

Offices of the County Executive. 101 Monroe Street. Rockville, Maryland 20850

Subject: Adoption of the 2021 IBC, IECC, IgCC, IMC, IFGC, IRC, ISPSC, and IEBC	Number: 13-24
Originating Department: Department of Permitting Services	Effective Date:

Montgomery County Regulation on:

ADOPTION OF THE 2021 INTERNATIONAL BUILDING, ENERGY CONSERVATION, GREEN CONSTRUCTION, MECHANICAL, FUEL-GAS, RESIDENTIAL, SWIMMING POOL AND SPA AND INTERNATIONAL EXISTING BUILDING CODES

#### DEPARTMENT OF PERMITTING SERVICES

Issued by: County Executive Regulation No. 13-24

Authority: Code Sections 8-13, 8-14 and 51-12 Supersedes: Regulation Nos. 31-19 and 12-20 Council Review: Method 2 under Code Section 2A-15

Register Vol. 41, Issue 9

Comment Deadline: September 30, 2024

Effective Date: \_\_\_\_

Sunset Date: None

SUMMARY: This regulation adopts the 2021 editions of the International Building

Code (IBC), the International Energy Conservation Code (IECC), the International Green Construction Code (IgCC), the International Mechanical Code (IMC), the International Fuel Gas Code (IFGC), the International Residential Code (IRC), the International Swimming Pool and Spa Code (ISPSC), and the International Existing Building Code (IEBC), with amendments. It governs all buildings and structures within

Montgomery County.

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BACKGROUND INFORMATION:	The International Code Council (ICC) publishes the international series (I-series) of construction standards every three years. The Maryland Department of Labor adopts these standards and obligates its political subdivisions to adopt the standards within a specific time period. Montgomery County adopts these standards within the prescribed period.	



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COMCOR 08.00.02 Adoption of the [2018] <u>2021</u> International Building, Energy Conservation, Mechanical, Fuel-Gas, Residential, Swimming Pool and Spa and International Existing Building Codes

#### 08.00.02.01

This regulation is adopted under Sections 8-13, 8-14, and 51-12 of the Montgomery County Code (MCC), [1994]2014, as amended, and applies to the construction, alteration, addition, repair, removal, demolition, use, location, occupancy, and/or maintenance of all buildings, structures, and swimming pools and spas, and their service equipment, within Montgomery County. It supersedes Executive Regulation # [4-15AMII]31-19 dated [August 3, 2015]May 20, 2020, Executive Regulation 12-20 dated September 28, 2021, and all previous regulations adopting the International Code Council (ICC) standards. This regulation adopts the [2018]2021 editions of the IBC, the IECC, the IGCC, the IMC, the IFGC, the IRC, the ISPSC, and the IEBC, with amendments necessary to achieve uniformity and consistency with Maryland and Montgomery County laws and ordinances, as well as department/division policies and procedures. Where this regulation differs from Chapter 22 of the Montgomery County [Fire Safety]Code (Fire Safety Code), it does not preempt or negate any more restrictive provisions of that code.

#### 08.00.02.02

Wherever the ICC Electrical Code is referenced, replace the reference with Chapter 17 of the Montgomery County Code. Wherever Chapter 11 of the International Building Code or the ICC/ANSI A117.1 is referenced, replace the reference with the Maryland Accessibility Code. Wherever the International Fire Code or International Property Maintenance Code is referenced, replace the reference with the Montgomery County Fire Safety Code.

# AMENDMENTS TO THE [2018]2021 INTERNATIONAL BUILDING CODE (IBC)

#### 08.00.02.03[.]

Section 101.1. Delete the brackets and replace the phrase in the brackets with "Montgomery County, Maryland."

#### 08.00.02.04[.]



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Section 101.2. <u>In the Exception, delete "this code or".</u>[COMAR 09.12.51.04.B(2) amended Section 101.2 Scope as follows: Delete the Exception and replace with the following:

- (a) Exception: 1. Detached one- and two-family dwellings and multiple single-family dwellings (townhouses) not more than three stories above grade plane in height with a separate means of egress and their accessory structures shall comply with the International Residential Code;
- (b) Exception: 2. Existing buildings undergoing repair, alterations or additions, and change of occupancy shall comply with the Maryland Building Rehabilitation Code set forth in *COMAR* 09.12.58; and
- (c) Exception: 3. Maintenance of residential structures and premises shall comply with the Minimum Livability Code *COMAR 09.12.54*.]

### 08.00.02.05[.]

Section 101.4.1. Add the following exception:

Exception: Fuel-gas piping systems, fuel gas appliances, gaseous hydrogen systems and related <u>appurtenances</u>[accessories] regulated under the authority of Washington Suburban Sanitary Commission (WSSC).

#### 08.00.02.06[.]

Section 101.4.3. Delete.

#### 08.00.02.07

<u>Section 101.4.7. Delete</u> "<u>International Existing Building Code</u>" and <u>replace with "Maryland Rehabilitation Code</u>".

### 08.00.02.[07.]<u>08</u>

Sections 103, 104.8, and 104.8.1. Delete.

#### 08.00.02.[08.]09



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Section 105.1. Add the following: A separate permit is required for each legal address. A separate permit is required for each separate building or structure at a legal address.

### 08.00.02.[09.]10

Sections 105.1.1 and 105.1.2. Delete.

### 08.00.02.[10.]11

Section 105.2. Delete Items 1, 2, 5, and 9 from the "Building" subsection.

Item 4. Delete and replace with "Retaining walls that are not over [54]30 inches [(assumed frost depth of 30 inches minimum) in height measured from the bottom of the footing to the top of the wall, or are not greater than 24 inches] in retained height, unless supporting a surcharge (sloped soil, fire truck, pedestrian or vehicular traffic, etc.) or impounding Class I, II or IIIA liquids[.], or crossing a lot line."

#### 08.00.02.[11.]12

Sections 105.3, 105.4, 105.5, [105.6,] and 105.7. Delete.

#### 08.00.02.13

Section 107.3.1. In the first sentence, delete ", as "Reviewed for Code Compliance".

#### 08.00.02.14

Section 107.3.4. At the end of the second paragraph, add "or structure" after the word building.

#### 08.00.02.[12.]<u>15</u>

Section 109.1. Add a second sentence to read: Required fees shall be paid for each separate permit application.

#### 08.00.02.[13.]<u>16</u>



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Section 110.3.10. Add the following: The final inspection must be requested and approved before a building (or portion thereof) including equipment and appliances are used or occupied, irrespective of whether a valid certificate of use and occupancy exists.

# **08.00.02.**[14.]<u>17</u>

Sections 111, 113, 114 and 115. Delete.

### 08.00.02.[15.]<u>18</u>

Section 202. DEFINITIONS

[Delete the definitions "EXISTING BUILDING" and "EXISTING STRUCTURE" and replace with the following: "EXISTING BUILDING or EXISTING STRUCTURE means a building or structure that was erected and occupied, or was issued a certificate of occupancy, at least 1 year before a construction permit application for the building or structure was made to a local jurisdiction, the Maryland National Capital Park and Planning Commission, or Washington Suburban Sanitary Commission."]

[In the definition of Foster Care Facilities,]FOSTER CARE FACILITIES. [change] Change 2½ to 2.

### 08.00.02.[16.]<u>19</u>

Sections 305.1. Delete phrase "at any one time" and replace with "for 4 or more hours per day or more than 12 hours per week."

#### [08.00.02.17.

Section 305.2. Change 2½ to 2.]

#### 08.00.02.[18.]<u>20</u>

Section 308.2.3. In the title and text, change the word "six" to "nine".

# 08.00.02.[19.]21



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Section 308.2.4. In the title and text, change the word "five" to "eight". Delete the phrase "or Section P2904 of the International Residential Code".

#### 08.00.02.[20.]22

Section 308.3.2. Delete the phrase "or Section P2904 of the International Residential Code".

### 08.00.02.[21.]23

Section 308.5.1. Add the following exception:

[Change 2½ to 2 and replace "shall be classified as Group E" with "may be classified as Group E".] Exception: A childcare facility may be classified as I-4 when the facility is classified as a day care under NFPA 101, as adopted by Montgomery County.

#### 08.00.02.[22.]24

Section 310.4.1. Delete the phrase "or Section P2904 of the International Residential Code." Add the following:

#### Exceptions:

- 1. A family day care home, which is a dwelling in which child day care services are provided:
  - a) in the home where the registrant is the provider and a resident, or where the registrant is not a resident, but more than half of the children cared for are residents;
  - b) for not more than eight children, including the children of the provider, who are less than six years of age, and;
  - c) where staffing complies with state and local regulations, but no more than two non-resident staff members are on site at any time, may be classified as Group R-3, or as a one- or two-family dwelling conforming to the IRC.
- 2. A group day care home, which is a dwelling in which child day care services are provided:
  - a) in the home where the licensee is the provider and a resident;



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- b) for nine to 12 children, including the children of the provider, and;
- c) where staffing complies with state and local regulations, but no more than three non-resident staff members are on site at any time, may be classified as Group R-3, or as a one- or two-family dwelling conforming to the IRC.
- 3. A dwelling unit that contains a home occupancy or home health care practitioner must comply with Chapter 59 of the Montgomery County Code and the IRC.

# 08.00.02.[23.]<u>25</u>

Section 310.5. In the first sentence change "five" to "eight".

### 08.00.02.[24.]26

Section 403.2.1.2. Delete.

#### **08.00.02.**[25.]<u>27</u>

Section 403.4.5. Delete the phrase "Section 510 of the International Fire Code" and replace with "Section [916]918 of this Code".

#### 08.00.02.[26.]28

Section 403.4.7. Delete Exception 2 in Item 1.

#### 08.00.02.29

Section 406.2.7. Delete "Section 1107" and replace with "Title II and III of the Americans with Disabilities Act (ADA)."

## $08.0\underline{0.02.30}$

Section 411.5. Delete Item 3 and replace with "3. All exits and exit access doors from each puzzle room shall be open and readily available upon activation by the automatic fire alarm system, automatic sprinkler system, a manual control at a constantly attended location, and a readily accessible control located inside each puzzle room."



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### 08.00.02.31

Section 420. Add a new subsection as follows:

Section 420.12. Radon Control. R-1 and R-2 occupancies, and I-1 assisted living housing units shall have an approved radon control system. R-3 and R-4 Use Groups shall have control features as prescribed in Appendix AF RADON CONTROL METHODS of the currently adopted International Residential Code.

### **08.00.02.**[27.]<u>32</u>

Section 422.3.2. Change "30" to "15". Change "2.8" to "1.4". Change "nonambulatory care recipient" to "occupant", and change "care recipient" to "occupied".

#### [08.00.02.28.

Chapter 4. Add a new Section 429. Residential Occupancies.

Section 429.1. Radon Control. All R occupancies shall have appropriate radon control features as prescribed in Appendix F of the International Residential Code, 2018 edition.]

#### 08.00.02.[29.]33

Section 502.1. Delete "and existing" in the first line. In the sixth sentence, change the phrase "4 inches (102 mm)" to "6 inches (153 mm), except R-3 occupancies where the characters are permitted to be 5 inches (127 mm),".

#### 08.00.02.[30.]34

Section 510.2. Delete condition #4.

Amend condition #[6]7 by deleting the phrase "grade plane" and replacing it with "lowest level of fire department access".

Add two more conditions as follows:



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[7]8. For purposes of determining the number of stories above grade, a story above the 3-hour horizontal assembly shall be considered a story above grade regardless of the location of the average grade plane.

[8]9. A fire command center complying with Section 911 shall be provided.

### 08.00.02.[31.]35

Section 712.1. Add a new Subsection 712.1.17.

Section 712.1.17. Communicating Space. Vertical openings protected as a Communicating Space under the <u>adopted edition of NFPA 101[2018]</u> Life Safety Code, [NFPA 101, Section 8.6,] are permitted.

### 08.00.02.[32.]<u>36</u>

Section 717.5.3. Replace the first sentence of Exception 2 with the following: "In buildings, other than Group H occupancies, equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 or 903.3.1.2, smoke dampers are not required where:"

#### [08.00.02.33.

Section 901.1. *COMAR 09.12.51.04.B(4)* added the following note to **Section 901.1** Scope: Fire protection system requirements of Chapter 9 may be concurrently covered in the State Fire Prevention Code, *Public Safety Article*, §§ 6-101—6-202, Annotated Code of Maryland, and *COMAR 09.06.01*. The State Fire Prevention Code is enforced by the State Fire Marshal or authorized fire official.]

#### **08.00.02.**[34.]<u>37</u>

Section 903.1.1. Delete and replace with the following:

903.1.1. Buildings over three stories in height. Except for stand-alone open parking structures that are detached from other buildings, all buildings greater than three stories in height above grade plane must be protected with an automatic sprinkler system under Section 903.3.1.1 or 903.3.1.2.

#### 08.00.02.[35.]38



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Add a new Section 903.1.2.

Section 903.1.2 Alternative Protection. Where automatic sprinkler systems are required by this code; and, where water as an extinguishing agent is not compatible with the fire hazard, or is prohibited by a law, statute, or ordinance, the affected area must be protected by an approved automatic fire-extinguishing system utilizing an extinguishing agent that is compatible with the fire hazard.

# 08.00.02.[36.]39

Section 903.2.1.[2.] Add a [fourth condition] second sentence to read as follows:

- [4. The assembly occupancy is one of the following:] The following assembly occupancies shall be protected throughout by an approved supervised automatic sprinkler system:
  - (1) [Dance] dance halls[,]
  - (2) [Discotheques,] <u>discotheques</u>
  - (3) [Nightclubs, or] <u>nightclubs</u>
  - (4) bars
  - (5) restaurants
  - ([4]6) [Assembly] assembly occupancies with festival seating[.]

# 08.00.02.[37.]<u>40</u>

Section 903.2.8. Add an exception to read as follows:

An automatic sprinkler system throughout the building is not required when all of the following conditions are met:

1. [The] the building is a mixed\_use building, that is not otherwise required to be protected throughout by automatic sprinklers;



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- 2. [There] there is only one dwelling unit in the building;
- 3. [The] the dwelling unit is separated from the remainder of the building by fire barriers under Section 707 and horizontal assemblies under Section 711 having a fire resistance rating not less than 2 hours;
- 4. [The] the means of egress from the dwelling unit is independent from the other occupancies; and,
- 5. [The] <u>the</u> dwelling unit is protected throughout with automatic sprinklers. The automatic sprinkler system installed for this exception may be designed under Section 903.3.1.3.

# 08.00.02.[38.]41

Section 903.2.8.4. Change the word "five" to "eight".

#### 08.00.02.42

903.2.10. Delete 903.2.10 and 903.2.10.1 and replace with the following:

903.2.10. Group S-2 parking garages. An automatic sprinkler system shall be provided throughout buildings classified as public parking garages in accordance with Section 406.4.

#### 08.00.02.[39.]43

Section 905.3. After the section title add the following two sentences:

In new installations where the code requires either Class II or III standpipes, Class I standpipes must be installed. Occupant use hose is prohibited in new or existing buildings.

## 08.00.02.[40.]44

Section 906. Delete subsection 906.1 through 906.10 and replace with the following:

906.1 Fire extinguishers [must]shall be provided under [2018 NFPA 1]the adopted edition of NFPA 101.



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#### 08.00.02.[41.]45

Section 907.2.1.1. Replace "1,000" with "300".

# 08.00.02.[42]<u>46</u>.

Section 907.6.4. Number the existing exception as Exception 1, and add an Exception 2 as follows:

Exception 2: Where an addressable automatic fire alarm system installation under Section 907 is present, fire alarm zoning may match, but not exceed sprinkler zoning.

# 08.00.02.[43.]<u>47</u>

Add subsection 909.2.1 to read as follows:

909.2.1. Designs for smoke management systems must be submitted for review and approval as part of a building permit <u>application</u>. Submittals for smoke management systems must include all of the following:

- a) [Plans] plans and specifications,
- b) [Engineering] engineering calculations and/or computer model,
- c) [Floor] floor plans,
- d) [System] system diagrams and details,
- e) [Sequence] sequence of operations and control layout,
- f) [Preliminary] preliminary test procedures,
- g) [Acceptance] acceptance test procedures,
- h) [Pass]pass/fail criteria, and



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i) [Maintenance] <u>maintenance</u> requirements including periodic testing criteria.

#### 08.00.02.[44.]<u>48</u>

Section 909.9. Add the following sentence at the end of the section: In all cases, the design fire size must not be less than 5000 Btu/s (5275 kW) unless approved by the building official and the fire official.

#### 08.00.02.[45.]49

Section 909.16. In the third sentence, replace the words "an approved location adjacent to the fire alarm control panel" with "a location approved by the building official and the fire official".

#### 08.00.02.50

Section 911.1. Replace with the following:

Where required by other sections of this code, in buildings classified as high-rise buildings by this code, in new buildings where the aggregate gross floor area exceeds 100,000 square feet, a fire command center for fire department operations shall be provided and shall comply with Sections 911.1.1 through 911.1.7.

Exception: Buildings or structures, or portions thereof, used exclusively for open-air parking.

#### 08.00.02.[46.]<u>51</u>

Section 911.1.1. Replace with the following: ["]The fire command center shall meet the following criteria:

- <u>1.</u> [The] <u>the</u> fire command center must have a door directly to the exterior of the building on the address side[.];
- 2. the exterior door to the fire command center shall be visible from the fire department access road on the address side;
- 3. [The] the exterior door to the fire command center must be within 50 feet of a fire department access road[.];



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- 4. [A] <u>a</u> fire department access box must be provided within 6 feet of the exterior door to the fire command center[.]; <u>and</u>
- 5. [The] the exterior door to the fire command center must be identified on the exterior face as the fire command center in a manner acceptable to the fire official.["]

### 08.00.02.52

Section 911.1.3. Delete the section in its entirety and replace with the following:

The fire command center shall be not less than 200 square feet (19 m2) in area, with a minimum dimension of 10 feet (3048 mm). For buildings with a total building area of 1,333,333 square feet or greater, the fire command center shall be not less than 0.015% (0.00015) of the total building area, with a minimum dimension of 0.7 times the square root of the area of the fire command center.

# **08.00.02.**[47.]<u>53</u>

Section 911.1.6. Amend Section 911.1.6 as follows:

Amend Item 2 to read: "The fire department communications system, which may include an inbuilding public safety radio enhancement system monitoring panel."

Amend Item 11 to read: "Fire pump status indicators and remote starting."

Add Item 19 which reads: "A shunt trip device to disconnect the electrical service to the building."

#### 08.00.02.54

Section 913.1. In the Exception, delete: ", or Section P2904 of the International Residential Code."

#### 08.00.02.[49.]<u>55</u>



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Section 918.1. Replace with the following: Emergency responder radio coverage must be assured in the following areas of all newly constructed buildings:

- 1. below ground floors of a building,
- 2. all floors in buildings greater than 25,000 ft<sup>2</sup> per floor, and
- 3. to all floors of buildings greater than 3 stories in height.

