

# Modifications to the 2018 International Residential Code

## Sections

1. **International Residential Code Adopted**
2. **Local Modifications**

### Section 1

**International Residential Code for One- and Two- Family Dwellings, 2018 Edition Adopted.** Pursuant to authority granted by Contract No. TV-60000A between the Tellico Reservoir Development Agency and the Tennessee Valley Authority for the purpose of regulating the construction, alteration, repair, use and occupancy, location, maintenance, removal, and demolition of every building or structure or any appurtenance connected or attached to any building or structure, the International Residential Code for One- and Two-Family Dwellings, 2018 Edition, Chapters 1-33, 44 and Appendices E, H, and J thereto, with the modifications thereto hereinafter set forth, as prepared and adopted by the International Code Council, is hereby adopted and incorporated by reference as a part of this Code except as otherwise specifically stated in the Chapter, and is hereinafter referred to as the “Residential Code.”

### Section 2

**Local Modifications.** The following sections and appendices of the International Residential Code for One- and Two- Family Dwellings, 2018 Edition, are hereby amended by the Tellico Reservoir Development Agency, as hereinafter provided:

(1) Chapter 1, Scope and Administration: Section R101.1 Title, is hereby amended locally by the Tellico Reservoir Development Agency by inserting "Tellico Reservoir Development Agency" as the name of the jurisdiction.

(2) Chapter 1, Scope and Administration: Section R102.5 Appendices, is hereby amended locally by the Tellico Reservoir Development Agency by inserting at the end of the section the following:

“The following Appendices are specifically included in the adoption. All others are excluded.

- Appendix E Manufactured Housing Used As Dwellings
- Appendix H Patio Covers
- Appendix J Existing Buildings and Structures

(3) Chapter 1, Scope and Administration: Section R103.1 Creation of enforcement agency, is hereby amended locally by the Tellico Reservoir Development Agency by deleting Section R103.1 in its entirety and replaced with the following:

“Section R103.1 Building Official. The provisions of this code shall be enforced by the Building Official.”

(4) Chapter 1, Scope and Administration: Section R104.10.1 Flood hazard areas. is hereby amended locally by the Tellico Reservoir Development Agency by deleting Section R104.10.1 in its entirety.

(5) Chapter 1, Scope and Administration: Section R105.2 Work exempt from permit is hereby amended locally by the Tellico Reservoir Development Agency by deleting number 1 in its entirety and replaced with:

"1. One-story detached accessory structures used as tool and storage sheds, playhouses and similar uses, provided the floor area does not exceed 200 square feet if the structure has a permanent foundation or does not exceed 400 square feet if the structure is a pre-manufactured building without a permanent foundation."

(6) Chapter 1, Scope and Administration: Section R105.4 Validity of permit. is hereby amended locally by the Tellico Reservoir Development Agency by inserting the following at the beginning:

“A permit issued shall be construed to be a license to proceed with the work and shall not be construed as authority to violate, cancel, alter, or set aside any of the provisions of this code, nor shall such issuance of a permit prevent the Building Official from thereafter requiring a correction of errors in plans of in construction, or of violation of this code. The building official is authorized to suspend or revoke a permit issued under the provisions of this code wherever the permit is issued in error or on the basis on incorrect, inaccurate or incomplete information, or in violation of any ordinance or regulation or any of the provisions of this code”

(7) Chapter 1, Scope and Administration: Section R105.5. Expiration. is hereby amended locally by the Tellico Reservoir Development Agency by deleting in its entirety and the following substituted in lieu thereof:

“R105.5 Expiration. Every permit issued shall become invalid unless the work on the site authorized by such permit is commenced within 60 days after its issuance, or if the work authorized on the site by such permit is suspended or abandoned for a period of 30 days after the time the work is commenced. Work authorized by that permit shall be completed within the time frame set forth in the following:

For Building Permits with Construction Valuation in the amount of:

\$0.01 - \$250,000 - twelve (12) months;

\$250,000.01 - \$500,000.00 - eighteen (18) months;

\$500,000.01 - \$1,000,000.00 - twenty four (24) months;

\$1,000,000.01 and up - thirty-six (36) months

Extensions of time may be granted by the Building Official; however, the extension must be requested in writing and justifiable cause demonstrated. The building official is authorized to grant, in writing, one or more extensions of time. Each extension shall be for a period of time not to exceed 180 days. A fee of fifty percent (50%) of the permit fee of the original permit shall be charged to cover administrative expenses for each extension granted."

