

GENERAL ASSEMBLY OF NORTH CAROLINA
SESSION 2009

H

1

HOUSE BILL 1443

Short Title: Green Building Code. (Public)

Sponsors: Representatives Harrison, Fisher, K. Alexander (Primary Sponsors);
M. Alexander, Bryant, E. Floyd, Insko, Luebke, and Mackey.

Referred to: Energy and Energy Efficiency, if favorable, Commerce, Small Business, and
Entrepreneurship.

April 13, 2009

A BILL TO BE ENTITLED
AN ACT TO REQUIRE THAT NEW AND RENOVATED COMMERCIAL BUILDINGS
AND NEW RESIDENTIAL BUILDINGS COMPLY WITH ENERGY CONSERVATION
STANDARDS.

The General Assembly of North Carolina enacts:

SECTION 1. G.S. 143-138 reads as rewritten:

"§ 143-138. North Carolina State Building Code.

(a) Preparation and Adoption. – The Building Code Council may prepare and adopt, in accordance with the provisions of this Article, a North Carolina State Building Code. Before the adoption of the Code, or any part of the Code, the Council shall hold at least one public hearing. A notice of the public hearing shall be published in the North Carolina Register at least 15 days before the date of the hearing. Notwithstanding G.S. 150B-2(8a)h., the North Carolina State Building Code as adopted by the Building Code Council is a rule within the meaning of G.S. 150B-2(8a) and shall be adopted in accordance with the procedural requirements of Article 2A of Chapter 150B of the General Statutes.

The Council shall request the Office of State Budget and Management to prepare a fiscal note for a proposed Code change that has a substantial economic impact, as defined in G.S. 150B-21.4(b1), or that increases the cost of residential housing by eighty dollars (\$80.00) or more per housing unit. The change can become effective only in accordance with G.S. 143-138(d). Neither the Department of Insurance nor the Council shall be required to expend any monies to pay for the preparation of any fiscal note under this section by any person outside of the Department or Council unless the Department or Council contracts with a third-party vendor to prepare the fiscal note.

(b) Contents of the Code. – The North Carolina State Building Code, as adopted by the Building Code Council, may include reasonable and suitable classifications of buildings and structures, both as to use and occupancy; general building restrictions as to location, height, and floor areas; rules for the lighting and ventilation of buildings and structures; requirements concerning means of egress from buildings and structures; requirements concerning means of ingress in buildings and structures; rules governing construction and precautions to be taken during construction; rules as to permissible materials, loads, and stresses; rules governing chimneys, heating appliances, elevators, and other facilities connected with the buildings and structures; rules governing plumbing, heating, air conditioning for the purpose of comfort cooling by the lowering of temperature, and electrical systems; and such other reasonable rules pertaining to the construction of buildings and structures and the installation of particular



1 facilities therein as may be found reasonably necessary for the protection of the occupants of
2 the building or structure, its neighbors, and members of the public at large.

3 In addition, the Code may regulate activities and conditions in buildings, structures, and
4 premises that pose dangers of fire, explosion, or related hazards. Such fire prevention code
5 provisions shall be considered the minimum standards necessary to preserve and protect public
6 health and safety, subject to approval by the Council of more stringent provisions proposed by
7 a municipality or county as provided in G.S. 143-138(e). These provisions may include
8 regulations requiring the installation of either battery-operated or electrical smoke detectors in
9 every dwelling unit used as rental property, regardless of the date of construction of the rental
10 property. For dwelling units used as rental property constructed prior to 1975, smoke detectors
11 shall have an Underwriters' Laboratories, Inc., listing or other equivalent national testing
12 laboratory approval, and shall be installed in accordance with either the standard of the
13 National Fire Protection Association or the minimum protection designated in the
14 manufacturer's instructions, which the property owner shall retain or provide as proof of
15 compliance.

16 The Code may contain provisions requiring the installation of either battery-operated or
17 electrical carbon monoxide detectors in every dwelling unit having a fossil-fuel burning heater
18 or appliance, fireplace, or an attached garage. Carbon monoxide detectors shall be those listed
19 by a nationally recognized testing laboratory that is OSHA-approved to test and certify to
20 American National Standards Institute/Underwriters Laboratories Standards ANSI/UL2034 or
21 ANSI/UL2075 and shall be installed in accordance with either the standard of the National Fire
22 Protection Association or the minimum protection designated in the manufacturer's
23 instructions, which the property owner shall retain or provide as proof of compliance. A carbon
24 monoxide detector may be combined with smoke detectors if the combined detector does both
25 of the following: (i) complies with ANSI/UL2034 or ANSI/UL2075 for carbon monoxide
26 alarms and ANSI/UL217 for smoke detectors; and (ii) emits an alarm in a manner that clearly
27 differentiates between detecting the presence of carbon monoxide and the presence of smoke.

