

ARTICLE V. BASIC BUILDING CODE

DIVISION 1. GENERALLY

Sec. 5-66. Purpose.

The purpose and intent of this article is to govern the design, construction, alteration, repair addition, removal, demolition, use, location, occupancy and maintenance of all buildings and structures and their service equipment as herein defined, except as some of such matters may be described in public, local or general laws of the State, zoning and other ordinances or regulations having legal precedence.

Sec. 5-67. Scope.

The provisions of this article shall apply to the construction of new buildings and structures. Construction involving buildings and structures existing at the time of adoption of or amendment of this Article shall comply with this Article or Article XIII. Applicable buildings must also comply with the provisions of Article XIV.

Sec. 5-68. Definitions.

Words defined in this article are intended only for use with sections of this article or any document referred to in this article. The following definitions are intended to be read in place of any definitions of the same words contained in the publication adopted in section 5-86.

Accessory structure means a building subordinate to, and located on the same lot with a main building, the use of which is clearly incidental to that of the main building, or to the use of the land, and which is not attached by any part of a common wall or common roof to the main building.

Accessory use means a use of a building, lot or portion thereof, which is customarily incidental and subordinate to the principal use of the main building or lot.

Alley means a passage or way open to public travel generally affording a secondary means of vehicular access to abutting lots and not intended for general traffic circulation.

Alteration, when applied to a building or structure or its service equipment, means:

- (1) A change or rearrangement in the structural parts or in the exit facilities;
- (2) A vital change in the service equipment;
- (3) An enlargement whether by extending laterally or by increasing in height;
- (4) The moving from one (1) location or position to another; or
- (5) The change in occupancy from one (1) use group to another of different legal requirements.

Building means a structure having one (1) or more stories and a roof, designed primarily for the shelter, support, or enclosure of persons, animals, or property of any kind.

Building line means a line coincident with the foundation wall of any enclosed porch, vestibule or other enclosed portion of a building, except as provided in chapter 25 (zoning).

Code Official means the Chief of Inspection Services.

Complex Structure means all buildings and structures that are being constructed under a Complex Structure Agreement.

Cool Roof Rating Council means an independent, non-profit organization that maintains the third-party rating system for radiative properties of roof surfacing materials.

Demolition means the complete razing of a building or structure.

Demolition by Neglect of Historic Properties means failure to maintain property, or any component thereof, located within a designated Historic District Zone so as to jeopardize the historic integrity of the property.

Dwelling, single unit means a building containing not more than one (1) dwelling unit. A one-family dwelling may include an accessory apartment approved by special exception.

Dwelling, semi-detached means a building containing not more than two (2) dwelling units arranged one above the other or side-by-side.

Dwelling, multifamily / multiunit, apartment house means a building containing three (3) or more dwelling units (an apartment house).

Dwelling, townhouse means one (1) of a group of three (3) or more dwelling units separated from each other by a party wall without openings extending from the cellar floor to the highest point of the roof, along the dividing lot line, and having separate front and rear or front and side entrances from the outside.

Dwelling unit means a building or portion thereof arranged or designed for permanent occupancy by not more than one (1) family for living purposes and having cooking facilities.

Garage, group means an accessory building or portion of a main building designed, arranged, or used for the housing of private motor vehicles, only one (1) of which may be a commercial vehicle. Not more than fifty (50) percent of the space in such a garage shall be used for housing vehicles other than those owned by occupants of the premises; except that all of the space in a garage of one (1) or two (2) car capacity may be so rented.

Garage, service-repair means a building, lot or both in or upon which the business of general motor vehicle repair and service is conducted, but excluding junk and/or auto wrecking business.

Garage, storage means a lot or portion thereof, other than an automobile sales lot, held out or used for the storage or parking of six (6) or more motor vehicles for a consideration, where service or repair facilities are not permitted. Such parking lot shall not be considered an accessory use, nor shall it be used for the storage of dismantled or wrecked motor vehicles, parts thereof or junk.

Hotel (including motel) means any building containing rooms or suites of rooms designed and intended for the temporary lodging of guests, and which are available to the general public for compensation.

Lot means a parcel of land occupied or to be occupied by a building and its accessory buildings or by group buildings and their accessory buildings, together with such open spaces as are required under the provisions of Chapter 25 (zoning), having at least the minimum area required by Chapter 25 (zoning) for a lot in the zone in which such lot is situated and having its principal frontage on a public street or public way.

Lot, corner means a lot abutting on two (2) or more streets at their intersections, where the interior angle of the intersection does not exceed one hundred thirty-five (135) degrees.

Lot, interior means any lot other than a corner lot, not including a through lot.

Lot line, front means the street line running along the front of the lot and separating it from the street. In a through lot, both lines abutting the street shall be deemed to be the front lot lines.

Lot line, rear means the lot line generally opposite or parallel to the front lot line, except in a through lot. If the rear lot line is less than ten (10) feet long or the lot comes to a point at the rear, the rear lot line is assumed to be a line not less than ten (10) feet long, lying wholly within the lot, parallel to the front lot line or, in the case of a curved front lot line, parallel to the chord of the arc of the front lot line.

Lot line, side means any lot line connecting the front and rear lot lines.

Lot, through means an interior lot fronting on two (2) or more streets that do not intersect adjacent to the lot.

Municipality means the Mayor and Council of Rockville.

Onsite renewable energy system includes, but is not limited to, photovoltaic panels, solar thermal collectors and wind systems located on or directly adjacent to the building site.

Record lot means the land designated as a separate and distinct parcel of land on a legally recorded subdivision plat filed among the land records of the County, but does not include land identified on any such plat as an out lot or an ownership lot shown on an ownership plat.

