

**GENERAL ASSEMBLY OF NORTH CAROLINA**  
**SESSION 2007**

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**HOUSE BILL 1702**  
**Committee Substitute Favorable 5/23/07**

Short Title: Conserve Energy/Insulate Hot Water Plumbing.

(Public)

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Sponsors:

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Referred to:

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April 19, 2007

A BILL TO BE ENTITLED

1  
2 AN ACT TO CONSERVE ENERGY AND TO REQUIRE A STUDY OF THE  
3 DEGREE OF INSULATION FOR HOT WATERLINES THAT SHOULD BE  
4 REQUIRED.

5 The General Assembly of North Carolina enacts:

6 **SECTION 1.** G.S. 143-138(b) reads as rewritten:

7 "(b) Contents of the Code. – The North Carolina State Building Code, as adopted  
8 by the Building Code Council, may include reasonable and suitable classifications of  
9 buildings and structures, both as to use and occupancy; general building restrictions as  
10 to location, height, and floor areas; rules for the lighting and ventilation of buildings and  
11 structures; requirements concerning means of egress from buildings and structures;  
12 requirements concerning means of ingress in buildings and structures; rules governing  
13 construction and precautions to be taken during construction; rules as to permissible  
14 materials, loads, and stresses; rules governing chimneys, heating appliances, elevators,  
15 and other facilities connected with the buildings and structures; rules governing  
16 plumbing, heating, air conditioning for the purpose of comfort cooling by the lowering  
17 of temperature, and electrical systems; and such other reasonable rules pertaining to the  
18 construction of buildings and structures and the installation of particular facilities  
19 therein as may be found reasonably necessary for the protection of the occupants of the  
20 building or structure, its neighbors, and members of the public at large.

21 In addition, the Code may regulate activities and conditions in buildings, structures,  
22 and premises that pose dangers of fire, explosion, or related hazards. Such fire  
23 prevention code provisions shall be considered the minimum standards necessary to  
24 preserve and protect public health and safety, subject to approval by the Council of  
25 more stringent provisions proposed by a municipality or county as provided in  
26 G.S. 143-138(e). These provisions may include regulations requiring the installation of  
27 either battery-operated or electrical smoke detectors in every dwelling unit used as  
28 rental property, regardless of the date of construction of the rental property. For  
29 dwelling units used as rental property constructed prior to 1975, smoke detectors shall

1 have an Underwriters' Laboratories, Inc., listing or other equivalent national testing  
2 laboratory approval, and shall be installed in accordance with either the standard of the  
3 National Fire Protection Association or the minimum protection designated in the  
4 manufacturer's instructions, which the property owner shall retain or provide as proof of  
5 compliance.

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

8 Provided further, that nothing in this Article shall be construed to make any building  
9 rules applicable to farm buildings located outside the building-rules jurisdiction of any  
10 municipality.

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

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

24 For the information of users thereof, the Code shall include as appendices the  
25 following:

- 26 (1) Any rules governing boilers adopted by the Board of Boiler and  
27 Pressure Vessels Rules,
- 28 (2) Any rules relating to the safe operation of elevators adopted by the  
29 Commissioner of Labor, and
- 30 (3) Any rules relating to sanitation adopted by the Commission for Health  
31 Services which the Building Code Council believes pertinent.

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

37 Nothing in this Article shall extend to or be construed as being applicable to the  
38 regulation of the design, construction, location, installation, or operation of (1)  
39 equipment for storing, handling, transporting, and utilizing liquefied petroleum gases  
40 for fuel purposes or anhydrous ammonia or other liquid fertilizers, except for liquefied  
41 petroleum gas from the outlet of the first stage pressure regulator to and including each  
42 liquefied petroleum gas utilization device within a building or structure covered by the  
43 Code, or (2) equipment or facilities, other than buildings, of a public utility, as defined  
44 in G.S. 62-3, or an electric or telephone membership corporation, including without

1 limitation poles, towers, and other structures supporting electric or communication  
2 lines.

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

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

16 **SECTION 2.** The North Carolina Building Code Council shall study the  
17 extent to which hot waterlines should be insulated to achieve greater energy efficiency  
18 and shall amend the North Carolina State Building Code as necessary to achieve those  
19 ends. The Council shall report its findings and actions to the Environmental Review  
20 Commission and the 2008 Regular Session of the General Assembly on or before 1  
21 April 2008.

22 **SECTION 3.** Sections 2 and 3 of this act are effective when this act becomes  
23 law. Section 1 of this act becomes effective 1 January 2008 and applies to all new  
24 construction for which permits are issued on or after that date.