2014 NYC Construction Codes: Overview

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Office of the First Deputy Commissioner
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Learning Objectives

• Participants will examine local law amendments to chapter one of Title 28 the New York City Construction Codes and understand how they regulate the design of new buildings and alterations to existing buildings thereby ensuring safe construction.
• Participants will review the New York City Construction Codes revision process and learn how the codes provide safety enhancements in building design and construction.
• Participants will analyze the changes in the New York City Construction Codes and will be able to determine how they apply to a project.
• Participants will analyze the triggers in the New York City Construction Codes and will be able to determine when to apply the new revisions to an existing building.
Construction Codes Revision

Benefits:
• Updates Codes to national standards
• Incorporates latest technologies
• Allows new materials and methods of construction
• Maintains consistency with other jurisdictions
Construction Codes Timeline

December 2013
- Council approval & Mayoral signing of Local Law 141 of 2013

Training & Implementation

December 31, 2014
- Effective date of LL 141/13
Construction Codes Effective Date

Other Local Laws becoming effective 12/31/2014:

• LL  79/13  Toilets/faucets function without electricity
• LL 100/13  Increase flood resiliency
• LL 101/13  Increased wind standards
• LL 108/13  External hookups for I & R occupancies
• LL 110/13  Common area drinking water
• LL 130/13  Vehicle charging: parking lots & garages
Construction Codes Effective Date

Other Local Laws becoming effective 12/31/2014:

- LL 10/14  CO detectors in assembly spaces
- LL 12/14  Insulation of existing concealed piping
- LL 13/14  Mold-resistant gyp & cement board
- LL 17/14  Hold-open devices & automatic doors
- LL 18/14  Construction site lighting
Accessing the 2014 Codes

New Effective Date for 2014 NYC Construction Codes: December 31, 2014.

An integrated version of the General Administrative Provisions – 2014 NYC Administrative Code, Title 28, Chapters 1-5 – is available, and the full 2014 Construction Codes are accessible below, chapter by chapter.

RESOURCES + TRAINING MATERIALS

View our presentations and training videos to learn more about changes under the 2014 NYC Construction Codes.


Read an overview of Chapter 33, which explains changes and compares language to the 2008 Code.

See Selected Local Laws for the 13 local laws that comprise the 2014 Codes.

More than 350 people participated in this code revision. We thank them for their time, effort and commitment. Please read the 2014 Codes Acknowledgements and Dedication.

The 2014 NYC Construction Codes are published by the International Code Council (ICC). Visit ICC’s website to purchase the 2014 NYC Construction Codes.

2014 NYC CONSTRUCTION CODES TABLE OF CONTENTS

1. GENERAL ADMINISTRATIVE PROVISIONS
2. PLUMBING CODE
3. MECHANICAL CODE
4. FUEL GAS CODE
5. BUILDING CODE
## Effective Dates – New Buildings

<table>
<thead>
<tr>
<th>Type of Work</th>
<th>Trigger</th>
<th>2008 Code</th>
<th>2014 Code</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>NEW BUILDINGS</strong></td>
<td><strong>Construction Documents</strong> submitted <em>before December 31, 2014</em></td>
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<tr>
<td></td>
<td>• Architectural, Structural, &amp; Foundation Drawings Required</td>
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<tr>
<td></td>
<td>• Subsequent filings may be filed on or after <em>December 31, 2014</em></td>
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<tr>
<td></td>
<td><strong>Construction Documents</strong> submitted <em>on or after December 31, 2014</em></td>
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## Effective Dates – Alterations

<table>
<thead>
<tr>
<th>Type of Work</th>
<th>Trigger</th>
<th>2008 Code</th>
<th>2014 Code</th>
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<tbody>
<tr>
<td>ALTERATIONS TO EXISTING BUILDINGS</td>
<td>Construction Documents submitted <em>before December 31, 2014</em></td>
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<tr>
<td></td>
<td>Construction Documents submitted <em>on or after December 31, 2014</em></td>
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# Effective Dates – Chapter BC 33

