

**Interpretations
of the
State Building Code
Technical Review Board**



A publication of the Commonwealth of Virginia
Department of Housing and Community Development

**Interpretations
of the
State Building Code
Technical Review Board**

1975 - 1990 USBC



A publication of the Commonwealth of Virginia
Department of Housing and Community Development

INTERPRETATIONS OF THE STATE BUILDING CODE TECHNICAL REVIEW BOARD

NOTE TO THE USER

In 1975 the State Building Code Technical Review Board issued the first formal interpretations of the Virginia Uniform Statewide Building Code (USBC). Originally, as the Board issued new interpretations, each would be assigned the next available sequential number. In 1989, DHCD staff implemented a new numbering system in which interpretations are grouped by the edition of the USBC to which they are applicable. In doing so, we replaced the original numbers with numbers ending in a two digit suffix which identifies the applicable edition (e.g. 102/84 issued under the 1984 USBC, or 75/87 issued under the 1987 USBC).

The user may notice that certain numbers are not used. That is because duplications occurred during the initial renumbering process. Those numbers are now deleted.

This book is subdivided in sections, each containing the interpretations applicable to one edition of the USBC. An index is located at the end of each section. The numbers in the right column of the index represent the interpretation numbers. The two digit suffix is not included.

This edition of the Interpretations of the State Building Code Technical Review Board replaces all previous compilations. Please discard (recycle) earlier editions.

The staff of the Code Development Office has made a great effort to find and correct errors in the transcribed interpretations. There may still be a few that we missed. User comments concerning errors or suggestions for improving the format of future editions are appreciated. New interpretations, updated index pages and errata notices will be published in the "Code Connection," the newsletter published by the Division of Building Regulation. You may contact the Training and Certification Office at (804) 371-7180 for subscription information.

Direct comments or questions to:

Code Development Office, DHCD
501 North Second Street
Richmond, Virginia 23219-1321
(804) 371-7170

Interpretations

Of

The

1975 USBC



Interpretation 1/75

Issued April 7, 1978

Section 440-14, National Electrical Code/1975 and 1976 Editions

- Q. Could the disconnect switch for a central air conditioning unit be located inside a dwelling if the disconnect is visible from the outside through a glass door or window?
- A. No. Even though the disconnect switch for a central air conditioning unit may be "visible from the outside through a glass door or window", it is our opinion, it still could not be considered "readily accessible"—a definite part of the requirement in Section 440-14, National Electrical Code, both 1975 and 1978 Editions. Pertinent to this whole matter, is the definition of "readily accessible" in Article 100 of the aforementioned codes.

Interpretation 2/75

Issued March 11, 1976

Section 316.0,

BOCA Basic Building Code/1975 Edition

- Q. Does Section 316.2.2 mean that the dwelling units allocated for the physically handicapped and aged must be proportionately distributed throughout all types of units?
- A. Yes.

Comment: This means that there must be available for the physically handicapped and aged apartment units of the various types such as one (1) bedroom, two (2) bedroom, etc. But in garden apartments, quadruplexes, sixplexes and corridor garden apartments, there is no reason why they may not be on the lower level or grade level as long as they comply with the accessibility requirements.

Interpretation 3/75 (2nd. Revision)

Issued May 6, 1976

Section 316.0,

BOCA Basic Building Code/1975 Edition

- Q. Does Section 316.0 mean one dwelling unit for every 25 dwellings must be accessible to the physically handicapped, or one bedroom for every 25 bedrooms?
- A. This means one (1) dwelling unit for every twenty-five (25) units.

Comment: Units containing more than one (1) bedroom are considered to be one (1) unit.

Interpretation 4/75 (2nd. Revision)

Issued May 7, 1976
Section 316.0, BOCA Basic Building Code/1975 Edition

- Q. Does Section 316.0 include apartment units (R-2) for sale (Condominiums, cooperatives, etc.)?
- A. Yes.

Interpretation 5/75

Issued March 11, 1976
Section 316.0, BOCA Basic Building Code/1975 Edition

- Q. Does Sections 316.8.2 and 316.8.3 mean that we will have to have two (2) water closets with handrails; one for adults and one for children in apartments for the physically handicapped and aged?
- A. No. One (1) water closet for an adult will meet the requirements for apartment buildings.

Comment: Sections 316.8.2, 316.8.3 and 316.4 give the details for the installation of fixtures where more than one fixture is required.

Interpretation 6/75

Issued May 7, 1976
Section 303.0, BOCA Basic Building Code/1975 Edition

- Q. What type fire rating does frame construction, single family dwellings, attached side by side, with no side yard (lot line separation only), require when constructed outside the fire limits?
- A. Refer to Section 303.2 of the Basic Building Code: In frame construction, an exterior wall erected less than six (6) feet from its adjacent lot line shall be of one (1) hour fire-resistance rated construction, including opening protectives, except store front and window and door openings in one and two family dwellings. Exterior walls of Type 4 frame construction shall not have openings of any type when located three (3) feet or less from interior lot lines.

Interpretation 7/75

Issued March 11, 1976

Section 433.2, BOCA Basic Building Code/1975 Edition

Section R-216.2, CABO One and Two Family Dwelling Code/1975 Edition

Q. Does Section 433.2 of the Virginia Basic Building Code and Section R-216.2 of the One and Two Family Dwelling Code mean the insulation must have the insulating factors noted?

A. No.

Comment: The complete assembly including the insulation (such as the exterior finish, the sheathing, interior finish and insulation) must be taken into account when determining the insulating factors. Remember these sections of the Code have to do with residential construction only.

Interpretation 8/75

Issued March 29, 1976

Section 1100.2, BOCA Basic Building Code/1975 Edition

Section M-307.1, BOCA Basic Mechanical Code/1975 Edition

Q. Will the provisions of the Virginia Uniform Statewide Building Code allow heating equipment to be installed in crawl space areas of one and two family dwelling-type structures?

A. Yes. Section 1100.2, page 10 of the Accumulative Supplement allows such installations. Section M-307.1 of the Basic Mechanical Code speaks to mechanical requirement.

Comment: In that Section R-309 of the One and Two Family Dwelling Code and Section 507.3 of the Basic Code require the crawl space be ventilated or other means be provided to control moisture, crawl space would not normally be considered a "damp location." Section 872 of the Accumulative Supplement must also be considered. Section 110-16A, Exception No. 2 "NEC" should be considered when electrical type heating is installed.

Interpretation 9/75

Issued April 5, 1976

Section P-1802.5.2, BOCA Basic Plumbing Code/1975 Edition

Q. Is that portion of the building sewer which connects the plumbing system five (5) feet from a structure to a public or private sewer system covered by the Virginia Uniform Statewide Building Code?

A. Yes. The building sewer is defined on page 11 of the 1975 Plumbing Code. Section P-1802.5.2 speaks to the testing required.

Comment: The building sewer must be installed in accordance with the code requirements, inspected and tested by the building official.

Exception: When under the exclusive control of a utility company on private property by established right, the installation would not be covered by the Virginia Uniform Statewide Building Code.

Interpretation 10/75

Issued April 26, 1976

Section 316.0, BOCA Basic Building Code/1975 Edition

Section 36-124, Accumulative Supplement/1975 Edition

Q. Section 316.0 refers to Appendix "C", which in paragraph 6 of the amendment to Section 36-124 of the Code of Virginia, lists "Places of Public Accommodation," which are to be designed for access by the physically handicapped. Is a church sanctuary and a church Sunday school classroom "Places of Public Accommodation?"

A. Yes.

Comment: Churches are considered auditoriums.

Interpretation 11/75

Issued May 5, 1976

Section 108.1, BOCA Basic Building Code/1975 Edition

Q. Where the One and Two Family Dwelling Code is silent, what is the governing source?

A. The building official.

Comment: Section 108.1 grants the building official the authority to act on any question relative to the mode or manner of construction.

Interpretation 12/75

Issued July 1, 1976

Section 230 and 250, National Electrical Code/1975 Edition

"I would like to request a legal interpretation of the requirements on service disconnecting means, the location of this disconnect, and the proper and correct way to ground this disconnecting means and how service panel connected to these disconnects should be wired."

- Q. Should it be three (3) wires, two (2) and one (1) insulated, or three (3) insulated and one (1) uninsulated?
- A. a) Section 230-70 requires that a means be provided to disconnect all conductors in a building from the service entrance conductors. b) Section 230-72(c) requires the service disconnect means be located either outside or inside of the nearest point of entrance of the service entrance conductors into a building. c) Section 250-23(a) requires the grounding conductor connection be connected to the supply side of the disconnecting means, which is identified by Section 250.25. This is required so that there will be ground on the service entrance cable...when grounded conductors are disconnected as required by Section 230-75. d) Section 230-40 requires service entrance conductors entering the building be insulated. NOTE: Exceptions.