One- and two-family dwellings and townhouses are exempt from this requirement.

### 08.00.02.[50.]<u>56</u>

Add Sections 918.2 and 918.3 as follows:

Section 918.2. Where emergency radio coverage is required under Section 918.1, every floor area in a building or structure which cannot achieve the required level of emergency responder radio coverage as established by Montgomery County Department of Technology Services must be provided with an in-building public safety radio enhancement system under the Montgomery County Fire Safety Code.

Section 918.3. Inspection and Testing. Emergency responder radio coverage and in-building public safety radio enhancement system must be tested[,] and inspected by approved individuals. The results of the testing and inspection must be certified to the code official before issuance of an occupancy permit.

#### [08.00.02.51.

Section 1001.1. Add the following to the end of the section: "The means of egress must also comply with the requirements in the currently adopted edition of the Life Safety Code."]

#### 08.00.02.[52.]<u>57</u>

Add a new Section 1001.3 as follows:

Section 1001.3 Convenience stairs and ramps. Stairs that are not part of a means of egress, but are provided as a convenience in occupiable spaces, must comply with Section 1011. Ramps that are not part of a means of egress, but are provided as a convenience in occupiable spaces,



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and are not provided solely for the movement of equipment and materials must comply with Section 1012.

### 08.00.02.[53.]<u>58</u>

Section 1003.5. [In exception] <u>Exception</u> #2, replace [the phrase "a single riser or with two risers and a tread" to "three risers or less"] <u>with the following, "Where a stair is used in the means of egress where the change in elevation is 21 inches or less, the tread depth of such stair shall not be less than 13 inches."</u>

### 08.00.02.[54.]<u>59</u>

Table 1004.5. Add an entry for "Shell Office Spaces" with an occupant load factor of 65 gross square feet per person. Add an entry for "Tennis Courts (within the area of play)" with an occupant load factor of 50 net square feet per person. Change the occupant load factor for mercantile space from "60" to "30" in table 1004.5.

#### 08.00.02.[55.]60

Section 1004.6. Delete the last sentence of the section and replace with "The occupant load of bench-type seating, and the occupant load of bars, must be based on one person for each 18 linear inches (455 mm) measured at the seat, or patron side of the bar, respectively."

#### 08.00.02.61

Section 1005.3.1. Delete all of the exceptions.

#### 08.00.02.[56.]62

Section 1005.3.2. Delete all of the exceptions.

#### [08.00.02.57.

Section 1006.2.2.4. Change 2½ to 2.]

#### 08.00.02.[58.]63



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Section 1010.1.2.1. Add a sentence at the end to read: "Doors in exit enclosures must swing in the direction of egress travel unless the door opening serves an individual living unit that opens directly into an exit enclosure."

# **08.00.02.**[59.]<u>64</u>

Section [1010.1.9.4]  $\underline{1010.1.2.4}$ . In Item #[6] $\underline{7}$ , after "occupied" add ", and are not part of a means of egress,".

### [08.00.02.60.

Section 1010.1.9.10. Add an Item #7 which reads, "Doors in smoke or fire-rated separations must be capable of positive latching during the interval when the electric lock has been released."]

#### 08.00.02.[61.]65

Section [1010.1.9.12]1010.2.7. Amend as follows:

In Exception #3, delete [", or a signal by emergency personnel from a single location inside the main entrance to the building".] and replace with "Stairway exit doors are permitted to be locked from the side opposite the egress side, provided that they are openable from the egress side and capable of being unlocked simultaneously without unlatching upon a signal from the fire command center. In buildings without a fire command center, the signal may be given by emergency personnel from a single location inside the main entrance to the building."

Add Exception #6 to read as follows: "Stairway doors complying with the stair enclosure reentry provisions of the adopted edition of NFPA 101."

#### 08.00.02.66

Section 1010.2.11. Add an Item #7 which reads, "Doors in smoke or fire-rated separations must be capable of positive latching during the interval when the electric lock has been released."

#### **08.00.02.67**

Section 1011.7. Delete Exception #2.



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### 08.00.02.[62.]68

Section 1014.7. Change "1½" to "2½" and change "38mm" to "57mm" and add a sentence at the end to read: "Handrails inside dwelling units, R-3, and R-4 Use Groups are permitted to have a clear space of not less than 1½" between the handrail and a wall or other surface."

#### 08.00.02.[63.]69

Section 1015.2. After "including" add "but not limited to,". After the phrase "equipment platforms," add the phrase "retaining walls,".

#### [08.00.02.64.

Section 1015.3. In exception #2 and #3, change "34 inches (864 mm)" to "36 inches (915 mm)". Add a seventh exception: Exception 7. In occupancies in Group R-3, and within individual dwelling units in occupancies in Group R-2, interior guards must not be less than 36 inches high.]

#### [08.00.02.65.

Section 1015.4. Delete Exception #6.]

#### **08.00.02.**[66.]<u>70</u>

Section 1015.8. Add two exceptions (#5 and #6) to read as follows:

Exception #5: In buildings four stories or less, the lowest part of the clear opening of the window must not be less than 18 inches (457mm) above the finished floor surface of the room in which the window is located.

Exception #6: In buildings four stories or less, glazing between the floor and a height of 18 inches (457mm) must be fixed or have openings through which a 4-inch (102mm) sphere cannot pass.

## **08.00.02.**[67.]<u>71</u>

Section 1022. Add a new subsection 1022.3 to read as follows:



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Section 1022.3. Fire Department Access to Floors. One or more exit stair which serves all stories of the building must be accessible by an internal corridor from the main entrance of the building or the fire department response location.

#### 08.00.02.72

Section 1023.2 Delete Exception #3.

### **08.00.02.**[68.]<u>73</u>

Chapter 11. Delete and replace with the Maryland Accessibility Code.

### [08.00.02.69.

Section 1207.2. Add an exception # 5 to read as follows:

Exception 5. Projections in ceiling height as permitted by Chapter 10.]

#### **08.00.02.**[70.]<u>74</u>

Section 1603.1.4. Add to Item 1. The basic design wind speeds in miles per hour in Montgomery County for risk categories I, II, III, and IV are 105, 115, 120, and 125, respectively. The corresponding allowable stress design wind speeds in miles per hour are 82, 89, 93, and 97, respectively.

#### **08.00.02.**[71.]<u>75</u>

Section 1603.1.5. Add to Item 3. The mapped spectral response acceleration parameters for Montgomery County for short-period,  $S_s$ , and 1-second,  $S_1$ , shall be [13.5]15% and 4.3%, respectively.

#### 08.00.02.[72.]<u>76</u>

Table 1607.1. Item [26]27 Roofs. Modify the uniform live load value for "Ordinary flat, pitched, and curved roofs (that are not occupiable)" to 30 pounds per square foot, non-reducible.

#### **08.00.02.**[73.]<u>77</u>



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## Section [1607.7.2]1607.8.2. Modify Item 1 to read as follows:

The maximum fire truck operating weight is 85,000 pounds distributed in three axles spaced 19 feet 6 inches and 4 feet 6 inches apart. The transverse wheel distance is 8 feet 2 inches. The front axle weighs 23,000 pounds and rear axles weigh 31,000 pounds each. When the ladder is up, the vehicle is raised and supported on four (4) outriggers spaced 10 feet apart along the length of the vehicle and 16 feet apart in the transverse direction. Depending upon the position of the ladder, any pair of two (2) front, side or rear outriggers apply to the structure a force of 171,000 pounds (85,500 pounds per outrigger) and the remaining two outriggers apply a force of zero (0) pounds. During operations, aerial apparatus outriggers are designed to exert no more than 75psi over stabilizer pads. Outrigger pad dimensions are 2 feet 2 inches wide by 2 feet 6 inches long.

### **08.00.02.**[74.]<u>78</u>

Section [1607.13.5.1]1607.14.4.1. In the Exception under Item 1, add the phrase "For existing roofs" at the beginning of the sentence and replace the word "need" with "must".

#### 08.00.02.[75.]79

Section 1608.1. Add the following at the end: "All roof areas, including areas to be covered with photovoltaic panels, must be designed for roof snow loads. The permit applicant must provide proof of service of the permit application and construction documents upon the adjoining property owner and that the existing lower roof must be evaluated for compliance with Chapter 7, ASCE 7-16 Standard due to increased drifting snow loads caused by proposed higher roofs or structures. Said notification must be served not less than 10 days before the scheduled starting date of the construction."

#### 08.00.02.[76.]80

Section 1608.2. After the title add the following sentence: "Design ground snow loads for Montgomery County must not be less than 30 pounds per square foot."

## 08.00.02.[77.]<u>81</u>

Section 1612.3. After the heading, delete the text and replace with the following: The flood hazard map of Montgomery County is established in the Floodplain Regulations (COMCOR 19.45.01) adopted by the County under the authority in Article III, Chapter 19 of the Montgomery County Code.



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### 08.00.02.[78.]82

Section 1704.2. Delete [exception] Exception #4.

# 08.00.02.[79.]<u>83</u>

Section 1704.2.4. Add a new subsection as follows:

Section 1704.2.4.1. Certificate of Completion Requirement. Upon completion of the project, all signatories of the Statement of Special Inspections (SSI) must submit Certificates of Completion to the County as required in the Montgomery County Special Inspections Program Manual. A final bid document must also be submitted by the owner/applicant for all "Complex Structures" projects subject to repair and rehabilitation.

#### 08.00.02.[80.]84

Section 1704.2.5. After the phrase "except where the fabricator has been approved", insert the phrase "by the County".

#### 08.00.02.[81.]<u>85</u>

Section 1704.2.5.1. After the phrase "premises of a fabricator approved", insert the phrase "by the County".

#### 08.00.02.[82.]86

Section 1705.2.1. Modify AISC 360 Chapter N as follows:

Section N1. First User Note: Delete the sentence starting with "Additionally, where...".

N3. Delete subsection (m).

Section N5.5b: Add at the end of the paragraph "unless a higher percentage is required by the structural engineer of record".

Section N5.5b, User Note: Add at the end of the user note "unless otherwise specified by the structural engineer of record".



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Delete the first two paragraphs of Section N6 ("QA inspection is permitted...shall review the fabricator's NDT reports") and replace with IBC Section 1704.2.5, as amended.

### 08.00.02.[83.]<u>87</u>

Section 1705.2.2. Modify SDI QA/QC-2017 Standard by deleting subsection 2 from Section 3.2B and subsection 4.3 from Section 4.

#### 08.00.02.[84.]88

Section 1705.3. Delete Exceptions 1 and 2.3.

### 08.00.02.[85.]89

Table 1705.3. Modify Table 1705.3 as follows:

Item 4a. Add the following sentence: "Installation must be performed by an ACI or CRSI certified adhesive anchor installer".

Items 10, 12 and [11]13. Modify the inspection frequency from "periodic" to "continuous".

Item [11]13. Add the following sentence to the first column: "The strength evaluation must be demonstrated by field cured cylinders only."

#### 08.00.02.90

Section 1705.5.3. Add "and IV-HT" after "IV-C."

#### 08.00.02.91

<u>Table 1705.5.3.</u> Modify <u>Table 1705.5.3 as follows:</u>

<u>Item 3. Threaded fasteners.</u> <u>In the fourth row, after the sentence starting with "Adhesive anchors installed...", add the following: "Installation must be performed by a certified adhesive anchor installer".</u>

#### 08.00.02.[86.]92



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Section 1705.5. Add a new subsection as follows:

Section [1705.5.3]1705.5.4. Additional Special [inspection] <u>Inspection</u> Requirements for Wood Construction. Third party [Special Inspection] <u>inspections</u> must be performed under [Section] <u>Sections 1.3 and 1.7.2</u> of the Montgomery County Special Inspections Program Manual for:

- a) [Multifamily] <u>multi-family</u> and other structures of types [VA and VB] <u>III, IV and V</u> construction (except townhomes) over three stories above podium level or [grade plane.] <u>over four stories in height;</u>
- b) Risk Category III buildings and other structures of types [VA and VB] <u>III, IV and V</u> construction whose primary occupancy is public assembly with an occupant load greater than 300[.]; and
- c) [All] <u>all</u> Risk Category IV buildings of types [VA and VB] <u>III, IV and V</u> construction.

## 08.00.02.[87.]93

Table 1705.6. Item 1. Modify the inspection frequency from "periodic" to "continuous".

#### 08.00.02.94

<u>Table 1705.7.</u> <u>Modify as follows: Items 5, 6, & 7, modify the inspection frequency from the reference statement to "continuous".</u>

#### 08.00.02.95

<u>Table 1705.8.</u> <u>Item 3.</u> <u>Modify the inspection frequency from the referenced section to "continuous".</u>

#### 08.00.02.96

Table 1705.17. Delete Exceptions 1 and 2.

#### 08.00.02.97



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<u>Table 1705.18.</u> <u>Delete the word "or" after "IV," and after the words "special inspections" insert ", or when required by the building official,".</u>

### 08.00.02.[88.]98

Section 1809.5. In Item number 1, after the word "locality" insert: "Depth must be a minimum of 30 inches below the adjacent finish grade."

# 08.00.02.[89.]99

Add a new subsection as follows:

1901.2.1. For precast structures, in the case of a conflict between ACI 318 and PCI Design Handbook, the requirements of ACI 318 control the design.

#### 08.00.02.[90.]<u>100</u>

Section 1904.2. Delete the last sentence completely and replace with "Nonstructural concrete must have a minimum specified compressive strength, f'c of 2500 psi for Class F0; 3000 psi for Class F1; and [3500]4500 psi for Classes F2 and F3. Nonstructural concrete must be air entrained in accordance with ACI 318."

#### 08.00.02.101

Section 2211.1.3.3. Modify AISI S240-20 Chapter D as follows:

- 1. with the exception of Sections D.4 and D.6.4.5, eliminate any reference to "Authority Having Jurisdiction" and replace with "Quality Assurance Inspector (SI);" and
- 2. in Section D7.2.2, after the words "the installer" add "and the Authority Having Jurisdiction."

#### 08.00.02.[91.]102

Section 2406. Add a new Section 2406.6 to read as follows:



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Section 2406.6. The requirements for safety glazing set forth in Public Safety Article, Title 12, Subtitle 4, Annotated Code of Maryland, are in addition to this Section. In the event of a conflict between Section 2406 and the Annotated Code of Maryland, the requirements of the Annotated Code of Maryland prevail.

### 08.00.02.[92.]103

Chapter 29. Delete. Plumbing regulations are administered by the local water authority.

### 08.00.02.[93.]104

Section 3001. Add a new subsection as follows:

3001.1.1. Residential Elevators. Elevator equipment, and similar conveying systems, provided in privately owned single-family residential dwellings:

- 1. [Are] are not required to comply with the requirements of this chapter[.];
- 2. [Do] <u>do</u> not have to enclose the hoistway with a fire-resistance rated shaft if the elevator shaft is protected by an approved automatic sprinklered system[.];
- 3. [Must] <u>must</u> comply with all other applicable requirements of the International Building Code[.];
- 4. [Must] <u>must</u> comply with all applicable requirements of the Maryland Public Safety Article, Title 12, Subtitle 8[.]; and
- 5. [Must] <u>must</u> be listed for use by a nationally recognized testing laboratory (NRTL) and installed under the listing and manufacturers requirements.

### 08.00.02.[94.]<u>105</u>

Sections 3001.2, 3001.3, 3001.4, and 3001.5. Delete and replace with the following: 3001.2 Standards. The Maryland Department of Labor, Division of Labor and Industry, regulates the design, installation, inspection, and testing of all hoisting and conveying equipment.

#### 08.00.02.[95.]106



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Section 3107.1. Add the following at the end of the sentence: "and Chapter 59 of the Montgomery County Code."

# **08.00.02.**[96.]<u>107</u>

Section [3109] <u>3109.1</u>. [Add a new subsection that reads as follows] <u>Delete and replace with the following:</u>

[3109.1.1 Commercial Pools and Spas] <u>3109.1</u>. <u>General</u>. Pools and spas that are not accessory to [one- or two-family ]dwellings, as [referred to] <u>defined</u> by the International Residential Code, [are not required to comply with the ISPSC. Such pools and spas must] <u>shall</u> comply with Chapter 59 of the Montgomery County Code and be enclosed by a fence or wall that meet the following criteria:

- 1. has a minimum height of not less than 60 inches,
- 2. any openings, if provided, do not permit the passage of a 4-inch diameter sphere,
- 3. completely encloses the pool or spa, and
- 4. any gate or door provided in the fence or wall must be self-closing and self-latching.

#### 08.00.02.[97.]108

Section 3113. Add the following after the title "Relocatable Buildings": ", Industrialized Buildings, and Manufactured Homes"

# 08.00.02.[98.]109

Section 3113. Add a new subsection as follows:

3113.1.2 State Model Performance Code. Buildings, structures, or portions thereof, approved under the Model Performance Standards adopted by the State of Maryland must comply with the requirements of that Code. Any on-site construction, additions, or other modifications that exceed the scope of the State's Certification must be approved by the County.

#### 08.00.02.110



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Section 3201.1. Add the following after the word "chapter", " and Chapter 49 of the Montgomery County Code".

### 08.00.02.111

Section 3202.3.4. After the words "governing authority" in the first sentence add the following "and be installed in accordance with Section 3306". Delete the second sentence.

#### 08.00.02.[99.]112

Section 3307.1. After the words "shall provide" in the fourth sentence, add the following "proof of service of".

#### 08.00.02.[100.]<u>113</u>

Appendix G. Appendix G is deleted in its entirety and replaced with the Floodplain District Requirements in Article III, Chapter 19 of the Montgomery County Code, the regulations for the Subdivision of Land in Chapter 50 of the Montgomery County Code, and the Floodplain Regulations (COMCOR 19.45.01) adopted by the County.

#### 08.00.02.[101.]114

Appendix H. Appendix H is amended as follows:

Section H101.1. Insert at the beginning of this section "The provisions of this chapter apply to signs that are permitted by the Montgomery County Zoning Ordinance".

Section H 101.2. Delete.

Section H102.1. Delete definitions for "Combination Sign", "Display Sign", "Pole Sign", "Portable Display Surface", and "Projecting Sign."

Section H102.1. Add definition of "Supported Sign" as follows: "A sign that is attached to a structure like a pole, column, frame, or brace, as its sole means of support, and is not a ground sign and is not attached to a building."



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Section H102.1. Delete and replace the definition of "sign" as follows: "Any device, fixture, placard, or structure that uses any color, form, graphic, illumination, symbol, or writing to attract attention or to communicate information".

Section H102.1. Delete and replace the definition of "ground sign" as follows: "A sign erected on the ground or with its bottom edge within 12 inches of the ground, that has its support structure as an integral part of the sign, and where the dimension closest to the ground is greater than the height."

