Chapter Bcr 300 (CURRENT)

Amendments to the State Building Code Manuals Rules

Statutory Authority: RSA 155-A:10

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Bcr 301.01 Purpose

(a) The purpose of these rules is to publish the amendments to the state building code manuals for the following codes:

(1) International Building Code 2009 Edition, adopted with an effective date of April 1, 2010, [ratified June 18, 2012];

(2) International Plumbing Code 2009 Edition, adopted with an effective date of April 1, 2010; , [ratified June 18, 2012]

(3) International Mechanical Code 2009 Edition, adopted with an effective date of April 1, 2010; , [ratified June 18, 2012]

(4) *International Energy Conservation Code* 2009 Edition, adopted with an effective date of April 1, 2010; , [ratified June 18, 2012]

(5) *National Electrical Code 2011*, as published by the National Fire Protection Association, adopted with an effective date of July 1, 2011, [ratified June 18, 2012];

(5) *National Electrical Code 2014*, as published by the National Fire Protection Association, adopted with an effective date of January 1, 2015, [ratified August 1, 2014]

(6) International Residential Code 2009 Edition, adopted with an effective date of April 1, 2010. , [ratified June 18, 2012]; and

(7) International Existing Building Code 2009 Edition, adopted and ratified with an effective date of June 18, 2012.

PART Bcr 302 DEFINITIONS OF TERMS

Bcr 302.01 "Board" means the New Hampshire state building code review board as established in RSA 155-A:10, I.

Bcr 302.02 "Commissioner" means the commissioner of the New Hampshire department of safety.

Bcr 302.03 "Department" means the New Hampshire department of safety.

Bcr 302.04 "Person" means "person" as defined in RSA 155-A:1, V.

Bcr 302.05 "State fire marshal" means the state fire marshal of the state of New Hampshire.

PART Bcr 303 AMENDMENTS TO THE INTERNATIONAL BUILDING CODE 2009

Bcr 303.01 International Building Code 2009

(a) Pursuant to RSA 155-A:10, V, the board hereby adopts the following amendments to the applicable provisions of the *International Building Code* 2009:

(1) Amend Section 101.1 of the *International Building Code* 2009 by replacing said section with the following [effective date of April 1, 2010, ratified June 18, 2012]:

101.1 Title. These regulations shall be known as the *Building Code of the State of New Hampshire* hereinafter referred to as "this code."

(2) Amend Section 101.4 of the *International Building Code* 2009 by replacing said section with the following [effective date of April 1, 2010, ratified June 18, 2012]:

101.4 Referenced codes. The other codes listed in §101.4.1 through §101.4.6 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 Gas. Fuel gas systems shall comply with the *New Hampshire Fire Code*, Saf-C 6000 (NFPA 54).

101.4.2 Mechanical. The provisions of the *International Mechanical Code* shall apply to the installation, alterations, repairs, and replacement of mechanical systems, including equipment, appliances, fixtures, fittings and/or appurtenances, including ventilating, heating, cooling, air conditioning and refrigeration systems, incinerators, and other energy-related systems. **101.4.3 Plumbing.** The provisions of the *International Plumbing Code* shall apply to the installation, alteration, repair and replacement of plumbing systems, including equipment, appliances, fixtures, fittings and appurtenances, and where connected to a water or sewage system and all aspects of a medical gas system. Private sewage disposal systems shall comply with RSA 485-A:29-44.

101.4.4 Property maintenance. [RESERVED]

101.4.5 Fire prevention. The provisions of the *New Hampshire Fire Code* Saf-C 6000 (NFPA 1) shall apply to matters affecting or relating to structures, processes and premises from the hazard of fire and explosion arising from the storage, handling or use of structures, materials or devices; from conditions hazardous to life, property or public welfare in the occupancy of structures or premises; and from the construction, extension, repair, alteration or removal of fire suppression and alarm systems or fire hazards in the structure or on the premises from occupancy or operation.

101.4.6 Energy. The provisions of the *International Energy Conservation Code* shall apply to all matters governing the design and construction of buildings for energy efficiency.

(3) Amend Section 102.6 of the *International Building Code* 2009 by replacing said section with the following [effective date of April 1, 2010, ratified June 18, 2012]:

102.6 Existing structures. The legal occupancy of any structure existing on the date of adoption of this code shall be permitted to continue without change, except as is specifically covered in this code, the *New Hampshire Fire Code* Saf-C 6000 (NFPA 1 and NFPA 101) or as is deemed necessary by the building official for the general safety and welfare of the occupants and the public.

(4) Delete Table 503 of the International Building Code 2009 and replace it with <u>NH Modified Table 503</u> [effective date of April 1, 2010, ratified June 18, 2012] [The State Building Code Review Board deleted this amendment of Table 503; therefore, height and area calculations shall be as formulated and described within the 2009 International Building effective March 14, 2014, ratification pending.]

(5) Amend Section 506 of the *International Building Code* 2009 by replacing said section with the following [effective date of April 1, 2010, ratified June 18, 2012]. [The State Building Code Review Board deleted the amendment to Section 506 of the International Building Code effective March 14, 2014, ratification pending.]

Section 506.0 Building Area Modifications

General: The provisions of this section shall modify the area limitations of Table 503 as herein specified.

Street frontage increase: Where a building or structure has more than 25 percent of the building perimeter fronting on a street or other unoccupied space, the area limitations specified in Table 503 shall be increased 2 percent for each 1 percent of such excess frontage. The unoccupied space shall be on the same lot or dedicated for public use, shall not be less than 30 feet (9144 mm) in width and shall have access from a street by a posted fire lane not less than 18 feet (5486 mm) in width.

Automatic sprinkler system: Where a building is equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1, the area limitations specified in Table 503 shall be increased 200 percent for one- and two-story buildings and 100 percent for buildings more than two stories in height.

Exception:

1. The automatic sprinkler system increase shall not apply to buildings with an occupancy in Use Group H-1.

2. The automatic sprinkler system increase shall not apply to any fire area with an occupancy in Use Group H-2 or H-3.

Multistory buildings: The area limitations for buildings two stories in height shall be the same as the area limitations provided in Table 503 for one-story buildings. In buildings over two stories in height, the area limitations of Table 503 for one-story buildings shall be reduced as specified in Table 506.4.

Number	Type of Construction						
	IA	IB	11 Others				
1	None	None	None				
2	None	None	None				
3	None	5%	20%				
4	None	10%	20%				
5	None	15%	30%				
6	None	20%	40%				
7	None	25%	50%				
8	None	30%	60%				
9	None	35%	70%				
10	None	40%	80%				

Table 506.4 REDUCTION OF AREA LIMITATIONS

(6) Amend Section 716.5.3 of the *International Building Code* 2009 by replacing said section with the following [effective date of April 1, 2010, ratified June 18, 2012]:

716.5.3 Shaft enclosures. Shaft enclosures that are permitted to be penetrated by ducts and air transfer openings shall be protected with approved fire and smoke dampers installed in accordance with their listing.

Exceptions:

1. Fire dampers are not required at penetrations of shafts where:

1.1. Steel exhaust subducts are extended at least 22 inches (559 mm) vertically in exhaust shafts, provided there is a continuous airflow upward to the outside; or 1.2. Penetrations are tested in accordance with ASTM E 119 or UL 263 as part of the fire-resistance-rated assembly; or

1.3. Ducts are used as part of an approved smoke control system designed and installed in accordance with Section 909 and where the fire damper will interfere with the operation of the smoke control system; or

1.4. The penetrations are in parking garage exhaust or supply shafts that are separated from other building shafts by not less than 2-hour fire-resistance-rated construction.

2. In Group B and R occupancies equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1, smoke dampers are not required at penetrations of shafts where:

2.1. Kitchen, clothes dryer, bathroom and toilet room exhaust openings are installed with steel exhaust subducts, having a minimum wall thickness of 0.187-inch (0.4712 mm) (No. 26 gage);

2.2. The subducts extend at least 22 inches (559 mm) vertically; and

2.3. An exhaust fan is installed at the upper terminus of the shaft that is powered continuously in accordance with the provisions of Section 909.11, so as to maintain a continuous upward airflow to the outside.

3. Smoke dampers are not required at penetration of exhaust or supply shafts in parking garages that are separated from other building shafts by not less than 2-hour fire-resistance-rated construction.

4. Smoke dampers are not required at penetrations of shafts where ducts are used as part of an approved mechanical smoke control system designed in accordance with Section 909 and where the smoke damper will interfere with the operation of the smoke control system.

5. Fire dampers and combination fire/smoke dampers are not required in kitchen and clothes dryer exhaust systems when installed in accordance with the *International Mechanical Code*.

