STATE OF TENNESSEE
Sumner County

Date: JANUARY 27, 2025

Board of County Commissioners

RESOLUTION

No. 2501-04

A RESOLUTION AMENDING RESOLUTION 2303-04 RELATING TO RETAINING WALLS

BE IT RESOLVED by the Sumner County Board of County Commissioners meeting in regular session on this the 27th day of January 2025, that this body does hereby amend Resolution 2303-04 relating to retaining walls as set forth in the attachment hereto.

CERTIFICATE OF ACTION

Carolyn Tompleton
COUNTY CLERK

COUNTY MAYOR

1/28/2025
DATE

UNANIMOUS VOICE VOTE

Ayes: ____ Nays: ____ Abs: ____

APPROVED: ☑ REJECTED: ☐

STATE OF TENNESSEE, SUMNER COUNTY
I, the undersigned County Clerk, do hereby certify that this is a true and correct copy of the original instrument filed in this office. Given under my hand and the seal of office
This 30th **day of** January **20** 25
Carolyn Tompleton, Clerk by Jennifer Mitchell, DC
SUMNER COUNTY CLERK

PROPOSED REVISIONS, ADOPTED SUMNER COUNTY INTERNATIONAL RESIDENTIAL CODE: *RETAINING WALLS*

PURPOSE OF THIS PROPOSED AMENDMENT:

The purpose of this proposed amendment is to clarify existing language contained in the County's adopted Residential Building Code related to *retaining walls*. This amendment will bring the code standards for retaining walls into alignment with retaining wall standards recently adopted by the Sumner County Regional Planning Commission within the County's Zoning Resolution and Subdivision Regulations.

CURRENT TEXT TO BE REPLACED:

(IRC) Section R105.2.(3) Work exempt from permit: Unbalanced retaining walls that are not over 6 feet in height measured from the bottom of the footing to the top of the wall shall be regulated by the Sumner County Engineer.

Exception: Unbalanced retaining walls that exceed 4 feet in height from the bottom of the footing to the top of the retaining wall that lead to a basement/garage portal. Retaining walls shall be regulated by the Sumner County Engineer.

PROPOSED TEXT TO BE INSERTED:

Section (IRC) R105.2: (3) Work exempt from permit: Permits shall not be required for retaining walls less than four (4) feet in height measured from the bottom of the footing to the top of the wall unless such walls are greater than two (2) feet in height and resist lateral loads in addition to soil.

All other retaining walls shall be governed by IRC R404.4, and applicable requirements of the Sumner County Zoning Resolution, to include additional required technical and design standards promulgated and maintained by the office of the County Engineer.

STATE OF TENNESSEE
Sumner County
STATE OF TENNESSEE, SUMNER COUNTY
I, the undersigned County Clerk, do hereby certify that this is a true and correct copy of the original instrument filed in this office. Given under my hand and the seal of office
This 1st day of Sept. 2023
Carolyn Templeton, Clerk by Jenny Mitchell, DC
SUMNER COUNTY CLERK

MARCH 20, 2023
Date

Board of County Commissioners

RESOLUTION

No. 2303-04

TITLE

A RESOLUTION ADOPTING CERTAIN PROVISIONS OF THE 2021 ICC MODEL CODES AND STANDARDS AS RELATING TO CERTAIN PERMITTING, INSPECTION AND ENFORCEMENT OF BUILDING ACTIVITIES WITHIN SUMNER COUNTY, TENNESSEE, IN THE AFOREMENTIONED CODES WHILE EXCLUDING CERTAIN PORTIONS THEREOF

WHEREAS, Sumner County adopted certain building codes in September of 1992, February of 2002, December of 2007 and June of 2015; and

WHEREAS, it is the desire of Sumner County to update its building codes and standards to adopt for the following:

#1.(IBC) 2021 INTERNATIONAL BUILDING CODE, **#2.**(IPC) 2021 INTERNATIONAL PLUMBING CODE, **#3.** (IMC) 2021 INTERNATIONAL MECHANICAL CODE, **#4.** (IFGC) 2021 INTERNATIONAL FUEL GAS CODE **#5.** (IRC) 2021 INTERNATIONAL RESIDENTIAL CODE, **#6.** (IEBC) 2021 INTERNATIONAL EXISTING BUILDING CODE, **#7.** (IECC) 2021 INTERNATIONAL ENERGY CODE CONSERVATION CODE, **#8.** (ISPSC) 2021 INTERNATIONAL SWIMMING POOL AND SPA. In addition to the model codes prescribed above, **#9.** ICC/MBI 1200-2021 Standard for Off-site Construction: Planning, Design, Fabrication and Assembly, **#10.** ICC/MBI 1205-2021 Standard for Off-site Construction: Inspection, **#11.** ICC 400-2022 Standard on the Design and Construction of Log Structures.

