

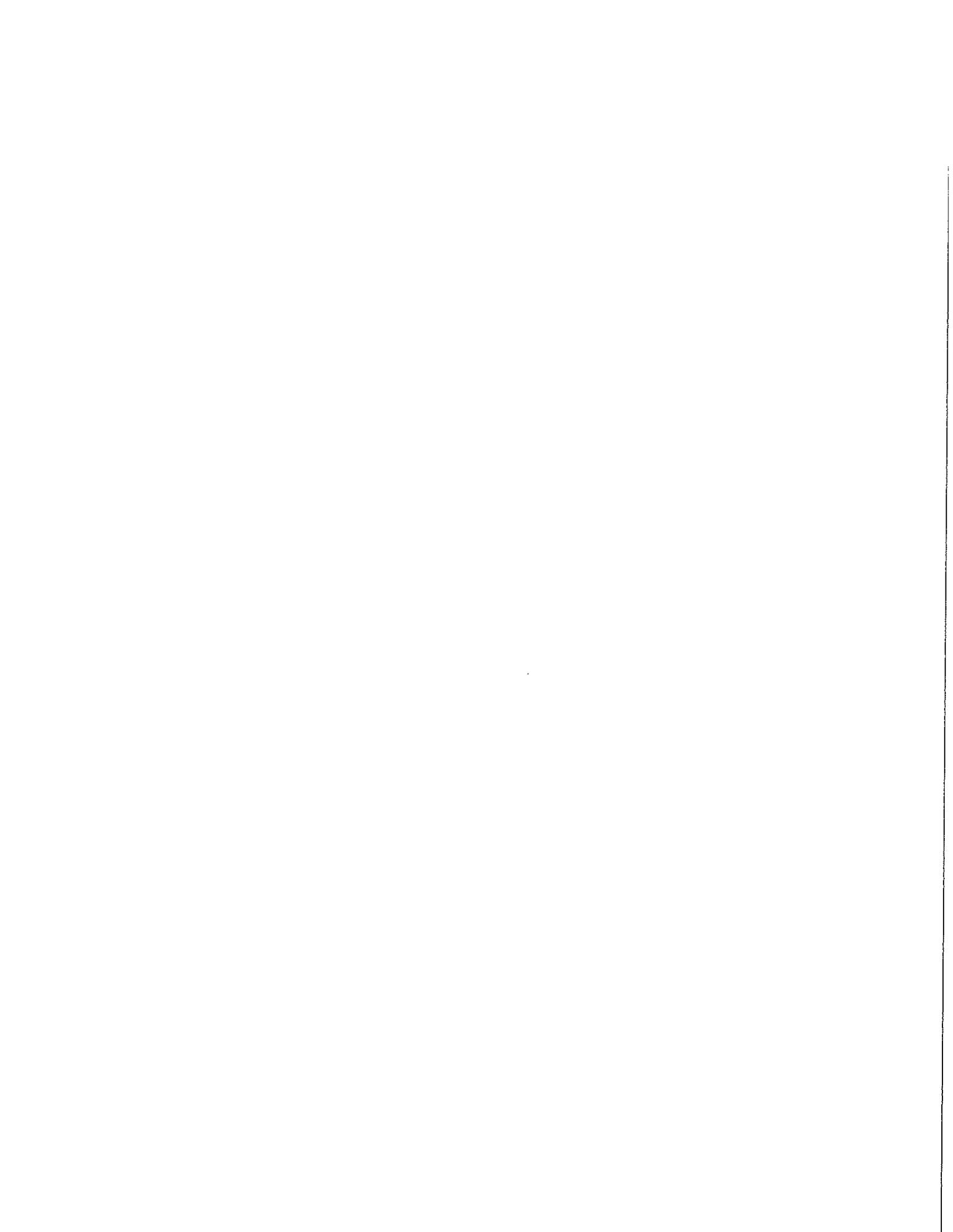
*Spring 2012  
Career Development Programs*

*(CODE) Information Required on Construction Documents*

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Sponsored by

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## ***CODE INFORMATION REQUIRED ON CONSTRUCTION DOCUMENTS***

This presentation includes an overview of the interrelationship between Construction Documents and Code Compliance. It will review the role of Construction Documents and discuss where they fit into the code compliance puzzle. The presentation is based on the International Building Code 2003, as modified by the 2005 Connecticut Supplement and the 2009 Connecticut Amendments.

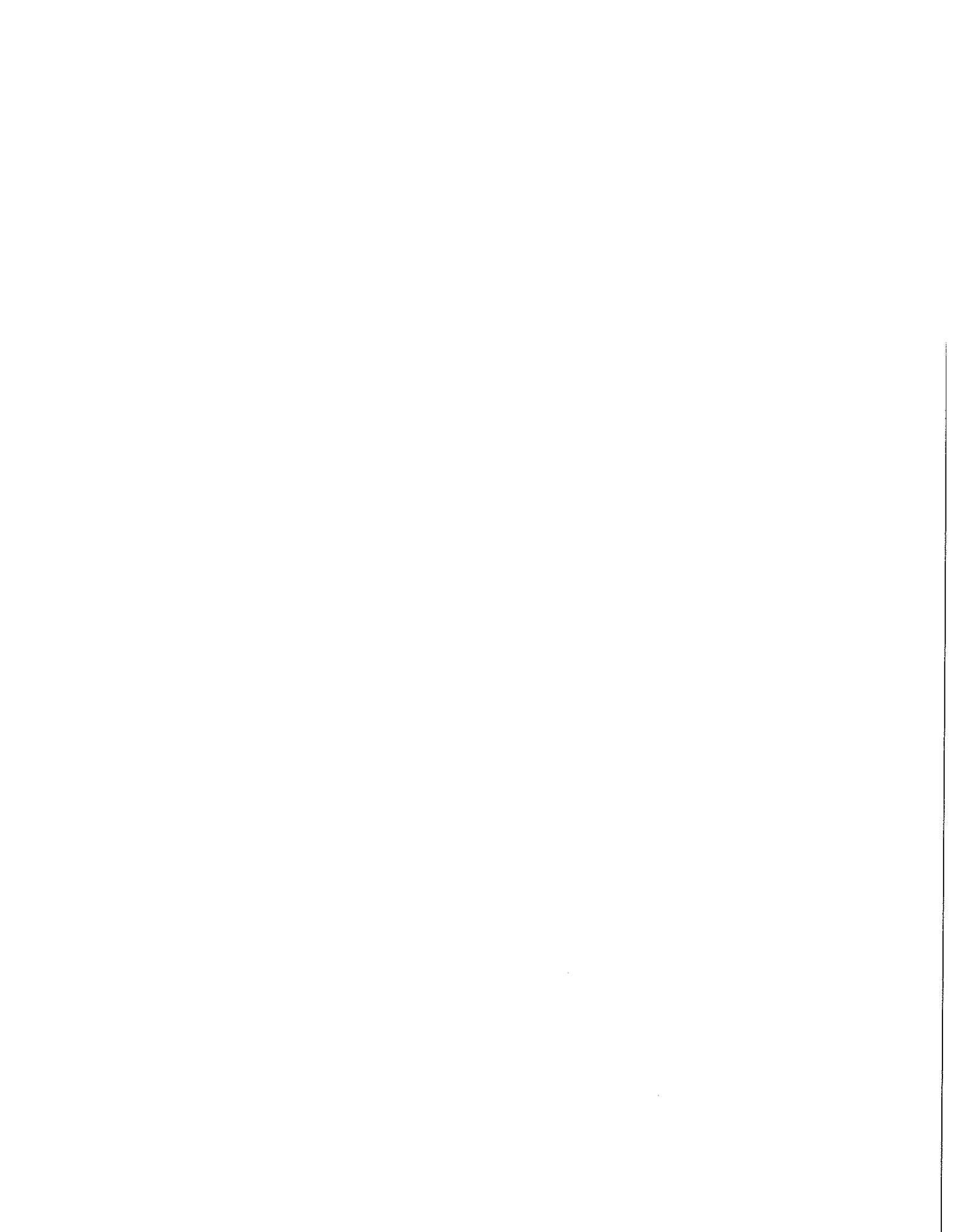
- Administration (Chapter 1)
  - Permit applicant to indicate on CD's for existing buildings whether compliance is with IEBC or IBC portion of the Code. (101.2 Ex.2)
  - BO not to produce CD's (103.4)
  - BO to review CD's (104.2, 106.3)
  - Permit application to include CD's where required (105.3)
  - BO to reject permit application if CD's do not comply with code. (105.3.1)
  - FM must also review CD's for code compliance (105.3.1.2)
  - BO approval of CD's containing code violations does not validate the documents. BO can require corrections in CD's, and can prevent use or occupancy when there are violations. (105.4)
  - CD's to be prepared by registered design professional, unless the nature of the work does not require same, as judged by the BO. (106.1)
  - CD's to clearly show and detail the conformity with the code and relevant laws. (106.1.1)
  - Complete fire protection shop drawings in compliance with the CD's shall be submitted. (106.1.1.1)
  - CD's shall show means of egress and designate number of occupants as required.(106.1.2)
  - CD's shall detail exterior wall envelope. (106.1.3)
  - CD's shall include a site plan showing grades, lot lines, structures, flood information, demolition. (106.2)
  - BO shall review CD's to determine compliance with Building Code and other applicable laws and regulations. (106.3)
  - CD's after reviewed by BO to be kept at the site for BO inspection. (106.3.1)
  - CD's under a prior code are not required to be revised if the permit was issued under that prior code and work was pursued within 180 days after the effective date of the current code. (106.3.2)
  - CD's can be approved by BO for phased work (i.e. foundations) but permit holder proceeds at own risk. (106.3.3)
  - Deferred submittals shall be approved by the BO and listed in the CD's. Deferred submittal items to be approved before installation. (106.3.4.2)
  - Amendments to the approved CD's shall be submitted to the BO for approval. (106.4)
  - CD's to be retained by the BO for specific periods of time. (106.5)
  - Any person who does work in violation of approved CD's is subject to penalties of

- law. (113.4)
- Definitions (Section 202)
  - CD's are defined as Written, graphic and pictorial documents prepared or assembled for describing the design, location and physical characteristics of the elements of a project necessary for obtaining a building permit. (202)
- Hazardous Materials (Section 414)
  - CD's to indicate locations of Hazardous Materials on separate floor plans (414.1.3)
  - CD's to indicate protection of Hazardous Materials (414.1.3)
- Fire Alarm and Detection Systems (Section 907)
  - CD's shall be submitted for review and approval prior to system installation, and shall include specific details. (907.1.1)
- Smoke Control Systems (Section 909)
  - CD's shall include info and detail (909.2)
  - CD's shall be accompanied by details of inspections and tests. (903.3)
- Structural Design (Chapter 16)
  - CD's shall indicate size, section and locations of structural members, with floor levels, dimensions, and design loads. (1603.1)
    - Floor live load (1603.1.1)
    - Roof live load (1603.1.2)
    - Roof snow load (1603.1.3)
    - Wind design data (1603.1.4)
    - Earthquake design data (1603.1.5)
    - Flood load (1603.1.6)
    - Special loads (1603.1.7)
  - CD's shall indicate items requiring special inspections for seismic resistance. (1603.1.8)
  - CD's shall indicate floor live loads, and occupancy permits shall not be issued until such loads are posted. (1603.4)
  - Minimum partition load of 20 p.s.f. shall be indicated whether or not partitions are shown, except if the specified live load exceeds 80 psf. (1607.5)
  - CD's shall include statements regarding flood proof design. (1612.5)
- Structural Tests and Special Inspections (Chapter 17)
  - Certificates of Compliance, Special Inspections and visual observations shall document work in compliance with the CD's. (1702.1)
  - Special inspectors shall report that work is in compliance with CD's. (1704)
    - Shop fabrication (1704.2)
    - Steel details (1704.3.2)
    - Spray fireproofing (1704.11)
  - Contractor shall issue statement of responsibility for seismic-force-resisting systems for conformance with CD's. (Section 1705.3)
  - Contractor shall issue statement of responsibility for main windforce-resisting systems for conformance with CD's. (Section 1706.3)
  - Structural steel quality assurance plan shall be in accordance with the CD's. (1708.4)
- Cast in place Concrete Pile Foundations (Section 1810)