Staff Comment: A three wire properly sized system consisting of two insulated and one uninsulated conductor would comply with the minimum code standards for the typical 2 phase - 230 volt service.

Interpretation 13/75

Issues May 25, 1976

Section 1404.4 and 1407.0, BOCA Basic Building Code/1975 Edition

- Q. At the present time, these two provisions are being enforced in different ways in various jurisdictions, if in fact they are being enforced at all. One jurisdiction requires that the sign contractors post a bond. Another requires a bond from the building owner. The majority have not required such bonds in the past and are not doing so now. Because of the divergence cited above, and because of the workload and manpower demands involved, clarification of these provisions and intentions of the State regarding their enforcement is requested.
- A. Section 1407.0 requires the filing of bond for signs erected which require permits. The amount of bond and permit fees are to be as required by local ordinance. Section 113.3 requires permits be obtained by owner or lessee. Other persons may obtain permit if accompanied by an affidavit from owner. The authority for annual inspections must be by local ordinance or as prescribed by the permit issued.

Interpretation 14/75

Issued December 13, 1976

Section R-215, CABO One and Two Family Dwelling Code/1975 Edition

Q. What is the intent of Section R-215 as it pertains to protection on stairways of 3 or more risers?

A. Handrails shall be provided on both sides of stairways of 3 or more risers, unless one side is against a wall.

Interpretation 15/75

Issued June 25, 1976

BOCA Basic Building Code/1975 Edition

Q. Some of our contractors put in floor insulation with the foil side down as a vapor barrier. The insulation has printed on it, however, that the foil side is to go nearest the living areas of the house. We maintain that the insulation must go in with the foil side toward the living area and that "tiger teeth" must be used to hold it up. Should we also require a layer of plastic as a vapor barrier?

A. No.

Comment: When a material is designed by a manufacturer to accomplish a particular job when installed in accordance with his furnished instructions and the building official issues a permit for said installation, it must be installed in accordance with the manufacturers' recommendations. In the case of floor insulation, the intent of the Virginia Uniform Statewide Building Code would be that the vapor barrier be installed towards the living area and could be held in place by any means approved by the local building official. A layer of plastic vapor barrier can not be required under the VUSBC.

Interpretation 16/75

Issued June 25, 1976

Section R-214, CABO One and Two Family Dwelling Code/1975 Edition

Q. Are spiral stairways permitted in single family dwellings?

A. Yes.

Comment: Section R-214. Stairways shall not be less than 3 feet, 0 inches in clear width and the headroom, rise and run shall conform to Fig. N. A-2 (copy attached). Handrails may project from each side of a stairway a distance of 3 1/2 inches into the required width.

Spiral stairways are permitted provided the width of the tread at a point not more than 12 inches from the side where the treads are narrower is not less than 9 inches and the minimum width is not less than 6 inches.

Interpretation 17/75

Issued June 25, 1976

Section 209.5, BOCA Basic Building Code/1975 Edition and 1975 Accumulative Supplement

Q. Under the provisions of the Virginia Uniform Statewide Building Code, are the provisions of the BOCA Basic Building code applicable when a one and two family dwelling has been designed in accordance with the One and Two Family Dwelling Code?

A. No.

Comment: Note 209.5, Page 9 of the 1975 Accumulative Supplement allows an applicant to design in accordance with the One and Two Family Dwelling Code or design in accordance with the requirements prescribed for R-3 structures of the BOCA Basic Building Code. The applicant must indicate to which doctrine the structure has been designed.

Interpretation 18/75

Issued June 25, 1976

BOCA Basic Building Code/1975 Edition

Q. Does a building official have the authority to direct or dictate to the power company that it cannot service a dwelling built in accordance to Farmers Home Administration's Minimum Property Standards, which were in effect even prior to the time the county had no code at all; operating under standards then?

A. No.

Comment: See § 36-98 of the State Code of Virginia (1950), as amended.

Interpretation 19/17

Issued June 25, 1976

BOCA Basic Building Code/1975 Edition

Q. If a building or structure were built prior to the adoption of the Virginia Uniform Statewide Building Code or prior to the present provisions of this Code, become vacant and meter base removed, does the local Building Official have the authority, under the Code, to direct the owner or present occupant to bring the building up to the present code standards in order to have the meter base replaced, current turned on and the building or structure reoccupied as previously used?

A. No.

Comment: See opinion of the Attorney General of the State of Virginia, dated December 3, 1974, § 36-98 of the State Code of Virginia (1950), as amended.

Interpretation 20/75

Issued August 6, 1976
Section M-615.1, BOCA Basic Mechanical Code/1975 Edition

Q. Do the clearances given in M-615.1 for insulated heaters of 2 inches apply to the bottom of the heater when the heater is insulated only on the sides and top?

If the manufacturers' state that it is acceptable to be installed on combustible flooring, should we accept that as an approval?

A. No. 12" rule would apply.

Comment: When a gas fired water heater is installed in accordance with Section M-615 and is not labeled otherwise, and the bottom is not insulated, it must be 12" from combustible material or be placed on noncombustible material.

Section 1100.3 however, allows acceptance of the certification and labeling of authorized national inspection agencies. Therefore, when equipment is installed in accordance with the manufacturers' instructions on labeled equipment, it is acceptable and should be approved.

(Note: See Appendix A of the 1975 edition of BOCA Basic Building Code for a listing of the Accredited Authoritative Agencies.)

Interpretation 21/75

Issued August 6, 1976
Section 102.0, BOCA Basic Building Code/1975 Edition

Q. What constitutes "roof repair" as defined by Section 102, and when is a permit required?

A. Roof repair consists of removal and replacement of the existing roof covering with the same kind of material with the same fire rating as the material removed, and is considered as an ordinary repair as defined by Section 102.0 - Ordinary Repairs. The amount of material permitted to be replaced before the entire roof must be replaced and its fire rating is designed in Section 926.0 Roof Coverings.

Interpretation 22/75

Issued September 10, 1976

Section M-201.0, BOCA Basic Mechanical Code/1975 Edition

Article 2, Section M-201.0, Definition "Boiler": A closed heating appliance intended to supply hot water or steam for heating processing or power purposes."

Q. Is this definition intended to include domestic hot water heaters which have a heat input in excess of 200,000 BTU's per hour, a water temperature less than 200 degrees F., and more than 120 gallons storage?

A. No.

Comment: Water Heater, domestic type is defined under Article 2, Section 201.0, page 28 of the BOCA Basic Mechanical Code, and reads: "Water heater, domestic type (service): Any heating device with piping connections to the water supply system which is intended to furnish hot water of not more than two hundred (200) degrees F. for purposes other than space heating."

Interpretation 23/75

Issued September 10, 1976

Section R-603.2, CABO One and Two Family Dwelling Code/1975 Edition

Q. Is 95% compaction required in the fill area, or in any fill area using the One and Two Family Dwelling Code?

A. No. Section R-603.2 requires that the fill shall be compacted to insure uniform support of the slab.

Interpretation 24/75

Issued January 14, 1977

Sections 903.5.1 and 907.7, BOCA Basic Building Code/1975 Edition

Q. In Type 4 construction for multi-family buildings, Section 907.0; sub-section 907.7, "The wall may terminate at the underside of the roof deck in Types 3 and 4 construction if properly firestopped, and the roof sheathing or deck is constructed of approved noncombustible material for a distance of four (4) feet on either side of the wall and combustible material does not extend through or over the wall." Can fire retardant treated wood such as plywood be used for sheathing and meet these requirements?

A. No. Fire retardant treated plywood does not comply with Section 903.5.1 of the Basic Building Code/1975 which details the criteria for classification as a noncombustible.

Interpretation 25/75

Issued December 13, 1976

Section 610.0, BOCA Basic Building Code/1975 Edition

- Q. Is the space between furniture or racks which display merchandise in mercantile buildings considered to be exitway access, passageways or corridors as described in Section 610? Are they subject to the 60' width as found in 610.3?
- A. No. Furniture and/or fixtures are not governed by the Virginia Uniform Statewide Building Code.

Interpretation 26/75

Issued December 13, 1976

Section R-210, CABO One and Two Family Dwelling Code/1975 Edition

- Q. What is the feasibility of using an approved fire suppression system in passages located beneath residences as an alternative to the requirement in Section R-210 concerning sealing the garage area from the living quarters by means of conventional 1/2 inch gypsum board?
- A. This is an acceptable method when requested in accordance with Section 110.0 of the BOCA Basic Building Code.