28 The Code may contain provisions regulating every type of building or structure, wherever it
29 might be situated in the State.

30 Provided further, that building rules do not apply to (i) farm buildings that are located
31 outside the building-rules jurisdiction of any municipality, or (ii) farm buildings that are located
32 inside the building-rules jurisdiction of any municipality if the farm buildings are greenhouses.
33 A "greenhouse" is a structure that has a glass or plastic roof, has one or more glass or plastic
34 walls, has an area over ninety-five percent (95%) of which is used to grow or cultivate plants, is
35 built in accordance with the National Greenhouse Manufacturers Association Structural Design
36 manual, and is not used for retail sales. Additional provisions addressing distinct life safety
37 hazards shall be approved by the local building-rules jurisdiction.

38 Provided further, that no building permit shall be required under the Code or any local
39 variance thereof approved under subsection (e) for any construction, installation, repair,
40 replacement, or alteration costing five thousand dollars (\$5,000) or less in any single family
41 residence or farm building unless the work involves: the addition, repair, or replacement of load
42 bearing structures; the addition (excluding replacement of same size and capacity) or change in
43 the design of plumbing; the addition, replacement or change in the design of heating, air
44 conditioning, or electrical wiring, devices, appliances, or equipment, the use of materials not
45 permitted by the North Carolina Uniform Residential Building Code; or the addition (excluding
46 replacement of like grade of fire resistance) of roofing.

47 Provided further, that no building permit shall be required under such Code from any State
48 agency for the construction of any building or structure, the total cost of which is less than
49 twenty thousand dollars (\$20,000), except public or institutional buildings.

50 For the information of users thereof, the Code shall include as appendices [the following:]

- 1 (1) Any rules governing boilers adopted by the Board of Boiler and Pressure
2 Vessels Rules,
- 3 (2) Any rules relating to the safe operation of elevators adopted by the
4 Commissioner of Labor, and
- 5 (3) Any rules relating to sanitation adopted by the Commission for Public
6 Health which the Building Code Council believes pertinent.

7 In addition, the Code may include references to such other rules of special types, such as
8 those of the Medical Care Commission and the Department of Public Instruction as may be
9 useful to persons using the Code. No rule issued by any agency other than the Building Code
10 Council shall be construed as a part of the Code, nor supersede that Code, it being intended that
11 they be presented with the Code for information only.

12 Nothing in this Article shall extend to or be construed as being applicable to the regulation
13 of the design, construction, location, installation, or operation of (1) equipment for storing,
14 handling, transporting, and utilizing liquefied petroleum gases for fuel purposes or anhydrous
15 ammonia or other liquid fertilizers, except for liquefied petroleum gas from the outlet of the
16 first stage pressure regulator to and including each liquefied petroleum gas utilization device
17 within a building or structure covered by the Code, or (2) equipment or facilities, other than
18 buildings, of a public utility, as defined in G.S. 62-3, or an electric or telephone membership
19 corporation, including without limitation poles, towers, and other structures supporting electric
20 or communication lines.

21 Nothing in this Article shall extend to or be construed as being applicable to the regulation
22 of the design, construction, location, installation, or operation of industrial machinery.
23 However, if during the building code inspection process, an electrical inspector has any
24 concerns about the electrical safety of a piece of industrial machinery, the electrical inspector
25 may refer that concern to the Occupational Safety and Health Division in the North Carolina
26 Department of Labor but shall not withhold the certificate of occupancy nor mandate
27 third-party testing of the industrial machinery based solely on this concern. For the purposes of
28 this paragraph, "industrial machinery" means equipment and machinery used in a system of
29 operations for the explicit purpose of producing a product. The term does not include
30 equipment that is permanently attached to or a component part of a building and related to
31 general building services such as ventilation, heating and cooling, plumbing, fire suppression or
32 prevention, and general electrical transmission.

33 In addition, the Code may contain rules concerning minimum efficiency requirements for
34 replacement water heaters, which shall consider reasonable availability from manufacturers to
35 meet installation space requirements and may contain rules concerning energy efficiency that
36 require all hot water plumbing pipes that are larger than one-fourth of an inch to be insulated.

37 The Council shall adopt the latest published edition of the International Code Council's
38 International Energy Conservation Code, excluding published supplements but including the
39 adaptations to the Code that are made by the Board as set forth in subsection (c) of this section,
40 as minimum requirements for commercial buildings, applying to the construction of,
41 renovations to, and additions to all commercial buildings in the State. The Council shall also
42 adopt the Code as the minimum and maximum requirements for residential buildings, applying
43 to the construction of all single family and multifamily residential buildings in the State.

