Interpretations

Of

The

1984 USBC

Interpretation 1/84

Issued April 18, 1986
Article 220-3(b)(2), National Electrical Code/1984 Edition

Q. (1) Is it the intent of Article 220-3(b)(2) that "each" of the countertop receptacle outlets installed in the kitchen be supplied by not less than two small appliance branch circuit?

Q. (2) Is it the intent of Article 220-3(b)(2) that two small branch circuits be provided to alternately supply countertop receptacle outlets such that any one outlet would be served by no more than one of the two provided circuits?

Q. (3) Is it the intent of Article 220-3(b)(2) that two small appliance branch circuits be provided for countertop receptacle outlets for connections such that at least one outlet is served from each circuit?

A. (1) No.

A. (2) No.

A. (3) No. At least one countertop small appliance outlet and one general appliance on another circuit.

Interpretation 2/84

Issued April 18, 1986
Section 1702.8, BOCA Basic/National Building Code/1984 Edition

Q. Are the following alternatives considered as acceptable methods of compliance with Section 1702.8 of the USBC when requests are submitted under Section 107 of the USBC?

One story nurseries, housing 100 children or less, with each room having an exit to the outside. In addition, day nurseries housing 100 children or less, located on the first floor only in buildings of Type 1, 2, 3, or 4 construction not over three stories in height or of Type 5A construction not over two stories in height, provided:

a. each room occupied by the children has an exit discharging directly to the exterior; and the vertical travel from the floor level does not exceed five feet;

b. any basement is separated by construction by at least one hour fire resistance rating; or is protected by a sprinkler system; and

c. a complete automatic smoke detection system is installed throughout the building in accordance with the requirements of Section 1716.0 of the code.

A. Yes.

Interpretation 3/84

Issued April 18, 1986
Sections M-303.1, M-303.2, and M-303.2.1, BOCA Basic/National Mechanical Code/1984 Edition

Q. Does M-303.2.1 prohibit the use of flexible duct material from exceeding distances of 14 feet when used as a connector in a mechanical system?

A. No. When flexible duct material meets the requirements of UL 181, as duct material, its length is not restricted by M- 303.2.1.

Interpretation 4/84

Issued June 20, 1986
Sections P-500.5, P-906.1.2, P-1214.3, and P-1506.1 BOCA Basic National Plumbing Code/1984 Edition

Q. (1) Does the requirement of P-500.5 for accessibility apply to water utility connections below ground which are privately owned (curb valve-water meter(?

Q. (2) Does the accessibility requirement of P-500.5 apply to piping material and not connection to dissimilar valves or fixture fittings?

Q. (3) Would cleanouts the same diameter as the building drain, or building sewer, within the building on privately owned and maintained property meet the intent of P-1106 in the location cited for manholes?

Q. (4) Is the intent of P-1214.3 to require an air gap when discharging into the:

a. tail-piece of a kitchen sink?
b. dishwasher connection of a food waste grinder?
c. or into the tail-piece of a food waste grinder?

Q. (5) May hot water be required in use groups not mentioned in Section P-1506.1 pursuant to basic principle number three (3)?

A. (1) Yes.

A. (2) Yes.

A. (3) Yes.

A. (4) a. No; b. No; c. Yes.

A. (5) No, the basic principles are only enforceable when unforeseen situations arise, which are not specifically addressed by the code; Section P-1506.1 specifically addresses the location which require hot water.

Interpretation 5/84

Issued June 20, 1986
Section 309.5, BOCA Basic/National Building Code/1984 Edition

Q. If the CABO One and Two Family Dwelling Code is used for the building permit, do the mechanical and plumbing permits have to comply with CABO as well, or may BOCA be used at the permit applicants' option for the additional trade permit for the same dwelling unit?

A. Yes, unless a modification is granted by the building official, per Section 107 of the 1984 USBC, allowing the use of the BOCA model codes.

Interpretation 6/84

Issued June 20, 1986
Section 512.1, USBC, Volume I/1984 Edition

Q. Is the intent of paragraph four (4) to require areas on upper floors, which are open to the public, to be made accessible to the handicapped?

A. No.

Interpretation 7/84

Issued June 20, 1986
Section 1716.3, BOCA Basic/National Building Code/1984 Edition

Q. Are smoke detectors required on all levels of:

1. detached one and two family dwellings?
2. multilevel dwelling units in buildings of Use Group R-1?
3. multilevel dwelling units in buildings of Use Group R-2?
4. multilevel sleeping areas in buildings of Use Group R-3?
5. common areas of buildings of Use Group R-1?
6. common areas of buildings of Use Group R-2?
7. common areas of buildings of Use Group R-3?
8. Are multiple detectors in these buildings required to be interconnected?

A. The increased requirements for automatic fire alarm system (smoke detectors) requirements are applicable only to those buildings constructed under the 1984 Code, effective April 1, 1986.

Interpretation 8/84

Issued June 20, 1986
Section P-500.5, BOCA Basic/National Plumbing Code/1984 Edition

Q. Is the intent of this section to require an access panel for all dissimilar piping materials joined behind a wall?

A. Yes.

Interpretation 9/84

Issued June 20, 1986
Section 1702.9, Item 1 and 201.0, BOCA Basic/National Building Code/1984 Edition

Q. (1) Is the area addressed in 1702.9(1) a fire area as defined in 201.0?

Q. (2) Does this area include the thickness of exterior walls and fire walls?

Q. (3) Does this area include exterior space under a roof or canopy at an entrance or loading area?

A. (1) No, building area as defined in 201.

A. (2) No.

A. (3) Yes.

Interpretation 10/84

Issued June 20, 1986
Section P-1402.7 and P-1402.8, BOCA Basic/National Plumbing Code/1984 Edition

Q. (1) Can the exhaust from a vacuum pump be connected to a vent stack?

Q. (2) Can the waste from a central vacuum (fluid suction) system be indirectly connected to a floor drain or floor sink?

A. (1) No. P-1402.7 requires that exhaust discharge separately to the outer atmosphere above the roof.

A. (2) No. P-1402.8.1 requires waste piping to be directly connected to the sanitary drainage system.

Interpretation 11/84

Issued September 5, 1986
Section P-1402.7 and P-1402.8, BOCA Basic/National Plumbing Code/1984 Edition

Q. (1) Can the exhaust from a vacuum pump be connected to a vent stack?

Q. (2) Can the waste from a central vacuum (fluid suction) system be indirectly connected to a floor drain or floor sink?

Q. (3) Can the piping be installed in a concrete slab?

A. (1) No. P-1402.7 requires that exhaust discharge separately to the outer atmosphere above the roof.

A. (2) No. P-1402.8.1 requires waste piping to be directly connected to the sanitary drainage system.

A. (3) Yes.

Interpretation 12/84

Issued September 5, 1986
Section P-906.1.2, BOCA Basic/National Plumbing Code/1984 Edition

Q. For clarification and enforcement purposes of Section 906.1.2, can the assumption be made that the intent of the article could read as follows?

Where a stack has not been developed or where a relief vent has not been provided, the wet vent drainage pipe shall connect to the upper half of a horizontal soil pipe or water closet bend at a maximum angle of 45 degrees from the direction of flow; and

When connected to a stack, the wet vent drainage pipe may connect at the same level as the water closet bend, or below the water closet, or it shall connect to the water closet bend at a maximum angle of 45 degrees from the direction of flow.

A. Yes.

Interpretation 13/84

Issued September 5, 1986
Section 1409.4 and 1410, BOCA Basic/National Building Code/1984 Edition

Q. (1) Is a shaft wall a fire separation wall as implied in Section 1409.4?

Q. (2) If so, is the construction supporting the shaft required to have a fire resistance rating at least equal to that of the shaft, even in the type 2C, 3B and 5B construction?

A. (1) Yes.

A. (2) Yes.

Interpretation 14/84

Issued September 5, 1986
Section 911.2 and 101.2, USBC, Volume I, and BOCA Basic/National Building Code/1984 Edition

Q. (1) In light of Section 101.2 of the Virginia Uniform Statewide Building Code, Volume I, New Construction Code, does a local building official have the right of authority to modify Section 911.2 on a local basis?

Q. (2) If such right or authority exists, what procedures or administrative action must be taken by the local building official in order to institute such a change?

Q. (3) Does the enclosed material generated by the building official in an adjoining county form a sufficient basis and determination for modification of the statewide code?

A. (1) No. Section 101.2 does not give the building official authority to modify Section 911.2.

A. (2) Not applicable.

A. (3) Not applicable.

Interpretation 15/84

Issued September 5, 1986
Section 809.4, BOCA Basic/National Building Code/1984 Edition and R-211.1, CABO One and Two Family Dwelling Code/1984

Q. Does a tilt sash window similar to the type manufactured by Better Built Aluminum Products Company series 560, meet the requirements and intent of Section 809.4 and R-211.1 of the Virginia Uniform Statewide Building Code?

A. Yes.

Interpretation 16/84

Issued September 5, 1986
Section 120.2.1, USBC, Volume I/1984 Edition

Given: Existing service panel in a home built prior to September 1, 1973 is located in utility room. Washer and dryer are located in front and beneath panel. The owner wishes to upgrade service or replace existing panel.

Q. (1) Can new or replacement panel be installed in existing panel location?

Q. (2) Is a weatherproof disconnect required?

A. (1) Yes, provided no hazardous condition exists due to the installation.

A. (2) No, unless required to provide a safe installation.

Interpretation 17/84

Issued September 5, 1986
Section 2000.1, Item #4, BOCA Basic/National Building Code/1984 Edition; Article 331-3 National Electrical Code/1984 Edition, Addendum 1, USBC, Volume I/1984 Edition

Q. Is it the intent of this change to eliminate the height limitation for:

a) one and two family dwellings?
b) multifamily dwellings?
c) other structures?

A. a) Yes.
A. b) Yes.
A. c) Yes.

Interpretation 18/84

Issued September 5, 1986
Sections 201.0, 301.1, 617.1, 1711.2.9, and 1711.2.11, BOCA Basic/National Building Code/1984 Edition

Q. What section of the code outlines the standpipe requirements for open parking structures?

A. Section 1711.2.9, Statement #2.

Interpretation 19/84

Issued September 5, 1986
Section 309.5, BOCA Basic/National Building Code/1984 Edition

Q. (1) Does the permit applicant have the option to design a detached one-or-two family dwelling as R-4 or R-3 use group?

Q. (2) If R-4 use group is chosen, then is the One and Two Family Dwelling Code/1984 supplement as amended by the USBC followed for design and construction?

A. (1) Yes.

A. (2) Yes.

Interpretation 20/84

Issued September 26, 1986
Section 622.1, BOCA Basic/National Building Code/1984 Edition

Q. Does a mezzanine, which is considered as a portion of the floor below, have to be of fire rated construction (deck and supporting members) in accordance with Table 401 and Section 1412.0?

A. Yes. A mezzanine must be constructed in accordance with Section 622.0 and Table 401.

Interpretation 21/84

Issued September 5, 1986
Section M-303.4 and M-403.3, BOCA Basic/National Mechanical Code/ 1984 Edition

Q. (1) Pursuant to Section 107.1 of the USBC, the 1986 Accumulative Supplement to the 1984 BOCA Basic/National Codes, and Interpretation 64/81, on a Use Group R-3 residential project, could a U.L. 181 Class I air-duct material, flexible duct, be installed closer than six feet to a heat pump air handler with auxiliary electric heat, with a zero inches clearance from the discharge side?

Q. (2) Pursuant to Section 107.1 of the USBC, and NFPA Interpretation 83-1, on a Use Group R-3 residential project, could a U. L. 181 Class I air-duct material, flexible duct, be used as riser duct from the first floor up to the attic of the second floor?

