CHAPTER 1
ADMINISTRATION

SECTION 101
GENERAL

101.1 Title. These regulations shall be known as the 2009 North Carolina Building Code as adopted by the North Carolina Building Code Council on March 11, 2008, to be effective January 1, 2009. References to the International Codes shall mean the North Carolina Codes. The North Carolina amendments to the International Codes are underlined.

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 (town houses) not more than three stories above grade plane in height with a separate means of egress and their accessory structures shall comply with the International Residential Code.
2. Farm buildings located outside the building rules jurisdiction of any municipality.

   Exception: All buildings used for sleeping purposes shall conform to the provisions of the technical codes.
3. The design, construction, location, installation or operation of equipment for storing, handling, and transporting liquefied petroleum gases for fuel purposes up to the outlet of the first stage pressure regulator, and anhydrous ammonia or other liquid fertilizers.
4. The design, construction, location, installation or operation of equipment or facilities of a public utility, as defined in G.S. 62-3, or an electric or telephone membership corporation, including without limitation poles, towers, and other structures supporting electric or communication lines from the distribution network up to the meter location.

   NOTE: All buildings owned and operated by a public utility or an electric or telephone membership corporation shall meet the provisions of the code.
5. The Storage and Handling of Hazardous Chemicals Right to Know Act, Article 18 of Chapter 95 of the North Carolina General Statutes.

101.2.1 Appendices. Provisions in the appendices shall not apply unless specifically adopted or referenced in this Code.

101.4 Referenced codes. The other codes listed in Sections 101.4.1 through 101.4.7 and referenced elsewhere in this code shall be considered part of the requirements of this code to the prescribed extent of each such reference.

101.4.1 Electrical. The provisions of the North Carolina Electrical Code shall apply to the installation of electrical systems, including alterations, repairs, replacement, equipment, appliances, fixtures, fittings and appurtenances thereto.

101.4.5 Property maintenance. Deleted.

101.5 Requirements of other State agencies, occupational licensing boards, or commissions. The North Carolina State Building Codes do not include all additional requirements for buildings and structures that may be imposed by other State agencies, occupational licensing boards, and commissions. It shall be the responsibility of a permit holder, design professional, contractor, or occupational license holder to determine whether any additional requirements exist.

SECTION 103
DEPARTMENT OF BUILDING SAFETY
Deleted. See the North Carolina Administrative Code and Policies.

SECTION 104
DUTIES AND POWERS OF BUILDING OFFICIAL
104.1 through 104.9 Deleted. See the North Carolina Administrative Code and Policies.

(retain Sections 104.10 and 104.11)

SECTION 105
PERMITS
Deleted. See the North Carolina Administrative Code and Policies.

SECTION 106
CONSTRUCTION DOCUMENTS
Deleted. See the North Carolina Administrative Code and Policies.

SECTION 107
TEMPORARY STRUCTURES AND USES
Deleted. See the North Carolina Administrative Code and Policies.

SECTION 108
FEES
Deleted. See the North Carolina Administrative Code and Policies.

SECTION 109
INSPECTIONS
Deleted. See the North Carolina Administrative Code and Policies.

SECTION 110
CERTIFICATE OF OCCUPANCY
Deleted. See the North Carolina Administrative Code and Policies.

SECTION 111
SERVICE UTILITIES
Deleted. See the North Carolina Administrative Code and Policies.

SECTION 112
BOARD OF APPEALS
Deleted. See the North Carolina Administrative Code and Policies.

SECTION 113
VIOLATIONS
Deleted. See the North Carolina Administrative Code and Policies.

SECTION 114
STOP WORK ORDER
Deleted. See the North Carolina Administrative Code and Policies.

SECTION 115
UNSAFE STRUCTURES AND EQUIPMENT
Deleted. See the North Carolina Administrative Code and Policies.

CHAPTER 2
DEFINITIONS

APPROVED. Acceptable to the code official or authority having jurisdiction for compliance with the provisions of the applicable Code or referenced Standard.

REGISTERED DESIGN PROFESSIONAL. An individual who is registered or licensed to practice his respective design profession as defined by the statutory requirements of the professional registration laws of the state or jurisdiction in which the project is to be constructed. Design by a Registered Design Professional is not required where exempt under the registration or licensure laws.

CHAPTER 3
USE AND OCCUPANCY CLASSIFICATION

308.5.1 Adult care facility. A facility that provides accommodations for less than 24 hours for more than five unrelated adults and provides supervision and personal care services shall be classified as Group I-4.
Exception: Deleted.

310.1 Residential Group R
R-3 Residential occupancies where the occupants are primarily permanent in nature and not classified as Group R-1, R-2, R-4 or I, including:
Buildings that do not contain more than two dwelling units.
Adult facilities that provide accommodations for five or fewer persons of any age for less than 24 hours.
Child care facilities that provide accommodations for eight or fewer persons with no more than five preschool for less than 24 hours.
Congregate living facilities with 16 or fewer persons.
Adult and child care facilities that are within a single-family home are permitted to comply with the *International Residential Code.*

R-4 Residential occupancies shall include buildings arranged for occupancy as residential care/assisted living facilities, or adult and child day care facilities that provide accommodations in a residence occupied as a home by the caregiver for persons of any age for less than 24 hours, including more than five but not more than 16 occupants, excluding staff.
Group R-4 occupancies shall meet the requirements for construction as defined for Group R-3 except as otherwise provided for in this code, or shall comply with the *International Residential Code*.

CHAPTER 4
SPECIAL DETAILED REQUIREMENTS BASED ON USE AND OCCUPANCY

403.15 Smoke Control. Either a smoke control system shall be installed in accordance with Section 909 or natural smoke venting shall be provided.

403.15.1 Smoke venting. Natural smoke venting, when provided, shall be installed in two or more exterior walls. Either fixed windows with tempered glass, or panels or windows which can be opened from the interior without the use of special devices shall be provided and identified. Such venting facilities shall be provided at the rate of 20 square feet per 50 lineal feet of exterior wall in each story and distributed around the perimeter at not more than 50 foot intervals.

SECTION 407
GROUP I-2

407.5.1 Dry pipe sprinkler system. When dry pipe sprinkler systems are installed, upon activation, a full flow of water shall be delivered to the most remote point of the system in no more than 60 seconds.

407.6 Automatic fire detection. Corridors in Group I-2 and spaces permitted to be open to corridors by Section 407.2 shall be equipped with an automatic fire detection system. Hospitals shall be equipped with smoke detection as required by Section 407.2.
Exceptions:
1. Corridor smoke detection is not required in smoke compartments that contain patient sleeping units where patient sleeping units are provided with smoke detectors that comply with UL 268. Such detectors shall provide a visual display on the corridor side of each patient unit and an audible and visual alarm at the nursing station attending each unit.
2. Corridor smoke detection is not required in smoke compartments that contain patient sleeping units where patient unit doors are equipped with automatic door-closing devices with integral smoke detectors on the unit sides installed in accordance with their listing, provided that the integral detectors perform the required alerting function.

407.8 Locks and latches. Door-locking arrangements shall be permitted in Group I-2 where the clinical or security needs of the patients require specialized locking measures for their safety or the safety of others, provided keys are carried at all times by all staff that are responsible for the evacuation of the occupants within the locked building unit(s). Provisions for remote locking and unlocking of occupied rooms are required where more than ten locks are necessary to be unlocked in order to move occupants from one smoke compartment to another smoke compartment.

407.9 Special locking arrangements for Licensed Group I-2 and Large Residential Care Facilities as described in Section 421.5. Buildings protected throughout by an automatic fire detection system or automatic sprinkler system and in compliance with the following may be equipped with approved, listed locking devices:

1. Doors shall unlock upon actuation of the automatic fire detection system or automatic sprinkler system.
2. Doors shall unlock upon loss of power controlling the locking device.

Exception: Independent standby power is acceptable as long as the automatic fire detection system, or automatic sprinkler system, when activated has precedence over the standby power and unlocks the door. If a non-emergency situation occurs such as a power outage, the door shall be allowed to remain locked until

detection system(s) operate, provided that the power outage does not disable these detection systems. If any of the detection systems are disabled in any way, standby power controlling the locking devices will be interrupted.

3. A special locking system of electromagnetic locks may be utilized when all of the following requirements are met:

3.1. These types of locks may be used only in wards and wings or other portions of a facility that requires security provisions for the protection of its patients.