6. Fire and smoke dampers shall not be installed in laboratory fume hood exhaust systems.

7. Fire and smoke dampers shall not be installed in hazardous exhaust systems.

(7) Amend Section 716.5.4.1 of the *International Building Code* 2009 by replacing said section with the following [effective date of April 1, 2010, ratified June 18, 2012]:

716.5.4.1 Corridors. A listed smoke damper designed to resist the passage of smoke shall be provided at each point a duct or air transfer opening penetrates a corridor enclosure required to have smoke and draft control doors in accordance with Section 715.4.3.

Exceptions:

1. Smoke dampers are not required where the building is equipped throughout with an approved smoke control system in accordance with Section 909, and smoke dampers are not necessary for the operation and control of the system.

2. Smoke dampers are not required in corridor penetrations where the duct is constructed of steel not less than 0.019 inch (0.48 mm) in thickness and there are no openings serving the corridor.

3. Fire and smoke dampers shall not be installed in laboratory fume hood exhaust systems.

4. Fire and smoke dampers shall not be installed in hazardous exhaust systems.

(8) Amend section 1001.1 of the *International Building Code* 2009 by replacing said section with the following [effective date of April 1, 2010] [deleted effective June 18, 2012 pursuant to RSA 155-A:2, II]

1001.1 General. Buildings or portions thereof shall be provided with a means of egress system as required by RSA 155-A:2, II (NFPA 101).

(9) Amend Section 1101.2 of the *International Building Code* 2009 by replacing said section with the following [effective date of April 1, 2010, ratified June 18, 2012]:

1101.2 Design. Buildings and facilities shall be designed and constructed to be *accessible* in accordance with this code and ICC A117.1, as amended below:

Amend section 406.12 of ANSI 117.1, 2003 edition as referenced in the *International Building Code* 2009 by replacing said section with the following [effective date of April 1, 2010, ratified June 18, 2012]:

406.12 Detectable Warnings at Curb Ramps and Raised Marked Crossings. Curb Ramps and marked crossings that are raised to the same level as the adjoining sidewalk shall be preceded by a 24-inch (610 mm) deep detectable warning complying with Section 705, extending the full width of the curb ramp or marked crossing.

Amend section 502.2 of ANSI 117.1, 2003 edition as referenced in the *International Building Code* 2009 by replacing said section with the following [effective date of April 1, 2010, ratified June 18, 2012]:

502.2 Vehicle Space Size. Car and van parking spaces shall be 96 inches (2440 mm) minimum in width.

Amend certain sections in 502.4 of ANSI 117.1, 2003 edition as referenced in the *International Building Code* 2009 by replacing said sections as indicated by the following [effective date of April 1, 2010, ratified June 18, 2012]:

502.4.2 Width.

502.4.2.1 Access aisles serving car parking spaces shall be 60 inches (1525 mm) minimum in width.

502.4.2.2 Access aisles serving van parking spaces shall be 96 inches (2440 mm) minimum in width.

502.4.4 Marking.

502.4.4.1 Access aisles shall be marked so as to discourage parking in them and designated by vertical "No Parking" signs located at the front of the access aisle and mounted with the bottom of the sign 60 inches (1525 mm) minimum above the floor of the access aisle.

Exception: A "No Parking" sign is not required when:

1. The placement of the sign would obstruct the accessible route to the accessible entrance.

2. There is a non-removable physical obstacle preventing the

placement of the sign.

3. The placement of a sign would be in front of a window wall.

4. The placement of a sign would otherwise be in conflict with a

provision of the IBC 2009 or a provision of this standard.

502.4.4.2 Where access aisles are marked with lines, the width measurements of access aisles and adjacent parking spaces shall be made from the centerline of the markings.

Exception: Where access aisles or parking spaces are not adjacent to another access aisle or parking space, measurements shall be permitted to include the full width of the line defining the access aisle or parking space.

(10) Amend section 1105.1 of the *International Building Code* 2009 by replacing said section with the following [effective May 14, 2010][replaced March 11, 2011]:

1105.1 Public entrances. In addition to accessible entrances required by Sections 1105.1.1 through 1105.1.6, at least 60 percent of all public entrances shall be accessible. At least one of the required accessible public entrances in Use Groups A, E, I1, I2, I3, M, R1 and R2 and all buildings greater than 1,000 sq. ft (93 m2) in Group B, and the nonresidential portion of live/work units per Section 419 greater than 1,000 sq. ft. (93 m2) shall be equipped with full powered automatic doors in compliance with ICC A117.1. Where an automatic door is not provided, a mechanism to alert the owner of a presence at the door shall be provided.

Exceptions:

1. An accessible entrance is not required to areas not required to be accessible.

2. Loading and service entrances that are not the only entrance to a tenant space.

(10) Amend section 1105.1 of the *International Building Code* 2009 by replacing said section with the following [effective March 11, 2011, ratified June 18, 2012]:

1105.1 Public entrances. In addition to accessible entrances required by Sections 1105.1.1 through 1105.1.8, at least 60 percent of all public entrances shall be accessible.

Exceptions:

- 1. An accessible entrance is not required to areas not required to be accessible.
- 2. Loading and service entrances that are not the only entrance to a tenant space.

1105.1.1 Parking garage entrances. Where provided, direct access for pedestrians from parking structures to buildings or facility entrances shall be accessible.

1105.1.2 Entrances from tunnels or elevated walkways. Where direct access is provided for pedestrians from a pedestrian tunnel or elevated walkway to a building or facility, at least one entrance to the building or facility from each tunnel or walkway shall be accessible.

1105.1.3 Restricted entrances. Where restricted entrances are provided to a building or facility, at least one restricted entrance to the building or facility shall be accessible.

1105.1.4 Entrances for inmates or detainees. Where entrances used only by inmates or detainees and security personnel are provided at judicial facilities, detention facilities or correctional facilities, at least one such entrance shall be accessible.

1105.1.5 Service entrances. If a service entrance is the only entrance to a building or a tenant space in a facility, that entrance shall be accessible.

1105.1.6 Tenant spaces, dwelling units and sleeping units. At least one accessible entrance shall be provided to each tenant, dwelling unit and sleeping unit in a facility.

Exceptions:

1. An accessible entrance is not required to tenants that are not required to be accessible.

2. An accessible entrance is not required to dwelling units and sleeping units that are not required to be Accessible units, Type A units or Type B units.

1105.1.7 At least one of the required accessible public entrances in Groups A, E, I-1, I-2, I-3, R-1 and R-2 shall be equipped with automatic doors in compliance with ICC A117.1. **1105.1.8** At least one of the required accessible public entrances in Groups B and M greater

than or equal to 1,000 net square feet (93 m²) in size and the nonresidential portion of live/work units per Section 419 greater than 1,000 net square feet (93 m²) shall be equipped with automatic doors in compliance with ICC A117.1.

1105.1.8.1 Required accessible public entrances in Groups B and M less than 1,000 net square feet (93 m^2) in size and the nonresidential portion of live/work units per Section 419 less than 1,000 net square feet (93 m^2) where an automatic doors are not provided, an electric signaling device to alert the owner of a presence at the door shall be provided.

(11) Amend section 1608.2 of the *International Building Code* 2009 by replacing said section with the following [effective date of April 1, 2010, ratified June 18, 2012]:

1608.2 Ground snowloads. The ground snowloads to be used in determining the design snow loads for roofs shall be determined in accordance with ASCE 7 or Figure 1608.2 for the contiguous United States and Table 1608.2 for Alaska. Site-specific case studies shall be made in areas designated "CS" in Figure 1608.2. Ground snow loads for sites at elevations above the limits indicated in Figure 1608.2 and for all sites within the CS areas shall be approved. Ground snow load determination for such sites shall be based on an extreme value statistical analysis of data available in the vicinity of the site using a value with a 2-percent annual probability of being exceeded (50-year mean recurrence interval). Snow loads are zero for Hawaii, except in mountainous regions as approved by the building official.
1608.2.1. Ground snowloads are permitted to be determined in accordance with Table 1 of Ground Snow Loads for New Hampshire ERDC/CRREL TR-02-6.

(12) Amend Section [P] 2902.02 of the *International Building Code* 2009 by replacing said section with the following [effective date of April 1, 2010, ratified June 18, 2012]:

[P] 2902.2 Separate facilities. Where plumbing fixtures are required, separate facilities shall be provided for each sex.

Exceptions:

1. Separate facilities shall not be required for dwelling units and sleeping units.

Separate facilities shall not be required in structures or tenant spaces with a total occupant load, including both the employees and customers, of 15 or less.
 Separate facilities shall not be required in mercantile occupancies in which the maximum occupant load is 50 or less.

4. Separate facilities shall not be required in assembly occupancies that serve food with

a total occupant load, including both employees and customers, of less than 25.