A. (1) Yes, based on the written modification granted by the building official.

A. (2) Yes, based on the written modification granted by the building official.

Interpretation 22/84

Issued September 26, 1986
Section 622.1, BOCA Basic/National Building Code/1984 Edition

Q. Are there any code distinctions between an elevated platform (for storage or workspace) and a mezzanine?

A. No.

Interpretation 23/84

Issued September 26, 1986
Section P-1505.12.2, BOCA Basic/National Plumbing Code/1984 Edition

Q. (1) What is the intent of this section with respect to the term "essentially toxic"?

Q. (2) What is the intent of the exception to this requirement with respect to the minimum pressure requirements?

Q. (1) The term "essentially toxic" is defined in Section P-201 as fluids having a Gosselin rating of 2 or more.

A. (2) The exception is clearly stated in the code for providing an alternative in double wall construction when an essentially toxic transfer fluid is used.

Interpretation 24/84

Issued September 26, 1986
Section P-1202.4, TRB Interpretation 33/81 (1), BOCA Basic/ National Plumbing Code/1984 Edition

Q. (1) a. Does the travel route to employee toilets have to be within the exterior walls of the building?

b. Could toilet facilities with only an exterior access be acceptable?

Q. (2) Is Interpretation 33/81 (1) applicable to the 1984 BOCA Basic/National Code?

A. (1) a. No.

b. Yes, provided the external access is in the employees regular working area.

A. (2) Yes.

Interpretation 25/84

Issued September 26, 1986
Section P-903.2 and P-905.3, BOCA Basic/National Plumbing Code/1984 Edition

Q. Can a vent serving a bathroom group of fixtures on the lowest floor of a multi-story building be connected to a vent stack serving a soil stack for fixtures on upper floors, below the floor level of the lowest fixtures discharging into the soil stack?

A. Yes.

Interpretation 26/84

Issued September 26, 1986
Table P-1202.1 Note A and P-1202.1, BOCA Basic/National Plumbing Code/1984 Edition

Q. If the actual occupancy load of a structure is significantly less than that calculated per Section 806.0 of the 1984 BOCA Basic/National Building Code, is it appropriate to reduce the requirement of Table P-1202.1 to more adequately reflect the actual occupancy load?

A. Yes, Note A of Table P-1202.1 allows for modifications where the actual number of occupants of a building is significantly different from that calculated per Section 806.0.

Interpretation 27/84

Issued September 26, 1986
Revised February 20, 1987
Section P-1202.5, BOCA Basic/National Plumbing Code/1984 Edition

Given: A shopping center building has several individual tenant spaces. The entire building has been designed in compliance with Mercantile Use Group.

Q. Are public toilets required for the entire building or in each tenant space which has an occupant load of 50 or more?

A. Customer toilet facilities are required in a mercantile building which has an occupant load of 50 or more. The provisions for strip-type shopping centers are based on the code requirements for each individual tenant space. See Interpretation 116/81.

Interpretation 28/84

Issued September 26, 1986
Section P-1506.5.2, BOCA Basic/National Plumbing Code/1984 Edition

Q. (1) Is it the intent of this section to require a separate disconnect switch on all hot water heaters?

Q. (2) If so, is this switch required to be located at the water heater?

A. (1) Yes.

A. (2) No.

Interpretation 29/84

Issued September 26, 1986
Addendum 1, Article 16, M-301.1, USBC, Volume I/1984 Edition

Q. Does this section allow the installation of Class I Flexible Duct Connector, which meets M-303.2, in plenums?

A. Yes.

Interpretation 30/84

Issued September 26, 1986
Section M-407.3, BOCA Basic/National Mechanical Code/1984 Edition

Q. Is it the intent of Section M-407.3 to require permanent lighting be provided for appliances located outdoors?

A. No. Requirements for outdoor installations are specifically covered by Section M-405.0.

Interpretation 31/84

Issued September 26, 1989
Section M-1215.4.6, BOCA Basic/National Mechanical Code/1984 Edition

Q. May single wall connector constructed of 26 gauge galvanized sheet metal be used to connect an oil or gas-fired furnace or boiler (low-heat) outlet to a chimney, when both the furnace, or boiler, and the chimney opening are located within the crawlspace of a building or residence?

A. Yes, provided the equipment is installed in accordance with M-403, including Table M-1215.4.7.

Interpretation 32/84

Issued September 26, 1986
Section 680-20(b)(1), National Electrical Code/1984 Edition

Q. Does a junction box attached to a wet-niche fixture by rigid nonmetallic conduit with a No. 8 insulated copper conductor installed in this conduit and terminated in an encapsulated lug in the niche and on the bonding terminal of the junction box require an additional bonding jumper from the grind directly to the junction box (Note: the niche is attached to the grid by a #8 solid copper jumper attached to a lug on the outside of the niche and to the grid by an all brass compression fitting)?

A. Yes. Section 680-22(a) 6, requires devices within five feet of the inside walls of the pool to be grounded to the grid.

Interpretation 33/84

Issued September 26, 1986
Section 680-25(d), Exception 1, National Electrical Code/1984 Edition

A. Does an existing remote panelboard with grounding terminal, interconnect to the service equipment by six 3 UF w/grounding cable assembly underground feeder (Art. 339), satisfy requirements of above reference (Note: The swimming pool is served by an additional remote panelboard interconnected to the above remote existing panelboard by rigid nonmetallic conduit (Art. 347 with individual THHN conductors).

A. Yes, provided the integrity of the covering for the ground is properly maintained.

Interpretation 34/84

Issued October 24, 1986
Section 1403.1 and 816.9.2, BOCA Basic/National Building Code/1984 Edition

In an R-3 Use Group building of Type 5A construction, Table 401 requires floor assemblies to have a one hour fire resistance rating. Section 1403.1 also requires the rating of the floor assembly to be maintained. Section 816.9.2, however, provides for an exception to the requirement for interior exit stairways, in Use Group R-3, to be enclosed in fire separation assemblies.

Q. Is the fire resistance rating of the floor assembly to be maintained at the interior exit stairway by enclosing the stairway in a fire resistance rating providing for a fire curtain, or other approved methods of protection; or may the floor opening be left open and unprotected with an unenclosed interior exit stairway.

A. The fire resistance ratings required by Table 401 shall be maintained; however, exception #1 to Section 816.9.2 permits egress stairs in R-3 structures to remain unenclosed.

Interpretation 35/84

Issued October 24, 1986
Section 617.1 and 622.1, BOCA Basic/National Building Code/1984 Edition

Given: A ramp type open parking structure employs a series of continuously rising floors. Several complete levels of parking are provided, with an additional quadrant (less than 33% of a typical floor area) where there is another level of parking.

Q. Is the partial level or parking to be treated as a mezzanine instead of as another floor?

A. No. Where an intermediate level is not present the partial level is a floor.

Interpretation 36/84

Issued October 24, 1986
Section 1704.5 and 1704.5.1, BOCA Basic/National Building Code/1984 Edition

Q. (1) Is it the intent of the Code to require more than one primary alarm device for a sprinkler system?

Q. (2) Is it the intent of the Code to require more than one supplemental interior alarm device for a sprinkler system?

Q. (3) If the answer to Question #1 or Question #2 is "yes", what is the criteria for determining how many additional alarms are to be provided and where they are to be located?

A. (1) The Code requires a primary alarm, and at least one additional alarm.

A. (2) More than one supplemental alarm may be required when deemed necessary, and as approved by the local building official.

A. (3) The intent of the Code is to alert all building occupants of water flow in the sprinkler system and may or may not require alarms in each tenant space.

Interpretation 37/84

Issued October 24, 1986
Section 1711.2.1, BOCA Basic/National Building Code/1984 Edition

Q. (1) In a building having an auditorium, are standpipe hose valves required inside the auditorium on each side, if the 100 foot hose and 30 foot nozzle stream can reach all areas of the auditorium from hose valves placed in the lobbies on each side?

Q. (2) In a building having a stage, are standpipe hose valves required within the stage enclosure on each side, it the 100 foot hose and 30 foot nozzle stream can reach all areas of the stage from hose valves placed in stairways and/or corridors which communicate with the state area on both sides?

A. (1) No.

A. (2) No.

Interpretation 38/84

Issued October 24, 1986
Article 110-22, National Electrical Code/1984 Edition

Q. If Branch circuits are indicated by a number on the label on the door of a panel but the circuit breakers are not numbered, does this meet the requirement that they be marked to indicate their purpose?

A. No.

Interpretation 39/84

Issued October 24, 1986
Section 680-41 and 210-8(a)(1), National Electrical Code/1984 Edition

Given: The bathroom has a jacuzzi located two (2) feet from the basin with a mirror above it. The receptacle that is required to be adjacent to the basin will be less than five (5) feet horizontally and six (6) feet vertically from the jacuzzi.

Q. (1) If these lighting outlets are protected by G.F.C.I., does this meet the intent of N.E.C. Article 680-41(b)(1)?

Q. (2) Do the receptacles meet the intent of N.E.C. 680-41 (a) (1) when protected by G.F.C.I.?

A. (1) No, except in existing structures.

A. (2) No, except in existing structures.

Interpretation 40/84

Issued October 24, 1986
Section M-1602.8.2 and M-1603.4, BOCA Basic/National Mechanical Code/1984 Edition

Q. Can a bathroom exhaust system be combined with a kitchen exhaust system in residential use groups?

A. This situation is not addressed by the code; however, in the opinion of the Board, such installations may result in an unhealthy and unsafe condition which would be in conflict with Section 100.8 of the USBC, 1984 Edition.

Interpretation 41/84

Issued October 24, 1986
Section 210-70(a), National Electrical Code/1984 Edition

Q. (1) Does a bedroom with a ceiling fan and light assembly with a fan and light connected through individual pull chain switches and controlled by a wall switch meet the requirement of 210-70(a)?

Q. (2) Is it necessary for the light to be switched?

A. (1) Yes.

A. (2) No.

Interpretation 42/84

Issued October 24, 1986
Section 616.9, BOCA Basic/National Building Code/1984 Edition

Q. (1) Shall the governing body be the building official or the local country government?

Q. (2) What is the definition of a pool cover, pertaining to its strength and installation requirements in order that small children are unable to crawl under it?

A. (1) Pursuant to Section 102.2 each local government is required to appoint a local building official, who shall have the sole authority to enforce the USBC in accordance with 101.1 and 103.1.

A. (2) The pool cover shall be approved by the building official in accordance with Section 106.1 of the USBC.

Interpretation 43/84

Issued November 21, 1986
Section 103.9 and 104.1, USBC, Volume I/1984 Edition

Q. May a building official charge an owner, lessee, or agent of either a separate fee, pursuant to 103.9, for not obtaining a building permit in accordance with Sections 104 and 109?

A. No.

Interpretation 44/84

Issued November 21, 1984
Section 104.2, USBC, Volume I/1984 Edition

Q. (1) Under Section 104.2 of the 1984 USBC, is an employee or agent(possessing the proper authorization from the owner, if required) of a licensed contractor, employed in connection with the proposed work, entitled to apply for a permit?

Q. (2) If so, can a building official require the employee or agent of a licensed contractor, employed in connection with the proposed work, to appear in person in order to apply for a permit?

A. (1) Yes.

A. (2) No.

Interpretation 45/84

Issued November 21, 1986
Sections 104.5, 105.1 and 107.0, USBC, Volume I/1984 Edition

Q. Does Section 104.5 require the seal of a professional architect or engineer on the shop drawings, field drawings and specifications of components for the installation of elevators?