Interpretation 27/75

Issued September 10, 1976

Section 1202.4, BOCA Basic Building Code/1975 Edition

- Q. Is a fire suppression system required in a building used for storage of aircraft? There is no work done on the aircraft within this building; only employees will move aircraft in and out and no public is permitted.
- A. Yes. Except in hangars used for the storage of four (4) or less single engine planes.

Interpretation 28/75

Issued September 10, 1976

Section 106.0, 124.1 BOCA Basic Building Code/1975 Edition

In the case of a structure constructed in 1940, prior to the adoption of the Virginia Uniform Statewide Building Code, can the building official deny electrical service based on his estimation that restoration to be the building's original condition, with the same materials and methods is more than 50% of the buildings replacement value.

Property owner has no desire to renovate the building to its original condition and has made no application for a permit and has requested no inspections. The only request was for electrical service.

Q. (1) Can this service be denied?

Q. (2) Secondly, does Section 124.1 give the building official right of condemnation for this structure?

A. (1) No.

Comment: Section 106.1 requires that "When altered or repaired..." this section in no way authorizes the building official to require that alterations or repairs be made. This section can only apply once application for a building permit has been made.

A. (2) Section 124.1 authorizes right of condemnation only for those buildings constructed under the Virginia Statewide Building Code. Any structures constructed prior to that time would fall under the jurisdiction of the building code being enforced by the locality at the time the building was constructed; or any local ordinance which gives the building official right of condemnation for buildings constructed prior to the adoption of the Virginia Statewide Building Code.

Interpretation 29/75

Issued December 13, 1976

Section R-216.2, One and Two Family Dwelling Code/1975 Edition

Section 433.0, BOCA Basic Building Code/1975 Edition, as amended

Q. Please clarify the requirements of Section R-216.2, Insulation as specified in the 1975 Accumulative Supplement to the Virginia Uniform Statewide Building Code. Particularly, is the R-factor figured just on the insulation only, or does it include other materials to obtain the total R-factor?

A. References in R-216 to insulating factors such as "exterior walls" can be interpreted as any exterior wall; however, the insulating factor may be determined by calculating any R-value supplied by the wall constructed itself and adding insulation to meet the R-value required by the Code. This would also apply to Section 433.0 of the BOCA Basic Building Code as amended.

Interpretation 30/75

Issued December 13, 1976
Section P-1606.1, BOCA Basic Plumbing Code/1975 Edition

- Q. Is the use of "cold water only" vanities acceptable in school toilet areas?
- A. Yes, Basic Plumbing Principle #3 does not require that hot water be provided only that if it is provided the devices for heating and storage be designed and installed so as to prevent danger of explosion or overheating. Therefore, if the system is not designed for hot water, Section P-1606.1 would not apply.

Interpretation 31/75

Issued December 13, 1976
Section P-1703.0, BOCA Basic Plumbing Code/1975 Edition

- Q. In a single family dwelling of 3 bedrooms, designed for use by 6 persons, is the following condition considered to meet the intent of Sections P-1703 and P-1703.1? The well recovers 120 gallons of water in six hours or 480 gallons of water within a 24 hour period.
- A. Yes. Section 1703.0 specifies not less than fifty (50) gallons per person per day be provided. For 6 persons, the per day minimum gallonage is satisfied thereby providing adequate supply.

Interpretation 32/75

Issued December 13, 1976
Sections 203.5 and 207.3, BOCA Basic Building Code/1975 Edition

- Q. Day care centers and/or day nurseries are presently being classified either as A-4 or I-2 structures across the State, with very little continuity, thereby creating a need for an official interpretation.
- A. In a structure designed to house and provide facilities for the care of infants (birth to 3 years) and/or children suffering from other physical or mental limitations, Use Group I-2 would be indicated as this would be defined as a Day Nursery. In a building designed strictly for the education and care of pre-school children (3-6 years), the regulations set forth for schools under Use Group A-4 would prove adequate in meeting the spirit and intent of the VUSBC, and should be defined as day care facilities.

Interpretation 33/75

Issued December 13, 1976

Sections 504.0 and 506.0, BOCA Basic Building Code/1975 Edition

Q. In a domestic kitchen, if the required natural ventilation is provided, can a ductless range hood be installed?

A. Yes. The intent of the Basic Building Code (Sections 504.0 and 506.0) is to require habitable rooms to be provided with either natural or mechanical ventilation. Therefore, a ductless range hood may be used only if the required natural or mechanical ventilation is provided by other means.

Interpretation 34/75

Issued December 13, 1976

Section 240-81, National Electrical Code/1975 Edition

Q. Is there a violation of Section 240-81 when the main breaker is in the down position and the power is on when installed in a panelboard?

A. No. Definitions for panelboards and switchboards are found in the National Electrical Code on pages 70-11 and 70-13 respectively.

Interpretation 35/75

Issued December 13, 1976

Section 903.5.1, BOCA Basic Building Code/1975 Edition

Q. Is it acceptable to allow use of noncombustible treated plywood as roof sheathing for a distance of four feet on either side of the party or fire wall in lieu of the extending masonry wall 2'8" above the roof surface?

A. No.

Comment: Fire retardant treated plywood does not comply with the definition of "noncombustible" as set forth in Section 903.5.1 of the Basic Building Code/1975.

Interpretation 36/75

Issued December 13, 1976
Section 857.5.6, BOCA Basic Building Code/1975 Edition

- Q. Do Binnings Oriel type windows conform to code limitations as long as the bottom operable section of the window does not exceed 6 sq. ft.? Is safety glass required in the upper or lower section of the window if the operable section exceeds 6 sq. ft.? The bottom of the window which is 1/3 of the window height is separated by a fixed mullion that is not removable.
- A. Yes. This type window does conform to code limitations. The type of window proposed does not fall within the requirement of paragraph 8 of the above mentioned section until a single glazing panel exceeds 6 sq. ft. in area. Other operable sections of the window would not require safety glazing unless they fall under paragraph 79, Section 857.5.6.1

Interpretation 37/75

Issued December 13, 1976
Section 207.0 and 209.0, BOCA Basic Building Code/1975 Edition

- Q. Please determine the appropriate Use Group Classification for congregate or group homes and apartments in communities so those mentally retarded adults who are institutionalized only because they have no other housing alternative may pursue a life style as close to normal as possible.
- A. Based on information presented, this type construction is classified as an R-2 (Residential) rather than I-2 (Institutional) because the mentally retarded adults will not be restrained in any way but will have full independence as one would have in a rooming house or dormitory.

Interpretation 38/75

Issued January 14, 1977
Section 1202.14, BOCA Basic Building Code/1975 Edition

- Q. Does Section 1202.14 of the Virginia Uniform Statewide Building Code require a fire suppression system in all aircraft hangars, regardless of size?
- A. No. See Table 1, NFPA 409, which provides requirements for fire suppression systems.

Interpretation 39/75

Issued April 15, 1977
Section M-321.4.8, BOCA Basic Mechanical Code/1975 Edition

- Q. Does the "Flame Guard" grease filter meet the requirements and intent of the above referenced section?
- A. When installed in accordance with the manufacturers' recommendations, it would appear that this product would meet the intent of the Uniform Statewide Building Code.

Interpretation 40/75

Issued May 20, 1977

Section R-216, CABO One and Two Family Dwelling Code/1975 Edition

Q. Is a battery-powered smoke detector approved in a one and two family dwelling?

A. Yes. Battery-powered smoke detectors are approved for one and two family dwellings.

Interpretation 41/75

Issued January 14, 1977

Section 1202.0, BOCA Basic Building Code/1975 Edition

Q. Could the system, as outlined in letter of December 29, 1976, be considered an acceptable alternative to the requirements of Section 1202.0, BOCA, regarding fire suppression systems?

A. This case could be considered as an appeal rather than an interpretation. Background information was given by Mr. Proctor on the code section. Senator Colgan will assist in the drafting of a bill in reference to this. An opinion offered by Chairman Nexsen was that the alternative method proposed by the hangar owners does not meet the requirements of NFPA #409. The insurance rates would not change significantly if the sprinkler system was or was not installed. Taking into consideration the cost factor; use and location of the proposed structure and the potential hazard the technical Review Board, by unanimous decision approved this modification, provided plans are submitted to the building official indicating an automatic fire alarm system, consisting of smoke and heat sensing detectors be added to the proposed system. It was felt by the Board that this proposed alternative provided a practical means for protection without inflammatory cost.