3.2. These systems may be used provided not more than one such system is located in any egress path.

3.3. A wiring diagram and system components location map shall be provided under glass adjacent to the fire alarm panel.

3.4. An on/off emergency release switch(es) must be capable of interrupting power to all electromagnetically locked doors in the facility. Release switch(es) shall be located and identified at each nurses station serving the locked unit and any other control station responsible for the evacuation of the occupants of the locked units which are manned 24 hours.

3.5. An additional emergency release switch shall be provided for each locked door and located within 3 feet of the door and shall not depend on relays or other devices to cause the interruption of power.

3.6 Any required emergency release switch shall interrupt the power to the locking device(s). If any required emergency release switch is of the locking type, all staff that are responsible for the evacuation of the occupants of the locked unit must carry emergency release switch keys. Additional convenience release devices may be provided.

4. Each special locking installation shall be approved by the appropriate fire and building inspection authority prior to installation, after installation, and prior to initial use and reviewed periodically thereafter.

5. Emergency lighting shall be provided at the door.

SECTION 421
LICENSED RESIDENTIAL CARE FACILITIES

421.1 Classification. Buildings in which more than three people are harbored for medical, charitable or other care or treatment shall be classified as Residential Care Facilities. The State Agency having jurisdiction shall classify the facility as a Residential Care Home, Small Residential Care Facility, Small Non-Ambulatory Care Facility, or Large Residential Care Facility.

421.1.1 Fire extinguishers shall be installed in Licensed Residential Care Facilities in accordance with the North Carolina Fire Code.

421.1.2 Where two exits are required, the exits or exit access doors shall be so located and constructed to minimize the possibility that both may be blocked by any one fire or other emergency condition.

421.2 Residential Care Homes. Homes keeping no more than six adults or six unrestrained children who are able to respond and evacuate the facility without assistance, determined by the State Agency having jurisdiction to be licensable, shall be classified as Single Family Residential (North Carolina Residential Code).

421.2.1 Each normally occupied story of the facility shall have two remotely located exits.

421.2.2 Smoke detectors shall be provided on all levels per the North Carolina *Residential* Code.

421.2.3 Interior wall and ceiling finish shall be Class A, B or C.

421.2.4 Unvented fuel-fired heaters and portable electric heaters shall not be used.

421.3 Small Residential Care Facilities. The following facilities when determined by the State Agency having jurisdiction to be licensable, shall be classified as Single-Family Residential.

1. Residential Care Facilities keeping no more than six adults or six unrestrained children with no more than three who are unable to respond and evacuate without assistance.
2. Residential Care Facilities keeping no more than five adults or five children who are unable to respond and evacuate without assistance, when certifiable for Medicaid reimbursement, and when staffed 24-hours per day with at least two staff awake at all times.
3. Residential Care Facilities keeping no more than nine adults or nine children who are able to respond and evacuate without assistance.

421.3.1 Either the building shall be of one-hour fire resistant construction including all walls, partitions, floors and ceilings and bedroom doors shall be 1.75 inches solid wood core or the building shall be sprinklered with a wet pipe system in accordance with NFPA 13D with a 30-minute water supply including bathrooms, toilets, closets, pantries, storage and utility spaces. The sprinkler system shall be monitored per Section 903.4 (Section 903.4, Exception 1 is not applicable in this occupancy).

421.3.2 Buildings shall not exceed two stories in height or the area limitations for Group R-4. Attics and basements used as habitable spaces shall be counted as stories.

421.3.3 Each normally occupied story of the facility shall have two remotely located exits.

421.3.4 Facility exit stairways shall be either exterior unenclosed or interior enclosed on each level with one-hour fire resistant construction and a self-closing 20-minute labeled door. Other interior stairways shall be enclosed on one floor level with one-hour fire resistant walls and self-closing 20-minute labeled door.

421.3.5 Smoke detectors shall be provided on all levels per the North Carolina *Residential* Code. Heat detectors shall be installed in all attic spaces. The heat detectors shall be connected to the fire alarm and detection system.

421.3.6 Any incidental use area (as defined by Table 508.2) shall be enclosed with one-hour fire resistant construction and self-closing 20-minute labeled door or provided with sprinklers and smoke resistant separation from other areas.

421.3.7 A building fire alarm system shall be provided in accordance with NFPA 72. Provisions shall be made to activate the internal evacuation alarm at all required exits.

421.3.8 Interior wall and ceiling finish shall be gypsum wallboard, plaster or other non-combustible material.

421.3.9 Unvented fuel-fired heaters, floor furnaces, and portable electric heaters shall not be installed.

421.3.10 Occupants younger than six-years of age shall sleep on the level of exit discharge with adult supervision.

421.3.11 Every facility shall formulate an evacuation plan (in cooperation with the local fire department) for the protection of all persons in the event of fire, for their evacuation to areas of refuge, and from the building when necessary.

421.4 Small non-ambulatory care facilities. Facilities keeping no more than six adults or six children who are unable to respond and evacuate without assistance, when determined by the State Agency having jurisdiction to be licensable shall comply with the requirements for Small Residential Care Facilities.

421.4.1 The building shall be sprinklered with a wet pipe system in accordance with NFPA 13D with a 30-minute water supply including bathrooms, toilets, closets, pantries, storage and utility spaces. The sprinkler system shall be monitored per Section 903.4 (Section 903.4, Exception 1 is not applicable in this occupancy.)

421.5 Large residential care facilities. Facilities keeping no more than twelve residents, when determined by the State Agency having jurisdiction to be licensable shall be classified as Group R-4, residential (North Carolina Building Code).

421.5.1 The building shall be of one-hour fire resistant construction, sprinklered with a wet pipe system in accordance with NFPA 13R including bathrooms, toilets, closets, pantries, storage and utility spaces, and limited to one story in height. The sprinkler system shall be monitored per Section 903.4 (Section 903.4, Exception 1 is not applicable in this occupancy.)

421.5.2 The facility shall have two remotely located exits.

421.5.3 All doorways subject to to use by residents shall have an egress width of not less than 32-inches when the door is in the open position.

421.5.4 Required corridors, ramps, and passageways shall have a clear width of not less than 6-feet when serving as part of the means of egress from resident areas.

421.5.5 Buildings may have spaces open to the corridor provided:
1. Each area does not exceed 250 square feet.
2. The spaces are not used for patient sleeping rooms, treatment rooms, or incidental use areas as defined in Table 508.2.
3. The area is equipped with smoke detectors.
4. Not more than one such area is permitted in any one smoke compartment when smoke compartments are provided.
5. The area is arranged not to obstruct access to required exits.

421.5.6 Unless required otherwise by Section 421.5.8, corridor partitions and doors in corridor partitions need not have a fire resistance rating but shall be designed to resist the passage of smoke. Doors shall be equipped with approved latches that will keep the door tightly closed. All doors except those to patient sleeping rooms shall be self-closing or automatic closing by smoke detection. Interior wall and ceiling finish shall be gypsum wallboard, plaster or other non-combustible material.

421.5.7 Corridors shall be provided with smoke detectors. Heat detectors shall be installed in all attic spaces. The heat detectors shall be connected to the fire alarm and detection system.

421.5.8 Any incidental use area shall comply with the requirements of Table 508.2.

421.5.9 A building fire alarm system shall be provided in accordance with NFPA 72. Provisions shall be made to activate the internal evacuation alarm at all required exits.

421.5.10 Every facility shall formulate an evacuation plan (in cooperation with the local fire department and community emergency planning authority) for the protection of all persons in the event of the fire, for their evacuation to areas of refuge, and from the building when necessary.

SECTION 422
LICENSED ADULT AND CHILD DAY CARE

422.1 Exits.
422.1.1 Location. Rooms where occupants receive care in I-4 and R-3 adult and child day care facilities shall be on the level of exit discharge.

422.1.2 Number of Exits. Group E and Group R-4 adult and child day care facilities shall have two exits.

Exception: Rooms where occupants receive care are located on the level of exit discharge and each of these rooms has an exit door directly to the exterior.

422.1.3 Walls and Ceilings. All walls and ceilings in rooms which are used for day care purposes and are part of the exiting path shall have surfaces of noncombustible construction (plaster or gypsum wallboard).