- Design Professional to certify piles installed in accordance with approved CD's. (1810.3.2)
- Concrete (Chapter 19)
  - CD's to include details of structural concrete construction.(1901.4)
  - CD's to indicate concrete quality, mixing and placing. (1905.1.3)
  - Formwork shall result in a structure that conforms to CD's. (1906.1.1)
  - CD's to indicate any field bending of embedded reinforcement. (1907.3.2)
  - Shotcrete construction joints shall be as indicated in the CD's. (1914.7)
- Masonry (Chapter 21)
  - CD's to show details of masonry work and reinforcing. (2101.3)
  - CD's to show any fireplaces. (2101.3.1)
  - CD's to show any deviations in bed and head joints. (2104.1.2.1)
  - CD's to indicate any deviation in joints for solid masonry units.(2104.1.2.3)
  - Masonry quality assurance program to ensure compliance with CD's. (2105.1)
- Wood (Chapter 23)
  - Wood truss CD's shall be prepared and approved. Shop drawings shall be provided. Specific information shall be included. (2303.4.1)
- Glass and Glazing (Chapter 24)
  - Each glass pane shall have a label, unless the glazing contractor submits an affidavit of compliance with approved CD's. (2403.1)
  - CD's shall show details for unusual load conditions. (2403.2)
- Special Construction (Chapter 31)
  - CD's shall indicate Temporary Structures (Section 3103.2)
  - CD's shall be provided to the Department of Public Health for approval of swimming pools. (3109.1.1)
- Safeguards during Construction (Chapter 33)
  - CD's shall be submitted for demolition when required by the BO. (3303.1)

Some relevant web sites FYI:

- International Code Council (ICC) <http://www.iccsafe.org/Pages/default.aspx>
- National Fire Protection Association (NFPA) [www.nfpa.org](http://www.nfpa.org)
- State of Connecticut Department of Public Safety, Division of Fire, Emergency and Building Services <http://www.ct.gov/dcs/site/default.asp>
- American Institute of Architects (AIA) Connecticut Chapter [www.aiact.org](http://www.aiact.org)
- American Institute of Architects (AIA National) <http://www.aia.org/>
- Construction Institute [www.construction.org](http://www.construction.org)
- Connecticut Building Congress <http://www.cbc-ct.org/>



CHAPTER 1  
ADMINISTRATION

SECTION 101  
GENERAL

(Amd) **101.2 Scope.** The provisions of this code shall apply to the construction, alteration, movement, enlargement, replacement, repair, equipment, use and occupancy, location, maintenance, removal and demolition of every building or structure or any appurtenances connected or attached to such buildings or structures.

**Exceptions:**

1. Detached one- and two-family dwellings and multiple single-family dwellings (townhouses) not more than three stories above grade plane in height with a separate means of egress and their accessory structures shall comply with the 2003 International Residential Code.
2. Existing buildings undergoing repair, movement, alterations or additions and change of occupancy shall be permitted to comply with the 2003 International Existing Building Code. The choice to comply with this code or the 2003 International Existing Building Code shall be made by the permit applicant at the time of application for the building permit and shall be indicated on the **CONSTRUCTION DOCUMENTS** in writing.

SECTION 103  
DEPARTMENT OF BUILDING SAFETY

(Add) **103.4 Restriction of employees.** An official or employee connected with the agency created to enforce the provisions of this code pursuant to Section 103.1, except one whose only connection with it is that of a member of the board of appeals established under the provisions of Section 112, shall not be engaged in or directly or indirectly connected with the furnishing of labor, materials or appliances for the construction, addition, alteration, repair or maintenance of a building located in the town, city or borough in which such official or employee is employed, or the preparation of **CONSTRUCTION DOCUMENTS** therefore, unless that person is the owner of the building. Such officer or employee shall not engage in any work that conflicts with official duties or with the interests of the agency.

SECTION 104  
DUTIES AND POWERS OF BUILDING OFFICIAL

**104.2 Applications and permits.**

The building official shall receive applications, review **CONSTRUCTION DOCUMENTS** and issue permits for the erection, and alteration, demolition and moving of buildings and structures, inspect the premises for which such permits have been issued and enforce compliance with the provisions of this code.

SECTION 105  
PERMITS

**105.3 Application for permit.**

To obtain a permit, the applicant shall first file an application therefor in writing on a form furnished by the department of building safety for that purpose. Such application shall:

1. Identify and describe the work to be covered by the permit for which application is made.
2. Describe the land on which the proposed work is to be done by legal description, street address or similar description that will readily identify and definitely locate the proposed building or work.
3. Indicate the use and occupancy for which the proposed work is intended.
4. Be accompanied by CONSTRUCTION DOCUMENTS and other information as required in Section 106.3.
5. State the valuation of the proposed work.
6. Be signed by the applicant, or the applicant's authorized agent.
7. Give such other data and information as required by the building official.

**(Amd) 105.3.1 Action on application.** The building official shall examine or cause to be examined applications for permits and amendments thereto within 30 days after filing and either issue or deny a permit within such 30-day period. If the application or CONSTRUCTION DOCUMENTS do not conform to the requirements of this code and pertinent laws, the building official shall reject such application in writing, stating the reasons therefore. If the building official is satisfied that the proposed work conforms to the requirements of this code and applicable laws, statutes, regulations and ordinances, the building official shall issue a permit therefore as soon as practicable.

**(Add) 105.3.1.2 Fire marshal approval.** No building permit for a building, structure or use subject to the requirements of the 2005 Connecticut State Fire Safety Code shall be issued in whole or in part without certification in writing from the local fire marshal that the CONSTRUCTION DOCUMENTS for such building, structure or use are in substantial compliance with the requirements of the 2005 Connecticut State Fire Safety Code.

**105.4 Validity of permit.**

The issuance or granting of a permit shall not be construed to be a permit for, or an approval of, any violation of any of the provisions of this code or of any other ordinance of the jurisdiction. Permits presuming to give authority to violate or cancel the provisions of this code or other ordinances of the jurisdiction shall not be valid. The issuance of a permit based on CONSTRUCTION DOCUMENTS and other data shall not prevent the building official from requiring the correction of errors in the CONSTRUCTION DOCUMENTS and other data. The building official is also authorized to prevent occupancy or use of a structure where in violation of this code or of any other ordinances of this jurisdiction.

SECTION 106  
CONSTRUCTION DOCUMENTS

### **106.1 Submittal documents.**

**CONSTRUCTION DOCUMENTS**, special inspection and structural observation programs, and other data shall be submitted in one or more sets with each application for a permit. The **CONSTRUCTION DOCUMENTS** shall be prepared by a registered design professional where required by the statutes of the jurisdiction in which the project is to be constructed. Where special conditions exist, the building official is authorized to require additional **CONSTRUCTION DOCUMENTS** to be prepared by a registered design professional.

Exception: The building official is authorized to waive the submission of **CONSTRUCTION DOCUMENTS** and other data not required to be prepared by a registered design professional if it is found that the nature of the work applied for is such that review of **CONSTRUCTION DOCUMENTS** is not necessary to obtain compliance with this code.

#### **106.1.1 Information on CONSTRUCTION DOCUMENTS.**

**CONSTRUCTION DOCUMENTS** shall be dimensioned and drawn upon suitable material. Electronic media documents are permitted to be submitted when approved by the building official. **CONSTRUCTION DOCUMENTS** shall be of sufficient clarity to indicate the location, nature and extent of the work proposed and show in detail that it will conform to the provisions of this code and relevant laws, ordinances, rules and regulations, as determined by the building official.

##### **106.1.1.1 Fire protection system SHOP DRAWINGS.**

**SHOP DRAWINGS** for the fire protection system(s) shall be submitted to indicate conformance with this code and the **CONSTRUCTION DOCUMENTS** and shall be approved prior to the start of system installation. **SHOP DRAWINGS** shall contain all information as required by the referenced installation standards in Chapter 9.

##### **106.1.2 Means of egress.**

The **CONSTRUCTION DOCUMENTS** shall show in sufficient detail the location, construction, size and character of all portions of the means of egress in compliance with the provisions of this code. In other than occupancies in Groups R-2, R-3, as applicable in Section 101.2, and I-1, the **CONSTRUCTION DOCUMENTS** shall designate the number of occupants to be accommodated on every floor, and in all rooms and spaces.

##### **106.1.3 Exterior wall envelope.**

**CONSTRUCTION DOCUMENTS** for all buildings shall describe the exterior wall envelope in sufficient detail to determine compliance with this code. The **CONSTRUCTION DOCUMENTS** shall provide details of the exterior wall envelope as required, including flashing, intersections with dissimilar materials, corners, end details, control joints, intersections at roof, eaves or parapets, means of drainage, water-resistive membrane and details around openings. The **CONSTRUCTION DOCUMENTS** shall include manufacturer's installation instructions that provide supporting documentation that the proposed penetration and opening details described in the **CONSTRUCTION DOCUMENTS** maintain the weather resistance of the exterior wall envelope. The supporting documentation shall fully describe the exterior wall system which was tested, where applicable, as well as the test procedure used.

### **106.2 Site plan.**

The CONSTRUCTION DOCUMENTS submitted with the application for permit shall be accompanied by a site plan showing to scale the size and location of new construction and existing structures on the site, distances from lot lines, the established street grades and the proposed finished grades and, as applicable, flood hazard areas, floodways, and design flood elevations; and it shall be drawn in accordance with an accurate boundary line survey. In the case of demolition, the site plan shall show construction to be demolished and the location and size of existing structures and construction that are to remain on the site or plot. The building official is authorized to waive or modify the requirement for a site plan when the application for permit is for alteration or repair or when otherwise warranted.

### **106.3 Examination of documents.**

The building official shall examine or cause to be examined the accompanying CONSTRUCTION DOCUMENTS and shall ascertain by such examinations whether the construction indicated and described is in accordance with the requirements of this code and other pertinent laws or ordinances.

#### **106.3.1 Approval of CONSTRUCTION DOCUMENTS.**

When the building official issues a permit, the CONSTRUCTION DOCUMENTS shall be approved, in writing or by stamp, as "Reviewed for Code Compliance." One set of CONSTRUCTION DOCUMENTS so reviewed shall be retained by the building official. The other set shall be returned to the applicant, shall be kept at the site of work and shall be open to inspection by the building official or a duly authorized representative.

#### **106.3.2 Previous approvals.**

This code shall not require changes in the CONSTRUCTION DOCUMENTS, construction or designated occupancy of a structure for which a lawful permit has been heretofore issued or otherwise lawfully authorized, and the construction of which has been pursued in good faith within 180 days after the effective date of this code and has not been abandoned.

#### **106.3.3 Phased approval.**

The building official is authorized to issue a permit for the construction of foundations or any other part of a building or structure before the CONSTRUCTION DOCUMENTS for the whole building or structure have been submitted, provided that adequate information and detailed statements have been filed complying with pertinent requirements of this code. The holder of such permit for the foundation or other parts of a building or structure shall proceed at the holder's own risk with the building operation and without assurance that a permit for the entire structure will be granted.

#### **106.3.4 Design professional in responsible charge.**

##### **106.3.4.1 General.**

When it is required that documents be prepared by a registered design professional, the building official shall be authorized to require the owner to engage and designate on the building permit application a registered design professional who shall act as the registered design professional in responsible charge. If the circumstances require, the

owner shall designate a substitute registered design professional in responsible charge who shall perform the duties required of the original registered design professional in responsible charge. The building official shall be notified in writing by the owner if the registered design professional in responsible charge is changed or is unable to continue to perform the duties.

The registered design professional in responsible charge shall be responsible for reviewing and coordinating submittal documents prepared by others, including phased and deferred submittal items, for compatibility with the design of the building.

