

**STATE BUILDING CODE
TECHNICAL REVIEW BOARD**

**INTERPRETATIONS
OF THE
VIRGINIA UNIFORM STATEWIDE
BUILDING CODE**

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PREFACE

The Virginia State Building Code Technical Review Board is a governor-appointed board within the Virginia Department of Housing and Community Development. This board is responsible for hearing appeals arising under the application of the Virginia Uniform Statewide Building Code (USBC), the Virginia Statewide Fire Prevention Code and other regulations of the Department. As a secondary function, the Board interprets the provisions of those codes and makes recommendations to the Virginia Board of Housing and Community Development for future modification, amendment or repeal of such provisions.

Over the past 20 years, the Review Board has issued over 650 interpretations, a vast majority under the earlier editions of the codes. This printing contains only those interpretations determined by the Review Board to be applicable to the current USBC. The earlier interpretations are on file in the Department's records and may need to be considered in the case of an existing building constructed under an earlier edition of the code.

Code enforcement personnel may request the Review Board to reconsider older interpretations for applicability to the current code and may request new interpretations on confusing or unclear provisions. Inquiries should be directed to the Office of the Review Board, Department of Housing and Community Development, 501 North Second Street, Richmond, Virginia 23219.

As the USBC incorporates by reference the BOCA National Building Code series, the following acronyms are used in this booklet to delineate to which model code or referenced standard the interpretation applies:

(CABO)	- CABO One and Two Family Dwelling Code
(NEC)	- NFPA National Electrical Code
(IMC)	- ICC International Mechanical Code
(PM)	- BOCA National Property Maintenance Code

Note to users: This printing contains interpretations issued by the Review Board through August 1999. Interpretations issued by the Review Board subsequent to this printing are distributed in the Department's *Code Connection* newsletter.

**Sections 101.2 & 202.0
Code Interpretation No. 6/93
First Issued: 1/20/95, 1993 Edition**

QUESTION: Do shipping containers fall within the scope of the definition of "structures" when they meet the following criteria:

1. are situated on a piece of property for more than 180 calendar days
2. are not accessory to an active building construction project
3. are used for purposes directly related to primary business activity on the property

ANSWER: Yes. However, since this is a building constructed off site, it would be considered an unregistered industrialized building and would be regulated under the Virginia Industrialized Building Safety Regulations.

**Section 102.3
Code Interpretation No. 2/90
First Issued: 5/17/91, 1990 Edition**

QUESTION: Is a 115 volt, cord and plug connected customer deposit conveyor system installed at a bank drive-up teller window considered to be "equipment" subject to the USBC?

ANSWER: Yes

**Sections 105.6 and 108.1
Code Interpretation No. 1/96
First Issued: 8/15/97, 1996 Edition**

QUESTION #1: Is the code official authorized to accept the review of construction documents by a third party reviewer as part of the permit application process?

ANSWER: Yes, based on Sections 105.6 and 108.1.

QUESTION #2: Is the code official authorized to establish criteria by policy for the acceptance of third party construction document reviewers?

ANSWER: Yes, based on Sections 105.6 and 108.1.

**Section 107.1
Code Interpretation no. 2/96
First Issued: 2/20/98, 1996 Edition**

The following devices will be replaced by similar capacity devices in the same location in either Use Group R-2 (four stories or less), R-3 or R-4 by disconnection of the old device and reconnection of the replacement device without any changes to duct systems, plumbing supply, drain, waste and vent piping, electrical circuits, appliance vent systems and gas piping:

- electric water heater
- gas water heater
- oil-fired water heater
- electric furnace
- gas furnace
- oil furnace
- heat pump
- air conditioning condensing unit
- gas log

QUESTION: Would any permit be required? If so, please specify for which devices.

ANSWER: A permit is required for the replacement of; a gas furnace; an oil furnace; and, a gas log under the "given" circumstances. The remaining items are considered to be either plumbing or electrical appliances. A permit is not required to replace; any type of water heater; an electric furnace; a heat pump; or, an air conditioning condensing unit under the "given" circumstances.

COMMENT: The given circumstances for this interpretation request stipulate that no changes to any of the supply lines, venting systems, etc. are necessary in the replacement of the equipment. The Review Board notes that in many instances, replacement equipment will require changes to those systems, thereby requiring that a permit be obtained.

**Section 113.2
Code Interpretation No. 25/90
First Issued: 10/20/92, 1990 Edition**

QUESTION: Can the building official require a permit holder to have the footing inspection which is required under Section 113.2 be performed by a third party not employed by the jurisdiction in which the work is being performed?

ANSWER: No

**Section 113.3
Code Interpretation No. 7/90
First Issued: 7/19/91, 1990 Edition**

QUESTION: Is the electrical service to a building (dwelling unit, etc.) required to be energized in order for an electrical inspector to perform a final inspection?