(8) Chapter 1, Scope and Administration: Section R105.6 Suspension or revocation, is hereby amended locally by the Tellico Reservoir Development Agency by inserting at the end the following:

"After a permit has become void, if the owner wishes to commence construction to complete the structure for which the original permit was issued, the Owner shall reapply for a new building permit for the completion of the construction. When a new building permit is issued, the permit fee for the completion of the construction shall be equal to the permit fee that was paid when the original permit was issued."

(9) Chapter 1, Scope and Administration: Section R105.7 Placement of Permit, is hereby amended locally by the Tellico Reservoir Development Agency by deleting in its entirety and the following substituted in lieu thereof:

"R105.7 Placement of Permit. The building permit or copy shall be kept on the site of the work or be made available to inspectors upon request until the completion of the project."

(10) Chapter 1, Scope and Administration: Section R109.3 Inspection request, is hereby amended locally by the Tellico Reservoir Development Agency by inserting the following at the end:

"No inspections shall be performed on any site or portion thereof where there is an unsafe condition or a violation of the occupational safety and health standards for the construction industry promulgated by the Occupational Safety and Health Administration (OSHA)."

(11) Chapter 1, Scope and Administration: Section R110.1 Use and occupancy, is hereby amended locally by the Tellico Reservoir Development Agency by inserting the following at the end of the paragraph and before the exception:

"Said certificate shall not be issued until the following have been tested and approved by the appropriate agency or department:

- Fire protection systems
- Mechanical systems
- Utility systems
- Site work beyond the confines of the building

- General building construction requirements”

(12) Chapter 1, Scope and Administration: Section R112 Board of Appeals, is hereby amended locally by the Tellico Reservoir Development Agency by deleting in its entirety and the following substituted in lieu thereof:

“Section R112 Construction Board of Adjustments and Appeals  
R112.1 Appeals relative to the application of this code shall be as established and regulated by the International Building Code as locally adopted and amended by the Tellico Reservoir Development Agency.”

(9) Chapter 1, Scope and Administration: Section 113.4, Violation and Penalties is hereby locally amended by the Tellico Reservoir Development Agency by deleting the section in its entirety and the following substituted in lieu thereof:

“Any person, firm, corporation, tenant, owner or agent who shall violate a provision of this code, or fail to comply therewith or with any of the requirements thereof, or who shall erect, construct, alter, demolish, or move any structure, or has erected, constructed, altered, repaired, moved, or demolished a building or structure in violation of a detailed statement or drawing submitted and permitted thereunder, or directive of the building official, or of a permit or certificate issued under the provisions of this code, shall be subject to penalties as prescribed by law.”

(13) Chapter 3, Building Planning: Section R301.2 Climatic and geographic design criteria, is hereby amended locally by the Tellico Reservoir Development Agency by inserting the following information in Table R301.2 (1):

“Table R301.2 (1) Climatic and Geographic Design Criteria.

Insert “10 PSF” in the table for Ground Snow Load.

Insert “115” in the table for Wind Speed.

Insert “No” in the table for Topographic Effects.

Insert “No” in the table for Special Wind Region.

Insert “No” in the table for Windborne Debris Zone.

Insert “C” in the table for Seismic Design Category.

Insert “Severe” in the table for Weathering.

Insert “12 inches” in the table for Frost Line Depth.

Insert “Moderate to heavy” in the table for Termite.

Insert “19 degrees Fahrenheit” in the table for Winter Design Temp.

Insert “No” in the table for Ice Barrier Underlayment Required.