#1. (IBC) 2021 INTERNATIONAL BUILDING CODE: amendments, deletions or adopted appendixes.

A) ***Section 109.4 International Building Code: Work commencing before permit issuance*** (Original Text) Any person who commences any work on a building, structure, electrical, gas, mechanical or plumbing system before obtaining the necessary *permits* may be subject to a fee established by the *building official* that shall be in addition to the required *permit* fees.

Section 109.4 International Building Code: Work commencing before permit issuance (**Modified Text**) is amended by modifying the language to read: Any person who commences any work on a building, structure, electrical, gas, mechanical or plumbing system before obtaining the necessary permits may be subject to an administrative

fee up to 100% of the building permit fee. No administrative fee will exceed $500 unless preapproved by the County Attorney.

- New Commercial- $500.00
- Remodel Commercial- $300.00
- Residential Remodel not exceeding 2000 sq. feet $300.00
- Residential Remodel exceeding 2000 sq. feet $500.00
- New Residential Homes and New Accessory Structures
  200 sq. feet - 1000 sq. feet $150.00
  1001 sq. feet – 2000 sq. feet $250.00
  2001 sq. feet and over $500.00

Applicable to all Use Groups listed in the ICC Building Value Data Table (BVD)

B) ***Section 109.6(IBC) Refunds*** (**Original Text**) The *building official* is authorized to establish a refund policy.

Section 109.6 (IBC) Refunds (**Modified Text**) is amended by modifying the language to read: The building official is authorized to issue refunds up to $3,000 whenever the building official and his/her deputy agrees that a refund is justified due to double payment or overpayment. Refund requests exceeding $3,000 must be approved by the County Attorney. All refund requests must be submitted in writing providing reason why a refund is warranted.

C) ***Section 111.3(IBC) Temporary Occupancy*** (**Original Text**) The *building official* is authorized to issue a Temporary Certificate of Occupancy before the completion of the entire work covered by the *permit*, provided that such portion or portions shall be occupied safely. The *building official* shall set a time period during which the Temporary Certificate of Occupancy is valid.
Section 111.3 (IBC) Temporary Occupancy (**Modified Text**) is amended by modifying the language to read: The Building Official is authorized to issue a ***Temporary Certificate of Occupancy*** before the entire work covered by the permit is completed provided that such portion or portions shall be occupied safely. Upon request of the owner or authorized representative, the building official or representative may issue a ***Residential or Commercial Temporary Certificate*** of Occupancy. A temporary C.O. for residential or commercial shall not exceed 30 days unless granted a time extension from the building official. All safety issues must be resolved and verified

before issuing a ***Temporary Certificate of Occupancy***. Temporary Certificates of Occupancy shall be issued at the discretion of the onsite building inspector after consulting with the building official.

Temporary Residential Certificate of Occupancy - $150.00
Commercial Temporary Certificate of Occupancy - $250.00

It is the responsibility of the owner or his/her authorized representative to eventually attain a Permanent Certificate of Occupancy. Permanent Certificate of Occupancy $ no charge. All final state and local inspections must be approved before the "Permanent Certificate of Occupancy" is released.

*Applicable to all Use Groups listed in the Building Valuation Table (BVD)

D) ***Section 2701.1 (IBC) Electrical*** **(Original Text)** The provisions of this chapter and NFPA 70 shall govern the design, construction, erection and installation of the electrical components, appliances, equipment and systems used in buildings and structures covered by this code. The International Fire Code, International Property Maintenance Code and NFPA 70 shall govern the alteration, repair, relocation, replacement, and addition of electrical components, appliances, or equipment.
Chapter 27 (IBC) Electrical **(Modified Text)** Delete: Chapter 27 in its entirety.

Note: Plan reviews, permitting, inspections of any and all electrical components, equipment and systems shall be under the purview of the State Fire Marshal's Office.

#2. (IPC) 2021 INTERNATIONAL PLUMBING CODE: Adopt in its entirety with no amendments, deletions or appendixes.

#3. (IMC) 2021 INTERNATIONAL MECHANICAL CODE: Adopt in its entirety with no amendments, deletions or appendixes.

#4. (IFGC) 2021 INTERNATIONAL FUEL GAS CODE: Adopt in its entirety with no amendments, deletions or appendixes.

