
Memphis

and

Shelby County

Local Amendments

2012 Residential Code

ADOPTED BY:

**SHELBY COUNTY COMMISSION - Ordinance # 425 (10/8/12)
Amended by Ordinance # 442 (12/16/13)**

**MEMPHIS CITY COUNCIL – Ordinance # 5480 (12/18/12)
Amended by Ordinance #5539 (12/17/13)**

Local Amendments to 2012 *ICC International Residential Code*

Amend “Section R101.1 Title” by adding the term “of Memphis and Shelby County” in the parenthetic phrase so when amended it shall read:

R101.1 Title. These provisions shall be known as the Memphis and Shelby County 2012 *Residential Code for One- and Two- Family Dwellings*, and shall be cited as such and will be referred to as “this code.”

Amend the “Exception” to “Section R101.2 Scope” by renumbering the current Exception as 1 and adding a second exception as 2 as follows so that when amended it shall read as follows:

Exception:

1. Live/work units complying with the requirements of Section 419 of the *International Building Code* shall be permitted to be built as one- and two- family dwellings or townhouses. Fire suppression required by Section 419.5 of the *International Building Code* when constructed under the *International Residential Code of One- and Two- Family Dwellings* shall conform to Section 903.2.1.2 of the *International Building Code*.

2. Existing buildings undergoing repair, alteration or additions, and change of occupancy shall be permitted to comply with the *International Existing Building Code* as locally amended.

Amend Section R102.7 “Existing structures” by deleting the phrase “the *International Property Maintenance Code* or”

Delete “Section R103 Department of Building Safety” in its entirety including subsections “R103.1 Creation of enforcement authority”, “R103.2 Appointment” and “R103.3 Deputies” and replace it with the following:

**Section R103
Reserved**

Delete Section R105.1”Required” in its entirety and replace it with the following:

R105.1 Required. Any owner or authorized agent who intends to construct, enlarge, alter, repair, move, demolish or change the occupancy of a building, structure or retaining wall, or to erect install enlarge later repair remove convert or replace any electrical gas mechanical or plumbing system, the installation of which is regulated by this code, or to cause any such work to be done shall first make application to the building official and obtain the required permit.

Add a new subsection R105.1.1 entitled “Design and construction of retaining walls” which shall read as follows:

R105.1.1 Design and construction of retaining walls. Retaining wall systems shall be designed by a professional engineer, licensed to practice in the state of Tennessee, for all loads as specified in the Building Code and within this Chapter and in keeping with nationally recognized standards. Design shall be based upon sound engineering and geo-technical principles.

Delete the provisions under “Section R105.2 Work exempt from permit” after the last numbered exemption for building permits section so that when amended it reads as follows:

Section R105.2 Work exempt from permit. Permits shall not be required for the following. 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.

Building

1. Reserved
2. Reserved
3. Retaining walls that are not over 4 feet (1219mm) in height measures from the bottom of the footing to the top of the wall, unless supporting a surcharge.
4. Water tanks supported directly on grade if the capacity does not exceed 5,000 gallons (18927 L) and the ratio of the height to the diameter or width does not exceed 2 to 1.
5. Side walks and driveways not more than 30 inches (762mm) above adjacent grade and not over any basement or store below.
6. Painting, papering, tiling, carpeting, cabinets, counter tops and similar finish work.
7. Prefabricated swimming pools that are less than 24 inches (610mm) deep.
8. Swings and other playground equipment accessory to a one or two family dwelling.
9. Window awnings supported by an exterior wall which do not project more than 54 inches (1732mm) from the exterior wall and do not require additional support.
10. Decks not exceeding 200 square feet (18.58M²) in area, that are not more than 30 inches (762mm) above grade at any point, are not attached to a dwelling and do not serve the exit door required by Section R311.4.

Delete Section “R105.2.1 Emergency repairs” in its entirety and replace it with the following:

R-105.2.1 Emergency repairs. - Where equipment replacements or repairs performed in an emergency situation the permit application shall be submitted within the three business days, unless a shorter period is called for in the specific code adopted to cover the equipment or repair to be replaced or performed.