(13) Amend section 3412.2 of the *International Building Code* 2009 by replacing said section with the following [effective date of April 1, 2010, ratified June 18, 2012] [deleted February 1, 2013]

3412.2 Applicability. Structures existing prior to September 14, 2003, in which there is work involving additions, alterations or changes of occupancy shall be made to conform to the requirements of this section or the provisions of Sections 3403 through 3409. The provisions in Sections 3412.2.1 through 3412.2.5 shall apply to existing occupancies that will continue to be, or are proposed to be, in

Groups A, B, E, F, M, R, S and U. These provisions shall not apply to buildings with occupancies in Group H or I.

(14) Amend section 3401.1 of the *International Building Code* 2009 by replacing said section with the following [effective date of February 1, 2013]:

3401.1 Scope. Chapter 34 is deleted in its entirety. The *International Existing Building Code*, as adopted and amended shall control the alteration, repair, addition, and change of occupancy of existing structures.

(15) Adopt Appendix C in its entirety per section 101.2.1 of the *International Building Code* 2009, Group U, Agricultural Buildings [effective date of April 1, 2010, ratified June 18, 2012].

APPENDIX C GROUP U - AGRICULTURAL BUILDINGS

PART Bcr 304 AMENDMENTS TO THE INTERNATIONAL PLUMBING CODE 2009

Bcr 304.1. International Plumbing Code 2009.

(a) Pursuant to RSA 155-A:10, V, the board hereby adopts the following amendments to the applicable provisions of the *International Plumbing Code* 2009.

(1) Amend section 101.1 of the *International Plumbing Code* 2009 by replacing said section with the following [effective date of April 1, 2010, ratified June 18, 2012]:

101.1 Title. These regulations shall be known as the *International Plumbing Code of the State of New Hampshire* hereinafter referred to as "this code."

(2) Amend section 101.2 of the *International Plumbing Code* 2009 by replacing said section with the following [effective date of April 1, 2010, ratified June 18, 2012]:

101.2 Scope. The provisions of this code shall apply to the erection, installation, alteration, repairs, relocation, replacement, addition to, use or maintenance of plumbing systems within this jurisdiction. This code shall also regulate nonflammable medical gas, inhalation anesthetic, vacuum piping, nonmedical oxygen systems and sanitary and condensate vacuum collection systems. Fuel gas systems shall comply with the *New Hampshire Fire Code*, Saf-C 6000 (NFPA 54). Provisions in the appendices shall not apply unless specifically adopted.

Exception: Detached one- and two-family dwellings and multiple single-family dwellings (townhouses) not having more than three stories high with separate means of egress and their accessory structures shall comply with the *International Residential Code*.

(3) Amend section 104.2 of the *International Plumbing Code* 2009 by replacing said section with the following [effective date of April 1, 2010, ratified June 18, 2012]:

104.2 Rule-making authority. The code official shall have authority as necessary in the interest of public health, safety and general welfare to adopt and promulgate written rules and regulations to interpret and implement the provisions of this code to secure the intent thereof and to designate requirements applicable because of local climatic or other conditions. Such rules shall not have the effect of waiving structural or fire performance requirements specifically provided for in this code, or of violating accepted engineering practice involving public safety.

(4) Amend section 106.6.2 of the *International Plumbing Code* 2009 by replacing said section with the following [effective date of April 1, 2010, ratified June 18, 2012]:

106.6.2 Fee schedule. The fees for all plumbing work shall be as indicated by administrative rules Plu 306.01 and/or as determined by the local jurisdiction.

(5) Amend section 106.6.3 of the *International Plumbing Code* 2009 by deleting said section [effective date of April 1, 2010, ratified June 18, 2012].

(6) Amend section 108.4 of the *International Plumbing Code* 2009 by replacing said section with the following [effective date of April 1, 2010, ratified June 18, 2012]:

108.4 Violation penalties. Any person who shall violate a provision of this code or shall fail to comply with any of the requirements thereof or who shall erect, install, alter or repair plumbing work in violation of the approved construction documents or directive of the code official, or of a permit or certificate issued under the provisions of this code, shall be subject to penalties as prescribed by law. Each day that a violation continues after due notice has been served shall be deemed a separate offense.

(7) Amend section 108.5 of the *International Plumbing Code* 2009 by replacing said section with the following [effective date of April 1, 2010, ratified June 18, 2012]:

108.5 Stop work orders. Upon notice from the code official that plumbing system is being done contrary to the provisions of this code or in a dangerous or unsafe manner, such work shall

immediately cease. Such notice shall be in writing and shall be given to the owner of the property, or to the owner's agent, or to the person doing the work. The notice shall state the conditions under which work is authorized to resume. Where an emergency exists, the code official shall not be required to give a written notice prior to stopping the work. Any person who shall continue any work on the system after having been served with a stop work order, except such work as that person is directed to perform to remove a violation or unsafe condition, shall be subject to penalties as prescribed by law.

(8) Amend section 301.3 of the *International Plumbing Code* 2009 by replacing said section with the following [effective date of April 1, 2010, ratified June 18, 2012]:

301.3 Connections to the sanitary drainage system. All plumbing fixtures, drains, appurtenances and appliances used to receive or discharge liquid wastes or sewage shall be directly connected to the sanitary drainage system of the building or premises, in accordance with the requirements of this code. This section shall not be construed to prevent the indirect waste systems required by Chapter 8.

Exception: Bathtubs, showers, lavatories, clothes washers and laundry trays shall not be required to discharge to the sanitary drainage system where such fixtures discharge to an approved gray water system for flushing of water closets and urinals or for subsurface landscape irrigation provided that all irrigation use is first approved by the State of NH Department or Environmental Services.

(9) Amend section 305.6.1 of the *International Plumbing Code* 2009 by replacing said section with the following [effective date of April 1, 2010, ratified June 18, 2012]:

305.6.1 Sewer depth. Building sewers that connect to private sewage disposal systems shall conform to RSA 485-A relative to minimum depth below finished grade. Building sewers that connect to public sewers shall be a minimum depth of 48 inches (1219 mm) below grade or adequately insulated to afford the same protection whenever a condition arises that the 48 inches (1219 mm) cannot be attained.

(10) Amend section 403.2 of the *International Plumbing Code* 2009 by replacing said section with the following [effective date of April 1, 2010, ratified June 18, 2012]:

403.2 Separate facilities. Where plumbing fixtures are required, separate facilities shall be provided for each sex.

Exceptions:

1. Separate facilities shall not be required for dwelling units and sleeping units.

2. Separate facilities shall not be required in structures or tenant spaces with a total

occupant load, including both the employees and customers, of 15 or less.

3. Separate facilities shall not be required in mercantile occupancies in which the maximum occupant load is 50 or less.

4. Separate facilities shall not be required in assembly occupancies that serve food with

a total occupant load, including both employees and customers, of less than 25.

(11) Amend section 404.1 of the *International Plumbing Code* 2009 by replacing said section with the following [effective date of April 1, 2010, ratified June 18, 2012]:

404.1 Where required. Accessible plumbing facilities and fixtures shall be provided in accordance with the *International Building Code* and the State of NH Architectural Barrier Free Design Standards.

(12) Amend section 501.2 of the *International Plumbing Code* 2009 by replacing said section with the following [effective date of April 1, 2010, ratified June 18, 2012]:

501.2 Water heater as space heater. Where a combination potable water heating and space heating system requires water for space heating, a master thermostatic mixing valve complying with ASSE 1017 shall be provided to limit the water supplied to the potable hot water distribution system to a temperature of 130°F (55°C) or less. The potability of the water shall be maintained throughout the system.

(13) Amend section 501.6 of the *International Plumbing Code* 2009 by replacing said section with the following [effective date of April 1, 2010, ratified June 18, 2012]:

501.6 Water temperature control in piping from tankless heaters. The temperature of water from tankless heaters intended for faucets for domestic or personal hygiene use shall be a maximum of 130°F (55°C). This provision shall not supersede the requirement for protective shower valves in accordance with Section 424.3.

(14) Amend section 501.8 of the *International Plumbing Code* 2009 by replacing said section with the following [effective date of April 1, 2010, ratified June 18, 2012]:

501.8 Temperature controls. All hot water supply systems shall be equipped with automatic temperature controls capable of adjustments from the lowest to the highest acceptable temperature settings for the intended temperature operating range. The temperature of water supplied at faucets for domestic or personal hygiene use shall be limited to a maximum of 130°F (55°C).

(15) Amend section 605.22.2 of the *International Plumbing Code* 2009 by replacing said section with the following language [effective date of April 1, 2010, ratified June 18, 2012]:

605.22.2 Solvent cementing. Joint surfaces shall be clean and free from moisture. A primer that conforms to ASTM F 656 shall be applied. Solvent cement not purple in color and conforming to ASTM D 2564 or CSA-B137.3 shall be applied to all joint surfaces. The joint shall be made while the cement is wet and shall be in accordance with ASTM 2855. Solvent-cement joints shall be permitted above or below ground.