422.2 Ventilation. Rooms where occupants receive care in R-4 adult and child day care facilities shall comply with the ventilation requirements of Section 1203 of this code.

422.3 Portable Fire Extinguishers. In R-3 and R-4 adult and child day care facilities, at least one 2-A:10-B:C fire extinguisher shall be provided per floor with a maximum of 40 feet travel distance to the extinguisher.

SECTION 423
PRIVATE AND PUBLIC SCHOOLS

423.1 Boiler rooms in public schools. Every fuel storage room and boiler room shall be separated by two hour rated construction. Door openings shall be to the exterior and all penetrations to the interior of the building shall be protected.

423.2 Open flame heating appliances in public schools. Every comfort heating appliance installed within a building which produces an unprotected open flame shall be separated by two hour rated construction. Direct vent tubular infrared heaters installed in gymnasiums at a minimum height of 20 feet, measured from the finished floor to the bottom of the unit, shall be permitted.

423.3 Group E in churches, private schools and public schools. Rooms used for first grade children and younger shall be located on the level of exit discharge. Rooms used for second grade children shall not be located more than one story above the level of exit discharge.

CHAPTER 5
GENERAL BUILDING HEIGHTS AND AREAS

508.2 Incidental uses. Incidental use areas shall comply with the provisions of this section.
Exceptions:

1. Incidental use areas within and serving a dwelling unit are not required to comply with this section.
2. Incidental storage use areas within Groups B, F and M shall be permitted to be classified as a mixed occupancy and comply with Section 508.3.
3. The 1 hour incidental use area separation for Group I-2 waste and linen collection rooms shall not be reduced.

508.2.1 Occupancy classification. An incidental use area shall be classified in accordance with the occupancy of that portion of the building in which it is located.

(Table 508.2, add line items)

Table 508.2
INCIDENTAL USE AREAS

ROOM OR AREA	SEPARATION AND/OR PROTECTION
Group I-2 commercial kitchens	Smoke resistant construction and doors
Group I-2 laundries equal to or less than 100 square feet	Smoke resistant construction and doors
Group I-2 rooms or spaces that contain fuel-fired heating equipment.	Smoke resistant construction and doors

509.2 Group A, B, M or S-2 enclosed or open parking garage with Group A, B, M, R or S above. ***(change to heading only)***

CHAPTER 6
TYPES OF CONSTRUCTION
There are no proposed NC amendments for this chapter.

CHAPTER 7
FIRE-RESISTANCE-RATED CONSTRUCTION

702.1 Definitions.
FIRE SEPARATION DISTANCE. The distance measured perpendicular from the building face to one of the following:

1. The closest interior lot line;
2. To the centerline of a street, an alley or public way; or
3. To an imaginary line between two buildings on the property.

703.5 Identification. Walls and partitions required to have protected openings (fire walls, fire barriers, fire partitions, smoke barriers, smoke partitions) shall be permanently identified with signs or stenciling. Such identification shall be above any ceiling or other concealed spaces. Example wording:
2-HOUR FIRE BARRIER, PROTECT ALL OPENINGS.

705.3 Materials. Fire walls shall be of any approved noncombustible material.
Exception: Deleted.

705.6 Vertical continuity.
(no change to section)
Exceptions:
(no change to 1-4)
5. Buildings located above a Group A, B, M or S-2 parking garage designed in accordance with Section 509.2 shall be permitted to have the fire walls for the buildings located above the Group A, B, M or S-2 parking garage extend from the horizontal separation between the buildings above.

CHAPTER 8
INTERIOR FINISHES
There are no proposed NC amendments for this chapter.

CHAPTER 9
FIRE PROTECTION SYSTEMS

901.6.1 Automatic sprinkler systems
(Add exception #3 to supervisory service to 901.6.1, Automatic sprinkler systems.)
3. A Group R-2 building less than 4-stories in height sprinklered in accordance with NFPA 13R where sprinklers are provided for porches, balconies, corridors and stairs that are open and attached and installed in accordance with Section 903.4.

903.2.1.3 Group A-3. An automatic sprinkler system shall be provided for Group A-3 occupancies where one of the following conditions exists:
1. The fire area exceeds 12,000 square feet (1115 m2).
2. The fire area has an occupant load of 300 or more.
   Exceptions:
   1. This requirement shall not apply to assembly occupancies used primarily for worship with fixed seating and part of a separated use.
   2. This requirement shall not apply to assembly occupancies used primarily for worship consisting of a single multipurpose room that are not used for exhibition or display and are part of a separated use.
3. The fire area is located on a floor other than the level of exit discharge.

Exception: Areas used exclusively as participant sports areas where the main floor area is located at the same level as the level of exit discharge of the main entrance and exit.

903.2.5.1 Dry pipe sprinkler system. When dry pipe sprinkler systems are installed, upon activation, a full flow of water shall be delivered to the most remote point of the system in no more than 60 seconds.

903.2.7 Group R. An automatic sprinkler system installed in accordance with Section 903.3 shall be provided throughout all buildings with a Group R fire area.
Exception: An automatic sprinkler system is not required in Group R-3 and R-4 adult and child day care facilities.

907.2.3 Group E. A manual fire alarm system shall be installed in Group E occupancies. When automatic sprinkler systems or smoke detectors are installed, such systems or detectors shall be connected to the building fire alarm system.
Exceptions:
1. In other than child day care centers, Group E occupancies with an occupant load of less than 50.
(no change to exceptions 2 &3)

907.2.6.2 Group I-2. Corridors in Group I-2 and spaces permitted to be open to corridors by Section 407.2 shall be equipped by an automatic fire detection system. Hospitals shall be equipped with smoke detection as required by Section 407.2.
Exceptions:
1. Corridor smoke detection is not required in smoke compartments that contain patient sleeping rooms where patient sleeping units are provided with smoke detectors that comply with UL 268. Such detectors shall provide a visual display on the corridor side of each patient sleeping unit and an audible and visual alarm at the nursing station attending each unit.
2. Corridor smoke detection is not required in smoke compartments that contain patient sleeping rooms where patient sleeping unit doors are equipped with automatic door-closing devices with integral smoke detectors on the unit sides installed in accordance with their listing, provided that the integral detectors perform the required alerting function.

907.2.9 Group R-2 and Adult and Child Day Care in Group R-4.

907.2.9.1 Group R-2. A manual fire alarm system shall be installed in Group R-2 occupancies where:
1. Any dwelling unit or sleeping unit is located three or more stories above the lowest level of exit discharge;
2. Any dwelling unit or sleeping unit is located more than one story below the highest level of exit discharge of exits serving the dwelling unit or sleeping unit; or
3. The building contains more than 16 dwelling units or sleeping units.

Exceptions:
1. Afire alarm system is not required in buildings not over two stories in height where all dwelling units or sleeping units and contiguous attic and crawl spaces are separated from each other and public or common areas by at least 1-hour fire partitions and each dwelling unit or sleeping unit has an exit directly to a public way, exit court or yard.
2. Manual fire alarm boxes are not required throughout the building when the following conditions are met:
2.1. The building is equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 or 903.3.1.2.
2.2. The notification appliances will activate upon sprinkler flow, and 2.3. At least one manual fire alarm box is installed at an approved location.
3. Afire alarm system is not required in buildings that do not have interior corridors serving dwelling units and are protected by an approved automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2, provided that dwelling units either have a means of egress door opening directly to an exterior exit access that leads directly to the exits or are served by open-ended corridors designed in accordance with Section 1022.6, Exception 4.

907.2.9.2 Adult and Child Day Care in Group R-4. A manual fire alarm system listed for residential use shall be installed in R-4 occupancies used for adult or child day care.

907.9.2 Audible Alarms
(add exception #2)
2. In Group I-2 occupancies and licensed large residential care facilities where occupants are incapable of evacuating themselves because of age, physical or mental disabilities, or physical restraint, audible notification appliances shall be permitted to meet the Private Mode requirements of NFPA 72 in patient care and treatment areas.

CHAPTER 10
MEANS OF EGRESS

1008.1.8.3 Locks and Latches. Locks and latches shall be permitted to prevent operation of doors where any of the following exists:

1. Places of detention or restraint
2. In buildings in occupancy Group A having an occupant load less than 100, Groups B, F, M and S, the main exterior door or doors are permitted to be equipped with key-operated locking devices from the egress side provided:

    2.1 The locking device is readily distinguishable as locked and provided with a key that cannot be removed when the door is locked from the inside.