Where structural observation is required by Section 1709, the inspection program shall name the individual or firms who are to perform structural observation and describe the stages of construction at which structural observation is to occur (see also duties specified in Section 1704).

#### **106.3.4.2 Deferred submittals.**

For the purposes of this section, deferred submittals are defined as those portions of the design that are not submitted at the time of the application and that are to be submitted to the building official within a specified period.

Deferral of any submittal items shall have the prior approval of the building official. The registered design professional in responsible charge shall list the deferred submittals on the CONSTRUCTION DOCUMENTS for review by the building official.

Documents for deferred submittal items shall be submitted to the registered design professional in responsible charge who shall review them and forward them to the building official with a notation indicating that the deferred submittal documents have been reviewed and been found to be in general conformance to the design of the building. The deferred submittal items shall not be installed until the design and submittal documents have been approved by the building official.

#### **106.4 Amended CONSTRUCTION DOCUMENTS.**

Work shall be installed in accordance with the approved CONSTRUCTION DOCUMENTS, and any changes made during construction that are not in compliance with the approved CONSTRUCTION DOCUMENTS shall be resubmitted for approval as an amended set of CONSTRUCTION DOCUMENTS.

(Amd) **106.5 Retention of CONSTRUCTION DOCUMENTS.** One set of approved CONSTRUCTION DOCUMENTS shall be retained by the building official for a period as set forth in the records/disposition schedule adopted pursuant to chapter 188 of the Connecticut General Statutes.

**Exception:** In accordance with the provisions of subsection (e) of section 29-261 of the Connecticut General Statutes, upon receipt of a written request signed by the owner of plans and specifications on file for a single-family dwelling or out-building, the building official shall immediately return the original plans and specifications to the owner after a certificate of occupancy is issued with respect to the plans and specifications.

## SECTION 113 VIOLATIONS

### **113.4 Violation penalties.**

Any person who violates a provision of this code or fails to comply with any of the requirements thereof or who erects, constructs, alters or repairs a building or structure in violation of the approved CONSTRUCTION DOCUMENTS or directive of the building official, or of a permit or certificate issued under the provisions of this code, shall be subject to penalties as prescribed by law.

SECTION 202  
DEFINITIONS

CONSTRUCTION DOCUMENTS. Written, graphic and pictorial documents prepared or assembled for describing the design, location and physical characteristics of the elements of a project necessary for obtaining a building permit.

(Add) **PLANS AND SPECIFICATIONS**. See CONSTRUCTION DOCUMENTS.

[F] SECTION 414  
HAZARDOUS MATERIALS

**414.1.3 Information required.**

Separate floor plans shall be submitted for buildings and structures with an occupancy in Group H, identifying the locations of anticipated contents and processes so as to reflect the nature of each occupied portion of every building and structure. A report identifying hazardous materials including, but not limited to, materials representing hazards that are classified in Group H to be stored or used, shall be submitted and the methods of protection from such hazards shall be indicated on the CONSTRUCTION DOCUMENTS. The opinion and report shall be prepared by a qualified person, firm or corporation approved by the building official and shall be provided without charge to the enforcing agency.

SECTION 907  
FIRE ALARM AND DETECTION SYSTEMS

[F] **907.1 General.**

This section covers the application, installation, performance and maintenance of fire alarm systems and their components.

[F] **907.1.1 CONSTRUCTION DOCUMENTS.**

CONSTRUCTION DOCUMENTS for fire alarm systems shall be submitted for review and approval prior to system installation. CONSTRUCTION DOCUMENTS shall include, but not be limited to, all of the following:

1. A floor plan which indicates the use of all rooms.
2. Locations of alarm-initiating and notification appliances.
3. Alarm control and trouble signaling equipment.
4. Annunciation.
5. Power connection.
6. Battery calculations.
7. Conductor type and sizes.
8. Voltage drop calculations.

9. Manufacturers, model numbers and listing information for equipment, devices and materials.
10. Details of ceiling height and construction.
11. The interface of fire safety control functions

## SECTION 909

### SMOKE CONTROL SYSTEMS

#### **909.2 General design requirements.**

Buildings, structures or parts thereof required by this code to have a smoke control system or systems shall have such systems designed in accordance with the applicable requirements of Section 909 and the generally accepted and well-established principles of engineering relevant to the design. The **CONSTRUCTION DOCUMENTS** shall include sufficient information and detail to adequately describe the elements of the design necessary for the proper implementation of the smoke control systems. These documents shall be accompanied by sufficient information and analysis to demonstrate compliance with these provisions.

#### **909.3 Special inspection and test requirements.**

In addition to the ordinary inspection and test requirements which buildings, structures and parts thereof are required to undergo, smoke control systems subject to the provisions of Section 909 shall undergo special inspections and tests sufficient to verify the proper commissioning of the smoke control design in its final installed condition. The design submission accompanying the **CONSTRUCTION DOCUMENTS** shall clearly detail procedures and methods to be used and the items subject to such inspections and tests. Such commissioning shall be in accordance with generally accepted engineering practice and, where possible, based on published standards for the particular testing involved. The special inspections and tests required by this section shall be conducted under the same terms in Section 1704.

## SECTION 1603

### **CONSTRUCTION DOCUMENTS**

#### **1603.1 General.**

**CONSTRUCTION DOCUMENTS** shall show the size, section and relative locations of structural members with floor levels, column centers and offsets fully dimensioned. The design loads and other information pertinent to the structural design required by Sections 1603.1.1 through 1603.1.8 shall be clearly indicated on the **CONSTRUCTION DOCUMENTS** for parts of the building or structure.

Exception: **CONSTRUCTION DOCUMENTS** for buildings constructed in accordance with the conventional light-frame construction provisions of Section 2308 shall indicate the following structural design information:

1. Floor and roof live loads.
2. Ground snow load, Pg.
3. Basic wind speed (3-second gust), miles per hour (mph) (km/hr) and wind exposure.
4. Seismic design category and site class.

#### **1603.1.1 Floor live load.**

The uniformly distributed, concentrated and impact floor live load used in the design shall be indicated for floor areas. Live load reduction of the uniformly distributed floor live loads, if used in the design, shall be indicated.

#### **1603.1.2 Roof live load.**

The roof live load used in the design shall be indicated for roof areas (Section 1607.11).

#### **1603.1.3 Roof snow load.**

The ground snow load,  $P_g$ , shall be indicated. In areas where the ground snow load,  $P_g$ , exceeds 10 pounds per square foot (psf) (0.479 kN/m<sup>2</sup>), the following additional information shall also be provided, regardless of whether snow loads govern the design of the roof:

1. Flat-roof snow load,  $P_f$ .
2. Snow exposure factor,  $C_e$ .
3. Snow load importance factor,  $I_s$ .
4. Thermal factor,  $C_t$ .

#### **1603.1.4 Wind design data.**

The following information related to wind loads shall be shown, regardless of whether wind loads govern the design of the lateral-force-resisting system of the building:

1. Basic wind speed (3-second gust), miles per hour (km/hr).
2. Wind importance factor,  $I_w$ , and building category.
3. Wind exposure, if more than one wind exposure is utilized, the wind exposure and applicable wind direction shall be indicated.
4. The applicable internal pressure coefficient.
5. Components and cladding. The design wind pressures in terms of psf (kN/m<sup>2</sup>) to be used for the design of exterior component and cladding materials not specifically designed by the registered design professional.

#### **1603.1.5 Earthquake design data.**

The following information related to seismic loads shall be shown, regardless of whether seismic loads govern the design of the lateral force-resisting system of the building:

1. Seismic importance factor,  $I_E$ , and seismic use group.
2. Mapped spectral response accelerations  $S_S$  and  $S_1$ .
3. Site class.
4. Spectral response coefficients  $S_{DS}$  and  $S_{D1}$ .
5. Seismic design category.
6. Basic seismic-force-resisting system(s).
7. Design base shear.
8. Seismic response coefficient(s),  $C_S$ .
9. Response modification factor(s),  $R$ .
10. Analysis procedure used.

#### **1603.1.6 Flood load.**

For buildings located in flood hazard areas as established in Section 1612.3, the following information, referenced to the datum on the community's Flood Insurance Rate Map (FIRM), shall be shown, regardless of whether flood loads govern the design of the building:

1. In flood hazard areas not subject to high-velocity wave action, the elevation of proposed lowest floor, including basement.
2. In flood hazard areas not subject to high-velocity wave action, the elevation to which any nonresidential building will be dry floodproofed.
3. In flood hazard areas subject to high-velocity wave action, the proposed elevation of the bottom of the lowest horizontal structural member of the lowest floor, including basement.

#### **1603.1.7 Special loads.**

Special loads that are applicable to the design of the building, structure or portions thereof shall be indicated along with the specified section of this code that addresses the special loading condition.

#### **1603.1.8 System and components requiring special inspections for seismic resistance.**

CONSTRUCTION DOCUMENTS or specifications shall be prepared for those systems and components requiring special inspection for seismic resistance as specified in Section 1707.1 by the registered design professional responsible for their design and shall be submitted for approval in accordance with Section 106.1. Reference to seismic standards in lieu of detailed drawings is acceptable.

#### **1603.2 Restrictions on loading.**

It shall be unlawful to place, or cause or permit to be placed, on any floor or roof of a building, structure or portion thereof, a load greater than is permitted by these requirements.

#### **1603.3 Live loads posted.**

Where the live loads for which each floor or portion thereof of a commercial or industrial building is or has been designed to exceed 50 psf (2.40 kN/m<sup>2</sup>), such design live loads shall be conspicuously posted by the owner in that part of each story in which they apply, using durable signs. It shall be unlawful to remove or deface such notices.

#### **1603.4 Occupancy permits for changed loads.**

CONSTRUCTION DOCUMENTS for other than residential buildings filed with the building official with applications for permits shall show on each drawing the live loads per square foot (m<sup>2</sup>) of area covered for which the building is designed. Occupancy permits for buildings hereafter erected shall not be issued until the floor load signs, required by Section 1603.3, have been installed.

#### **1607.5 Partition loads.**

In office buildings and in other buildings where partition locations are subject to change, provision for partition weight shall be made, whether or not partitions are shown on the CONSTRUCTION DOCUMENTS, unless the specified live load exceeds 80 psf (3.83 kN/m<sup>2</sup>). Such partition load shall not be less than a uniformly distributed live load of 20 psf (0.96kN/m<sup>2</sup>).

#### **1612.5 Flood hazard documentation.**

The following documentation shall be prepared and sealed by a registered design

professional and submitted to the building official:

1. For construction in flood hazard areas not subject to high-velocity wave action:

1.1 The elevation of the lowest floor, including basement, as required by the lowest floor elevation inspection in Section 109.3.3.

1.2. For fully enclosed areas below the design flood elevation where provisions to allow for the automatic entry and exit of floodwaters do not meet the minimum requirements in Section 2.6.1.1, ASCE 24, CONSTRUCTION DOCUMENTS shall include a statement that the design will provide for equalization of hydrostatic flood forces in accordance with Section 2.6.1.2, ASCE 24.

1.3. For dry floodproofed nonresidential buildings, CONSTRUCTION DOCUMENTS shall include a statement that the dry floodproofing is designed in accordance with ASCE 24.

2. For construction in flood hazard areas subject to high-velocity wave action:

2.1. The elevation of the bottom of the lowest horizontal structural member as required by the lowest floor elevation inspection in Section 109.3.3.

2.2. CONSTRUCTION DOCUMENTS shall include a statement that the building is designed in accordance with ASCE 24, including that the pile or column foundation and building or structure to be attached thereto is designed to be anchored to resist flotation, collapse and lateral movement due to the effects of wind and flood loads acting simultaneously on all building components, and other load requirements of Chapter 16.

2.3. For breakaway walls designed to resist a nominal load of less than 10 psf (0.48 kN/m<sup>2</sup>) or more than 20 psf (0.96 kN/m<sup>2</sup>), CONSTRUCTION DOCUMENTS shall include a statement that the breakaway wall is designed in accordance with ASCE 24.