44 No State, county, or local building code or regulation shall prohibit the use of special
45 locking mechanisms for seclusion rooms in the public schools approved under
46 G.S. 115C-391.1(e)(1)e., provided that the special locking mechanism shall be constructed so
47 that it will engage only when a key, knob, handle, button, or other similar device is being held
48 in position by a person, and provided further that, if the mechanism is electrically or
49 electronically controlled, it automatically disengages when the building's fire alarm is activated.
50 Upon release of the locking mechanism by a supervising adult, the door must be able to be
51 opened readily.

1 (c) Standards to Be Followed in Adopting the Code. – All regulations contained in the
2 North Carolina State Building Code shall have a reasonable and substantial connection with the
3 public health, safety, morals, or general welfare, and their provisions shall be construed
4 reasonably to those ends. Requirements of the Code shall conform to good engineering
5 practice. The Council may use as guidance, but is not required to adopt, the requirements of the
6 International Building Code of the International Code Council, the Standard Building Code of
7 the Southern Building Code Congress International, Inc., the Uniform Building Code of the
8 International Conference of Building Officials, the National Building Code of the Building
9 Officials and Code Administrators, Inc., the National Electric Code, the Life Safety Code, the
10 National Fuel Gas Code, the Fire Prevention Code of the National Fire Protection Association,
11 the Safety Code for Elevators and Escalators, and the Boiler and Pressure Vessel Code of the
12 American Society of Mechanical Engineers, and standards promulgated by the American
13 National Standards Institute, Standards Underwriters' Laboratories, Inc., and similar national or
14 international agencies engaged in research concerning strength of materials, safe design, and
15 other factors bearing upon health and safety. In adapting the International Code Council's
16 International Energy Conservation Code for application to residential and commercial buildings
17 as set forth in subsection (b) of this section, the Council shall consider the particular economy,
18 population distribution, geography, and climate of the State.

19 (d) Amendments of the Code. – The Building Code Council may revise and amend the
20 North Carolina State Building Code, either on its own motion or upon application from any
21 citizen, State agency, or political subdivision of the State. In adopting any amendment, the
22 Council shall comply with the same procedural requirements and the same standards set forth
23 above for adoption of the Code.

24 (e) Effect upon Local Codes. – The North Carolina State Building Code shall apply
25 throughout the State, from the time of its adoption. Approved rules shall become effective in
26 accordance with G.S. 150B-21.3. However, any political subdivision of the State may adopt a
27 fire prevention code and floodplain management regulations within its jurisdiction. The
28 territorial jurisdiction of any municipality or county for this purpose, unless otherwise specified
29 by the General Assembly, shall be as follows: Municipal jurisdiction shall include all areas
30 within the corporate limits of the municipality and extraterritorial jurisdiction areas established
31 as provided in G.S. 160A-360 or a local act; county jurisdiction shall include all other areas of
32 the county. No such code or regulations, other than floodplain management regulations and
33 those permitted by G.S. 160A-436, shall be effective until they have been officially approved
34 by the Building Code Council as providing adequate minimum standards to preserve and
35 protect health and safety, in accordance with the provisions of subsection (c) above. Local
36 floodplain regulations may regulate all types and uses of buildings or structures located in flood
37 hazard areas identified by local, State, and federal agencies, and include provisions governing
38 substantial improvements, substantial damage, cumulative substantial improvements, lowest
39 floor elevation, protection of mechanical and electrical systems, foundation construction,
40 anchorage, acceptable flood resistant materials, and other measures the political subdivision
41 deems necessary considering the characteristics of its flood hazards and vulnerability. In the
42 absence of approval by the Building Code Council, or in the event that approval is withdrawn,
43 local fire prevention codes and regulations shall have no force and effect. Provided any local
44 regulations approved by the local governing body which are found by the Council to be more
45 stringent than the adopted statewide fire prevention code and which are found to regulate only
46 activities and conditions in buildings, structures, and premises that pose dangers of fire,
47 explosion or related hazards, and are not matters in conflict with the State Building Code, shall
48 be approved. Local governments may enforce the fire prevention code of the State Building
49 Code using civil remedies authorized under G.S. 143-139, 153A-123, and 160A-175. If the
50 Commissioner of Insurance or other State official with responsibility for enforcement of the
51 Code institutes a civil action pursuant to G.S. 143-139, a local government may not institute a

1 civil action under G.S. 143-139, 153A-123, or 160A-175 based upon the same violation.
2 Appeals from the assessment or imposition of such civil remedies shall be as provided in
3 G.S. 160A-434."

4 **SECTION 2.** This act is effective when it becomes law. The Building Code
5 Council shall adapt the International Energy Conservation Code by January 1, 2010.