Setback means the minimum perpendicular distance required between a lot line and any building or structure constructed or which may be constructed thereon, consistent with the setback requirements of the zone in which such lot is located.

Story means that portion of a building included between the surface of any floor and the surface of the floor next above it or, if there is no floor above it, the space between such floor and the ceiling next above it. A basement shall be counted as a story, if it is used for business or dwelling purposes. A mezzanine floor shall be counted as a story if it covers over one-third of the area of the floor next below it or if the vertical distance between the floor next below it and the floor next above it is twenty (20) feet or more.

Story, half means a story under a gable, hip or gambrel roof, the wall plates of which on at least two (2) opposite exterior walls are not more than two (2) feet above the floor of such story.

Street means a public dedicated way which affords the principal means of access to abutting property, including street, avenue, place, drive, boulevard, highway, road, pike, cul-de-sac, court, and any other public way except an alley or driveway.

Street lot line means a line defining the edge of a street right-of-way and separating the street from the abutting property or lots. If, on a master plan of streets and highways duly adopted by the Planning Commission, a street is scheduled for future widening, the proposed right-of-way line shown on the master plan shall be the street line.

Structure means a combination of materials which requires permanent location on the ground or attachment to something having permanent location on the ground.

Structure, part thereof means a combination of materials forming a construction for occupancy or other purposes which requires permanent location on the ground or attached to something having permanent location on the ground.

Volume of building means the actual cubical space occupied by the building, including exterior walls, basements, cellars and penthouses, but not open balconies, open porches or platforms.

Written notice, when required under the provisions of this article, means a written notice shall be considered to have been served, if delivered in person to the owner, agent or occupant of the structure to which the order or notice relates or other person responsible for the condition of violation. Service shall be made either by personal service; by delivering the same to the subject premises or the office or usual place of abode of the person being served and leaving it with some person of suitable age and responsibility who shall be informed of the contents thereof; by mailing a copy thereof to such person by certified mail to the last known address with return receipt requested; or if the certified mail is returned without receipt or with receipt showing that it has not been delivered, by posting a copy of the order or notice in a conspicuous place in or about the structure affected by such order or notice. If service cannot be made by any of the

foregoing methods, service may be made by publishing the substance of the order or notice in a newspaper of general circulation in the County.

Yard means the undeveloped space created by the setback requirements, lying between the lot lines and any structure or building, and not occupied nor obstructed from the ground upward, except as provided in this Chapter.

Yard, front means the open space extending across the full width of a lot between the front lot line of the proposed front street line and nearest line of the building or any enclosed portion thereof. The depth of such yard shall be the shortest horizontal distance between front lot line or proposed front street line and the nearest point of the building or any enclosed portion thereof.

Yard, rear means the open space extending across the full width of a lot between the rear line of the lot and the nearest line of the building, porch or projection thereof. The depth of such yard is the shortest horizontal distance between the rear lot line and the nearest point of the building. When the rear lot line is less than ten (10) feet long or if the lot comes to a point at the rear, the depth of the rear yard is measured to an assumed rear lot line, as defined under "lot line, rear."

Yard, side means open space between side lot line, the side street line, or the proposed side street line, if such line falls within the lot, and the nearest line of the building, porch, or projection thereof, extending from the front yard to the rear yard, or, in the absence of either of such yards, to the front lot line or rear lot line. The width of a side yard shall be the shortest distance between the side lot line and the nearest point of the building, porch or projection thereof.

Secs. 5-69 – 5-75. Reserved.

DIVISION 2. ADMINISTRATION AND ENFORCEMENT

Sec. 5-76. Enforcement; violations.

(a) Any person who shall violate any of the provisions of this article; or shall fail to comply herewith or shall permit or maintain such a violation; or shall violate or fail to comply with any order made hereunder; or shall build in violation of any details, statements, specifications or plans submitted or approved hereunder; or shall operate not in accordance with the provisions of any certificate, permit, or approval issued hereunder; or who shall fail to comply with such an order as affirmed or modified by the Board of Adjustments and Appeals within the time fixed therein, shall severally for each violation and noncompliance respectively, be guilty of a municipal infraction. The imposition of penalty for any violation shall not excuse the violation nor shall the violation be permitted to continue. Prosecution or lack thereof of either the owner, occupant, or the person in charge shall not be deemed to relieve any of the others.

(b) Any order or notice issued or served as provided in this article shall be complied with by the owner, operator, occupant or other person responsible for the condition or violation to which the order or notice pertains. Every order or notice shall set forth a time limit for compliance dependent upon the hazard and danger created by the violation. In cases of extreme danger to persons or property immediate compliance shall be required. If the building or other premises is owned by one (1) person and occupied by another, under lease or otherwise, and the order or notice requires additions or changes in the building or premises such as would immediately become real estate and be the property of the owner of the building or premises, such order or notice shall be complied with by the owner unless the owner and occupant have otherwise agreed between themselves, in which event the occupant shall comply.

Secs. 5-77 – 5-85. Reserved.

DIVISION 3. TECHNICAL STANDARDS

Sec. 5-86. International Building Code--Adopted.

The International Code Council (ICC) International Building Code, 2015 Edition, as modified herein, is hereby adopted as the building code for the City. One (1) copy of such publication as adopted shall be maintained by the Inspection Services Division and made available for inspection by the public during regular office hours. Any amendment or change in such publication promulgated by the International Code Council shall not become a part of this article until adopted by ordinance. References to other ordinances and codes of the City shall be interpreted and applied in accordance with the terms and effect of such ordinances and codes at the time of such application and interpretation.

Sec. 5-87. Same--Amendments.