## CHAPTER 17

### STRUCTURAL TESTS AND SPECIAL INSPECTIONS

#### 1702.1 General.

The following words and terms shall, for the purposes of this chapter and as used elsewhere in this code, have the meanings shown herein.

**CERTIFICATE OF COMPLIANCE.** A certificate stating that materials and products meet specified standards or that work was done in compliance with approved CONSTRUCTION DOCUMENTS.

**SPECIAL INSPECTION.** Inspection as herein required of the materials, installation, fabrication, erection or placement of components and connections requiring special expertise to ensure compliance with approved CONSTRUCTION DOCUMENTS and referenced standards (see Section 1704).

**STRUCTURAL OBSERVATION.** The visual observation of the structural system by a registered design professional for general conformance to the approved CONSTRUCTION DOCUMENTS at significant construction stages and at completion of the structural system. Structural observation does not include or waive the responsibility for the inspection required by Section 109, 1704 or other sections of this code.

#### SECTION 1704

#### SPECIAL INSPECTIONS

##### 1704.1.2 Report requirement.

Special inspectors shall keep records of inspections. The special inspector shall furnish inspection reports to the building official, and to the registered design professional in responsible charge. Reports shall indicate that work inspected was done in conformance to approved CONSTRUCTION DOCUMENTS. Discrepancies shall be brought to the immediate attention of the contractor for correction. If the discrepancies are not corrected, the discrepancies shall be brought to the attention of the building official and to the registered design professional in responsible charge prior to the completion of that phase of the work. A final report documenting required special inspections and correction of any discrepancies noted in the inspections shall be submitted at a point in time agreed upon by the permit applicant and the building official prior to the start of work.

#### **1704.2 Inspection of fabricators.**

Where fabrication of structural load-bearing members and assemblies is being performed on the premises of a fabricator's shop, special inspection of the fabricated items shall be required by this section and as required elsewhere in this code.

##### **1704.2.1 Fabrication and implementation procedures.**

The special inspector shall verify that the fabricator maintains detailed fabrication and quality control procedures that provide a basis for inspection control of the workmanship and the fabricator's ability to conform to approved CONSTRUCTION DOCUMENTS and referenced standards. The special inspector shall review the procedures for completeness and adequacy relative to the code requirements for the fabricator's scope of work.

**Exception:** Special inspections as required by Section 1704.2 shall not be required where the fabricator is approved in accordance with Section 1704.2.2.

(Amd) **1704.2.2 Fabricator approval.** Special inspections required by Section 1704.2.1 are not required where the work is done on the premises of the following certified fabricators:

1. A fabricator of structural steel that is certified by the American Institute of Steel Construction Inc.'s Fabricator Certification Program.
2. A fabricator of precast concrete that is certified by the Precast/Prestressed Concrete Institute's Plant Certification Program.
3. A fabricator of cold-formed steel trusses that is certified by the Truss Plate Institute's Quality Assurance Program.
4. A fabricator of wood trusses that is certified by the Truss Plate Institute's Quality Assurance Program.

Such fabricators shall not be exempt from special inspections required by Sections 1704.3, 1704.4 or 1704.6. At the completion of fabrication, the certified fabricator shall submit a certificate of compliance to the building official stating that the work was performed in accordance with the approved CONSTRUCTION DOCUMENTS.

##### **1704.3.2 Details.**

The special inspector shall perform an inspection of the steel frame to verify compliance with the details shown on the approved CONSTRUCTION DOCUMENTS, such as bracing, stiffening, member locations and proper application of joint details at each connection.

#### **1704.11 Sprayed fire-resistant materials.**

Special inspections for sprayed fire-resistant materials applied to structural elements and decks shall be in accordance with Sections 1704.11.1 through 1704.11.5. Special inspections shall be based on the fire-resistance design as designated in the approved **CONSTRUCTION DOCUMENTS**.

#### **1705.3 Contractor responsibility.**

Each contractor responsible for the construction of a seismic-force-resisting system, designated seismic system, or component listed in the quality assurance plan shall submit a written contractor's statement of responsibility to the building official and to the owner prior to the commencement of work on the system or component. The contractor's statement of responsibility shall contain the following:

1. Acknowledgment of awareness of the special requirements contained in the quality assurance plan.
2. Acknowledgment of awareness of the special requirements contained in the quality assurance plan.. Acknowledgment that control will be exercised to obtain conformance with the **CONSTRUCTION DOCUMENTS** approved by the building official.
3. Procedures for exercising control within the contractor's organization, the method and frequency of reporting and the distribution of the reports.
4. Identification and qualifications of the person(s) exercising such control and their position(s) in the organization.

#### **1706.3 Contractor responsibility.**

Each contractor responsible for the construction of a main windforce-resisting system or a wind-resisting component listed in the quality assurance plan shall submit a written statement of responsibility to the building official and the owner prior to the commencement of work on the system or component. The contractor's statement of responsibility shall contain the following:

1. Acknowledgment of awareness of the special requirements contained in the quality assurance plan;
2. Acknowledgment of awareness of the special requirements contained in the quality assurance plan;. Acknowledgment that control will be exercised to obtain conformance with the **CONSTRUCTION DOCUMENTS** approved by the building official;
3. Procedures for exercising control within the contractor's organization, the method and frequency of reporting and the distribution of the reports; and 4. Identification and qualifications of the person(s) exercising such control and their position(s) in the organization.

#### **1708.4 Structural steel.**

The testing contained in the quality assurance plan shall be as required by AISC 341 and the additional requirements herein. The acceptance criteria for nondestructive testing shall be as required in AWS D1.1 as specified by the registered design professional. Base metal thicker than 1.5 inches (38 mm), where subject to through-thickness weld shrinkage strains, shall be ultrasonically tested for discontinuities behind and adjacent to such welds after joint completion. Any material discontinuities shall be accepted or rejected on the basis of ASTM A 435 or ASTM A 898 (Level 1 criteria) and criteria as established by the registered design professional(s) in responsible charge and the

## **CONSTRUCTION DOCUMENTS.**

### SECTION 1810

#### CAST-IN-PLACE CONCRETE PILE FOUNDATIONS

##### **1810.3.2 Dimensions.**

The pile length shall not exceed 30 times the average diameter. The minimum diameter shall be 12 inches (305 mm).

**Exception:** The length of the pile is permitted to exceed 30 times the diameter, provided that the design and installation of the pile foundation are under the direct supervision of a registered design professional knowledgeable in the field of soil mechanics and pile foundations. The registered design professional shall certify to the building official that the piles were installed in compliance with the approved **CONSTRUCTION DOCUMENTS.**

### CHAPTER 19

#### CONCRETE

##### **1901.4 CONSTRUCTION DOCUMENTS.**

The **CONSTRUCTION DOCUMENTS** for structural concrete construction shall include:

1. The specified compressive strength of concrete at the stated ages or stages of construction for which each concrete element is designed.
2. The specified compressive strength of concrete at the stated ages or stages of construction for which each concrete element is designed.. The specified strength or grade of reinforcement.
3. The size and location of structural elements, reinforcement, and anchors.
4. Provision for dimensional changes resulting from creep, shrinkage and temperature.
5. The magnitude and location of prestressing forces.
6. Anchorage length of reinforcement and location and length of lap splices.
7. Type and location of mechanical and welded splices of reinforcement.
8. Details and location of contraction or isolation joints specified for plain concrete.
9. Minimum concrete compressive strength at time of posttensioning.
10. Stressing sequence for posttensioning tendons.
11. For structures assigned to Seismic Design Category D, E or F, a statement if slab on grade is designed as a structural diaphragm (see Section 21.10.3.4 of ACI 318).

### SECTION 1905

#### CONCRETE QUALITY, MIXING AND PLACING

##### **1905.1.3 Basis of $f'_c$ .**

Unless otherwise specified,  $f'_c$  shall be based on 28-day tests. If other than 28 days, test age for  $f'_c$  shall be as indicated in **CONSTRUCTION DOCUMENTS.**

### SECTION 1906

#### FORMWORK, EMBEDDED PIPES AND CONSTRUCTION JOINTS

##### **1906.1 Formwork.**

The design, fabrication and erection of forms shall comply with Sections 1906.1.1 through 1906.1.6.

#### **1906.1.1 General.**

Forms shall result in a final structure that conforms to shapes, lines and dimensions of the members as required by the CONSTRUCTION DOCUMENTS.

### SECTION 1907 DETAILS OF REINFORCEMENT

#### **1907.3.2 Embedded reinforcement.**

Reinforcement partially embedded in concrete shall not be field bent, except as shown on the CONSTRUCTION DOCUMENTS or permitted by the registered design professional.

### SECTION 1914 SHOTCRETE

#### **1914.7 Joints.**

Except where permitted herein, unfinished work shall not be allowed to stand for more than 30 minutes unless edges are sloped to a thin edge. For structural elements that will be under compression and for construction joints shown on the approved CONSTRUCTION DOCUMENTS, square joints are permitted. Before placing additional material adjacent to previously applied work, sloping and square edges shall be cleaned and wetted.

### MASONRY SECTION 2101 GENERAL

#### **2101.3 CONSTRUCTION DOCUMENTS.**

The CONSTRUCTION DOCUMENTS shall show all of the items required by this code including the following:

1. Specified size, grade, type and location of reinforcement, anchors and wall ties.
2. Specified size, grade, type and location of reinforcement, anchors and wall ties..  
Reinforcing bars to be welded and welding procedure.
3. Size and location of structural elements.
4. Provisions for dimensional changes resulting from elastic deformation, creep, shrinkage, temperature and moisture.

#### **2101.3.1 Fireplace drawings.**

The CONSTRUCTION DOCUMENTS shall describe in sufficient detail the location, size and construction of masonry fireplaces. The thickness and characteristics of materials and the clearances from walls, partitions and ceilings shall be clearly indicated.

### SECTION 2102 DEFINITIONS AND NOTATIONS

### **2102.1 General.**

The following words and terms shall, for the purposes of this chapter and as used elsewhere in this code, have the meanings shown herein.

SPECIFIED. Required by CONSTRUCTION DOCUMENTS.

SPECIFIED COMPRESSIVE STRENGTH OF MASONRY, fm. Minimum compressive strength, expressed as force per unit of net cross-sectional area, required of the masonry used in construction by the CONSTRUCTION DOCUMENTS, and upon which the project design is based. Whenever the quantity fm is under the radical sign, the square root of numerical value only is intended and the result has units of pounds per square inch (psi) (Mpa).

## SECTION 2104

### CONSTRUCTION

#### **2104.1.2.1 Bed and head joints.**

Unless otherwise required or indicated on the CONSTRUCTION DOCUMENTS, head and bed joints shall be 3/8 inch (9.5 mm) thick, except that the thickness of the bed joint of the starting course placed over foundations shall not be less than 1/4 inch (6.4 mm) and not more than 3/4 inch (19.1 mm).

#### **2104.1.2.3 Solid units.**

Unless otherwise required or indicated on the CONSTRUCTION DOCUMENTS, solid units shall be placed in fully mortared bed and head joints. The ends of the units shall be completely buttered. Head joints shall not be filled by slushing with mortar. Head joints shall be constructed by shoving mortar tight against the adjoining unit. Bed joints shall not be furrowed deep enough to produce voids.

## SECTION 2105

### QUALITY ASSURANCE

#### **2105.1 General.**

A quality assurance program shall be used to ensure that the constructed masonry is in compliance with the CONSTRUCTION DOCUMENTS. The quality assurance program shall comply with the inspection and testing requirements of Chapter 17.

#### **2105.2.2.2 Prism test method.**

##### **2105.2.2.2.1 General.**

The compressive strength of masonry shall be determined by the prism test method:

1. Where specified in the CONSTRUCTION DOCUMENTS.
2. Where masonry does not meet the requirements for application of the unit strength method in Section 2105.2.2.1.