#5. (IRC) 2021 INTERNATIONAL RESIDENTIAL CODE: Adopt with the following amendments:

1) ***Section (IRC) R105.2: (2) Work exempt from permits*** **(Original Text)** Exemption from permit requirements of this code shall not be deemed to grant authorization for any work to be done in any manner in violation of the provisions of this code or any other laws or ordinances of this jurisdiction. Permits shall not be required for the following: ***Item #2 Fences:*** not over 7 feet high.

Section (IRC) R105.2: **(2) Work exempt from permits (Modified Text)** is amended by modifying ***Item #2 Fences*** to read: Fences not over **eight** feet in height. The height of all fences shall be measured from the finished grade to the top of the individual

sections. The finished grade shall not include measurements from the top of a berm. For fences exceeding eight feet in height or swimming pool fence requirements contact the Building and Codes Department. For additional fence requirements that may be found in the Sumner County Zoning Resolutions contact the Sumner County Planning Office.

2) ***Section (IRC) R105.2: (3) Work exempt from permit*** **(Original Text)** Exemption from permit requirements of this code shall not be deemed to grant authorization for any work to be done in any manner in violation of the provisions of this code or any other laws or ordinances of this jurisdiction. Permits shall not be required for the following: #3 ***Section (IRC) R105.2: (3)*** *Retaining walls* that are not over 4 feet in height measured from the bottom of the footing to the top of the wall, unless supported by a surcharge.

Section (IRC) R105.2: (3) Work exempt from permit **(Modified Text)** is amended by modifying #3. *Section R105.2.(3)Retaining Walls* to read: Unbalanced retaining walls that are not over 6 feet in height measured from the bottom of the footing to the top of the wall shall be regulated by the Sumner County Engineer.

Exception: Unbalanced retaining walls that exceed 4 feet in height from the bottom of the footing to the top of the retaining wall that lead to a basement/garage portal. Retaining walls shall be regulated by the Sumner County Engineer.

3) ***Section (IRC) R105.2: (11) Work exempt from permit*** **(Original Text)** Exemption from requirements of this code shall not be deemed to grant authorization for any work to be done in any manner in violation of the provisions of this code or any other laws or ordinances of this jurisdiction. **Permits shall not be required for the following:** "Replacement of any minor part that does not alter approval of equipment or make such *equipment* unsafe."
Section (IRC) R105.2: (11) Work exempt from permit **(Modified Text)** is amended by adding: HVAC or other mechanical system change-outs whenever there is no change in the utility provider or type of fuel. HVAC or other mechanical systems with no reconfiguration or extension of existing fuel system.

4) ***Section (IRC) R106.1 Submittal documents*** **(Original Text)** Submittal documents consisting of *construction documents*, and other data shall be submitted in two or more sets, or in a *digital format* where allowed by the *building official*, with each application for a *permit*. The *construction documents* shall be prepared by a *registered design professional* where required by the statues of the *jurisdiction* in which the project is to be constructed. Where special conditions exist, the *building official* is authorized to require additional information by a *registered design professional*.

Exception: The building official is authorized to waive the submission of construction documents and other data not required by a registered design professional if it is found that the nature of the work applied is such that reviewing the construction documents is not necessary to obtain compliance with this code.

Section (IRC) R106.1 Submittal documents **(Modified Text)** is amended by modifying the language to read: One full set of construction drawings must be included with the application before the building permit application is considered complete.

Exception: Digital (CAD) drawings may be submitted on ***minimum 11"x 14'paper as part of the application documents***. (CAD) drawings must be legible, shall have a floor plan providing the total square footage under roof and how much of the total square footage under roof will be conditioned. The floor plan must identify the use of all rooms with the dimensions including height and shall clearly detail all ingress/egress and emergency egress requirements. Digital drawings shall have a detailed foundation sheet. Homes having crawl spaces must provide a schematic drawing of crawl space if crawl space is conditioned. Digital drawings may only be submitted for residential buildings only and will not be accepted electronically unless requested by the department.

Exception: Hand drafted construction drawings may be accepted for detached structures when in the opinion of the plan reviewer enough information has been provided.

Exception: Where special conditions exist, the building official is authorized to require additional details or other documents to be prepared by a registered design professional. The building official is authorized to waive the submission of construction documents and other data not required by a registered design professional if it is found that the nature of work applied is such that the reviewing of the construction documents is not necessary to obtain compliance with this code.

5) ***Section (IRC) R109.1.6 Final Inspections: shall also include R109.1.6.2*** **(Original Text)** Final inspection shall be made after the permitted work is complete and prior to occupancy.

Section (IRC) R109.1.6 **(Modified Text)** ***Final Inspections:*** Final Inspections shall also include: Grading and sodding or grading, seeding and straw, a minimum distance of fifty feet around dwellings shall be graded and sodded or graded, seeded and straw. Dwellings with property lines nearer than fifty feet shall cease the grading and sodding, seeding and straw at the property line. Grading shall be so designed to remove storm water away from the foundation without discharging on neighboring property.