Interpretation 42/75

Issued April 15, 1977

Section M-317.21.2, BOCA Basic Mechanical Building Code/1975 Edition; Sections 504 and 506, BOCA Basic Building Code/1975 Edition

Q. Please reconsider Interpretation 33/75 in view of M-317.21.2. Secondly, does the word "ductless" include allowance for recirculating types of vent hoods or must the ventilation system vent and discharge to the outside as required in Section M-317.21.2?

A. Interpretation 33/75 should remain as approved, as Section M-317.21.2 is not applicable when natural ventilation is provided. Therefore, ductless or recirculating vent hoods may be used.

Interpretation 43/75

Issued April 15, 1977
Section M-317.1.13, BOCA Basic Mechanical Code/1975 Edition

- Q. In a domestic kitchen, if a range hood is installed, must it be discharged out of doors?
- A. If the required natural ventilation is provided, discharge to the outside is not mandatory. This would only be required if the ventilation is mechanically supplied.

Interpretation 44/75

Issued July 20, 1977
Section M-905.4.1, BOCA Basic Mechanical Code/1975 Edition

- Q. The distance between fireplace and combustibles shall be at least four inches. Does this mean outside of fireplace? (See Diagram of interpretation request form.) If not, explain. Is a Morgan mantel assembly permissible when mounted directly against the brick wall with a 6" clearance from fireplace opening?
- A. In response to Question Number One: "Does this mean outside the fire place?" The answer would be yes. With reference to the Morgan mantel assembly, refer to the attached which offers a qualification of the response to Question Number One, and discuss the assembly of a Morgan mantel.

Interpretation 45/75

Issued May 20, 1977

Section 210-8(a), National Electrical Code/1975 Edition

- Q. (1) Are the firewalls subdividing a large building into smaller areas to be considered the perimeter walls (with external walls, if any) of such smaller areas, for the purpose of computing area increase under Section 306.2?
- Q. (2) Are the firewalls subdividing a large building into smaller areas considered as "street frontage or unoccupied space" for the purpose of computing accessible perimeter under this section?
- Q. (3) If the separating firewalls are not interpreted to be perimeter walls of a part of a larger building, can the percentage of area increase under this section (calculated from the perimeter (exterior) walls of the total building), be used to increase the area of each part of the building as subdivided by firewalls?
- A. (1) No. The 30 foot open space used for area increases must be "unoccupied" and "accessible" primary for fire fighting purposes. A firewall does not perform the function of accessibility.
- A. (2) No. Same explanation as stated in A (1).
- A. (3&4) Yes. Section 106.6 of the Basic Building Code requires that when a building is increased in size, the existing portion must be treated as a new structure. Therefore, the entire building perimeter (old and new) must be considered when calculating area increases for a given type of construction. However, the portion of the existing building perimeter, common to the building addition, can not be credited as accessible open unoccupied space.

Interpretation 46/75

Issued May 20, 1977

Section 803.3, BOCA Basic Building Code/1975 Edition

- Q. Do floor trusses with a deflection design of L/240 meet the code when used in combination with (A) 1/2" drywall or (B) 1/2" thin coat plaster system which consists of a 1/2" drywall-type board plus the 1/8" thin coat on the walls and ceiling?
- A. (A) Yes (B) No: Section 803.3 of the BOCA Basic Building Code calls for a maximum deflection of L/360 for plastic construction (which would include the situation in Part (B) and L/240 for unplastered (which includes drywall construction).

Interpretation 47/75

Issued May 20, 1977
Section P-1606.3.5, BOCA Basic Plumbing Code/1975 Edition

- Q. Some contractors have been piping the relief valve from the water heater to the outside to protect the carpet from damage in the event the relief valve should discharge. Is this considered to be an acceptable procedure?
- A. Yes. In areas subject to freezing, an air gap should be provided within the piping near the bottom of the tank.

Interpretation 48/75

Issued May 20, 1977
Section R-210, CABO One and Two Family Dwelling Code/1975 Edition Section 201.0 and 413.0,
BOCA Basic Building Code/1975 Edition

- Q. Define "Carport". On carport ceiling materials, is 3/8" A-C plywood permitted?
- A. "Carport" is defined in Interpretation 100/75. 3/8" A-C plywood is permitted as no fire separation is required for carports.

Interpretation 49/75

Issued April 15, 1977
Section P-1204.2 and P-1204.4, BOCA Basic Plumbing Code/1975 Edition

- Q. Are plumbing facilities in motel units to be of the type required for public use as in the above cited section?
- A. No. Plumbing facilities in motel units would not be considered for public use, as units are rented out singularly for occupancy as opposed to public use occupancy in lobbies, restaurants, etc.

Interpretation 50/75

Issued April 15, 1977
Section 336-3, National Electrical Code/1975 Edition

- Q. Please interpret the meaning of the National Electrical Code. Article 336-3, as it relates to garden-type apartments.
- A. Types NM and NMC Electrical cable can be used in multifamily and other structures of all type construction not exceeding three (3) stories above grade when in compliance with other applicable provisions of this code. Definition of "first story" is found in Article 2 of the BOCA Basic Building Code and governs the intent of the "floors above grade".

Interpretation 51/75

Issued May 20, 1977

Section P-1802.5.2, BOCA Basic Plumbing Code/1975 Edition

- Q. Is the low pressure air test as described in the attachments an acceptable substitute to the water test described in the code?
- A. Yes. The intent is to verify the sewer's capability to withstand pressure. Any test may be accepted if it can be shown by calculation that the pressures involved are equal to or greater than those produced by the specific water test identified and the duration of the pressure maintained is equal to or better than that prescribed in P-1802.5.2.

Interpretation 52/75

Issued May 20, 1977

Section 602.2, BOCA Basic Building Code/1975 Edition

- Q. Are the exit doors, as they do not swing in the direction of egress from one part of the passageway, not an approved element of egress, thus creating a dead-end corridor in that part of the passageway?
- A. No. A dead-end corridor would only be established when the occupants would have to retrace their steps to gain access to an exitway. This situation would, however, create an obstruction to egress prohibited by Sections 605.1, 607.2, and 625.2 of the 1975 BOCA Basic Building Code.

Interpretation 53/75

Issued July 18, 1977

Section R-502, CABO One and Two Family Dwelling Code/1975 Edition

- Q. Does the use of 3/8" sheetrock meet the performance criteria of the 1975 One and Two Family Dwelling Code?
- A. Yes. In new construction 3/8" sheetrock may be used over framing not exceeding 16" on center. Nailing is the same as for 1/2" sheetrock. While 3/8" sheetrock is recommended for double layer installations and remodeling work by the gypsum manufacturers, it may be utilized in new construction when meeting the criteria in ASTM C36 specifications for gypsum wallboard.

Interpretation 54/75

Issued July 20, 1977

Section M-303.1.3, Appendix B, BOCA Basic Mechanical Code/1975
Edition

- Q. May or should the requirement under M-303.1.3 that "all heating furnaces shall be approved and bear the label of a nationally recognized testing or inspection agency" be waived when there are no standards listed in Appendix B for fuel furnaces (wood burning) and an investigation by the administrative authority reveals that no such standards exist for such furnaces?
- A. No. The administrative authority may waive the label of a nationally recognized testing laboratory under such a condition, but he may not waive his approval. When recognized test standards are not available, the building official must base his approval on comparative testing best suited to the product.

Interpretation 55/75

Issued July 18, 1977

Figure A-6, CABO One and Two Family Dwelling Code/1975 Edition

- Q. Must all floor joists overlap beam as shown in One and Two Family Dwelling Code, Page 62, Figure A-6? Does this apply to pre-cut homes with a butt joint over the beam?
- A. No. Floor joists need only be provided with adequate bearing as required in Section R-602 #4, i.e., 1 1/2 inches on wood or metal and 3 inches on masonry. Butt joints may be acceptable when adequate bearing (and lateral bracing- R-602 #5) is provided.

Interpretation 56/75

Issued July 18, 1977

Sections 417.10.1, 1202.2, BOCA Basic Building Code/1975 Edition

- Q. In the 1975 BOCA Code, Sections 417.10.1 and 1202.2 regarding requirements for fire suppression systems in A-1 Use Group, does the word "auditorium" mean the theater seating area?
- A. Yes. The basic thrust of Section 417 revolves around theaters and their typical configurations. The term "auditorium" is utilized to refer to the seating area. See Section(s) 417.3, Theater means of egress requirements, 417.3.1 and 417.3.2 and the context in which "auditorium" is utilized. Section 1202.2 specifically refers to theaters and specifically exempts auditoriums from mandatory sprinkler protection.

