

February 21, 2007

**Revision to NC Building Code – Effective March 1, 2007  
Section 1704 – Special Inspections**

On September 11, 2006 the North Carolina Building Code Council adopted revisions to the 2006 NC Building Code, Section 1704, "Special Inspections". The Rules Review Commission considered and approved these revisions during its February 15, 2007 meeting. **These revisions are effective (mandatory) on March 1, 2007.**

Special inspections shall be conducted on state capital improvement projects that fall within building Categories and/or contain elements subject to special inspections as prescribed by revised Section 1704. The State Construction Office will not require special inspections in excess of the Building Code requirements. However, there is nothing to prevent owning agencies from conducting special inspections on *any* project as the agencies deem appropriate and as funding allows.

The revised Section 1704 wording (excerpted from the minutes of the December 11-12, 2006 Building Code Council meeting) are reproduced below:

**2006 NC Building Code  
1704 Special Inspections**

**1704.1 General.** Where application is made for construction as described in this section, ~~the building official, at the official's discretion, may require the owner to~~ or the registered design professional in responsible charge acting as the owner's agent shall employ one or more special inspectors to provide inspections during construction on the types of work listed under Section 1704 per Section 1704.1.2. The special inspector shall be a qualified 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:**

1. ~~Special inspections are not required for work of a minor nature or as warranted by conditions in the jurisdiction as approved by the building official.~~

- ~~2. Special inspections are not required for building components unless the design involves the practice of professional engineering or architecture as defined by applicable state statutes and regulations governing the professional registration and certification of engineers or architects.~~
- ~~3. Unless otherwise required by the building official, special inspections are not required for occupancies in Group R-3 as application in 101.2 and occupancies in Group U that are accessory to a residential occupancy including, but not limited, those listed in 312.1~~

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 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.

1704.1.2 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 category II if:
  - a. Building height exceeds 45 feet or three stories,  
or
  - b. The building is an Underground buildings per 405.1;
2. Buildings or other structures listed in table 1604.5 in categories III or IV;
3. Piles, piers and special foundations;
4. Retaining walls exceeding 5 feet height per 1610.3;
5. Smoke control and smoke exhaust systems;
6. Sprayed fire-resistant materials; or
7. Special case described in 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 of inspections documenting required special inspections and correction of any discrepancies noted in the inspection shall be submitted periodically at a frequency agreed upon by the permit applicant and the building official prior to the start of work.

2006 NC Administrative Code  
107.5 Special Inspections

107.5 Special Inspections. Special inspections required by the building code or the building inspector shall be performed by a NC registered design professional or a qualified inspector under their responsible charge.

Designers are reminded that these special inspections requirements apply to all projects, public and private, as delineated in revised Section 1704.

See next page for discussion of Building Categories as they appear in the 2006 North Carolina Building Code.

Designers and Owners are reminded that Building Category designations, per Code Table 1604.5, *changed* with the transition from the 2002 to 2006 editions of the North Carolina Building Code. See the 2006 table below:

**TABLE 1604.5  
CLASSIFICATION OF BUILDINGS AND OTHER STRUCTURES FOR IMPORTANCE FACTORS**

CATEGORY <sup>a</sup>	NATURE OF OCCUPANCY	SEISMIC FACTOR $I_E$	SNOW FACTOR $I_S$	WIND FACTOR $I_W$
I	Buildings and other structures that represent a low hazard to human life in the event of failure including, but not limited to: <ul style="list-style-type: none"> <li>• Agricultural facilities</li> <li>• Certain temporary facilities</li> <li>• Minor storage facilities</li> </ul>	1.00	0.8	0.87 <sup>b</sup>
II	Buildings and other structures except those listed in Categories I, III and IV	1.00	1.0	1.00
III	Buildings and other structures that represent a substantial hazard to human life in the event of failure including, but not limited to: <ul style="list-style-type: none"> <li>• Buildings and other structures where more than 300 people congregate in one area</li> <li>• Buildings and other structures with elementary school, secondary school or day care facilities with an occupant load greater than 250</li> <li>• Buildings and other structures with an occupant load greater than 500 for colleges or adult education facilities</li> <li>• Health care facilities with an occupant load of 50 or more resident patients but not having surgery or emergency treatment facilities</li> <li>• Jails and detention facilities</li> <li>• Any other occupancy with an occupant load greater than 5,000</li> <li>• Power-generating stations, water treatment for potable water, waste water treatment facilities and other public utility facilities not included in Category IV</li> <li>• Buildings and other structures not included in Category IV containing sufficient quantities of toxic or explosive substances to be dangerous to the public if released</li> </ul>	1.25	1.1	1.15
IV	Buildings and other structures designed as essential facilities including, but not limited to: <ul style="list-style-type: none"> <li>• Hospitals and other health care facilities having surgery or emergency treatment facilities</li> <li>• Fire, rescue and police stations and emergency vehicle garages</li> <li>• Designated earthquake, hurricane or other emergency shelters</li> <li>• Designated emergency preparedness, communication, and operation centers and other facilities required for emergency response</li> <li>• Power-generating stations and other public utility facilities required as emergency backup facilities for Category IV structures</li> <li>• Structures containing highly toxic materials as defined by Section 307 where the quantity of the material exceeds the maximum allowable quantities of Table 307.7(2)</li> <li>• Aviation control towers, air traffic control centers and emergency aircraft hangars</li> <li>• Buildings and other structures having critical national defense functions</li> <li>• Water treatment facilities required to maintain water pressure for fire suppression</li> </ul>	1.50	1.2	1.15

a. For the purpose of Section 1616.2, Categories I and II are considered Seismic Use Group I, Category III is considered Seismic Use Group II and Category IV is equivalent to Seismic Use Group III.

b. In hurricane-prone regions with  $V > 100$  miles per hour,  $I_w$  shall be 0.77.