Grading and sodding or grading, seeding and straw shall be completed and inspected prior to the Certificate of Occupancy being released. Issuing a Temporary Certificate of Occupancy may be considered prior to grading and sodding or grading, seeding and straw whenever in the opinion of the building inspector inclement weather would make this unreasonable. In the case of inclement weather a letter of request for a Temporary Certificate of Occupancy must be submitted between the owner and contractor giving a timeline and who is responsible for completing the work. All trip hazards and other life safety concerns must be mitigated before a Temporary Certificate of Occupancy can be issued.

6) ***Section (IRC) R309.5 Fire Sprinklers*** **(Original Text)** Private garages shall be protected by fire sprinklers where the garage wall has been designed based on Table R302.1(2),Note: Sprinklers in garages shall be connected to an automatic sprinkler system that complies with P2904. Garage sprinklers shall be residential sprinklers or quick-response sprinklers, designed to provide a density of 0.05 GPM/ft. Garage doors shall not be considered obstructions with respect to sprinkler placement.

Section (IRC) R309.5 Fire Sprinklers **(Modified Text)** is deleted in its entirety.

7) ***Section (IRC) R313.2 Automatic Fire Sprinkler Systems*** **(Original Text)** One and Two-family dwellings automatic sprinkler systems: An automatic sprinkler system shall be installed in one-and two-family dwellings.

Exception: An automatic sprinkler system shall not be required for additions or alterations to existing buildings that are not already provided with a sprinkler system.

Section (IRC) R313.2 **(Modified Text)** is deleted in its entirety.

8) ***Section (IRC) P2904 Dwelling Unit Fire Sprinkler System*** **(Original Text)** Section P2904.1 General. The design and installation of residential fire sprinkler systems shall be in accordance with **NFPA 13D** or **Section P2904**, which shall be considered to be equivalent to **NFPA 13D**. Partial residential sprinkler systems shall be permitted to be installed only in buildings not required to be equipped with a residential sprinkler system. **Section P2904** shall apply to stand-alone and multipurpose wet-pipe sprinkler systems that do not include the use of antifreeze. A multipurpose fire sprinkler system shall provide domestic water to both fire sprinklers and plumbing fixtures. A stand-alone sprinkler system shall be separate and independent from the water distribution system. A backflow preventer shall not be required to separate a sprinkler system from the water distribution system, provided that the sprinkler system complies with all of the following:

1. The system complies with the **NFPA 13D** or **Section P2904.**
2. The piping material complies with **Section P2906.**
3. The system does not contain antifreeze.

4. The system does not have a fire department connection.

Section (IRC) P2904 Dwelling Unit Fire Sprinkler System Change (Modified Text) Section P2904 is deleted.

9) *Section (IRC) R313 Automatic Fire Sprinkler Systems* (Original Text) Section R313.1 *Townhouse automatic sprinkler system:* An automatic sprinkler system shall be installed in townhouses.

Exception: An automatic sprinkler system shall not be required where additions or alterations are made to existing townhouses that do not have an automatic sprinkler system installed.

Section (IRC) R313.1 (Modified Text) Section R313.1 is deleted

10) *Section (IRC) R309.3 Flood hazard areas* and *Section R322 Flood- Resistant construction* (Original Text) *Section R309.3* Garages and carports located in the flood hazard areas as established by Table R301.2 shall be constructed in accordance with Section R322

Section (IRC) R322 Flood-Resistant Construction (extensive).

Section (IRC) R309.3 Flood hazard areas and *Section R322 Flood- Resistant construction* (Modified Text) No change

Note! Chapter 10 of the Sumner County Zoning Resolution shall also govern development in a Special Flood Hazard Area.

11) *Section (IRC) R405.2.3 Drainage system* (Original Text) In other than Group I soils, a sump shall be provided to drain the porous layer and footings. The sump shall be not less than 24 inches in diameter or 20 inches square, shall extend not less than 24 inches below the bottom of the *basement* floor and shall be capable of positive gravity or mechanical drainage to remove any accumulated water. The drainage system shall discharge into an *approved* sewer system or to daylight.

Section (IRC) R405.2.3 Drainage system (Modified Text) is amended by adding: A crawlspace sump system also known as a positive drain shall be located at the lower grade of the crawlspace area. Discharge piping shall be a minimum 2" inside dimension schedule 40 PVC. The discharge piping shall extend to the exterior of the building and beyond until it reaches daylight by gravity flow. If the topography of the property makes a positive flow to daylight unreasonable then a sump system may discharge into a sub-surface rock or sand pit designed using accepted engineer practices. The sub-surface rock or sand pit must be located a minimum of 10 feet from the exterior foundation of the building. The installation of a crawl space sump pump shall be recognized as an acceptable alternative.