(remainder unchanged)

1013.3 Opening Limitations. Open guards shall have ballisters or ornamental patterns such that a 4-inch-diameter (102 mm) sphere cannot pass through any opening up to a height of 34 inches (864 mm). From a height of 34 inches (864 mm) to 42 inches (1067 mm) above the adjacent walking surfaces, a sphere 8 inches (203 mm) in diameter shall not pass. A bottom rail or curb shall be provided that will reject the passage of a 2 inch (51 mm) diameter sphere.
(exceptions unchanged)

1013.5 Mechanical equipment.
Guards shall be provided where appliances, equipment, fans, roof hatch openings or other components that require service are located within 6 feet (1829 mm) of a roof edge or open side of a walking surface and such edge or open side is located more than 30 inches (762 mm) above the floor, roof or grade below. The guard shall be constructed so as to prevent the passage of a 21-inch-diameter (533 mm) sphere. The guard shall extend not less than 30 inches (762 mm) beyond each end of such appliance, equipment, fan or component.

TABLE 1017.1
CORRIDOR FIRE-RESISTANCE RATING[e]

OCCUPANCY	OCCUPANT LOAD SERVED BY CORRIDOR	REQUIRED FIRE-RESISTANCE RATING (hours)	
		Without sprinkler system	With sprinkler system[c]
H-1, H-2, H-3	*All*	*Not Permitted*	*1*
H-4, H-5	*Greater than 30*	*Not Permitted*	*1*
A, B[f], E[d], F, M, S, U	*Greater than 30*	*1*	*0*
R	*Greater than 10*	*Not Permited*	*0.5*
I-2[a], I-4	*All*	*Not Permitted*	*0*
I-1, I-3	*All*	*Not Permitted*	*1[b]*

a. For requirements for occupancies in Group I-2, see Section 407.3.
b. For a reduction in the fire-resistance rating for occupancies in Group I-3, see Section 408.7.
c. Buildings equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 or 903.3.1.2 where allowed
d. Adult and child day care facilities without sprinkler systems shall have 1-hour fire-resistant corridors regardless of occupant load.
e. For requirements for residential care facilities see Section 421

(The Council granted a petition on 9/11/07 to add the following Footnote "f" to Table 1017.1, to "Occupancy B")

f. Exit access corridors are not required to be rated on any single tenant floor or in any single tenant space, when 1-hour rated tenant demising walls are provided between all tenant spaces and 1-hour rated floor/ceiling assemblies are provided in multi-story buildings.

1017.2 Corridor width. The minimum corridor width shall be as determined in Section 1005.1, but not less than 44 inches (1118 mm).

Exceptions:

1. Twenty-four inches (610 mm)—For access to and utilization of electrical, mechanical or plumbing systems or equipment.
2. Thirty-six inches (914 mm)—In other than Groups I-1, I-2 and I-3 with a required occupant capacity of 50 or less.
3. Thirty-six inches (914mm)—Within a dwelling unit.
4. Seventy-two inches (1829 mm)—In Group E with a corridor having a required capacity of 100 or more.
5. Seventy-two inches (1829 mm)—In corridors serving surgical Group I, health care centers for ambulatory patients receiving outpatient medical care, which causes the patient to be not capable of self-preservation and resident areas of Groups I-1 and I-2.
6. Ninety-six inches (2438 mm)—In Group I-2 in inpatient areas and in areas where required for bed movement.

TABLE 1019.2
BUILDINGS WITH ONE EXIT
(Change "I" to "I-1, I-4")
(add Footnote "f" to Table, to "Occupancy R")
For SI: 1 foot = 304.8 mm.
a. For the required number of exits for open parking structures, see Section 1019.1.1.
b. For the required number of exits for air traffic control towers, see Section 412.1.
c. Buildings classified as Group R-2 equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 or 903.3.1.2 and provided with emergency escape and rescue openings in accordance with Section 1026 shall have a maximum height of three stories above grade.
d. Buildings equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 with an occupancy in Group B shall have a maximum travel distance of 100 feet.
e. Day care maximum occupant load is 10.
f. R-4 adult and child day care facilities shall have two exits or the rooms where the occupants receive care shall be located on the level of exit discharge and each of these rooms shall have an exit door directly to the exterior.

1026.1 General. In addition to the means of egress required by this chapter, provisions shall be made for emergency escape and rescue in Group E classrooms, Group R as applicable in Section 101.2 and Group I-1 occupancies. Basements and sleeping rooms below the fourth story above grade plane shall have at least one exterior emergency escape and rescue opening in accordance with this section. Where basements contain one or more sleeping rooms, emergency egress and rescue openings shall be required in each sleeping room, but shall not be required in adjoining areas of the basement. Such opening shall open directly into a public way or to a yard or court that opens to a public way.

Exceptions:

1. In other than Group R-3 occupancies as applicable in Section 101.2, buildings equipped throughout with an approved automatic sprinkler system in accordance with Section 903.3.1.1 or 903.3.1.2.
2. In other than Group R-3 occupancies as applicable in Section 101.2, sleeping rooms provided with a door to a fire-resistance-rated corridor having access to two remote exits in opposite directions.
3. The emergency escape and rescue opening is permitted to open onto a balcony within an atrium in accordance with the requirements of Section 404, provided the balcony provides access to an exit and the dwelling unit or sleeping unit has a means of egress that is not open to the atrium.

4. Basements with a ceiling height of less than 80 inches (2032 mm) shall not be required to have emergency escape and rescue windows.
5. High-rise buildings in accordance with Section 403.
6. Emergency escape and rescue openings are not required from basements or sleeping rooms that have an exit door or exit access door that opens directly into a public way or to a yard, court or exterior exit balcony that opens to a public way.
7. Basements without habitable spaces and having no more than 200 square feet (18.6 square meters) in floor area shall not be required to have emergency escape windows.
8. In Group E where the room or space complies with the following:
    8.1 Doors open directly to a corridor with exit access in one direction and provide access through adjacent classrooms or directly to a separate smoke compartment with exit access in the other direction, and
    8.2 The compartments are separated by smoke barriers having a 1 hour fire resistance rating with self-closing or automatic closing doors, and
    8.3 The length of travel to exits along such paths shall not exceed 150 ft. (45 m) and
    8.4 Each communicating door shall be identified, and
    8.5 No locking device shall be allowed on the communicating doors.

1026.3 Maximum height from floor. Emergency escape and rescue openings shall have the bottom of the clear opening not greater than 44 inches (1118 mm) measured from the floor. For classrooms serving children Grade 5 and younger, the bottom of the clear opening shall be not more than 32 inches (810 mm) measured from the floor.

CHAPTER 11
ACCESSIBILITY

Note: *The Rules Review Commission received 10-written requests for Legislative review of this rule (Chapter 11, Accessibility and ICC A117.1). The rule becomes* ***effective on the thirty-first legislative day of the 2009 session*** *of the General Assembly unless a bill that specifically disapproves this rule is introduced. The rule becomes* ***effective on day of adjournment of the 2009 session*** *of the General Assembly if a bill is introduced and not ratified.*

The 1999 Accessibility Code (with 2002, 2004 amendments) will remain effective until then.

1103.2.2 Existing buildings. Existing buildings shall comply with Section 3409 or the North Carolina Rehabilitation Code.

1104.1 Site arrival points. Accessible routes within the site shall be provided from public transportation stops; accessible parking; accessible passenger loading zones; and public streets or side walks to the accessible building entrance served. The exterior accessible path of travel shall be fixed, firm, non-slip and minimum 48" inches wide. Where handrails are provided, the measurement shall be between the handrails.
Exception: [No change.]

1104.2 Within a site. At least one accessible route shall connect accessible buildings, accessible facilities, accessible elements and accessible spaces that are on the same site. The exterior accessible path of travel shall be fixed, firm, non-slip and minimum 48" inches wide. Where handrails are provided, the measurement shall be between the handrails.
Exception: [No change.]

1104.3.2 Press boxes. Press boxes in assembly areas shall be on an accessible route.
Exceptions:
1) An accessible route shall not be required to a press box unless the press box is part of a privately-owned facility of three or more stories in height and a minimum of one of those stories has an area of 3,000 gross square feet or more.
2) Deleted.