Add a new “Section R105.4.1. Action on permits” which shall read as follows:

R105.4.1 Action on permits - Permits shall be issued to a licensed and/or registered contractor who performs the work. If work is subcontracted, both contractors shall be licensed and/or registered.

Exception: A building permit for construction of a single-family dwelling may be obtained by the property owner as allowed by T.C.A. Section 62-6-103 entitled “License requirements - - Recovery of expenses by unlicensed contractors” which allows a person or firm specified in subdivision (a)(2)(A) of the act to make an application for a permit to construct a single residence, provided that person shall not construct more than one (1) single residence within a period of two (2) years.

Delete “Section R106.3.1 Approval of construction documents” in its entirety and replace it with the following;

R106.3.1 Review of construction documents. When the Building Official issues a permit, the construction documents shall be marked, by stamp or writing, as “REVIEWED.” One set of construction documents so reviewed shall be retained by the Building Official. The other set or sets shall be returned to the applicant. At least one set shall be kept at the site of work and shall be open to inspection by the Building Official or his or her authorized representatives.

Amend “Section R106.4 Amended construction documents” by substituting the word “reviewed” in each of the two locations in the section that now contains the word “approved” and the word “review” for the work “approval” so that when amended it shall read as follows:

R106.4 Amended construction documents. Work shall be installed in accordance with the reviewed construction documents, and any changes made during the construction that are not in compliance with the reviewed construction documents shall be resubmitted for review as an amended set of construction documents.

Delete “Section 106.5 Retention of construction documents” in its entirety with no replacement

Delete “Section R110.3 Certificate issued” in its entirety and replace it with the following:

R110.3 Certificate issued. After the Building Official or his designee conducts all final inspections on a one or two family dwelling or an addition or modification to such a dwelling that required a permit be issued and finds no violations of the provisions of this code or other laws that are enforced by the Memphis and Shelby County Office of Construction Code Enforcement, such final inspection shall act as the certification by the Building Official that the construction shown on the building permit issued for the structure or

improvement is compliant with the code. Should the owner of the one or two family dwelling request or the Building Official determine it is prudent to assure compliance with special conditions in the permit and for any other structures covered by this code; the Building Official shall issue a certificate of occupancy for that structure or part thereof that will contain the following:

1. The building permit number
2. The address of the structure
3. The name and address of the owner
4. The name of the Building Official
5. Any special stipulation and conditions of the building permit.

Delete the entire Section entitled “R112 Board of Appeals” and replace it with the following:

SECTION R112 BOARD of APPEALS

R112.1 General. The Memphis and Shelby County Joint Board of Appeals, as established in the Memphis and Shelby County Building Code, shall hear all appeals and variance requests that arise under this Code.

Delete the entire Section entitled “R113 Violations” and replace it with the following:

Section R113 Violations

R113.1 General. The violation provisions of the Memphis and Shelby County Building Code, as locally amended, shall be applicable to the enforcement of this Code.

Delete the entire Section entitled “R114 Stop work order” and replace it with the following:

Section R114 Stop work order

R114.1 General – The stop work order provisions of the Memphis and Shelby County Building Code, as locally amended, shall be applicable to the enforcement of this Code.

Add the following definitions to Section R202 in the appropriate alphabetical locations:

Building Official – The officer or other designated authority, or their duly authorized representative, charged with the administration and enforcement of the Technical Codes.

Building Section – Whenever the term “Building Section” is used in the Memphis and Shelby County Residential Code herein adopted, it shall mean the Building Section of the Memphis and Shelby County Office of Construction Code Enforcement (MSCCE).

Chief Appointing Authority – Whenever the term “Chief Appointing Authority” is used in the Technical Codes herein adopted, it shall mean the Mayors of the City of Memphis and County of Shelby, Tennessee.

City, Municipality, or Governing Body – Whenever the word “City” or “Municipality” or “Governing Body” is used in the Technical Codes herein adopted, it shall mean the City of Memphis and County of Shelby, Tennessee.