12) *Section (IRC) R507 Exterior Decks Section R507.10.4 Exterior Guards* (Original Text) Other *guards* shall be in accordance with either manufacturer's instructions or accepted engineering principles.

Section (IRC) R507.10.4 Exterior Guards (Modified Text) is amended by adding: Cable guards shall have individual turnbuckles or other tensioning mechanism for each cable guard and shall be a maximum of 3" apart. Cable guards shall be stainless steel or vinyl coated. Cable guards shall be able to withstand 200 pound vertical load and shall be installed in accordance with manufacturer's instructions or accepted engineering practices.

13) *Delete (IRC) Part VIII Electrical.*

14) *Section (IRC) R602.7.5 Supports for headers* (Original Text) Headers shall be supported on each end with one or more jack studs or with *approved* framing anchors in accordance with **Table R602.7 (1)** or **R602.7 (2)**. The full height stud adjacent to each end of the header shall be end nailed to each end of the header with four-16d nails (3.5 inches x 0.135 inches) in accordance with **Table R602.3(1)**. The minimum number of full-height studs at each end of a header shall be in accordance with **Table R602.7.5**.

Addendum to Section (IRC) R602.7.5 Supports for headers (Modified Text) ***is amended by adding:*** Portal openings for garages shall be framed with a minimum of two cripple/jack studs and a minimum of two full height studs on both sides of the portal opening supporting headers. Each portal opening shall have its own dedicated header. Hinged doors that are located on a garage portal opening wall shall also have its own dedicated header. All full height (king studs) shall run from bottom plate to top plate with all components attached according to the fastening tables located in chapter six of the International Residential Code.

> Walls having garage portal openings shall be constructed using minimum 2"X 6" nominal lumber on maximum 16" centers. Exterior walls consisting of garage portal openings and not supporting an additional story or bonus room above may be constructed of minimal 2"x 4" nominal lumber on maximum 16" centers but not exceeding 9 feet in height.

15) *Section (IRC) R905.2.8.5 Drip edge:* (Original Text) A drip edge shall be provided at eaves and rake edges of shingle roofs. Adjacent segments of drip edge shall be overlapped not less than 2 inches (51mm). Drip edges shall extend not less than ¼ inch (6.4 mm) below the roof sheathing and extend up back onto the *roof deck* not less than 2 inches (51 mm). Drip edges shall be mechanically fastened to the *roof deck* at not more than 12 inches (305 mm) o.c. with fasteners as specified in **Section (IRC) R905.2.5**. *Underlayment* shall be installed over the drip edge along eaves and under the drip edge along rake edges.
Addendum to Section (IRC) 905.2.8.5 Drip edge (Modified Text): *Exception:* Aluminum and other fascia materials having a built in drip edge shall ***not*** be recognized as an accepted alternative to the drip edge requirements in **Section R905.2.8.5**

Exception: Aluminum and other fascia materials having a built in drip edge shall be recognized as an acceptable alternative to drip edge requirements in R905.2.8.5 when tested and approved by an Independent Testing Agency. In the absence of a recognized and accepted test method, the building official shall approve the testing procedures. Test shall be performed by an approved agency at no cost to the jurisdiction.

16) ***Section (IRC) 905.1.2 Ice Barriers:*** shall be referred to as ***905.1.2.1*** **(Original Text)** In areas where there has been a history of ice forming along the eaves causing a backup of water as designated in **Table R301.2**, an ice barrier shall be installed for asphalt shingles, metal roof shingles, mineral-surfaced roll roofing, slate and slate-type shingles, wood shingles and wood shakes. The ice barrier shall consist of not fewer than two layers of underlayment cemented together, or a self-adhering polymer-modified bitumen sheet shall be used in place of normal *underlayment* and extend from the lowest edges of all roof surfaces to a point not less than 24 inches inside the exterior wall line of the building. On roofs with slope equal to or greater than 8 units vertical in 12 units horizontal (67 percent slope), the ice barrier shall also be applied not less than 36 inches (914mm) measured along the roof slope from the eave edge of the building.

Exception: Detached *accessary structures* not containing conditioned floor area.