Interpretation 57/75

Issued October 14, 1977

Section 874.7.1, BOCA Basic Building Code/1975 Edition

- Q. Section 874.7.1 - Geographical areas. "In those geographical areas where experience has demonstrated a need for greater protection, the requirements in the proceeding items may be modified to the extent required by local conditions." Does this section allow the local jurisdiction to require soil pre-treatment against termites?
- A. No. Research has indicated that Virginia's geographical areas do not vary significantly in need for this type of protection. The board is of the opinion, however, that the current requirements for protection against termites and decay should be thoroughly reviewed prior to the next code change adoptions. Soil pre-treatment could, however, be accepted as an alternate method if requested in accordance with Section 110.

Interpretation 58/75

Issued October 14, 1977

Sections 214.0, 305.1, 907.0, 909.0; Tables 305 and 214 BOCA Basic Building Code/1975 Edition

- Q. Can fire separation walls (Section 909) be used in lieu of the fire walls required by Section 305.1 in determining building areas for the purposes of compliance with area limitations of Table 305? If so, can Table 214, line 4, be used to allow these walls to be 1 1/2 hour walls (Table 902, A-4 assembly)?
- A. No. Table 305 prescribes height and area limits for buildings of various uses and types of construction. Building area, by definition, includes the term "fire walls" as defining separate building areas or spaces. However, fire separations do not, by definition, provide separate building areas.

Interpretation 59/75

Issued August 3, 1977
Section 417.3.3, BOCA Basic Building Code/1975 Edition

- Q. Does the wording of Article 417.3.3 that "discharge doors on both sides of the auditorium" require that doors be located to the left and to the right of the stage front, or will direct discharge doors of proper size in the front and in the rear of the auditorium suffice?
- A. Yes. It is the intent of Section 417.3.3 to provide readily identifiable and accessible fire emergency exitways which are reasonably remote from the main entrances and which lead directly outside at grade by direct discharge or through properly enclosed passageways or stairs independent of other theater areas and/or the main entrance (note that main entrances are typically open and non-fire separated from the remainder of theater operations or spaces and are generally located at the rear of the theater viewing area).

Thus an arrangement of additional fire emergency discharge exitways which reasonably provides readily visibility, clear accessibility, protected passage to the exterior public way without involvement in intervening spaces or the main entrance or exitway, and sufficient remoteness to the main entrance or exitway such that fires in other portions of the building will not obstruct their access, may be utilized in theaters.

Interpretation 60/75

Issued October 14, 1977
Section 1202.15, BOCA Basic Building Code/1987 Edition

- Q. Please outline or define the extent of "storage" in the Use Groups noted in 1202.15 that would need a fire suppression system. The simple use of the word would indicate that even a small store room used strictly for daily office supplies would fall within that definition. Are there further guidelines concerning the extent of storage warranting a fire suppression system?
- A. In determining the extent of storage warranting a fire suppression system, NFPA 13-34 may provide some guidelines. Further clarification may be gained through the use of the NFPA handbook. All storage spaces do not necessarily require a fire suppression system. Each case must be evaluated individually, with consideration being given to the proposed use and degree of hazard.

Interpretation 61/75

Issued October 14, 1977

Section 609.4, BOCA Basic Building Code/1975 Edition

- Q. Does a horizontal sliding or double-hung window unit with removable sash comply with the minimum net clear opening requirement of this code section if the net clear opening can only be achieved by removing the sash unit? The sash can be easily removed by lifting and removing without any tools.
- A. No. The intent of Section 609.4 is to provide an emergency means of egress and rescue from a bedroom. In an emergency situation, the occupants should not be required to perform an unfamiliar operation.

Interpretation 62/75

Issued September 12, 1977

Section 907.7, BOCA Basic Building Code/1975 Edition

- Q. Does the use of fire retardant treated plywood as an alternative to non-combustible materials where parapets are permitted to be eliminated under Section 907.7 of the Uniform Statewide Building Code meet the intent of such code, and may such materials be used where a fire resistant rating of one hour or less is the criteria for roof assembly or decking?
- A. Yes.

Interpretation 63/75

Issued October 14, 1977

Section 240-C, National Electrical Code/1975 Edition

- Q. Is the following an acceptable installation? Installation by a licensed electrician of a U.L. approved waterproof enclosure, which houses a U.L. approved fuse block or proper rating with "J" style current limiting fuses. Equipment to be installed between meter and service as indicated by the attached drawing.
- A. Yes, provided that the entire system meets all requirements of the Uniform Statewide Building Code, this would be an acceptable installation.

Interpretation 64/75

Issued September 26, 1986

Section R-214, CABO One and Two Family Dwelling Code/1975 Edition

- Q. May a spiral stairway that does not comply with the regulations of Section R-214 of the One and Two Family Dwelling Code be installed within a dwelling if there is a second means of egress from the second floor that does comply with the Building Code as a means of egress?
- A. Section R-211 requires only one (1) stairway meeting the minimum requirements of Section 214. Additional stairways would not necessarily have to conform if all areas of each floor are served by the approved stairway.

Interpretation 65/75

Issued October 14, 1977

Section 113.5, BOCA Basic Building Code/1975 Edition

- Q. Campbell County recently has been involved in court action concerning the definition of the word "minor" in Section 113.5 and the waiver provided by the building official on plans not certified by professional engineers and architects. However, liability in this regard is an important question as is our liability when any variances are granted. Could this concern be addressed by the Board?
- A. It would be difficult to define "work of a minor nature" so as to cover all construction. Section 113.5 leaves it to the discretion of the building official to decide whether the work can be described or specified adequately or whether plans are necessary to determine that the proposed work will comply with the code. Section 113.7 also provides for the building official to decide to what extent detailed plans and computations are needed. It further requires that all engineering details and technical data be signed by the engineer or architect responsible for the design. It is, and should be the building official's responsibility to determine when plans are needed to require that engineering drawings and details be signed by a registered architect or engineer.

Interpretation 66/75

Issued October 14, 1977

Section 854.7.2, BOCA Basic Building Code/1975 Edition

- Q. Is it permissible to install 3/4" X 3 3/4" T and G Pine Flooring, C and Btr. Grade, directly to joists 24" c-c? (10' - 6" span)? - 16" c-c?
- A. Based on the above the Board assumes the applicant is asking can 3/4" X 3/4" T&G pine flooring C&B grade be used directly on to joists spaced 24" O.C. or 16" oc. Per Section 854.7.2, Flooring: The flooring of wood frame construction shall be of adequate strength and stiffness to support required loads and, when necessary for strength and for lateral support of the building, subflooring shall be provided. Based on Section 845.7.2, if the material met that criteria, it could be used.

Interpretation 67/75

Issued December 16, 1977

Sections 304.1.2, 103.1 and 106.0, BOCA Basic Building Code/1975 Edition

- Q. To what extent may a building or structure be renovated before the code requirements for new structures apply; and, how is Section 106.8 to be properly administered?
- A. Section 304.1.2 allows changes, alterations and repairs to the interior and to the front next to a street of existing buildings, provided such changes do not increase the size of the buildings or increase a fire hazard or other hazard. It should be noted that Section 403.2 prohibits the increase in size and height of an existing building unless it will comply with the code as to type of construction and use.

Section 103.1 provides that service equipment which is installed, repaired or altered may not be used until approval is given by the building official. This applies to both new and existing equipment.

The provisions of Section 106 determine to what extent an existing building must meet the Basic Code.

Section 106.5 allows alterations or repairs to be made with the same kind of materials as exists, provided the cost of such work does not exceed 25% of the physical value of building.

Section 106.4 provides that if such work exceeds 25% but is under 50%, the building official shall determine to what extent the alterations or repairs shall meet the code requirements for new construction.

Section 106.3 and Section 106.2. It is clearly indicated in both of these sections that if alterations or repairs exceed 50% of the physical value of the building, the existing structure shall be made to conform to the provisions of the code as for new buildings.

Section 106.8 Physical Value. The wording of this section means that the building official shall determine the value of the building, exclusive of land value, based on fair market value. His determination may be used on a professional appraisal or on realistic tax assessments. Physical value does not mean the cost of a new building.

Interpretation 68/75

Issued December 16, 1977

Section M-317.21.4, BOCA Basic Mechanical Code/1975 Edition
Interpretations 33/75, 42/75 and 43/75

- Q. Do the above-referenced interpretations permit the installation of ductless charcoal filtered range hoods although Section M-317.21.4 strictly prohibited such equipment even when adequate natural ventilation is provided?
- A. Yes. When required natural ventilation is supplied, unvented range hoods incorporating filtering elements may be used when listed by a nationally-recognized laboratory.