<table>
<thead>
<tr>
<th>Type of Chapter 33 Work</th>
<th>Trigger</th>
<th>2008 Code (BC 33)</th>
<th>2014 Code (BC 33)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Non-Site Safety Jobs:</strong> New Buildings, Alterations, &amp; Partial Demolitions</td>
<td>Construction docs submitted <strong>before December 31, 2014</strong></td>
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<td>✓</td>
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<tr>
<td></td>
<td>Construction docs submitted <strong>on or after Dec. 31, 2014</strong></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td><strong>Site Safety Jobs:</strong> New Buildings, Alterations, and Partial Demolitions</td>
<td>Site safety plan approved <strong>before December 31, 2014</strong></td>
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<td>✓</td>
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<tr>
<td></td>
<td>Site safety plan approved <strong>on or after Dec. 31, 2014</strong></td>
<td></td>
<td>✓</td>
</tr>
</tbody>
</table>
Effective Dates – Full Demolitions

<table>
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<tr>
<th>Type of Chapter 33 Work</th>
<th>Trigger</th>
<th>2008 Code (BC 33)</th>
<th>2014 Code (BC 33)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full Demolitions: (Non-Site Safety &amp; Site Safety Jobs)</td>
<td>Demolition permit issued <em>before December 31, 2014</em></td>
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<tr>
<td></td>
<td>Demolition permit issued <em>on or after December 31, 2014</em></td>
<td></td>
<td>✓</td>
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</table>
Effective Dates – EXCEPTIONS

• **28-304.6.4 to 28-304.6.6**, Elevator Inspections
  - Effective IMMEDIATELY

• **BC 403.5.2**, Additional Egress Capacity for nonresidential > 420 feet
  - Effective **JUNE 30, 2015** or upon zoning text change, whichever is later
Effective Dates – Inflight Upgrades

• For projects filed under 2008 or earlier code prior to 12/31/14, BIS now allows the application to be upgraded to 2014 code on or after 12/31/14 by filing a PAA
  – Any PW1 sections that are affected must be completely amended
# Effective Dates – Inflight Upgrades

**DO NOT SUBMIT BEFORE 12/31/2014**

**NYC Buildings**

**PW1: Plan / Work Application**

Must be typewritten.

### Filing Status

Required for all applications. Choose one and provide specified associated information.

- **Initial Filing**: 5, 7, 11, 12A, 25-26
  - Choose only one:
    - Standard Plan Examination or Review
    - Professional Certification PC1, PCO1
    - Professional Certification of Objections A11

- **Prior to Approval Actions**: 25-26
  - Amend Existing Filing 4A
  - Subsequent Filing 6-7, 8A (A11 only), 11

- **Post Approval Amendment (PAA)**: 4A, 6, 24-25
  - Will PAA affect filing fees? ☐ Yes ☐ No
  - New (Superseding) Applicant 4A, 25-26

- **Reinstatement**: 24-26

- **Withdrawal**: 26
  - Specified in 4A and 6
  - Entire Job

4A Indicate existing document number affected by filing.

### Additional Considerations, Limitations or Restrictions

9A. Review is requested under which building code? ☐ 2014 ☐ 2008 ☐ 1968 ☐ Prior to 1968

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>9B</td>
<td>Alteration required to meet New Building requirements (28-101.4.5) If yes, 13A-B</td>
<td></td>
</tr>
<tr>
<td>9C</td>
<td>Façade Alteration</td>
<td></td>
</tr>
</tbody>
</table>

- ☐ Change in number of dwelling units
- ☐ Change in occupancy / use
- ☐ Change is inconsistent with current certificate of occupancy
- ☐ Change in number of stories
Quiz #1

1. What are two exceptions to the December 31, 2014 effective date of the 2014 Construction Codes?
Alterations to Existing Buildings in the 2014 Construction Codes
Alterations to Existing Buildings

“Existing” Building

“This Code”

2008

2014

“Prior Code” Building

“Prior Code” Building
Alterations to Existing Buildings (§ 28-101.4.5)

“Big” Alterations must follow 2014 Code
Alterations to Existing Buildings
(§ 28-101.4.5)

TO: Distribution
FROM: Ronny A. Livian,
Deputy Commissioner
DATE: July 24, 2002
SUBJECT: Application Type Required for Work Involving Alterations and Demolition in a Building

Effective: Immediately
Purpose: To establish a procedure to determine the type of application that must be filed for work involving demolition of exterior building walls.