## CHAPTER 23

### WOOD

## SECTION 2303

### MINIMUM STANDARDS AND QUALITY

### **2303.4 Trusses.**

Metal-plate-connected wood trusses shall be manufactured as required by TPI 1. Each manufacturer of trusses using metal plate connectors shall retain an approved agency to make unscheduled inspections of truss manufacturing and delivery operations. The inspection shall cover all phases of truss operations, including lumber storage, handling, cutting fixtures, presses or rollers, manufacturing, bundling and banding.

#### **2303.4.1 Truss design drawings.**

Truss **CONSTRUCTION DOCUMENTS** shall be prepared by a registered design professional and shall be provided to the building official and approved prior to installation. These **CONSTRUCTION DOCUMENTS** shall include, at a minimum, the information specified below. Truss **SHOP DRAWINGS** shall be provided with the shipment of trusses delivered to the job site.

1. Slope or depth, span and spacing;
2. Location of joints;
3. Required bearing widths;
4. Design loads as applicable;
5. Top chord live load (including snow loads);
6. Top chord dead load;
7. Bottom chord live load;
8. Bottom chord dead load;
9. Concentrated loads and their points of application;
10. Controlling wind and earthquake loads;
11. Adjustments to lumber and metal connector plate design value for conditions of use;
12. Each reaction force and direction;
13. Metal connector plate type, size, thickness or gage, and the dimensioned location of each metal connector plate except where symmetrically located relative to the joint interface;
14. Lumber size, species and grade for each member;
15. Connection requirements for:
  - 15.1. Truss to truss girder;
  - 15.2. Truss ply to ply; and
  - 15.3. Field species;
16. Calculated deflection ratio or maximum deflection for live and total load;
17. Maximum axial compression forces in the truss members to design the size, connections and anchorage of the permanent continuous lateral bracing. Forces shall be shown on the truss **CONSTRUCTION DOCUMENTS** or on supplemental documents; and
18. Required permanent truss member bracing location.

## CHAPTER 24

## GLASS AND GLAZING

### SECTION 2403

### GENERAL REQUIREMENTS FOR GLASS

#### **2403.1 Identification.**

Each pane shall bear the manufacturer's label designating the type and thickness of the glass or glazing material. The identification shall not be omitted unless approved and an

affidavit is furnished by the glazing contractor certifying that each light is glazed in accordance with approved CONSTRUCTION DOCUMENTS that comply with the provisions of this chapter. Safety glazing shall be identified in accordance with Section 2406.2.

Each pane of tempered glass, except tempered spandrel glass, shall be permanently identified by the manufacturer. The identification label shall be acid etched, sand blasted, ceramic fired, embossed or shall be of a type that once applied cannot be removed without being destroyed.

Tempered spandrel glass shall be provided with a removable paper marking by the manufacturer.

#### **2403.2 Glass supports.**

Where one or more sides of any pane of glass are not firmly supported, or are subjected to unusual load conditions, detailed CONSTRUCTION DOCUMENTS, detailed SHOP DRAWINGS and analysis or test data assuring safe performance for the specific installation shall be prepared by a registered design professional.

### SECTION 3103

#### TEMPORARY STRUCTURES

##### **3103.2 CONSTRUCTION DOCUMENTS.**

A permit application and CONSTRUCTION DOCUMENTS shall be submitted for each installation of a temporary structure. The CONSTRUCTION DOCUMENTS shall include a site plan indicating the location of the temporary structure and information delineating the means of egress and the occupant load.

### SECTION 3109

#### SWIMMING POOL ENCLOSURES AND SAFETY DEVICES

(Add) **3109.1.1 Health Department regulations.** No person shall construct, substantially alter or reconstruct a swimming pool until the CONSTRUCTION DOCUMENTS and water discharge provisions have been approved by the Department of Public Health, in accordance with the regulations adopted pursuant to section 19a-36 of the Connecticut General Statutes.

**Exception:** Swimming pools accessory to owner-occupied, detached one- two- or three-family residences and swimming pools accessory to a single one-family townhouse where the pool is intended to be used exclusively by the owner and invited guests.

### CHAPTER 33

#### SAFEGUARDS DURING CONSTRUCTION

### SECTION 3303

#### DEMOLITION

##### **3303.1 CONSTRUCTION DOCUMENTS.**

CONSTRUCTION DOCUMENTS and a schedule for demolition must be submitted when required by the building official. Where such information is required, no work shall

be done until such **CONSTRUCTION DOCUMENTS** or schedule, or both, are approved.

END

*Spring 2012*  
*Career Development Programs*

*IBC© PLAN REVIEW*

Presented by Bruce J. Spiewak, AIA

**Sponsored by**

**State of Connecticut Department of Construction Services  
Office of Education & Data Management**

## A GUIDE TO USE OF THE INTERNATIONAL BUILDING CODE ©

The following step-by-step approach is recommended for use in determining the code's application to particular buildings and occupancies.

1. **Construction documents:** Determine compliance with the requirements for construction documents in Sections 106.0
2. **Occupancy group:** Determine the appropriate occupancy group classification of the building. See Section 302.1 for a listing of all occupancy groups and Sections 303.0 through 312.0 for a description of each occupancy group.
3. **Height and area:** Determine the type of construction required based on the building occupancy group and the height and area limitations of Chapter 5. See Sections 503.0 through 507.0, as well as Table 503 for general limitations and exceptions. See section 508 for special provisions.
4. **Type of construction:** Determine compliance with the required type of construction of the building by the building materials used and the fire-resistance rating of the building elements. See Section 602 and Tables 601 and 602 for a listing of all of the types of construction and limitations on exterior walls. See Section 603 for a description of specific combustible materials allowed in noncombustible construction.
5. **Siting:** Determine the location of the building on the site, including separation distances from lot lines and other buildings. See Section 704.0 and Table 704.8 for exterior wall and wall opening requirements based on proximity to lot lines and adjacent buildings.
6. **Fire performance:** Determine compliance with detailed requirements for fire-resistance (Chapter 7) and fire protection systems (Chapter 9).
7. **Interior environment and design:** Determine compliance with special use and occupancy requirements (Chapter 4), means of egress requirements (Chapter 10), accessibility requirements (Chapter 11) and interior environment requirements (Chapter 12).
8. **Exterior envelope:** Determine compliance with, exterior envelope requirements (Chapters 14 [Exterior Walls] and 15 [Roof Assemblies and Rooftop Structures]) as well as energy conservation (Chapter 13 => IECC).
9. **Structural performance:** Determine compliance with structural requirements (Chapters 16 [Structural Loads] and 18 [Soils and Foundations]) and building material requirements (Chapters 17 [Structural Tests and Special Inspections] and 19 [Concrete, 20 Aluminum, 21 Masonry, 22 Steel, 23 Wood, 24 Glass and Glazing, 25 Gypsum Board and Plaster] through 26 [Plastic]).
10. **Building service system:** Determine compliance with various building service system requirements (Chapters 27 [Electrical], 28 [Mechanical Systems], 29 [Plumbing Systems] through 30 [Elevators and Conveyance Systems]).

## CT Building Code Plan Review

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A Brief Overview

Presented by

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OFFICE OF EDUCATION AND DATE MANAGEMENT  
Spring 2012 Career Development Programs

## Overview of the Building Code Plan Review Process

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- Recommendations for Review Process
- Helpful Hints for Reviewing a set of Construction Documents
- Procedures for Utilizing the ICC® Plan Review Forms
  - Simple Notation Methodology
- Typical Correction List Items

## Recommendations for Review Process

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- Encourage preliminary meeting with Design Professionals and Owner
  - Include other Municipal Code Enforcement Officials
  - Have Design Professional / Owner present overview of Project
  - Identify possible issues early on in the process
  - Request set of preliminary Drawings when available
  - Take your own notes

## Recommendations for Review Process (Continued)

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- Meet again at the completion of Design Development Documents
  - Review old and new issues
  - Inform applicant of submittal requirements
  - Provide applicant with a copy of the ICC® Plan Review Record, or municipal form
  - Take your own notes

## Recommendations for Review Process (Continued)

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- Meet again just prior to completion of documents
  - Review old and new issues
  - Take your own notes

## Helpful Hints for Reviewing a Set of Construction Documents

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Reviewing a Preliminary Set

- Provides an overview of the scope of the project
- Gives you an opportunity to compile a list of questions
- Allows you to identify weak points early on in the process

### Helpful Hints for Reviewing a Set of Construction Documents

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#### Reviewing a Permit Set

- Look for a Table of Contents
- Look for a Code Information Drawing
- Page through the entire set for an Overview

### Helpful Hints for Reviewing a Set of Construction Documents

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#### Reviewing a Permit Set (Continued)

- Utilize adhesive removable tabs to identify drawings or issues
- Do not write on the drawings
- Keep separate notes, note DWG. No., issue, and Code Section
- Assign a plan review space, with adequate room

### Helpful Hints for Reviewing a Set of Construction Documents

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#### Reviewing a Permit Set (Continued)

- First pass - start at the beginning and work thru the set
- Page thru the drawings quickly making notes
- Page thru the specifications quickly making notes

### Helpful Hints for Reviewing a Set of Construction Documents

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#### Reviewing a Permit Set (Continued)

- Then use the ICC© Plan Review Record
- Make your own Correction List on your word processor or spread sheet
- Utilize the correction list as a check list when documents are resubmitted

### Procedures for Utilizing the ICC© Plan Review Forms

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- Go in order
- Use N.R. for Not Required
- Use N.A. for Not Applicable
- Use ✓ or "OK" for items in compliance

### Procedures for Utilizing the ICC© Plan Review Forms (Continued)

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- Use a consecutive number to reference a correction list item
- Include notes taken during earlier reviews
- Enter brief notes on form, longer notes by reference number

## Guide to Use of the ICC© National Building Code (p vi)

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See the "Guide" handout

## Typical Correction List Items

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Examples upon which to build your own master list

- See the sample Correction List handout.

## Overview of the Building Code Plan Review Process

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- Recommendations for Review Process
- Helpful Hints for Reviewing a set of Construction Documents
- Procedures for Utilizing the ICC© Plan Review Forms
  - Simple Notation Methodology
- Typical Correction List Items

**Connecticut Building Code 2005 as amended 2009**

**CORRECTION LIST**

Item No.	DESCRIPTION	CODE SECTION
1	Submit permit application.	105.1
2	Permit application shall be signed by Owner, or authorized agent.	105.1, 105.3
3	Include the following in the permit application: <ul style="list-style-type: none"> <li>a. General description of the proposed work</li> <li>b. Location of the proposed work</li> <li>c. Use and Occupancy for which the proposed work is intended.</li> <li>d. Construction Documents and other required information.</li> <li>e. Stated valuation of the proposed work</li> <li>f. Signature of applicant or authorized agent.</li> <li>g. Such additional information as required by the Building Official</li> </ul>	105.3
4	Submit sets of construction documents and other data, prepared by a licensed design professional when required by statute, and as required by the B.O. [may be waived by B.O. if work is of a minor nature].	106.1
5	Provide specific information to establish conformity with the Building Code and other applicable laws, ordinances, rules and regulations as determined by the B.O.	106.1.1
6	Provide documentation of "threshold review" as required.	106.1.5.1
7	Provide site plan, including the following, to scale: <ul style="list-style-type: none"> <li>a. Size and location of all new construction and existing structures</li> <li>b. Distances from lot lines</li> <li>c. Established street grades and proposed finished grades</li> <li>d. Accurate boundary line survey</li> <li>e. Flood hazard areas</li> </ul>	106.2
8	Provide private sewage disposal system location on site plan where public sewer is not available. Submit all technical and soil data required by the Public Health Code.	106.2.1
9	Provide evidence of written notice to adjoining owners who will be affected by the proposed removal of a building or structure.	110.2
10	Provide payment of fees required to allow issuance of permit.	108.1