Interpretation 69/75

Issued December 16, 1977

Section P-1604.1.3, BOCA Basic Plumbing Code/1975 Edition

- Q. Is a gate valve required in an underground valve box outside the building to satisfy P-1604.1.3? P-1604.1.6 is satisfied with the installation of the gate valves in each tenant space and in most areas, satisfy 1604.1.3 as they are located near the point the water service enters the individual unit. Since "near" is a relative term, how far can you come inside to install the building valve?
- A. No. (1) Section P-1604.1.3 of the Basic Plumbing Code/1975 requires a gate valve located inside the structure near the point of entrance of the water service piping. Section P-1604.1.2 covers the valves in boxes. (2) "Near" as used in the Plumbing Code means close proximity to its entrance. Distance will be dictated by ease of accessibility for use and maintenance. A rule of thumb would be within 10 feet of its entrance.

Interpretation 70/75

Issued December 16, 1977

Section 316.2.1, BOCA Basic Building Code/1975 Edition

- Q. Are hotel and motel occupancies required to provide handicapped units based on one unit per 20 units, or do we apply 316.2.1 of the BOCA Basic which requires one unit per 25 units? Also, does Section 36-124 apply to an apartment complex which contains in excess of 20 units with no one building containing in excess of 20 units?
- A. Section 316.2.1 of the BOCA Basic Building Code applies to motels. Section 36-124 applies to apartment complexes.

Interpretation 71/75

Issued December 16, 1977

Section 201.0, Definitions, BOCA Basic Building Code/1975 Edition

- Q. Would a greenhouse which distributes its products either retail or wholesale be classified as "Commercial", "Industrial", or would it qualify for exemption as a "farm building" or "structure" under the 1975 supplement to the Uniform Statewide Building Code?
- A. Greenhouses are only exempt from the provisions of the Uniform Statewide Building Code when they are used as an accessory building on a farm. Section 36-97-(12) Code of Virginia refers. If a greenhouse is accessible to the public, then it is classified as Group M, Mercantile. If not, it is classified as Group S, Storage.

Interpretation 72/75

Issued April 7, 1978

Sections 307.0 and 205.3, BOCA Basic Building Code/1975 Edition

- Q. Would a Type I building, having no fire suppression system, be limited in area, whose use is classified as a low hazard industrial process?
- A. Yes. Factory and industrial buildings are required to have an automatic fire suppression system when over 12,000 square feet in area, regardless of the type of construction, according to Section 1202.9 of the 1975 Basic Building Code. However, a low hazard industrial process can qualify for unlimited height and area according to Section 205.3. Such buildings shall comply with 307 for unlimited area buildings. Under these provisions, the suppression system may be waived if it would be detrimental or dangerous to the specific use or occupancy or if the building is used exclusively for the storage or of non-combustible materials not packed or crated in combustible materials.

Interpretation 73/75

Issued April 7, 1978

Sections 911.2 and 911.3, BOCA Basic Building Code/1975 Edition.

- Q. Does Section 911.3 prohibit the enclosure of pipes, wires, conduits, etc. in the hollow space existing in a typical WF structural steel column and its required fire rated protective covering?
- A. No. Piping and conduit may be installed in the hollow spaces of fire resistance rated column assembly provided that they are not embedded in the protective covering of the assembly. Also, if there are any penetrations of the assembly, they must not violate the integrity of the fire resistance rating. It should be noted that items such as steam piping which might significantly increase the ambient temperature within the assembly should not be permitted.

Interpretation 74/75

Issued May 15, 1978

Section P-1212.1, BOCA Basic Plumbing Code/1975 Edition

- Q. Is a domestic dishwasher required to discharge through an air gap or air brake when connected to the tail piece of the kitchen sink or garbage grinder unit?
- A. Yes. Unless investigation pursuant to Section 108.5 substantiates that the appliance contains a built-in air gap or back flow preventer.

Interpretation 75/75

Issued December 16, 1977

Section M-718.2.13, BOCA Basic Mechanical Code/1975 Edition

- Q. Would installation in oil furnace flues of Sentinel Automatic Stack Damper, manufactured by Trionic Industries, Incorporated, Harrisonburg, Pennsylvania, be contrary to the requirements of the Virginia Uniform Statewide Building Code, in particular LaserJet Series IIHP LASE II PRSEdition
- Q. Are the front and rear walls perpendicular to a two (2) hour party wall separation required to possess a one (1) hour fire-resistance rating for a distance of six (6) feet from the property line in 4B construction?
- A. Yes.

Interpretation 77/75

Issued December 16, 1977

Section R-214, CABO One and Two Family Dwelling Code/1975 Edition

- Q. For a single family residence, do stair risers have to be closed or may open risers be used?
- A. Interpretation 17/75 established that a dwelling designed in accordance with the One and Two Family Dwelling Code are not subject to requirement of the BOCA Basic Building Code. Section R-214 of the One and Two Family Dwelling Code does not require stair risers be closed.

Interpretation 78/75

Issued April 7, 1978

Sections 417.7 and 417.7.7, BOCA Basic Building Code/1975 Edition

- Q. Does Section 417.7.7 require that a smoke tight fire curtain be required in the proscenium arch to the theater stage area located in auditorium or theater when this stage is not equipped with fixed scenery, lights or other mechanical appliances? Current practice of local consultants is to provide automatic fire protection systems for this stage and automatic ventilation in accordance with 417.7.9.
- A. Yes, if in a theater or auditorium, a stage (by definition) exists and the area is intended for the presentation of plays or similar entertainment, the requirements of Section 417.7 of the 1975 Basic Building Code shall apply. When the stage is an enclosed area, with a proscenium opening, it lends itself to the possible use of fly gallery equipment, drop effects and lighting and the definition of a stage deals with this potential. Where this potential does not exist, such as an unenclosed, raised platform in a motion picture theater, the requirements of Section 417.7 would apply.

Interpretation 79/75

Issued January 12, 1978

Section 118.8, BOCA Basic Building Code/1975 Edition

- Q. Does Section 118.8 of the 1975 Code apply to a local jurisdiction for permits issued in 1973 and 1974?
- A. 36-105 Code of Virginia empowers the local governing body to levy fees to defray the cost of enforcement of the Virginia Uniform Statewide Building Code. 36-118 Code of Virginia empowers the State Building Code Technical Review Board to interpret the provisions of the Building Code. The State Board of Housing did not adopt Section 118.0 through 118.8 of the BOCA Code and therefore, it is the decision of this Board that they are without jurisdiction on this request.

Interpretation 80/75

Issued April 7, 1978

Sections 213.0, 214.0 and 417.0, Table 305, BOCA Basic Building Code/1975 Edition

- Q. Several questions have arisen concerning the classification of various uses within school buildings. For instance, should auditorium and gymnasium be classified A-3 or A-4 thereby requiring a more critical analysis of areas, etc.? Should auditoriums which fall within the definition of theaters which are a part of school activities be classified A-1 or A-3 in lieu of A-4? From investigation of other building officials, it appears that generally the A-4 classification is within the intent of the Code but separating these auditoriums with fire walls and fire rated enclosures would appear to be in order based on Section 312.
- A. Section 203.5 of the BOCA Basic Building Code defines schools as falling within A-4 Use Group. Auditoriums and gymnasiums are normal accessory uses of a school and are not a separate use group unless used primarily for other than educational purposes. This agrees with Section 213 as to classification according to the main use.

The fire protection and other requirements for auditoriums and gymnasiums in conjunction with schools are as required in Section 418 and the applicable sections of Section 417.

Interpretation 81/75

Issued April 7, 1978
Section R-913, Figure A-9, CABO One and Two Family Dwelling
Code/1975 Edition

- Q. (1) Can a flue thimble be extended through a cavity wall without 4 inches of masonry with air space from combustible material as a chimney requires?
- Q. (2) Is a 2-inch air space from combustible material required on 8-inch masonry chimney with flue lining when fireplace is used?
- A. (1) No. This section does not address itself to flue connectors. However, the NFIPA Handbook recommends a minimum clearance between flue connectors and combustibles of 18 inches. The thimble is a flue liner and should be enclosed in at least 4 inches of brick on all sides as required for chimneys. The penetration of the wall space, if necessary, should be with an approved insulated or double wall flue pipe.
- A. (2) Yes. A 2-inch air space is required. This is covered in Section R-913.