Specified:
- Departmental Memorandum, dated March 6, 1986 regarding
  Determination For Applications Type Be Used: New Buildings – C26-110.0; Alterations – C26111.0; Demolitions – C26-113.0
- Technical PPN 83/00 regarding application type required for work involving demolitions in buildings.

Specifics:
A. Exterior Walls
   For the purpose of this TPPN, an exterior wall shall be any building enclosing wall including party walls.

TPPN 1/02
Alterations to Existing Buildings
( § 28-101.4.5)

§ 28-101.4.5 Work that increases existing floor surface area of a prior code building by more than 110 percent.
• ...where the proposed work at the completion of construction will increase the amount of floor surface area of a prior code building by more than 110 percent, over the amount of existing floor surface area, such entire building shall be made to comply with the provisions of this code as if it were a new building hereafter erected...
Alterations to Existing Buildings
(§ 28-101.4.5)

**FLOOR SURFACE AREA.** Floor surface area is the gross square foot area of all horizontal floor and roof surfaces, including roofs of bulkheads and superstructures, of a building or structure at any level, including cellar, attic and roof.

**IMPLICATIONS:**

- Entire building to comply with 2014 code
- Must be filed as “Big Alt-1” (see next slide)
### Alterations to Existing Buildings

(§ 28-101.4.5)

**5. Job/Project Types** Choose one and provide specified associated information.

- **Alteration Type 1 or Alteration Type 1 required to meet New Building requirements (28-101.4.5)**
  - 64-E, 8B-C, 9-10, 13C-F, 14, 18-20, 22, PWA & PD1

- **Alteration Type 2** 5A, 6A-D, 8A-E, 9-10, 13C-E, &
  - 14, 20, 22

- **Alteration Type 3** 5A, 6B-F, 8C, 9-10, 13C-E, 20, 22

- **New Building** 64-E, 8F-G, 9A, 9C-K, 10, 12 &
  - 13A-E, 14, 18-20, PWA, PD1

- **Sign** 5A, 6B-D, 9A, 9D, 22, 23

- **Full Demolition** 6B, 8D, 9A &
  - 9C-D, 9K, 13D-E, 14, 21A, 22

- **Subdivision** 9A, 9D, 12A-B

- **Condominium**

- **Improved 17**

5ADirective 14 acceptance requested?

- Yes
- No

### 9. Additional Considerations, Limitations or Restrictions

- **9A** Review is requested under which building code?
  - [ ] 2014
  - [ ] 2008
  - [ ] 1968
  - [ ] Prior to 1968

- **9B** [ ] Alteration required to meet New Building requirements (28-101.4.5) 
  - [ ] Yes
  - [ ] No

- **9C** [ ] Change in number of dwelling units

- **9D** [ ] Change in occupancy / use

- **9E** [ ] Change is inconsistent with current certificate of occupancy

- **9F** [ ] Change in number of stories

- **9G** [ ] Façade Alteration

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**NYC Buildings**

**PW1: Plan / Work Application**

*Must be typewritten.*

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**DO NOT SUBMIT BEFORE 12/31/2014**
Alterations to Existing Buildings
( § 28-101.4.5)

...the following shall be excluded from the measured square footage of floor surface area:

1. The square footage of floors removed during the course of the work when...removed...with the supporting beams, joists, decking and slabs on grade.