Insert in the table for Flood Hazards:

For Property in Loudon County, insert in the table for Flood Hazards (a) 08/15/1978 is the date for Loudon County’s entry into the National Flood Insurance Program; (b)

05/16/2007 is the date of the Flood Insurance Study; (c) the Community Number 470107 and the effective FIRM panels are 0094D, 0125D, 0200D, 0225D

For Property in Monroe County, insert in the table for Flood Hazards (a) 09/04/1991 is the date for Monroe County's entry into the National Flood Insurance Program; (b) 02/03/2010 is the date of the Flood Insurance Study (c) the Community Number 470233 and the effective FIRM panels are 0070D, 0160D, 0180D, 0185D, 0190D

Insert "210" in the table for Air Freezing Index.

Insert "59.4" in the table for Mean Annual Temp.

Insert "980 feet" in the table for Elevation.

Insert "35<sup>0</sup> North" in the table for the Latitude.

Insert "19<sup>0</sup> F" in the table for Winter Heating.

Insert "90<sup>0</sup> in the table for Summer Cooling.

Insert "0.97" in the table for Altitude Correction Factor.

Insert "70<sup>0</sup> F (Heat)" in the table for Indoor Design Temperature.

Insert "75<sup>0</sup> F – 70<sup>0</sup> F" in the table for Design Temperature Cooling.

Insert "51<sup>0</sup> F in the table for Heating Temperature Difference.

Insert "15<sup>0</sup> – 20<sup>0</sup> F" in the table for Cooling Temperature Difference.

Insert "15 mph" in the table for Wind Velocity Heating.

Insert "7.5 mph" in the table for Wind Velocity Cooling.

Insert "74<sup>0</sup> F" in the table for Coincident Wet Bulb.

Insert "Medium" in the table for Daily Range.

Insert "70<sup>0</sup> db no visible condensation" in the table for Winter Humidity.

Insert "50% @ 75<sup>0</sup> db" in the table for Summer Humidity.

(14) Chapter 3, Building Planning: Section R301.2.2 Seismic provisions. is hereby amended locally by the Tellico Reservoir Development Agency by deleting item 1, renumbering item 2 to item 1 and inserting "and townhouses" just after the word dwellings and at the end of the section inserting "All references to "townhouses in seismic design category C" in Chapters 6, 7 and 28 shall not apply by the Tellico Reservoir Development Agency."

(15) Chapter 3, Building Planning: Section R301.2.2.1 Determination of seismic design category. is hereby amended locally by the Tellico Reservoir Development Agency by deleting the entire sentence and replacing with "Buildings shall be assigned a seismic design category in accordance with Table R301.2.2.1.1. For the purpose of determining the seismic design category for this code by the Tellico Reservoir Development Agency the value for SDS in Table R301.2.2.1.1 shall be 0.414g."

(16) Chapter 3, Building Planning: Section R302.5.1 Opening protection. is hereby amended locally by the Tellico Reservoir Development Agency by deleting the words " , equipped with a self-closing device" and insert a period after the word "doors".

(17) Chapter 3, Building Planning: Section R302.13 Fire protection of floors. is hereby amended locally by the Tellico Reservoir Development Agency by deleting the words “or electric-powered” in exception 2. Additionally, the following shall be inserted at the end of exception 2:

“For the purpose of this section a crawl space or basement shall be considered intended for storage where any access opening for the space exceeds 36 inches by 48 inches in dimension.”

(18) Chapter 3, Building Planning: Section R303.4 Mechanical ventilation. is hereby amended locally by the Tellico Reservoir Development Agency by adding the word “(Optional).” in the section title after the word ventilation and by deleting the words “the dwelling unit shall be provided with whole-house mechanical ventilation” and replacing with the words “dwelling units provided with whole-house mechanical ventilation shall be”

(19) Chapter 3, Building Planning: Section R312.1.1 Where required. is hereby amended locally by the Tellico Reservoir Development Agency by deleting the first sentence and replacing it with the following sentence:

“Guards shall be provided along open-sided walking surfaces or ground surfaces, mezzanines, retaining walls, stairways, ramps, landings and any other locations that are located more than 30 inches above the floor or grade below at any point within 36 inches horizontally to the edge of the open side.”