A. No, per § 54-37.1, item 8, Code of Virginia.

Interpretation 46/84

Issued November 21, 1986
Revised March 20, 1987
Section 304.1 and 302.4, BOCA Basic/National Building Code/1984 Edition

Q. Would a college Learning Resources Building Which has a primary function of gathering people together for instruction; with a 13 percent floor area set aside for book stacks for reference materials; with a maximum of 19.5% ultimate future stack arrangement and the remaining floor area dedicated to classrooms, work areas, study spaces, audio-visual instructional areas, offices etc,. be classified as Use Group E or Use Group A-3 under the 1984 Code?

A. The building would be classified as use Group A-3 under the 1984 Code.

Interpretation 47/84

Issued November 21, 1986
Section 1716.0, BOCA Basic/National Building Code/1984 Edition

Q. Is it the intent of the code to provide a system connected smoke detector in each quest room or suite of Use Group R-1 (hotels, motels) in addition to the single station detectors required by Section 1716.3.4 (excluding 1716.4 sprinklered building exception).

A. Yes; however, a single detector may be designed and installed which will perform both functions.

Interpretation 48/84

Issued February 20, 1987
Sections 100.5, 100.8, P-404.1.2, and P-500.5, USBC, Volume I/1984 Edition

Q. (1) Do building water service connections, at the public utilities water meter housing, come within the jurisdiction of the USBC?

Q. (2) Are the plastic piping materials which are listed in Table P-404.1.2 considered acceptable for use in the building water service connections outlined in Question #1?

Q. (3) Does the accessibility requirements of P-500.5 apply to an approved fitting, such as the Flo-Control compression fitting, when joining plastic pipe to a dissimilar piping material as the location noted in the previous questions?

A. (1) Yes. See Memorandum of Agreement between the Department of Housing and Community Development and Virginia Department of Health, dated July 21, 1980, paragraph #2.

A. (2) Yes.

A. (3) Yes; however, a modification to this requirement may be issued by the building official based on substantiating evidence that secures the intent of the USBC. The intent of P-500.5 is to provide access to the joint or connection to facilitate repair of leaks caused by actions of the dissimilar materials used. If a fitting is listed for use to join dissimilar materials without access it may be considered as meeting the Code/s intent as specified in Section 107.2

Interpretation 49/84

Issued February 20, 1987
Sections 100.5, 100.9, and 111.0 USBC, Volume I/1984 Edition

Q. When equipment is installed in a building for the purpose of manufacturing, processing, production or other purposes, are the lateral utility connections subject to permit and inspection requirements of the USBC when connected to an already approved service system?

A. Yes. The authority to regulate the installation of such equipment is found in Section 100.5 and 104.1 of the USBC.

Interpretation 50/84

Issued February 20, 1987
Sections 240-3, 240-6, Notes 8 and 9 to Table 310-16 through 310-19 National Electrical Code/1984 Edition

Q. Are 4-4/0 aluminum conductors XHHW 75 degree c (167 degree F) installed in conduit acceptable as feeders for a 200 ampere commercial service, whenever the tenant demands are unknown at the time of inspection?

A. No. 4/0 aluminum conductors 75 degrees c (167 degrees F) do not meet the requirements of 230-42(c) for 200 amp service to a commercial structure.

Interpretation 51/84

Issued February 20, 1987
Revised April 17, 1987
Section 512.1 and 512.3, both Exception 3, USBC, Volume I/1984 Edition

Q. In a restaurant with an occupancy load of less than 50, are the following facilities required to meet the provisions of ANSI A117.1?

(1) Restaurant entrance in a stand alone building.
(2) Restaurant entrance within a larger building.
(3) The entrance to seating areas although less than 50 seats.
(4) Seating facilities.
(5) Entrance to toilet rooms.
(6) Fixtures within toilet rooms.
(7) Other public facilities within the restaurant governed by the ANSI code such as drinking fountains or telephone.

A. (1) Yes.
(2) Yes.
(3) Yes.
(4) Yes.
(5) Yes.
(6) Yes.
(7) No.

Interpretation 52/84

Issued February 20, 1987
Section R-204.1.1, CABO One and Two Family Dwelling Code/1983 Edition

Q. (1) Is it the intent of Section R-204.1.1 to require that screens be installed on all windows located in a dwelling unit provided with a mechanical heating and air conditioning system?

Q. (2) Is it the intent of Section R-204.1.1 to require that screens be installed on all windows located in a dwelling unit provided with a mechanical heating and air conditioning system?

Q. (3) Is it the intent of Section R-204.1.1 to require that screens be installed on all windows located in the dwelling if a mechanical system is installed which provides circulation and/or recirculation of air within the dwelling?

A. (1) No.

A. (2) No.

A. (3) No.

Interpretation 53/84

Issued February 20, 1987
Section 1711.3.2 and 1711.3.1, BOCA Basic/National Building Code/1984 Edition

Q. (1) A building is less than 75 feet in Use Group B, R-1 or R-2 equipped with a complete fire suppression system. The building requires two standpipes with one riser being a combination sprinkler/standpipe connection. How is the supply piping and each vertical riser sized?

Q. (2) Same condition as above, except this building requires six or more standpipes and the water pressure is such that a booster pump will be required for the sprinkler system. Is the fire pump sized to accommodate the standpipe GPM requirement (i.e. 1500 GPM) at the pressure required for the sprinkler system or strictly for the requirements of the sprinkler system?

A. (1) The combination system supply is sized in accordance with 1714.2. The standpipe supply piping is sized at 250 GPM for the first riser plus 250 GPM for each additional riser; therefore, the supply piping shall be sized to supply 500 GPM to the standpipe system.

A. (2) The pump should be sized to accommodate the greater demand (1500 GPM). The pressure demand would be the greater of either that needed to supply the most hydraulically remote standpipe outlet, or the sprinkler system (see 1714.2).

Interpretation 54/84

Issued February 20, 1987
Section 619.10, BOCA Basic/National Building Code/1984 Edition

Q. (1) To what parameters does the USBC consider "supply capable of delivering 250 GPM" if two or more valves are supplied by a single source?

Q. (2) Can a 2 1/2 inch hose valve be supplied from the mail sprinkler system or the tenant sprinkler system? If so, what are the requirements?

A. (1) The Code requires the standpipe system to be connected to a 250 GPM supply.

A. (2) Yes, provided that sprinkler system can supply the minimum requirement of 250 GPM to the standpipe outlet.

Interpretation 55/84

Issued March 20, 1987
Section 700-12(F) and 700-17, National Electrical Code/1984 Edition

Q. Do exit fixtures, with individual battery back up (unit equipment as defined by 700-12(f), connected to a branch circuit which does not serve the normal lighting load of a building meet the requirements of Section 700-17, Paragraph 2?

A. Yes.

Interpretation 56/84

Issued March 20, 1987
Section 1711.3, Exception, BOCA Basic/National Building Code/1984 Edition

Q. (1) Is it the code intent that any specified residual pressure be maintained at the top of a riser so long as the required standpipe flow rate is achieved?

Q. (2) Must a fire pump, necessary only for sprinkler system operation, be sized to accommodate the total required standpipe flow (multiple risers) if the standpipe flow rate can be achieved by means of the pump bypass piping?

A. (1) Yes, residual pressure of 65 psi is required unless the building is less than 75 feet in height and provided throughout with an approved automatic fire suppression system.

A. (2) No, provided the building is less than 75 feet in height and protected throughout with an approved automatic fire suppression system.

Interpretation 57/84

Issued March 20, 1987
Section M-1903.4, BOCA Basic/National Mechanical Code/1984 Edition

Q. Would floor and wall heating and cooling registers be sufficient to meet the intent of the Mechanical Code M-1903.4, Paragraph 1 in the 1984 Edition (In addition, a readily accessible manual or automatic means shall be provided to partially restrict or shut off the heating and cooling input to each zone or floor.)?

A. No.

Interpretation 58/84

Issued April 17, 1987
Section 1411.6, BOCA Basic/National Building Code/1984 Edition

Q. Is it the intent of this section to require a fireresistance rating of not less than one hour for members supporting masonry walls when the masonry walls supported are permitted to be unprotected (0 hours)?

A. No. The intent is to provide protection of structural members as required for the construction type permitted.

Interpretation 59/84

Issued April 17, 1987
Section P-306.4, USBC, Volume I/1987 Edition

Q. Is it the intent of this section to require a privacy partition between a water closet and urinal in a public men's toilet room when the number of water closets required and provided in the room is one (1) and a privacy lock is provided on the room entrance door?

A. Yes.

Interpretation 60/84

Issued April 17, 1987
Interpretation 19/84; Section 101.1, USBC, Volume I/1984 Edition

Q. Interpretation 19/84 states you can use the BOCA Basic/National Building Code, 1984 edition to build a R-3 or R-4 Use Group Dwelling. Can you use the CABO One and Two Family Dwelling Code for the building part of the structure and the BOCA Basic/National Plumbing Code and the BOCA Basic/National Mechanical Code in the same structure?

A. All work must be done in accordance with the permit issued pursuant to Section 109.0.

Note: If the permit indicates that work will be done in accordance with the CABO Code, then all work covered by that permit must be in conformance with that code. Deviations from the CABO requirements to the provisions of BOCA may only be made when a modification has been issued by the building official pursuant to Section 107.0 [sic].

If separate permits are issued, as covered by 109.5, each permit should indicate the applicable code which will govern the work.

Finally, it is important to note that it is the permit applicant's responsibility to indicate which code is to be used.

Interpretation 61/84

Issued April 17, 1987
Section 1716.3.4, BOCA Basic/National Building Code/1984 Edition

Q. (1) In an R-1 occupancy, could an alarm suitable to warn the occupants within the individual unit be located outside the unit (i.e. in a hallway or on an exit access balcony) if it is clearly audible within the individual unit?

Q. (2) If the answer to Question #1 is yes, must the single station detector in the individual unit be isolated from the automatic fire alarm system required by 1716.3.2?

A. (1) No.

A. (2) N/A.

Interpretation 62/84

Issued April 17, 1989
Section 823.2, BOCA Basic/National Building Code/1984 Edition

Q. (1) This section states that exit signs shall have red letters six inches high. Does this apply only to the exit sign leaving the building, or does it apply to all exits those that direct within the building)?

Q. (2) Assuming red applies to all exit signs and it is specified and ordered this way, can a building official direct you to change the color to green for all interior directional exit signs by stating that is a local interpretation?

Q. (3) If it is a local interpretation, should this be in adopted form for viewing if requested, and not just a personal interpretation by the building official.

A. (1) The requirements of 823.2 are applicable to all exit signs.

A. (2) No. Section 100.5 provides that the USBC supersedes the building codes and regulations of the counties, municipalities and other political subdivisions and State agencies relating to any construction, reconstruction, alterations, conversions, repair, maintenance, or use of buildings.

A. (3) See answer to Question #2.

Interpretation 63/84

Issued April 17, 1987
Sections ES-701.6, 100.5.1 and ES-602, USBC, Volumes I and II/1984 Editions

Q. (1) Would Section ES-701.6 "Duel Egress" Volume II of the BOCA Basic/National Existing Structures Code/1984 apply to residential apartment houses with only one means of egress built prior to the adoption of the Virginia Uniform Statewide Building Code, or would Section 100.5.1 "Application to pre USBC buildings" govern in this situation?

Q. (2) Since there were no Certificates of Occupancy issued by the City of Charlottesville prior to 1953, what means should be used to determine if buildings built before that date are in conformance with Volume II of the USBC? Would it be legal to use the Assessor's history file records for date built as in implied date that a Certificate of Occupancy was issued for those buildings built before 1953?