2. The square footage of any floor that was installed...less than 12 months prior to submission of the application for construction document approval for the proposed work...[or] installed pursuant to a work permit signed off less than 12 months before such submission...
Alterations to Existing Buildings
( § 28-101.4.5)

4 Existing

4 Added
≤ 110%
Prior Code Option

5 Added
> 110%
2014 Code Only

or
Alterations to Existing Buildings
(§ 28-101.4.5)

3 Existing (1 Removed)

3 Added ≤ 110% Prior Code Option

or

4 Added > 110% 2014 Code Only
Alterations to Existing Buildings
( § 28-101.4.5)

2 Existing (2 Removed) → 2 Added ≤ 110% Prior Code Option or 3 Added > 110% 2014 Code Only
Alterations to Existing Buildings

(§ 28-101.4.5)
Alterations to Existing Buildings
(§ 28-101.4.5)

Changes in scope of work. In cases where changes in the scope of work during the course of construction would result in increasing the floor surface area at the completion of construction by more than 110 percent...such entire building shall be made to comply with the provisions of this code as if hereafter erected...

*Exception:* Work to the extent necessary to relieve an emergency condition...
Alterations to Existing Buildings
(§ 28-101.4.5)

Effect on zoning resolution. The provisions of section 28-101.4.5 shall not affect the status of any nonconforming use or non-complying bulk otherwise permitted to be retained pursuant to the zoning resolution.

11-23
Demolition and Replacement
The alteration of an existing building resulting in both the removal of more than 75 percent of the floor area and more than 25 percent of the perimeter walls of such existing building, and the replacement of any amount of floor area, shall be considered a development...
Quiz #2

2. What is a “prior code” building?

3. If an alteration increases floor surface area by over 110% after 12/31/2014, how should it be filed?
Alterations to Existing Buildings
( § 28-101.4.3)

§ 28-101.4.3 Optional use of the 1968 building code for work on prior code buildings.

• ...work on prior code buildings may be performed in accordance with...the 1968 building code, or where the 1968 code so authorizes, [1938 code].

• Many changes from the 2008 edition of 28-101.4.3
• 19 exceptions
## Alterations to Existing Buildings
(§ 28-101.4.3)

### EXCEPTIONS:

1. Fuel gas, plumbing and mechanical work.
2. Fire protection systems.
3. Elevators, conveyors and amusement rides.
4. Safety during construction operations.
5. Accessibility.
6. Encroachments into the public right of way.
7. Administration and enforcement.
8. Special inspections.
10. Security grilles.
12. Roof recovering and replacements.
13. Handrails.
15. Areas of special flood hazard.
17. Emergency and standby power systems.
18. Parking garages and open parking lots.
19. Mold protection.
Alterations to Existing Buildings
( § 28-101.4.3)

- Most exceptions require 2014 code for certain work:

4. **Safety during construction operations.** Safety of public and property during construction operations including demolition shall be governed by chapter 33 of the New York city building code.
Alterations to Existing Buildings
(§ 28-101.4.3)

• Most exceptions require 2014 code for certain work:

14. Guards. Where the alteration or repair of a building involves the addition or replacement of guards, such guards shall comply with sections 1013 and 1607.7 of the New York city building code.
Alterations to Existing Buildings
(§ 28-101.4.3)

• Some exceptions refer to “Special Provisions for Prior Code Buildings”
  – Such provisions are generally found at the end of the first section of a code chapter

  Exception 1: Plumbing PC 102.4
  Fuel Gas FGC 102.4
  Mechanical MC 102.4

  Exception 2: Fire Protection BC 901

  Exception 3: Elevators BC 3001

  Exception 5: Accessibility BC 1101

  Exception 16: Structural BC 1601
Alterations to Existing Buildings
( § 28-101.4.3)

• Special Provisions for Prior Code Buildings
• 28-101.4.3, Exception 1:

1. **Fuel gas, plumbing and mechanical work.** The installation of and work on all appliances, equipment and systems regulated by the New York city fuel gas code, the New York city plumbing code and the New York city mechanical code shall be governed by applicable provisions of those codes relating to new and existing installations.
Alterations to Existing Buildings (§ 28-101.4.3)

- Special Provisions for Prior Code Buildings
  - “applicable provisions of those codes”:

**MC 102.4 Additions, alterations or repairs.**

Additions, alterations, renovations or repairs to a mechanical system shall conform to requirements for a new mechanical system without requiring the existing mechanical system to comply with all of the requirements of this code. Additions, alterations or repairs shall not cause an existing mechanical system to become unsafe, hazardous or overloaded.
Alterations to Existing Buildings
(§ 28-101.4.3)

• Special Provisions for Prior Code Buildings
  – “applicable provisions of those codes”:

**MC 102.4.1 Minor additions, alterations, renovations and repairs.**

Minor additions, alterations, renovations and repairs to existing mechanical systems shall meet the provisions for new construction, unless such work is done in the same manner and arrangement as was in the existing system, is not hazardous and is approved.
Alterations to Existing Buildings
(§ 28-101.4.3)

• Special Provisions for Prior Code Buildings
  – “applicable provisions of those codes”:

MC 102.4.2

Special provisions for prior code buildings.
In addition to the requirements of Sections 102.4 and 102.4.1, the provisions of Sections 102.4.2.1 through 102.4.2.6 shall apply to prior code buildings.

• MC 102.4.2.1 Fire and smoke dampers
• MC 102.4.2.2 Guards and access to roofs and elevated structures
• MC 102.4.2.3 Vibration isolation for cooling towers (...
Alterations to Existing Buildings
(§ 28-101.4.3)

- Special Provisions for Prior Code Buildings
- 28-101.4.3, Exception 2:

2. **Fire protection systems.** Alterations of buildings and changes of use or occupancy shall be governed by chapter 9 of the New York city building code, subject to special provisions for prior code buildings as set forth therein.
Alterations to Existing Buildings
(§ 28-101.4.3)

• Special Provisions for Prior Code Buildings

BC 901.9

➤ 901.9.3 Sprinkler and fire alarm requirements for enlargements.
Alterations to Existing Buildings

(§ 28-101.4.3)

• Special Provisions for Prior Code Buildings

• 28-101.4.3, Exception 3:

3. **Elevators, conveyors and amusement rides.** The installation of and work on elevators, conveyors, and amusement rides shall be governed by chapter 30 and appendix K of the New York City building code and the rules of the department, subject to special provisions for prior code buildings as set forth therein.
Alterations to Existing Buildings
( § 28-101.4.3)

• Special Provisions for Prior Code Buildings

BC 3001.11

- 3001.11.1 New elevators in existing shafts.
Alterations to Existing Buildings
( § 28-101.4.3)

• Special Provisions for Prior Code Buildings
• 28-101.4.3, Exception 5:

5. **Accessibility.** Alterations, including minor alterations, of buildings and changes of use or occupancy, shall be governed by chapter 11 of the New York city building code, subject to special provisions for prior code buildings as set forth therein.
Alterations to Existing Buildings
( § 28-101.4.3)

• Special Provisions for Prior Code Buildings

BC 1101.3

- 1101.3.1 Accessibility requirements for changes of occupancy.
Alterations to Existing Buildings
(§ 28-101.4.3)

• Special Provisions for Prior Code Buildings
• 28-101.4.3, Exception 16:

16. Structural. The use of load resistance factor design (LRFD), calculation of live loads, and applicability of seismic and wind loads shall be governed by special provisions for prior code buildings as set forth in section 1601.2 of the New York city building code.
Alterations to Existing Buildings
(§ 28-101.4.3)

- Special Provisions for Prior Code Buildings

**BC 1601.2**

- **1601.2** Seismic requirements for alterations.
4. In a prior code building, for an elevator cab upgrade in an existing elevator shaft, does the shaft have to be enlarged to fit a larger cab per 14 Code?
Questions?

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