(20) Chapter 3, Building Planning: Section R312.2 Window fall protection. is hereby amended locally by the Tellico Reservoir Development Agency by deleting section R312.2 and its subsections in their entirety.

(21) Chapter 3, Building Planning: Section R313.1 Townhouse automatic fire sprinkler systems. is hereby amended locally by the Tellico Reservoir Development Agency by deleting the entire section and the exception and replacing with “Automatic residential fire sprinkler systems shall not be required to be install in townhouses by the Tellico Reservoir Development Agency. Installation of automatic fire extinguishing systems in townhouses shall be optional. Nothing in this code shall be construed as requiring automatic fire extinguishing systems in townhouses. See Tennessee Code Annotated, Section 68-120-101(a) (8).”

(22) Chapter 3, Building Planning: Section R313.1.1 Design and installation. is hereby amended locally by the Tellico Reservoir Development Agency by inserting “Where installed” at the beginning before the word “automatic”.

(23) Chapter 3, Building Planning: Section R313.2 One- and two-family dwellings automatic fire sprinkler systems. is hereby amended locally by the Tellico Reservoir Development Agency by deleting the entire section and the exception and replacing with

“Automatic residential fire sprinkler systems shall not be required to be install in one- and two-family dwellings by the Tellico Reservoir Development Agency. Installation of automatic fire extinguishing systems in townhouses shall be optional. Nothing in this code shall be construed as requiring automatic fire extinguishing systems in one- and two-family dwellings. See Tennessee Code Annotated, Section 68-120-101(a) (8).”

(24) Chapter 3, Building Planning: Section R313.2.1 Design and installation. is hereby amended locally by the Tellico Reservoir Development Agency by inserting “Where installed” at the beginning before the word “automatic”.

(25) Chapter 3, Building Planning: Section R322.1.7 Protection of water supply and sanitary sewage. is hereby amended locally by the Tellico Reservoir Development Agency by deleting “and Chapter 3 of the International Private Sewage Disposal Code” and inserting “, the requirements of the water and sewer service utility providers.

(26) Chapter 4, Foundations: Figure R403.1 (1) Concrete and Masonry Foundation Details. is hereby amended locally by the Tellico Reservoir Development Agency by inserting a note in the figure as follows:

“The bottom of all foundations shall extend a minimum of 12 inches below finished grade.”

(27) Chapter 5, Floors: Section R502.11.4 Truss Design Drawings. is hereby amended locally by the Tellico Reservoir Development Agency by deleting “to the building official and approved prior to installation” and replacing it with “for review when required by the building official”.

(28) Chapter 8, Roof-ceiling Construction: Section R802.10.1 Truss design drawings. is hereby amended locally by the Tellico Reservoir Development Agency by deleting “to the building official and approved prior to installation” and replace it with “for review when required by the building official”.

(29) Chapter 11 [RE]: Energy Efficiency: Table N1102.1.2 (R402.1.2) Insulation and Fenestration Requirements by Component is hereby amended locally by the Tellico Reservoir Development Agency by:

In the row for climate zone “4 except Marine”, change Ceiling R-Value from “R49” to “R-38”, and change the Wood Frame Wall R-Value from “20 or 13 + 5” to “13”, and change the Mass Wall R-Value from “8/13” to “5/10”.

(30) Chapter 11 [RE]: Energy Efficiency: Table N1102.1.4 (R402.1.4) Equivalent U-Factors is hereby amended locally by the Tellico Reservoir Development Agency by:  
In the row for climate zone “4 except Marine”, change Ceiling U-Factor from “0.026” to “0.030”, and change the Frame Wall U-Factor from “0.060” to “0.082”, and change the Mass Wall U-Factor from “0.098” to “0.141”.

(31) Chapter 11 [RE]: Energy Efficiency: Section N1102.2.6 (R402.2.6) Steel-frame ceilings, walls, and floors. is hereby amended locally by the Tellico Reservoir Development Agency by inserting “Table N1102.1.2,” after the first occurrence of the word “of”.