Interpretation 82/75

Issued April 7, 1978
Section R-920, CABO One and Two Family Dwelling Code/1975 Edition

- Q. In regard to Section R-920, when a fireplace opening is six square feet or larger, shall the extension of hearth be measured from front of opening or fireplace profile? Some masonry workers argue the point that it should be measured from the fire brick which is usually set back one brick or four inches in fireplace.
- A. Yes. The hearth extension shall be measured from the outside face of the fireplace opening. This is clearly shown in Figure A-9.

Interpretation 83/75

Issued April 7, 1978
Section R-203, CABO One and Two Family Dwelling Code/1975 Edition

- Q. Should the roof overhang be classified as a part of the wall section and, when of combustible materials, be separated by three feet from property line?
- A. No. Section R-203 and 301.2, BOCA Basic Building Code/1975 Edition.

Interpretation 84/75

Issued April 7, 1978

Sections 300.1 and 301.2, BOCA Basic Building Code/1975 Edition

- Q. (1) Do the localities have the right to make residential areas classified as fire limits? It states in Section 301.2 congested business, commercial manufacturing and industrial uses.
- Q. (2) If an area is designated as fire limits, do the localities have the right to exclude certain types of buildings, such as dwellings? It states in Section 300.1 that (all buildings hereafter erected) shall comply to the restrictions noted under this section.
- A. (1) The Technical Review Board is without jurisdiction in this matter. It should be referred to the local Commonwealth Attorney.
- A. (2) No. When an area has been designated as fire limits, all buildings constructed within the designated area regardless of classification, shall comply with Section 302.

Interpretation 85/75

Issued April 7, 1978

Table 214, BOCA Basic Building Code/1975 Edition

- Q. Under Table 214, Type 2C Construction, is fire treated wood classified as non-combustible materials for use on exterior walls bearing or nonbearing as long as the hourly fire resistance rating is maintained?
- A. Yes. The intent of the Basic Building Code is that a noncombustible wall must have the required fire resistance, structural strength and weather tightness without the use of combustible materials. The limitation on combustible exterior trim is indicated in Section 924.

Interpretation 86/75

Issued April 7, 1978

Sections 305.1 and 907.7, BOCA Basic Building Code/1975 Edition

- Q. What fire resistant requirements apply to an exterior wall enclosing a second floor, when the wall supporting it on the ground floor is a fire wall separating the building into areas under 305.1?
- A. The fire wall must continue to at least 2 feet 8 inches above the roof of the one story building as required by Section 907.7. Since a building is defined as the area between exterior walls and fire walls, the drawing shows two buildings: one being one story and the other two stories. The second floor wall above the fire wall becomes an exterior wall and must have a fire resistance rating as required for bearing or nonbearing exterior walls in Table 214. It shall also comply with Sections 868.1 and 869.2 with respect to parapet walls.

Interpretation 87/75

Issued April 7, 1978
Section 716.1, BOCA Basic Building Code/1975 Edition

- Q. Does the attached design meet the intent of Section 716.1 of the BOCA Basic Building Code for the City of Virginia Beach?
- A. Yes.

Interpretation 88/75

Issued October 6, 1978
Sections 100.4, 108.0, 304.2, 305.0, Tables 305 and 306, BOCA
Basic Building Code/1975 Edition

- Q. Under what sections of the code is the local building official empowered to permit a "trade-off" of a specific code requirement?
- A. Section 109.0, Modifications, empowers the building official to grant modifications where there are practical difficulties involved in meeting code requirements, provided that such modification is requested in writing by the owner and provided that public safety and welfare are assured and the intent of the code is met. Whether the modification is justified depends on the specific merits of the case in question.

Interpretation 89/75

Issued October 6, 1978
Section 303.2, Table 214, BOCA Basic Building Code/1975 Edition

- Q. Specifically, are the front and rear walls of a townhouse required to have a one hour fire resistance for a distance of six feet from the party walls?
- A. No. Building walls that are not facing a lot line should not be considered adjacent to that line.

Interpretation 90/75

Issued May 15, 1978
Section R-216.1 and R-216.2, CABO One and Two Family Dwelling Code/1975 Edition

- Q. Under the Virginia Uniform Statewide Building Code, are the walls (which are marked in red on page 2 of Model A and page 3 of Model D) considered fireplace walls? If so, do they need to be insulated according to Sections R-216.1 and R-216.2?
- A. Yes. Section M-905.10 of the Virginia Uniform Statewide Building Code requires all fireplaces to be fronted by the hearth extending not less than eight (8) to twelve (12) inches on each side. Non-combustible walls constructed as part of fireplaces extending on either side, fronted by a hearth, are considered as part of the fireplace. Walls considered as part of fireplaces need not be insulated.

Interpretation 91/75

Issued October 6, 1978

Sections R-402.6, R-503.4.2, Figure A-3, CABO One and Two Family Dwelling Code/1975 Edition

- Q. What is the method of constructing the perimeter walls of a brick veneered dwelling on piers?
- A. Figure A-3 does not provide for pier construction. However, Section 108 provides for use of alternate materials and methods when approved by the building official. The building official may require adequate data or proof that the alternate foundation design complies with good engineering practice.

Interpretation 92/75

Issued June 19, 1978

Section P-1202.1, BOCA Basic Plumbing Code/1975 Edition

- Q. Please interpret the formula or method to calculate the number of bathroom fixtures required for restaurants according to Table P-1202.1.
- A. Calculate the total number of people and divide by 2; half women, half men. Use the figure calculated for each sex to determine the number of fixtures required for each bathroom.

Interpretation 93/75

Issued April 25, 1980

Sections 216.0 and 217.0, BOCA Basic Building Code/1975 Edition

- Q. (1) Would a pre-engineered metal building (steel structure with 26 gauge corrugated steel siding and roofing) be classified as type 2C or type 3C construction?
- Q. (2) If a pre-engineered metal building (steel structure with 26 gauge corrugated steel siding and roofing) can be classified as type 3C construction, would this permit an upper level storage area constructed of 2 X 10 wood floor joists with plywood decking supported on 2 X 4 wood stud wall (which meets all structural and area requirements of the Uniform Statewide Building Code) to not be required to have a fire resistance rating and could this be built of unprotected untreated wood?
- A. (1) A metal building (normally type 2C construction) can be classified as type 3C construction to accommodate the inside wood framing but the building would still have to conform to Section 217 and the ratings of Table 214.
- A. (2) Same as Answer #1.

Interpretation 94/75

Issued April 25, 1980

Section M-111.3, BOCA Basic Mechanical Code/1975 Edition

Q. (1) Under Section M-111.3 of the 1975 Uniform Statewide Building Code, is the replacement of a heating and cooling unit considered a "minor" replacement?

Q. (2) Would a permit be required for the installation of such a unit?

A. (1) The replacement of a heating and cooling unit would not be considered a "minor repair" but would be considered a "replacement". The governing rules for the subject installation are contained in Section M-111.3 of the 1975 BOCA Basic Mechanical Code. Pursuant to Section M-111.3, "...replacements of any existing system may be made in the same manner and arrangement as in the existing system, provided such repairs or replacements are made in a same manner and are approved by the administrative authority.

A. (2) Yes.

Interpretation 95/75

Issued July 25, 1980

Sections R-211 and R-213, CABO One and Two Family Dwelling Code/ 1975 Edition

Q. (1) Is a door leading from the house into a garage or carport considered as an exit?

Q. (2) Does Section R-213 apply to a door leading into a garage or carport?

Q. (3) If Section R-211 has been complied with, must all other doors leading to the outside meet the requirements of Section R-213?

A. (1) Section R-211 requires that not less than one (1) exit be provided from each dwelling unit. If there is already an exit door which complies with the provisions of Section R-211, it is not necessary for a door leading into a garage or carport to be considered as an exit.

A. (2) If it is not considered as an exit door, the provisions of Section R-213 would not apply.

A. (3) No.

Interpretation 96/75

Issued April 25, 1980

Tables 6-B and 7-A, CABO One and Two Family Dwelling Code/1975 Edition

Q. Are the ceiling joist spans for a house with a 5 in 12 pitch roof and a disappearing stairway calculated at a 20 lb. per square foot live load in Table 6-B or a 20 lb. per square foot live load in Table 7-A?

A. Yes. Table 7-A of the One and Two Family Dwelling Code is to be used for ceiling joists that support an attic space which may contain limited storage but is not intended to be used as a habitable space.

Interpretation 97/75

Issued April 25, 1980

Section R-215, CABO One and Two Family Dwelling Code/1975 Edition

Q. According to Section R-215 of the One and Two Family Dwelling Code, are exterior steps leading up to a porch or stoop that is less than 30 inches in height required to have handrails?