Item No.	DESCRIPTION	CODE SECTION
11	Determine special inspection requirements, and submit a statement of special inspections prepared by the registered design professional in responsible charge, in accordance with 109.3.9 and 1704. Include the following: <ul style="list-style-type: none"> <li>a. Complete list of materials and work requiring special inspections</li> <li>b. Inspections to be performed</li> <li>c. List of individuals, approved agencies and firms intended to be retained for conducting the inspections</li> </ul>	109.3.9 1704
12	Indicate classification of occupancy of all structures in one or more occupancy groups.	302.1
13	Provide separation and protection of specific occupancy areas incidental to the main use group(s).	302.1.1, T302.1.1
14	Identify accessory areas and provide calculations indicating meeting the 10% restrictions.	302.2
15	Child Care facility indicated as Use Group E should be I-2 due to more than 5 children on 24 hour basis, even though less than 3 years of age.	308.3.1
16	Indicate the category of mixed use for a building occupied by two or more occupancies not included in the same use group. Indicate compliance with 302.3.1, 302.3.2 or a combination of these sections.	302.3

Item No.	DESCRIPTION	CODE SECTION
17	<p>Indicate Special Use and Occupancy Requirements</p> <ul style="list-style-type: none"> <li>a. Covered Mall [402.0]: <ul style="list-style-type: none"> <li>i. Provide minimum 1 hour fire partition between tenant spaces [402.7.2]</li> <li>ii. Provide exit access travel distance in the mall not to exceed 200 feet [402.4.4]</li> <li>iii. Indicate design occupant load of the covered mall building [402.4.1]</li> <li>iv. ETC.</li> </ul> </li> <li>b. High Rise Building [403.0] <ul style="list-style-type: none"> <li>i. Building has occupied floor located more than 75 feet above lowest level of fire department vehicle access - Provide high rise protection [403.1]</li> <li>ii. Provide automatic sprinkler system [403.2]</li> <li>iii. Provide alternative sprinkler system in order to utilize type of construction modifications [403.3]</li> <li>iv. Provide voice alarm communication systems [403.6]</li> <li>v. Provide two way fire department communication system [403.7]</li> <li>vi. Provide fire command station [403.8]</li> <li>vii. ETC.</li> </ul> </li> <li>c. Atriums [404.0] <ul style="list-style-type: none"> <li>i. Provide supervised NFPA 13 automatic sprinkler system throughout the building, unless an exception is claimed and demonstrated. [404.3]</li> <li>ii. Provide smoke control in an atrium which connects more than 2 stories [404.4]</li> <li>iii. Provide 1 hour fire partitions to separate atrium spaces from adjacent spaces, or indicate exception utilized [404.5]</li> <li>iv. Provide exit access travel distance within the atrium not to exceed 200 feet [404.8]</li> </ul> </li> <li>d. Underground Buildings [405.0] <ul style="list-style-type: none"> <li>i. Building space has a floor level used for human occupancy more than 30 feet below the lowest level of exit discharge serving that floor level - provide underground building protection, or indicate exception utilized [405.1]</li> <li>ii. Provide Type I Construction for underground portion of the structure [405.2]</li> <li>iii. Provide automatic sprinkler system for highest level of exit discharge and all levels below [405.3]</li> <li>iv. Provide smoke barrier compartmentation with smoke barriers, or indicate exception [[405.4]</li> <li>v. ETC.</li> </ul> </li> </ul>	Chapter 4

Item No.	DESCRIPTION	CODE SECTION
	<ul style="list-style-type: none"> <li>e. Open Parking Structures [406.0] <ul style="list-style-type: none"> <li>i. Structure is used for other than passenger motor vehicles, or for repair, or the exterior walls are not open on two sides. Must follow Section 408.0 for Public Garages [406.1]</li> <li>ii. Exterior wall openings are not uniformly distributed on minimum of 2 sides or are not equal to 20 % or more of the total perimeter wall area on each floor. Must follow Section 408.0 for Public Garages [406.1.1]</li> <li>iii. Provide a fire separation distance of greater than 10 feet for exterior walls containing openings [406.1.2]</li> <li>iv. Provide construction type as required or reduce size [406.4, T406.4]</li> <li>v. Provide guards at open sided floor areas [406.5]</li> <li>vi. Provide noncombustible wheel guards where required [406.6]</li> </ul> </li> <li>f. Private Garages [407.0] ETC.</li> <li>g. Public Garages [408.0] ETC.</li> <li>h. Use Group I-2 [409.0] ETC.</li> <li>i. Use Group I-3 [410.0] ETC.</li> <li>j. ETC.</li> </ul>	Chapter 4 (contin.)
18	Measure building height from grade plane. See definitions.	502.1
19	Building exceeds allowable height or area for given Construction Type and use Group(s). Increase construction type or decrease building size.	503.0, T503
20	Mezzanine exceeds area limitations. Decrease size or classify as another story.	505.2
21	Apply area reduction due to number of stories.	506.4
22	Building does not meet requirements for unlimited area because the area identified as a "mezzanine" is too large. Use higher construction type or reduce size of upper level to comply.	507.1, 505.2
23	Drawings indicate mixed construction types. Designate one type and comply with its requirements. Option for mixing Types IIB and IIIB - seek code modification per 104.10	602.1, 602.2, 602.3
24	Drawings indicate Type IV Construction, but show suspended ceilings, concealing the floor structure from below. This does not qualify as Type IV, but should be verified with the requirements of Type III.	602.4
25	Drawings indicate Type IIB Construction, but show FRTW studs for load bearing interior partitions, which is not allowed.	603.1, T601

Item No.	DESCRIPTION	CODE SECTION
26	Designate the Type of Construction and fire ratings of all structure elements: a. Include documentation and supporting data substantiating all required fireresistance ratings. b. Include details and materials for providing the required fireresistance rating at joints and penetrations of fireresistance rated assemblies. c. Include details and methods for fireblocking.	703.2
27	Fire separation distance at [east] wall requires fireresistance rating.	T601, T602
28	Windows shown at [west] exterior wall exceed maximum allowable area of exterior wall openings.	704.8, T704.8
29	Provide vertical separation of openings in this 4 story, non-sprinklered, unprotected building.	704.9
30	Indicate method of fire protectives provided for exterior wall openings required to be protected.	704.12
31	Wall indicated as fire wall is not detailed to provide sufficient structural stability under fire conditions to allow collapse of construction on either side without collapse of the wall.	705.2
32	Where roof heights differ at fire wall, provide fire wall extension or 1 hour protection at lower roof for 10 feet.	705.6.1
33	Openings in fire wall exceed 25% of the length of the wall on the [second] floor.	705.8
34	Openings in the mixed use fire barrier separation wall exceed 25% of the length of the wall on the [third] floor.	706.7
35	Door opening from a closet into exit stair [#3] at the [second] floor is not permitted.	1019.1.1
36	Show and document fireresistance rated joint systems for fireresistance rated assemblies.	713
37	Although shaft only connects 3 stories, it must be 2 hour rated to equal the rating of the floor assembly penetrated in this Type IB building.	707.4
38	To take advantage of the reduction to ½ hour rating at dwelling unit separation walls in this sprinklered Type VB construction R-2 building, sprinklers must be installed in accordance with NFPA 13, as opposed to NFPA 13R.	708.3 exception 2.
39	Provide 1 hour rated smoke barriers in this I-2 building.	407.4, 709.3
40	Specify minimum 1 psf for fireresistance rated floor or roof/ceiling assembly lay in tiles, or provide mechanical clips or wires in accordance with manufacturer's listing.	711.3.1
41	Provide continuity at fireresistance rated floor/ceiling or roof/ceiling intersection at exterior curtain wall.	711.6, 713.4

Item No.	DESCRIPTION	CODE SECTION
42	Provide details for fire-resistance ratings of penetrations of fire walls, fire separation walls, and fire partitions.	712.3
43	Provide details for fire-resistance ratings of penetrations of fire-resistance rated floor/ceiling and roof/ceiling assemblies.	712.4
44	Provide details for individual encasement of all structural members which are required to have a fire-resistance rating and which support more than 2 floors or one floor and a roof, or support a loadbearing or nonloadbearing wall more than 2 stories high.	714.2.1
45	Provide bottom flange protection for lintels, shelf angles and plates which are part of the structural frame and have a span of greater than 6 feet.	714.6
46	In this nonsprinklered building, specify maximum transmitted temperature end point of not more than 450 degrees F. above ambient at the end of 30 minutes of standard fire test exposure, in addition to required fire rating.	715.3.4
47	Provide 1 ½ hour labeled door assemblies for 2 hour rated shafts.	715.3, T715.3
48	Provide self closers [or automatic closers] and latches for fire doors.	715.3.7
49	Detail and specify access methods for fire damper locations.	716.4
50	Wired glass vision panels shall not exceed 100 square inches in 1 or 1 ½ hour rated doors.	715.4.3, T715.4.3
51	Provide fireblocking at exterior combustible architectural trim, maximum 20 feet intervals.	717.2.6
52	Provide fireblocking at concealed spaces formed by floor sleepers in areas of not more than 100 s.f., or fill the space solidly with approved noncombustible materials.	717.2.7
53	Provide draftstopping within floor systems of Types 3, 4 or 5 construction with suspended ceilings under joists, or with open web wood floor trusses, or provide sprinklers in the concealed combustible space.	717.3
54	Provide draftstopping in attics and concealed roof spaces of Types 3, 4 or 5 construction, or provide sprinklers.	717.4
55	Indicate how ventilation will be provided combined with draftstopping in attics and concealed roof spaces.	717.4, 1203.2
56	Provide documentation and specifications for flame spread of 25 or less and smoke-developed rating of 450 or less, when tested in accordance with ASTM E84 where insulation is exposed in rooms or spaces including attics or crawl spaces.	719.3

Item No.	DESCRIPTION	CODE SECTION
57	Provide specifications for loose fill insulation testing.	719.3, 719.4, 719.6
58	Indicate and specify interior wall and ceiling finish classifications.	803.0, T803.5
59	Indicate and specify floor finish classifications for carpet and floor coverings other than traditional type floor coverings [such as wood, vinyl, linoleum, terrazzo and other resilient floor covering materials].	804.0
60	In occupancies of Groups A, E, I, R-1 and dormitories in Group R-2, curtains, draperies, hangings and other decorative materials suspended from walls or ceilings shall be flame resistant in accordance with Section 805.2 and NFPA 701 or noncombustible.	805.1
61	Submit construction documents for fire alarm systems for review and approval prior to system installation.	907.1.1
62	Provide automatic fire suppression systems where required by height and area and by Occupancy Group provisions.	903.2
63	Provide automatic fire suppression system in certain buildings and areas as noted.	903.2.13, 903.2.14, T903.2.13
64	When installing an NFPA 13R sprinkler system, sprinkler protection shall be provided for exterior balconies and ground-floor patios of dwelling units	903.3.1.2.1
65	Limited area sprinkler systems are limited to serving six sprinklers or less in any fire area are permitted to be connected to the domestic service where a wet automatic standpipe is not available.	903.3.5.1.1
66	Provide Class III standpipe systems throughout building where the floor level of the highest story is located more than 30 feet (9144 mm) above the lowest level of fire department vehicle access, or where the floor level of the lowest story is located more than 30 feet (9144 mm) below the highest level of fire department vehicle access.	905.3.1
67	Threads provided for fire department connections to sprinkler systems, standpipes, yard hydrants or any other fire hose connection shall be compatible with the connections used by the local fire department.	901.4
68	Submit construction documents for fire alarm systems for review and approval prior to system installation.	907.1.1
69	Provide fire alarm system in certain areas and buildings as noted.	907.2

64 When installing an NFPA 13R sprinkler system, sprinkler protection shall be provided for exterior balconies and ground-floor patios of dwelling units where the building is of Type V construction. 903.3.1.2.1