Q. (3) Is an owner required to install electrical facilities in a new building? If the answer is now, then would Section ES-602 "Electrical Facilities" be applicable?

A. (1) Section 100.5.1, Volume II, USBC addresses the requirements for pre-USBC buildings.

A. (2) The assessor's history file records indicating date built may be accepted as an implied date that a C.O. was issued. Section 117.6 of Volume I, USBC, addresses the issuance of C.O.'s for existing buildings.

A. (3) The USBC does not require electrical facilities in all new buildings. Section ES-602 may be applicable to only the buildings that were required to have electrical facilities installed.

Interpretation 64/84

Issued April 17, 1987
Section R-214.1, CABO One and Two Family Dwelling Code/1984 Edition

Q. Section R-214.1 requires stairways to be not less than 3"-0" in clear width. Is this clear width measured from wall to wall or is it the actual tread width measured form baseboard to baseboard?

A. Figure R-214 specifies a 3"-0" clearance from wall to wall. This diagram also indicates a handrail projection of up to 3 1/2" into the 3'-0" other similar trim. Baseboard may project into the 3' width.

Interpretation 65/84

Issued April 17, 1987
Section P-903.2, BOCA Basic/National Plumbing Code/1984 Edition

Q. Is the intent of Section P-903.2, "...vent stacks shall connect full size at their base to the drainage system...", to require the vent stack to be the same size in diameter as the building drain, when the building drain is required to be greater than three inches in diameter.

A. No.

Interpretation 66/84

Issued April 17, 1987
Section 503.1, USBC, Volume I/1984 Edition

Q. Section 503.1 of the 1984 BOCA Basic/National Building Code allows a building of other than Use Group H to be erected one story and 20 feet higher than specified in Table 501 when the building is equipped throughout with an approved automatic fire suppression system. When this fire suppression system option is used, for example when a multifamily building, Use Group R-2, of Type 5A construction is increased from three stories to four stories completely sprinklered, can the additional floor (the fourth floor in this example) be constructed in the same method and with the same materials as the other floors?

A. Yes.

Note: The BOCA Basic/National Building Code is used to determine the requirements and design for the construction of buildings and structures. The BOCA Mechanical Code, Plumbing Code, and the National Electrical Code are subsidiary codes to the Building Code and, as such, must be governed by the requirements and allowances in the BOCA Basic/National Building Code.

Interpretation 67/84

Issued May 15, 1987
Article 680-12(a), National Electrical Code/1984 Edition

Q. For a junction Box for a 120 volt wet niche swimming pool light that:

1. is U.L. listed for materials, conduit hubs, etc. (680-21(a)(1) to (3);

2. is connected to a conduit that extends directly to the forming shell (680-12(a);

3. is located not less than 8 inches above ground, deck or water level and to less than 4 feet from inside wall of pool (680-21(a)(4).

Is it required to install a compression gland or approved seal for cord entry?

A. No. Wet-niche fixtures shall be installed in accordance with 680-20(b).

Interpretation 68/84

Issued May 15, 1987
Section 123.1, USBC, Volume I/1984 Edition

Given: A building which was built prior to the adoption of the VUSBC is to be relocated. Building meets all criteria for exemption under Section 123.1 USBC. The concrete porch at the existing site must be demolished and a new one constructed at the new site. At the existing site there were two step risers to porch elevation and now at the new site there are three.

Q. (1) Would handrails and guardrails be required at the new site under the current 1984 edition of the USBC?

Q. (2) If the answer to the first question is yes, would handrails and guardrails be required if this was not a required means of egress?

A. (1) Yes.

A. (2) Handrails are required only as specified by 816.5 for interior egress stairways, and 819.0 for exterior stairways. The requirements for guards are specified by Section 827.0. These provisions should be applied to the new construction in order to determine what will be required.

Interpretation 69/84

Issued May 15, 1987
Section 1705.0, BOCA Basic/National Building Code/1984 Edition

Q. Is there anything within the language of Section 1705.0 that would prohibit requiring installation of a pressure gauge and an inspectors' test valve on a limited area sprinkler system?

A. No. Section 1705.1 requires that the system be of an approved type. Approved is defined by Section 201.

Interpretation 70/84

Issued May 15, 1987
Articles 220-3(c) and 210-50(c), National Electrical Code/1984 Edition

Q. Is it the intent of Article 220-3(c) to allow more than one outlet in the laundry area to be on the laundry circuit so long as the circuit does not extend beyond the laundry area and controls no other outlets or lighting loads in the dwelling. Article 210-50(c) has been complied with by having at least one outlet within six feet of the intended appliance?

A. Yes. Section 210-52(e) requires that at least one receptacle outlet be installed for the laundry; therefore more than one may be installed provided it is located as required by 210-50(c).

Interpretation 71/84

Issued August 21, 1987
Section P-404.0, BOCA Basic/National Plumbing Code/1984 Edition

Q. According to Section P-404.0 of the 1984 (87) BOCA Plumbing Code ASTM D3309 is listed as the installation and performance standards for Polybutylene. May a local official (Building or Plumbing Inspector) require Polybutylene to meet ASTM B251.81 for the installation of copper tubing?

A. No. Section 103.1 [USBC, Volume I] requires the Building Official to enforce the USBC as provided and interpreted by the State Technical Review Board. Section P-404.1.3 and Table P-404.1.3 require polybutylene (PB) plastic pipe and tubing to comply only with ASTM D3309. It should be noted that Article 15 governs the installation of water distribution pipe. Article 4 regulates types of materials used as water distribution pipe, and the standards those materials must meet.

Interpretation 72/84

Issued August 21, 1987
Sections 1421.1 and 1421.3, and 1421.7.2, BOCA Basic/National Building Code/1984 Edition

Q. (1) Are there any requirements for carpeting not to exceed certain maximum standards for smoke or gases (Smoke Density)? Why would smoke density not apply to carpeting? Would not carpet fall under the general guidelines for all interior finish and trim as outlined in 1421.1 and further defined in 1421.3?

Q. (2) Will your explanation for the above questions apply to carpet installed on a vertical surface? There are some carpet now being manufactured which have a smoke density of over 700.

A. (1) All floor finishes must meet Table 1421.7; and Section 1421.3 is not applicable to floor finishes.

A. (2) No, carpet on the wall is not a floor finish.

Interpretation 73/84

Issued August 21, 1987
Section 512.4, BOCA Basic/National Building Code/1984 Edition

Q. Are open risers acceptable on a route where handicapped accessibility is required?

A. No.

Interpretation 74/84

Issued August 21, 1987
Section M-311.1 and M-311.2, BOCA Basic/National Mechanical Code/1984 Edition

Q. Under the above sections, can a one (1) hour rated floor, ceiling assembly in a multifamily structure be protected by a non UL rated assembly i.e. Lima Fuse Link Register?

A. No.

Interpretation 75/84

Issued August 21, 1987
Section 810.2 and 807.4, BOCA Basic/National Building Code/1984 Edition

Q. To determine the maximum allowable length of travel to an exit within a single occupant tenant space, Use Group B, is BOCA 810.2 "Dead Ends" or is BOCA 807.4 "Length of Travel" to be applied?

A. Both sections would be applicable. The intent of Section 810.2 is to prohibit the design of an unsafe corridor regardless of the location of that corridor, either within or outside single tenant space. The intent of Section 807.4 is to provide a maximum allowable travel distance from any point within a building (i.e. individual tenant space, corridor, restroom, etc.) to be an approved exit (i.e. stair enclosure). This is represented by Section 807.2.2 which allows egress to other room spaces that are not deemed as corridor exit egress.

Interpretation 76/84

Issued August 21, 1987
Section 1410.7, BOCA Basic/National Building Code/1984 Edition

Q. Can electrical outlets that comply with the U.L. requirements listed on page 13 of the U.L. Fire Resistance Directory (January 1984), under wall and partition penetrations (for a fire rating up to 2 hours) be installed in a 2 hour shaft wall? The penetration of the shaft wall with the electrical outlet shall occur through only one half of the rated assembly.

A. Yes. Listed single and double gang metallic outlet and switch boxes with non-metallic cover plates may be used in bearing and non-bearing wood-stud and steel-stud walls with ratings not exceeding 2 hours.

Interpretation 77/84

Issued August 21, 1987
Section 1716.3, BOCA Basic/National Building Code/1984 Edition

Q. Is there any provision in the code that would require the occupants of a mezzanine to be warned if there is a fire or other emergency on the level below?

A. Yes. Alarms required by Section 1716.3 of the 1984 BOCA Basic/National Building Code are required to be located so as to warn all building occupants in every occupied space within the building by Section 1716.9.2. This includes mezzanines.

Interpretation 78/84

Issued August 21, 1987
Section 680-41(b)(1), National Electrical Code/1984 Edition

Q. Is it the intent of Article 680-41(b)(1) to require that exhaust fans located over spa or hot tubs meet the minimum height requirements as for lighting fixtures and lighting outlets? I should mention that the exhaust fans are flush in the ceiling, and are protected by GFCI.

A. No.

Interpretation 79/84

Issued August 21, 1987
Section 809.4, BOCA Basic/National Building Code/1984 Edition
Section R-211.1, CABO One and Two Family Dwelling Code/1983 Edition

Q. Emergency egress window openings must have a minimum net clear opening width dimension of twenty (20) inches. How is this clear opening to be measured (i.e., must the horizontal measurement be taken when the window is in a position 90 degree relative to the plan of the wall, or can one measure the opening when the window is opened say 45 degrees)? This is a problem with casement windows that crank open and in so doing, the casement roto operator slides over to a position that precludes the twenty (20) inch dimension.

A. The opening measurement should include only that area which is considered as part of the clear opening. The clear opening is that open space, to be used for emergency egress, which contains no projection or obstruction.

Interpretation 80/84

Issued August 21, 1987
Section 100.7, USBC, Volume I/1984 Edition

Q. Where a hog operation is being constructed utilizing five different hog farms with thirteen hog buildings and one office building per farm; would the office building be exempt from the Virginia Uniform Statewide Building Code? This building consists of the following uses: shop area, dispensary, laundry room, sanitary office, and break room for employees.

A. Yes.

Interpretation 81/84

Issued August 21, 1987
Section 1711.3, BOCA Basic/National Building Code/1984 Edition
NFPA 13 2.2.1, NFPA 14 6.3, Interpretations 53/84 and 56/84, NFPA 20 A 2-3.1 and 2-1.5

Q. (1) In a building less than 75 feet in height of Use Group B, R-1 or R-2, equipped with a full fire suppression system, what minimum residual pressure, with 250 gpm flowing from each standpipe to 1400 gpm total, is required at the top of the riser to consider the standpipe rising and supply piping to be capable of flowing these required flows?

Q. (2) In the same building as above, if a fire pump is installed, with a bypass installed per NFPA 20, both the sprinklers and the standpipes are supplied by the pump and its bypass, shall the pump be sized to meet:

a. the sprinkler and hose stream flow and pressure per NFPA 13 taken back to the pump discharge?

b. the standpipe flow and pressure required at the pump discharged to meet the flows per Section 1711.3.2, and pressures determined in Number 1 above?

c. or a and b above as a two point design?

A. (1) The minimum residual pressure required to operate the automatic sprinkler system.

A. (2) c. Interpretation 56/84 was answered assuming a separate supply to the standpipe system was provided.

Interpretation 82/84

Issued April 18, 1986
Section R-904.5, CABO One and Two Family Dwelling Code/1983 Edition

Q. (1) Does R-904.5 allow combustible materials to be placed within 3/8" of the firebox of a fireplace when combustible subflooring or finished flooring is used?

