ORDINANCE 2012 – 37

AN ORDINANCE AMENDING ORDINANCE 2011 – 49, ARTICLE II, CHAPTER 8, SECTIONS 19-21 OF THE MT. JULIET MUNICIPAL CODE TO ADOPT THE 2012 EDITION OF THE INTERNATIONAL BUILDING CODE AND RELATED CODES

WHEREAS, Tenn. Code Annotated §§'s 6-54-501 through 6-54-511 authorizes municipalities to adopt building, electrical, and fire codes by reference; and,

WHEREAS, the City of Mt. Juliet Board of Commissioners are of the opinion that it is necessary for the health, safety, and welfare of the citizens of Mt. Juliet, Tennessee, to adopt the 2012 Edition of the International Building Code, regulating the conditions and maintenance of all property, buildings, and structures; by providing the standards for the supplied utilities and facilities and other physical things and conditions essential to ensure buildings that structures are safe, sanitary and fit for occupation and use; and the condemnation of buildings and structures unfit for human occupancy and use and the demolition of such structures in the City of Mt. Juliet; and providing for issuance of permits and collections of fees.

NOW THEREFORE, BE IT ORDAINED by the City Commission of City of Mt. Juliet, Wilson County, Tennessee, as follows:

Section 1. Article II, Chapter 8, Sections 19-21 of the Mt. Juliet Municipal Code is amended by deleting the current Article II, Chapter 8, Sections 19-21 in their entirety and substituting in lieu thereof the following sections:

CHAPTER 1 INTERNATIONAL BUILDING CODE ADOPTED

8-19. Adoption of International Building Code. The International Building Code, 2012 Edition and other adopted codes, one (1) copy is on file in the Office of the Building Official in the Public Works Department of the City of Mt. Juliet, as published by the International Code Council, be and is hereby adopted as the official building code of the City of Mt. Juliet for regulating and governing the conditions and maintenance of all property buildings and structures; by providing the standard for supplied utilities and facilities and other physical things and conditions essential to ensure that structures are safe, sanitary and fit for occupation and use; and the condemnation of buildings and structures unfit for human occupancy and use and the demolitions of such structures in the City of Mt. Juliet; and providing for the issuance of permits and collection of fees; and each and all of the regulations, provisions, penalties, conditions and terms of the International Building Code are hereby adopted and made a part hereof, as if fully set out in this Ordinance, with the additions prescribed in Section 8-20.

8-20. Additional Codes Adopted. The following additional cods are hereby adopted:

2012 Edition of International Residential Code; plus Appendices A, B, C, E, F, G, H, I, J, K, M, N, O, P and Q; and amended as follows;

1. Section R101.1, Insert "City of Mt. Juliet Tennessee" in "Name of Jurisdiction",

2. Table R301.2(1) adding the following Snow Load "10#", wind speed "90", Seismic "B", weathering "severe", Frost Line Depth, 6", Termite "Moderate to Heavy", Winter design temperature "14°F", Ice Barrier Required, "No", Flood Hazards, "As shown on FEMA FIRM Panel , Dated , Air Freezing Index "1500 or less", and Mean Annual Temperature "57°F".

3. Section 303.4 Add the following language to the end of the code section to read, "...or approved air exchanger on the HVAC System which will make up the required ventilation."

4. Section R313.2 Remove and replace the words, "one-and two-family dwellings" with "all residential dwellings except, Single-Family Dwellings"