(16) Amend section 607.1 of the *International Plumbing Code* 2009 by replacing said section with the following [effective date of April 1, 2010, ratified June 18, 2012]:

607.1 Where required. In residential occupancies, hot water not to exceed 130°F (55°C) shall be supplied to all plumbing fixtures and equipment utilized for bathing, washing, culinary purposes, cleansing, laundry or building maintenance. In nonresidential occupancies, hot water shall be supplied for culinary purposes, cleansing, laundry or building maintenance purposes. In nonresidential occupancies, hot water or tempered water shall be supplied for bathing and washing purposes. Tempered water shall be supplied through a water temperature limiting device that conforms to ASSE 1070 and shall limit the tempered water to a maximum of 110°F (43°C). This provision shall not supersede the requirement for protective shower valves in accordance with Section 424.3.

(17) Amend section 701.2 of the *International Plumbing Code* 2009 by replacing said section with the following [effective date of April 1, 2010, ratified June 18, 2012]:

701.2 Sewer required. Every building in which plumbing fixtures are installed and all premises having drainage piping shall be connected to a public sewer, where available, or an approved private sewage disposal system in accordance with RSA 485-A:29-44.

(18) Amend section 705.8.2 of the *International Plumbing Code* 2009 by replacing said section with the following language [effective date of April 1, 2010, ratified June 18, 2012]:

705.8.2 Solvent cementing. Joint surfaces shall be clean and free from moisture. A primer that conforms to ASTM F 656 shall be applied. Solvent cement not purple in color and conforming to ASTM D 2564, CSA B137.3, CSA B181.2 or CSA B182.1 shall be applied to all joint surfaces. The joint shall be made while the cement is wet and shall be in accordance with ASTM 2855. Solvent-cement joints shall be permitted above or below ground.

(19) Amend section 705.14.2 of the *International Plumbing Code* 2009 by replacing said section with the following language [effective date of April 1, 2010, ratified June 18, 2012]:

705.14.2 Solvent cementing. Joint surfaces shall be clean and free from moisture. A primer that conforms to ASTM F 656 shall be applied. Solvent cement not purple in color and conforming to ASTM D 2564, CSA B137.3, CSA B181.2 or CSA B182.1 shall be applied to all joint surfaces. The joint shall be made while the cement is wet and shall be in accordance with ASTM 2855. Solvent-cement joints shall be permitted above or below ground.

(20) Amend section 904.1 of the *International Plumbing Code* 2009 by replacing said section with the following [effective date of April 1, 2010, ratified June 18, 2012]:

904.1 Roof extension. All open pipes that extend through a roof shall be terminated at least 12 inches (305 mm) above the roof, except that where a roof is to be used for any purpose other than weather protection, the vent extensions shall be run at least 7 feet (2134 mm) above the roof.

(21) Adopt Appendix B in its entirety per section 101.2.1 of the *International Plumbing Code* 2009 [effective date of April 1, 2010, ratified June 18, 2012]:

APPENDIX B RATES OF RAINFALL FOR VARIOUS CITIES

(22) Adopt Appendix C in its entirety per section 101.2.1 of the *International Plumbing Code* 2009 [effective date of April 1, 2010, ratified June 18, 2012]:

APPENDIX C GREY WATER RECYCLING SYSTEM

(23) Adopt Appendix F in its entirety per section 101.2.1 of the *International Plumbing Code* 2009 [effective date of April 1, 2010, ratified June 18, 2012]:

APPENDIX F STRUCTURAL SAFETY

(24) Adopt Appendix G in its entirety per section 101.2.1 of the *International Plumbing Code* 2009 [effective date of April 1, 2010, ratified June 18, 2012]:

APPENDIX G VACUUM DRAINAGE SYSTEM

PART Bcr 305 AMENDMENTS TO THE INTERNATIONAL MECHANICAL CODE 2009

Bcr 305.01. International Mechanical Code 2009.

(a) Pursuant to RSA 155-A:10, V, the board hereby adopts the following amendments to the applicable provisions of the *International Mechanical Code* 2009.

(1) Amend section 101.1 of the *International Mechanical Code* 2009 by replacing said section with the following [effective date of April 1, 2010, ratified June 18, 2012]:

101.1 Title. These regulations shall be known as the *Mechanical Code of the State of New Hampshire* hereinafter referred to as "this code."

(2) Amend section 101.2 of the *International Mechanical Code* 2009 by replacing said section with the following [effective date of April 1, 2010, ratified June 18, 2012]:

101.2 Scope. This code shall regulate the design, installation, maintenance, alteration and inspection of mechanical systems that are permanently installed and utilized to provide control of environmental conditions and related processes within buildings. This code shall also regulate those mechanical systems, system components, equipment and appliances specifically addressed herein. Fuel gas systems shall comply with the New Hampshire Fire Code, Saf-C 6000 (NFPA 54).

Exception: Detached one- and two-family dwellings and multiple single-family dwellings (townhouses) not having more than three stories high with separate means of egress and their accessory structures shall comply with the *International Residential Code*.

(3) Amend section 106.5.2 of the *International Mechanical Code* 2009 by replacing said section with the following [effective date of April 1, 2010, ratified June 18, 2012]:

106.5.2 Fee schedule. The fees for mechanical work shall be as determined by local jurisdiction.

(4) Amend section 106.5.3 of the *International Mechanical Code* 2009 by deleting said section [effective date of April 1, 2010, ratified June 18, 2012].

(5) Amend section 108.4 of the *International Mechanical Code* 2009 by replacing said section with the following [effective date of April 1, 2010, ratified June 18, 2012]:

108.4 Violation penalties. Any person who shall violate a provision of this code or shall fail to comply with any of the requirements thereof or who shall erect, install, alter or repair mechanical work in violation of the approved construction documents or directive of the code official, or of a permit or certificate issued under the provisions of this code, shall be subject to penalties as prescribed by law. Each day that a violation continues after due notice has been served shall be deemed a separate offense.

(6) Amend section 108.5 of the *International Mechanical Code* 2009 by replacing said section with the following [effective date of April 1, 2010, ratified June 18, 2012]:

108.5 Stop work orders. Upon notice from the code official that mechanical work is being done contrary to the provisions of this code or in a dangerous or unsafe manner, such work shall immediately cease. Such notice shall be in writing and shall be given to the owner of the property, or to the owner's agent, or to the person doing the work. The notice shall state the conditions under which work is authorized to resume. Where an emergency exists, the code official shall not be required to give a written notice prior to stopping the work. Any person who shall continue any work on the system after having been served with a stop work order, except such work as that person is directed to perform to remove a violation or unsafe condition, shall be subject to penalties as prescribed by law.

(7) Amend section 202 of the *International Mechanical Code* 2009 to add new definition as follows [effective January 14, 2011, ratified June 18, 2012]:

BIOMASS FUEL. For use in this section, biomass fuels are defined as "solid" organic matter, not including woods derived from construction or demolition debris; wood that has been chemically treated;

or agricultural crops or aquatic plants or byproducts from such crops or plants which have been used to rehabilitate a contaminated or brownfields site through a process known as "phytoremediation".

(8) Amend section 606.2 of the *International Mechanical Code* 2009 by replacing said section with the following [effective date of April 1, 2010, ratified June 18, 2012]:

606.2 Where required. Smoke detectors shall be installed where indicated in Sections 606.2.1 through 606.2.4.

Exception: Smoke detectors shall not be required where air distribution systems are incapable of spreading smoke beyond the enclosing walls, floors and ceilings of the room or space in which the smoke is generated.

606.2.1 Location of smoke detectors. Smoke detectors shall be installed downstream of the air filters and ahead of any branch connections in air supply systems with a design capacity greater than $2,000 \text{ cfm} (0.9 \text{ m}^3/\text{s})$.

606.2.2 Return air systems. Smoke detectors shall be installed in return air systems with a design capacity greater than 2,000 cfm (0.9 m3/s), in the return air duct or plenum upstream of any filters, exhaust air connections, outdoor air connections, or decontamination equipment and appliances.

Exception: Smoke detectors are not required in the return air system where all portions of the building served by the air distribution system are protected by area smoke detectors connected to a fire alarm system in accordance with the *International Fire Code*. The area smoke detection system shall comply with Section 606.4.

606.2.3 Common supply and return air systems. Where multiple air-handling systems share common supply or return air ducts or plenums with a combined design capacity greater than 2,000 cfm (0.9 m^3 /s), the return air system shall be provided with smoke detectors in accordance with Section 606.2.1 and 606.2.2.

Exception: Individual smoke detectors shall not be required for each fan-powered terminal unit, provided that such units do not have an individual design capacity greater than $2,000 \text{ cfm} (0.9 \text{ m}^3/\text{s})$ and will be shut down by activation of one of the following:

1. Smoke detectors required by Sections 606.2.1, 606.2.2 and 606.2.4.

2. An approved area smoke detector system located in the return air plenum serving such units.

3. An area smoke detector system as prescribed in the exception to Section 606.2.2. In all cases, the smoke detectors shall comply with Sections 606.4 and 606.4.1.