Section H102.1. Delete and replace the definition of "wall sign" as follows: "Any sign that is attached to the wall of a building. There are two types of wall signs: Flat wall sign: A sign that is parallel to the wall of a building to which it is attached[,] but does not extend more than 12 inches from the building face; Projecting wall sign: A sign that is attached to a wall of a building and extends more than 12 inches from the building face."

Section H104. Delete.

Section H108. Delete.

Section H109. Add the words "and supported" between the words "ground" and "signs" in the title.

Section H109.1. Height restrictions. Delete and replace as follows: "The maximum height of ground and supported signs is the height of the tallest building on the same premises as the sign or 26 feet above the ground, whichever is less."

Section H109.2. Delete.

Section H110. In Section H110.1, add the words "where permitted" after "Roof signs" in the first sentence.

Section H111.3. Add the word "wall" between "projecting" and "signs".

Section H112. Add the word "wall" between "projecting" and "sign" in the title.

Section H112.1. Add the word "wall" between "projecting" and "sign" in the first sentence.



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Section H112.4. In the first sentence, add the word "wall" between "projecting" and "sign" and delete all text starting with the word "except". Delete the second sentence.

Section H112.5. Add the word "wall" between "projecting" and "sign" in the first sentence.

Section H113. Delete.

# AMENDMENTS TO THE [2018]2021 INTERNATIONAL ENERGY CONSERVATION CODE (IECC)

### **08.00.02.**[102.]<u>115</u>

Section C101.1. Delete the brackets and replace the phrase in the brackets with "Montgomery County, Maryland."

#### 08.00.02.[103.]116

Section C105.6. Add a new sentence at the end as follows: "Energy Final Inspection must be performed and approved before building final or occupancy inspection, unless a conditional approval is approved by the building official."

#### 08.00.02.[104.]117

Section [C109] C110. Delete.

#### 08.00.02.118

<u>Section C401.2.</u> <u>Application.</u> <u>Delete in its entirety and replace with "Commercial buildings shall comply with the requirements of ANSI/ASHRAE/IES Standard 90.1 2022 (I-P), and all amendments listed below".</u>

- 4.2.1. Compliance Paths: New buildings over 20,000 square feet shall comply with PNNL-35193 Technical Brief, Section 3.1 Net Zero Energy. New building less than 20,000 square feet shall comply with either:
- a. PNNL-35193 Technical Brief: Section 3.1 Net Zero Energy or



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b. Sections 4.2.2 through 4.2.5 and Sections 5,6,7,8,9,10, and 11.

Additional Items for PNNL-35193:

- 1. set Site Zero Performance Energy Index (PEI) to: 0.67; and
- 2. <u>Table G1.2.2.2</u>, <u>change Class 3 Procurement factor to: 1.0</u>, <u>and add under classification at end: "All offsite energy must be located within the PJM service territory".</u>

Section 4.2.5.2. Building Commissioning Requirements. Exceptions to 4.2.5.2:

Replace Exception 1 with the following: "Mechanical systems and service water heater systems in buildings where the total mechanical equipment capacity is both less than 480,000 Btu/h (140.7 kW) cooling capacity and less than 600,000 Btu/h (175.8 kW) combined service waterheating and space-heating capacity."

Delete Exception 4.

Section 4.2.5.3. Activities Prior to Building Occupancy. Replace Item c with the following:

The owner/owner representative shall provide the building official with the following:

- <u>a.</u> <u>a letter of transmittal acknowledging that the building owner or owner's authorized agent has received and accepted all required verification documentation, FPT documentation, and required preliminary commissioning report; and</u>
- b. a copy of the reports listed in Section 4.2.5.3(b).

Add a new Section 5.4.3.4.5.

Section 5.4.3.4.5. Door Switches. Any conditioned space with a door, including doors with more than one-half glass, opening to the outdoors shall be provided with controls that, when any such door is open:

<u>a.</u> <u>disable mechanical heating or reset the heating set point to 55 F or lower within five minutes of the door opening; and</u>



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b. disable *mechanical cooling* or *reset* the cooling *set point* to 90 F or greater within five minutes of the *door* opening. *Mechanical cooling* may remain enabled if *outdoor air* temperature is below *space* temperature.

## **Exceptions:**

- 1. building entries with automatic closing devices;
- 2. any space without a thermostat; and
- 3. loading docks.

<u>Section 5.5.3.1.4.</u> <u>Roof Solar Reflectance and Thermal Emittance.</u> <u>Delete and replace "Zones 0 through 3" with "Zones 0 through 4".</u> <u>Delete Option "c".</u>

Section 6.5.10. Door Switches. Delete.

Section 11.1.4.2. <u>Initial Build-out Construction.</u> <u>Delete "exceeding 1000 square feet of gross floor area".</u>

Section 11.5.2.2. Improved HVAC Performance. At the beginning of the paragraph, add "All credits are only applicable when using non-gas-fueled equipment."

Section 11.5.2.3. Reduced Energy Use in Service Water Heating. At the beginning of the paragraph, add "All credits are only applicable when using non-gas-fueled equipment except for commercial kitchen applications."

Section 11.5.2.3.3. Improved Service Hot-Water Temperature Maintenance. Delete a.

Informative Appendix H Additional Guidance for Verification, Testing and Commissioning. Appendix H is hereby incorporated as provisions which establish standards of verification, testing, and commissioning to enhance the base functional performance testing and commissioning processes in Sections 4.2.5, 5.9, 6.9, 7.9, 8.9, 9.9, 10.9, 12.2(e) and G1.2.1(e) of Standard 90.1.

Normative Appendix J Sets of Performance Curves. Appendix J is hereby adopted in its entirety.



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Normative Appendix L Mechanical System Performance Rating Method. Appendix L is hereby adopted in its entirety and shall utilize site energy as listed in conversion table L5-4.

Appendix M Addenda Description. Change M to N.

#### [08.00.02.105.

COMAR 09.12.51.04.D(2) added the following note to Section C405.2.4 Specific Application Controls: For the new construction of hotels:

- (a) Each hotel guest room shall be equipped with a master control device that automatically turns off the power to all of the lighting fixtures in the guest room no more than 30 minutes after the room has been vacated; and
- (b) A master control device may also control the heating, ventilation, or air conditioning default settings in hotel guest rooms 30 minutes after a room has been vacated by:
  - (i) Increasing the set temperature by at least 3 degrees Fahrenheit when in the air conditioning mode; or
  - (ii) Decreasing the set temperature by at least 3 degrees Fahrenheit when in the heating mode.]

#### 08.00.02.[106.]119

Section R101.1. Delete the brackets and replace the phrase in the brackets with "Montgomery County, Maryland."

#### 08.00.02.120

Section R101.3. Intent. In the first sentence, delete "effective use and conservation" and Add "reduction of greenhouse gas emissions and for the efficient production, use and storage" after phrase "buildings for the".

#### <u>08.00.02.121</u>



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Section R102.1.1. Above code programs. Add to the end of Section R102.1.1, "Compliance with the Silver Rating of the ICC/ASHRAE 700-2020 National Green Building Standard as codified in §12-509(a) of the Public Safety Article of the Annotated Code of Maryland shall be considered to be in compliance with this code."

# 08.00.02.122

Section R103.2. Information on construction documents. In Item 6, add ", fuel sources" after word "sizes" and before "and efficiencies."; and add subsections as follows:

"R103.2.2. Solar-ready system. The construction documents shall provide details for dedicated roof area, structural design for roof dead and live load, and routing of conduit from solar-ready zone to electrical service panel or plumbing from solar-ready zone to service water heating system.

R103.2.3. Energy storage-ready system. The construction documents shall provide the location of pathways for routing of raceways or cable from the electrical service panel and energy storage system area and the location and layout of a designated area for electrical energy storage system.

R103.2.4. Electrification system. The construction documents shall provide details for additional electric infrastructure, including branch circuits, conduit, or pre-wiring, and panel capacity in compliance with the provisions of this code."

# 08.00.02.[107.]123

Section [R109] <u>R110</u>. Delete

#### .08.00.02.124

Section R202. General Definitions. Add definitions.

ALL-ELECTRIC BUILDING. A building that contains no combustion equipment, or plumbing for combustion equipment, installed within the building, or building site.

<u>APPLIANCE</u>. A device or apparatus that is manufactured and designed to utilize energy and for which this code provides specific requirements.



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<u>COMBUSTION EQUIPMENT</u>. <u>Any equipment or appliance used for space heating, service water heating, cooking, clothes drying, or lighting that uses fuel gas or fuel oil.</u>

CONTINUOUSLY BURNING PILOT LIGHT. A small gas flame used to ignite gas at a larger burner. Once lit, a continuous pilot light remains in operation until manually interrupted.

<u>DEMAND RESPONSIVE CONTROL.</u> An automatic control that can receive and automatically respond to demand response requests from a utility, electrical system operator, or third-party demand response program provider.

EQUIPMENT. Piping, ducts, vents, control devices and other components of systems other than appliances that are permanently installed and integrated to provide control of environmental conditions for buildings. This definition shall also include other systems specifically regulated in this code.

<u>FUEL GAS.</u> A natural gas, manufactured gas, liquified petroleum gas or a mixture of these.

<u>FUEL OIL.</u> <u>Kerosene or any hydrocarbon oil having a flash point not less than 100°F</u> (38°C).

MIXED-FUEL BUILDING. A building that contains combustion equipment or includes piping for combustion equipment.

<u>SOLAR-READY ZONE.</u> <u>A section or sections of the roof or building overhang designated and reserved for the future installation of a solar photovoltaic or solar thermal system."</u>

#### <u>08.00.02.125</u>

Section R401.2.5 Additional energy efficiency.

In Item 1, Add "all-electric" after word "For" and before "buildings"; and

Add Item 2 "For mixed-fuel buildings complying with Section R401.2.1, the building shall be required to install either R408.2.1 or R408.2.5 of the additional efficiency package options, and any two of R408.2.2, R408.2.3, or R408.2.4 of the additional efficiency package options."



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### Change Item 2 to 3.

- 3.1 Replace 2.1 with "All-electric buildings shall have one of the additional efficiency package options in Section R408.2 be installed without including such measures in the proposed design under Section R405".
- 3.2 Add "all electric" after the word "the": "The proposed design of the all-electric buildings under Section R405.2 shall have an annual energy cost that is less than or equal to the 95 percent of the annual energy cost of the standard reference design."
- Add Item 3.3 "Mixed-fuel buildings shall have either R408.2.1 or R408.2.5 of the additional efficiency package options, and any two of R408.2.2, R408.2.3, or R408.2.4 of the additional efficiency package options installed without including such measures in the proposed design under Section R405."
- 3.4 The proposed design of the mixed-fuel building under Section R405.2 shall have an annual energy cost that is less than or equal to 85 percent of the annual energy cost of the standard reference design.

Change Item 3 to 4.

Add new Item, "5. For buildings complying with Section R402.1.3.1, the structure shall also comply with the additional energy features in Section R408.3."

#### 08.00.02.126

Section R401.3 Certificate.

After the first appearance of the word 'builder' delete 'or other approved party'. After the word 'building' in the first sentence add "for all New Construct Permits or Add/Alt Permits where conditioned space has been increased"; and

In Item 4, Add "fuel sources," after word "sizes," and before "and"; and

Add Item: "8. The fuel sources for cooking and clothes drying equipment."

Add Item: "9. Where combustion equipment is installed, the certificate shall indicate



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information on the installation of additional electric infrastructure including which equipment and/or appliances include additional electric infrastructure, capacity reserved on the electrical service panel for replacement of each piece of combustion equipment and/or appliance."

Add Item: "10. Where a solar-ready zone is provided, the certificate shall indicate the location, dimensions, and capacity reserved on the electrical service panel."

### 08.00.02.127

Section R402.1.3 R-value alternative.

Add new section: "R402.1.3.1 Maryland Alternative R-value. Assemblies with R-value of insulation materials equal to or greater than that specified in Table R402.1.3.1 shall be an alternative to the U-factor in Table R402.1 when combined with Section R408.3. The provisions of Section R408.2.1 shall be applied to the base model house to establish the reference base design establishing energy efficiency."; and

# Add the following table:

Table R402.1.3.1

MD Al	MD Alternative Insulation Minimum R-Values and Fenestration Requirements by Componenta									
Clima	<u>Fenestrati</u>	Skyligh	Glazed	<u>Ceili</u>	Woo	Mass	<u>Floo</u>	<u>Basemen</u>	Slab	<u>Crawl</u>
te Zone	on U- Factor b, <u>i</u>	tb U- Factor	Fenestrati on SHGCb, e	ng R- Value	d Fram e Wall R- Valu eg	Wall R- Valu eh	r R- Valu e	tc, g Wall R- Value	d R- Valu e & Dept h	Space c, g Wall R- Value
4 excep t Marin e	0.30	0.55	0.40	<u>49</u>	20 or 13+5 <u>h</u>	8/13	<u>19</u>	10ci or 13	10ci, 4ft	10ci or 13
									10ci, 4ft	15ci or 19 Or 13 +



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										5ci	

For SI: 1 foot = 304.8 mm.

ci = continuous insulation.

- a. R-values are minimums. U-factors and SHGC are maximums. Where insulation is installed in a cavity that is less than the label or design thickness of the insulation, the installed R-value of the insulation shall be not less than the R-value specified in the table.
- <u>b. The fenestration U-factor column excludes skylights. The SHGC column applies to all glazed fenestrations. Exception: In Climate Zones 0 through 3, skylights shall be permitted to be excluded from glazed fenestration SHGC requirements provided that the SHGC for such skylights does not exceed 0.30.</u>
- c. "10ci or 13" means R-10 continuous insulation (ci) on the interior or exterior surface of the wall or R-13 cavity insulation on the interior side of the wall. "15ci or 19 or 13 & 5ci" means R-15 continuous insulation (ci) on the interior or exterior surface of the wall; or R-19 cavity insulation on the interior side of the wall; or R-13 cavity insulation on the interior of the wall in addition to R-5 continuous insulation on the interior or exterior surface of the wall.
- d. R-5 insulation shall be provided under the full slab area of a heated slab in addition to the required slab edge insulation R-value for slabs. as indicated in the table. The slab-edge insulation for heated slabs shall not be required to extend below the slab.
- e. There are no SHGC requirements in the Marine Zone.
- f. Basement wall insulation is not required in Warm Humid locations as defined by Figure R301.1 and Table R301.1.
- g. The first value is cavity insulation; the second value is continuous insulation. Therefore, as an example, "13 & 5" means R-13 cavity insulation plus R-5 continuous insulation.
- <u>h. Mass walls shall be in accordance with Section R402.2.5. The second R-value applies where more than half of the insulation is on the interior of the mass wall.</u>
- <u>i. A maximum U-factor of 0.32 shall apply in Climate Zones 3 through 8 to vertical fenestration products installed in buildings located either:</u>
  - 1. Above 4,000 feet in elevation, or
  - 2. In windborne debris regions where protection of openings is required by Section R301.2.1.2 of the International Residential Code.

### 08.00.02.128

Section R402.2.1 Ceilings with attics. Add "or Section R402.1.3.1" after "R402.1.3" and before "requires R-49 insulation"; and add "or Section R402.1.3.1" after "R402.1.3" and before "requires R-60 insulation".



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### 08.00.02.129

Section R402.2.2 Ceilings without attics. Add "or Section R402.1.3.1" after "R402.1.3" and before "requires insulation R-values greater than R-30"; and add "or R402.1.3.1" after "R402.1.3" and before "shall be limited to".

# 08.00.02.[108.]130

Section R402.4.1.2. In the first sentence replace the word "The" with the word "New".

[COMAR 09.12.51.04.D(3) added the following to Section R402.4.1.2: Except as provided for in the:

- (a) Simulated Performance Path listed in Section R405;
- (b) Energy Rating Index Compliance Alternative in Section R406.]

### 08.00.02.131

Section R403.5 Service hot water systems. Add Section,

<u>"R403.5.4 Demand responsive water heating. All-electric storage water heaters with a storage tank capacity greater than 20 gallons (76 L) shall be provided with demand responsive controls that comply with ANSI/CTA-2045-B or another approved demand responsive control."</u>

#### 08.00.02.132

<u>Section R403.6.2</u> <u>Whole-dwelling mechanical ventilation system fan efficacy.</u> <u>Delete the word</u> "dwelling" and replace with "house". In Table R403.6.2:

delete the word "DWELLING" from the title of the Table, and replace with "HOUSE";

delete the phrase "FAN LOCATION" and replace with "SYSTEM TYPE";

delete the word "MINIMUM" after the phrase "AIRFLOW RATE";

add the phrase ", or balanced" after the word "ERV";



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add the	add the following row		second row; and
	Range hood	Any	2.8 cfm/watt

<u>delete the second appearance of the phrase "Other exhaust fan".</u>

### <u>08.00.02.133</u>

Section R404 Electrical power and lighting systems.

Add Section "R404.4 Renewable energy infrastructure. One- and two-family dwellings and townhouses shall comply with the requirements of R404.4 through R404.7.

# **Exceptions:**

- 1. a building with a permanently installed on-site renewable energy system;
- 2. <u>a building with less than 600 square feet (55 m2) of roof area oriented between 110 degrees and 270 degrees of true north; and</u>
- 3. <u>a building where all areas of the roof that would otherwise meet the requirements for a solar-ready zone are in full or partial shade for more than 70 percent of daylight hours annually.</u>

R404.4.1 Solar-ready zone area. The total area of the solar-ready zone shall not be less than 300 square feet (28 m2) and shall be composed of areas not less than 5.5 feet (1676 mm) in width and not less than 80 square feet (7.4 m2)

Exception: Townhouses three stories or less in height above grade plane and with a total floor area less than or equal to 2,000 square feet (186 m2) per dwelling shall be permitted to have a solar-ready zone area of not less than 150 square feet (14 m2).

<u>R404.4.2</u> <u>Obstructions.</u> <u>Solar-ready zones shall be free from obstructions, including but not limited to vents, chimneys, and roof-mounted equipment.</u>

R404.4.3 Electrical service reserved space. The main electrical service panel shall have a reserved space to allow installation of a dual pole circuit breaker for the solar electric installation and shall be labeled "For Solar Electric." The reserved space shall be



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positioned at the opposite (load) end from the input feeder location or main circuit location.

R404.4.4 Electrical interconnection. An electrical junction box shall be installed within 24 inches (610 mm) of the main electrical service panel and shall be connected to a capped roof penetration sleeve or a location in the attic that is within 3 feet (914 mm) of the solar ready zone by:

- 1. minimum 1-inch continuous conduit; and
- 2. where the interconnection terminates in the attic, location shall be no less than 12" (35 mm) above ceiling insulation. Both ends of the interconnection shall be labeled "For Future Solar Electric".

Add Section "R404.5 Energy storage infrastructure. An energy storage ready area shall be installed in accordance with the following:

Exception: Where an onsite electrical energy system storage system is installed.