International Electrical Code – Whenever the word “International Electrical Code” is used in this code herein adopted, it shall mean the 2008 Edition of the *National Electrical Code* (NEC) with Local Amendments and will be known as the Joint Electrical Code (JEC) of Memphis and Shelby County, Tennessee Technical Codes.

International Energy Conservation Code - Whenever the word “International Energy Conservation Code” is used in this code herein adopted, it shall mean the 2009 Edition of the *ICC International Energy Conservation Code* with Local Amendments and will be known as the Memphis and Shelby County Energy Conservation Code (MSCECC) of the Memphis and Shelby County Tennessee Technical Codes.

International Building Code – Whenever the word “International Building Code” is used in this code herein adopted, it shall mean Chapter 1-13, 26-33 and Chapter 35 of the 2009 Edition of the *ICC International Building Code* with Local Amendments, together with Chapters 14-25 and Chapter 34 of the 2012 Edition of the *ICC International Building Code* and will be known as the Joint Building Code (JBC) of Memphis and Shelby County, Tennessee Technical Codes.

International Fuel Gas Code – Whenever the word “International Fuel Gas Code” is used in this code herein adopted, it shall mean the 2009 Edition of the *ICC International Fuel Gas Code* with Local Amendments and will be known as the Joint Fuel Gas Code (JFGC) of Memphis and Shelby County, Tennessee Technical Codes.

International Mechanical Code – Whenever the word “International Mechanical Code” is used in this code herein adopted, it shall mean the 2009 Edition of the

ICC International Mechanical Code with Local Amendments and will be known as the Joint Mechanical Code (JMC) of Memphis and Shelby County, Tennessee.

International Plumbing Code – Whenever the word “International Plumbing Code” is used in this code herein adopted, it shall mean the 2009 Edition of the *ICC International Plumbing Code* with Local Amendments and will be known as the Joint Plumbing Code (JPC) of Memphis and Shelby County, Tennessee Technical Codes.

Retaining Wall – A manmade structure built out of rock, block, wood, concrete or other similar material and used to either directly support retained material or to serve as a facing of a cut slope. This definition includes, but is not limited to other systems design to retain earth or other materials such geosynthetic-reinforced soil system or pre-engineered structures.

Chapter 3 Building Planning

Table R301.2 (1) shall read as follows and all existing footnotes shall remain unchanged.

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

| Ground Snow Load | Wind Design | | Seismic Design Category ^e | Subject to Damage from | | | | Winter Design Temp (°F) ^f | Ice Shield Under Layment Required ⁱ | Flood Hazard ^h | Air Freezing Index ^j | Mean Annual Temperature (°F) ^k |
|-----------------------------|--------------------------|----------------------------------|---------------------------------------|-------------------------|-------------------------------|--------------------------|---------------------------|--------------------------------------|------------------------------------------------|---------------------------|---------------------------------|-------------------------------------------|
| | Speed ^d (mph) | Topographic Effects ^k | | Weathering ^a | Frost Line Depth ^b | Termite ^c | Decay ^d | | | | | |
| 10 lb/ft² | 90 | NO | D₀ or D₁ | Moderate | 5 Inches | Moderate to Heavy | Moderate to Severe | 18 | No | September 29, 2007 | 158 | 61.8 |

Modifying Section R301.2.2 number 2 by adding the phrase "however, such detached one and two family dwellings constructed using wood framing in Seismic Design Categories D₀, D₁ and D₂ shall be allowed, as an alternative compliance method for meeting the structural requirements of this code's seismic provisions, to comply with the requirement in Section R301.2.2.3.8." at the end of this item, so that when amended the entire section shall read as follows:

(2013 Amendment) **R301.2.2 Seismic provisions.** The seismic provisions of this code shall apply as follows:

1. Townhouse in Seismic Design Categories C, D₀, D₁ and D₂.
2. Detached one and two family dwellings in D₀, D₁ and D₂, however, such detached one and two family dwellings constructed using wood framing in Seismic Design Categories D₀, D₁ and D₂ shall be allowed, as an alternative compliance method for meeting the structural requirements of this code's seismic provisions, to comply with the requirement in Section R301.2.2.3.8.