5. Section P2503.5.1 Remove the words, "Other than plastic"

2012 Edition of International Building Code; plus appendices A, B, C, E, F, G H, I, J, and K; and amended as follows:

1. Section 1013.8, change "36" inches to "24" inches

2012 Edition of International Mechanical Code plus Appendix A

2012 Edition of International Plumbing Code plus Appendices B, C, D, E, and F

2012 Edition of International Existing Building Code plus Appendix A, B and Resource A

2012 Edition of International Fuel Gas Code plus Appendices A, B, C, and D

2012 Edition of International Property Maintenance Code

2012 Edition of International Fire Code plus Appendices A, B, C, D, E, F, G, H, I, and J

2012 Edition of International Energy Conservation Code as amended as follows:

1. Replace Table C402.2 with Table 502.2(1) & (2) from the 2006 Edition of the IECC

2. Replace Table R402.1.1 with Table 402.1.1 from the 2006 Edition of the IECC

2012 Edition to Life Safety Code plus Annexes A, B, and C

2009 ICC/ANSI A117.1 and the 2010 Edition of the Americans with Disabilities Act for Accessibility Code

2012 International Swimming Pool and Spa Code

2008 ICC-500 Construction of Storm Shelters

2007 ICC-400 Construction of Log Homes

2012 ICC-300 Construction of Bleachers, Folding and Telescopic Seating, and Grandstands

2011 Edition of the National Electrical Code, (NFPA 70) is adopted by reference.

Article 90 through Chapter 9 inclusive are adopted and incorporated into this chapter as the technical section of the electrical code of the City of Mt Juliet, by reference, as fully as though copied into this chapter.

The City of Mt Juliet's adoption of the 2011 NEC is hereby amended by the following:

Amendments to the National Electrical Code.

A. Section 100.1 of the 2011 Edition of the National Electrical Code is amended by deleting the definition of Authority Having Jurisdiction and substituting the following:

Authority Having Jurisdiction - The Chief Building Official of the City of Mt Juliet.

B. Section 210.12(A) of the 2011 Edition of the National Electrical Code is amended by deleting Section 210.12(A) and substituting the following:

1. 210.12 Arc-Fault Circuit-Interrupter Protection.

(A) Dwelling Units. All 120-volt, single phase, 15- and 20-ampere branch circuits supplying outlets installed in dwelling unit bedrooms shall be protected by a listed arc-fault circuit interrupter, combination-type, installed to provide protection of the branch circuit.

Informational Note No. 1: For information on types of arc-fault circuit interrupters, see UL 1699-1999, *Standard for Arc-Fault Circuit Interrupters.*

Informational Note No. 2: See 11.6.3(5) of *NFPA 72*-2010, *National Fire Alarm and Signaling Code*, for information related to secondary power supply requirements for smoke alarms installed in dwelling units.

Informational Note No. 3: See 760.41(B) and 760.121(B) for power-supply requirements for fire alarm systems.

Exception No. 1: If RMC, IMC, EMT, Type MC, or steel armored Type AC cables meeting the requirements of 250.118 and metal outlet and junction boxes are installed for the portion of the branch circuit between the branch circuit overcurrent device and the first outlet, it shall be permitted to install an outlet branch-circuit type AFCI at the first outlet to provide protection for the remaining portion of the branch circuit.

Exception No. 2: Where a listed metal or nonmetallic conduit or tubing is encased in not less than 50 mm (2 in.) of concrete for the portion of the branch circuit between the branch-circuit overcurrent device and the first outlet, it shall be permitted to install an outlet branch-circuit type AFCI at the first outlet to provide protection for the remaining portion of the branch circuit.

Exception No. 3: Where an individual branch circuit to a fire alarm system installed in accordance with 760.41(B) or 760.121(B) is installed in RMC, IMC, EMT, or steel sheathed cable, Type AC or Type MC, meeting the requirements of 250.118, with metal outlet and junction boxes, AFCI protection shall be permitted to be omitted.

8-21. Penalty. It shall be illegal for any person to violate any provision of a code adopted by the City of Mt. Juliet. Violations shall be punished by a fine not to exceed Fifty Dollars ($50.00). Each day that a violation continues after due notice has been served shall be deemed a separate offense.

BE IT FURTHER ORDAINED

In case of conflict between this ordinance or any part hereof, and the whole or part of any existing ordinance of the City, the most restrictive code provision will apply, If any section, clause, provision or portion of this ordinance is held to be invalid or unconstitutional by any court of competent jurisdiction, such holding shall not affect any other section, clause, provision or portion of this ordinance.