- 1. Floor area not less than 2 feet (610 mm) in one dimension and 4 feet (1219 mm) in another dimension and located in accordance with Section 110.26 of the NFPA 70.
- 2. The main electrical service panel shall have a reserved space to allow installation of a two-pole circuit breaker for future electrical energy storage system installation. This space shall be labeled "For Future Electric Storage." The reserved spaces shall be positioned at the end of the panel that is opposite from the panel supply conductor connection.

Add Section "R404.6 Additional electric infrastructure. Combustion equipment shall be installed in accordance with this section.

R404.6.1 Combustion water heating. Water heaters shall be installed in accordance with the following:

1. <u>a minimum 1-inch continuous conduit shall be provided between a junction box</u> located within 3 feet (914 mm) of the equipment and an electrical panel. Both



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ends of the conduit shall be labeled with the words "For Future Heat Pump Water Heater" and be electrically isolated;

- 2. a condensate drain that is no more than 2 inches (51 mm) higher than the base of the installed water heater and allows natural draining shall be installed within 3 feet (914 mm) of the water heater;
- 3. the water heater shall be installed in a space with minimum dimensions of 3 feet (914 mm) by 3 feet (914 mm) by 7 feet (2134 mm) high; and
- 4. the water heater shall be installed in a space with a minimum volume of 700 cubic feet (20,000 L) or the equivalent of one 16-inch (406 mm) by 24-inch (610 mm) grill to a heated space and one 8-inch (203 mm) duct of no more than 10 feet (3048 mm) in length for cool exhaust air.

R404.6.2 Combustion space heating. Where a building has combustion equipment for space heating, the building shall be provided with a designated exterior location(s) in accordance with the following:

- 1. natural drainage for condensate from cooling equipment operation or a condensate drain located within 3 feet (914 mm);
- 2. heat pump space heating equipment sized in accordance with R403.7; and
- 3. a minimum 1-inch continuous conduit shall be provided between a junction box located within 3 feet (914 mm) of the equipment and an electrical panel. Both ends of the conduit shall be labeled "For Future Heat Pump Space Heater."

Exception: Where an electrical circuit in compliance with NEC 440.4(B) and NEC 440.35 exists for space cooling equipment.

R404.6.3 Combustion clothes drying. A minimum 1-inch continuous conduit shall be provided between a junction box within 6 feet (1829 mm) of the equipment and an electrical panel and shall be accessible with no obstructions. Both ends of the conduit shall be labeled with the words "For Future Electric Clothes Drying" and be electrically isolated.



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R404.6.4 Combustion cooking. A minimum 1-inch continuous conduit shall be provided between a junction box within 6 feet (1829 mm) of the equipment and an electrical panel and shall be accessible with no obstructions. Both ends of the conduit shall be labeled with the words "For Future Electric Range" and be electrically isolated.

R404.6.5 Other combustion equipment. Combustion equipment and end-uses not covered by R404.7.1-4 shall be provided with a minimum 1-inch continuous conduit between a junction box for an electric appliance, equipment or end use that terminates within 6 feet (1829 mm) of the appliance or equipment and an electrical panel."

### <u>08.00.02.134</u>

Section R405.2 Performance Based Compliance.

<u>In Table R405.2 under Mechanical, add line "R403.5 except Section R403.5.2 Service hot water systems"; delete line "R403.5.1 Heated water circulation and temperature maintenance systems"; and delete line "R403.5.3 Drain water heat recovery units".</u>

<u>In Table R405.2 under Electrical Power and Lighting Systems, add line "R404.4</u> <u>Renewable energy infrastructure"; add line "R404.5 Energy storage infrastructure"; and add line "R404.6 Additional electric infrastructure".</u>

### 08.00.02.135

Section R405.3.2.1 Compliance report for permit application. In Item 5, delete "R405.3" and replace with "R405.2".

### 08.00.02.136

Section R405.3.2.2 Compliance report for certificate of occupancy. In Item 3, delete "R405.3" and replace with "R405.2". In Item 5, delete "R405.3" and replace with "R405.2". In Item 6, delete "R405.3" and replace with "R405.2".

# [08.00.02.122.

Section 606.2. In the exception, add "Return air" to the beginning of the sentence.]

#### [08.00.02.123.



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Section 606.2.1. Add to the words "Supply and" to the beginning of the heading. Add the words "supply and" after the word "in" in the first sentence.]

# [08.00.02.124.

Section 607.5.5. Exception #2. Replace the phrase "In Group B and R occupancies equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 of the *International Building Code*, smoke dampers are not required at penetrations of shafts where" with the following: "In buildings, other than Group H occupancies, equipped throughout with an automatic sprinkler system under Section 903.3.1.1 or 903.3.1.2, smoke dampers are not required where:"]

# [08.00.02.125.

Add new Section 608 Emergency and Standby Power Systems, as follows:

Section 608.1. Installation. Emergency and standby power systems required by the Montgomery County Fire Safety Code or the International Building Code must be installed under NFPA 110 and NFPA 111. Existing installations must be maintained under the original approval.

Section 608.1.1. Stationary Generators. Stationary emergency and standby power generators required by the International Building Code or the Montgomery County Fire Safety Code must be listed under UL 2200.

Section 608.2. Standby Power. Where the standby system is a generator set inside a building, the system must be located in a separate room enclosed with a 2-hour fire barrier constructed under section 707 or horizontal assemblies constructed under section 712 of the International Building Code or both. System supervision with manual start and transfer features must be provided at the fire command center.

Section 608.2.1. Ventilation Air. Ventilation air must be supplied directly from a source outside the building by an exterior wall opening or from a source outside the building by a 2-hour fire rated air transfer system. (NFPA 110)



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Section 608.2.2. Discharge air. Discharge air must be directed outside the building by an exterior wall opening or to an exterior opening by a 2-hour rated air transfer system. (NFPA 110)

Section 608.2.3. Fire Dampers. Fire dampers, shutters or other self-closing devices are not permitted in ventilation or discharge air openings or ductwork for standby power systems. (NFPA 110)

Section 608.2.4. Motor Operated Dampers. Motor operated dampers, where provided, must be spring operated to open and motor operated to close. (NFPA 110)]

# [AMENDMENTS TO THE 2018 INTERNATIONAL FUEL GAS CODE (IFGC)]

# [08.00.02.126.

Section 101.1. Delete the brackets and replace the phrase in the brackets with "Montgomery County, Maryland."]

# [08.00.02.127.

Section 102.2.1. Delete and replace to read as follows: As an alternative to the provisions of this code, fuel-gas piping systems, fuel-gas utilization equipment and related accessories in existing buildings, as defined by the Maryland Building Rehabilitation Code, undergoing repair, alterations, or additions, and change of occupancy are permitted to comply with the Maryland Building Rehabilitation Code.]

# [08.00.02.128.

Sections 103.4, 103.4.1, 106.1.1, 106.1.2, 106.5.3, 106.5.4, 106.6, and 109. Delete.]

# [08.00.02.129.

Chapter 4. Delete all except Sections 401.2, 402.6.1 412, 413, and 414.]

[AMENDMENTS TO THE 2018 INTERNATIONAL RESIDENTIAL CODE (IRC) 1st and 2nd Printings, with Errata dated July 11, 2019]

#### [08.00.02.130.



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Wherever the IRC references Chapters 34-43, replace the reference with National Electric Code (NEC) currently adopted by the County. Wherever the IRC references P2904, replace with National Fire Protection Association (NFPA) 13D standard.]

### [08.00.02.131.

Section R101.1. Delete the brackets and replace the phrase in the brackets with Montgomery County, Maryland."]

# [08.00.02.132.

Section R101.2. Add the following Exception: Existing buildings, as defined by the Maryland Building Rehabilitation Code, undergoing repair, alterations or additions and change of occupancy are permitted to comply with the Maryland Building Rehabilitation Code.]

# [08.00.02.133.

Section R102.5. Delete the complete sentence after the word "Appendices" and replace with "All provisions in Appendices C, F, K, O, Q, R and S are adopted as part of the IRC. All provisions of Appendices E and J are adopted as part of the IRC with the modifications described as modified in sections **08.00.02.181** and **08.00.02.182** of this Regulation.]

### [08.00.02.134.

Section R102.7. Delete the phrase "the International Property Maintenance Code."]

# [08.00.02.135.

Sections R104.8 and R104.8.1. Delete.]

# [08.00.02.136.

Section R105.2. Delete Items 1 & 2. In Item 4: Add "Fully enclosed" before "Water tanks". In Item 7: Delete "swimming" and change 24 (610 mm) to 18 inches (457 mm). In Item 8: Add "playhouses, treehouses or other similar structures" after first word. Delete Item 9 and replace with "Retractable awnings and retractable canopies". Delete Item 10. Add Item 11: Replacing windows and doors without changing the size of openings and without reducing the net clear



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opening dimensions. Add Item 12: Replacing roofing materials with in kind materials. Add Item 13: Replacing siding materials with in kind materials. Delete Electrical and Plumbing subsections.]

[08.00.02.137.

Sections 105.3.2 and 105.5. Delete.]

[08.00.02.138.

Section R106.1.3 Delete the phrase "and where required by the building official".]

[08.00.02.139.

Section R107. Delete.]

[08.00.02.140.

Section R108.1. Add a second sentence as follows: "Required fees must be paid for each separate permit application". Sections R108.2 through R108.5. Delete.]

[08.00.02.141.

Sections R109.1 through R109.1.6. Delete all except R109.1.2, R109.1.5, and R109.1.5.1 and replace with the following: R109.1 Types of inspections. The following inspections must be conducted for all buildings and structures:

- 1. Sign: The sign must be posted on the property within 3 days after the permit issuance date and must remain posted on the property for 30 days. The sign must be located on the side of the lot/parcel, which provides principal access to the street or right-of-the-way. It must be conspicuously posted not more than 5 feet from the front property line and mounted at least 30 inches, but not more than 60 inches, above the ground. NO BUILDING INSPECTION WILL BE PERFORMED BEFORE THE APPROVAL OF THIS INSPECTION AND THE DRAINAGE PRECONSTRUCTION, IF APPLICABLE.
- 2. Footings: Conducted before concrete placement and after excavations for all footings and thickened slabs are completed; after form work, reinforcing steel,



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concrete-encased electrode (for new dwellings), and grade stakes are in place; and after sediment control measures are installed according to the approved sediment control plan.

- 3. Waterproofing/Foundation Drainage: Conducted after the exterior walls have been waterproofed and foundation drainage system has been installed. Insulation, if used, must be in place and protected as required. If interior drain tiles are to be used, weep holes (2 in. minimum diameter, 6 feet on center) must be installed. A second inspection may be required before backfilling the interior drainage system.
- 4. Concrete slab-on-ground floor: After the installation of the slab base, interior drainage system (if any), vapor retarder, slab edge insulation, and a minimum 3 in. schedule 40 PVC, or equivalent gas tight pipe inserted into a 3 in. tee embedded into the slab base for the venting of RADON GAS and labeled adequately. Where the sump crock is to be used for the venting of RADON GAS, it must be in place at the time of the inspection. For new construction of habitable space exceeding 70 sf, a radon mitigation system is required.
- 5. Wall check (house location survey): The owner must have a house location survey prepared and certified by a Maryland Registered Land Surveyor and must submit a copy to the building official for approval before erecting the framing. A wall check not identified by a premise address and permit number will not be accepted. Walls must not be constructed on the foundation without an approved wall check.
- 6. Masonry fireplace/chimney: Conducted after the fireplace and first flue liner section are completed.
- 7. Wall Bracing: Conducted before installation of weather-resistive barrier (house wrap).
- 8. Framing ("close-in"): Conducted after the completion of all framing, air sealing, rough wiring, fire sprinkler system installation, fire sprinkler system hydro inspection, plumbing, gas and mechanical distribution systems (as required) but before installing exterior finish, insulation and drywall. Roof is to be completed and weatherproof. The exterior finish is [not]NOT to be installed until framing (close-in) has been approved. When plumbing/gas work is part of the construction, a Washington Suburban Sanitary Commission (WSSC) plumbing/gas inspection must be approved before requesting a framing



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inspection. The building, electrical, and mechanical inspections must be requested at the same time. When floor framing is less than 48in. above the surface below, a framing inspection must be requested before installation of any floor materials.

- 9. Insulation: Conducted after the FRAMING (close-in) inspection has been approved to verify that the installed insulation complies with the approved plans or specifications for the building.
- 10. Swimming Pool Bonding Conducted when the pool has been formed with the rebar installed and bonded before placement of concrete or backfill. During construction pool excavations must be completely enclosed by a 42 in. high safety fence AT ALL TIMES when work is not being performed in the pool. A separate bonding inspection is required under the electrical permit for both the pool shell and the perimeter surfaces.
- 11. Final: Conducted after the building or structure is completed and ready for occupancy or use. If applicable, final electrical and mechanical inspections must be requested with the final building inspection. A final approval from WSSC must be obtained for all plumbing/gas installations, fire sprinklers, drainage, duct leakage and blower door test certifications before requesting final building inspections. Where a building is served by an on-site water system or an on-site sewage disposal system, any condition of the permits issued for those systems must be satisfied before the final inspection. If an owner refuses access within a reasonable time after a house is completed, the building official may close the permit file, but this action will not relieve the owner from any obligation to comply with applicable codes. The final inspection must be requested and approved before a building (or portion thereof) is used or occupied.
- 12. Partial Inspection: Conducted upon request. An Inspection fee under the Executive Regulation adopted by the County must be paid when scheduling this inspection.
- 13. Re-inspection: Any of the above inspections disapproved twice for the same violation will be subject to a re-inspection fee under the Executive Regulation adopted by the County. The fee must be paid before any further inspections will be performed at the building site.]

[08.00.02.142.



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Section R110.1. Delete Exception 2 and replace with Additions and alterations.]

[08.00.02.143.

Section R110.2. Delete.]

[08.00.02.144.

Sections R110.3. Delete Items 3, 6, and 8.]

[08.00.02.145.

Sections R110.4. Delete.]

[08.00.02.146.

Sections R112. Delete.]

[08.00.02.147.

Section R202. Delete words "living or" from the definition of "Guestrooms".

Add the following definition: Accessory Dwelling Unit means a second dwelling unit that is subordinate to the principal dwelling and complies with Chapter 59 of the Montgomery County Code.

Add the following definition: Storage, finished: A finished area having no more than two (2) 120V outlets and no other wiring methods (CATV, satellite, data communication, etc.), excluding lighting requirements.]

[08.00.02.148.

Table R301.2(1). Under the headings indicated insert the appropriate criteria, as follows: GROUND SNOW LOAD—30 pounds per square foot (psf); ULTIMATE WIND-Speed—115 miles per hour (mph); TOPOGRAPHIC EFFECTS—No; SEISMIC DESIGN CATEGORY—B; SUBJECT TO DAMAGE FROM-Weathering—severe, Frost line depth—30 inches (762 mm), Termite—moderate to heavy, and Decay—slight to moderate; WINTER DESIGN TEMP—13



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degrees Fahrenheit (F); ICE SHIELD UNDERLAYMENT REQUIRED—yes; footnote h; FLOOD HAZARDS—yes; footnote g: (a) July 18, 1975, (b) September 29, 2006, (c) FEMA Flood Panels Numbers Effective September 29, 2006; AIR FREEZING INDEX—300; MEAN ANNUAL TEMPERATURE—55; Manual J Design Criteria: Elevation: 451 ft; Latitude: 39°N; Winter Heating: 19°F; Summer Cooling: 89°F; Altitude Correction Factor: N/A; Indoor Design Temperature: 72°F; Design Temperature Cooling: 75°F; Heating Temperature Differential: 55°F; Cooling Temperature Difference: 14°F; Wind Velocity Heating: 10mph; Wind Velocity Cooling: 6mph; Coincident Wet-bulb: 76°F; Daily Range: M; Winter Humidity: 68% RH; Summer Humidity: 52% RH.]

### [08.00.02.149.

Section R302.2. At the end of Item 1 after the phrase "with ASTM E 119 or UL 263." add "; however where there are lot lines between townhouses or individual electrical services are provided, the common wall shall be not less than a 2-hour fire-resistance-rated wall assembly tested under ASTM E 119 or UL 263. Electrical service for the townhouses must comply with Article 230 of the National Electrical Code."]

# [08.00.02.150.

Section R302.3. Delete and replace with: "For side by side two family dwellings the separating wall must comply with R302.2". Delete Exceptions 1 & 2.]

# [08.00.02.151.

Section R305.1. Exception 1. Delete each occurrence of the word "required." Add "Any floor area having less than 5 feet (1524 mm) of ceiling height is not considered part of the room area and must not be allowed to have any permanent fixtures or furnishings such as cabinets, counters, and shelves."

Add the following after the first sentence of Exception 2: "An area of 21 inches deep by 24 inches wide in front of water closets and lavatories or other fixtures, must have a ceiling height not less than 6 feet 8 inches measured from the finished floor."]

### [08.00.02.152.

Section R307.1. Delete ", and in accordance with the requirements of Section P2705.1".]



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# [08.00.02.153.

Section 308.4.4.1. Delete the Exception.]

[08.00.02.154.

Section R309.5. Delete.]

[08.00.02.155.

Section R310.2.3.2. Delete the Exception.]

# [08.00.02.156.

Section R312.1. After the phrase "floor or grade below" in Subsection R312.1.1 insert the phrase "and retaining walls with a difference in grade level on either side of the wall exceeding 30 inches (762 mm) and within 2 feet (610 mm) of a defined walkway, path, parking lot, or driveway on the high side".

Add Subsection R312.1.5. Areaways with a difference in grade level on the lower side exceeding 30 inches (762mm) requires a guard.

Add Subsection R312.1.6. Window wells with an area of 9 square feet (0.836 meters squared) or larger must be protected with a guard or a bar, grill, cover, screen or similar device that complies with Section R310.4.]

# [08.00.02.157.

Add new Subsection R313.3. Rehabilitation work in one- and two-family dwellings and townhouses equipped with an approved sprinkler system. An approved automatic fire sprinkler system must be protected from damage in areas undergoing rehabilitation work.]

# [08.00.02.158.

Add new Subsection R313.4. Automatic sprinkler system for reconstruction. An approved automatic fire sprinkler system must be installed when 50 percent or more of the gross floor area of the existing building, excluding basements, is demolished or if 50 percent or more of the existing exterior walls above foundation walls calculated in linear feet by each story are



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demolished. Gross floor area is the floor area within the inside perimeter of the exterior walls of the building exclusive of vent shafts and courts, without deduction for corridors, hallways, stairways, ramps, closets, thickness of interior walls, columns and other features. The length of the exterior wall is measured from corner to corner on the exterior side of the wall. An existing wooden wall is defined as unaltered bottom plate, top plate, studs and sheathing.]

# [08.00.02.159.

Section R314.2.2. Exception 2. Add "or electrical" after the word "plumbing".]

### [08.00.02.160.

Section R314.6. Delete Exception 2 and replace with the following: "Smoke alarms must be installed as required by COMAR Public Safety Code Section 9-104 (2017)."]