606.2.4. Return air risers. Where return air risers serve two or more stories and serve any portion of a return air system having a design capacity greater than 15,000 cfm (7.1 m³/s), smoke detectors shall be installed at each story. Such smoke detectors shall be located upstream of the connection between the return air riser and any air ducts or plenums.

(9) Amend section 607.5.4 of the *International Mechanical Code* 2009 by replacing said section with the following [effective date of April 1, 2010, ratified June 18, 2012]:

607.5.4 Corridors/smoke barriers. A listed smoke damper designed to resist the passage of smoke shall be provided at each point a duct or air transfer opening penetrates a smoke barrier wall or a corridor enclosure required to have smoke and draft control doors in accordance with the International Building Code. Smoke dampers and smoke damper actuation methods shall comply with Section 607.5.4.1.

Exceptions:

 Smoke dampers are not required in corridor penetrations where the building is equipped throughout with an approved smoke control system in accordance with Section 513 and smoke dampers are not necessary for the operation and control of the system.
 Smoke dampers are not required in smoke barrier penetrations where the openings in ducts are limited to a single smoke compartment and the ducts are constructed of steel.
 Smoke dampers are not required in corridor penetrations where the duct is constructed of steel not less than 0.019 inch (0.48 mm) in thickness and there are no openings serving the corridor.

4. Fire and smoke dampers shall not be installed in laboratory fume hood exhaust systems.

5. Fire and smoke dampers shall not be installed in hazardous exhaust systems.

607.5.4.1 Smoke damper. The smoke damper shall close upon actuation of a listed smoke detector or detectors installed in accordance with the *International Building Code* and one of the following methods, as applicable:

1. Where a damper is installed within a duct, a smoke detector shall be installed in the duct within 5 feet (1524 mm) of the damper with no air outlets or inlets between the detector and the damper. The detector shall be *listed* for the air velocity, temperature and humidity anticipated at the point where it is installed.

2. Where a damper is installed above smoke barrier doors in a smoke barrier, a spot-type detector *listed* for releasing service shall be installed on either side of the smoke barrier door opening.

3. Where a damper is installed within an unducted opening in a wall, a spot-type detector *listed* for releasing service shall be installed within 5 feet (1524 mm) horizontally of the damper.

4. Where a damper is installed in a corridor wall, the damper shall be permitted to be controlled by a smoke detection system installed in the corridor.

5. Where a total-coverage smoke detector system is provided within all areas served by an HVAC system, dampers shall be permitted to be controlled by the smoke detection system.

(10) Amend section 607.5.5 of the *International Mechanical Code* 2009 by replacing said section with the following [effective date of April 1, 2010, ratified June 18, 2012]:

607.5.5 Shaft enclosures. Shaft enclosures that are permitted to be penetrated by ducts and air transfer openings shall be protected with approved fire and smoke dampers installed in accordance with their listing.

Exceptions:

1. Fire dampers are not required at penetrations of shafts where:

1.1. Steel exhaust subducts extend at least 22 inches (559 mm) vertically in exhaust shafts provided that there is a continuous airflow upward to the outdoors; or

1.2. Penetrations are tested in accordance with ASTM E 119 or UL 263 as part of the fire-resistance-rated assembly; or

1.3. Ducts are used as part of an approved smoke control system in accordance with Section 909 of the *International Building Code*, and where the fire damper will interfere with the operation of the smoke control system; or

1.4. The penetrations are in parking garage exhaust or supply shafts that are separated from other building shafts by not less than 2-hour fire-resistance-rated construction.

2. In Group B and R occupancies equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 of the *International Building Code*, smoke dampers are not required at penetrations of shafts where kitchen, clothes dryer, bathroom and toilet room exhaust openings with steel exhaust subducts, having a minimum thickness of 0.0187 inch (0.4712 mm) (No. 26 gage), extend at least 22 inches (559 mm) vertically and the exhaust fan at the upper terminus is powered continuously in accordance with the provisions of Section 909.11 of the *International Building Code*, and maintains airflow upward to the outdoors.

3. Smoke dampers are not required at penetrations of exhaust or supply shafts in parking garages that are separated from other building shafts by not less than 2-hour fire-resistance-rated construction.

4. Smoke dampers are not required at penetrations of shafts where ducts are used as part of an approved mechanical smoke control system designed in accordance with Section 909 of the *International Building Code* and where the smoke damper will interfere with the operation of the smoke control system.

5. Fire dampers and combination fire/smoke dampers are not required in kitchen and clothes dryer exhaust systems installed in accordance with this code.

6. Fire and smoke dampers shall not be installed in laboratory fume hood exhaust systems.

7. Fire and smoke dampers shall not be installed in hazardous exhaust systems.

607.5.5.1 Enclosure at the bottom. Shaft enclosures that do not extend to the bottom of the building or structure shall be protected in accordance with Section 708.11 of the *International Building Code*.

(11) Add new section 928.1 of the *International Mechanical Code* 2009 with the following [effective January 14, 2011, ratified June 18, 2012]:

928.1 Solid Fuel-Burning Boilers. Solid Fuel-Burning Boilers listed and conforming to European Committee for Standardization 1999 EN 303-5, "Heating Boilers – Part 5: Heating Boilers for Solid-

fuels, Hand and Automatically Stoked, Nominal Heat Output of Up to 300 kW – Terminology, Requirements, Testing and Marking "shall be permitted for biomass fuels when all data plates; warning labels; limits on temperature and pressure of relief valves; installation, operations, and maintenance manuals; all operating and safety gauges and controls; and construction and emissions specification documents are provided in English using U.S. customary system units of measurement. All pipe connections shall meet the North American ASTM standards for pipe and fittings.

(12) Amend section 1002.2.2 of the *International Mechanical Code* 2009 by replacing said section with the following [effective date of April 1, 2010, ratified June 18, 2012]:

1002.2.2 Temperature limitation. Where a combination potable water-heating and space-heating system requires water for space heating at temperatures higher than 130° F (55°C), a temperature actuated mixing valve that conforms to ASSE 1017 shall be provided to temper the water supplied to the potable hot water distribution system to a temperature of 130° F (55°C) or less.

(13) Add section 1002.4 of the *International Mechanical Code* 2009 with the following [effective date of April 1, 2010, ratified June 18, 2012]:

1002.4 Water temperature at faucets. Water temperature shall be limited to 130°F (55°C) at faucets used for personal and domestic hygiene. This shall not affect other water temperature requirements in this code.

(14) Amend section 1003.1 of the *International Mechanical Code* 2009 by replacing said section with the following [effective January 14, 2011, ratified June 18, 2012]:

1003.1 General: All pressure vessels shall be in accordance with the ASME Boiler and Pressure Vessel Code, or with the European Committee for Standardization 1999 EN 303-5 shall bear the label of an approved agency and shall be installed in accordance with the manufacturer's installation instructions.

(15) Add new section 1004.1.1 of the *International Mechanical Code* 2009 with the following [effective January 14, 2011, ratified June 18, 2012]:

1004.1.1 Solid Fuel-Burning Boilers. Solid Fuel-Burning Boilers listed and conforming to European Committee for Standardization 1999 EN 303-5 "Heating Boilers – Part 5: Heating Boilers for Solid-fuels, Hand and Automatically Stoked, Nominal Heat Output of Up to 300 kW – Terminology, Requirements, Testing and Marking" shall be permitted for biomass fuels when all data plates; warning labels; limits on temperature and pressure of relief valves; installation, operations, and maintenance manuals; all operating and safety gauges and controls; and construction and emissions specification documents are provided in English using U.S. customary system units of measurement. All pipe connections shall meet the North American ASTM standards for pipe and fittings.

(16) Amend Chapter 15 Referenced Standards of the *International Mechanical Code* 2009 to add new standards as follows [effective January 14, 2011, ratified June 18, 2012]:

CEN European Committee for Standardization

CEN-CENELEC Management Centre

Avenue Marnix 17 B-100 Brussels Tel: +32 2 550 08 11 Fac: +32 2 550 08 19

EN European Standard

303-5 Heating Boilers – Part 5: Heating Boilers for Solid-fuels, Hand and Automatically Stoked, Nominal Heat Output of Up to 300 kW – Terminology, Requirements, Testing and Marking (1999)

PART Bcr 306 AMENDMENTS TO THE INTERNATIONAL ENERGY CONSERVATION CODE 2009

Bcr 306.01 International Energy Conservation Code 2009

(a) Pursuant to RSA 155-A:10, V, the board hereby adopts the following amendments to the applicable provisions of the *International Energy Conservation Code* 2009:

(1) Amend section 101.1 of the *International Energy Conservation Code* 2009 by replacing said section with the following [effective date of April 1, 2010, ratified June 18, 2012:

101.1 Title. These regulations shall be known as the *International Energy Conservation Code of the State of New Hampshire*, hereinafter referred to as "this code."