Item No.	DESCRIPTION	CODE SECTION
70	<p>Submit Construction documents for fire alarm systems for review and approval prior to system installation. Construction documents shall include, but not be limited to, all of the following:</p> <ol style="list-style-type: none"> <li>1. A floor plan which indicates the use of all rooms.</li> <li>2. Locations of alarm-initiating and notification appliances.</li> <li>3. Alarm control and trouble signaling equipment.</li> <li>4. Annunciation.</li> <li>5. Power connection.</li> <li>6. Battery calculations.</li> <li>7. Conductor type and sizes.</li> <li>8. Voltage drop calculations.</li> <li>9. Manufacturers, model numbers and listing information for equipment, devices and materials.</li> <li>10. Details of ceiling height and construction.</li> <li>11. The interface of fire safety control functions</li> </ol>	907.1.1
71	Manual fire alarm boxes should be located not more than 5 feet from the entrance to each exit. Additional manual fire alarm boxes shall be located so that travel distance to the nearest box does not exceed 200 feet.	907.3.1
72	<p>Show Single- or multiple-station smoke alarms to be installed and maintained in Groups R-2, R-3, R-4 and I-1, regardless of occupant load at all of the following locations:</p> <ol style="list-style-type: none"> <li>1. On the ceiling or wall outside of each separate sleeping area in the immediate vicinity of bedrooms.</li> <li>2. In each room used for sleeping purposes.</li> <li>3. In each story within a dwelling unit, including basements but not including crawl spaces and uninhabitable attics. In dwellings or dwelling units with split levels and without an intervening door between the adjacent levels, a smoke alarm installed on the upper level shall suffice for the adjacent lower level provided that the lower level is less than one full story below the upper level.</li> </ol>	907.2.10.1.2
73	Provide smoke control system for covered mall buildings, for atriums connecting three or more stories, for underground buildings, windowless buildings, or large stages.	909.2, 402.9, 404.4, 408.8,
74	Indicate the number of occupants for whom means of egress facilities shall be provided.	1004.1
75	Provide guards along open-sided walking surfaces, mezzanines, industrial equipment platforms, stairways, ramps and landings which are located more than 30 inches above the floor or grade below. [See exceptions.]	1012.1
76	Means of egress doors shall be placed remotely when more than one door is required.	1014.2.1
77	Maximum length of exit access travel, measured from the most remote point to an approved exit along the natural and unobstructed line of travel, exceeds the allowable distances.	1015.1, T1015.1

Item No.	DESCRIPTION	CODE SECTION
78	Areas of refuge and 48 inches clear between stair handrails must be provided for accessible means of egress in an unsprinklered building.	1007.1, 1007.3
79	Design occupant load shall be established by the largest number computed in accordance with: a. The actual number b. The number by Table 1004.1.2 c. The number by combination of a and b above.	1004.1
80	Capacity of means of egress for [a specific] floor, balcony, tier or other occupied space is not sufficient for the occupant load thereof.	1005.1
81	The minimum number of exits for the occupant load is not provided for [a specific] floor area.	1018.1, 1014.1, 1013.3
82	Dead end exit accessways, aisles or corridors exceed the allowable distances.	1016.3, 1024.9.5
83	Common path of travel exceeds the allowable distances.	1013.3
84	Passageways, aisle accessways, aisles or corridors do not provide the minimum required width.	1005.1, 1016.2
84	Corridor fire-resistance rating is not provided as required.	1016.1, T1016.1
85	Means of egress stairways shall not be less than 44 inches unless they meet an exception.	1009.1
86	Means of egress ramps shall not reduce in width in the direction of egress travel.	1010.5.3
87	Means of egress stairway shall not have a rise of more than 12 feet between floor levels or landings.	1009.6
88	Minimum stair tread shall be 11 inches, maximum riser 7 inches. [See exceptions.]	1009.3
89	Stair risers shall be solid. [See exceptions.]	1009.3.2
90	Handrails shall be continuous on both sides of stairs. [See exceptions.]	1009.11

Item No.	DESCRIPTION	CODE SECTION
91	Doors in means of egress shall not reduce the width of landings during their swing to less than ½ the required width. [See exceptions.]	1005.2
92	Exit stairway enclosures shall not be used for any purpose other than means of egress. [Mailboxes are prohibited.]	1019.1
93	Openings in exit enclosures, other than unexposed exterior openings, shall be limited to those necessary for exit access to the enclosure from normally occupied spaces and for egress from the enclosure. [See Exceptions per 402.4.6]	1019.1.1
94	Where nonrated walls or unprotected openings enclose the exterior of the stairway and the walls or openings are exposed by other parts of the building at an angle of less than 180 degrees (3.14 rad), the building exterior walls within 10 feet (3048 mm) horizontally of a nonrated wall or unprotected opening shall be constructed as required for stairway enclosures, including opening protectives, but are not required to exceed a 1-hour fire-resistance rating with ¾-hour opening protectives. This construction shall extend vertically from a point 10 feet (3048 mm) above the topmost landing of the stairway or to the roof line, whichever is lower, and down to the ground.	1019.1.4
95	Penetrations into and openings through an exit enclosure assembly are prohibited except for required exit doors, ductwork and equipment necessary for independent stair pressurization, required ventilation, sprinkler piping, standpipes and electrical conduit serving the stairway and terminating at a steel box that does not exceed 16 square inches (10323 mm <sup>2</sup> ) in area.	1019.1.2
96	All means of egress doors shall be openable from the egress side without the use of a key or special knowledge or effort. [See exceptions.]	1008.1.8
97	Exterior exit ramps and stairways serving as an element of a required means of egress shall be open on at least one side. An open side shall have a minimum of 35 square feet (3.3m <sup>2</sup> ) of aggregate open area adjacent to each floor level and the level of each intermediate landing. The required open area shall be located not less than 42 inches (1067 mm) above the adjacent floor or landing level.	1022.3
98	In other than occupancies in Use Group R-3, and occupancies in Use Group accessory to an U that are occupancy in Use Group R-3, treads, platforms and landings which are part of exterior stairways in climates subject to snow or ice shall be protected to prevent accumulation of same.	1009.5.2
99	The maximum rise for any ramp run shall be 30 inches.	1010.4

Item No.	DESCRIPTION	CODE SECTION
100	There shall be a floor or landing on each side of a door. Such floor or landing shall be at the same elevation on each side of the door.	1008.1.4
101	Each occupant of a room or space shall have access to at least two exits or exit access doors from the room or space where the occupant load or travel distance exceeds that listed in Table 1014.1 or 1013.3.	1014.1, 1013.3
102	Doors equipped with latching devices in Use Groups A and E or portions of buildings occupied for assembly or educational purposes and serving rooms or spaces with an occupant load greater than 100, and in Occupancy Groups H-1, H-2, H-3, or H-5 shall be equipped with approved panic hardware.	1008.1.9
103	In occupancies other than Use Group H, horizontal sliding doors considered as a component in a means of egress shall meet specific criteria. [See text.]	1008.1.2 Ex. 5
104	Horizontal exits shall be provided with a 2 hour fire-resistance rated fire wall or fire barrier wall, and area[s] of refuge.	1021.1, 1021.2
105	Not more than 50% of the required stairways shall discharge through the same passageway [lobby].	1023.1, Ex. 1
106	Handrail clear space for stairways shall not be less than 1 ½ inches.	1022.2
107	Exit sign placement shall be such that any point in the exit access shall not be more than 100 feet , or the listed viewing distance (whichever is less) from the nearest visible sign.	1011.1
108	Means of egress lighting shall be provided for the exit discharge. Intensity shall be minimum 1 footcandle and it shall be connected to an emergency power source.	1006.1, 1006.2
109	New fire escapes for existing buildings shall be permitted only where exterior stairs cannot be utilized due to lot lines limiting stair size or due to the sidewalks, alleys or roads at grade level. New fire escapes shall not incorporate ladders or access by windows.	3404.1.3
110	In addition to accessible entrances required by Sections 1105.1.1 through 1105.1.6, at least 50 percent of all public entrances shall be accessible.	1105.1

Item No.	DESCRIPTION	CODE SECTION
111	In Group R-2 and R-3 occupancies on a single site where multiple buildings containing Type A or Type B units are served by recreational facilities, 25 percent, but not less than one, of each type of recreational facility serving each building shall be accessible. The total number of each type of recreational facility that is required to be accessible shall be determined by considering every recreational facility of each type serving each building on the site.	1109.14.2
112	Controls, operating mechanisms and hardware intended for operation by the occupant, including switches that control lighting and ventilation, and electrical convenience outlets, in accessible spaces, along accessible routes or as parts of accessible elements shall be accessible. [See Exceptions.]	1109.13
113	Where an alteration affects the accessibility to, or contains an area of primary function, the route to the primary function area shall be accessible. The accessible route to the primary function area shall include toilet facilities or drinking fountains serving the area of primary function.[See exceptions.]	3409.6
114	<p>Existing buildings, or portions thereof, that undergo a change of group or occupancy shall have all of the following accessible features:</p> <ol style="list-style-type: none"> <li>1. At least one accessible building entrance.</li> <li>2. At least one accessible route from an accessible building entrance to primary function areas.</li> <li>3. Signage complying with Section 1110.</li> <li>4. Accessible parking, where parking is being provided.</li> <li>5. At least one accessible passenger loading zone, when loading zones are provided.</li> <li>6. At least one accessible route connecting accessible parking and accessible passenger loading zones to an accessible entrance.</li> </ol> <p>Where it is technically infeasible to comply with the new construction standards for any of these requirements for a change of group or occupancy, the above items shall conform to the requirements to the maximum extent technically feasible.</p> <p>Change of group or occupancy that incorporates any alterations or additions shall comply with this section and Sections 3409.4, 3409.5, 3409.6 and 3409.7.</p>	3409.3
115	Buildings shall be provided with natural ventilation in accordance with Section 1203.4, or mechanical ventilation in accordance with the <i>International Mechanical Code</i> .	1203.1
116	<p>Every dwelling unit shall have at least one room that shall have not less than 120 square feet (13.9 m<sup>2</sup>) of net floor area. Other habitable rooms shall have a net floor area of not less than 70 square feet (6.5 m<sup>2</sup>).</p> <p><b>Exception:</b> Every kitchen in a one- and two-family dwelling shall have not less than 50 square feet (4.64 m<sup>2</sup>) of gross floor area.</p>	1208.3

Item No.	DESCRIPTION	CODE SECTION
117	Habitable spaces, other than a kitchen, shall not be less than 7 feet (2134 mm) in any plan dimension. Kitchens shall have a clear passageway of not less than 3 feet (914 mm) between counter fronts and appliances or counter fronts and walls.	1208.1
118	The control for activation of the required stairway lighting within a dwelling unit shall be in accordance with the <i>National Electrical Code</i> .	1205.4.1
119	Crawl spaces shall be provided with a minimum of one access opening not less than 18 inches by 24 inches (457 mm by 610 mm).	1209.1
120	An opening not less than 20 inches by 30 inches (559 mm by 762 mm) shall be provided to any attic area having a clear height of over 30 inches (762 mm). A 30-inch (762 mm) minimum clear headroom in the attic space shall be provided at or above the access opening.	1209.2
121	Walls, partitions and floor/ceiling assemblies separating dwelling units from each other or from public or service areas shall have a sound transmission class (STC) of not less than 50 (45 if field tested) for air-borne noise when tested in accordance with ASTM E 90. Penetrations or openings in construction assemblies for piping; electrical devices; recessed cabinets; bathtubs; soffits; or heating, ventilating or exhaust ducts shall be sealed, lined, insulated or otherwise treated to maintain the required ratings.	1207.2
122	Floor/ceiling assemblies between dwelling units or between a dwelling unit and a public or service area within the structure shall have an impact insulation class (IIC) rating of not less than 50 (45 if field tested) when tested in accordance with ASTM E 492.	1207.3
123	Submit evidence of compliance with the energy code.	1301.1.1
124	Provide specifications / documentation of testing of combustible exterior wall coverings.	1406.2
125	Provide specifications / documentation of classification of roof coverings.	1505.1
126	In areas where the average daily temperature in January is 25°F (-4°C) or less or where there is a possibility of ice forming along the eaves causing a backup of water, a membrane that consists of at least two layers of underlayment cemented together or of a self-adhering polymer modified bitumen sheet shall be used in lieu of normal underlayment and extend from the eave's edge to a point at least 24 inches (610 mm) inside the exterior wall line of the building.	1507.2.8.2