Q. (2) If so, would this supersede the requirements of R-904.5 prohibiting combustible materials from being placed within six inches of a fireplace opening, or from the inside surface of the nearest flue lining?

A. No.

Interpretation 83/84 (number not used)

Interpretation 84/84 (number not used)

Interpretation 85/84

Issued June 20, 1986
Section R-503.7, CABO One and Two Family Dwelling Code/1983 Edition

Q. Is the intent of Section R-503.8, item #3, of the first printing of the 1983 Code, to omit sheathing paper over sheathing materials behind brick veneer finishes?

A. No.

Interpretation 86/84

Issued September 26, 1986
Section R-211, Interpretation 64/74, CABO One and Two Family Dwelling Code/1983 Edition

Given: Two story single family dwelling has two stairways leading from second floor to first floor. One the stairways is built in accordance with the code.

Q. (1) Does State Interpretation 64/75 still apply for the second stairway?

Q. (2) If the answer to Question #1 is yes, is it the intention of the interpretation to not require the second stairway to meet the code in any aspect (i.e. handrails, width, guardrails, headroom, rise and run, etc.)?

A. (1) Yes.

A. (2) Yes, however minimum safety requirements must be provided according to the local building official.

Interpretation 87/84

Issued September 26, 1986
Section R-502.6, CABO One and Two Family Dwelling Code/1983 Edition

Q. (1) Is it the intent of this section to require entire bathrooms to be finished with a nonabsorbent surface to a height of not less than 6 ft.?

Q. (2) Is it the intent of this section to regulate floor and wall coverings in toilet facilities where no bath or shower spaces are located?

Q. (3) Is it the intent of this section to prohibit wood flooring, or carpeting, in the rooms regulated by this section?

A. (1) No. This requirement applies only to shower and bath enclosures.

A. (2) No.

A. (3) No.

Interpretation 88/84

Issued September 26, 1986
Section R-902.11, CABO One and Two Family Dwelling Code/1983 Edition

Q. If a masonry chimney is constructed thicker than the minimum required thickness, can the clearance to the combustibles be reduced by the amount of excess thickness provided?

A. No, unless a modification is granted in accordance with 107.2 of the USBC.

Interpretation 89/84

October 24, 1986
Section R-303, CABO One and Two Family Dwelling Code/1983 Edition

Q. Does the building code have a minimum footing requirement for a foundation or masonry wall, i.e., minimum dimension of either side of a masonry wall or foundation?

A. No. Pursuant to R-303 footings shall be of sufficient design to support safely the loads imposed. The minimum dimensions shall be those which provide the established level of safety.

Interpretation 90/84 (number not used)

Interpretation 91/84

Issued March 20, 1987
Section R-210.2, CABO One and Two Family Dwelling Code/1983 Edition

Q. (1) Would a pull-down staircase installed in the ceiling of an attached garage, with a common attic shared with the residence be allowed under this section?

Q. (2) If not, would a fire-rated pull-down staircase be allowed?

Q. (3) If an unrated pull-down staircase is used in the garage, would application of 1/2" gypsum board to the face of the staircase meet the intent of R-210.2?

A. (1) Yes, subject to an approval in accordance with Section 106.0 of the USBC.

A. (2) N/A.

A. (3) See Section 106.0 of the USBC.

Interpretation 92/84

Issued August 21, 1987
Section R-217.2.3, CABO One and Two Family Dwelling Code/1983 Edition

Q. (1) Is it the intent of Section R-217.2.3 to allow foil back foam insulation board (R-MAX, etc.) to be left exposed in the attic when the attic is used for storage purposes?

Q. (2) Define what is meant by the term "service of utilities".

A. (1) No.

A. (2) This terminology refers to maintenance of building utilities (i.e. electrical equipment, mechanical equipment, etc.).

Interpretation 93/84 (number not used)

Interpretation 94/84

Issued August 21, 1987
Section R-217, CABO One and Two Family Dwelling Code/1983 Edition

Q. Is the intent of this section to not allow foil faced insulation board (example, R-MAX) to be left exposed in an unfinished area within a single family dwelling?

A. Yes.

Interpretation 95/84

Issued August 21, 1987
Section R-902 and R-904, CABO One and Two Family Dwelling Code/1983 Edition

Q. Are the attached reports suitable documentation to base a modification request concerning clearances and support of combustible material on or framed to a chimney?

A. The suitability of substantiating materials shall be determined by the building official in accordance with the provisions outlined by Sections 106.0 and 107.0 of the Uniform Statewide Building Code.

Interpretation 96/84

Issued October 23, 1987
Section R-503.8, CABO One and Two Family Dwelling Code/1983 Edition

Q. Under the requirements of R-503.8 (Flashing) do I interpret "under--masonry" to mean that the foundation should be flashed before the plate is bolted down?

A. No.

Interpretation 97/84

Issued December 18, 1987
Section R-209 (g), CABO One and Two Family Dwelling Code/1983 Edition

Q. Section R-209 note (g) states that a 1 1/2 inch horizontal member should serve as an alternate to safety glazing. What is the intent in regard to the horizontal member, i.e., would a 1 1/2 inch wide strip of tape across the entire glazed area at the recommended height meet the intent of this section of the code?

A. The purpose of the horizontal member is to prevent a person from falling into, and through, a fixed glazed panel; therefore, a 1 1/2 inch strip of tape would not meet the intent of this code. The structural integrity of the member should be such that it satisfied the building official as meeting this purpose. See Section 106.1 for information regarding the approval of materials and equipment.

Interpretation 98/84

Issued February 19, 1988
Section R-215.1, CABO One and Two Family Dwelling Code/1983 Edition

Q. Under the requirement of Section R-215.1, One and Two Family Code, 1983 Edition, "Handrails", should I interpret this to mean three (3) treads between the bottom and top landings would require a handrail on at least one (1) side?

A. No. R-215.1 specifically requires handrails to be provided on at least one side of a stairway whenever such stairway has four or more risers. This section does not address treads.

Interpretation 99/84

Issued February 19, 1988
Section R-210.2, CABO One and Two Family Dwelling Code/1983 Edition

Q. (1) In a two-story, single family dwelling with a garage on the grade floor, does R-210.2 require that the front and rear walls of the dwelling and the center bearing partition, which together support the second floor over the garage, be covered with one-half (1/2) inch gypsum board or equivalent in the garage area?

Q. (2) If the answer to Question 1 is no, would the top plates of the front and rear bearing walls and the center bearing partition have to be covered with one-half (1/2) inch gypsum board or equivalent in the garage area?

A. (1) No.

A. (2) No.

Interpretation 100/84

Issued July 15, 1988
Section R-707, CABO One and Two Family Dwelling Code/1983 Edition

Q. Is ventilation of roof rafter spaces for a cathedral ceiling required when the space between rafters is completely filled with insulation and sealed by a vapor barrier?

A. No.

Interpretation 101/84

Issued October 23, 1987
Section R-217.1 and R-217.2.3, CABO One and Two Family Dwelling Code/1983 Edition

Q. Under the requirement of R-217.1 and R-217.2.3 of the One and Two Family Dwelling Code, 1983 Edition, would styrofoam brand insulation and celotex foil faced insulating sheathing be approved without any protection (Exterior wall in garage)?

A. No.

Interpretation 102/84

Issued December 18, 1987
Section R-304.5, CABO One and Two Family Dwelling Code/1983 Edition

Q. Define "equivalent fluid weight" as it would apply to the requirement for design foundation walls?

A. The "equivalent fluid weight" refers to the lateral force exerted against a foundation wall by an imaginary fluid weighing 30 lbs. per cubic foot. Where lateral load against a foundation wall exerted by the backfill will exceed the lateral forces exerted by this imaginary fluid weighing 30 lbs. per cubic foot, the foundation wall must be designed in accordance with accepted engineering practice.

Interpretation 103/84

Issued December 18, 1987
Article 90-2(b)(3), National Electrical Code/1987 Edition

Q. Is a 60 amp, 240 volt, single phase AC electric service built on a utility pole as shown in attachment (ATTACHMENT A) and installed by a railroad as a power supply exclusively for railroad street crossing signals, or for railroad train control signal equipment covered by the National Electrical Code?

A. Yes. The National Electrical Code covers the installation of service equipment and branch circuit protection, but does not cover the signal or communication equipment that directs the branch circuit.

Interpretation 104/84

Issued October 23, 1987
Sections 250-79(c), 250-80(a) and 250-91(a), Ex. 2, National Electrical Code/1984 Edition

Q. Two 200 ampere service panels are installed a with a 4/0 S.E. cable supplying each in a single family dwelling and are supplied from one meter. The panels are electrically separate except for grounding. Are the service cables considered as parallel when sizing a single bond to the water pipe?

A. No. The bonding jumper shall be sized in accordance with Table 250-94. Parallel conductors shall comply with the requirements of Section 310-4 (conductors in parallels). The parallel conductors in each phase or neutral shall:

(1) be the same length;
(2) have the same conductor material;
(3) be the same size in circular mil area;
(4) have the same insulation type;
(5) be terminated in the same manner;
(6) be electrically joined at both ends to form a single conductor

Interpretation 105/84

Issued October 23, 1987
Section 680-41(b)(1), National Electrical Code/1984 Edition

Q. Are light fixtures permitted in the shaded area of the following diagram? (ATTACHMENT A)

A. Yes.

Interpretation 106/84

Issued October 23, 1987
Section 300-21, National Electrical Code/1984 Edition

Q. Several inspectors at certain counties have been insisting that we fill the holes after installing electrical wires both in ceilings, floors, and partitions. They refer to this Code 300-21 on page 127, which states this for fire resistant walls. The walls in residential dwellings are not fire rated; therefore, this should not apply and counties should not be able to enforce this code.

A. The firestopping required by 300-21 is required only where fire-resistance rated walls, partitions, floors or ceilings are penetrated by electrical installations. Other requirements for firestopping are contained in Section 1420.0 of the BOCA Basic/National Building Code, 1984 Edition and the energy provisions of the USBC which require that in assemblies such as walls, floors, and roof/ceiling which are part of the building envelope, air leakage must be limited through caulking and weather-stripping of joints, cracks, holes, penetrations, and other areas where air can pass.

Interpretation 107/84

Issued October 23, 1987
Section M-1903.4, Paragraph 1, second sentence, BOCA Basic/ National Mechanical Code/1984 Edition

Q. If the question of Interpretation 57/84 was rephrased "Would closeable floor and closeable wall heating and cooling registers be acceptable to meet the intent of the Mechanical Code M-1903.4, Paragraph 1, second sentence, in the 1984 edition?"

A. Yes.

Interpretation 108/84

Issued October 23, 1987
Section 210-70, National Electrical Code/1984 Edition

Q. Is a porcelain, UL listed, ceiling light with string pull chain (860-SOL) approved for an attic use when required by the NEC Code when pull chain string rests on the light bulb?

A. Yes, provided the listing of the device is complied with.

Interpretation 109/84

Issued October 23, 1987
Sections 603.1 and 1702.9, BOCA Basic National Building Code/1984 Edition

Q. (1) Although not required under Section 1702.9, can the local fire marshal, based on NFPA 231 and 231C, require a fire suppression system to be installed in Use Group S-1 buildings under 12,000 square feet in area or in Use Group S-2 buildings of any area?

Q. (2) In a newly constructed one-story building, under 12,000 square feet in area, used to store materials permitted under Use Group S-1, can the local fire marshal require retrofit of a suppression system under the Fire Prevention Code referenced in Section 603 of the Basic Code (per F-101.4.1.3 of the Fire Prevention Code)?