(2) Amend section 101.5 of the *International Energy Conservation Code* 2009 by replacing said section with the following [effective: April 1, 2010, replaced February 10, 2012]:

101.5 Compliance Residential buildings shall meet the provisions of Chapter 4. Commercial buildings shall meet the provisions of Chapter 5.

Exception: Any structure three stories or less above grade plane in height and less than 4,000 ft2 (372 m2) in gross floor area is permitted to show compliance based on Chapter 4.

(2) Amend section 101.5 of the *International Energy Conservation Code* 2009 by replacing said section with the following [effective February 10, 2012, ratified June 18, 2012]:

101.5 Compliance. Residential buildings shall meet the provisions of Chapter 4. Commercial buildings shall meet the provisions of Chapter 5. Log structures shall meet the provisions of Section 305 of the *ICC-400 2012 Standard on the Design and Construction of Log Structures*

(3) Amend section 403.4 of the *International Energy Conservation Code* 2009 by replacing said section with the following [effective date of April 1, 2010, ratified June 18, 2012]:

403.4 Circulating hot water systems. All circulating service hot water piping shall be insulated to at least R- 4. Circulating hot water systems shall include an automatic or readily accessible manual switch that can turn off the hot water circulating pump when the system is not in use.

(4) Add footnote "k" to the Mass Wall R-value column of TABLE 402.1.1 Insulation and Fenestration Requirements by Component to the *International Energy Conservation Code* 2009 as follows: [effective: April 1, 2010, deleted February 10, 2012]k. Log walls complying with ICC400 and with a minimum average wall thickness of 5" or greater shall be permitted in Zones 5-8 when overall window glazing is .31 U-factor or lower, minimum heating equipment efficiency of 90 AFUE (gas) or 84 AFUE (oil), and all other component requirements are met.

INSULATION AND FENESTRATION REQUIREMENTS BY COMPONENT ⁴										
		SKYLIGHT ^a UFACTOR	GLAZED FENESTRATION SHGC ^{L B}	CELING R-VALUE	WOOD FRAME WALL	MASS WALL R-VALUE	FLOOR R-VALUE	BASEMENT ^E WALL R-VALUE	SLAB ^I R-VALUE	CRAWL SPACE ⁶ WALL A-VALUE
1	1.2	0.75	0.30	30	13	3/4	13	0	0	0
2	0.65	0.75	0.30	30	13	4/6	13	0	0	0
3	0.50	0.65	0.30	30	13	5/8	19	5/13	0	5/13
4 except Marine	0.35	0.60	NR	38	13	5/10	19	10/13	10, 2 ft	10/13
5 and Marine 4	0.35	0.60	NR	38	20 or 13+54	13/17	304	10/13	10, 2 ft	10/13
6	0.35	0.60	NR	49	20 or 13+54	15/19	30/	15/19	10, 4 ft	10/13
7 and 8	0.35	0.60	NR	49	21	19/21	381	15/19	10, 4 ft	10/13

TABLE 402.1.1 ATION AND FENESTRATION REQUIREMENTS BY COMPONEN

PART Bcr 307 AMENDMENTS TO THE NATIONAL ELECTRICAL CODE 2014

Bcr 307.1 National Electrical Code 2014

(a) Pursuant to RSA 155-A:10, V, the board hereby adopts the following amendments to the applicable provisions of the *National Electrical Code* 2014.

(1) The *National Electrical Code* 2011 is replaced with the *National Electrical Code* 2014 [effective date of January 1, 2015, ratified August 1, 2014].

(2) Amend section 210.5(C)(1) Branch Circuits Supplied from More Than One Nominal Voltage System of the *National Electrical Code* 2014 by replacing said section with the following [effective date January 1, 2015, [ratified August 1, 2014]]:

210.5 Identification for Branch Circuits

(C) Identification of Ungrounded Conductors. Underground conductors shall be identified in compliance with 210.5(C)(1)(a) and (b), as applicable.

(1) Branch Circuits Supplied from More Than One Nominal Voltage System. Where the premises wiring system has branch circuits supplied from more than one nominal voltage system, each ungrounded conductor of a branch circuit, where accessible, shall be identified by system at all terminations connection, and splice points in compliance with 210.5(C)(1)(a) and (b).

(a) *Means of Identification*. The means of identification shall be permitted to be by separate color coding, marking tape, tagging, or other approved means.

(b) *Posting of Identification Means*. The method utilized for conductors originating within each branchcircuit panelboard or similar branch-circuit distribution equipment shall be documented in a manner that is readily available or shall be permanently posted at each branch-circuit panelboard or similar branch-circuit distribution equipment.

PART BCr 308 AMENDMENTS TO THE INTERNATIONAL RESIDENTIAL CODE 2009

Bcr 308.01 International Residential Code 2009

(a) Pursuant to RSA-A:10, V, the board hereby adopts the following amendments to the applicable provisions of the *International Residential Code* 2009.

(1) Amend section R101.1 of the *International Residential Code* 2009 by replacing said section with the following [effective date of April 1, 2010, ratified June 18, 2012:

Title. These regulations shall be known as the *Residential Code for One- and Two-Family Dwellings of the State of New Hampshire* hereinafter referred to as "this code."

(2) Amend section R102.7 of the *International Residential Code* 2009 by replacing said section with the following [effective date of April 1, 2010, ratified June 18, 2012:

Existing structures. The legal occupancy of any structure existing on the date of adoption of this code shall be permitted to continue without change, except as is specifically covered in this code or as is deemed necessary by the building official for the general safety and welfare of the occupants and the public.

(3) Amend section R202 of the *International Residential Code* 2009 to add new definition as follows [effective January 14, 2011, ratified June 18, 2012]:

BIOMASS FUEL. For use in this section, biomass fuels are defined as "solid" organic matter, not including woods derived from construction or demolition debris; wood that has been chemically treated; or agricultural crops or aquatic plants or byproducts from such crops or plants which have been used to rehabilitate a contaminated or brownfields site through a process known as "phytoremediation".

(4) Add footnote "I" to the Ground Snow Load column of TABLE R301.2(1) Climatic and Geographic Design Criteria and add footnote "I" below [effective date of April 1, 2010, ratified June 18, 2012.

I. The jurisdiction shall fill in this part of the table with the ground snow load from Figure R301.2(5) or from Table 1 of Ground Snow Loads for New Hampshire ERDC/CRREL TR-02-6.

	CLIMATIC AND GEOGRAPHIC DESIGN CRITERIA										
GROUND	WIND DESIGN		SEISMIC	SUBJECT TO DAMAGE FROM		WINTER	ICE BARRIER		AIR	MEAN	
SNOW LOAD	Speed ⁸ (mph)	Topographic effects ⁴	DESIGN CATEGORY	Weathering*	Frost line depth ^b	Termite ^c	DESIGN TEMP*	UNDERLAYMENT REQUIRED [®]	FLOOD HAZARDS ^p	FREEZING INDEX	ANNUAL TEMP

TABLE R301.2(1)

(5) Amend section R302.2 of the *International Residential Code* 2009 by replacing said section with the following language [effective date of April 1, 2010, ratified June 18, 2012:

R302.2 Townhouses. Each townhouse shall be considered a separate building and shall be separated by fire-resistance-rated wall assemblies meeting the requirements of Section R302.1 for exterior walls.
Exception: A common 2-hour fire-resistance-rated wall assembly tested in accordance with ASTM E 119 or UL 263 is permitted for townhouses if such walls do not contain plumbing or mechanical equipment, ducts or vents in the cavity of the common wall. The wall shall be rated for fire exposure from both sides and shall extend to and be tight against exterior walls and the underside of the roof sheathing. Electrical installations shall be in accordance with Chapters 34 through 43. Penetrations of electrical outlet boxes shall be in accordance with Section R302.4. The wall is permitted to be 1-hour fire resistance-rated where the building is protected by a sprinkler system complying with Section R313.1.1.

R302.2.1 Continuity. The fire-resistance-rated wall or assembly separating townhouses shall be continuous from the foundation to the underside of the roof sheathing, deck or slab. The fire-resistance rating shall extend the full length of the wall or assembly, including wall extensions through and separating attached enclosed accessory structures.

R302.2.2 Parapets. Parapets constructed in accordance with Section R302.2.3 shall be constructed for townhouses as an extension of exterior walls or common walls in accordance with the following:

1. Where roof surfaces adjacent to the wall or walls are at the same elevation, the parapet shall extend not less than 30 inches (762 mm) above the roof surfaces.