ANSWER: The building official is authorized by Sections 113.2 and 113.4 to perform various inspections of buildings under construction to determine compliance with the provisions of the USBC. In accordance with Section 113.3, the building official is required to perform a final inspection to insure that all work conforms with the USBC. The building official has authority to require that building electrical systems, components or devices be energized as part of the final inspection.

**Section 310.6 (CABO 602.7)
Code Interpretation No. 3/96
First Issued: 6/19/98, 1996 Edition**

QUESTION #1: Is the definition of the term "noncombustible" as used in Item #4 of Section 602.7 intended to be the same definition of the term as in Section 1202, Mechanical Definitions?

ANSWER: No

QUESTION #2: When unfaced fiberglass batt insulation is used as firestopping in accordance with Section 602.7.1.1, is the requirement of Item #4 of Section 602.7 met?

ANSWER: Yes

**Sections 310.6 & 3404.2 (CABO 1307.3)
Code Interpretation No. 34/90
First Issued: 1/22/93, 1990 Edition**

A permit applicant wants to replace an existing oil furnace (located in a garage) with a new gas furnace.

QUESTION #1: Is the new gas furnace considered equipment of a similar kind?

ANSWER: Yes.

QUESTION #2: Are the fuel lines and fuel storage considered equipment of a similar kind?

ANSWER: No. Any new fuel lines and fuel storage tanks must conform to current code requirements for the new type of fuel.

QUESTION #3: Can the new gas furnace be placed on the floor where the oil furnace was, or is the new gas furnace required to meet the 18 inch above the floor requirement of Section 1307.3 of CABO?

ANSWER: The replacement furnace may be placed on the floor instead of being elevated as long as the burners, burner ignition devices or heating elements and switches are not lower than those of the existing installation.

**Section 310.6 (CABO 2104.2.6)
Code Interpretation No. 5/93
First Issued: 1/20/95, 1993 Edition**

QUESTION: Is mechanical equipment which is required by the manufacturer to be vented to a chimney allowed to be vented by a power venter as an alternative method?

ANSWER: No. Unless the manufacturer of the mechanical equipment permits such a venting method.

**Section 310.6 (CABO 2608.9)
Code Interpretation No. 7/93
First Issued: 1/20/95, 1993 Edition**

QUESTION: Does Section 2608.9 require the metallic gas piping system to be bonded to a separate grounding electrode than is required in accordance with Chapters 39-46 of the code?

ANSWER: No. Section 2608.9 does not require a grounding electrode in addition to the requirements of Chapters 39-46.

**Section 403.1
Code Interpretation No. 17/90
First Issued: 4/17/92, 1990 Edition**

QUESTION: Would a building with a height to the top floor of less than 75-ft. above the lowest level of fire department vehicle access, with an occupiable roof at a level of greater than 75-ft. need to comply with the high-rise requirements?

ANSWER: No

**Sections 904.9 & 1010.3
Code Interpretation No. 26/90
First Issued: 11/20/92, 1990 Edition**

Table 1010.3 specifies the requirements for buildings with one exit. A building of Use Group R-2 with four dwelling units per floor, three stories above grade and equipped throughout with a sprinkler system in accordance with Section 906.2.1 or 906.2.2 would be allowed to have one exit.

QUESTION: Is it the intent of the USBC to allow that same building to have one exit when it meets Exception No. 2 of Section 904.9, which eliminates the requirement for a sprinkler system?

ANSWER: Yes. To achieve compliance with Section 1010.3, Section 904.9 equates a three story building in which every two dwelling units are separated with a two hour fire separation assembly to that of a three story building provided with sprinklers in accordance with Section 906.2.1 or 906.2.2.

**Section 915.7
Code Interpretation No. 9/90
First Issued: 10/31/91, 1990 Edition**

QUESTION: Are standpipe hose connections required to be located in accordance with NFPA 14 so that all parts of a floor area may be reached by a 30 foot hose stream from a nozzle attached to not more than 100 feet of hose connected to the riser outlet?

ANSWER: No. See Sections 102.4 and 915.7.

**Section 918.7.1
Code Interpretation No. 43/90
First Issued: 3/18/94, 1990 Edition**

A Use Group E building is equipped with commercial cooking equipment with an exhaust hood and suppression system. The building is required to have a fire alarm system.

QUESTION: Does Section 918.7.1 require the activation of the fire alarm system audio/visual alarm indicating appliances upon discharge of the hood/duct and cooking appliance fire suppression system?

ANSWER: Section 918.7.1 does not specifically require range hood extinguishing systems to be connected to the alarm system; however, Sections 910.1 and 914.1 require dry- and wet-extinguishing systems to comply with NFPA standards, which, in turn, require the systems to be connected to the alarm system, if one is provided.

**Section 1705.1
Code Interpretation No. 39/90
First Issued: 6/18/93, 1990 Edition**

Section 1705.1 states that special inspectors shall be qualified and approved for the inspection of the work under the special inspection requirements.

QUESTION: Is the structural engineer of record the only entity which the building official should consider qualified for approval as a special inspector?