The *ICC International Building Code*, 2015 Edition (IBC), is amended in the following respects:

Section 101.1 of the IBC is amended to read as follows:

101.1 Title. These regulations shall be known as the *Building Code of the City of Rockville*, hereinafter referred to as “this code”.

Section 101.3.1 is added to the IBC to read as follows:

101.3.1 Application of references. References to the International Building Code shall mean the 2015 Edition of the International Building Code issued by the International Code Council Inc. Unless otherwise specified, all references to an article, section number, table, chart, etc., or to provisions not specifically identified by number and not set forth textually in this article but included by reference only, shall be construed to refer to such article, section number, table, chart, or provision as specified in the “International Building Code”, which article, section or provision is hereby made part of this article and shall have the same force and effect as if set forth in this article in full.

The citing of the main number of an article or section of the International Building Code shall be taken to include all of its sections or subsections. Subject to changes by the council, the other standards and specifications, or recommended regulations, or parts thereof, which are included by reference to their title and date in various parts of the "International Building Code" and sometimes identified as an "appendix" thereof, are declared to be a part of this article to the full extent of the provisions of such "appendix" or "appendices"; provided, that in the case of conflict the provisions of this article shall govern.

Amendments to the International Building Codes may be promulgated from time to time by the International Code Council, shall be adopted pursuant to laws as are other ordinances or amendments thereto. Changes in the regulations or standards and specifications promulgated by the accredited authoritative agencies of the International Code Council shall be adopted as regulations, standards, and specifications of the City after being approved by ordinance of the council.

Section 101.4.4 of the IBC is deleted.

Section 101.4.5 is amended to read as follows:

101.4.5 Fire prevention. The provisions of the National Fire Protection Association (NFPA) 1 Fire Code and NFPA 101 shall apply.

Section 105.2 of the IBC is amended to read as follows:

105.2 Work exempt from permit. Exemptions from permit requirements of this code shall not be deemed to grant authorization for any work to be done in any manner in violation of the provisions of this code or any other laws or ordinances of this jurisdiction. Permits shall not be required for the following:

Building:

1. Oil derricks.
2. Retaining walls that are not over 2 feet in height as measured from the lower grade level to the grade level on the high side of the wall, unless supporting a surcharge or impounding Class I, II or IIIA liquids.
3. Water tanks supported directly upon grade if the capacity does not exceed 5,000 gallons (18,927 L) and the ratio of height to diameter or width does not exceed 2 to 1.
4. Sidewalks and driveways not more than 30 inches (762 mm) above adjacent grade and not over any basement or story below.
5. Painting, papering, tiling, carpeting, cabinets, counter tops and similar finish work.
6. Temporary motion picture, television and theater stage sets and scenery.
7. Prefabricated swimming pools that are less than 24 inches (610 mm) deep.
8. Shade cloth structures constructed for nursery or agricultural purposes, not including service systems.
9. Swings and other playground equipment accessory to detached one- and two-family dwellings.
10. Window awnings supported by an exterior wall that do not project more than 54 inches (1372 mm) from the exterior wall and do not require additional support.
11. Non-fixed and movable fixtures, cases, racks, counters and partitions not over 5 feet 9 inches (1753 mm) in height.
12. Re-roofing or residing an existing home without removing any structural components.
13. Patio/decks that are not greater than 4" in height above ground level, Height is measured from top of patio/decking to ground at lowest point.

Electrical:

1. Listed cord-and-plug connected temporary decorative lighting.
2. Reinstallation of attachment plug receptacles but not the outlet therefore.
3. Replacement of branch circuit overcurrent devices of the required capacity in the same location.
4. Electrical wiring, devices, appliances apparatus or equipment operating at less than 25 volts and not capable of supplying more than 50 watts of energy.
5. Minor repair work, including the replacement of lamps or the connection of approved portable electrical equipment to approved permanently installed receptacles.
6. Removal and replacement of stoves, disposals, ranges. Lighting fixtures, or similar appliances and equipment, not to include base board heaters.

Radio and television transmitting stations: The provisions of this code shall not apply to electrical equipment used for radio and television transmissions, but do apply to equipment and wiring for a power supply and the installations of towers and antennas.

Temporary testing systems: A permit shall not be required for the installation of any temporary system required for the testing or servicing of electrical equipment or apparatus.

Gas:

1. Portable heating, cooking or clothes drying appliances.
2. Replacement of any minor part that does not alter approval of equipment or make such equipment unsafe.
3. Portable-fuel-cell appliances that are not connected to a fixed piping system and are not interconnected to a power grid.

Mechanical:

1. Portable heating appliances.
2. Portable ventilation appliances.
3. Portable cooling units.
4. Steam, hot or chilled water piping within any heating or cooling equipment regulated by this code.
5. Replacement of any minor part that does not alter approval of equipment or make such equipment unsafe.
6. Portable evaporative coolers.
7. Self-contained refrigeration systems containing 10 pounds (4.54 kg) or less of refrigerant or that are actuated by motors of 1 horsepower (746 W) or less. (Window AC units).
8. Portable-fuel-cell appliances that are not connected to a fixed piping system and are not interconnected to a power grid.

Plumbing:

1. The clearing of stoppages or the repairing of leaks in pipes, valves or fixtures and the removal and reinstallation of water closets, provided such repairs do not involve or require the replacement or rearrangement of valves, pipes or fixtures.
2. The stopping of leaks in drains, water, soil, waste or vent pipe; provided, however, that if any concealed trap, drainpipe, water, soil, waste or vent pipe becomes defective and it becomes necessary to remove and replace the same with new material, such work shall be considered as new work and a permit shall be obtained and inspection made as provided in this code.