2. Where roof surfaces adjacent to the wall or walls are at different elevations and the higher roof is not more than 30 inches (762 mm) above the lower roof, the parapet shall extend not less than 30 inches (762 mm) above the lower roof surface.

Exception: A parapet is not required in the two cases above when the roof is covered with a minimum class C roof covering, and the roof decking or sheathing is of noncombustible materials or approved fire-retardant-treated wood for a distance of 4 feet (1219 mm) on each side of the wall or walls, or one layer of 5/8-inch (15.9 mm) Type X gypsum board is installed directly beneath the roof decking or sheathing, supported by a minimum of nominal 2-inch (51 mm) ledgers attached to the sides of the wall or walls.
3. A parapet is not required where roof surfaces adjacent to the wall or walls are at different

elevations and the higher roof is more than 30 inches (762 mm) above the lower roof. The common wall construction from the lower roof to the underside of the higher roof deck shall have not less than a 1-hour fire-resistance rating. The wall shall be rated for exposure from both sides.

EXTERIOR	WALL ELEMENT	MINIMUM FIRE-RESISTANCE RATING	MINIMUM FIRESEPARATION DISTANCE	
Walls	(Fire-resistance rated)	1 hour-tested in accordance with ASTM E 119 or UL 263 with exposure from both side	< 5 feet	
	(Not fire-resistance rated)	0 hours	≥ 5 feet	
	(Fire-resistance rated)	1 hour on the underside	≥ 2 feet to 5 feet	
Projections	(Not fire-resistance rated)	0 hours	5 feet	
	Not allowed	N/A	< 3 feet	
Openings in walls	25% maximum of wall area	0 hours	3 feet	
	Unlimited	0 hours	5 feet	
Donotrations	A II	Comply with Section R302.4	< 5 feet	
Penetrations	All	None required	5 feet	

TABLE R302.1 EXTERIOR WALLS

For SI: 1 foot = 304.8 mm. N/A = Not Applicable.

R302.2.3 Parapet construction. Parapets shall have the same fire-resistance rating as that required for the supporting wall or walls. On any side adjacent to a roof surface, the parapet shall have noncombustible faces for the uppermost 18 inches (457 mm), to include counterflashing and coping materials. Where the roof slopes toward a parapet at slopes greater than 2 units vertical in 12 units horizontal (16.7-percent slope), the parapet shall extend to the same height as any portion of the roof within a distance of 3 feet (914 mm), but in no case shall the height be less than 30 inches (762 mm).

R302.2.4 Structural independence. Each individual townhouse shall be structurally independent. Exceptions:

1. Foundations supporting exterior walls or common walls.

2. Structural roof and wall sheathing from each unit may fasten to the common wall framing.

- 3. Nonstructural wall and roof coverings.
- 4. Flashing at termination of roof covering over common wall.

5. Townhouses separated by a common fire-resistance-rated wall as provided in Section R302.2.

(6) Amend section R310.1 of the *International Residential Code* 2009 by replacing said section with the following language [effective date of April 1, 2010, ratified June 18, 2012:

R310.1 Emergency escape and rescue required. Basements, habitable attics and every sleeping room shall have at least one operable emergency escape and rescue opening. Where basements contain one or more sleeping rooms, emergency egress and rescue openings shall be required in each sleeping room. Where emergency escape and rescue openings are provided they shall have a sill height of not more than 44 inches (1118 mm) above the floor. Where a door opening having a threshold below the adjacent ground elevation serves as an emergency escape and rescue opening and is provided with a bulkhead enclosure, the bulkhead enclosure shall comply with Section R310.3. The net clear opening dimensions required by this section shall be obtained by the normal operation of the emergency escape and rescue opening from the inside. Emergency escape and rescue openings with a finished sill height below the adjacent ground elevation shall be provided with a window well in accordance with Section R310.2. Emergency escape and rescue openings shall open directly into a public way, or to a yard or court that opens to a public way.

Exceptions:

1. Basements used only to house mechanical equipment and not exceeding total floor area of 200 square feet (18.58 m^2).

2. Emergency escape and rescue openings required by Section 310.1 are permitted to be omitted where the building protected by a sprinkler system complying with Section R313.

(7) Notwithstanding the adoption of the *International Residential Code* 2009 the effective date of Section R313 shall be April 1, 2012 [effective date of April 1, 2010, ratified June 18, 2012.

(8) Delete the following language from Section R313.2 of the *International Residential Code* 2009, One- and two-family dwellings automatic fire systems. Note: This amendment to the State Building Code does not delete Section R313.2.1. or R313.2.2. [effective June 11, 2010, ratified June 18, 2012]:

Effective April 2012, an automatic residential fire sprinkler system shall be installed in one- and twofamily dwellings. Exception: An automatic residential fire sprinkler system shall not be required for additions or alterations to existing buildings that are not already provided with an automatic residential sprinkler system.

(9) Add the following to Section R313 of the *International Residential Code* 2009 [effective date of April 1, 2010, ratified June 18, 2012:

R313.2.2 One- and two-family dwellings automatic fire systems. Buildings provided with an automatic residential fire sprinkler system shall be allowed to exercise all credits regarding egress in accordance with RSA 155-A:2 II (NFPA 101).

(10) Amend section N1101.2 of the *International Residential Code* 2009 by replacing said section with the following language: [effective Feb 10, 2012, ratified June 18, 2012]

N1101.2 Compliance. Compliance shall be demonstrated by either meeting the requirements of the *International Energy Conservation Code*, meeting the requirements of Section 305 of the *ICC-400 2012 Standard on the Design and Construction of Log Structures* or meeting the requirements of this chapter. Climate Zones from Figure N1101.2 or Table N1101.2 shall be used in determining the applicable requirements from this chapter.

(11) Amend Table N1102.1 of the *International Residential Building Code* 2009 with the following [effective date of April 1, 2010, ratified June 18, 2012:

TABLE N1102.1 INSULATION AND FENESTRATION REQUIREMENTS BY COMPONENT Revise climate zone 6, basement wall R value to 15/19 from 10/13.

(12) Amend section N1102.2.2 of the *International Residential Building Code* 2009 by replacing said section with the following language [effective date of April 1, 2010, ratified June 18, 2012:

N1102.2.2 Ceilings without attic spaces. Where Section N1102.1 would require insulation levels above R-30 and the design of the roof/ceiling assembly does not allow sufficient space for the required insulation, the minimum required insulation for such roof/ceiling assemblies shall be R-30. This

reduction of insulation from the requirements of Section N1102.1 shall be limited to 500 square feet (46 m^2) or 20% of the total insulated ceiling area whichever is less. This reduction shall not apply to the U-factor alternative approach in Section N1102.1.2 and the Total UA alternative in Section N1102.1.3.

(13) Amend section N1103.8.3 of the *International Residential Building Code* 2009 by replacing said section with the following language [effective date of April 1, 2010, ratified June 18, 2012:

N1103.8.3 Pool covers. Heated pools shall be equipped with a vapor retardant pool cover on or at the water surface. Pools heated to more than 90°F (32°C) shall have a pool cover with a minimum insulation value of R-12.

Exception: Pools deriving over 60% of the energy for heating from site-recovered energy or solar energy source.

(14) Amend section M2001.1.1 of the *International Residential Code* 2009 by replacing said section with the following [effective January 14, 2011, ratified June 18, 2012]:

M2001.1.1 Standards. Oil-fired boilers and their control systems shall be listed and labeled in accordance with UL 726. Electric boilers and their control systems shall be listed in accordance with UL 834. Boilers shall be designed and constructed in accordance with the requirements of ASME CSD-1 and as applicable, the ASME Boiler and Pressure Vessel Code, Sections I and IV. Gas-fired boilers shall conform to the requirements listed in Chapter 24. Solid Fuel-Burning Boilers listed and conforming to European Committee for Standardization 1999 EN 303-5 "Heating Boilers – Part 5: Heating Boilers for Solid-fuels, Hand and Automatically Stoked, Nominal Heat Output of Up to 300 kW – Terminology, Requirements, Testing and Marking" shall be permitted for biomass fuels when all data plates; warning labels; limits on temperature and pressure of relief valves; installation, operations, and maintenance manuals; all operating and safety gauges and controls; and construction and emissions specification documents are provided in English using U.S. customary system units of measurement. All pipe connections shall meet the North American ASTM standards for pipe and fittings.

(15) Delete Chapter 24 of the *International Residential Code* 2009 in its entirety and add the following [effective date of April 1, 2010, ratified June 18, 2012:

CHAPTER 24, FUEL GAS Fuel gas systems shall comply with the *New Hampshire Fire Code*, Saf-C 6000 (NFPA 54).