(32) Chapter 11 [RE]: Energy Efficiency: Section N1102.4.1.1 (R402.4.1.1) Installation. is hereby amended locally by the Tellico Reservoir Development Agency by adding the words “and visual inspection option.” after the word “Installation” in the section title, and adding the words “, and be field verified.” after the word “construction”.

(33) Chapter 11 [RE]: Energy Efficiency: Section N1102.4.1.2 (R402.4.1.2) Testing. is hereby amended locally by the Tellico Reservoir Development Agency by adding the word “(optional)” after the word “Testing” in the section title, and inserting “Where required by the building official,” before the first sentence.

(34) Chapter 11 [RE]: Energy Efficiency: Section N1103.1.1 (R403.1.1) Programmable thermostat. is hereby amended locally by the Tellico Reservoir Development Agency by adding the word “(optional).” after the word “thermostat” in the section title, and inserting “Where required by the building official and,” before the first sentence.

(35) Chapter 11 [RE]: Energy Efficiency: Section N1103.3.3 (R403.3.3) Duct testing (Mandatory). is hereby amended locally by the Tellico Reservoir Development Agency by deleting the word “(Mandatory)” in the section title and “inserting “Where required by the building official,” at the beginning.

(36) Chapter 11 [RE]: Energy Efficiency: Section N1103.5.3 (R403.5.3) Hot water pipe insulation (Prescriptive). is hereby amended locally by the Tellico Reservoir Development Agency by deleting the word “Prescriptive” and replacing it with the word “Optional” in the section title, by inserting before the first sentence “Where required by the building official,”, and by inserting “Where required by the building official,” before the words “All remaining piping”.

(37) Chapter 11 [RE]: Energy Efficiency: Section N1103.6 (R403.6) Mechanical ventilation (Mandatory). is hereby amended locally by the Tellico Reservoir Development Agency by deleting the word “Mandatory” and replacing it with the word “Optional” in the section title, and deleting “The building shall be provided with ventilation that meets” and replacing with “Buildings provided with mechanical ventilation shall comply”.

(38) Chapter 11 [RE]: Energy Efficiency: Section N1103.10 (R403.10) Pools and permanent spa energy consumption (Mandatory). is hereby amended locally by the Tellico Reservoir Development Agency by deleting the word “Mandatory” and replacing it with the word “Optional” in the section title, and inserting “Where required by the building official,” before the first sentence.

(39) Chapter 26, General Plumbing Requirements: Section P2603.5.1 Sewer depth. is hereby amended locally by the Tellico Reservoir Development Agency by inserting in two places “twelve inches” as the number to be inserted.

(40) Chapter 30, Sanitary Drainage: Section P3002.2 Building Sewer. is hereby amended locally by the Tellico Reservoir Development Agency by deleting the section in its entirety and the following substituted in lieu thereof:

“P3002.2 Approved Material: Building Sewer Pipe and Pipe Fittings. Only the following materials will be accepted in the installation of building sewer pipes and fittings:

1. Cast iron soil pipe and fittings,
2. Brass fittings,
3. Bronze fittings,
4. Type 1 PVC pipe and fittings, minimum schedule 40 (ASTM 0-2665),
5. ASTM D - 3034 PVC pipe encapsulated with six (6) inches of bedding material (Size no. 7 or 67 crushed stone) on the top, both sides, and the bottom of the pipe,
6. Ductile iron pipe and fittings.

The following pipe and fitting materials are specifically prohibited:

1. Asbestos – cement pipe and fittings,
2. Concrete pipe and fittings,
3. Coextruded PVC pipe in outside building sanitary sewers.”

(41) Chapter 30, Sanitary Drainage: Section P3003.13 Joints between different materials. is hereby amended locally by the Tellico Reservoir Development Agency by inserting the following at the end:

“Co-mingling of materials in the building sewer shall be accomplished only through the use of neoprene adapters with stainless steel bands.:

(42) Chapter 30, Sanitary Drainage: Section P3005.1 Drainage fittings and connections. is hereby amended locally by the Tellico Reservoir Development Agency by inserting the following at the end:

"Bends greater than 45 degrees shall be prohibited in the building sewer."