### [08.00.02.161.

Section R315.2.2. Delete Exception 2.]

### [08.00.02.162.

Section R317.1.4. Exception 1. Delete "exposed to the weather or" and delete the remainder of the exception after the phrase "concrete floor". Delete Exceptions 2 and 3.]

# [08.00.02.163.

Section R319.1. Change "4 inches (102 mm)" to "5 inches (122.5 mm)".]

### [08.00.02.164.

Section R322.1. To the first paragraph add the phrase "and the Floodplain District Requirements, Article III, Chapter 19, of the Montgomery County Code, and the Executive Regulation adopted by the County."]

# [08.00.02.165.

Section R403.1.4.1. Exception 1: Delete everything after "accessory structures" and replace with the phrase "excluding garages and carports that do not exceed 400 square feet or less in floor



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area and an eave height of 10 feet (3048 mm) or less are not required to be protected." Delete Exceptions 2 and 3.]

# [08.00.02.166.

Section R405.1. Add to the title "exterior drainage system". Delete the exception. Add new subsection R405.1.2. Concrete or masonry foundation interior drainage system. Weep holes at least 2 inches (51 mm) in diameter, spaced at a maximum of 6 feet (1828 mm) on center must be installed in the footing or wall below the slab elevation connecting into the interior drains. Weephole inlets must have a minimum of 6 inches (153 mm) of gravel for the full perimeter of the foundation, extending at least 12 inches (306 mm) from the inlets and covered by a layer of approved filter membrane.]

# [08.00.02.167.

Section R406.1. Delete.]

### [08.00.02.168.

Section R406.2. Delete the first sentence and replace with the following: Exterior foundation walls retaining earth and enclosing usable spaces below grade must be waterproofed with an approved waterproofing system or a membrane extending from the top of the footings to finished grades. Delete Items 1, 2, 3, and 4. Add. "Waterproofing system must be installed as required in a current evaluation report for the product."]

### [08.00.02.169.

Section R406.4. Delete.]

### [08.00.02.170.

Section R506.2.2. Delete the Exception.]

# [08.00.02.171.

Section R506.2.3. Exception 1. Add "Detached" before the word "Garage". Delete Exceptions 2 and 4.]



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# [08.00.02.172.

Section R507.9.1. Amend as follows:

Table R507.9.1.3(2) Delete the phrase "LAG SCREWS AND" from the title of the Table. Delete the phrase "lag screw or" from footnotes (a) and (d).

Figure R507.9.1.3(1) Delete "LAG SCREWS AND" from the title. Delete "LAG SCREWS OR" from the figure. Delete "IF LAG SCREWS ARE USED OR BOLT SPACING IS REDUCED TO THAT OF LAG SCREWS" from the asterisked note.

Figure R507.9.1.3(2) Delete "LAG SCREWS AND" from the title. Delete "LAG SCREWS OR" from the figure.

Subsection R507.9.1.4 Add the following after the last sentence. "The deck ledger must be connected to the building's band board or rim board with through bolts, or the deck must be self-supporting".]

# [08.00.02.173.

Section R602.10. Add the following new sentence to the end of this section: "As used in this section, the term building or buildings includes individual townhouse units."]

# [08.00.02.174.

Chapter 11 Energy Efficiency. Replace Chapter 11 with [2018]2021 IECC-Residential Provisions, Chapters 1 to 6 as amended by this Executive Regulation.]

### [08.00.02.175.

Section M1305.1.2. Add the following after the first sentence: Access to the attic opening must be provided by a permanent or pull-down stairway in all new construction. In existing installations, portable ladders are permitted.]

### [08.00.02.176.

Section M1411.6. Replace R-4 with R-3.]



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# [08.00.02.177.

Section G2406.2. Add ", under stairways" after the phrase "storage closets".]

[08.00.02.178.

Chapters 25 through 33. Delete.]

[08.00.02.179.

Delete Chapters 34-43 and replace with the National Electric Code (NEC) as adopted by the County.]

[08.00.02.180.

Add new Chapter 45. Site Work and Safeguards.

Section R4501. Storage and placement. Construction equipment and materials must be stored and placed so as not to endanger the public, the workers or adjoining property for the duration of the construction project.

Section R4502. Disposal of Construction Debris/Material. Construction debris and/or materials must be stored and disposed in a suitable manner so as not to endanger the public and not spread onto the lot and adjoining properties.

Section R4503. Utility connections. Service utility connections must be discontinued and capped under the approved rules and the requirements of the authority having jurisdiction.

Section R4504. Excavation and fill for buildings and structures must be constructed or protected so as not to endanger life or property.

Section R4505. Fill supporting foundations. A building permit is required when fill is used to support the foundations of any building or structure. Special inspections of compacted fill must comply with the International Building Code as adopted by the County.

Section R4506. Protection of Pedestrians.



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Section R4506.1. Protection required. Pedestrians must be protected during construction, remodeling and demolition activities by a barrier when the distance from the construction to the lot line is 5 feet (1524 mm) or less.

Section R4506.2. Adjacent to excavations. Every excavation on a site located 5 feet (1524 mm) or less from the street lot line must be enclosed with a barrier. Where located more than 5 feet (1524 mm) from the street lot line, a barrier must be erected when and where required by the building official.

Section R4506.3. Barriers. Barriers must be at least 42 inches high, have adequate strength, and must be of a type which will warn of potential danger.

Section R4507. Protection of Adjoining Property. Adjoining public and private property must be protected from damage during construction, remodeling and demolition work. Protection must be provided for footings, foundations, party walls, chimneys, skylights and roofs.]

### [08.00.02.181.

Appendix E. Sections AE501 through AE606 of Appendix E are hereby adopted with the following modification to Section AE502.3: In the last sentence, first paragraph, change 12 inches (305 mm) to 30 inches (762 mm).]

# [08.00.02.182.

Appendix J. Appendix J is hereby adopted with the following modifications:

Section AJ103.1 General: Replace "shall" with "may".

Sections AJ301.1.2, AJ301.3, and AJ501.5. Delete.

Section AJ501.7 Ceiling height: Add "and attics" after basements.]

[Section AJ508.1 Stair width. Delete and replace with: "The width of existing or replacement stairways serving existing unfinished attics or existing unfinished basements being converted to habitable space must not be less than 32 inches in clear width at all points above the permitted handrail height and below the required headroom height.



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Handrails must not project more than 4 inches on either side of the stairway and the minimum clear width of the stairway at and below the handrail height, including tread and landings, must not be less than 28 inches where a handrail is installed on one side and 24 inches where handrails are provided on both sides."]

[Section AJ508.2 Stair headroom. Delete and replace with: "The minimum headroom in all parts of existing or replacement stairways serving existing unfinished attics or existing unfinished basements being converted to habitable space must not be less than 6 feet 8 inches or 6 feet 4 inches under existing beams, girders, ducts or other obstructions."]

[Add Section AJ509. Stair treads and risers. Treads must be 9 inches or greater and risers must not be greater than 8¾ inches.]

[Add Section AJ601.1.4. Stair width. The width of existing or replacement stairways serving existing unfinished attics or existing unfinished basements being converted to habitable space must not be less than 32 inches in clear width at all points above the permitted handrail height and below the required headroom height. Handrails must not project more than 4 inches on either side of the stairway and the minimum clear width of the stairway at and below the handrail height, including tread and landings, must not be less than 28 inches where a handrail is installed on one side and 24 inches where handrails are provided on both sides.]

[Add Section AJ601.1.5. Stair headroom. The minimum headroom in all parts of existing or replacement stairways serving existing unfinished attics or existing unfinished basements being converted to habitable space must not be less than 6 feet 8 inches or 6 feet 4 inches under existing beams, girders, ducts or other obstructions.]

[Add Section AJ601.1.6. Stair treads and risers. Treads must be 9 inches or greater and risers must not be greater than 8¾ inches.]

# [AMENDMENTS TO THE 2018 INTERNATIONAL SWIMMING POOL AND SPA CODE (ISPSC) First Printing: August 2017]

# [08.00.02.183.

Section 101.1. Delete the brackets and replace the phrase in the brackets with "Montgomery County, Maryland."]



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# [08.00.02.184.

Section 101.2. Add an exception to read as follows:

Exception: Pools that are not accessory to one- and two-family dwellings.]

# [08.00.02.185.

Section 102.2. Replace Section 102.2 with the following new paragraph:

"Existing pools for which building permit applications were submitted before July 13, 1990, must be enclosed by an approved fence or wall not less than 42 inches in height, and any latch or lock must be no less than 3 feet from the ground, or the pool must be equipped with an automatic pool cover in lieu of a fence, and the automatic pool cover must be closed whenever the pool is not attended".]

# [08.00.02.186.

Section 102.7.1. Wherever this code references electrical requirements of the IRC, replace the reference with the National Electric Code (NEC) as adopted by the County.]

### [08.00.02.187.

Section 103.1. Add at the end of the paragraph: Swimming pools, Spas and Hot Tubs must also comply with Chapter 51 of the Montgomery County Code.]

### [08.00.02.188.

Sections 103.4 and 103.4.1. Delete.]

### [08.00.02.189.

Section R105.6. Add a third sentence: "Required fees must be paid for each separate permit application". Delete Sections 105.6.2 through 105.6.3.]

### [08.00.02.190.

Section 108. Delete.]



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# [08.00.02.191.

Add a new Section 305.1.1. "A swimming pool over 18 inches deep, or the property on which the pool is constructed, must be enclosed by a temporary or permanent fence or wall while the swimming pool is under construction. The fence or wall must be at least 42 inches high and must be of a type which will warn of potential danger."]

# [08.00.02.192.

Section 305.2.1. In Item 1 change 48 inches (1219 mm) to 60 inches.]

# [08.00.02.193.

Section 305.4. In Item 1 first sentence, change 48 inches (1219 mm) to 60 inches. At the end of the first sentence, add the phrase "or a window limiting device that does not allow the window to open more than 4 inches". Add a new third sentence as follows: "A window limit device must comply with ASTM F 2090."]

# [08.00.02.194.

Section 305.5. In Item 1 change 48 inches (1219 mm) to 60 inches. Add "Portable non circulating pools on grade less than 24 inches high are not covered by this code. When the pool is not attended it is the homeowner's responsibility to empty the portable pool."]

# [08.00.02.195.

Sections 310 through 315 and 317 through 320. Delete.]

### [08.00.02.196.

Chapters 4, 5, and 6. Delete.]

# [AMENDMENTS TO THE 2018 INTERNATIONAL EXISTING BUILDING CODE (IEBC)]

# [08.00.02.197.

Section 101.1. Delete the brackets and replace the phrase in the brackets with "Montgomery County, Maryland."]



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### [08.00.02.198.

Sections 103, 104.8 and 104.8.1. Delete.]

### [08.00.02.199.

Section 105.1. Add the following sentences: A separate permit is required for each legal address. A separate permit is required for each separate building at a legal address.]

[Subsections 105.1.1 and 105.1.2. Delete.]

### [08.00.02.200.

Section 105.2. Delete Item 5 from the "Building" subsection.]

### [08.00.02.201.

Subsections 105.3, 105.4, 105.5, 105.6, 105.7, and 108.1. Delete.]

### [08.00.02.202.

Section 109.3.10. Add the following: The final inspection must be requested and approved before a building (or portion thereof) including equipment and appliances are used or occupied.]

### [08.00.02.203.

Sections 110, 112, 113, 114, 116 and 117. Delete.]

### [08.00.02.204.

Section 202. Delete the definitions "EXISTING BUILDING" and "EXISTING STRUCTURE" and replace with the following: "EXISTING BUILDING or EXISTING STRUCTURE means a building or structure that was erected and occupied, or was issued a certificate of occupancy, at least 1 year before a construction permit application for the building or structure was made to a local jurisdiction, the Maryland National Capital Park and Planning Commission, or Washington Suburban Sanitary Commission.]



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# [08.00.02.205.

Section 305. Delete and replace with the Maryland Accessibility Code.]

# [08.00.02.206. Severability

The provisions of these regulations are severable. If a court of competent jurisdiction holds that a provision is invalid or inapplicable, the remainder of the regulation remains in effect.]

### 08.00.02.137

Section R406.2 ERI Compliance.

<u>In Table R406.2 Under Mechanical, add line "R403.5 except Section R403.5.2 Service hot water systems"; delete line "R403.5.1 Heated water circulation and temperature maintenance systems"; and delete line "R403.5.3 Drain water heat recovery units".</u>

<u>In Table R405.2 under Electrical Power and Lighting Systems, add line "R404.4</u> <u>Renewable energy infrastructure"; and add line "R404.6 Additional electric infrastructure".</u>

### 08.00.02.138

Section R406.3.1 On-site renewables are not included. In Equation 4-1, delete the symbol "=" and replace with "= \( \sigma^{\circ} \).

#### 08.00.02.139

Section R406.5 ERI-based Compliance. Table R406.5. Replace with

### **Table R406.5 MAXIMUM ENERGY RATING INDEX**

Climate Zone	All-Electric Building	Mixed-Fuel Building
0-1	52	43
<u>2</u>	<u>52</u>	<u>45</u>
<u>3</u>	<u>51</u>	47
<u>4</u>	<u>54</u>	47
<u>5</u>	<u>55</u>	47
<u>6</u>	54	46



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<u>7</u>	<u>53</u>	<u>46</u>
8	<u>53</u>	<u>45</u>

# <u>08.00.02.140</u>

Section R406.6 Verification by approved agency. Delete "R406.4" and replace with "R406.5". Delete "R406.6" and replace with "R406.7".

### 08.00.02.141

Section R407.2 Tropical climate region. In Item 7, delete the number "21" and replace with "24".

# 08.00.02.142

Section R408.2.3 Reduced energy use in service water-heating option. Add new Item, "4. Greater than or equal to 82 EF instantaneous fossil fuel service water-heating system and drain water heat recovery unit meeting the requirements of Section R403.5.3 installed on at least one shower."

### 08.00.02.143

Section R408.2.5 Improved air sealing and efficient ventilation system option. Delete the phrase "cubic feet per minute per watt (0.03 m3/min/watt)" and replace with "W/CFM Fan Energy".

### 08.00.02.144

Section R408 Additional Efficiency Package Options. Add new Section "R408.3 Maryland Alternative Additional Energy Efficiency Package Options. The provisions of this Section shall be applied as part of the prescriptive compliance path of Section R402.1.3.1. Additional energy efficiencies from Table R408.3 must be selected to meet or exceed a minimum percentage increase of 6% for climate Zone 4."; and add the following table:

Table R408.3 Additional Energy Features



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		Percentage
	Energy Feature	Increase
		for Climate
		Zone 4
<u>1</u>	$\geq 2.5\%$ reduction in total UA5	<u>1%</u>
<u>2</u> <u>3</u>	≥ 5% reduction in total UA5	<u>2%</u>
<u>3</u>	≥ 7.5% reduction in total UA5	<u>2%</u>
<u>4</u> <u>5</u>	<u>0.22 U-factor windows5</u>	<u>3%</u>
<u>5</u>	High performance cooling system (Greater than or equal to 18 SEER and 14 EER air conditioner)2	3%
<u>6</u>	High performance cooling system (Greater than or equal to 16 SEER and 12 EER air conditioner)2	3%
<u>7</u>	High performance gas furnace (Greater than or equal to 96 AFUE natural gas furnace)2	<u>5%</u>
<u>8</u>	High performance gas furnace (Greater than or equal to 92 AFUE natural gas furnace)2	4%
9	High performance heat pump system (Greater than or equal to 10 HSPF/18 SEER air source heat pump.)2	<u>6%</u>
<u>10</u>	High performance heat pump system (Greater than or equal to 9 HSPF/16 SEER air source heat pump.)2	<u>5%</u>
<u>11</u>	Ground source heat pump (Greater than or equal to 3.5 COP ground source heat pump.)2	<u>6%</u>
<u>12</u>	Fossil fuel service water heating system (Greater than or equal to 82 EF fossil fuel service water- heating system.)	3%
<u>13</u>	High performance heat pump water heating system option (Greater than or equal to 2.9 UEF electric service water-heating system.)	8%
<u>14</u>	High performance heat pump water heating system. (Greater than or equal to 3.2 UEF electric service water-heating system.)	8%
<u>15</u>	Solar hot water heating system (Greater than or equal to 0.4 solar fraction solar water-heating system.)	6%
<u>16</u>	More efficient HVAC distribution system. (100 percent of ductless thermal distribution system or hydronic thermal distribution system located completely inside the building thermal envelope.)	10%
<u>17</u>	100% of ducts in conditioned space. (100 percent of duct thermal distribution system located in conditioned space as defined by Section R403.3.2.)	12%



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<u>18</u>	Reduced total duct leakage. (When ducts are located outside conditioned	<u>1%</u>
	space, the total leakage of the ducts, measured in accordance with	
	R403.3.5, shall be in accordance with one of the following:	
	Where air handler is installed at the time of testing, 2.0 cubic feet per	
	minute per 100 square feet of conditioned floor area.	
	Where air handler is not installed at the time of testing, 1.75 cubic feet	
	per minute per 100 square feet of conditioned floor area.)	
<u> 19</u>	2 ACH50 air leakage rate with ERV or HRV installed. (Less than or	<u>10%</u>
	equal to 2.0 ACH50, with either an Energy Recovery Ventilator (ERV)	
	or Heat Recovery Ventilator (HRV) installed.)3	
<u>20</u>	2 ACH50 air leakage rate with balanced ventilation. (Less than or equal	<u>4%</u>
	to 2.0 ACH50, with balanced ventilation as defined in Section 202 of the	
	2021 International Mechanical Code.)4	
<u>21</u>	1.5 ACH50 air leakage rate with ERV or HRV installed. (Less than or	<u>12%</u>
	equal to 1.5 ACH50, with either an ERV or HRV installed.)4	
<u>22</u>	1 ACH50 air leakage rate with ERV or HRV installed. (Less than equal	<u>14%</u>
	to 1.0 ACH50, with either an ERV or HRV installed.)4	
	Energy Efficient Appliances (Minimum 3 appliances not to exceed 1	
<u>23</u>	from each type with follow efficiencies. Refrigerator - Energy Star	<u>7%</u>
	Program Requirements, Product Specification for Consumer	
	Refrigeration Products, Version 5.1 (08/05/2021), Dishwasher - Energy	
	Star Program Requirements for Residential Dishwashers, Version 6.0	
	(01/29/2016), Clothes Dryer - Energy Star Program Requirements,	
	Product Specification for Clothes Dryers, Version 1.1 (05/05/2017) and	
	Clothes Washer	
	- Energy Star Program Requirements, Product Specification for	
	Clothes Washers, Version 8.1 (02/05/2018)	

- 1. Energy efficiency percentage increases as established by PNNL.
- 2. For multiple cooling systems, all systems shall meet or exceed the minimum efficiency requirements in this section and shall be sized to serve 100 percent of the cooling design load. For multiple heating systems, all systems shall meet or exceed the minimum efficiency requirements in this section and shall be sized to serve 100 percent of the heating design load. Increases to minimum efficiency requirements are limited to one selection.
- 3. Minimum HRV and ERV requirements, measured at the lowest tested net supply airflow, shall be greater than or equal to 75 percent Sensible Recovery Efficiency (SRE), less than or equal to 1.1 cubic feet per minute per watt (0.03 m3/min/watt) and shall not use recirculation as



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- <u>a defrost strategy. In addition, the ERV shall be greater than or equal to 50 percent Latent Recovery/ Moisture Transfer (LRMT).</u>
- 4. Renewable energy resources shall be permanently installed that have the capacity to produce a minimum of 1.0 watt of on-site renewable energy per square foot of conditioned floor area. The installed capacity shall be in addition to any onsite renewable energy required by Section R404.4. To qualify for this option, one of the following forms of documentation shall be provided to the code official:
- a. Substantiation that the RECs associated with the on-site renewable energy are owned by, or retired on behalf of, the homeowner.
- <u>b. A contract that conveys to the homeowner the RECs associated with the on-site renewable energy or conveys to the homeowner an equivalent quantity of RECs associated with other renewable energy.</u>
- 5. Reduction in total UA from lines 1, 2 or 3 and higher performance windows from line 4 are limited to a single selection.