That nothing in this ordinance or in the International Building Codes hereby adopted shall be construed to affect any suit or proceedings pending in any, court, or any rights acquired, or liability incurred, or any cause or causes of action acquired or existing, under any act or ordinance hereby repealed, not shall nay just or legal right, remedy of any character be lost, impaired or affected by this ordinance.

This ordinance shall take effect on the earliest date allowed by law.

PASSED:

Ed Hagerty, Mayor

FIRST READING: 5/14/12
SECOND READING: 6/11/12

ATTEST:
Sheila S. Luckett, CMC
City Recorder

APPROVED AS TO FORM:
Jason Holleman

Kenny Martin, Interim City Manager

8-20. Additional Codes Adopted. The following additional cods are hereby adopted:

2012 Edition of International Residential Code; plus Appendices A, B, C, E, F, G, H, I, J, K, M, N, O, P and Q; and amended as follows;

1. Section R101.1, Insert "City of Mt. Juliet Tennessee" in "Name of Jurisdiction",

R101.1 Title.
These provisions shall be known as the Residential Code for One- and Two-family Dwellings of ~~[NAME OF JURISDICTION]~~ *City of Mt. Juliet Tennessee*, and shall be cited as such and will be referred to herein as "this code."

Table R301.2(1) adding the following Snow Load "10#", wind speed "90", Seismic "B", weathering "severe", Frost Line Depth, 6", Termite "Moderate to Heavy", Winter design temperature "14°F", Ice Barrier Required, "No", Flood Hazards, "As shown on FEMA FIRM Panel , Dated , Air Freezing Index "1500 or less", and Mean Annual Temperature "57°F".

TABLE R301.2(1)
CLIMATIC AND GEOGRAPHIC DESIGN CRITERIA

GROUND SNOW LOAD	WIND DESIGN		SEISMIC DESIGN CATEGORY[f]	SUBJECT TO DAMAGE FROM			WINTER DESIGN TEMP[e]	ICE BARRIER UNDERLAYMENT REQUIRED[h]	FLOOD HAZARDS[g]	AIR FREEZING INDEX[i]	MEAN ANNUAL TEMP[j]
	Speed[d] (mph)	Topographic effects[k]		Weathering[a]	Frost line depth[b]	Termite[c]					
10	*90*	*NA*	*B*	*SEVERE*	*6"*	*Mod to Hvy*	*14°F*	*NO*	*SEE FIRM*	*1,500 or Less*	*57°F*

3. Section 303.4 Add the following language to the end of the code section to read, "...or approved air exchanger on the HVAC System which will make up the required ventilation."

R303.4 Mechanical ventilation.
Where the air infiltration rate of a dwelling unit is less than 5 air changes per hour when tested with a blower door at a pressure of 0.2 inch w.c (50 Pa) in accordance with Section N1102.4.1.2, the dwelling unit shall be provided with whole-house mechanical ventilation in accordance with Section M1507.3 *or approved air exchanger on the HVAC System which will make up the required ventilation.*

4. Section R313.2 Remove and replace the words, "one-and two-family dwellings" with "all residential dwellings except, Single-Family Dwellings"

R313.2 One- and two-family dwellings automatic fire systems.

An automatic residential fire sprinkler system shall be installed in ~~one- and two-family dwellings.~~ *all residential dwellings except one- and two-family dwellings.*

5. Section P2503.5.1 Remove the words, "Other than plastic"

P2503.5.1 Rough plumbing.