1104.4 Multilevel buildings and facilities. At least one accessible route shall connect each accessible level, including mezzanines, in the following multilevel buildings and facilities.
1. All buildings of State, County or Municipal government, or any government agencies, two (2) stories or more in height;
2. Publicly owned schools, colleges, and university buildings two (2) or more stories in height;
3. Publicly owned dormitories two (2) or more stories in height;
4. Multiple tenant facilities of Group M occupancies containing five or more tenant spaces;
5. Levels containing offices of health care providers (Group B or I);
6. A terminal, depot or other station used in specified public transportation that is two (2) or more stories in height;
7. Passenger transportation facilities and airports (Group A-3 or B); and
8. All privately-owned buildings three or more stories in height having an area of 3,000 gross square feet (280 square meters) or more per story.

Exceptions:
1. In Group A, I, R and S occupancies, levels that do not contain accessible elements or other spaces required by Section 1107 or 1108 are not required to be served by an accessible route from an accessible level.
2. In air traffic control towers, an accessible route is not required to serve the cab and the floor immediately below the cab.

3. Where a two-story building or facility has one story with an occupant load of five or fewer persons that does not contain public use space, that story shall not be required to be connected by an accessible route to the story above or below.

1109.4 Kitchen and kitchenettes. Where kitchens and kitchenettes are provided in accessible spaces or rooms they shall be accessible in accordance with ICC A117.1.

a. A minimum 60" clear turning space shall be provided within the kitchen of a Type A unit.
b. A maximum 6" (150 mm) deep by minimum 9" (230 mm) high toe space beneath a cabinet shall be permitted to provide part of the 60" clear floor area on one side only.

1107.6.2.1.1 Type A units. In Group R-2 occupancies containing more than 11 dwelling units or sleeping units, at least 5 percent but not less than one of the units shall be a Type A unit. All units on site shall be considered to determine the total number of units and the required number of Type A units. Type A units shall be dispersed among the various classes of units.

Exceptions:

1) [No change.]
2) For sites with more than 100 units, at least 2 per cent of the number of units exceeding 100 shall be Type A units.

1110.1 Signs. Required accessible elements shall be identified by the International Symbol of Accessibility at the following locations:

1) Accessible parking spaces required by Section 1106.1. Location and design of signage shall comply with the requirements of North Carolina General Statute 20-37.6(d) and 136-30 and the NCDOT Manual on Uniform Traffic Control Devices.

[No change to #2, 3, 4, 5, 6, 7, 8.]

CHAPTER 12
INTERIOR ENVIRONMENT
CHAPTER 13
ENERGY EFFICIENCY
CHAPTER 14
EXTERIOR WALLS
CHAPTER 15
ROOF ASSEMBLIES AND ROOFTOP STRUCTURES
There are no proposed NC amendments for these chapters.

Chapter 16

(Note: Retain 2006 International Building Code Figure 1608.2, page 291 eastern US and add in Figure 1608.2, North Carolina from the 2006 NC Building Code.)

(Note: verify NE contour line printing on map)

1609.1.2 Protection of openings. In wind-borne debris regions, glazing in buildings shall be impact-resistant or protected with an impact-resistant covering meeting the requirements of an approved impact-resisting standard or ASTM E 1996 and ASTM E 1886 referenced therein as follows:

1. Glazed openings located within 30 feet (9144 mm) of grade shall meet the requirements of the Large Missile Test of ASTM E 1996.
2. Glazed openings located more than 30 feet (9144 mm) above grade shall meet the provisions of the Small Missile Test of ASTM E 1996.

Exceptions:

1. Wood structural panels with a minimum thickness of $^{7}/_{16}$ inch (11.1 mm) and maximum panel span of 8 feet (2438 mm) shall be permitted for opening protection in buildings with a mean roof height of 33 feet or less. Panels shall be precut so that they shall be attached to the framing surrounding the opening containing the product with the glazed opening. Panels shall be secured with the attachment hardware provided. Attachments shall be designed to resist the components and cladding loads determined in accordance with the provisions of ASCE 7. Attachment in accordance with Table 1609.1.2 is permitted for buildings with a mean roof height of 33 feet (10 058 mm) or less where wind speeds do not exceed 130 mph (57.2 m/s).
2. Glazing in Occupancy Category I buildings as defined in Section 1604.5, including greenhouses that are occupied for growing plants on a production or research basis, without public access shall be permitted to be unprotected.
3. Glazing in Occupancy Category II, III or IV buildings located over 60 feet (18 288 mm) above the ground and over 30 feet (9144 mm) above aggregate surfaced roofs (gravel, stone ballast) located within 1,500 feet (458 m) of the building shall be permitted to be unprotected.

1609.1.2.1 Louvers. Operable louvers protecting intake and exhaust ventilation ducts not assumed to be open that are located within 30 feet (9144 mm) of grade shall meet requirements of an approved impact-resisting standard or the Large Missile Test of ASTM E 1996.

1609.2 Definitions. WIND-BORNE DEBRIS REGION. Areas within hurricane-prone regions defined as that area east of the inland waterway from the NC/SC state line north to Beaufort Inlet and from that point to include the barrier islands to the NC/VA state line.

(Note: Retain 2006 International Building Code Figures 1609, page 295 eastern US, page 297 southeastern US, and add in Figure 1609, North Carolina from the 2006 NC Building Code.)

1612.1 General. Within flood hazard areas as established in Section 1612.3, all new construction of buildings, structures and portions of buildings and structures, including substantial improvement and restoration of substantial damage to buildings and structures, shall be designed and constructed to resist the effects of flood hazards and flood loads. For buildings that are located in more than one flood hazard area, the provisions associated with the most restrictive flood hazard area shall apply. For construction in coastal high hazard areas and ocean high hazard areas see Section 1614.

(Note: Retain 2006 International Building Code Figures 1613.5(1) & (2), pages 309 and 311 eastern US, and add in Figures 1615(1) & (2), North Carolina from the 2006 NC Building Code.)

1613.6.1 Assumption of flexible diaphragm.
(no change to main section or items 1-3)
4. Portions of wood structural panel diaphragms that cantilever beyond the vertical elements of the lateral-force-resisting system are designed in accordance with 4.2.5.2 of AF&PA SDPWS.

SECTION 1614
COASTAL HIGH HAZARD AREAS
AND OCEAN HIGH HAZARD AREAS

Construction in coastal high hazard areas and ocean high hazard areas shall comply with ASCE-24 and Table 1614.

Table 1614
CORROSION RESISTANCE
(applies only to structures located in coastal high hazard areas and ocean hazard areas)

EXPOSURE LEVEL	OPEN (exterior, porches and underhouse)	VENTED/ENCLOSED (attic, floor trusses and enclosed	CONDITIONED (heated/cooled living areas)
Nails, staples, screws	Hot dipped galvanized	Hot dipped galvanized	.....
Nuts, bolts, washers, tie rods	Hot dipped galvanized	Hot dipped galvanized	.....
Steel connection plates & straps (3/16" minimum thickness)	Hot dipped galvanized after fabrication	Hot dipped galvanized	.....
Sheet metal connectors, wind anchors, joists, hangers, steel joists and beams	Stainless steel or hot dipped galvanized after fabrication	Hot dipped galvanized after plate fabrication	Hot dipped galvanized
Truss plates	Stainless steel or hot dipped galvanized after fabrication	Hot dipped galvanized after fabrication or stainless steel within 6'-0" of a gable louver or soffit vent. Otherwise in accordance with TPI 1 of the Truss Plate Institute	Standard galvanized

Chapter 17

1704.1 General. Where application is made for construction as described in this section, the owner shall employ one or more special inspectors to provide inspections during construction on the types of work listed per Section 1704.1.2. The special inspector shall be a person who shall demonstrate competence, to the satisfaction of the building official, for inspection of the particular type of construction or operation requiring special inspection. These inspections are in addition to the inspections specified in *the North Carolina Administrative Code and Policies*.
Exceptions: Deleted.

1704.1.1 Building permit requirement. 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 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.
Exceptions: Deleted.