# 08.00.02.145

Section R503.1.1 Building envelope. Delete "R402.1.4" and replace with "R402.1.3".

#### 08.00.02.146

Section R503.1.2 Heating and cooling systems. Delete the phrase "to an addition" from the Exception.

# 08.00.02.147

<u>Chapter 6 Referenced Standards.</u> <u>Under ASHRAE standard, delete the number "2021" and replace with "2017".</u> <u>Under ASTM standard, delete the phrase "E2013" and replace with "13(2018)".</u> <u>Add standard,</u>

<u>CTA</u>	Consumer Technology Association 1919 S. Eads Street	
	Arlington, VA 22202	
Standard reference		Referenced
<u>number</u>		in code section
	<u>Title</u>	<u>number</u>



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ANSI/CTA-2045	-B Modular Communications Interface for Energy  Management	R403.5.4
Under HVI standard, delete the number "18" and replace with "15". Add standard,		
<u>NEMA</u>	National Electrical Manufacturers Association 1300 North 17th Street, Suite 900 Rosslyn, VA 22209	
Standard		Referenced
<u>reference</u>		<u>in</u>
<u>number</u>	<u>Title</u>	code section
		<u>number</u>
OS 4-2016	Requirements for Air-Sealed Boxes for Electrical and	R402.4.6
	Communication Applications	

# AMENDMENTS TO THE 2021 INTERNATIONAL GREEN CONSTRUCTION CODE (IgCC)

### 08.00.02.148

<u>Section 101.1.</u> <u>Delete the brackets and replace the phrase in the brackets with "Montgomery County, Maryland."</u>

### 08.00.02.149

<u>Section 101.3.1.</u> <u>Add the following Item: 6. Group R-4 occupancy buildings not exceeding 16 residents.</u>

# 08.00.02.150

Add a new Section 101.3.2 with the following: 101.3.2 Applicability. This code applies only to the following building projects:

1. new buildings greater than 5,000 square feet in gross aggregate area and their systems; and



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2. new portions of buildings exceeding 5,000 square feet in gross aggregate square area and their systems.

### 08.00.02.151

Section 102.6. Existing Structures. Delete.

### 08.00.02.152

Section 111. Board of Appeals. Delete.

# 08.00.02.153

Section 301.2. Definitions. Add the following definitions:

Gross Aggregate Area means the sum of the floor areas of all the spaces within the building with no deductions for floor penetrations. Gross Aggregate Area is measured from the exterior faces of exterior walls or from the centerline of walls separating buildings. Gross Aggregate Area includes covered walkways, open roofed-over areas, porches and similar spaces, exterior terraces or steps, roof overhangs, parking garages, surface parking, and similar features.

EVSE Installed: Fully Installed EVSE with connector (plug) with a minimum 208/240 volt, 40-amp circuits, including sufficient panel capacity, conduit, and wiring. Dedicated parking spaces shall be identified at original building permit submittal.

<u>Delete EV Ready Space and replace with:</u>

EV Ready: has installed panel capacity and conduit, to accommodate future build-out of EV charging with minimum 208/240 volt, 40-amp circuits. Dedicated parking spaces shall be identified at original building permit submittal.

EV Capable: has sufficient conduit (capable of facilitating 208/240 volt 40-amp) installed to accommodate future build-out of EV charging but lacks panel capacity, or dedicated parking spaces but shall have physical electrical equipment space available via additional sub-panel/additional dedicated panel(s).



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Amend the definition of Owner's Project Requirements (OPR) to add the following sentence at the end: "All information in the OPR document shall certify that the items identified in the plans are constructed, installed and operate as intended in the approved plans and specifications."

# 08.00.02.154

Section 501.3.1.2 Prohibited Development Activity. Delete.

### 08.00.02.155

<u>Sections 501.3.2, 501.3.3, 501.3.4, 501.3.5.3 and 501.3.7.2.3.</u> Delete.

### <u>08.00.02.156</u>

Chapter 6 Water Use Efficiency. Delete.

#### 08.00.02.157

Section 701.1 (7.1) Scope. Delete and replace with the following: "This section specifies requirements for EV Capable/Ready, Additional Electrical Infrastructure, and Mechanical System Performance Rating Method."

### 08.00.02.158

Sections 701.2 (7.2) Compliance. Delete.

### 08.00.02.159

Section 701.3 (7.3) Mandatory provisions. Delete in its entirety and replace with the following:

Section 701.3. Mandatory Provisions.

701.3.1. EV Capable/Ready Parking. Construction documents shall indicate the raceway termination point and proposed location of future EV spaces and EVSE. Construction documents shall also provide information on amperage of future EVSE, raceway methods, wiring schematics and electrical load calculations to verify that the electrical panel service capacity and electrical system, including any on-site distribution transformers, meet the requirements of this code. Parking spaces equipped with EVSE shall be identified by signage. A permanent and visible "EV-Capable"



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or "EV-Ready" label shall be posted in a conspicuous place at the service panel to identify each panel space reserved to support EV-Capable or EV-Ready Spaces, respectively and at the termination point of the raceway or circuit termination point. See Table 701.3.1 for details.

# **TABLE 701.3.1**

	EVSE Installed	EVSE Ready	EVSE Capable	<u>Total</u>
Commercial Construction Residential use:				
Multi-family apartments, hotels, dormitories.	<u>0%</u>	<u>25%</u>	<u>65%</u>	90%
<u>R-1, R-2</u>	<u>0%</u>	<u>25%</u>	<u>65%</u>	<u>90%</u>
Longer dwell time visitor destinations:				
Business (B), Educational (E), Assembly (A), Factory (F) Institutional (I), Residential (R-3, R-4), Large Mercantile > 50 spaces (M), S-2 parking garages, High Hazard (H)	<u>0%</u>	5% (10% employee parking)	20% (25% employee parking)	<u>25 (35) %</u>
Brief destinations:				
Small Mercantile (M) < 50 spaces, Storage (S except parking garages), Utility and Misc. (U)	<u>0%</u>	<u>5%</u>	<u>5%</u>	<u>10%</u>

# Other requirements:

- a) EV Ready shall comply with Montgomery County Code Chapter 59 Zoning
  Ordinance Section 6.2.3 Calculation of Required Parking (Spaces for handicapped and Space for charging electric vehicles).
- b) Federal requirements (Regulations under Titles II and III of the Americans with Disabilities Act).

701.3.2 Additional electric infrastructure. Buildings that contain combustion equipment and end-uses shall be required to install electric infrastructure in accordance with this section.



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- 701.3.2.1 Combustion space heating. Space heating equipment that uses fossil fuels shall comply with either 701.3.6.2.1.1 or 701.3.6.2.1.2.
- 701.3.2.1.1 Low-capacity heating. Warm-air furnaces with a capacity less than 225,000 Btu/h and gas- and oil-fired boilers with a capacity less than 400,000 Btu/h shall be provided with a designated exterior location(s) in accordance with the following:
  - 1. Natural drainage for condensate from cooling equipment operation or a condensate drain located within 3 feet (914 mm) of the location of the space heating equipment.
  - 2. A dedicated branch circuit in compliance with NFPA70 Section 424.4 based on heat pump space heating equipment sized in accordance with the requirements of ASHRAE 90.1 Section 6.4.2.1 and terminating within 3 feet (914 mm) of the location of the space heating equipment with no obstructions. Both ends of the branch circuit shall be labeled "For Future Heat Pump Space Heater."

Exception: Where an electrical circuit in compliance with NFPA70 Sections 440.4(B) and 440.35 exists for space cooling equipment.

- 701.3.2.1.2 High-capacity heating. All other space heating equipment shall be provided with conduit that is continuous between a junction box located within 3 feet (914 mm) of the equipment and an electrical panel. The junction box, conduit and bus bar in the electrical panel shall be rated and sized to accommodate a branch circuit with sufficient capacity for an equivalent electric equipment with an equivalent equipment capacity. The electrical junction box and electrical panel shall have labels stating, "For Future Electric Space Heating Equipment".
- 701.3.2.2 Combustion water heating. Water heating equipment that uses fossil fuels shall comply with either 701.3.6.2.2.1 or 701.3.6.2.2.2.
- 701.3.2.2.1 Low-capacity water heating. Water heaters with a capacity less than 300,000 Btu/h (88 kW) shall be installed in accordance with the following:
  - 1. A dedicated 208/240-volt branch circuit with a minimum capacity of 30 amps shall terminate within 3 feet (914 mm) from the water heater and be accessible to the water heater with no obstructions. Both ends of the branch circuit shall be labeled with the words "For Future Heat Pump Water Heater" and be electrically



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### isolated.

- 2. A condensate drain that is no more than 2 inches (51 mm) higher than the base of the installed water heater and allows natural draining without pump assistance shall be installed within 3 feet (914 mm) of the water heater.
- 3. The water heater shall be installed in a space with minimum dimensions of 3 feet (914 mm) by 3 feet (914 mm) by 7 feet (2134 mm) high.
- 4. The water heater shall be installed in a space with a minimum volume of 700 cubic feet (20,000 L) or the equivalent of one 16-inch (406 mm) by 24-inch (610 mm) grill to a heated space and one 8-inch (203 mm) duct of no more than 10 feet (3048 mm) in length for cool exhaust air.

701.3.2.2.2 <u>High-capacity water heating.</u> <u>Water heaters with a capacity greater than or equal to 300,000 Btu/h (88 kW) shall be provided with the following:</u>

- 1. Conduit that is continuous between a junction box located within 3 feet (914 mm) of the equipment and an electrical panel. The junction box, conduit and bus bar in the electrical panel shall be rated and sized to accommodate a branch circuit with sufficient capacity for an equivalent electric equipment with an equivalent equipment capacity. The electrical junction box and electrical panel shall have labels stating, "For Future Electric Water Heating Equipment".
- 2. A condensate drain that is no more than 2 inches (51 mm) higher than the base of the installed water heater and allows natural draining without pump assistance shall be installed within 3 feet (914 mm) of the water heater.
- 701.3.3 Record Documents. Construction documents shall require that within 90 days after the date of system acceptance, record documents shall be provided to the building owner to include: location of additional electric infrastructure for heating and water heating.
- 701.3.4 Electric infrastructure for energy storage. Each building site shall have space for on-site energy storage not less than 2 feet (610 mm) in one dimension and 4 feet (1219 mm) in another dimension and located in accordance with Section 1206.2.8 of the International Fire Code and Section110.26 of the NFPA 70.

Exception: Where an onsite electrical energy system storage system is installed.



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701.3.4.1 Electrical service reserved space. The main electrical service panel shall have a reserved space to allow installation of a two-pole circuit breaker for future electrical energy storage system installation. This space shall be labeled "For Future Electric Storage." The reserved spaces shall be positioned at the end of the panel that is opposite from the panel supply conductor connection.

#### 08.00.02.160

Section 701.4 Prescriptive option. Delete and replace with the following:

ASHRAE 90.1 2022 Normative Appendix L. Mechanical System Performance Rating Method is mandatory for all prescriptive projects that are allowed to use this method according to L1. General.

#### 08.00.02.161

Section 701.5 (7.5) Performance option. Delete.

#### 08.00.02.162

<u>Sections 801.3.1.3(b), 801.3.1.7, 801.3.3.4, 801.3.3.5, and 801.3.9.</u> Delete.

#### 08.00.02.163

<u>Sections 1001.3, 1001.4.1, 1001.4.3, 1001.5.3, 1001.6, 1001.8, 1001.9.2, 1001.9.7, 1001.10, and 1001.11.</u> <u>Delete.</u>

#### 08.00.02.164

<u>Appendix L. Informative Appendix L is adopted in its entirety.</u>

#### 08.00.02.165

<u>Appendix M. Informative Appendix M Sections M101.1.3, M101.1.4, and M101.1.5 are adopted. Projects shall meet a minimum Silver rating for whole building. Delete all reference to ICC/ASHRAE 700-2015 and replace with "ICC/ASHRAE 700-most current version".</u>



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#### AMENDMENTS TO THE 2021 INTERNATIONAL MECHANICAL CODE (IMC)

#### 08.00.02.166

Section 101.1. Delete the brackets and replace the phrase in the brackets with "Montgomery County, Maryland."

#### 08.00.02.167

Sections 103.4, 103.4.1, 106.1.1, 106.1.2, 106.4.3, 106.4.4, 113, and 114. Delete.

#### 08.00.02.168

Add new Section 304.13 Supports and Anchorage. All appliances located on roofs must rest on a manufacturer's standard perimeter support, self-flashing roof curb, framed steel support, or 4 inch x 4 inch pressure-treated lumber as a minimum. The appliances must be securely affixed in an approved manner to resist vibration and wind loads and must follow the manufacturers installation recommendations.

#### 08.00.02.169

Add new Section 306.1.14 Heating Appliances. Electric, fossil, or solid fuel fired appliances must not be installed under any stairway or landing.

#### <u>08.00.02.170</u>

Section 306.3. After the last sentence add the following: Access to the attic opening must be provided by a permanent or pull-down stairway in all new construction. In existing installations, portable ladders are permitted.

#### 08.00.02.171

Section 403.2. Delete the exception.

#### 08.00.02.172

<u>Add new Section 505.7 Independent exhaust systems for domestic kitchens located in</u> multistory structures. Shaft enclosures not exceeding 5 stories in height in fully sprinklered



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Group R occupancies penetrated by individual kitchen exhaust ducts serving a single tenant kitchen shall have a minimum thickness of 26 gauge and a listed fire damper must be installed at the shaft penetration.

#### 08.00.02.173

Section 506.3.2.5. Change "100" to "300".

#### 08.00.02.174

Section 513.2. Add subsection 513.2.1 to read as follows:

- 513.2.1. Designs for smoke management systems must be submitted for review and approval as part of a building permit application. Submittals for smoke management systems must include the following:
- (a) plans and specifications,
- (b) engineering calculations or computer model or both,
- (c) floor plans,
- (d) system diagrams and details,
- (e) sequence of operations and control layout,
- (f) preliminary test procedures,
- (g) acceptance test procedures,
- (h) pass/fail criteria, and
- (i) maintenance requirements including periodic testing criteria.

#### 08.00.02.175



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Add new Section 603.18.3. Air Device Support. Air devices in suspended ceilings must be directly supported by the building structure from opposite corners. If wires are used for support, the minimum wire size shall be equal to the wire supporting the suspended grid.

### <u>08.00.02.176</u>

Section 607.5.5. Replace the first sentence of Exception 2 with the following: "In buildings, other than Group H occupancies, equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 or 903.3.1.2, smoke dampers are not required where:"

### AMENDMENTS TO THE 2021 INTERNATIONAL FUEL GAS CODE (IFGC)

#### 08.00.02.177

Section 101.1. Delete the brackets and replace the phrase in the brackets with "Montgomery County, Maryland."

#### 08.00.02.178

Section 103.1. Delete the brackets and replace the phrase in the brackets with "Department of Permitting Services".

#### 08.00.02.179

<u>Sections 104.8, 104.8.1, 106.1.1, 106.1.2, 106.5.3, 106.5.4, 113, and 114.</u> <u>Delete.</u>

### <u>08.00.02.180</u>

Chapter 4. Delete all except Sections 401.2, 403.5.2, 412, 413, and 414.

### AMENDMENTS TO THE 2021 INTERNATIONAL RESIDENTIAL CODE (IRC) Second Printing, November 2021 with Errata, February 2nd 2024

#### 08.00.02.181

Wherever the IRC references Chapters 34-43, replace the reference with National Electric Code (NEC) currently adopted by the County. Wherever the IRC references P2904, replace with National Fire Protection Association (NFPA) 13D standard.



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#### 08.00.02.182

Section R101.1. Delete the brackets and replace the phrase in the brackets with Montgomery County, Maryland."

#### 08.00.02.183

Section R101.2. Add the following Exception: Existing buildings, as defined by the Maryland Building Rehabilitation Code, undergoing repair, alterations or additions and change of occupancy are permitted to comply with the Maryland Building Rehabilitation Code.

#### 08.00.02.184

Section R102.5. Delete the complete sentence and replace with "All provisions in the Appendices AF, AK, AO, AQ, AR, AS, AT, AU and AW are adopted as part of the IRC. All provisions of Appendices AE and AJ are adopted as part of the IRC with the modifications described in Sections 08.00.02.250 and 08.00.02.251 of this Regulation."

#### 08.00.02.185

Section R102.7. Delete the phrase "the International Property Maintenance Code."

#### 08.00.02.186

Sections R104.8 and R104.8.1. Delete.

#### 08.00.02.187

Section R105.2. Delete Items 1 & 2. Delete Item 3 and replace with "Retaining Walls that are not over 36 inches (914mm) in retained height unless supporting a surcharge, crossing a lot line, located in problem soils, or part of a tiered retaining wall system. In Item 4: Add "Fully enclosed" before "Water tanks". In Item 5: Add "and on grade patios located in rear yards" after driveways. In Item 7: Delete "swimming" and change 24 (610 mm) to 18 inches (457 mm). In Item 8: Add "Children's playhouses, treehouses, and open roofed pergolas that are no higher than 8' above grade or other similar structures" after first word. Delete Item 9 and replace with "Retractable awnings and retractable canopies". Item 10: Delete the words "Decks not exceeding 200 square feet (18.58 m2) in area, that are not more than 30" (762mm) above grade



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at any point" and replace with "Decks where the joists bear completely on grade, supporting no other structures". Add Item 11: Replacing windows and doors without changing the size of openings and without reducing the net clear opening dimensions. Add Item 12: Replacing roof covering(s) and sheathing materials with in kind materials. Add Item 13: Replacing siding materials with 'in kind' materials. Add Item 14: Interior and Exterior Non-Structural Waterproofing repairs of existing below grade structures. Delete Electrical and Plumbing subsections.