DWV systems shall be tested on completion of the rough piping installation by water or for piping systems ~~other than plastic~~, by air with no evidence of leakage. Either test shall be applied to the drainage system in its entirety or in sections after rough piping has been installed, as follows:

1. **Water test. Each section shall be filled with water to a point not less than 10 feet above the highest fitting connection in that section, or to the highest point in the completed system. Water shall be held in the section under test for a period of 15 minutes. The system shall prove leak free by visual inspection.**

2. **Air test. The portion under test shall be maintained at a gauge pressure of 5 pounds per square inch (psi) or 10 inches of mercury column. This pressure shall be held without introduction of additional air for a period of 15 minutes.**

2012 Edition of International Building Code; plus appendices A, B, C, E, F, G H, I, J, and K; and amended as follows:

1. Section 1013.8, change "36" inches to "24" inches

1013.8 Window sills.

In Occupancy Groups R-2 and R-3, one- and two-family and multiple-family dwellings, where the opening of the sill portion of an operable window is located more than 72 inches above the finished grade or other surface below, the lowest part of the clear opening of the window shall be at a height not less than ~~36~~ *24* inches above the finished floor surface of the room in which the window is located. Operable sections of windows shall not permit openings that allow passage of a 4-inch-diameter sphere where such openings are located within ~~36~~ *24* inches of the finished floor.

2012 Edition of International Energy Conservation Code as amended as follows:

1. Replace Table C402.2 with Table 502.2(1) & (2) from the 2006 Edition of the IECC

TABLE C402.2
OPAQUE THERMAL ENVELOPE REQUIREMENTS[a]

CLIMATE ZONE	1		2		3		4 EXCEPT MARINE		5 AND MARINE 4		6		7		8	
	All Other	Group R	All Other	Group R	All Other	Group R	All Other	Group R	All Other	Group R	All Other	Group R	All Other	Group R	All Other	Group R
Roofs																
Insulation entirely above deck	R-20ci	R-20ci	R-20ci	R-20ci	R-20ci	R-20ci	R-25ci	R-25ci	R-25ci	R-25ci	R-30ci	R-30ci	R-35ci	R-35ci	R-35ci	R-35ci
Metal buildings (with R-5 thermal blocks)[b, h]	R-19 + R-11 LS	R-19 + R-11 LS	R-19 + R11 LS	R-19 + R-11 LS	R-19 + R-11 LS	R-19 + R-11 LS	R-19 + R-11 LS	R-19 + R-11 LS	R-19 + R-11 LS	R-19 + R-11 LS	R-25 + R-11 LS	R-25 + R-11 LS	R-30 + R-11 LS	R-30 + R-11 LS	R-30 + R-11 LS	R-30 + R-11 LS
Attic and other	R-38	R-38	R-38	R-38	R-38	R-38	R-38	R-38	R-38	R-49	R-49	R-49	R-49	R-49	R-49	R-49
Walls, Above Grade																
Mass	R-5.7ci	R-5.7ci	R-5.7ci	R-7.6ci	R-7.6ci	R-9.5ci	R-9.5ci	R-11.4ci	R-11.4ci	R-13.3ci	R-13.3ci	R-15.2ci	R-15.2ci	R-15.2ci	R-25ci	R-25ci
Metal building	R-13+ R-6.5ci	R-13 + R-6.5ci	R13 + R-6.5ci	R-13 + R-13ci	R-13 + R-6.5ci	R-13 + R-13ci	R-13 + R-13ci	R-13 + R-13ci	R-13 + R-13ci	R-13 + R-13ci	R-13+ R-13ci	R-13 + R-13ci	R-13 + R-13ci	R-13+ R-19.5ci	R-13 + R-13ci	R-13+ R-19.5ci
Metal framed	R-13 + R-5ci	R-13 + R-5ci	R-13 + R-5ci	R-13 + R-7.5ci	R-13 + R-7.5ci	R-13 + R-7.5ci	R-13 + R-7.5ci	R-13 + R-7.5ci	R-13 + R-7.5ci	R-13 + R-7.5ci	R-13 + R-7.5ci	R-13 + R-7.5ci	R-13 + R-7.5ci	R-13 + R-15.5ci	R-13 + R-7.5ci	R-13+ R17.5ci
Wood framed and other	R-13 + R-3.8ci or R-20	R-13 + R-3.8ci or R-20	R-13 + R-3.8ci or R-20	R-13 + R-3.8ci or R-20	R-13 + R-3.8ci or R-20	R-13 + R-3.8ci or R-20	R-13 + R-3.8ci or R-20	R-13 + R-3.8ci or R-20	R-13 + R-3.8ci or R-20	R-13 + R-7.5ci or R-20 + R-3.8ci	R-13 + R-7.5ci or R-20 + R-3.8ci	R-13 + R-7.5ci or R-20 + R-3.8ci	R-13 + R-7.5ci or R-20 + R-3.8ci	R-13 + R-7.5ci or R-20 + R-3.8ci	R-13 + R-15.6ci or R-20 + R-10ci	R-13 + R-15.6ci or R-20 + R-10ci
Walls, Below Grade																
Below-grade wall[c]	NR	NR	NR	NR	NR	NR	R-7.5ci	R-7.5ci	R-7.5ci	R-7.5ci	R-7.5ci	R-7.5ci	R-10ci	R-10ci	R-10ci	R-12.5ci
Floors																
Mass	NR	NR	R-6.3ci	R-6.3ci	R-10ci	R-10ci	R-10ci	R-10.4ci	R-10ci	R-12.5ci	R-12.5ci	R-12.5ci	R-15ci	R-15.7ci	R-15ci	R-15.7ci
Joist/framing	NR	NR	R-30	R-30	R-30	R-30	R-30	R-30	R-30	R-30	R-30	R-30[e]	R-30[e]	R-30[e]	R-30[e]	R-30[e]
Slab-on-Grade Floors																
Unheated slabs	NR	NR	NR	NR	NR	NR	R-10 for 24" below	R-10 for 24" below	R-10 for 24" below	R-10 for 24" below	R-10 for 24" below	R-15 for 24" below	R-15 for 24" below	R-15 for 24" below	R-15 for 24" below	R-20 for 24" below
Heated slabs[d]	R-7.5 for 12" below	R-7.5 for 12" below	R-7.5 for 12" below	R-7.5 for 12" below	R-10 for 24" below	R-10 for 24" below	R-15 for 24" below	R-15 for 24" below	R-15 for 36" below	R-15 for 36" below	R-15 for 36" below	R-20 for 48" below	R-20 for 24" below	R-20 for 48" below	R-20 for 48" below	R-20 for 48" below
Opaque Doors																
Swinging	U-0.61	U-0.61	U-0.61	U-0.61	U-0.61	U-0.61	U-0.61	U-0.61	U-0.37	U-0.37	U-0.37	U-0.37	U-0.37	U-0.37	U-0.37	U-0.37
Roll-up or sliding	R-4.75	R-4.75	R-4.75	R-4.75	R-4.75	R-4.75	R-4.75	R-4.75	R-4.75	R-4.75	R-4.75	R-4.75	R-4.75	R-4.75	R-4.75	R-4.75