Section 105.5 of the IBC is amended to read as follows:

105.5. Expiration. Every permit issued shall become invalid unless the work on the site authorized by such permit is commenced within six (6) months after its issuance, or if the work authorized by such permit does not continue to progress or is abandoned for a period of six (6) months after the last approved/valid inspection. Before such work

recommences, a new permit shall be first obtained and the appropriate fees shall be paid. The code official can extend the time for action by the permittee if there is reasonable cause. A permittee holding an unexpired permit shall have the right to apply for an extension, in writing, for time to complete such work. The extension shall be requested for a justifiable cause.

The fees shall be one-half the amount required for a new permit for such work, provided no changes have been made or will be made in the original construction documents for such work. Any person who commences work before obtaining the necessary permits shall be subject to, an investigation fee as set forth by resolution, and 100 percent of the usual permit fee.

Section 107.2 of the IBC is amended to read as follows:

107.2 Construction Documents. Construction documents shall be in accordance with Sections 107.2.1 through 107.2.8

Section 107.2.1.1 of the IBC is amended to read as follows:

107.2.1.1 Building Height and Area Calculations. On the Code Data Sheet for a new structure or an addition to an existing structure, the design professional shall provide the height and area calculations used to determine if the structure meets the limitations of the building code.

Sections 107.2.2.1 & 107.2.6.1.1 of the IBC is added to read as follows:

107.2.2.1 Shop Drawings. All fire protection shop drawing prepared by sub-contractors shall be reviewed by the fire protection engineer who performed the FPEDE prior to submittal to the City of Rockville. Shop drawings include, but not limited to, fire sprinkler plans, non-aqueous fire protection systems, fire alarm submittals, smoke control systems. The fire protection engineer shall review the plans for coordination of components and the performance of integrated systems. The fire protection engineer will also verify that the systems are designed in accordance with the appropriate standard, all fire protection systems are coordinated together to work in concert, and that all information is presented for a review.

107.2.2.1.1 Required Statement. Each fire protection shop drawings must have a signed and stamped statement attached to the plans by the evaluating fire protection engineer attesting: "In my professional engineering opinion these drawings and specifications have been reviewed, coordinated with other applicable fire protection systems, and are in compliance with the fire safety provisions of all adopted State and local building code, fire codes, mechanical codes, local amendments and referenced codes and standards to the best of their knowledge and belief."

Section 107.2.7 of the IBC is added to read as follows:

107.2.6 Fire Protection Engineering Design Evaluation (FPEDE). All plans and specifications for which a building permit is required for buildings of the Use Groups listed in Section 107.2.7 shall be evaluated in accordance with the requirements of this Section for design compliance with adopted fire related code requirements concerning:

- (1) Documentation of the title and edition of all applicable State and local Building and Fire codes and standards, and amendments thereto, on which the design is based;
- (2) Designated Use Group Classification(s) of all spaces;
- (3) Type of Construction requirements identified, with supportive calculations;
- (4) Documentation of fire endurance ratings of structural elements and fire rated components (walls, floors, roofs, parapets, opening protectives);
- (5) Detailed discussion for protection of fire rated penetrations, systems joining fire rated assemblies, perimeter fire containment, etc.;
- (6) Height and area limits compliance and required property line setback criteria;
- (7) Occupant load calculations, egress capacity and travel distance analysis;
- (8) Interior finishes analysis;
- (9) Fire protection systems required (suppression, fire alarm, smoke detection, heat detection, smoke control, other required fire protection systems);
- (10) Fire hydrant locations, fire department connection locations, and emergency fire and medical vehicle access;
- (11) Emergency lighting and emergency power systems;
- (12) Applicable provisions of Chapter 4 of the IBC, "Special Detailed Requirements Based on Use and Occupancy";
- (13) Compliance with applicable NFPA Codes and Standards for specific processes, materials, or hazards which are referenced within the IBC, NFPA 101, Life Safety Code or NFPA 1, Uniform Fire Prevention Code;
- (14) Integration, coordination and performance of fire protection systems (both active and passive) with detailed information of their features;
- (15) Completion of the 2015 International Building Code Plan Review Record as published by the International Code Council.

A written Fire Protection Engineering Design Evaluation (FPEDE) concerning these items shall be submitted with the plans accompanying the application for a building permit. It shall be in a format established by the Fire Marshal and shall be signed and stamped by the preparer. If, in the course of performing the FPEDE, the evaluating fire protection engineer determines that there are fire related code deficiencies in the drawing or specifications, all such deficiencies shall be remedied prior to the submittal of the FPEDE and the building permit application and drawings. The FPEDE must include a signed and sealed statement by both the evaluating fire protection engineer and the engineer or architect of record attesting: "In my professional engineering opinion these drawings and specifications are in compliance with the fire safety provisions of all adopted State and local Building Code, Fire Codes, Mechanical Codes, local amendments and referenced codes and standards to the best of their knowledge and belief".

107.2.7.1 FPEDE Finals. Prior to final inspection by city officials, the fire protection engineer shall personally inspect and verify that the systems are installed correctly and are prepared for an inspection.

Section 107.2.8 of the IBC is added to read as follows:

107.2.8 Use Groups Requiring a Fire Protection Engineering Design Evaluation (FPEDE). An FPEDE is required when deemed necessary by the Building Official, during the pre-submittal phase, for the following buildings or fire protection systems for which a building permit application is made:

- (1) Use Group "A", Assembly, with an occupant load of One Thousand (1,000) persons or more;
- (2) Use Group "E", Educational;
- (3) Use Group "H", High Hazard;
- (4) Use Groups "I-2 and I-3", Institutional;
- (5) Use Group "M", all malls of Type I construction;
- (6) All Use Groups with an estimated construction cost of Five Million Dollars (\$5,000,000.00) or more;
- (7) Other complex or unusual structures;

107.2.8.1 Qualifications of Fire Protection Design Evaluation (FPEDE) Preparer. The FPEDE must be prepared by a Fire Protection Engineer who is a registered Professional Engineer in the State of Maryland.