#### 08.00.02.188

<u>Sections 105.3.2 and 105.5.</u> Delete.

#### <u>08.00.02.189</u>

Section R106.1.3. Delete the phrase "and where required by the building official".

#### 08.00.02.190

Section R107. Delete.

#### 08.00.02.191

Section R108.1. Add a second sentence as follows: "Required fees must be paid for each separate permit application". Sections R108.2 through R108.5. Delete.

#### 08.00.02.192

Sections R109.1 through R109.1.6. Delete all except R109.1.2, R109.1.5, and R109.1.5.1 and replace with the following: R109.1 Types of inspections. The following inspections must be conducted for all buildings and structures:

1. Sign: The sign must be posted on the property within 3 days after the permit issuance date and must remain posted on the property for 30 days. The sign must be located on the side of the lot/parcel, which provides principal access to the street or right-of-the-way. It must be conspicuously posted not more than 5 feet from the front property line and mounted at least 30 inches, but not more than 60 inches, above the ground. NO BUILDING INSPECTION WILL BE



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### PERFORMED BEFORE THE APPROVAL OF THIS INSPECTION AND THE DRAINAGE PRECONSTRUCTION, IF APPLICABLE.

- 2. Footings: Conducted before concrete placement and after excavations for all footings and thickened slabs are completed; after form work, reinforcing steel, concrete-encased electrode (for new dwellings), and grade stakes are in place; and after sediment control measures are installed according to the approved sediment control plan.
- 3. Waterproofing/Foundation Drainage: Conducted after the exterior walls have been waterproofed and foundation drainage system has been installed. Insulation, if used, must be in place and protected as required. If interior drain tiles are to be used, weep holes (2 in. minimum diameter, 6 feet on center) must be installed. A second inspection may be required before backfilling the interior drainage system.
- 4. Concrete slab-on-ground floor: After the installation of the slab base, interior drainage system (if any), vapor retarder, slab edge insulation, and a minimum 3 in. schedule 40 PVC, or equivalent gas tight pipe inserted into a 3 in. tee embedded into the slab base for the venting of RADON GAS and labeled adequately. Where the sump crock is to be used for the venting of RADON GAS, it must be in place at the time of the inspection. For new construction of habitable space exceeding 70 sf, a radon mitigation system is required.
- 5. Wall check (house location survey): The owner must have a house location survey prepared and certified by a Maryland Registered Land Surveyor and must submit a copy to the building official for approval before erecting the framing. A wall check not identified by a premise address and permit number will not be accepted. Walls must not be constructed on the foundation without an approved wall check.
- 6. <u>Masonry fireplace/chimney: Conducted after the fireplace and first flue liner section are completed.</u>
- 7. Wall Bracing: Conducted before installation of weather-resistive barrier (house wrap).
- 8. Framing ("close-in"): Conducted after the completion of all framing, air sealing, Weather-Resistive Barrier (Housewrap), rough wiring, fire sprinkler system



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installation, fire sprinkler system hydro inspection, plumbing, gas and mechanical distribution systems (as required) but before installing exterior finish, insulation and drywall. Roof is to be completed and weatherproof. The exterior finish is NOT to be installed until framing (close-in) has been approved. When plumbing/gas work is part of the construction, a Washington Suburban Sanitary Commission (WSSC) plumbing/gas inspection must be approved before requesting a framing inspection. The building, electrical, and mechanical inspections must be requested at the same time. When floor framing is less than 48in. above the surface below, a framing inspection must be requested before installation of any floor materials.

- 9. <u>Insulation: Conducted after the FRAMING (close-in) inspection has been approved to verify that the installed insulation complies with the approved plans or specifications for the building.</u>
- 10. Swimming Pool Bonding: Conducted when the pool has been formed with the rebar installed and bonded before placement of concrete or backfill. During construction pool excavations must be completely enclosed by a 42 in. high safety fence AT ALL TIMES when work is not being performed in the pool. A separate bonding inspection is required under the electrical permit for both the pool shell and the perimeter surfaces.
- 11. Final: Conducted after the building or structure is completed and ready for occupancy or use. If applicable, final electrical and mechanical inspections must be requested with the final building inspection. A final approval from WSSC must be obtained for all plumbing/gas installations, fire sprinklers, drainage, duct leakage and blower door test certifications before requesting final building inspections. Where a building is served by an on-site water system or an on-site sewage disposal system, any condition of the permits issued for those systems must be satisfied before the final inspection. If an owner refuses access within a reasonable time after a house is completed, the building official may close the permit file, but this action will not relieve the owner from any obligation to comply with applicable codes. The final inspection must be requested and approved before a building (or portion thereof) is used or occupied.
- 12. <u>Partial Inspection: Conducted upon request. An Inspection fee under the Executive Regulation adopted by the County must be paid when scheduling this inspection.</u>



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13. Re-inspection: Any of the above inspections disapproved twice for the same violation will be subject to a re-inspection fee under the Executive Regulation adopted by the County. The fee must be paid before any further inspections will be performed at the building site.

#### 08.00.02.193

Section R110.1. After the first occurrence of the word "building" delete "or structure", and after the second occurrence of the word "building" delete "or structure or portion thereof". Add Exception 3: Additions and Alterations.

#### <u>08.00.02.194</u>

Section R110.2. Delete.

#### 08.00.02.195

Sections R110.3. Delete Items 3, 6, and 8.

#### 08.00.02.196

Sections R110.4. Delete.

#### <u>08.00.02.197</u>

Sections R112. Delete.

#### 08.00.02.198

Sections R114.2. Section R114.2. In the third sentence after the second appearance of the word "order" add a period (.) and delete the remainder of the sentence.

#### 08.00.02.199

Section R202. Delete words "living or" from the definition of "Guestrooms".



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Add the following definition: Accessory Dwelling Unit means a second dwelling unit that is subordinate to the principal dwelling and complies with Chapter 59 of the Montgomery County Code.

### Add the following definitions:

<u>RETAINED HEIGHT.</u> The difference in grade between either side of a retaining wall at the same location.

STORAGE, FINISHED. A finished area having no more than two (2) 120V outlets and no other wiring methods (CATV, satellite, data communication, etc.), excluding lighting requirements.

<u>SURCHARGE</u>. The vertical load imposed on retained soil that may impose a lateral force in addition to lateral earth pressure of retained soil. For example: Sloping retained soil; structure footings supported by the retained soil; adjacent vehicle loads supported by retained soil.

<u>TIERED RETAINING WALL SYSTEM.</u> A series of two or more stacked walls, each higher wall set back from the underlying wall.

#### Revise the following definitions:

BASIC WIND SPEED. Delete reference R301.2(5)A after the word Figure and replace with R301.2(2).

### Add the following definitions under FIREPLACE definition:

<u>FACTORY-BUILT FIREPLACE.</u> <u>A listed and labeled fireplace and chimney system composed of factory-made components and assembled in the field in accordance with manufacturer's instructions and the conditions of the listing.</u>

MASONRY FIREPLACE. A field-constructed fireplace composed of solid masonry units, bricks, stones or concrete.

WINDBORNE DEBRIS REGION. Item 1. Delete the word "coastal" before the words "mean high water line", add the words: "an Exposure D condition exists upwind at the



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water line and the" after the word "where". Item 2. Delete the words "an Exposure D condition exists upwind at the waterline and" after the word "where".

#### 08.00.02.200

Table R301.2(1). Replace with the following.

#### **Table R301.2(1)**

GROUND SNOW	· <del></del>						SEISMIC DESIGN					<u>ICE BARRIER</u> UNDERLAYMENT	FLOOD HAZARDS	<u>AIR</u> FREEZING	MEAN ANNUAL	
	_	Topogra effects	wir		Windborne debris zone				thering Frost line depth		Termite 1		REQUIRED		INDEX	<u>TEMP</u>
	(mph)	N.T.	reg	gion_				C		202	M 1 .		X 7	V7	200	5.50E
30	<u>115</u>	<u>No</u>				1	<u>B</u>	Severe			Moderate to Heavy		<u>Yes</u>	Yesg	300	<u>55°F</u>
MANUAL J	DESIGN	CRITE	RIA							<u> </u>				•	•	
Elevation								Outdoor winter Hedesign dry-bulb temperature		ing temperatu	re difference					
451 ft	451 ft N/A 76°F 529		52%		72°F		<u>F</u> 19		<u>19°F</u> 53°		<u>53°F</u>					
Latitude		Daily rang	sum des rela	nmer	Sumi	mer design grai			Indoor summer design dry-bulb temperature				Cooling temperature		2	
39°N <u>M</u> 68%					75°F			89°F	14°F	7						

g(a) July 18, 1975, (b) The more stringent water surface elevations of the latest effective map of: February 29, 2006 with ongoing amendments, (c) FEMA "Flood Insurance Rate Maps" and "Flood Boundary and Floodway maps"; approved engineered floodplain studies by DPS, or the M-NCPPC maps. Effective September 29, 2006, (c) FEMA Flood Panels Numbers Effective September 29, 2006

#### 08.00.02. 201

Section R302.2. At the end of Item 1 after the phrase "with ASTM E 119 or UL 263." add "; however, where there are lot lines between townhouses or individual electrical services are provided, the common wall shall be not less than a 2-hour fire-resistance-rated wall assembly tested under ASTM E 119 or UL 263. Electrical service for the townhouses must comply with Article 230 of the National Electrical Code."

### <u>08.00.02.202</u>



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Section R302.3. Delete and replace with: "For side by side two family dwellings the separating wall must comply with R302.2". Delete Exceptions 1 & 2.

### <u>08.00.02.203</u>

Section R305.1. Exception 1. Delete each occurrence of the word "required." Add "Any floor area having less than 5 feet (1524 mm) of ceiling height is not considered part of the room area and must not be allowed to have any permanent fixtures or furnishings such as cabinets, counters, and shelves."

Add the following after the first sentence of Exception 2: "An area of 21 inches deep by 24 inches wide in front of water closets and lavatories or other fixtures, must have a ceiling height not less than 6 feet 8 inches measured from the finished floor."

#### 08.00.02.204

Section R307.1. Delete ", and in accordance with the requirements of Section P2705.1".

#### <u>08.00.02.205</u>

Section 308.4.4.1. Delete Section and replace with "Structural Glass Baluster Panels shall be installed per Test Evaluation Report from an Accredited Testing Lab."

#### 08.00.02.206

Section R309.5. Delete.

#### 08.00.02.207

Section R310.2.1 In the Exception, after the words "grade-floor" add the words "or below".

#### 08.00.02.208

Section R310.4.3. Delete the Exception.

#### <u>08.00.02.209</u>



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Section R310.7.1 Before the word "occupancy" add the words "use and". Section R310.7.1 Item 1 change the number 4 to 5 (square feet). Delete Item 2.

#### <u>08.00.02.210</u>

Section R312.1. After the phrase "floor or grade below" in Subsection R312.1.1 insert the phrase "and retaining walls with a difference in grade level on either side of the wall exceeding 30 inches (762 mm) and within 2 feet (610 mm) of a defined walkway, path, parking lot, or driveway on the high side". Add Subsection R312.1.5. Areaways with a difference in grade level on the lower side exceeding 30 inches (762mm) requires a guard. Add Subsection R312.1.6. Window wells with an area of 9 square feet (0.836 meters squared) or larger must be protected with a guard or a bar, grill, cover, screen or similar device that complies with Section R310.4.4.

#### 08.00.02.211

Add new Subsection R313.3. Rehabilitation work in one- and two-family dwellings and townhouses equipped with an approved sprinkler system. An approved automatic fire sprinkler system must be protected from damage in areas undergoing rehabilitation work.

#### 08.00.02.212

Add new Subsection R313.4. Automatic sprinkler system for reconstruction. An approved automatic fire sprinkler system must be installed when 50 percent or more of the gross floor area of the existing building, excluding basements, is demolished or if 50 percent or more of the existing exterior walls above foundation walls calculated in linear feet by each story are demolished. Gross floor area is the floor area within the inside perimeter of the exterior walls of the building exclusive of vent shafts and courts, without deduction for corridors, hallways, stairways, ramps, closets, thickness of interior walls, columns and other features. The length of the exterior wall is measured from corner to corner on the exterior side of the wall. An existing wood or cold-formed wall is defined as unaltered bottom plate, top plate, studs and sheathing.

#### 08.00.02.213

Section R314.2.2. Exception 2. Add "or electrical" after the word "plumbing".

#### <u>08.00.02.214</u>



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Section R314.6. Delete Exception 2 and replace with the following: "Smoke alarms must be installed as required by COMAR Public Safety Code Section 9-104 (2017)."

#### 08.00.02.215

Section R315.2.2. Delete Exceptions 2 & 3.

#### 08.00.02.216

Section R317.2 Quality Mark. Delete section reference "R318.1" and replace with "R317.1".

#### 08.00.02.217

Section R319.1. Change "4 inches (102 mm)" to "5 inches (122.5 mm)".

#### 08.00.02.218

Section R322.1. To the first paragraph add the phrase "and the Floodplain District Requirements, Article III, Chapter 19, of the Montgomery County Code, and the Executive Regulation adopted by the County."

#### 08.00.02.219

Section R324.6.2. Add new sentence "In existing installations where a new array is being added, the minimum total ridge setback on both sides combined shall not be less than 36"."

### <u>08.00.02.220</u>

Section R326.4. Add "and Section R324.6.3."

#### 08.00.02.221

Section R403.1.4.1. Exception 1: Delete everything after "accessory structures" and replace with the phrase "excluding garages and carports that do not exceed 400 square feet or less in floor area and an eave height of 10 feet (3048 mm) or less are not required to be protected." Delete Exceptions 2 and 3.

#### 08.00.02.222



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Section R404.4 Retaining Walls. Delete entire section and replace with:

Retaining walls over 48 inches (1219 mm) in retained height or over 36 inches (914 mm) in retained height that resist a surcharge, shall be designed in accordance with accepted engineering practice to ensure stability against overturning, sliding, excessive foundation pressure and water uplift. Retaining walls shall be designed for a safety factor of 1.5 against lateral sliding and overturning. This section shall not apply to foundation walls supporting buildings.

#### 08.00.02.223

Section R405.1. Add to the title "exterior drainage system". Delete the Exception. Add new subsection R405.1.2. Concrete or masonry foundation interior drainage system. Weep holes at least 2 inches (51 mm) in diameter, spaced at a maximum of 6 feet (1828 mm) on center must be installed in the footing or wall below the slab elevation connecting into the interior drains. Weep-hole inlets must have a minimum of 6 inches (153 mm) of gravel for the full perimeter of the foundation, extending at least 12 inches (306 mm) from the inlets and covered by a layer of approved filter membrane.

#### 08.00.02.224

Section R405.1.1 Precast concrete foundation. Last sentence, replace words "into an approved sewer" with" by gravity or mechanical means into an approved drainage."

#### 08.00.02.225

Section R405.2.3 Drainage system. Last sentence, replace words "into an approved sewer" with" by gravity or mechanical means into an approved drainage."

#### 08.00.02.226

Section R406.1. Delete.

#### 08.00.02.227

Section R406.2. Delete the first sentence and replace with the following: Exterior foundation walls retaining earth and enclosing usable spaces below grade must be waterproofed with an approved waterproofing system or a membrane extending from the top of the footings to finished



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grades. Delete Items 1 and 2. Add. "Waterproofing system must be installed as required in a current evaluation report for the product."

#### 08.00.02.228

Section R406.3 Delete "Dampproofing" and "dampproofed" where used and replace with "Waterproofing" and "waterproofed".

#### 08.00.02.229

Section R406.4. Delete.

#### <u>08.00.02.230</u>

Section R506.2.2. Delete the Exception.

#### 08.00.02.231

<u>Section R506.2.3.</u> <u>Exception 1.</u> <u>Add "Detached" before the word "Garage".</u> <u>Delete Exceptions 2 and 4.</u>

#### 08.00.02.232

<u>Section R507.3.3</u> <u>Item 1. After the words "Table R301.2.", add "Footings within 5 feet of the existing structure shall be extended down to the depth of the existing footings."</u>

### 08.00.02.233

Section R507.9.1. Amend as follows:

Where this Code Section mentions Lag Screws or Lag Bolts, delete all references to their use and or acceptance, including the following sections:

<u>Table R507.9.1.3(2)</u> <u>Delete the phrase "LAG SCREWS AND" from the title of the Table.</u> <u>Delete the phrase "lag screw or" from footnotes (a) and (d).</u>

Figure R507.9.1.3(1) Delete "LAG SCREWS AND" from the title. Delete "LAG SCREWS OR" from the figure. Delete "IF LAG SCREWS ARE USED



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OR BOLT SPACING IS REDUCED TO THAT OF LAG SCREWS" from the asterisked note.

Figure R507.9.1.3(2) Delete "LAG SCREWS AND" from the title. Delete "LAG SCREWS OR" from the figure.

Subsection R507.9.1.4 Add the following after the last sentence. "The deck ledger must be connected to the building's band board or rim board with through bolts, or the deck must be self-supporting".

#### 08.00.02.234

Table R602.3(1) Fastening Schedule Item 32: 19/32"-3/4" Under Number and Type of Fastener, delete "(2-2 ½" "and replace with (2 ½" after 8d common nails and before x 0.131") nail (subfloor, wall). Under Spacing of fasteners delete "6' and replace with "6f".

#### 08.00.02. 235

Section R602.10. Add the following new sentence to the end of this section: "As used in this section, the term building or buildings includes individual townhouse units."

#### 08.00.02.236

<u>Table R602.10.3(1)</u> <u>Under Minimum total length (feet) of braced wall panels required along each braced wall line title, third column delete "PFC" and replace with "PFG".</u>

### 08.00.02.237

<u>Table R608.7.1.1(3)</u> <u>Delete "One story or top story of two story" and replace with "First story of two story".</u>

#### 08.00.02.238

<u>Table R802.4.1(5)</u>. <u>Under Dead Load=10psf, 2x10 with 16" rafter spacing for douglas fir-larch delete "11-18" and replace with "11-8".</u>

#### 08.00.02.239



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R905.1.3. Cool Roofs Coverings. Add section Roof coverings for roof slopes less than or equal to two units vertical in 12 units horizontal (17 percent slope or less) for buildings and covered parking shall conform to this section. A minimum of 75 percent of the entire roof surface not used for roof penetrations, renewable energy power systems (e.g., photovoltaics or solar thermal collectors), harvesting systems for rainwater to be used on-site, or green roofing systems shall be covered with products that comply with one or more of the following:

- 1. Have a minimum three-year-aged Solar Reflective Index (SRI) of 64.
- 2. Comply with the criteria for roof products as defined in "ENERGY STAR® Program Requirements, Product Specification for Roof Products, Eligibility Criteria."