TABLE 502.2(1)
BUILDING ENVELOPE REQUIREMENTS – OPAQUE ASSEMBLIES

CLIMATE ZONE	1	2	3	4 except Marine	5 and Marine 4	6	7	8
Roofs								
Insulation entirely above deck	R-15 ci	R-15 ci	R-15 ci	R-15 ci	R-20 ci	R-20 ci	R-25 ci	R-25 ci
Metal buildings (with R-5 thermal blocks[f])	R-19 + R-10	R-19	R-19	R-19	R-19	R-19	R-19 + R-10	R-19 + R-10
Attic and other	R-30	R-30	R-30	R-30	R-30	R-30	R-38	R-38
Walls, Above Grade								
Mass	NR	NR	R-5.7 c[e, i]	R-5.7 c[e]	R-7.6 ci	R-9.5 ci	R-11.4 ci	R-13.3 ci
Metal building[e]	R-13	R-13	R-13	R-13	R-13 + R-13	R-13 + R-13	R-13 + R-13	R-13 + R-13
Metal framed	R-13	R-13	R-13	R-13	R-13 + R-3.8 ci	R-13 + R-3.8 ci	R-13 + R-7.5 ci	R-13 + R-7.5 ci
Wood framed and other	R-13	R-13	R-13	R-13	R-13	R-13	R-13	R-13 + R-7.5 ci
Walls, Below Grade								
Below grade wall[e]	NR	NR	NR	NR	NR	NR	R-7.5 ci	R-7.5 ci
Floors								
Mass	NR	R-5 ci	R-5 ci	R-10 ci	R-10 ci	R-10 ci	R-15 ci	R-15 ci
Joist/Framing	NR	R-19	R-19	R-19	R-19	R-30	R-30	R-30
Slab-on-Grade Floors								
Unheated slabs	NR	NR	NR	NR	NR	NR	NR	R-10 for 24 in. below
Heated slabs	R-7.5 for 12 in. below	R-7.5 for 12 in. below	R-7.5 for 12 in. below	R-7.5 for 12 in. below	R-7.5 for 24 in. below	R-10 for 36 in. below	R-10 for 36 in. below	R-10 for 48 in. below
Opaque Doors								
Swinging	U – 0.70	U – 0.70	U – 0.70	U – 0.70	U – 0.70	U – 0.70	U – 0.70	U – 0.50
Roll-up or sliding	U – 1.45	U – 1.45	U – 1.45	U – 1.45	U – 1.45	U – 0.50	U – 0.50	U – 0.50