A. (1) No. See Section 100.5 of the Uniform Statewide Building Code (USBC).

A. (2) No. Section 603 of the BOCA Basic/National Building Code has been deleted by Addendum 1 of the 1984 USBC. Also, see 100.5 of the USBC.

Interpretation 110/84

Issued October 23, 1987
Section 210-70(a), National Electrical Code/1984 Edition

Q. Section 210-70(a) reads: At least one wall switch-controlled lighting outlet shall be installed in every habitable room. My question is: Does lighting outlet mean that a light fixture must be installed at the outlet, or would it be permissible to install a paddle fan in the stated outlet even if the paddle fan does not have a light kit installed on it?

A. No. The intent of this section is to provide a lighting outlet as defined by Article 100. The installation of a paddle fan with no lighting fixture does not meet this intent.

Interpretation 111/84

Issued October 23, 1987
Section 810.3, Exception 1, BOCA Basic/National Building Code/1984 Edition

Q. (1) Are all homes for adults which are classified as Use Group I-2 for nonambulatory residents required to have 8 foot wide corridors?

Q. (2) If the answer to the above is no, what is the criteria for determining when a facility is used for the "movement of beds"?

A. (1) Yes. This is the current definition of nonambulatory resident as defined in Section 63.1-174.1, Code of Virginia. "A nonambulatory resident is a person who by reason of physical or mental disability or condition is unable to vacate the home in case of an emergency without the assistance of another person."

A. (2) Not applicable.

Interpretation 112/84

Issued October 23, 1984
Section 100.8, USBC, Volume I/1984 Edition

Q. Is there any language within the USBC which allows the building official to require that a fire protection system be installed in accordance with the applicable section of Article 17 even though the system in question was not required to be provided by the USBC?

A. No. There are no provisions established by the USBC to regulate the installation of elective fire alarm systems beyond what is necessary to secure a safe installation in accordance with Section 100.8. Also, note the language contained in Section 36-103 of the Code of Virginia which states in part "...building owners may elect to install partial or full fire alarms or other safety equipment that was not required by the building code in effect at the time a building was constructed without meeting current building code requirements, provided the installation does not create a hazardous condition." See Interpretation 124/81 issued September 26, 1986.

Interpretation 113/84

Issued October 23, 1987
Sections P-806.1 and P-806.2, USBC, Volume I/1984 Edition

Given: A parking structure, open, with floor drains at each floor connection to a sewer.

Q. Is it the intent of these sections to require the drains to be trapped?

A. No.

Interpretation 114/84

Issued December 18, 1987
Section M-301.1, BOCA Basic/National Mechanical Code/1984 Edition

Q. In an condominium unit (Use Group R-2) having its own central heat pump system, can a room containing electric washer/dryer and air handling unit be used to return air from adjoining living spaces through a louver door?

A. Yes. The only areas prohibited to be used as return air plenums are uninhabited basements, cavity walls, areas above ceilings and attic spaces.

Interpretation 115/84

Issued December 18, 1987
Section M- 812.2, BOCA Basic/National Mechanical Code/1984 Edition

Q. In view of 1 1/2 times the system working pressure:

a. Can a city require 50 PSI?

b. Can a mutually (i.e. contractor, inspector, gas supplier) agreed upon pressure be accepted within a region, for instance 20 PSI using a 0-30 or 0-50 lb. test gauge of good quality?

A. a. No, unless 50 PSI is 1 1/2 times the system's working pressure.

b. Yes, provided the pressure agreed upon is a minimum of 1 1/2 times the working pressure of the system being tested.

Interpretation 116/84

Issued December 18, 1987
Section M- 812.3, BOCA Basic/National Mechanical Code/1984 Edition

Q. What is the fuel source(s) (i.e. natural gas, LPG) the code addresses in regard to the test equipment?

A. The section requires all fuel gas systems, regardless of fuel type, to have the test pressure measured with a water manometer or device of equivalent accuracy.

Interpretation 117/84

Issued December 18, 1987
Section M-1602.9 and M-403.1, BOCA Basic/National Mechanical Code/1984 Edition

Q. In a condominium unit (Use Group R-2), can a BOCA approved recirculating fan be used to ventilate a bathroom having a tub or a shower and no window opening to outside?

A. Yes, provided the fan meets the requirements of Report No. NER-178.

Interpretation 118/84

Issued December 18, 1987
Article I, USBC, Volume I/1984 Edition

Q. (1) Based on Section 120.2.1, are all repairs to buildings constructed before the USBC required to conform with the current edition of the USBC (for example, a pre-USBC building must have a set of exit stairs replaced). Must these replacement stairs meet the current edition of the USBC?

Q. (2) If no, what type and to what extent may alterations be made without complying?

Q. (3) If the answer to number one above is no, is the building official required to inspect the work and issue a Certificate of Occupancy in accordance with Section 117.6?

A. (1) No.

A. (2) Section 120.2.1 states that existing materials and equipment may be replaced with materials and equipment of the same kind or replaced with greater capacity equipment in the same location. If any new equipment or materials that were not a part of the original existing building are added to the building, then such added equipment or material must meet the current edition of the USBC.

A. (3) Yes.

Interpretation 119/84

Issued December 18, 1987
Article 220-3(b) National Electrical Code/1984 Edition

Q. If a receptacle located at the end of a counter space which is projecting from a wall is supplied from one the required small appliance circuits and the receptacles above the countertop are supplied by the other required small appliance circuit, does this meet the intent of 220-3(b)?

A. Yes. The code does not prohibit the outlets being installed in fronts, backs or sides of counters.

Interpretation 120/84

Issued December 18, 1987
Sections M-1204.1 and M-1402.1, BOCA Basic/National Mechanical Code/1984 Edition

Q. (1) Are manufactured wood burning firebox and flue assemblies (UL listed and tested under UL Standard 127) together considered to be a shaft? or, is Section 1410 (vertical shafts) applicable?

Q. (2) Are there any enclosures required around these firebox and flue assemblies because of penetration through floor/ceiling assemblies of adjacent dwelling units?

Q. (3) If firebox and flue assemblies are required to be enclosed, can flues from more than one dwelling unit be contained in the dame enclosures?

Q. (4) Are horizontal off-sets permitted in a shaft if the required rating is maintained along the horizontal surfaces?

A. (1) Factory-built chimneys are regulated by Section M-1204.0 of the 1984 BOCA Basic/National Mechanical Code. Section M-1204.1 requires these chimneys to be installed in accordance with the manufacturer's instructions. These devices are not considered vertical shafts and are not governed by the provision of 1410.0. See BOCA Interpretation #50/1410/82.

A. (2) Yes. M-1204.2.2 requires the chimney to be protected from physical damage, and requires that penetrations of floors and ceilings be firestopped. The firestopping must be installed in a manner to maintain he integrity of the fireresistance rating assembly. See Section 1420.6.4.

A. (3) Yes.

A. (4) Yes.

Interpretation 121/84

Issued December 18, 1987
Article 100.6, USBC, Volume I/1984 Edition

Given: Virginia Power's Telecommunications Department routinely installs concrete poles at various locations for the purpose of supporting microwave communication antennas. The poles and foundations are similar to our transmission line supporting poles.

Q. Should Virginia Power be required to obtain a local building permit for these antenna support poles?

A. Yes.

Interpretation 122/84

Issued December 18, 1987
Section 1700.0, BOCA Basic/National Building Code/1984 Edition and Section 104.1, USBC, Volume I/1984 Edition

Q. When installing a central station burglar alarm system that is capable of monitoring additional functions such as fire, room temperature, freezer temperature, medical alert and etc., is a permit required if the customer elects to install limited fire protection that is not required to be installed by the building code?

A. Yes. Section 104.1 states that a building permit shall be issued by the building official before the installation or alteration of any building equipment.

Interpretation 123/84

Issued December 18, 1987
Article 370, National Electrical Code/1984 Edition

Q. Is it permissible to install a surface-mounted range receptacle in a dwelling unit to the floor immediately behind the range?

A. Yes

Interpretation 124/84

Issued December 18, 1987
Section 110.2, USBC, Volume I/1984 Edition

Q. Section 110.2 (Compliance with Permit) states that all work shall conform to the application and plans for which the permit has been issued, and any approved amendment thereto. Is there any allowance for "normal" variance during construction (e.g. a plan shows a measurement of 48 inches but actual construction resulted in a measurement of 43 inches). Would "normal construction variance" from the plan constitute a violation of the USBC Section 110.2; or, is there a provision or interpretation that allows for such variance?

Regardless of whether there is such a provision, would language in the plans to the effect that "all measurements are approximate and may vary up to six inches during construction" be acceptable to the Commonwealth and have the effect of allowing for normal construction variance?

A. The building official has authority to grant modifications and determine if plans show the nature and character of the work performed. Section 110.2 allows the building official to approve amendments to the application and plans.

Interpretation 125/84

Issued January 22, 1988
Section 1007.3 and 1412.3, BOCA Basic/National Building Code/1984 Edition, USBC, Volume I/1984 Edition

The following questions address themselves to the intent of BOCA 1984 Section 1007.3 "Wood Foundations":

Q. (1) Section 1007.3 recognizes the use of wood foundations, but is not specific as to type of construction. Can wood foundations be used in Type 5B and/or 5A construction?

(Note: Section 406.1 states that "Building and structures of Type 5 construction are those in which the exterior walls, bearing walls, partitions, floor and roof construction are constructed of any materials permitted by this code...)

Q. (2) Does BOCA restrict the use of wood foundations by building "use group" when classified either 5A/5B?

Q. (3) In 5A construction, Table 401 requires exterior walls to be one hour rated. If a wood foundation system is used, does the one hour rating need to be maintained at that portion of the wall below grade?

Q. (4) (a) If question 3 is yes, is the fire exposure on the wood foundation assumed to be from within the unit?

(b) Would the fire exposure ever be assumed to be from outside the unit?

(c) If question 4b is yes, would the fire exposure from outside the unit ever be assumed at that portion of the exterior wall below grade?

The following question addresses itself to the intent of BOCA 1984 Section 1412.3:

Q. (5) Section 1412.3 allows a one hour fireresistive rated assembly to omit the membrane material on the "unusable" side of the assembly: Would this also apply to an exterior wood foundation wall assembly, allowing the membrane material to be omitted from the exterior portion of the wall below grade?

A. (1) Section 1007.3 does indeed provide design, installation and treatment requirements for wood foundations via referenced standards. As with any other materials or products specified in the code, the provisions of Article 4 for types of construction classification must be referred to for applicability. Only Type 5 construction allows the exterior walls to be constructed of any materials permitted by the code (i.e., wood foundations).

A. (2) The relationship between types of construction and Use Groups is provided in Table 501. Type 5 construction is limited to certain heights and areas for certain use groups and, in some cases, Type 5B construction is not permitted for certain use groups. Within the height and area limitations of the table, wood foundations would be allowed in all use groups as a part of Type 5A construction and would be allowed in all use groups except A-1-A, H, I-2 and I-3 as part 0 type 5B construction.

A. (3) Table 401 requires fire resistance ratings for exterior walls based on type of construction, the fire separation distance, and whether the walls are bearing or nonbearing. Certainly, that portion of the wood foundation that is above grade is considered an exterior wall and must have the required fire resistance ratings. That portion of the wood foundation that is located below grade is not exposed, however, it is the supporting construction for other fire resistance rated elements. As such, Table 401 and Section 1411.0 will require the remaining portion of wood foundation to have at least the fire resistance rating of the construction it supports.

A. (4) (a) Section 1406.1 requires that exterior walls be treated for exposure from inside the building.

(b) Yes, when there is a fire separation of less than six feet.