1704.1.2 Special Inspections requirement. Special inspections per Section 1704 are required for building, building components or other structures per the following:

1. Buildings or other structures listed in Table 1604.5 in occupancy category II if:
    a. Building height exceeds 45 feet or three stories, or
    b. The building is an underground building per 405.1:
2. Buildings or other structures listed in Table 1604.5 in occupancy categories III or IV;

3. Piles, piers and special foundations;
4. Retaining walls exceeding 5 feet height per Section 1806.2
5. Smoke control and smoke exhaust systems;
6. Sprayed fire-resistant materials; or
7. Special case described in Section 1704.13.

1704.1.3 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.

Chapter 18

1804.2 Presumptive load-bearing values. The maximum allowable foundation pressure, lateral pressure or lateral sliding-resistance values for supporting soils near the surface shall not exceed the values specified in Table 1804.2, provided that all of the following criteria are satisfied.
1. Presumptive bearing pressures are acceptable only for structures where column loads are less than 50 kips per column and wall loads do not exceed 3.0 kips per linear foot.
2. Finished grades, including cut or fill operations, do not differ from the natural grades by more than 5 feet.
3. Histories of favorable foundation performance are available from adjoining sites for similar loading conditions.

Presumptive load-bearing values shall apply to materials with similar physical characteristics and dispositions.

Mud, organic silt, organic clays, peat or unprepared fill shall not be assumed to have a presumptive load-bearing capacity unless data to substantiate the use of such a value are submitted.
Exception: A presumptive load-bearing capacity is permitted to be used where the building official deems the load-bearing capacity of mud, organic silt or unprepared fill is adequate for the support of lightweight and temporary structures.

1805.4.1 Design. Footings shall be so designed that the allowable bearing capacity of the soil is not exceeded, and that differential settlement is minimized. The minimum width of footings shall be 16 inches (406 mm).

Footings in areas with expansive soils shall be designed in accordance with the provisions of Section 1805.8. Minimum width of turned down slabs shall be 12 inches (305 mm) unless engineering analysis is provided.

(Note: Tables 1805.5(1) thru (4) add MH as a soil type to the last column of these tables)
(Note: Table 1805.5(5), all soil classifications are missing)

1806.2 Retaining systems. Retaining systems providing a cumulative vertical relief greater than five feet in height within a horizontal distance of 50 feet or less. including retaining walls or mechanically stabilized earth walls, shall be designed under the responsible charge of the Registered Design Professional. Retaining systems shall meet the requirements of Section 1610. Testing and inspection reports shall comply with Section 1704.1.2 and shall verify:

1. Foundation support system is adequate for the intended site conditions;
2. Measurement of the quality of construction materials for conformance with specifications;
3. Determination of similarity of actual soil conditions to those anticipated in design and;
4. Examination of backfill materials and any drainage systems for compliance with plans and specifications.

1807.1 Where required. Walls or portions thereof that retain earth and enclose interior spaces and floors below grade shall be waterproofed and dampproofed in accordance with this section. Ventilation for crawl spaces shall comply with Section 1203.4.

1807.4.2 Foundation drain. A drain shall be placed around the perimeter of a foundation that consists of gravel or crushed stone containing not more than 10-percent material that passes through a No. 4 (4.75 mm) sieve. The drain shall extend a minimum of 12 inches (305 mm) beyond the out-side edge of the footing. The thickness shall be such that the bottom of the drain is not higher than the bottom of the base under the floor, and that the top of the drain is not less than 6 inches (152 mm) above the top of the footing. Where a drain tile or perforated pipe is used, the invert of the pipe or tile shall not be higher than the floor elevation. The top of joints or the top of perforations shall be protected with an approved filter membrane material. The pipe or tile shall be placed on not less than 2 inches (51 mm) of gravel or crushed stone complying with Section 1807.4.1, and shall be covered with not less than 6 inches (152 mm) of the same material. The gravel or crushed stone shall be wrapped with an approved geotextile fabric.

1808.2.5 Stability.
Piers or piles shall be braced to provide lateral stability in all directions. Three or more piles connected by a rigid cap shall be considered braced, provided that the piles are located in radial directions from the centroid of the group not less than 60 degrees (1 rad) apart. A two-pile group in a rigid cap shall be considered to be braced along the axis connecting the two piles. Methods used to brace piers or piles shall be subject to the approval of the building official. Piles supporting walls shall be driven alternately in lines spaced at least 1 foot (305 mm) apart and located symmetrically under the center of gravity of the wall load carried, unless effective measures are taken to provide for eccentricity and lateral forces, or the wall piles are adequately braced to provide for lateral stability.

1810.1.1 Materials.
Concrete shall have a 28-day specified compressive strength (f'c) of not less than 3,000 psi (20.69 MPa). Where concrete is placed through a funnel hopper at the top of the pile, the concrete mix shall be designed and proportioned so as to produce a cohesive workable mix having a slump of not less than 4 inches (102 mm) and not more than 6 inches (152 mm). Where concrete is to be pumped, the mix design including slump shall be adjusted to produce a pumpable concrete.

1810.3.6 Pile test.
A pile load test shall be performed if 400 psi shaft stress is exceeded. Pile load test shall be in accordance with 1808.2.8.3.

1810.3.7 Quality control.
For piles having a shaft stress exceeding 400 psi, the following quality control procedures shall be met:
1. Calibrate pile installation equipment to accurately measure grout volumes and pressure prior to test pile installation. This calibration shall be expressed in cubic feet per pump stroke.
2. Document the amount of grout injected into the test pile by recording the number of pump strokes per linear foot or number of pump strokes per 5 linear foot section.
3. Subject the installation procedures to a static load test in accordance with ASTM D 1143.
4. If the load test is successful, insure that each production pile is installed using the same procedure that installed the successful test pile.

5. A Registered Design Professional shall certify to the Code Enforcement Official that all pilings were installed in accordance with the approved design and tested installation procedure. The engineer shall be prepared to submit upon request a report showing the following information:
(a) Pile Identification
(b) Pile Length
(c) Date
(d) Rate of Auger Withdrawal (grouting time)
(e) Grout volume in cubic feet per linear foot or cubic feet per 5 foot section.

1812.3 Materials.
Concrete shall have a 28-day specified compressive strength (f'c) of not less than 3,000 psi (20.69 MPa). Where concrete is placed through a funnel hopper at the top of the pier, the concrete mix shall be designed and proportioned so as to produce a cohesive workable mix having a slump of not less than 4 inches (102 mm) and not more than 6 inches (152 mm). Where concrete is to be pumped, the mix design including slump shall be adjusted to produce a pumpable concrete.

Chapter 19
(As printed in 2006 International Building Code)

Chapter 20
(As printed in 2006 International Building Code)

Chapter 21
2109.1.1 Limitations. The use of empirical design of masonry shall be limited as follows: (see Table 2109.1.1for clarification)

1. Empirical design shall not be used for buildings assigned to Seismic Design Category D, E, or F as specified in Section 1613, nor for the design of the seismic-force-resisting system for buildings assigned to Seismic Design Category B or C.
2. Empirical design shall not be used for masonry elements where the basic wind speed exceeds 130 mph (58 m/s).
3. Empirical design shall be permitted to be used for interior masonry elements that are not part of the lateral-force-resisting system in buildings other than enclosed buildings as defined in Chapter 6 of ASCE 7 and the buildings meet the following conditions:
   3.1. Buildings 60 feet (18 400mm) or more but equal to or less than 180 feet (55 100 mm) in height where the basic wind speed is 90 mph (40m/s) or less.
   3.2. Buildings 35 feet (10 700mm) or more but less than 60 feet (18 400 mm) in height where the basic wind speed is 100 mph (45 m/s) or less.
   3.3. Deleted.
   3.4. Deleted.
4. Empirical design shall be permitted to-be used for exterior masonry elements that are not part of the lateral-force-resisting system in buildings and the buildings meet the following conditions
   4.1. Buildings 60 feet (18 400mm) or more but equal to or less than 180 ~~ft.~~ feet (55 100 mm) in height where the basic wind speed is 90 mph (40m/s) or less.
   4.2. Buildings 35 feet (10 700mm) or more but less than 60 ~~ft.~~ feet (18 400 mm) in height where the basic wind speed is 100 mph (45 m/s) or less.
   4.3. Deleted.
5. Deleted.