### **Exceptions:**

- 1. Building projects where an annual energy analysis simulation demonstrates that the total annual building energy consumption with the proposed roof is 2 percent less than it would be with a roof having a three-year-aged SRI of 64.
- 2. 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.
- 3. <u>Terraces on setbacks comprising less than 25 percent of the area of the largest floor plate in the building.</u>
- 4. Green roofs shall be permitted to comprise part, or all of the 75 percent required area coverage.

#### 08.00.02.240

R905.1.4. Cool Roofs Solar Reflective Index. Add new section. Initial and aged values of the SRI shall be calculated in accordance with ASTM E1980 for medium-speed wind conditions, using a convection coefficient of [2.1 BTU/(h · ft2 · °F)] or the metric equivalent [12 W/(m2· K)]. The SRI shall be based upon solar reflectance as measured in accordance with ASTM



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E1918 or ASTM C1549, and the thermal emittance as measured in accordance with ASTM E408 or ASTM C1371. For roofing products, the values for 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.

#### 08.00.02.241

<u>Chapter 11 Energy Efficiency. Replace Chapter 11 with 2021 IECC-Residential Provisions, Chapters 1 to 6 as amended by this Executive Regulation.</u>

#### 08.00.02.242

Section M1305.1.2. Add the following after the first sentence: Access to the attic opening must be provided by a permanent or pull-down stairway in all new construction. In existing installations, portable ladders are permitted.

#### 08.00.02.243

Section G2406.2. Add ", under stairways" after the phrase "storage closets".

#### 08.00.02.244

<u>Figure G2427.8. Delete note "Regulator vent outlet in the event no regulator is present, H and I can be disregarded."</u>

#### 08.00.02.245

Table G2427.8 Through-the-wall vent terminal clearances. Delete Figure Clearances H and I.

#### 08.00.02.246

Chapters 25 through 33. Delete.

#### 08.00.02.247

<u>Delete Chapters 34-43 and replace with the National Electric Code (NEC) as adopted by the County.</u>



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#### 08.00.02.248

<u>Chapter 44 Referenced Standards NEMA.</u> <u>Delete "National Electrical Manufacturers Association 12300 17th Street North No. 900ArlingtonVA22209" and replace with "National Electrical Manufacturers Association1300 North 17th Street, Suite 900 Rosslyn, VA 22209".</u>

#### 08.00.02.249

Add new Chapter 45. Site Work and Safeguards.

Section R4501. Storage and placement. Construction equipment and materials must be stored and placed so as not to endanger the public, the workers or adjoining property for the duration of the construction project.

Section R4502. Disposal of Construction Debris/Material. Construction debris and/or materials must be stored and disposed in a suitable manner so as not to endanger the public and not spread onto the lot and adjoining properties.

Section R4503. Utility connections. Service utility connections must be discontinued and capped under the approved rules and the requirements of the authority having jurisdiction.

Section R4504. Excavation and fill for buildings and structures must be constructed or protected so as not to endanger life or property. Add sentence: When excavation exceeds a depth of 5', shoring must be provided in accordance with best practices or, a ratio of a 1:1 slope must be maintained.

Section R4505. Fill supporting foundations. A building permit is required when fill is used to support the foundations of any building or structure. Special inspections of compacted fill must comply with the International Building Code as adopted by the County.

Section R4506. Protection of Pedestrians.

Section R4506.1. Protection required. Pedestrians must be protected during construction, remodeling and demolition activities by a barrier when the distance from the construction to the lot line is 5 feet (1524 mm) or less.



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Section R4506.2. Adjacent to excavations. Every excavation on a site located 5 feet (1524 mm) or less from the street lot line must be enclosed with a barrier. Where located more than 5 feet (1524 mm) from the street lot line, a barrier must be erected when and where required by the building official.

Section R4506.3. Barriers. Barriers must be at least 42 inches high, have adequate strength, and must be of a type which will warn of potential danger.

Section R4507. Protection of Adjoining Property. Adjoining public and private property must be protected from damage during excavation, construction, remodeling and demolition work. Protection must be provided for footings, foundations, party walls, chimneys, skylights and roofs.

### 08.00.02.250

Appendix AE. Sections AE113 through AE126 of Appendix AE are hereby adopted with the following modification to Section AE114.3: In the last sentence, first paragraph, change 12 inches (305 mm) to 30 inches (762 mm).

#### 08.00.02.251

Appendix AJ. Appendix AJ is hereby adopted with the following modifications:

Section AJ102.4.3. Delete.

Section AJ103.1 General: Replace "shall" with "may".

Sections AJ107.1.2, AJ107.3, and AJ109.5. Delete.

Section AJ109.7 Ceiling height: Add "and attics" after basements in each occurrence.

Add Section AJ109.8.4. Stair treads and risers. Treads must be 9 inches or greater and risers must not be greater than 834 inches.

Add Section AJ110.1.4. Stair width. The width of existing or replacement stairways serving existing unfinished attics or existing unfinished basements being converted to habitable space must not be less than 32 inches in clear width at all points above the permitted handrail height and below the required headroom height. Handrails must not project more than 4 inches on



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either side of the stairway and the minimum clear width of the stairway at and below the handrail height, including tread and landings, must not be less than 28 inches where a handrail is installed on one side and 24 inches where handrails are provided on both sides.

Add Section AJ110.1.5. Stair headroom. The minimum headroom in all parts of existing or replacement stairways serving existing unfinished attics or existing unfinished basements being converted to habitable space must not be less than 6 feet 8 inches or 6 feet 4 inches under existing beams, girders, ducts or other obstructions.

Add Section AJ110.1.6. Stair treads and risers. Treads must be 9 inches or greater and risers must not be greater than 834 inches.

### AMENDMENTS TO THE 2021 INTERNATIONAL SWIMMING POOL AND SPA CODE (ISPSC)

First Printing/Version: October 2020 with Errata, February 2nd 2024

#### 08.00.02.252

Section 101.1. Delete the brackets and replace the phrase in the brackets with "Montgomery County, Maryland."

#### 08.00.02.253

Section 101.2. Add an exception to read as follows:

Exception: Pools that are not accessory to one- and two-family dwellings.

#### 08.00.02.254

Section 102.2. Replace Section 102.2 with the following new paragraph: "Existing pools for which building permit applications were submitted before July 13, 1990, must be enclosed by an approved fence or wall not less than 42 inches in height, and any latch or lock must be no less than 3 feet from the ground, or the pool must be equipped with an automatic pool cover in lieu of a fence, and the automatic pool cover must be closed whenever the pool is not attended".

#### 08.00.02.255



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Section 102.7.1. Add the following: Wherever this code references electrical requirements of the IRC, replace the reference with the National Electric Code (NEC) as adopted by the County.

### <u>08.00.02.256</u>

Add Section 102.7.2 to read as follows: Swimming Pools, Spas and Hot Tubs must also comply with Chapter 51 of the Montgomery County Code.

#### 08.00.02.257

<u>Sections 104.8 and 104.8.1.</u> Delete.

### 08.00.02.[189.]<u>258</u>

Section [R105.6]108.1. Add a third sentence: "Required fees must be paid for each separate permit application". Delete Sections [105.6.2]108.2 through [105.6.3]108.6.

#### 08.00.02.[190.]259

[Section 108] Sections 111 and 112. Delete.

#### 08.00.02.260

Section 305.1. After the first occurrence of ASTM F 1346 delete "and swimming pools are equipped with a powered safety cover that complies with ASTM F 1346". Delete "or pools" in the last sentence.

#### 08.00.02.261

Delete Section 305.1.1 and replace with the following: "A swimming pool over 18 inches deep, or the property on which the pool is constructed, must be enclosed by a temporary or permanent fence or wall while the swimming pool is under construction. The fence or wall must be at least 48 inches high and must be of a type which will warn of potential danger."

#### 08.00.02.262

Section 305.2.1. In Item 1 change 48 inches (1219 mm) to 60 inches.



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#### 08.00.02.263

Section 305.4. In Item 1 first sentence, change 48 inches (1219 mm) to 60 inches. At the end of the first sentence, add the phrase "or a window limiting device that does not allow the window to open more than 4 inches". Add a new third sentence as follows: "A window limit device must comply with ASTM F 2090."

#### 08.00.02.264

Section 305.5. In Item 1 change 48 inches (1219 mm) to 60 inches. Add "Portable non circulating pools on grade less than 24 inches high are not covered by this code. When the pool is not attended it is the homeowner's responsibility to empty the portable pool."

### <u>08.00.02.265</u>

Sections 310 through 315 and 317 through 320. Delete.

#### 08.00.02.266

Chapters 4, 5, and 6. Delete.

#### AMENDMENTS TO THE 2021 INTERNATIONAL EXISTING BUILDING CODE (IEBC)

#### 08.00.02.267

Section 101.1. Delete the brackets and replace the phrase in the brackets with "Montgomery County, Maryland."

#### 08.00.02.268

Sections 103, 104.8 and 104.8.1. Delete.

#### 08.00.02.269

<u>Section 105.1.</u> Add the following sentences: A separate permit is required for each legal address. A separate permit is required for each separate building at a legal address.

Subsections 105.1.1 and 105.1.2. Delete.



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#### 08.00.02.270

Section 105.2. Delete Item 5 from the "Building" subsection.

#### 08.00.02.271

Subsections 105.3, 105.4, 105.5, 105.7, and 108.1. Delete.

#### 08.00.02.272

<u>Section 109.3.10.</u> Add the following: <u>The final inspection must be requested and approved before a building (or portion thereof) including equipment and appliances are used or occupied.</u>

#### 08.00.02.273

<u>Sections 110, 112, 113, 114, 116 and 117.</u> Delete.

#### 08.00.02.274

Section 306. Delete and replace with the Maryland Accessibility Code.

#### **08.00.02.275** Severability

The provisions of these regulations are severable. If a court of competent jurisdiction holds that a provision is invalid or inapplicable, the remainder of the regulation remains in effect.

#### [COMCOR 08.00.03 Buildings – Energy Conservation and Sustainable Building Design

#### 08.00.03.01 Purpose]

[This regulation adopts the 2018 International Green Construction Code (IGCC), with amendments, and establishes:

(a) a process to verify that certain new construction and additions comply with the applicable standard;



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- (b) standards and procedures under which the Director may approve waivers or modifications of the IGCC, when compliance would be impracticable or unduly burdensome and the public interest would be served by the waiver or modification; and
- (c) standards and procedures for any enforcement mechanism that the Department finds necessary to accomplish the purposes of the energy conservation and sustainable building design standard adopted in this regulation.]

### [AMENDMENTS TO THE 2018 INTERNATIONAL GREEN CONSTRUCTION CODE (IgCC)]

#### [08.00.03.02 Section 101.1.

Delete the brackets and replace the phrase within the brackets with "Montgomery County, Maryland".]

#### [08.00.03.03 Section 101.3.1.

Delete items (1) through (4) and replace with the following:

- 1. New buildings greater than 5,000 square feet in gross aggregate area and their systems.
- 2. New portions of buildings exceeding 5,000 square feet in gross aggregate square area and their systems.]

#### [08.00.03.04 Section 101.3.2.

Add the following item:

6. Group R-4 occupancy buildings not exceeding 16 residents.]

### [08.00.03.05 Section 102.6. Existing Structures.

Delete.]

[08.00.03.06 Section 108. Board of Appeals.



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Delete.]

[08.00.03.07 Section 301.2 Definitions.

Add the following definition:

Gross Aggregate Area means the sum of the floor areas of all the spaces within the building with no deductions for floor penetrations. Gross Aggregate Area is measured from the exterior faces of exterior walls or from the centerline of walls separating buildings. Gross Aggregate Area includes covered walkways, open roofed-over areas, porches and similar spaces, exterior terraces or steps, roof overhangs, parking garages, surface parking, and similar features.

Amend the definition of *Owner's Project Requirements (OPR)* to add the following sentence at the end: "All information in the *OPR* document shall certify that the items identified in the plans are constructed, installed and operate as intended in the approved plans and specifications."]

[08.00.03.08 Subsection 501.3.1.2. Prohibited Development Activity.

Delete.]

[08.00.03.09 Sections 501.3.2, 501.3.3, 501.3.4, 501.3.6, 501.3.7, and 501.3.8.

Delete.]

[08.00.03.10 Section 601.3.

Delete.]

[08.00.03.11 Section 701.4.1.1.1.

Add the following sentence at the end: "All RECs obtained must be sourced within the PJM Interconnection region. Documentation pertaining to retainment and retirement of RECs must be available to the authority having jurisdiction, for review upon request." Note: PJM Interconnection is a regional transmission organization that coordinates the movement of wholesale electricity in all or parts of 13 states including Maryland and DC.]



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#### [08.00.03.12 Section 701.5.1.

Delete in full and replace with the following language:

**Performance-based compliance**. Compliance for buildings and their sites to be designed on a performance basis must be determined by predictive modeling of both energy performance and CO<sub>2</sub>e emissions. Predictive energy modeling must use source energy kBtu unit measure based on compliance with Section 701.5.1.1. Predictive CO<sub>2</sub>e emissions modeling must comply with Section 701.5.2.

**Subsection 701.5.1.1 Energy performance modeling.** Performance-based designs must demonstrate a zEPI of not more than the zEPI<sub>target</sub> for the building type as shown in Table 701.5.1. zEPI must be determined under the following:

#### Equation:

(Equation) zEPI = M x (Proposed building performance/Baseline building performance)

#### Where:

zEPI = zero energy performance index of the proposed building

zEPI<sub>Target</sub> = zero energy performance index target for compliance with this section

Proposed Building Performance (PBF) = The proposed building performance in source kBtu for the proposed design of the building and its site calculated under Section 701.5.1.2

Baseline Building Performance (BBF) = The baseline building performance in source kBtu for a baseline building and its site calculated under Section 701.5.1.2

M = zEPI conversion factors from a 90.1 Appendix G baseline to a CBECS 2003 baseline for the building type as shown in Table 701.5.1.

#### **Table 701.5.1**

Building Type zEPI score calculation inputs



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BUILDING	M	zEPI <sub>target</sub>
TYPE		
Multifamily	78	42
Health	83	45
Hotel/motel	92	50
Office	71	39
Restaurant	92	50
Retail	61	33
School	81	44
Semi-heated storage	61	37
Other	78	42

**Subsection 701.5.1.2 Modeling methodology.** The proposed building performance and the baseline building performance of the building and building site must be calculated under Appendix G to ASHRAE 90.1, as modified by Section 701.5.1.3 and 701.5.1.4. The energy use modeling must include all energy used for building and site functions and anticipated occupancy.

**Subsection 701.5.1.3 Energy units**. The building performance calculations in Section G3 of ASHRAE 90.1 must be based on energy use instead of energy cost. Energy use must be converted to consistent units by multiplying the nonrenewable energy fossil fuel use at the utility meter or measured point of delivery to Btus and multiplying by the conversion factor in Table 701.5.1.3.

**Subsection 701.5.1.4 Site to source electric power conversion**. In calculating the proposed building performance and the baseline building performance, electric energy used must be calculated in source energy by multiplying the electric power use at the utility meter or measured point of delivery in Btus by the conversion factor in Tables 701.5.1.3 and 701.5.1.4.

#### **Table 701.5.1.3**

ELECTRICITY GENERATION ENERGY CONVERSION FACTORS BY EPA eGRID SUB-REGION

eGRID 2018	eGRID 2018	ENERGY
SUBREGION	SUBREGION	CONVERSION
ACRONYM	NAME	FACTOR
RFCE	RFC East	2.86



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#### **Table 701.5.1.4**

U.S. AVERAGE BUILDING FUELS ENERGY CONVERSION FACTORS BY FUEL TYPE

ENERGY
CONVERSION
FACTOR
1.09
1.19
1.15
1.73
1.83
.62 (electric
only)

#### [08.00.03.13 Section 701.5.2.

Delete Tables 701.5.2A and 701.5.2B and replace with:

### TABLE 701.5.2A (7.5.2A)

ENERGY COST AND CO2e BUILDING PERFORMANCE FACTORS (BPF)

	BUILDING
BUILDING TYPE	PERFORMANCE
	FACTOR (BPF)
Multifamily	0.66
Healthcare/hospital	0.51
Hotel/motel	0.48
Office	0.47
Restaurant	0.61
Retail	0.48
School	0.36
Semiheated warehouse	0.42
all others	0.5

### TABLE 701.5.2B (7.5.2B)



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### CO<sub>2</sub>e EMISSION FACTORS

Energy Form	CO2e,	CO2e,
	lb/kBtu	kg/MWh
Grid-delivered		
electricity and		
other fuels not	1156	524
specified in this		
table		
LP or propane	651	295
Fuel oil (residual)	738	335
Fuel oil (distillate)	715	324
Coal	892	405
Gasoline	744	337
Natural gas	681	309
District chilled	339	154
water		
District steam	1145	519
District hot water	1081	491

[08.00.03.14 Sections 801.3.1.7 and 801.3.3.5.

Delete.]

[08.00.03.15 Section 901.3.1.

Delete.]

[08.00.03.16 Sections 1001.3.1.1.1.2.c and 1001.3.1.1.1.3.

Amend to add the phrase "AHJ, with copies also being provided to" before the phrase 'building owner" and "owner", respectively.]

[08.00.03.17 Sections 1001.3.1.1.2.1.3,, 1001.3.1.4, 1001.3.1.7, 1001.3.1.9, 1001.3.1.10, 1001.3.2.1.2, 1001.3.2.1.5 and 1001.3.2.4.

Delete.]

[08.00.03.18 Section 1001.3.2.1.3.



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Delete the second sentence and subsections 1001.3.2.1.3.1 through 1001.3.2.1.3.3 and replace with the following: "The plan must describe the procedures needed to use the energy measurement devices and collection/storage infrastructure, and the procedures for tracking and assessing energy consumption.]

#### [08.00.03.19 Section 1001.3.2.1.4.

Delete in its entirety and replace it with the following: "The indoor air quality plan must describe the procedures needed to implement a regular outdoor airflow monitoring program after building occupancy; the procedures for operating ventilation systems during occupancy; the procedures needed for maintaining and monitoring IAQ after building occupancy; a green cleaning plan; and the procedures for implementing a regular humidity sensor monitoring program after building occupancy.]

#### [08.00.03.20

Amend Normative Reference Chapter 11, ISO, to replace "ISO 21930-2007:" with "ISO 21930-2017:".]

#### [08.00.03.21

Informative Appendix H is adopted in its entirety.]

#### [08.00.03.22 Section J101.1.3.

Add the phrase "this code or" after the phrase "shall comply with".]

[08.00.03.23 Informative Appendix J.

Sections J101.1.3, J101.1.4, and J101.1.5 are adopted.]

#### [08.00.03.24 Severability

The provisions of this regulation are severable. If a court of competent jurisdiction holds that a provision is invalid or inapplicable, the remainder of the regulation remains in effect.]



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	Marc Elrich, County Executive	Date	
	Approved as to form and legali	ty	
	$C_{l}$		
	Munkay	08/19/2024	
		Date	