A. No. If the steps have 3 or more risers, the handrails are required.

Example: Steps to a porch which is 24 inches above the ground would have three, eight-inch risers.

Interpretation 98/75

Issued August 7, 1981

Section R-213, CABO One and Two Family Dwelling Code/1975 Edition

Q. Is a landing, minimum length and width of three feet, required at an exit door on a single family residence, 1 1/2 inch lower than the threshold of the doorway, when the exit door swings inwards?

A. No. The purpose of a landing is to provide a level area for operation of the door. Accordingly, Section R-213 of the One and Two Family Dwelling Code requires landings on each side of a door, except a landing is not required where the door does not swing over a stair.

Interpretation 99/75

Issued March 18, 1988

Section M-801.7, BOCA Basic Mechanical Code/1975 Edition

Section 801.7 states that metallic pipe or tubing used for gas piping that is exposed to corrosive action, such as soil conditions or moisture, shall be protected with an approved coating.

Q. (1) Is gas piping that is run exposed to a roof-top air conditioning unit subject to the above stated corrosive action (i.e. exposed to moisture by virtue of being exposed to the elements)?

Q. (2) What constitutes an "approved coating"? (in particular, does galvanized pipe meet this requirement?)

A. (1) Yes.

A. (2) An approved coating is one which is approved by the building official as providing the necessary protection from the corrosive action to which it is subjected. (Galvanized piping is considered as meeting the intent of this section.)

Interpretation 100/75

Issued May 20, 1977

Section R-210, One and Two Family Dwelling Code/1975 Edition

Q. Is Section R-210 applicable to structures with attached carports? Further, within the meaning of this section, please define "garage".

A. No. Section R-210 would not be applicable to structures with attached carports. A garage is an appurtenant structure which is enclosed on all sides and have a car entrance door installed on either side. Structures enclosed by three (3) or less walls would be considered to be a carport.

Interpretation 101/75

Issued May 20, 1977

Section 210-8(a), National Electrical Code/1975 Edition

Q. Should we require G.F.I. protection for convenience outlets adjacent to lavatories, located in units of nursing homes and other health care centers?

A. No. G.F.I. protection is not required in Type I Institutional Buildings.

1975 INDEX

<u>CODE/SECTION</u>	<u>INTERPRETATION</u>
BOCA Basic Building Code	
100 Scope	
100.4	88
102 Ordinary Repairs	
102.0	21
103 Installation of Service Equipment	
103.1	67
106 Existing Structures	
106.0	28, 67
108 Duties and Powers of Building Official	
108.0	88
108.1	11
113 Application for Permit	
113.5	65
118 Fees	
118.8	79
124 Unsafe Structures	
124.1	28
201 General Definitions	
201.0*	48, 71
203 Use Group A, Assembly Buildings	
203.5	32
205 Use Group F, Factory and Industrial Buildings	
205.3	72
207 Use Group I, Institutional Buildings	
207.0	37
207.3	32
209 Use Group R, Residential Buildings	
209.0	37
209.5	17
213 Mixed Use and Occupancy	
213.0	80
214 Construction Classification	
214.0	58, 80
216 Type 2, Noncombustible Construction	
216.0	93

*Indicates provisions as amended by the USBC

217	Type 3, Exterior Masonry Wall Construction	93
217.0	.....	93
300	General Building Limitations	84
300.1*	.....	84
301	Fire Limits	84
301.2	.....	84
303	Restrictions Outside Fire Limits	6
303.0	.....	6, 76, 89
303.2	.....	6, 76, 89
304	Existing Buildings	67
304.1.2	.....	67
304.2	.....	88
305	General Area and Height Limitation	88
305.0	.....	88
305.1	.....	58, 86
307	Unlimited Areas	72
307.0	.....	72
316	Physically Handicapped and Aged	2-5, 10
316.0*	.....	2-5, 10
316.2.1	.....	70
316.8.2	.....	5
316.8.3	.....	5
413	Private Garages	48
413.0	.....	48
417	Places of Public Assembly	-80
417.0	.....	-80
417.10.1	.....	56
417.3.3	.....	59
417.7	.....	78
417.7.7	.....	78
433	Insulation	7
433.2*	.....	7
504	Artificial Light and Ventilation	33, 42
504.0	.....	33, 42
506	Natural Lighting and Ventilation of Rooms	33, 42
506.0	.....	33, 42
602	Use and Occupancy Requirements	52
602.2	.....	52
609	Number of Exitways	61
609.4*	.....	61
610	Exitway Access Passageways and Corridors	25
610.0	.....	25
610.3	.....	25

*Indicates provisions as amended by the USBC

716	Unusual Wind Exposures	87
716.1	.....	87
803	Conditions of Acceptance	
803.3	.....	46
854	Wood Frame Construction	
854.7.2	.....	66
857	Enclosure Walls	
857.5.6	.....	36
874	Protection Against Decay and Termites	
874.7.1	.....	57
903	Fireresistance Tests	
903.5.1	.....	24, 35
907	Fire Walls and Party Walls	
907.0	.....	58
907.7	.....	24, 62, 86
909	Fire Separation Walls	
909.0	.....	58
911	Fireresistance of Structural Members	
911.2	.....	73
911.3	.....	73
1100	Heating, Mountings, Clearances and Connections	
1100.2*	.....	8
1200	Fire Protection Systems	
1202.0	.....	41
1202.14	.....	38
1202.15	.....	60
1202.2	.....	56
1202.4	.....	27
1404	Maintenance and Inspection	
1404.4	.....	13
1407	Bonds and Liability Insurance	
1407.0	.....	13
Table 214	.....	85, 89
Table 305	.....	80
Tables 305 and 306	.....	88

*Indicates provisions as amended by the USBC

BOCA Basic Mechanical Code

M- 111	Existing Mechanical Systems	
M- 111.3	.....	94
M- 201	General Definitions	
M- 201.0	.....	22
M- 303	Furnace Locations and Clearances	
M- 303.1.3	.....	54
M- 307	Heating Equipment Located in Crawl Spaces	
M- 307.1	.....	8
M- 317	Ventilation	
M- 317.1.13	.....	43
M- 317.21.2	.....	42
M- 317.21.4	.....	68
M- 321	Commercial Hoods and Fans	
M- 321.4.8	.....	39
M- 615	Water Heaters	
M- 615.1	.....	20
M- 718	Chimney Connectors and Vent Connectors	
M- 718.2.13	.....	75
M- 801	Definitions	
M- 801.7	.....	99
M- 905	Fireplaces	
M- 905.4.1	.....	44

BOCA Basic Plumbing Code

P-1202	Minimum Plumbing Facilities	
P-1202.1*	.....	92
P-1204	Water Closets	
P-1204.2	.....	49
P-1204.4	.....	49
P-1212	Dishwashing Machines	
P-1212.1	.....	74
P-1604	Installing the Building Water Distribution System	
P-1604.1.3	.....	69
P-1606	Hot Water Supply System	
P-1606.1	.....	30
P-1606.3.5	.....	47
P-1703	Quantity and Quality of Water for Residential Use	
P-1703.0	.....	31
P-1802	Testing of Plumbing Systems	
P-1802.5.2	.....	9, 51

*Indicates provisions as amended by the USBC

Code of Virginia	
§36-124	10
§36-98*	18, 19

National Electrical Code

210	Branch Circuits	
210-8(a)		45, 101
230	Services	
230.0		12
240	Overcurrent Protection	
240-81		34
240-C		63
250	Grounding	
250.0		12
336	Nonmetallic-Sheathed Cable	
336-3		50
440	Air-Conditioning and Refrigerating Equipment	
440-14		1

*Indicates provisions as amended by the USBC

One and Two Family Dwelling Code

Figure A-6	55
R-203 Location on Lot	
R-203.0	83
R-210 Private Garages	
R-210.0	26, 48, 100
R-211 Exits	
R-211.0	95
R-213 Landings	
R-213.0	95, 98
R-214 Stairways	
R-214.0	16, 64, 77
R-215 Handrails and Guardrails	
R-215.0	14, 97
R-216 Smoke Detector	
R-216.0	40
R-216.1	15, 90
R-216.2	7, 29, 90
R-402 Wood	
R-402.6	91
R-502 Interior Covering	
R-502.0	53
R-503 Exterior Covering	
R-503.4.2	91
R-603 Concrete Floors (On Ground)	
R-603.2	23
R-913 Chimney Clearance	
R-913.0	81
R-920 Hearth Extension	
R-920.0	82
Tables 6-B and 7-A	96