ANSWER: No. The special inspectors are not required to be licensed professionals but must be qualified to inspect the work. The building official may approve anyone deemed qualified to perform the special inspections.

**Section 2701.1 (NEC Table 310-16)
Code Interpretation No. 44/90
First Issued: 3/18/94, 1990 Edition**

QUESTION: When installing a heat pump/air conditioner which has a nameplate specifying a minimum supply circuit conductor amperage of 16.1 amperes and a maximum branch-circuit short-circuit and ground-fault protective device of 25 amperes in accordance with Article 440, is it permissible to use a 25 amp circuit breaker with 14 AWG NM type cable to supply power to the equipment?

ANSWER: Yes. Since Section 240-3(h) permits HVAC equipment circuit conductors to be protected against over-current current according to Parts C and F of Article 440, the obelisk note at the bottom of Table 310-16 does not apply. All other applicable provisions of the NEC not specifically addressed in the question must be complied with in order to use the stated conductor sizes and over-current protection.

**Section 2801.2 (IMC 509.4)
Code Interpretation No. 27/90
First Issued: 11/20/92, 1990 Edition**

QUESTION: Is it the intent of Section M-509.4 to require lighting fixtures used for illumination of the cooking area and located in the kitchen hood space to shut off with the actuation of the fire suppression system?

ANSWER: No. The lighting fixtures must comply with Section 410-4(c) of the NEC.

**Section 2801.2 (IMC 509.4)
Code Interpretation No. 38/90
First Issued: 6/16/93, 1990 Edition**

Section 509.4 states that a commercial exhaust hood suppression system must automatically shut down the fuel or electrical supply to the cooking equipment.

QUESTION #1: If the cooking equipment's fuel source is gas but also contains electrical components such as spark ignition, temperature control devices, tilt assemblies or clocks, blower motors, etc., must the actuation of the suppression system also automatically shut down the electrical supply?

ANSWER: No. The activation of the suppression system is only required to shut off the source of fuel or heat in the cooking equipment which would contribute to the spread of a fire.

QUESTION #2: If an appliance not requiring a hood, such as an enclosed oven or auxiliary cooking equipment, is located under a hood anyway, is its fuel or electrical supply required to be automatically shut down upon activation of the suppression system?

ANSWER: Yes. If its source of fuel is gas.

**Section 2801.2 (IMC 602.1)
Code Interpretation No. 20/90
First Issued: 7/17/92, 1990 Edition**

QUESTION: Is it the intent Section 602.1 to prohibit completely sealed (combustion chamber and combustion air) fuel-fired mechanical appliances located in a return-air plenum?

ANSWER: Yes. Section 602.1 prohibits the installation of fuel-fired equipment in plenums. Technical data, research reports or other information may be submitted to the code official to substantiate a modification request for the use of a specific unit listed for that purpose.

**Section 2801.2 (IMC Chapter 7 and Sections 901 and 926)
Code Interpretation No. 5/96
First Issued: 9/18/98, 1996 Edition**

QUESTION: Is an unvented room heater installed in a building of unusually tight construction required to comply with both Section 926 and Chapter 7?

ANSWER: Yes. Section 901.2 states the requirements of Chapter 9 are in addition to other requirements of the code.

**Section 3401.2
Code Interpretation No. 8/93
First Issued: 2/17/95, 1993 Edition**

QUESTION: Are the provisions or portions thereof in the BOCA National Property Maintenance Code relating to premises, as opposed to structures, enforceable as part of the USBC?

ANSWER: No. Section 3401.2 limits the application of the BOCA Property Maintenance Code to buildings and structures only.

**Section 3401.2 (PM-304.1 and PM-304.2)
Code Interpretation No. 4/96
First Issued: 6/19/98, 1996 Edition**

QUESTION: Is peeling, flaking or chipped paint on exterior surfaces required to be eliminated and repainted when the surfaces are not subject to deterioration without the paint, such as a brick wall or vinyl siding?

ANSWER: No

**Section 3404.2
Code Interpretation No. 4/90
First Issued: 6/14/91, 1990 Edition**

QUESTION: If an existing non pressure balanced valve is to be replaced, is it required to be replaced with a pressure balanced valve?

ANSWER: No. Section 3404.2 permits the valve to be replaced without meeting the requirements for a pressure balancing or a thermostatic mixing valve.

**Sections 3408.0 and 202.0
Code Interpretation No. 7/96
First Issued: 8/20/99, 1996 Edition**

An existing building is proposed to be changed and Section 3408.0 (Compliance Alternatives) is elected to be used for compliance with the USBC.

QUESTION #1: If an existing tenant space is altered without a change of occupancy, are any requirements of Sections 3404.0 or 1110.0 applicable?

ANSWER: No

QUESTION #2: Is a planned increase in the number of occupants in a portion of a building a change of occupancy?

ANSWER: Yes, provided the increase in occupant load involves a change in application of the requirements of the USBC.