(no change to items 6 and 7)

Table 2109.1.1

EMPIRICAL WIND LIMITATIONS TABLE

	Building Height, ft(m)	Basic Wind Speed, mph (m/s)				
		V3S=<90(40)	90(40)<V3S=<100(45)	100(45)<V3S=<110(49)	110(49)<V3S=<130(58)	130(58)<V3S
All masonry elements that are part of the lateral force-resisting system and exterior masonry elements located 35 ft(11m) or less above ground	H=<35(11)	Permitted			Not Permitted	
Interior masonry elements that are not part of the lateral force-resisting system in buildings other than enclosed as defined by ASCE 7	H>180(55)	Not Permitted				
	60(18)<H=<180(55)	Permitted	Not Permitted			
	35(11)<H=<60(18)	Permitted		Not Permitted		
	H=<35(11)	Permitted				Not Permitted
Exterior masonry elements that are not part of the lateral force-resisting system that are more than 35 ft (11 m) above ground	H>180(55)	Not Permitted				
	60(18)<H=<180(55)	Permitted	Not Permitted			
	35(11)<H=<60(18)	Permitted		Not Permitted		

(Note: insert Tables 2109.1(a&b) below from the 2006NC Code)
(Note: Delete note "c" from both tables.)
(Note: Change note "d" by replacing 1.2 with 1.15 in both tables.)

TABLE 2109.4.1
INTERIOR WALLS LATERAL SUPPORT REQUIREMENTS
IN WIND SPEEDS 110 MPH OR LESS

CONSTRUCTION	MAXIMUM WALL LENGTH TO THICKNESS OR WALL HEIGHT TO THICKNESS
Bearing walls	
Solid units or fully grouted	20
All others	18
Nonbearing walls	
Interior	36

Footnote: Interior walls in windspeeds greater than 110 mph may be designed as exterior walls using Table 2109.1a.

2111.1 Definition. A masonry fireplace is a fireplace constructed of concrete or masonry. Masonry fireplaces shall be constructed in accordance with this section this section, Table 2111.1 and Figure 2111.1.

(Note: insert Table 2111.1 "Summary Of requirements For Masonry Fireplaces and Chimneys" and Figure 2111.1 "Fireplace And Chimney Details" from 2006 NCBC. Check section references.)

2111.2 Footings and foundations. Footings for masonry fireplaces and their chimneys shall be constructed of concrete or solid masonry at least 12 inches (305 mm) thick and shall extend at least 12 inches (305 mm) beyond the face of the fireplace or foundation wall on all sides. Footings shall be founded on natural undisturbed earth or engineered fill below frost depth. In areas not subjected to freezing, footings shall be at least 12 inches (305 mm) below finished grade.

Chapter 22
(As printed in 2006 International Building Code)

Chapter 23

2301.1 Scope. The provisions of this chapter shall govern the materials, design, construction and quality of wood members and their fasteners. Refer to Chapter 7 for fireblocking, draftstopping and fire-resistance requirements.

2301.1.1 Minimum lumber grades. The minimum grade of lumber used for light-frame construction shall be:

1. For joists and rafter; Those obtained in AF&PA *Design Values for Joists and Rafters.*

2. For loadbearing studs; No. 3 grade, standard grade or stud grade, utility grade may be used to support roof and ceiling loads only.

3. For nonloadbearing studs; utility grade.

4. For wall top plates; utility grade.

2301.1.2 Moisture content. All lumber shall have a maximum moisture content of 19 percent at time of grading.

2303.4.1.1 Truss designer. The individual or organization responsible for the design of trusses who is a registered design professional.

2303.4.1.2 Truss design drawings. The written, graphic and pictorial depiction of each individual truss shall be provided to the building official and approved prior to installation. Truss design drawings shall also be provided with the shipment of trusses delivered to the job site. Truss design drawings shall include, at a minimum, the information specified below:

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 as applicable;
10. Controlling wind and earthquake loads as applicable;
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;
    15.2. Truss ply to ply; and
    15.3. Field splices.
16. Calculated deflection ratio and maximum vertical and horizontal deflection for live and total load as applicable;
17. Maximum axial tensile and compression forces in the truss members; and
18. Required permanent individual truss member bracing and method per Section 2303.4.1.5, unless a specific truss member permanent bracing plan for the roof or floor structural system is provided by a registered design professional.

Each individual truss design drawing shall bear the seal and signature of the truss designer.
Exceptions: Deleted.

2303.4.1.3 Truss placement diagram. The truss manufacturer shall provide a truss placement diagram that identifies the proposed location for each individually designated truss and references the corresponding truss design drawing. The truss

placement diagram shall be provided as part of the truss submittal package, and with the shipment of trusses delivered to the job site. Truss placement diagrams shall be required to bear the seal and signature of the truss designer.
Exception: Deleted.

2303.4.1.4 Truss submittal package. The truss submittal package shall consist of each individual truss design drawing, the truss placement diagram for the project, the truss member permanent bracing specification and, as applicable, the cover sheet/truss index sheet. The submittal package shall be submitted to the project registered design professional for final approval prior to fabrication of trusses.

2303.7 Shrinkage. Deleted.

2303.8 Construction practices.
2303.8.1 Preparation of building site and removal of debris.

2303.8.1.1 All building sites shall be graded so as to provide drainage under all portions of the building not occupied by basements.

2303.8.1.2 The foundation and the area encompassed therein shall have all vegetation, stumps, roots and foreign material removed and the fill material shall be free of vegetation and foreign material. The fill shall be compacted to assure adequate support of the foundation.

2303.8.1.3 After all the work is completed, loose wood and debris shall be completely removed. Wood shall not be stored in contact with ground under any building.

2304.10.3 Roof framing. Every roof girder and at least every alternate roof beam shall be anchored to its supporting member; and every monitor and every sawtooth construction shall be anchored to the main roof construction. Such anchors shall be of sufficient strength to resist vertical uplift of the roof.

2304.10.5 Roof decks. Where supported by a wall, roof decks shall be anchored to walls to resist uplift forces determined in accordance with Chapter 16. Such anchors shall be of sufficient strength to resist vertical uplift of the roof.

(Note: table 2304.9.1, item 30 "Ledger Strips" under the "Location" column: Add "@ 2 inches oc centered under the joists" after "face nail")

2304.11.6 Termite Control Methods. Protection shall be one of the following methods or a combination of these methods:

1. Chemical termiticide treatment, as provided in Section R320.2.
2. Termite baiting system installed and maintained according to the label.
3. Pressure-preservative-treated wood in accordance with the AWPA standards listed in Section 2303.

4. Naturally termite-resistant wood as provided in Section 2304.11.6.3.

5. Physical barriers as provided in Section 2304.11.6.4.

2304.11.6.1.2 Field Treatment. Field-cut ends, notches, and drilled holes of pressure-preservative-treated wood shall be retreated in the field in accordance with AWPA M4.

2304.11.6.2 Chemical termiticide treatment. Chemical termiticide treatment shall include soil treatment and/or field applied wood treatment. The concentration, rate of application and method of treatment of the chemical termiticide shall be in strict accordance with the termiticide label and applied according to the standards of the NC Department of Agriculture.

2304.11.6.3 Naturally resistant wood. Heartwood of redwood and eastern red cedar shall be considered termite resistant.

2304.11.6.4 Barriers. Approved physical barriers, such as metal or plastic sheeting or collars specifically designed for termite prevention, shall be installed in a manner to prevent termites from entering the structure. Shields placed on top of an exterior foundation wall are permitted to be used only if in combination with another method of protection.

(Note: insert 2007 ICC supplement for 2305)

2308.2.1 Basic wind speed greater than 100 mph (3-second gust). Where the basic wind speed exceeds 100 mph (3-second gust), the provisions of either AF&PA WFCM, or the SBCCI SSTD 10 are permitted to be used. When using SSTD 10-99, convert 3-second design wind to fastest mile design wind using Table 1609.3.1.

Chapter 24
(As printed in 2006 International Building Code)

Chapter 25

TABLE 2508.2
ALLOWABLE NONBEARING PARTITION HEIGHTS
BASED ON WALLBOARD AND NO. 25 GAGE STUDS
ACTING AS A COMPOSITE SECTION[a,b]

STUD SPACING (in.)	FACING EACH SIDE	STUD DEPTH (in.)					
		1 5/8	2 ½	3 ¼	3 5/8	4	6
16	½″-one ply	11′0″	14′8″	17′10″	19′5″	20′8″	18′10″
24	½″-one ply	10′0″	13′5″	16′0″	17′3″	18′5″	17′8″
24	½″-two ply	12′4″	15′10″	18′3″	19′5″	20′8″	19′0″

a. The tabulated stud heights are based on 0.0179-inch uncoated thickness (25 ga) steel studs manufactured in compliance with ASTM C 754 for installation of screw-type steel framing members to receive gypsum boards.
b. Gypsum board product must be ½-inch minimum thickness and may be applied vertically or horizontally.