Item No.	DESCRIPTION	CODE SECTION
127	<p>Modified bitumen membrane roofs shall have a design slope of a minimum of one-fourth unit vertical in 12 units horizontal (2-per cent slope) for drainage.</p> <p><b>Exception:</b> A minimum design slope of one-eighth unit vertical in 12 units horizontal shall be permitted when the following two conditions are met:</p> <ol style="list-style-type: none"> <li>1. The roofing material is warranted/guaranteed by both the roofing material manufacturer and the roofing installer for the proposed slope.</li> <li>2. The registered design professional responsible for the design of the roof structure certifies that the roof structure is designed to support all loads, including any additional loads resultant to the reduced slope.</li> </ol>	1507.11.1
128	<p>The uniformly distributed, concentrated and impact floor live load used in the design shall be indicated for floor areas. Live load reduction of the uniformly distributed floor live loads, if used in the design, shall be indicated.</p>	1603.1.1
129	<p>The roof live load used in the design shall be indicated for roof areas (Section 1607.11).</p>	1603.1.2
130	<p>The ground snow load, <math>P_g</math>, shall be indicated. In areas where the ground snow load, <math>P_g</math>, exceeds 10 pounds per square foot (psf) (0.479 kPa), the following additional information shall also be provided, regardless of whether snow loads govern the design of the roof:</p> <ol style="list-style-type: none"> <li>1. Flat-roof snow load, <math>P_f</math>.</li> <li>2. Snow exposure factor, <math>C_e</math>.</li> <li>3. Snow load importance factor, <math>I_s</math>.</li> <li>4. Thermal factor, <math>C_t</math>.</li> </ol>	1603.1.3
131	<p>The following information related to wind loads shall be shown, regardless of whether wind loads govern the design of the lateral-force resisting system of the building:</p> <ol style="list-style-type: none"> <li>1. Basic wind speed (3-second gust), miles per hour (m/s).</li> <li>2. Wind importance factor, <math>I_W</math>, and building category.</li> <li>3. Wind exposure, if more than one wind exposure is utilized, the wind exposure and applicable wind direction shall be indicated.</li> <li>4. The applicable internal pressure coefficient.</li> <li>5. Components and cladding. The design wind pressures in terms of psf (kPa) to be used for the design of exterior component and cladding materials not specifically designed by the registered design professional.</li> </ol>	1603.1.4

Item No.	DESCRIPTION	CODE SECTION
132	<p>The following information related to seismic loads shall be shown, regardless of whether seismic loads govern the design of the lateral-force-resisting system of the building:</p> <ol style="list-style-type: none"> <li>1. Seismic importance factor, <i>IE</i>, and seismic use group.</li> <li>2. Mapped spectral response accelerations <i>SS</i> and <i>S1</i>.</li> <li>3. Site class.</li> <li>4. Spectral response coefficients <i>SDS</i> and <i>SD1</i>.</li> <li>5. Seismic design category.</li> <li>6. Basic seismic-force-resisting system(s).</li> <li>7. Design base shear.</li> <li>8. Seismic response coefficient(s), <i>CS</i>.</li> <li>9. Response modification factor(s), <i>R</i>.</li> <li>10. Analysis procedure used.</li> </ol>	1603.1.5
133	Indicate a minimum required concentrated load of 2000 lbs is analyzed at office areas.	T1607.1
134	Indicate a minimum required concentrated load of 8000 lbs is analyzed at sidewalk and vehicular driveway subject to trucking.	T1607.1
135	Indicate loading conditions at handrails, guards, grab bars and vehicle barriers.	1607.7
136	Roofs used for promenade purposes shall be designed for a minimum live load of 60 psf (2.87 kPa). Roofs used for roof gardens or assembly purposes shall be designed for a minimum live load of 100 psf (4.79 kPa). Roofs used for other special purposes shall be designed for appropriate loads, as directed or approved by the building official.	1607.11.2.2
137	Where roofs are to be landscaped, the uniform design live load in the landscaped area shall be 20 psf (0.958 kPa). The weight of the landscaping materials shall be considered as dead load and shall be computed on the basis of saturation of the soil.	<b>1607.11.2.3</b>
138	Provide calculations of snow drift at lower roofs and skylights.	1608.7
139	Provide calculations of sliding snow loads at lower roofs and skylights.	1608.9
140	Provide calculations for flood loads.	1603.1.6

Item No.	DESCRIPTION	CODE SECTION
141	The permit applicant shall submit a statement of special inspections prepared by the registered design professional in responsible charge in accordance with Section 106.1 as a condition for permit issuance. This statement shall include a complete list of materials and work requiring special inspections by this section, the inspections to be performed and a list of the individuals, approved agencies or firms intended to be retained for conducting such inspections.	1704.1.1
142	In the absence of satisfactory data from immediately adjacent areas, submit a foundation and soils investigation to the building official where required in Sections 1802.2.1 through 1802.2.7.	1802.2
143	<p>The construction documents for structural concrete construction shall include:</p> <ol style="list-style-type: none"> <li>1. The specified compressive strength of concrete at the stated ages or stages of construction for which each concrete element is designed.</li> <li>2. The specified strength or grade of reinforcement.</li> <li>3. The size and location of structural elements, reinforcement, and anchors.</li> <li>4. Provision for dimensional changes resulting from creep, shrinkage and temperature.</li> <li>5. The magnitude and location of prestressing forces.</li> <li>6. Anchorage length of reinforcement and location and length of lap splices.</li> <li>7. Type and location of mechanical and welded splices of reinforcement.</li> <li>8. Details and location of contraction or isolation joints specified for plain concrete.</li> <li>9. Minimum concrete compressive strength at time of posttensioning.</li> <li>10. Stressing sequence for posttensioning tendons.</li> <li>11. For structures assigned to Seismic Design Category D, E or F, a statement if slab on grade is designed as a structural diaphragm (see Section 21.10.3.4 of ACI 318).</li> </ol>	1901.4
144	Provide specifications for cold- and hot-weather requirements for concrete. Coordinate with specific code requirements.	1905.12, 1905.13
145	<p>With respect to masonry, the construction documents shall show all of the items required by this code including the following:</p> <ol style="list-style-type: none"> <li>1. Specified size, grade, type and location of reinforcement, anchors and wall ties.</li> <li>2. Reinforcing bars to be welded and welding procedure.</li> <li>3. Size and location of structural elements.</li> <li>4. Provisions for dimensional changes resulting from elastic deformation, creep, shrinkage, temperature and moisture.</li> </ol>	2101.3

Item No.	DESCRIPTION	CODE SECTION
146	The construction documents shall describe in sufficient detail the location, size and construction of all masonry fireplaces. The thickness and characteristics of all material and the clearances from walls, partitions and ceilings shall be clearly indicated.	2101.3.1
147	Provide specifications for cold- and hot-weather requirements for masonry, including wetting of brick. Coordinate with specific code requirements.	2104.3, 2104.4
148	Masonry shall not be supported on wood girders or other forms of wood construction except as permitted in Section 2304.12..	2104.1.6
149	Masonry fireplaces and chimney flues shall have dimensions in compliance with these specific code provisions.	2111.1, T2111.1, Fig.2111.1
150	Indicate in Construction Documents that steel furnished for structural load-carrying purposes shall be properly identified for conformity to the ordered grade in accordance with the specified ASTM standard or other specification and the provisions of this chapter. Steel that is not readily identifiable as to grade from marking and test records shall be tested to determine conformity to such standards.	2203.1
151	Indicate in construction documents by specific information that structural lumber, end-jointed lumber, prefabricated I-joists, structural glued-laminated timber, wood structural panels, fiberboard sheathing (when used structurally), hardboard siding (when used structurally), particleboard, preservative-treated wood, fire-retardant-treated wood, hardwood, plywood, trusses and joist hangers conform to the specific applicable provisions of this section.	2303.1
142	Posts and columns supporting permanent structures that are embedded in concrete in direct contact with the earth or embedded in concrete exposed to the weather, or in direct contact with the earth, shall be of preservative-treated wood.	<b>2304.11.4.1</b>
143	In Type I and II construction, sloped glazing and skylight frames shall be constructed of noncombustible materials. In structures where acid fumes deleterious to metal are incidental to the use of the buildings, approved pressure- treated wood or other approved noncorrosive materials are permitted to be used for sash and frames. [Aluminum is not noncombustible. See 703.4]	2405.4, 703.4
144	Coordinate construction documents to require identifying mark on each light of safety glazing material.	2406.2
145	Coordinate construction documents to specify safety glazing at all hazardous locations.	2406.3

Item No.	DESCRIPTION	CODE SECTION
146	Coordinate construction documents to provide for weather protection of gypsum board and related products.	2508.2.1
147	Coordinate construction documents to provide for specific requirements of the code for foam plastic installed on exterior walls. [Note alternatives of 2603.8.]	2603.5, 2603.8
147	Coordinate construction documents to provide for specific requirements of the code for foam plastic used for interior trim.	2604.2
148	<p>The aggregate area of skylights shall not exceed 33 1/3 percent of the floor area of the room or space sheltered by the roof in which such skylights are installed where Class CC1 materials are utilized, and 25 percent where Class CC2 materials are utilized.</p> <p><b>Exception:</b> The aggregate area limitations of light-transmitting plastic skylights shall be increased 100 percent beyond the limitations set forth in this section where the building is equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 or the building is equipped with smoke and heat vents in accordance with Section 910.</p>	2610.5
149	Indicate emergency and standby electric power where required.	2702.2
150	Indicate minimum numbers of plumbing facilities, per sex, as required.	2902, T 2902.1
151	Where four or more elevators serve all or the same portion of a building, the elevators shall be located in at least two separate hoistways. Not more than four elevators shall be located in any single hoistway enclosure.	3002.2
152	Elevators shall not be in a common shaft enclosure with a stairway.	3002.7
153	Hoistways of elevators and dumbwaiters serving more than three stories shall be provided with a means for venting smoke and hot gases to the outer air in case of fire, except that in occupancies of other than Use Groups R-1, R-2, I-1, I-2 and similar occupancies with overnight sleeping quarters, venting of hoistways is not required where the building is equipped throughout with an approved automatic fire suppression system which conforms to NFPA 13 or NFPA 13R. Also sidewalk elevator hoistways are not required to be vented.	3004.1
154	Exterior elevated pedestrian walkways and tunnels must comply with specific requirements in order to be considered as not contributing to the building area, height or number of stories of the connected buildings, which shall be considered separate structures.	3104

Item No.	DESCRIPTION	CODE SECTION
155	Every excavation on a site located 5 feet (1524 mm) or less from the street lot line shall be enclosed with a barrier not less than 6 feet (1829 mm) high. Where located more than 5 feet (1524 mm) from the street lot line, a barrier shall be erected when required by the building official. Barriers shall be of adequate strength to resist wind pressure as specified in Chapter 16.	3306.9
156	Additions or alterations to any building or structure shall conform with the requirements of the code for new construction. Additions or alterations shall not be made to an existing building or structure which will cause the existing building or structure to be in violation of any provisions of this code. An existing building plus additions shall comply with the height and area provisions of Chapter 5. Portions of the structure not altered and not affected by the alteration are not required to comply with the code requirements for a new structure. [See exception for flood hazard areas.]	3403.1
157	No change shall be made in the use or occupancy of any building that would place the building in a different division of the same group of occupancy or in a different group of occupancies, unless such building is made to comply with the requirements of this code for such division or group of occupancy. Subject to the approval of the building official, the use or occupancy of existing buildings shall be permitted to be changed and the building is allowed to be occupied for purposes in other groups without conforming to all the requirements of this code for those groups, provided the new or proposed use is less hazardous, based on life and fire risk, than the existing use. <b>3406.1.1 Determination of hazard.</b> For the purposes of Section 3406.1, the determination of hazard category shall be made in accordance with Section 812.4.1 of the 2003 <i>International Existing Building Code</i> .	3406.1

END OF CORRECTION LIST