(c) Yes. See response #3 concerning supporting construction.

A. (5) Question is not applicable since Section 1412.3 refers to ceiling/floor assemblies; however, if a one hour rating is required, then the specific materials used are immaterial, as long as the fire rating is maintained.

Interpretation 126/84 (Revised)

Issued May 27, 1988
Section M-503.0 through M-507.0, BOCA Basic/National Mechanical Code/1984 Edition

Q. (1) Should a building official withhold the approval of a UL #710 listed commercial exhaust hood when the installation instructions (i.e. "manufacturers and/or a project design consultant") designate an alternate (i.e. "an airflow less than prescribed by applicable code") but fail to include needed evidence to provide the alternate is at least equivalent to that prescribed by BOCA Mechanical Code 503.5.1 and M-503.5.2?

Q. (2) Does any air pumped or introduced directly inside of a hood (i.e. "the plane in-between the hood perimeter entrance area and the outside edge of cooking surfaces") qualify as makeup air required by BOCA Mechanical code M-503.5.2?

A. (1) Yes. It is recognized that laboratory tests of a restaurant hood cannot duplicate all the conceivable conditions that may exist in actual installations and that hoods when installed may not perform satisfactorily under existing kitchen conditions using the air flow established in the listing investigation. It is often necessary that the exhaust flow be increased to attain proper evacuation of the grease and smoke vapor. Approval of alternate air flow rates, less than prescribed by M-503.5.1 and M-503.5.2 is governed by Section M-108.4.2. The mechanical official shall require sufficient technical data be submitted to substantiate the alternate flow rate, under existing kitchen conditions, will confine cooking vapors and residues within the hood.

A. (2) No. If the exhaust air volume is "made-up" inside of the plane in between the perimeter entrance area of a hood and the outside edge of cooking surfaces, the effectiveness of the exhaust system to encompass, entrap and carry cooking vapor into the hood is reduced as follows:

"made-up"	effectiveness%
100	0
90	10
80	20
70	30
60	40
50	50

Makeup air shall not reduce the effectiveness of the exhaust system.

Interpretation 127/84

Issued January 22, 1988
Section ES-303.3.1, BOCA Basic/National Existing Structures Code/1984 Edition

Q. Is the intent of this section to require the removal or covering of painted surfaces containing an excess of 0.5 percent lead in all dwelling units where it is discovered during an inspection?

A. Section 103.5 of Volume II, USBC, Building Maintenance Code, allows the code official to order the minimum changes needed to remedy the hazardous conditions not related to maintenance.

Interpretation 128/84 - Superseded - See revised version 126/84

Issued January 22, 1988
Section M-503.0 through M-507.0, BOCA Basic/National Mechanical Code/1984 Edition

Q. Should a building official withhold approval of a UL #710 listed commercial exhaust hood for a particular installation when the "manufacturer's instructions" and/or a project design consultant designate an alternative (i.e. "an air flow less than prescribed by the Code") but fail to include needed evidence to prove the alternate is at least equivalent to that prescribed by BOCA Mechanical Code Section M-503.0 through M-507.4?

A. Section 106.1 of the Uniform Statewide Building Code states that the "building official shall require that sufficient technical data be submitted to substantiate the proposed use of any material, equipment, device or assembly." If the building official determines that the data submitted is satisfactory proof of performance for the intended use of the equipment, then the building official may approve the use of the equipment or device.

Section M-503.1 of the BOCA Mechanical Code requires that mechanical equipment be installed in accordance with the manufacturer's instructions for the labeled equipment.

Also, see Interpretation 8/81.

Interpretation 129/84

Issued January 22, 1988
Section 336-3 and 300-21, National Electrical Code/1984 Edition

Q. Is Non-Metallic Sheathed Cable permitted to be used for wiring in fire-rated walls and ceilings of a building of 3 stories or less and not of an occupancy listed in 336-3(C)?

A. Yes. Section 336-3 permits type NM and NMC cables to be used in certain buildings and structures that do not exceed three floors above grade. Section 300-21 requires the necessary firestopping to prohibit the spread of fire or products of combustion (smoke).

Interpretation 130/84

Issued January 22, 1988
Section ES-602-1.1, USBC, Volume II/1984 Edition

Q. The referenced section states "Every laundry area and bathroom shall contain at least one grounded type receptacle. Every bathroom shall contain at least one receptacle."

Is it the intent of the code to require with respect to bathrooms only:

1. Where no receptacle exists, the violation is cited. Installation of a new circuit is required in compliance with the National Electrical Code.

2. Where a non-grounding receptacle exists the violation is cited. Where a grounding means does not exist in the receptacle enclosure, replacement may be made with an ungrounded GFCI receptacle, either of the non fed-through type or else wired so that the feed through feature is not used to feed other receptacles.

3. That this code section should affect each vacancy in continuous use structures built prior to the enactment of the Uniform Statewide Building Code where a properly functioning two-pronged receptacle is currently installed. Also, that this code section require with each vacancy in continuous use structures built prior to the enactment of the Uniform Statewide Building Code, where no receptacle exists, a new circuit and GFCI receptacle must be installed.

A. No. The Building Maintenance Code does not generally provide for retrofitting existing buildings. Section 103.5 of Volume II, USBC Building Maintenance Code does allow the code official to order only minimum changes needed to remedy the hazardous condition related to maintenance.

Interpretation 131/84

Issued February 19, 1988
Section P-1506.4.2, BOCA Basic/National Plumbing Code/1984 Edition

Q. "Is it permissible, under Section 1506.4.2, for the relief valve of a hot water tank to discharge into an unusable crawl space of a residential building?"

A. Yes.

Interpretation 132/84

Issued February 19, 1988
Section 313, USBC, Volume I/1984 Edition

Q. Can a home professional office complying with the five conditions as listed below be classified as Use Group R-3 or R-4 and therefore not be subject to the Code requirements for office use or should home occupations be treated as mixed uses under Section 313 of the Virginia Uniform Statewide Building Code?

Characteristics of a home professional office to be simultaneously satisfied:

1. creates no external evidence of nonresidential use;

2. involves no process, activity or equipment which would crate a nuisance or hazard to surrounding properties;

3. employs only persons domiciled on the premises;

4. has no more than one customer at a time and no more than four per day;

5. occupies no more than 20% of the gross floor are of the dwelling, or 600 square feet, whichever is less.

A. Zoning matters not related to the materials or methods of construction are not regulated by the Uniform Statewide Building Code. Section 303.1 of the USBC requires all structures, or parts thereof, used for the transaction of business or rendering of professional services to be classified as Use Group B. Section 313 and 1405.5 are acceptable alternatives to classifying the building as Use Group R-3 or R-4.

Interpretation 133/84

Issued February 22, 1988
Section 106.1, Addendum 1, Article 16, USBC, Volume I/1984 Edition

Q. If mechanical equipment bears the label "CSA" (Canadian Standards Association), is this equipment approved for the use intended?

A. Sections 106.1 and M-401.1 of the USBC require mechanical equipment to bear the label of an approved agency or be approved by the building official based on sufficient substantiating technical data or the recommendations of nationally recognized research, testing and certification organizations. The building official has the authority to accept CSA (Canadian Standards Association) or other organizations as "approved agencies" or nationally recognized certification organizations.

Interpretation 134/84

Issued February 22, 1988
Section 708.1, USBC referencing BOCA/1984 and 1987 Edition

Q. Does a storage area in the basement of a R-3 dwelling unit have a minimum ceiling height?

A. No.

Interpretation 135/84

Issued February 22, 1988
Section 816.5 and 816.5.1.3, USBC referencing BOCA, 1984 and 1987 Edition

Q. Must interior stair handrails in R-3 dwelling units be constructed from the nosing of the first tread to the nosing of the last tread?

Section 816.5 states continuous but mentions no specifics as to starting and ending. Decorative colonial railings do not typically run from nosing to nosing.

A. Handrails in R-3 dwelling units shall begin at the first riser at the bottom of the flight of stairs and continue to the top of the last riser.

Interpretation 136/84

Issued March 18, 1988
Section 100.6, USBC, Volume I/1984 Edition

Q. The subject code section "exempts" the provider of a publicly regulated utility service" from the "provisions of the USBC." Would this exemption include equipment such as freestanding telephone booths and/or wall mounted telephone stands?

A. Yes; however, if a bank of public telephones is provided at least one telephone shall comply with the requirements of Section 512.0.

Interpretation 137/84

Issued April 22, 1988
Section 1317.2, BOCA Basic/National Building Code/1984 Edition

Q. (1) Does "interior of the building" as referenced in 1317.2 of the BOCA Basic National Building Code, 1984 include an attic space not used to house serviceable equipment in R3 construction?

Q. (2) Does "interior of the building" as referenced in 1317.2 of the BOCA Basic National Building Code, 1984 include storage spaces behind knee walls in R3 construction?

Q. (3) Does "interior of the building" as referenced in 1317.2 of the BOCA Basic National Building Code, 1984 include attached garages with garage doors in R3 construction?

Q. (4) Does "interior of the building" as referenced in 1317.2 of the BOCA Basic National Building Code, 1984 include attached garages without garage doors in R3 construction?

Q. (5) Does "interior of the building" as referenced in 1317.2 of the BOCA Basic National Building Code, 1984 include crawl spaces not used to house serviceable equipment in R3 construction?

A. (1) Yes, see Section 1317.3.5.

A. (2) Yes.

A. (3) Yes.

A. (4) Yes.

A. (5) Yes, see Section 1317.3.5.

The interior of the building is to be considered that space enclosed by the exterior walls and roof structure of the building (regardless of whether such space is occupiable). Section 1317.2 is a general requirement for all interior spaces in the building, and Section 1317.3 provides specific requirements for prescribed areas.

Interpretation 138/84

Issued April 22, 1988
Section 812.2, USBC, Volume I/1984 and 1987 Edition

Q. Section 812.2 requires two independent means of egress when the occupant load is more than 50 or in which the travel distance exceeds 75 feet. Should the 75 foot travel distance be measured to the exit? Or, can it be measured to the exit access corridor entrance even if only one exit is provided from the exit access corridor? Should the 75 foot travel distance be measured to a point where there is a choice of two egress paths?

A. The 1984 BOCA Basic/National Building Code, Section 812.2, is written to state when any room or space is required to have two doorways. The travel distance referred to is that distance within the room to one doorway. The arrangement of corridors and exits beyond the doorway, and the total egress travel distance requirements to the building exit will not alter this requirement. These issued are part of other code sections.

Interpretation 139/84

Issued April 22, 1988
Section 812.2, USBC, Volume I/1984 and 1987 Edition

Q. Section 812.2 requires two independent means of egress when the occupant load is more than 50 or in which the travel distance exceeds 75 feet. Should the 75 foot travel distance be measured from the most remote point with no exceptions? Or, can the provisions as set forth in Section 807.4, for measuring from the exit access entrance, be applied?

A. Section 812.2 of the 1984 BOCA Basic/National Building Code refers to the travel distance within a single room or space; this means from the remote point within the room or space. The provisions of Section 807.5, redefining what is meant by exit access travel distance, do no have any bearing on Section 812.2.

Interpretation 140/84

Issued April 22, 1988
Section 622.3, USBC, Volume I/1984 and 1987 Edition

Q. Section 622.3 requires two independent means of egress when the occupant load is more than 50 or in which the travel distance exceeds 75 feet. Should the 75 foot travel distance be measured from the most remote point with no exceptions? Or, can the provisions as set forth in Section 807.4, for measuring from the exit access entrance, be applied?