Chapter 26

2603.5.2 Thermal barrier. Any foam plastic insulation shall be separated from the building interior by a thermal barrier meeting the provisions of Section 2603.4, unless special approval is obtained on the basis of Section 2603.9.
Exception: One-story buildings complying with Section 2603.4.1.4.

2603.8 Protection against termites. Extruded and expanded polystyrene, polyisocyanurate and other foam plastics shall not be installed on the exterior face or under interior or exterior foundation walls or slab foundations located below grade. The clearance between foam plastics installed above grade and exposed earth shall be at least 8 inches (203 mm).

Exceptions:

1. Buildings where the structural members of walls, floors, ceilings and roofs are entirely of noncombustible materials or preservatively treated wood.
2. An approved method of protecting the foam plastic and structure from subterranean termite damage is provided.
3. On the interior side of basement walls.
4. Foam plastic less than 8 inches (203 mm) above or in contact with grade shall be installed in accordance with Section 2603.8.1.

(Note: delete Figure 2603.8)

2603.8.1 Chemical treatment. When foam plastic is in contact with the ground, the soil area shall be chemically treated in accordance with the North Carolina Department of Agriculture and Consumer Services rules.

Chapter 27
EMERGENCY AND STANDBY POWER

[F] 2702.2.11 Highly toxic and toxic materials. Emergency power shall be provided for occupancies with highly toxic or toxic materials in accordance with Section 414 and the International Fire Code.

[F] 2702.2.12 Organic peroxides. Standby power shall be provided for occupancies with silane gas in accordance with Section 414 and the International Fire Code.

[F] 2702.2.13 Pyrophoric materials. Emergency power shall be provided for occupancies with silane gas in accordance with Section 414 and the International Fire Code.

Chapter 28
(As printed in 2006 International Building Code)

Chapter 29
(As printed in 2006 International Building Code)
(Note: coordinate with the NC Plumbing Code)

Chapter 30

3002.9 Pits. For dampproofing and waterproofing requirements refer to Section 1807.

Chapter 31

3105.1 General. Awnings or canopies shall comply with the requirements of this section and other applicable sections of this code. For awnings or canopies that encroach into public right-of-ways refer to Chapter 32.

3105.5 Permanent canopies. Permanent canopies are permitted to extend over adjacent open spaces provided:

1. The canopy and its supports shall be of noncombustible material, fire retardant-treated wood, Type IV construction, or of 1-hour fire resistance rated construction.

   Exception: Any textile covering for the canopy shall be flame resistant as determined by tests conducted in accordance with NFPA 701 after both accelerated water leaching and accelerating weathering.

2. Any canopy covering, other than textiles, shall have a flame spread index not greater than 25 when tested in accordance with ASTM E 84 in the form intended for use.
3. The canopy shall have at least one long side open.
4. The maximum horizontal width of the canopy shall not exceed 15 feet (4572 mm).
5. The fire resistance of exterior walls shall not be reduced.

3107.1 General. Signs shall be designed, constructed, and maintained in accordance with Appendix H of this code.

SECTION 3108
RADIO, TELECOMMUNICATIONS AND TELEVISION TOWERS

3108.6 Foundations. Footings and foundations shall be designed and constructed in accordance with the provisions of Chapter 18.

3109.3 Public swimming pools. Public swimming pools (all occupancies except R-3) shall be completely enclosed by a fence or barrier at least 4 feet (1290 mm) in height or a screen enclosure. Openings in the fence shall not permit the passage of a 4-inch-diameter (102 mm) sphere. The fence or screen enclosure shall be equipped with self-closing and self-latching gates.

3109.4 Residential swimming pools (R-3). Residential swimming pools shall comply with Sections 3109.4.1 through 3109.4.3.

Exception (R-3): A swimming pool with a power safety cover or a spa with a safety cover complying with ASTM F 1346.

Chapter 32

3202.5 Space under public property.
3202.5.1 Space under sidewalk. Where space under the sidewalk is used for any purpose, a special permit shall be required.

3202.5.2 Sidewalk Lights. When glass is set in the sidewalk to provide light for spaces underneath, the glass shall be supported by metal or reinforced concrete frames and such glass shall be not less than 1/2 inch (12.7 mm) thick. Where such glass is over 12 square inches (7742 mm^2), it shall have wire mesh embedded in the glass. All portions of sidewalk lights shall be of not less strength than required for the load specified.

Chapter 33
(As printed in 2006 International Building Code)

Chapter 34

3407.1 Historic buildings. The provisions of this code relating to the construction, repair, alteration, addition, restoration and movement of structures, and change of occupancy shall not be mandatory for historic buildings where such buildings are judged by the building official to not constitute a distinct life safety hazard.

Chapter 35
(As printed in 2006 International Building Code)

Chapter 36
(Note: Reprint Chapter 36 from the 2006 North Carolina Building Code with the following changes.)

3606.4 Electrical service. All electrical service to marine structures shall be in accordance with the North Carolina State Electrical Code.

3606.5 Fuel docks. Fuel docks and other marine facilities handling flammable liquids shall comply with the *Flammable and Combustible Liquids Code*, NFPA 30 and the North Carolina Fire Code. All fuel installations shall be designed to prevent fuel spillage from entering the water. The fuel docks or floats shall be a separate structure form berths and shall be isolated to the extent that fire or explosion would have minimal opportunity to spread to or from the fuel dock to the berths. Storage tanks for public facilities shall be located a minimum distance of 50 feet (15240 mm) from the dispenser with a shutoff valve at the tank.

Appendix A – EMPLOYEE QUALIFICATIONS
(deleted)

Appendix B – BOARD OF APPEALS
(deleted)

Appendix C – GROUP U-AGRICULTURAL BUILDINGS
The provisions contained in this appendix are adopted as part of this code.

Appendix D – FIRE DISTRICTS
The provisions contained in this appendix are adopted as part of this code.

Appendix E – SUPPLEMENTARY ACCESSIBILITY REQUIREMENTS
The provisions contained in this appendix are adopted as part of this code.

Appendix F - RODENTPROOFING
The provisions contained in this appendix are adopted as part of this code.

Appendix G – FLOOD-RESISTANT CONSTRUCTION
The provisions contained in this appendix are adopted as part of this code.

G101.3 Scope. The provisions of this appendix shall apply to all proposed development in a flood hazard area established in Section 1612 of this code.

G102.1 General. This appendix, in conjunction with the *International Building Code*, provides minimum requirements for development located in flood hazard areas, including the subdivision of land, installation of utilities, placement and replacement of manufactured homes, new construction and repair, reconstruction, rehabilitation, or additions to new construction and substantial improvement of existing buildings and structures, including restoration after damage.

G103.1 Permit applications. The building official shall review all permit applications to determine whether proposed development sites will be reasonably safe from flooding. If a proposed development site is in a flood hazard area, all site development activities, including grading, filling, utility installation and drainage modification, and all new construction and substantial improvements (including the placement of prefabricated buildings and manufactured homes) shall be designed and constructed with methods, practices and materials that minimize flood damage and that are in accordance with this code and ASCE 24.

Appendix H - SIGNS
The provisions contained in this appendix are adopted as part of this code.

H101.2 Signs exempt from permits. The following signs are exempt from the requirements to obtain a permit before erection:

1. Nonilluminated wall signs.
2. Temporary signs.
3. Signs erected by transportation authorities.
4. Projecting signs not exceeding 6 square feet (0.56 m^2).
5. The changing of moveable parts of an approved sign that is designed for such changes, or the repainting or repositioning of display matter shall not be deemed an alteration.

Appendix I – PATIO COVERS
The provisions contained in this appendix are adopted as part of this code.

Appendix J - GRADING
The provisions contained in this appendix are adopted as part of this code.

J104.1 Submittal requirements. The applicant shall state the estimated quantities of excavation and fill.

Appendix K – ICC ELECTRICAL CODE
(deleted)