Addendum to Section 905.1.2 Ice Barriers **(Modified Text)**: There is empirical evidence of ice forming along eaves causing water damage in Sumner County, therefore ice barriers are required as prescribed in **Section R905.1.2.**

*** Due to the physical hazards Sumner County Inspectors do not specifically perform shingle, shingle underlayment, ice barrier or drip edge inspections. It shall be the sole responsibility of the permit holder and or contractor to verify that such roofing components have been installed according to code and the manufacturer's installation instructions.**

17) ***Section (IRC) P2603.5 Freezing*** **(Original Text)** In localities having a winter design temperature of 32°F (0°C) or lower as shown in Table R301.2 of this code, a water, soil or waste pipe shall not be installed outside of a building, in exterior walls, in attics or crawl spaces, or in any other place subjected to freezing temperature unless adequate provision is made to protect it from freezing by insulation or heat or both. Water service pipe shall be installed not less than **12 inches (305 mm)** deep and not less than **6 inches (152mm)** below the frost line.

Section (IRC) P2603.5 Freezing **(Modified Text)** is amended by modifying the language to read: In localities having a winter design temperature of 32°F (0°) or lower as shown in Table R301.2 of this code, a water, soil or waste pipe shall not be installed outside of a building, in exterior walls, in *attics* or crawl spaces, or in any other place subjected to freezing temperature unless adequate provision is made to protect it from freezing by insulation or heat or both. Water

service pipe shall be installed not less than ***(18) inches (305mm) deep*** and not less than 6 **inches** below the frost line.

18) ***Section(IRC) P2801.6 Required Pan*** **(Original Text)** Where a storage tank-type water heater or a hot water storage tank is installed in a location where water leakage from the tank will cause damage, the tank shall be installed in a pan constructed of one of the following:

1. Galvanized steel or aluminum of not less than 0.0236 inch (0.6010 mm) in thickness.
2. Plastic not less than 0.036 inch (0.9mm) in thickness.
3. Other *approved* materials.

A plastic pan beneath a gas-fired water heater shall be constructed of material having a flame spread index of 25 or less and a *smoke-developed index* of 450 or less when tested in accordance with **ASTM E84** or **UL 723**

Section (IRC) P2801.6 Required Pan **(Modified Text)** is amended by adding: No pan is required where water heaters are installed in a crawl space or in a basement without living space. Water heater relief valve piping shall terminate 6 to 10 inches above the floor or crawl space.

19) ***Section P2903.4 Thermal Expansion Control*** **(Original Text)** A means for controlling increased pressure caused by thermal expansion shall be installed where required in accordance with Sections P2903.4.1 and P2903.4.2.

Section P2903.4 Thermal Expansion Control **(Modified Text)** is amended by modifying the language to read: Tanks commonly referred to as Hot Water Expansion Tanks shall be installed on all hot water tanks.

Exception: Thermal expansion tanks are not required on tank-less hot water heaters.

Thermal Expansion Control tanks shall be installed according to the Manufacturers Installation Instructions.

20) ***Section(IRC) P2903.5 Water hammer*** **(Original Text)** The flow velocity of the water distribution system shall be controlled to reduce the possibility of water hammer. A water-hammer arrestor shall be installed where quick-closing valves are utilized. Water-hammer arrestors shall be installed in accordance with the manufacturer's instructions. Water-hammer arrestors shall conform to ASSE 1010."

Section (IRC) P2903.5 Water hammer **(Modified Text)** shall be amended by adding: Water hammer arrestors shall be installed at all washing machines, dishwashers and stand-alone ice makers. Water-hammer arrestors shall conform to ASSE-1010.

21) ***Section (IRC) P2903.9.1 Service valve*** **(Original Text)** Each *dwelling unit* shall be provided with an accessible main shutoff valve near the entrance of the water service. The valve shall be of a full-open type having nominal restriction to flow, with provision for drainage such as a bleed orifice or installation of a separate drain valve. Additionally, the water service shall be

valved at the curb or *lot line* in accordance with local requirements.
Section (IRC) P2903.9.1 Service valve **(Modified Text)** is amended by modifying the language to read: A main shut-off valve on the water service line shall be installed for each dwelling unit within a building and shall be accessible in the living portion of the dwelling unit or attached garage. The valve shall be of the full opened type having nominal restrictions to flow, with provisions for drainage such as a bleed orifice or installation of a separate drain valve. Additionally, the water service shall be valved at the curb or property line in accordance with local requirements.

22) ***Section (IRC) G2417.1.1 (406) Inspection, Testing and Purging*** **(Original Text)** Inspection shall consist of visual examination, during or after manufacture, fabrication, assembly or *pressure tests.*

Section (IRC) G2417.1.1 (406) Inspections **(Modified Text)** is amended by deleting it in its entirety and replacing it with: On completion of the installation, alteration, repair or replacement of gas piping, and prior to the use thereof, the building department shall be notified that the gas piping is ready for inspection.

