 A qualified person designated by the scaffold designer (if the installation is supervised by a competent person); such qualified person must be a registered design professional or an employee of the registered design professional.

2. Following installation, the inspector must issue a **sign-off letter**.

Note: Inspections are not required for a non-adjustable suspended scaffold that does not require design (“floats”).

BC 3314.4.3.1: Suspended Scaffolds – Pre-Installation Inspection

3314.4.3.1 Inspection prior to the installation of a suspended scaffold. Prior to the installation of a suspended scaffold, all suspended scaffold support devices, including but not limited to outrigger beams and C-hooks, along with the support surface upon which they rest, shall be inspected by a qualified person. The qualified person shall:

1. Where the installation or removal occurs under the direct and continuing supervision of a licensed rigger or sign hanger, be designated by such licensee; or
2. Where the installation or removal does not occur under the direct and continuing supervision of a licensed rigger or sign hanger, be designated by the designer of the scaffold.

Exception: An inspection is not required for a non-adjustable suspended scaffold that, pursuant to Section 3314.3.2, is not required to be designed.

3314.4.3.1.1 Special provision for parapet clamps. Where parapet clamps are to be utilized, the qualified person who inspects the support surface as required by Section 3314.4.3.1 shall be a registered design professional.

BC 3314.16: Corner and Angle Suspended Scaffolds/Design

3314.16.3 Additional information. In addition to the information required by Section 3314.3, corner and angle scaffolds shall also contain load capacity and distribution charts and a certification from the registered design professional that he/she has reviewed the manufacturer's design calculations and testing or prepared sufficient calculations of his/her own and found them to conform to this code.

BC 3314.4: Suspended Scaffolds—Pre-Shift Inspection

Suspended Scaffold Pre-shift Inspection

1. A pre-shift suspended scaffold inspection checklist must be developed by the licensed rigger/sign hanger who installed the scaffold, or by the scaffold designer.
2. The checklist must be kept on site.
3. Suspended scaffolds must be inspected in accordance with the checklist prior to the start of each shift by the individual supervising the use of the suspended scaffold.

Note: Inspections are not required for a non-adjustable suspended scaffold that does not require design (“floats”).

BC 3316.9.1: Rigging Supervision

Supervision of Rigging:

1. A licensed sign hanger/designated sign hanging foreman may supervise the hoisting or lowering of a sign.
2. A licensed rigger/designated rigging foreman or a competent person designated by the contractor may supervise the hoisting or lowering of articles during the course of:
 - 2.1 New building construction
 - 2.2 Full demolition
 - 2.3 A vertical or horizontal enlargement; or
 - 2.4 Façade work on a major building with a site safety plan
3. However, boilers and tanks, tower crane assembly/jumping/disassembly, and industrial rope access must always be supervised by a licensed rigger/designated rigging foreman.
4. For all other work, the use of a suspended scaffold must be supervised by a licensed rigger/designated rigging foreman.

BC 3314.4.1.5: Suspended Scaffold--Notification

3314.4.1.5 Notification of adjustable suspended scaffold installation and removal. Prior to the initial installation of the adjustable suspended scaffold at a site, and prior to the final removal of the adjustable suspended scaffold at a site, the department shall be notified at least 24 hours, but not more than 48 hours, prior to such installation or removal.

BC 3316.9.1: Critical Picks

Critical Picks shall either be:

1. Personally supervised by a licensed rigger (or a licensed sign hanger for sign hanging work), with the crew employed by the licensee; or
2. Performed in accordance with a plan developed by a licensed master rigger or a New York State licensed professional engineer who has relevant experience with cranes, hoisting machines, and rigging. Prior to the pick, the master rigger, professional engineer, or a registered design professional employed by the engineer must visit the site to verify compliance with the plan.

BC 3314.2: Supported Scaffolds—Permit Exceptions

4. A permit is not required for a supported scaffold, provided:

4.1. The scaffold is not an outrigger scaffold (thrust out);

4.2. No hoisting equipment with a manufacturer's rated capacity greater than 2,000 pounds (907kg) will be located on the scaffold;

4.3. The scaffold will not be loaded, or designed to be loaded, in excess of 75 pounds per square foot (366.15 kg/m²); and

4.4. The scaffold is less than 40 feet (12 192mm) in height.

BC 3314.3: Supported Scaffolds—Design Exceptions

Exception: Design is not required for a supported scaffold, provided:

1. The scaffold is not an outrigger scaffold (thrust out);
2. No hoisting equipment with a manufacturer's rated capacity greater than 2,000 pounds (907kg) will be located on the scaffold;
3. The scaffold will not be loaded, or designed to be loaded, in excess of 75 pounds per square foot (366.15 kg/m²);
4. The scaffold is less than 40 feet (12 192mm) in height;
5. Side-arm or end-arm scaffold brackets are used exclusively for the support of workers; and
6. The scaffold is a light duty scaffold, a medium duty scaffold, or a heavy duty scaffold.

BC 3314.4.1.2: Supported Scaffold--Installation

3314.4.1.2 Supervision of supported scaffold installation and removal. The installation and removal of a supported scaffold shall be supervised by a competent person designated by the contractor installing or removing the scaffold.

BC 3314.4.2.2: Supported Scaffold Use

3314.4.2.2 Supervision of supported scaffold use. The use of a supported scaffold shall be supervised by a competent person designated by the scaffold controlling entity.

Scaffold Controlling Entity: The contractor or other entity that exercises responsibility for the site where scaffold is located.

Thank You for Your Time!

Questions?