Section 107.3.3 of the IBC is amended to read as follows:

107.3.3 Phased approval. The Chief of Inspection Services is authorized to issue a permit for the construction of foundations of a building or structure prior to the construction documents, for the whole building or structure, having been approved. The application for foundation permit shall include all relative information, number of plans, applications, fees and complies with the appropriate codes. The holder of such permit for the foundation of a building or structure shall proceed at the holder's own risk with the building operation and without assurance that a permit for the entire structure will be granted.

Sections 107.3.4.2 is added to the IBC to read as follows:

107.3.4.2 Design Professional. All commercial and multifamily project plans shall be prepared, signed, sealed and include the certification statement as required by Maryland State law (COMAR 09.21.02.04)

Sections 111.1.1, 111.1.2, and 111.1.3 are added to the IBC to read as follows:

111.1.1 New buildings. A building or structure hereafter erected shall not be used or occupied in whole or in part until the certificate of occupancy shall have been issued by the code official.

111.1.2 Buildings hereafter altered. A building or structure hereafter enlarged, extended or altered to change from one (1) use group to another or to a different use within the same use group in whole or in part, and a building or structure hereafter altered for which a certificate of occupancy has not been heretofore issued, shall not be occupied or used until the certificate shall have been issued by the code official, certifying that the work has been completed in accordance with the provisions of the approved permit. Any use or occupancy, which was not discontinued during the work of alteration, shall be discontinued within thirty (30) days after the completion of the alteration unless the required certificate is secured from the code official.

111.1.3 Change of tenant or ownership. Whenever a commercial, industrial, or business use or building changes ownership; or the tenancy of a commercial or industrial building or space changes, application must be made for a certificate of occupancy. Any violations of this Section or any applicable code as related to fire or life safety codes must be corrected prior to the issuance of the certificate of occupancy.

Section 113 of the IBC is amended to read as follows

113.1 Administrative Appeals. Administrative appeals shall be administered in accordance with Chapter 5, Article I, Section 5-12 of the Rockville City Code

Section 115.3 of the IBC is amended to read as follows:

115.3 Unlawful Continuance. Any person who shall continue any work in or about the structure after having been issued a verbal or written stop work order, except such work

as that person is directed to perform to remove a violation or unsafe condition, shall be liable to a fine as set forth by resolution of the Mayor and Council.

Section 303.1.2, Item 2 of the IBC is deleted:

Section 414.1.2.2 is added to the IBC to read as follows:

414.1.2.2 Laboratory chemicals. Upon application for construction permit, any structure with a laboratory shall provide a listing of liquids to be stored and used. The applicant is responsible for the preparation and submittal of the chemical list, the quantity to be stored of each individual chemical, the Material Safety Data Sheets and the container storage type and arrangement for review.

Section 501.3 is added to read as follows:

501.3 Internal Fire Department Access in Complex Structures. In all complex structures, at least one entrance to a stair shall be provided in the vicinity of the main fire department access point, which accesses all levels of the structure. If a standpipe system is required in the building, this stair must be provided with that means of manual fire protection. The automatic fire sprinkler floor control valves shall also be located in this stair.

Section 901.1 of the IBC is amended to read as follows:

901.1 Scope. The provisions of this chapter shall specify where fire protection systems are required and shall apply to the design, installation and operation of fire protection systems. These fire protection system requirements may be concurrently covered in the State of Maryland Fire Prevention Code, Public Safety Article 6-101 – 6-202 Annotated Code of Maryland and COMAR 29.06.01.

Section 903.1.2 is added to the IBC to read as follows:

903.1.2 Sprinkler Zones. Each floor shall be zoned separately. Where atrium smoke exhaust is used, atriums shall be separately zoned to work in concert with the fire alarm zone to activate the exhaust fans.

Exceptions:

- (1) Where the building is not protected throughout by a fire alarm system in accordance with Section 907, a zone shall not exceed 52,000 square feet (2,090 m²) for light hazard occupancies and 40,000 square feet for ordinary and extra hazard occupancies.
- (2) Single unit dwellings designed in accordance with NFPA 13D.
- (3) Multi-story dwelling units

Section 903.2.1.1 of the IBC is amended to read as follows:

903.2.1.1 Group A-1. ~~An automatic sprinkler system shall be provided for fire areas in new buildings and structures containing Group A-1 occupancies and intervening floors of the building where one of the following conditions exists:~~

- ~~1. The fire area exceeds 5,000 square feet.~~
- ~~2. The fire area has an occupant load of 100 or more.~~
- ~~3. The fire area is located on a floor other than a level of exit discharge serving such occupancies.~~
- ~~4. The fire area contains a multi-theater complex.~~

Repealed 7/10/2017

Section 903.2.1.3 of the IBC is amended to read as follows:

903.2.1.3 Group A-3. ~~An automatic sprinkler system shall be provided for fire areas in new buildings and structures containing Group A-3 occupancies and intervening floors of the building where one of the following conditions exists:~~

- ~~1. The fire area exceeds 5,000 square feet.~~
- ~~2. The fire area has an occupant load of 100 or more.~~
- ~~3. The fire area is located on a floor other than a level of exit discharge serving such occupancies.~~