(16) Amend section P2601.2 of the *International Residential Code* 2009 by replacing said section with the following [effective date of April 1, 2010, ratified June 18, 2012:

P2601.2 Connections. Plumbing fixtures, drains and appliances used to receive or discharge liquid wastes or sewage shall be directly connected to the sanitary drainage system of the building or premises, in accordance with the requirements of this code. This section shall not be construed to prevent indirect waste systems.

Exception: Bathtubs, showers, lavatories, clothes washers and laundry trays are not required to discharge to the sanitary drainage system where those fixtures discharge to an approved gray water recycling system provided the system complies with Appendix O.

(9) Amend section P2603.6.1 of the *International Residential Code* 2009 by replacing said section with the following [effective date of April 1, 2010, ratified June 18, 2012]:

P2603.6.1 Sewer depth. Building sewers that connect to private sewage disposal systems shall conform to RSA 485-A relative to minimum depth below finished grade. Building sewers that connect to public sewers shall be a minimum depth of 48 inches (1219 mm) below grade or adequately insulated to afford the same protection whenever a condition arises that the 48 inches (1219 mm) cannot be attained.

(17) Add section P2801.8 of the *International Residential Code* 2009 with the following [effective date of April 1, 2010, ratified June 18, 2012:

P2801.8 Water temperature at faucets. Water temperature shall be limited to 130 degrees F at faucets used for personal and domestic hygiene. This shall not affect other water temperature requirements in this code.

(18) Add section P2801.9 of the *International Residential Code* 2009 with the following [effective date of April 1, 2010, ratified June 18, 2012:

P2801.9 Water temperature control in piping from tankless heaters. The temperature of water from tankless water heaters intended for faucets for domestic or personal hygiene use shall be a maximum of 130°F (55°C). This provision shall not supersede the requirement for protective shower valves in accordance with Section 2708.3.

(19) Amend section P2802.2 of the *International Residential Code* 2009 by replacing said section with the following [effective date of April 1, 2010, ratified June 18, 2012:

P2802.2 Temperature control. Where a combination water heater-space heating system requires water for space heating at temperatures exceeding 130°F (55°C) a master thermostatic mixing valve complying with ASSE 1017 shall be installed to temper the water to a temperature of 130°F (55°C) or less for domestic uses.

(20) Add section P2804 of the *International Residential Code* 2009 with the following [effective date of April 1, 2010, ratified June 18, 2012:

P2804 Maximum temperature. Hot water not to exceed 130°F (55°C) shall be supplied at all plumbing fixtures and equipment utilized for bathing, washing, culinary purposes, cleaning, laundry or building maintenance. This provision shall not supersede the requirement for protective shower valves in accordance with Section P2708.3.

(21) Amend section P2903.10 of the *International Residential Code* 2009 by replacing said section with the following [effective date of April 1, 2010, ratified June 18, 2012:

P2903.10 Hose bibb. Hose bibbs subject to freezing, including the "frost-proof" type, shall be equipped with an accessible stop-and-waste-type valve inside the building so that they can be controlled and/or drained during cold periods.

(22) Amend section P2905.9.13 of the *International Residential Code* 2009 by replacing said section with the following language [effective date of April 1, 2010, ratified June 18, 2012:

P2905.9.1.3 PVC Plastic pipe. A primer that conforms to ASTM F 656 shall be applied to PVC solvent cemented joints. Solvent cement for PVC plastic pipe conforming to ASTM D 2564 shall be applied to all joint surfaces.

(23) Amend section P3003.9.20f the *International Residential Code* 2009 by replacing said section with the following language [effective date of April 1, 2010, ratified June 18, 2012:

P3003.9.2 Solvent cementing. Joint surfaces shall be clean and free from moisture. A primer that conforms to ASTM F 656 shall be applied. Solvent cement not purple in color and conforming to ASTM D 2564 CSA B137.3, or CSA B181.2 shall be applied to all joint surfaces. The joint shall be made while the cement is wet and shall be in accordance with ASTM 2855. Solvent-cement joints shall be permitted above or below ground.

(24) Amend section P3003.14.2 of the *International Residential Code* 2009 by replacing said section with the following language [effective date of April 1, 2010, ratified June 18, 2012:

P3003.14.2 Solvent cementing. Joint surfaces shall be clean and free from moisture. A primer that conforms to ASTM F 656 shall be applied. Solvent cement not purple in color and conforming to ASTM D 2564, CSA B137.3, or CSA B181.2 shall be applied to all joint surfaces. The joint shall be made while the cement is wet and shall be in accordance with ASTM 2855. Solvent-cement joints shall be permitted above or below ground.

(25) Amend section P3103.1 of the *International Residential Code* 2009 by replacing said section with the following [effective date of April 1, 2010, ratified June 18, 2012:

P3103.1 Roof extension. Open vent pipes that extend through a roof shall be terminated at least 12 inches (305 mm) above the roof or 6 inches (152 mm) above the anticipated snow accumulation, whichever is greater, except that where a roof is to be used for any purpose other than weather protection the vent extension shall be run at least 7 feet (2134 mm) above the roof.

(26) Adopt Appendix G in its entirety per section R102.5 of the *International Residential Code* 2009 [effective date of April 1, 2010, ratified June 18, 2012.

APPENDIX G SWIMMING POOLS, SPAS, AND HOT TUBS

(27) Adopt Appendix J in its entirety per section R102.5 of the *International Residential Code* 2009 [effective date of April 1, 2010, ratified June 18, 2012.

APPENDIX J EXISTING BUILDINGS AND STRUCTURES

(28) Adopt Appendix O in its entirety per section R102.5 of the *International Residential Code* 2009 [effective date of April 1, 2010, ratified June 18, 2012.

APPENDIX O GREY WATER RECYCLING SYSTEM

PART Bcr 309 AMENDMENTS TO THE INTERNATIONAL EXISTING BUILDING CODE 2009

Bcr 309.01 International Existing Building Code 2009

(a) Pursuant to RSA 155-A:10, V, the board hereby adopts the following amendments to the applicable provisions of the *International Existing Building Code* 2009:

(1) Amend Section 101.1 of the *International Existing Building Code* 2009 by replacing said section with the following [effective date of February 1, 2013]:

101.1 Title. These regulations shall be known as the *Existing Building Code* of the State of New Hampshire hereinafter referred to as "this code."

(2) Amend Section 101.5.1 of the *International Existing Building Code* 2009 by replacing said section with the following [effective date of February 1, 2013]:

101.5.1 Prescriptive compliance method. Repairs, alterations, additions and changes of occupancy complying with Chapter 3 of this code in buildings complying with the *International Fire Code* shall be considered in compliance with the provisions of this code.

1.01.5.1.1 Repairs, alterations and additions to any building that falls under the jurisdiction of the *International Residential Code* complying with the provisions of the IRC Appendix J, shall be considered in compliance with this code.

(3) Amend Section 102.4 of the *International Existing Building Code* 2009 by replacing said section with the following [effective date of February 1, 2013]:

102.4 Referenced codes and standards. The codes and standards referenced in this code shall be considered part of the requirements of this code to the prescribed extent of each such reference. All references in this code to the *International Fuel Gas Code, International Property Maintenance Code and International Fire Code,* are superseded by BCR 300, amendments to the *International Building Code,* 101.4 Referenced codes. Where differences occur between provisions of this code and referenced codes and standards, the provision of this code shall govern.

Exception: Where enforcement of a code provision would violate the conditions of the listing of the equipment or appliance, the conditions of the listing shall govern.

(4) Amend Section 912.5.1 of the *International Existing Building Code* 2009 by replacing said section with the following [effective date of February 1, 2013]:

912.5.1 Height and area for change to higher hazard category. When a change of occupancy classification is made to a higher hazard category as shown in Table 912.5, heights and areas of buildings and structures shall comply with the requirements of Chapter 5 of the *International Building Code* for the new occupancy classification.

Exception: In other than Groups H, F-1 and S-1, in lieu of fire walls, use of fire barriers having a fire-resistance rating of not less than that specified in Table 706.4 of the *International Building Code* constructed in accordance with Section 707 of the *International Building Code*, shall be permitted to meet area limitations required for the new occupancy in buildings protected throughout with an automatic sprinkler system in accordance with *NFPA 13 – Standard for the Installation of Sprinkler Systems*.

(5) Amend Section 1301.2 of the *International Existing Building Code* 2009 by replacing said section with the following [effective date of February 1, 2013]:

1301.2 Applicability. Structures existing prior to September 14, 2003, in which there is work involving *additions, alteration*, or *changes of occupancy* shall be made to conform to the requirements of this chapter or the provisions of Chapter 4 through 12. The provision in Sections 1301.2.1 through 1301.2.5 shall apply to existing occupancies that will continue to be, or are proposed to be, in Groups A, B, E, F, M, R, S and U. These provisions shall not apply to buildings with occupancies in Group H or I.

Questions and comments may be e-mailed to: <u>bldgcodebrd@dos.nh.gov</u>.