> ***Rough fuel - gas inspection*** shall be made after the gas piping authorized by the permit has been installed and before such piping is covered up or concealed or a fixture or appliance has been attached thereto. This inspection shall include a determination that the gas piping size, material and installation meets the requirements of this chapter. It shall also include an air pressure test at which time the gas piping shall stand a pressure of not less than 30 pounds per square inch gauge (68.9 kPa gauge) and shall hold this pressure for a length of time of no less than twenty (20) minutes, with no perceptible drop pressure. The test shall be made using air pressure only. Necessary apparatus for conducting test shall be furnished by the permit holder.
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> ***Gas Meter Release Inspection:*** Gas meter release inspection shall be conducted when all fuel gas appliances are connected to the gas pipe system or plugged with a cast iron plug. All appliance venting shall be in place at the time of the meter release inspection. A shut-off valve in the off position with no appliance connected, shall not be an acceptable termination of the building gas pipe.
>
> ***Final Inspection:*** Final inspection shall be made after piping authorized by the permit has been installed and after all portions thereof which are to be covered or concealed and after all fixtures, venting, appliances, shut-off valves, and cast iron plugs have been installed.

23) ***Section(IRC) G 2417.4.1 Test pressure*** **(Original Text):** The test pressure to be used shall not be less than 1 ½ times the proposed maximum working pressure, but less than 3 psig (20kPa gauge), irrespective of design pressure. Where test pressure exceeds 125 psig (862kPa gauge), the test pressure shall not exceed a value that produces a hoop stress in the piping greater than

50 percent of the specified minimum yield strength of the pipe.
Section (IRC) G 2417.4.1 Test pressure **(Modified Text)** is amended by adding: Air pressure test shall be made after gas piping authorized by the permit has been installed and before such piping has been covered up or concealed or a fixture or appliance has been attached thereto. This inspection shall include a determination that the gas piping size, material and installation meets the requirements of this chapter. It shall also include an air pressure test at which time the gas piping shall stand a pressure of not less than 30 pounds per square inch gauge (68.9 kPa gauge) and shall hold this pressure for a length of time no less than twenty (20) minute, with no perceptible drop in pressure. The test shall be made using air pressure only. Necessary apparatus for conducting the test shall be furnished by the permit holder.

24) ***Section Energy N1102.4.1.2 (R402.4.1.1) Testing*** **(Original Text):** The *building* or *dwelling unit* shall be tested for air leakage. The maximum air leakage rate for any *building* or *dwelling unit* under any compliance path shall not exceed 5.0 air changes per hour or 0.28 cubic feet per minute (CFM) per square foot [0.0079 $m^3/(s \times m^2)$] of dwelling unit enclosure area. Testing shall be conducted in accordance with **ANSI/RESNET/ICC 380, ASTM E779** or **ASTM E1827** and reported at a pressure of 0.2 inch w.g. (50 Pascals). Where required by the *code official*, testing shall be conducted by an *approved* third party. A written report of the results of the test shall be signed by the party conducting the test and provided to the *code official*. Testing shall be performed at any time after creation of all penetrations of the *building thermal envelope* have been sealed.

Section (IRC) Energy N1102.4.1.2 (R402.4.1.2) Testing **(Modified Text)** ***2021 Section N1102.4.1.2 (R404.4.1.2) Testing the Building Thermal Envelope (Mandatory) is replaced*** with ***2009 Section N1102.4.2.2 (R402.4.2.2) Visual inspection optional.***

25) ***Section (IRC) Energy N1103.3.5 Duct testing*** **(Original Text):** Ducts shall be pressure tested in accordance with **ANSI/ RESNET/ICC 380** or **ASTM E1554** to determine air leakage by one of the following methods:

1. **Rough- in test:** Total leakage shall be measured with a pressure differential of 0.1 inch w.g. (25 Pa) across the system, including the manufacturer's air handler enclosure if installed at the time of the test. Registers shall be taped or otherwise sealed during test.
2. **Post-construction test:** Total leakage shall be measured with a pressure differential of 0.1 inch w.g. (25 Pa) across the entire system, including the manufacture's air handler enclosure. Registers shall be taped or otherwise sealed during test.
3. **Exception:** A duct air-leakage test shall not be required for ducts serving heating, cooling or ventilation systems that are not integrated with ducts serving heating or cooling systems.