(43) Chapter 30, Sanitary Drainage: Section P3005.2.6 Cleanout plugs. is hereby amended locally by the Tellico Reservoir Development Agency by deleting the entire section and replacing with:

“Cleanout plugs shall be copper alloy, plastic or other *approved* materials. Cleanout plugs for borosilicate glass piping systems shall be of borosilicate glass. Copper alloy cleanout plugs shall conform to ASTM A74 and shall be limited for use only on metallic piping systems. Cleanout plugs in building sewers shall have countersunk heads or be of the recessed slot type only."

(44) Chapter 30, Sanitary Drainage: Section P3005.2.2 Spacing. is hereby amended locally

by the Tellico Reservoir Development Agency by inserting the following at the end:

“Cleanouts in building sewers shall be installed not more than 80 feet apart measured from the upstream entrance of the cleanout.”

(45) Chapter 30, Sanitary Drainage: Section P3005.2.4 Change of direction. is hereby amended locally by the Tellico Reservoir Development Agency by deleting the words “building sewer,” in the first sentence with nothing to be inserted in its place and inserting the following at the end of the section:

“In the building sewer cleanouts shall be installed at each change of direction which is greater than 90 degrees. (Please note that this change may be accomplished with two or more fittings. Example - Two 45 degree bends and a 22 1/2 degree bend installed in succession shall require a cleanout be installed between them regardless length of separation.)”

(46) Chapter 30, Sanitary Drainage: Section P3005.2.9 Accessibility. is hereby amended locally by the Tellico Reservoir Development Agency by inserting the following at the end:

“All building sewer cleanouts shall be provided with clearance of not less than 36 inches (914 mm) for rodding.”

(47) Chapter 30, Sanitary Drainage: Section P3005.2.3 Building drain and building sewer junction. is hereby amended locally by the Tellico Reservoir Development Agency by deleting the section in its entirety and the following substituted in lieu thereof:

“Building drain and building sewer junction. The first exterior cleanout shall be located a minimum of three (3) feet but no more than five (5) feet from the exterior wall of the building without prior approval of the plumbing official. The use of two-way cleanouts is prohibited.”

(48) Chapter 30, Sanitary Drainage: Section P3005.2.5 Cleanout size. is hereby amended locally by the Tellico Reservoir Development Agency by deleting the second sentence.

(49) Chapter 30, Sanitary Drainage: Section P3005.4 Drain pipe sizing. is hereby amended locally by the Tellico Reservoir Development Agency by inserting the following at the end:  
“A common building sewer line must be a minimum of six (6) inches diameter.”

(50) Chapter 30, Sanitary Drainage: Section P3005.4.2. Building drain and sewer size and slope. is hereby amended locally by the Tellico Reservoir Development Agency by inserting the following at the end:

“Notwithstanding the above, four (4) inch nominal diameter building sewer drainage piping shall have a minimum fall of 1/4 inch per foot, and six (6) inch nominal diameter building sewer drainage piping shall have a minimum fall of 1/8 inch per foot.”

(51) Appendix E: Manufactured Housing Used As Dwellings: Section AE304.3.2.1 Investigation. is hereby amended locally by the Tellico Reservoir Development Agency by inserting “Where required by the building official,” before the first sentence.

(52) Appendix E: Manufactured Housing Used As Dwellings: Section AE304.3.2.2 Fee. is hereby amended locally by the Tellico Reservoir Development Agency by inserting “Where required by the building official,” before the first sentence.

(53) Appendix E: Manufactured Housing Used as Dwellings: Section AE305.5.1 Structural inspections for the manufactured home installation. is hereby amended locally by the Tellico Reservoir Development Agency by inserting at the end of the section:

“Exception: The inspections required by this section shall not apply to manufactured homes as exempted by the State of Tennessee but shall apply to any construction or installation of decks, porches, steps or other structures or equipment. All manufactured homes shall pass a final inspection and have a certificate of occupancy issued.”