Repealed 7/10/2017

Section 903.2.1.4 of the IBC is amended to read as follows:

903.2.1.4 Group A-4. ~~An automatic sprinkler system shall be provided for Group A-4 occupancies where one of the following conditions exists:~~

- ~~1. The fire area exceeds 5,000 square feet.~~
- ~~2. The fire area has an occupant load of 100 or more.~~
- ~~3. The fire area is located on a floor other than a level of exit discharge serving such occupancies.~~

Repealed 7/10/2017

Section 903.2.1.7 of the IBC is amended to read as follows:

903.2.1.7 Multiple fire areas. ~~An automatic sprinkler system shall be provided where multiple fire areas of Group A-1, A-2, A-3 or A-4 occupancies share exit or exit access components and the combined occupant load of these fire areas is 300-100 or more.~~

Repealed 7/10/2017

Section 903.2.3 of the IBC is amended to read as follows:

903.2.3 Group E. ~~An automatic sprinkler system shall be provided for all Group E occupancies.~~

Exception: An automatic sprinkler system is not required in any area below the lowest level of exit discharge serving that area where every classroom throughout the building has at least one exterior exit door at ground level.

Repealed 7/10/2017

Section 903.2.4 of the IBC is amended to read as follows:

903.2.4 Group F-1. An automatic sprinkler system shall be provided throughout all buildings containing a Group F-1 occupancy where one of the following conditions exists:

1. A Group F-1 fire area exceeds 5,000 square feet.
2. A Group F-1 fire area is located more than three stories above grade plane.
3. The combined area of all Group F-1 fire areas on all floors, including any mezzanines, exceeds 24,000 square feet (2230 m²).
4. A Group F-1 occupancy used for the manufacture of upholstered furniture or mattresses exceeds 2,500 square feet (232 m²).

Repealed 7/10/2017

Section 903.2.7 of the IBC is amended to read as follows:

903.2.7 Group M. An automatic sprinkler system shall be provided throughout buildings containing a Group M occupancy where one of the following conditions exists:

1. A Group M fire area exceeds 5,000 square feet.
2. A Group M fire area is located more than three stories above grade plane.
3. The combined area of all Group M fire areas on all floors, including any mezzanines, exceeds 24,000 square feet (2230 m²).
4. A Group M occupancy used for the display and sale of upholstered furniture or mattresses exceeds 5,000 square feet (464 m²).

Repealed 7/10/2017

Section 903.2.9 of the IBC is amended to read as follows:

903.2.9 Group S-1. An automatic sprinkler system shall be provided throughout all buildings containing a Group S-1 occupancy where one of the following conditions exists:

1. A Group S-1 fire area exceeds 5,000 square feet.
2. A Group S-1 fire area is located more than three stories above grade plane.
3. The combined area of all Group S-1 fire areas on all floors, including any mezzanines, exceeds 24,000 square feet (2230 m²).
4. A Group S-1 fire area used for the storage of commercial trucks or buses where the fire area exceeds 5,000 square feet (464 m²).
5. A Group S-1 occupancy used for the storage of upholstered furniture or mattresses exceeds 2,500 square feet (232 m²).

Repealed 7/10/2017

Section 903.2.9.1 of the IBC is amended to read as follows:

~~903.2.9.1 Repair garages.~~ ~~An automatic sprinkler system shall be provided throughout all buildings used as repair garages in accordance with Section 406, as shown:~~

- ~~1. Buildings with repair garages servicing vehicles parked in basements.~~
- ~~2. A Group S-1 fire area used for the repair of commercial trucks or buses where the fire area exceeds 5,000 square feet (464 m²).~~

~~Repealed 7/10/2017~~

Section 903.3.1.1.2.1 of the IBC is added to read as follows:

903.3.1.1.2.1 Manner for Calculation of Residential Bathroom Square Footage. When calculating the area of a residential bathroom for the purpose of determining if sprinkler coverage is required, any separate rooms with doors opening into the larger room contained within the larger footprint shall be counted. The area that a shower stall or bathtub uses shall also be incorporated into the overall area calculation. Rules governing smaller rooms shall continue to apply when determining if those smaller rooms need independent sprinkler heads.

Section 903.4.3.1 is added to the IBC to read as follows:

903.4.3.1 Sprinkler Floor Control Valves Arrangement. When a sprinkler system serves more than one level, each level must be consistently and separately valved by a listed and approved control valve. Control valves shall be located in an area which provides adequate and easy access by the Fire Department. Additionally, at each control valve, approved signage shall be permanently installed to advise individuals of the additional control valves and their location(s) on the floor. If the building is provided with a fire alarm system, the fire alarm zones will need to coincide with the flow switch arrangement to provide proper annunciation.

Section 903.6 is added to the IBC to read as follows:

903.6 Sprinkler Plan Preservation. All buildings equipped with a new sprinkler system shall have a copy of the plans permanently mounted in the Fire Command Center or Fire Pump room or main sprinkler valve room. The plans shall be protected from deformation and located in a dedicated, labeled storage cabinet permanently mounted to the wall adjacent to the main sprinkler riser and locked. Plans can be reduced in size but must remain legible.

Exceptions: Plans for tenant modifications do not need to meet this requirement.

Section 903.7 is added to the IBC to read as follows:

903.7 Insulation Value for Sprinkler Piping Protection. All insulation installed near or on sprinkler piping shall have a minimum R-value of 30. R-30 insulation shall be used in the attic and in the exterior walls. Only batt insulation shall be used in the specific areas protecting sprinkler piping. Blown-in insulation shall not be used in the same channels as

sprinkler piping. Appropriate width shall be provided to prevent the compaction of the insulation, thus decreasing the “R” value of the insulation.