Section Energy N1103.3.5 Duct Testing: (Modified Text): *2021 Section N1103.3.5 (R403.3.5) Duct leakage test (Mandatory) and Section N1103.3.6 (R403.3.6) Duct leakage test are optional.*

26) *Energy Table N1102.1.2 (R402.1.2) and Table N1102.1.3 (R403.1.3)*

Remove: 2021 Maximum Assembly U-Factors and Fenestration Requirement Table N1102.1.2 (R402.1.2) and replace with 2009 Equivalent U-Factor Table N1102.1.2

Remove: 2021 Insulation Minimum R-Values and Fenestration Requirements by Component Table N1102.1.3) and replace with 2009 Insulation and Fenestration Requirements by Component Table N1102.1

27) ***Part VIII Electrical Sections 34-43*** is deleted in its entirety and replacing it with the following language: Plan reviews, permitting, inspections of any and all electrical components, equipment and systems shall be under the prevue of the State Fire Marshal's Office.

#6. (IEBC) 2021 INTERNATIONAL EXISTING BUILDING CODE: Adopt in its entirety with no amendments, deletions or appendixes.

#7. (IECC) 2021 INTERNATIONAL ENERGY CONSERVATION CODE: Adopt in its entirety but excluding Chapter 4/(RE)

#8. (ISPSC) 2021 INTERNATIONAL SWIMMING POOL AND SPA CODE: Adopt in its entirety with the exception of:

The term ***Spa*** is to be deleted in ***Section 105. PERMITS***

The term ***Spa*** is to be deleted in ***Section 110 INSPECTIONS***

Section 307.2.2 Materials and structural design: is amended by adding 307.2.2.1.1 Minimum distance from adjacent building foundations. In-ground or semi in-ground pools shall be a minimum distance of 10 feet from any permanent building foundation or any attached elevated deck exceeding 36 inches above grade.

Exception: In-ground or semi in-ground pools shall be permitted to be within 10 feet from a structural foundation or any attached elevated deck exceeding 36 inches above grade if approved by a Tennessee Licensed Engineer. The engineer report shall be part of the pool permit application documents.

#9. ICC/MBI 1200-2021 Standard Off-Site Construction Section 101.1 Purpose: The purpose of this standard is to provide minimum requirements to safeguard public health, safety and general welfare and to address societal and industry challenges for the inspections and regulatory compliance of off-site constructed buildings intended for habitation. This standard is intended for adoptions by government agencies and organizations for use in conjunction with

STATE OF TENNESSEE, SUMNER COUNTY
I, the undersigned County Clerk, do hereby certify that this is a true and correct copy of the original instrument filed in this office. Given under my hand and the seal of office
This 1st day of Sept. 2023
Carolyn Tennpleton, Clerk by
SUMNER COUNTY CLERK
Jennifer Mitchell, DC

model codes to achieve uniformity in the inspection and regulatory compliance of off-site construction.

Adopt: ICC/MBI 1200-2021 Standard for Off-site Construction: Planning, Design, Fabrication and Assembly in its entirety.

#10. ICC/MBI 1205-2021 Standard Off-Site Construction *Section 101.1 Purpose:* The purpose of this standard is to provide minimum requirements to safeguard public health, safety and general welfare and to address societal and industry challenges for the inspections and regulatory compliance of off-site constructed buildings intended for habitation. This standard is intended for adoption by government agencies and organizations for use in conjunction with model codes to achieve uniformity in the inspection and regulatory compliance of off-site construction.

Adopt: ICC/MBI 1205-2021 Standard for Off-site Construction: Inspection and Regulatory Compliance in its entirety.

#11. *Section 10101 Scope:* This standard establishes the minimum requirements for log structures to safeguard the public health, safety and welfare through structural, thermal and settling provisions. This standard is intended for adoption by local governmental agencies and organizations adopting model codes to achieve uniformity in technical design criteria in building codes and other regulations.

Adopt: ICC 400-2022 Standard on the Design and Construction of Log Structures in its entirety.

DEFINITION:
OFF-SITE CONSTRUCTION: A modular building, modular component or panelized system intending for occupancy, that is designed and constructed in compliance with this standard and is wholly or in substantial part fabricated or assembled in manufacturing plants for installation; or assembly and installation on a separate building site and has been manufactured in such a manner that all parts or processes cannot be inspected at the installation site without disassembly, damage to, or destruction thereof.

NOW, THEREFORE, BE IT RESOLVED by the Sumner County Board of County Commissioners meeting in regular session on this the 20th day of March 2023, that this body formally adopts building codes and incorporates them by reference.

CERTIFICATION OF ACTION

Carolyn Tennpleton
COUNTY CLERK

COUNTY EXECUTIVE

3/22/2023
DATE

UNANIMOUS VOICE VOTE

Ayes_____ Nays_____ Abs_____

[14]

APPROVED: ☑ REJECTED: ☐