2. Replace Table R402.1.1 with Table 402.1.1 from the 2006 Edition of the IECC

TABLE R402.1.1
INSULATION AND FENESTRATION REQUIREMENTS BY COMPONENT[a]

CLIMATE ZONE	FENESTRATION U-FACTOR[b]	SKYLIGHT[b] U-FACTOR	GLAZED FENESTRATION SHGC[b, e]	CEILING R-VALUE	WOOD FRAME WALL R-VALUE	MASS WALL R-VALUE[i]	FLOOR R-VALUE	BASEMENT[c] WALL R-VALUE	SLAB[d] R-VALUE & DEPTH	CRAWL SPACE[c] WALL R-VALUE
1	NR	0.75	0.25	30	13	3/4	13	0	0	0
2	0.40	0.65	0.25	38	13	4/6	13	0	0	0
3	0.35	0.65	0.25	38	20 or 13+5[h]	8/13	19	5/13[f]	0	5/13
4 except Marine	0.35	0.65	0.40	49	20 or 13+5[h]	8/13	19	10/13	10, 2 ft	10/13
5 and Marine 4	0.32	0.65	NR	49	20 or 13+5[h]	13/17	30[g]	15/19	10, 2 ft	15/19
6	0.32	0.65	NR	49	20+5 or 13+10[h]	15/20	30[g]	15/19	10, 4 ft	15/19
7 and 8	0.32	0.65	NR	49	20+5 or 13+10[h]	19/21	38[g]	15/19	10, 4 ft	15/19

TABLE 402.1.1
INSULATION AND FENESTRATION REQUIREMENTS BY COMPONENT[a]

CLIMATE ZONE	FENESTRATION *U*-FACTOR	SKYLIGHT[b] U-FACTOR	GLAZED FENESTRATION SHGC	CEILING *R*-VALUE	WOOD FRAME WALL *R*-VALUE	MASS WALL *R*-VALUE	FLOOR *R*-VALUE	BASEMENT[c] WALL *R*-VALUE	SLAB[d] *R*-VALUE & DEPTH	CRAWL SPACE[c] WALL *R*-VALUE
1	1.20	0.75	0.40	30	13	3	13	0	0	0
2	0.75	0.75	0.40	30	13	4	13	0	0	0
3	0.65	0.65	0.40[e]	30	13	5	19	0	0	5 / 13
4 except Marine	0.40	0.60	NR	38	13	5	19	10 / 13	10, 2 ft	10 / 13
5 and Marine 4	0.35	0.60	NR	38	19 or 13+5[g]	13	30'	10 / 13	10, 2 ft	10 / 13
6	0.35	0.60	NR	49	19 or 13+5[g]	15	30'	10 / 13	10, 4 ft	10 / 13
7 and 8	0.35	0.60	NR	49	21	19	30'	10 / 13	10, 4 ft	10 / 13