Section 903.9 is added to the IBC to read as follows:

903.9 Minimum length of “Dry” type sprinkler heads. All dry type sprinkler heads connected to wet pipe sprinkler systems shall have a minimum barrel length of 12 inches. The installation of the sprinkler head shall not have the barrel protruding from the wall/ceiling or exposed on the exterior of the wall/ceiling.

Section 903.10 is added to the IBC to read as follows:

903.10 Sprinkler System Riser locations. All alarm check valves on sprinkler system risers shall be located in the same room.

Exception: Where a separate alarm check valve serves a special hazard, the alarm check valve shall be permitted if the alarm valve installed in a labeled dedicated room that is located adjacent to the special hazard. The room must be arranged with drainage adequate in size to handle main drain flow tests or the drain is piped to the exterior. Special signage shall be located at the main sprinkler riser room to direct maintenance personnel, service workers and firefighters to the dedicated room.

Section 907.1.2.1 is added to the IBC to read as follows:

907.1.2.1 Electric Water flow Alarm. If an electrical alerting device is chosen as the water flow alarm on the exterior of a building, the audible bell will be equipped with a clear lens strobe immediately adjacent to the audible device. The electric audible and visual device shall be mounted immediately above all fire department connections.

Section 907.2.13.2 of the IBC is amended to read as follows:

907.2.13.2 Fire department communication system. An approved two-way, fire department communication system designed and installed in accordance with NFPA 72 shall be provided for fire department use. It shall operate between a fire command center complying with Section 911, elevators, elevator lobbies, emergency and standby power rooms, fire pump rooms, areas of refuge and inside enclosed exit stairways. The fire department communication devices shall be provided on intermediate floor landings in stairwells and adjacent to fire department hose connections, unless otherwise permitted by the code official.

Sections 907.6.4.3 and 907.6.4.4 are added to the IBC to read as follows:

907.6.4.3 Fire Alarm Zones. Each floor shall be zoned separately. Where the building is protected by an automatic sprinkler system in accordance with Section 903, the area of the fire alarm zone shall coincide with the allowable area of the sprinkler system.

907.6.4.4 Fire Alarm Zones Unprotected areas. Where the building is not protected throughout by an automatic sprinkler system in accordance with Section 903, a zone in an unprotected area shall not exceed 22,500 square feet (2090 m²) and the length of any zone shall not exceed 300 feet (91440 mm) in any direction.

Section 913.2.3 is added to the IBC to read as follows:

913.2.3 Fire Pump Room Design. Any room housing a fire pump shall be of sufficient size to allow access to all sides of the pump that require servicing and maintenance.

913.2.3.1 Fire Pump Room Doorway. The room shall have a doorway directly to the exterior. The doorway shall be of sufficient size to allow removal of the fire pump and be a minimum of 36 inches in width.

Exception: Fire Pump rooms located below grade with direct access from a fire department and maintenance accessible area are exempt from the doorway directly to the exterior.

913.2.3.2 Fire Pump Room Protection. Access to fire pump shall be maintained at all times by bollards or other vehicular protective devices installed outside of the doors. The protective devices shall be located to prevent vehicles from parking in front of the doors.

913.2.3.3 Fire Pump Room Drains. Each fire pump room shall be provided with a minimum of two drains located near the fire pump. Each drain shall have a minimum of 4 inch diameter opening. One drain shall be dedicated to the main drain from the pump discharge piping and the second drain opening shall serve the accessory drain piping from the fire pump.

913.2.3.4 Fire Pump Test Header Location. The fire pump test header shall be located in a location where it would not be confused with the sprinkler/standpipe feed connection used by the fire department. The pump test header shall be located near an area where water discharge is easily contained and directed to collection points without impacting public vehicular traffic.

913.2.3.5 Fire Pump Transfer Switch. If a secondary electrical power supply is provided for the fire pump, the fire pump controller shall be a dual service controller acting as a combination fire pump controller and transfer switch.

Exception: Limited service controllers with a separate transfer switch will be permitted only if the transfer switch is installed adjacent to the limited service fire pump controller.

Section 916 of the IBC is amended to read as follows:

Section 916

Radio Amplification System for Emergency Service Personnel

916.1 General. The provisions of this Section shall apply to all newly constructed below ground floors of a building, all floors in buildings greater than 25000 ft² per floor, and to all floors of buildings greater than 3 stories in height.

916.2 Where Required. Every floor area in a building or structures which cannot achieve the required level of radio coverage as established by Montgomery County Department of Technology Services (DTS) shall be provided with in-building public safety radio enhancement system in accordance with the Montgomery County Fire Safety Code.

916.3 Inspection and Testing. Emergency responder radio coverage and in-building public safety radio enhancement systems must be tested, and inspected by approved individuals. The results of the testing and inspection shall be certified to the code official and Montgomery County prior to issuance of an occupancy permit.

Section 917 is added to the IBC to read as follows:

Section 917

Fire Hydrants

917.1 Fire Hydrant Spacing. For all newly constructed buildings, fire hydrants shall be spaced at no greater than 300 feet from all points of the structure as the fire hose would lay on the ground. The perimeter distance shall be measured, as a hose line would be laid along paved streets, through parking lot entrances, and around obstructions, in accordance with the determination of the authority having jurisdiction. If publicly maintained hydrants do not meet this spacing, then privately owned and maintained hydrants shall be provided.

Exception: Fire hydrant perimeter spacing may be increased to 500 feet for a structure equipped with an automatic fire suppression installed completely throughout. The distance from a fire hydrant to the fire department connection shall remain 100 feet.