A. See answer to Interpretation No. 139/84. The intent for 622.3 is the same as that for 812.2.

Interpretation 141/84

Issued April 22, 1988
Section 622.3, USBC, Volume I/1984 and 1987 Edition

Q. Section 622.3 requires two independent means of egress when the occupant load is more than 50 or in which the travel distance exceeds 75 feet. Should the 75 foot travel distance be measured to the exit? Or, can it be measure to the exit access corridor entrance even if only one exit is provided from the exit access corridor? Should the 75 foot travel distance be measured to a point where there is a choice of two egress paths?

A. The 1984 BOCA/Basic National Building Code, Section 622.3, is written to state when a mezzanine is required to have two means of egress. The travel distance referred to is that distance within the mezzanine to one of the exit access corridor entrances. The arrangement of corridors and exits beyond the exit access corridor entrance, and the total egress travel distance requirements to the building exit will not alter this requirement. These issues are part of other code sections.

Interpretation 142/84

Issued April 22, 1988
Sections 2111.4, 2107.2, 2107.2.3 and ANSI A17.1, USBC, Volume I/1984 Edition

Q. Generally BOCA, 1984 2111.4 requires that where emergency operation is required by BOCA, 1984 2107.2 that a smoke detector be installed in elevator lobbies and elevator equipment rooms which causes the elevator cars to return non-stop to a designated level and wait until reset in the event of a fire.

Generally BOCA, 1984 2107.2 requires emergency operation in accordance with ANSI A17.1, BOCA 1984 2107.2.1, BOCA, 1984 2107.2.2 and BOCA, 1984 2197.2.3.

Generally ANSI A17.1 rule 211.3 only requires emergency operation for automatic elevators having a travel distance of 25 feet or more.

For a two story building where the elevator travel distance is less than 25 feet and the provisions of BOCA, 1984 2107.2.1 - 2107.2.3 are complied with, is it necessary to comply with BOCA, 1984 2111.4 since emergency operation is not required?

Is it the intent of the code to make the provisions of BOCA, 1984 2111.4 apply to ALL passenger elevators; and if so, why refer to BOCA, 1984 2107.2 referring to only emergency operations.

A. The provisions of Section 2111.4 apply only to elevators where emergency operation is required. Section 2107.2 refers to ANSI A17.1, which, as noted, only requires emergency operation when the travel distance exceeds 25 feet.

Interpretation 143/84

Issued April 22, 1988
Article 618.5.1, BOCA, Section 101.1, USBC, Volume I/1984 Edition

Q. (1) Does Article 618.5.1 of the BOCA code require that, upon activation of a smoke detector or sprinkler located in a stairwell, a voice alarm system be automatically activated providing a predetermined message in the stairwell audible to all occupants within the stairwell?

Q. (2) Does Article 618.5.1 require that the voice alarm system predetermined message transmitted to an area be sufficiently informative and directive in nature to insure the occupants of that area leave it immediately via an identified safe means of egress?

A. (1) Yes.

A. (2) Yes.

Interpretation 144/84

Issued April 22, 1988
Section 810.2, USBC, Volume I/1984 Edition

Q. (1) Is the garage portion as shown below a "dead end corridor", subject to a twenty foot limitation imposed by a portion of Section 810.2?

Q. (2) Does the Board have any general guidance on this subject?

A. (1) No, Section 810.2 applies to corridors and there are no corridors involved in this type of parking garage.

A. (2) The term is not applicable to an open parking structure.

Interpretation 145/84

Issued April 22, 1988
Section 1714.7, USBC, Volume I/1984 Edition

Q. Do temperature-supervised heat-traced wet standpipes meet the requirements of Section 1714.7?

A. Yes, if in accordance with NFPA 13, Section 3-10.1.2 and supervised in accordance with the USBC, Section 1718.0.

Comment: The intent of the USBC is to permit alternative methods of complying with the code if the alternatives accomplish the same purpose. A standpipe system in which water is present in the piping throughout the system, but is prevented from freezing by heating the piping through an electrical heat wrap, is an example of such an alternative that can be judged as accomplishing the intent of the code.

Interpretation 146/84

Issued May 27, 1988
Article 17, USBC, Volume I/1984 Edition

Q. (1) What is the definition of a "hazardous condition"?

Q. (2) Would a non-required (voluntary) fire alarm system that was not designed or installed in accordance with a recognized national standard (i.e. NFPA 70, 72A) be considered a hazardous condition?

Q. (3) If these voluntary alarm systems are not required to be reviewed or approved by the building or fire official, how can we be sure they are not, in fact, hazardous?

A. (1) Any condition which violates the purpose of the USBC as established by Section 100.8 to ensure safety to life and property.

A. (2) No.

A. (3) Permits, plans, inspections, certificates of use, etc. are required when installing elective fire alarm systems. This is necessary in order to ensure compliance with 100.8. See 36-103 Code of Virginia.

Interpretation 147/84

Issued May 27, 1988
Section 302.4 and 302.5, BOCA Basic/National Building Code/1984 and 1987 Editions

Q. We have designed a multi-purpose building with a total of 13948 sq. ft. The central space has 7171 sq. ft. and will be used for church assemblies several times a week. At these times, the occupancy will be 600 seated at chairs and 450 seated at tables and chairs.

At other times the same room will function as a gymnasium for basketball, volleyball, etc. The total occupancy at these times will be 200 total. This figure includes teams and maximum spectators. Since this space is serving both recreational and church functions with different occupancies, what should be the Use Group Classification: A-3 recreation with 200 total, or A-4 church with 600 total?

This judgement will be useful in determining other requirements and restrictions of both the 1984 and 1987 BOCA code.

A. Use Group A-3. See Section 313.1.

The occupancy load is to be determined according to the most restrictive requirements (i.e. higher occupancy load is to be used).

Interpretation 148/84

Issued May 27, 1988
Section 120.2.1, USBC, Volume I, BOCA/1984 Edition

Q. An existing elementary school is to receive a new roof mounted HVAC system with ducted supply, and plenum return. The new HVAC system has been designed under the 1984 VUSBC.

Existing corridor walls, which are not rated, nor required to be rated when the school was built, are being cut to provide new 16 x 18 transfer openings above the ceiling for return air from classrooms to corridor plenum.

Under the 1984 VUSBC, can the building official require either smoke/fire dampers in the transfer openings in the existing non-rated wall, or a "rated ceiling" in the corridor, in conjunction with the installation of the new HVAC system?

A. No.

Interpretation 149/84

Issued July 15, 1988
Section 113.2, USBC, Volume I/1984 Edition

Q. (1) Please advise if issuance of the violation to the builder or subcontractor is always correct?

Q. (2) Is there a point in time when the builder no longer becomes the "person responsible" for code violations caused by improper construction?

A. (1) If the builder or subcontractor is the person "responsible for the construction, alteration, extension, repair, removal, demolition or use of the building in violation of the provisions of the USBC" then it would be correct to issue the notice of violation to that builder or subcontractor.

A. (2) The Statute of Limitations provisions found in § 19.2-8 of the Code of Virginia also apply to contractors and subcontractors. On its face, § 19.2-8 of the Code recognizes that the discovery of a violation of the USBC might be made by the owner of the building after the building has been occupied and keys the limitation to the construction of the building or the issuance of a certificate of occupancy. Accordingly, the contractor and subcontractor would be subject to the same ultimate limitation of two years of prosecution of building code violations found in §19.2-8 of the Code.

Interpretation 150/84

Issued July 15, 1988
Section 201.0 and 309.2, BOCA Basic/National Building Code/1984 Edition

Q. (1) Does a wet bar area, microwave oven (not built in) and refrigerator constitute "permanent provisions for...cooking" as used in the Section 201.0 definition of "dwelling unit" so that the structure consists of two dwelling units?

Q. (2) Under Section 309.2, are cooking facilities permitted in buildings designated as Use Group R-1?

Q. (3) Does a different use group designation apply when the structures described above are constructed in a series of adjoining structures rather than as freestanding structures?

Q. (4) Does Section 309.2, under the language "primarily transient in nature, making use of the facilities for a period of less than 30 days" include a structure used by time-share occupants for one week periods on the basis of ownership, rather than first come first served?

A. (1) Yes.

A. (2) Yes.

A. (3) No, the use group classification is determined by the use of the building not by the type of construction.

A. (4) No.

Interpretation 151/84

Issued July 15, 1988
Article 645-2, National Electrical Code/1984 Edition

Q. (1) Does Article 645-2(c)(2) exempt receptacles, electrical metallic tubing, or flexible metal conduit from being rigidly and securely fastened in place under raised flooring.

Q. (2) Does Article 645-2(c)(3) require type CMP cords or cables to be installed under raised flooring within a data processing area when air-conditioning return for the data processing area only.

A. (1) No. Article 348, 350 and 370 require those components to be securely fastened.

A. (2) No. Article 300-22(c), Exception No. 6 and 300-22(d) exempt areas beneath raised floors for data processing systems. All cables associated with the data processing equipment shall be permitted under a raised floor provided ventilation in the under floor area is used for the data processing equipment and data processing area only.

Interpretation 152/84 through 173/84

(Numbers Not Used)

Interpretation 174/84

Issued October 25, 1985
Section M-307.1 and M-307.2, BOCA Basic/National Mechanical Code/1984 Edition

Q. Do recirculating air or exhaust systems with a capacity of less than 2000 CFM require smoke or heat detectors?

A. No. A detector would be required only when the system is to be used for smoke control or as part of a supervised system required by M-307.5.1 and Section 1718.1 of the BOCA Basic Building Code/1984.

Interpretation 175/84

Issued October 23, 1987
Section 1301.5.6.1 Item 7, BOCA Basic/National Building Code/1984 Edition

Given: A wall opening that is greater than 9 square feet in total area and located less than 18 inches above a floor level within 36 inches of the opening. If the opening is glazed with a single fixed panel of glass, it is evident that Section 1301.5.6.1, item 7, of the 1984 BOCA Basic/National Building Code requires the glass to be an approved safety glazing material.

Q. Would safety glazing be required if the opening were glazed with individually framed fixed glass panels, each of which are less than 9 square feet in area?

A. No.

Comment: The intent of Section 1301.5.6.1, item 7, is to require safety glazing when an individual panel of fixed glass is larger than 9 square feet in area (and located relative to the floor as specified). Individual panels of glass that are 9 square feet and less in area have not presented the same risk of injury upon breakage as have larger panels of glass. Further, such an opening with smaller, individually framed panels is more likely to be noticeable and therefore, less likely to be subjected to accidental human impact.

Interpretation 176/84

Issued March 20, 1987
Sections 4.3, 4.7, 4.8, ANSI-A117.1 and Section 512, USBC, Volume I/1984 Edition

Q. (1) At what point does an accessible route begin?

Q. (2) If an accessible route encompasses both 4.7 (curb ramps) and Section 4.8 (ramps), does the curb ramp have to comply with Section 4.8.4 (Landing) paragraph (2)?

A. (1) Accessible routes originate within the property line of the buildings which are being made accessible pursuant to Section 512 of the USBC.

A. (2) No.

1984 INDEX

CODE/SECTION — INTERPRETATION

* Indicates provisions amended by State Regulation

* Indicates provisions amended by State Regulation

BOCA Basic/National Existing Structures Code

* Indicates provisions amended by State Regulation

BOCA Basic/National Mechanical Code

* Indicates provisions amended by State Regulation

BOCA Basic/National Plumbing Code

* Indicates provisions amended by State Regulation

* Indicates provisions amended by State Regulation

National Electrical Code

* Indicates provisions amended by State Regulation

USBC, Volume I

USBC, Volume II

* Indicates provisions amended by State Regulation