917.1.1 Fire Hydrant location. Structures equipped with a sprinkler system and/or a standpipe system shall have a fire hydrant located within 100 feet of the fire department connection. The distance shall be measured along a path accessible to foot travel.

917.2 Fire Hydrant Location Markings. All new and relocated fire hydrants, either maintained by the City of Rockville, Washington Suburban Sanitary Commission or privately owned, shall be provided with a marker installed in the roadway. The marker shall be reflective and blue in color. The location of the marker shall be dependent upon the roadway characteristics.

- On unstriped roadways, blue markers shall be set in the center of the roadway.
- On undivided striped roadways, blue markers shall be set 6" to the hydrant side of the center stripe.
- On divided roadways, the blue marker shall be set 6" to the side of the lane striping, which is closest to the hydrant.
- In locations where hydrants are situated on corners, blue markers shall be installed on both approaches, which front the hydrant.

In addition, all fire hydrants shall be equipped with a vertical visual indicator to be permanently attached to the bonnet of the fire hydrant to assist in locating the hydrant when surrounded by snow.

917.3 Fire Hydrant Color Coding. A reflective tape marker shall be placed on each fire hydrant indicative of the fire hydrant's flow characteristics. The color of the band of reflective tape shall be in accordance with NFPA 291, Recommended Practice for Fire Flow Testing and Marking of Hydrants. The band shall be at least 2 inches in width and shall be wrapped around the neck of the fire hydrant, which is immediately beneath the bonnet.

Exception: If the fire hydrant is manufactured where a band cannot be attached, a reflective self-adhesive tape shall be applied to the rim of the bonnet.

917.4 Fire Hydrant Protection Systems. When a fire hydrant is considered to be vulnerable to vehicular traffic by the Code Official, a protective system shall be installed to prevent any damage. The system can be composed of bollards or another accepted physical barriers capable of impact without causing damage to the fire hydrant.

Section 1001.1.1 is added to the IBC to read as follows:

1001.1.1 Scope. Means of egress requirements of Chapter 10 may be concurrently covered in the State of Maryland Fire Prevention Code, Public Safety Article 6-101 – 6-202 Annotated Code of Maryland and COMAR 29.06.01.

Section 1028.6 is added to the IBC to read as follows:

1028.6 Construction of Path to Egress Discharge. Egress discharge paths shall be made of permanent, formed materials arranged in a manner to lead occupants to a public way. Grass lawns, gravel and other filler materials will not be an acceptable path base.

Chapter 11 of the IBC is unchanged by this ordinance:

Chapter 11
ACCESSIBILITY

Section 1101

General

1101.1 Scope. Chapter 11 is hereby replaced with the *Maryland Accessibility Code* set forth in *COMAR 05.02.02*.

Section 1209.2.1 of the IBC is added to read as follows:

1209.2.1 Dedicated Attic Walkways. When a commercial or multi-family residential structure is provided with an attic, dedicated and permanent walkways shall be installed to provide an easy manner for maintenance personnel to transverse the structural spans. The walkway shall be of materials consistent with the construction of the building. The walkway shall be a maximum of 18 inches wide or meeting required widths as designated by other Codes and shall not be used for storage. The walkway shall be arranged so to prevent any contact with sprinkler piping or the insulation that protects the piping.

Sections 1507.1.1 and *1507.1.2* are added to the IBC to read as follows:

1507.1.1 Cool roof requirements. Roof coverings for roof slopes less than two units vertical in 12 units horizontal (less than 17-percent slope) for buildings and covered parking shall conform to Sections 1507.1.1 and 1507.1.2. Replacement, including any change to design or materials, of the roof of a building or structure in a Historic District Zone must be approved by the Historic District Commission. A minimum of 75% of the entire roof surface not used for roof penetrations, onsite renewable energy systems, or vegetated roofing systems shall be covered with products that comply with the following:

1. Have a minimum initial solar reflective index (SRI) of 78, as described in Section 1507.1.2; or
2. Comply with the criteria for the U.S. EPA's Energy Star Program Requirements for Roof Products – Eligibility Criteria.

Exceptions:

1. Roofs used to shade or cover parking and roofs over semi-heated spaces or used as outdoor recreation space by the occupants of the building shall be permitted to be either landscaped or have a minimum initial *SRI* of 29. A default *SRI* value of 35 for new concrete without added color pigment is allowed to be used in lieu of measurements.
2. Terraces on setbacks comprising less than 25% of the area of the largest floor plate in the building.

3. Roofs ballasted at a minimum weight of 17 pounds per square foot with limestone or a ballast with a solar reflectance of at least 30% shall be permitted to comprise part or all of the 75% required area coverage.
4. Roofs where a minimum of 75% of the roof area is shaded during the peak sun angle on June 21st by permanent features of the building.
5. Vegetated roofs and onsite renewable energy systems shall be permitted to comprise part or all of the 75 percent required area coverage.

1507.1.2 Solar Reflective Index. The solar reflective index (SRI) shall be calculated in accordance with ASTM E1980 for medium-speed wind conditions. The SRI shall be based upon solar reflectance as measured in accordance with ASTM E1918 or ASTM C1549, and the thermal emittance as measured in accordance with ASTM E408 or ASTM C1371. For roofing products, the values of a solar reflectance and thermal emittance shall be determined by a laboratory accredited by a nationally recognized accreditation organization, such as the Cool Roof Rating Council CRRC-1 Product Rating Program, and shall be labeled and certified by the manufacturer.

Sec. 5-88. Adoption of Maryland Accessibility Code.

The *Maryland Accessibility Code (COMAR 05.02.02.)* is adopted by reference.

Secs. 5-89 – 5-95. Reserved.