(2013 Amendment) Added a new Section R301.2.2.3.8 and new Subsections R301.2.2.3.8.1 through R301.2.2.3.8.12 so that when amended, the entire new section and its subsections shall read as follows:

R301.2.2.3.8 Alternative compliance method for structural requirements. In addition to meeting all the structural requirements for Seismic Design Category C and sections R301.2.2.3.1, R301.2.2.3.6 and R301.2.2.3.7, an alternative compliance method for meeting structural requirements when wood framing is used shall include compliance with the following items. In the event any requirement in this section differs from wind code structural requirements, the more stringent will apply. The alternative compliance method is allowable only when the total wall opening area does not exceed 30 percent of wall area along each of the four main exterior walls, not including exterior walls containing a garage door opening.

1. A minimum of two 24" prefabricated shear panels may be installed in any one exterior wall with openings that exceed the 30 percent requirement and still be considered in compliance with the amendment conditions.

R301.2.2.3.8.1 Anchorage exterior walls (Sole Plates). Exterior wall sole plates shall be secured to the foundation or framing below by one of the following methods:

1. Foundation: ½ inch (12.7 mm) anchor bolts, with 3 inch by 3 inch (76 mm by 76 mm) washers, embedded in the foundation a minimum of 7 inches (178 mm) in depth. Such anchor bolts are to be placed 4 feet on center maximum and within 12 inches (305 mm) of the end of each plate section. A minimum of 2 anchors per plate section is required.

2. Foundation: MASA anchors or equivalent embedded in the foundation and placed at 4 feet (1219 mm) on center maximum and within 12 inches (305 mm) of the end of each plate section. A minimum of 2 anchors per plate section is required.

3. Elevated Floors: 10d nails placed at 8 inches on center and embedded in a continuous rim board. Rim board depth to match depth of floor framing. Rim board shall be nailed to the end of each floor framing member with three 10d nails. Where floor framing parallels exterior wall, 2 rim boards shall be provided and nailed per Table R602.3(1). The rim board shall be fastened to wall top plate with metal plates at 6 feet (1829 mm) on center; installed plate capacity shall equal or exceed 440 pounds

R301.2.2.3.8.2 Anchorage all structural interior walls (Sole Plates).

Interior wall framing shall be secured by one of the following methods:

1. Foundation: ½ inch (12.7mm) anchor bolts, with 3 inch by 3 inch (76 mm by 76 mm) washers, embedded a minimum of 7 inches (178 mm) in depth in the concrete foundation (thickened slab) at 4 feet (1219 mm) on center maximum and within 12 inches (305mm) of the end of each plate section.

2. Foundation: By power actuated fasteners that provide 210 pounds per linear foot shear capacity, placed 2 feet (610 mm) on center maximum and within 12 inches (305 mm) of each plate section or equivalent means of anchorage. A minimum of 2 anchors are required per plate section.

3. Elevated Floors: 10d nails placed at 8 inches (204 mm) on center and embedded in one of the following:

- a) Structural wall top plate flush with bottom of floor sheathing, or
- b) Floor joist parallel with and directly below plate, or
- c) Blocking, depth to match, placed between floor joists and running the full length of the plate. Blocking to be nailed per Table R602.3(1).

R301.2.2.3.8.3 Stud spacing - Exterior walls. All 2x4 exterior walls shall be a maximum of 16 inch (406 mm) stud spacing up to 3 stories. Gypcrete flooring or similar cementitious leveling products shall not be used on elevated floors.

Exception: Thin-set or other base material required for installation of flooring products in isolated confined spaces such as bathrooms.

R301.2.2.3.8.4 Wall sheathing.

R301.2.2.3.8.4.1 Exterior wall sheathing. Exterior wall sheathing shall be 7/16 inch (11mm) exterior rated OSB or equivalent or 7/16 inch (11mm) plywood minimum. Sheathing is to be fastened every 6 inches (152 mm) on the edges and 12 inches (305 mm) at intermediate supports.

R301.1.2.2.3.8.4.2 Interior structural wall sheathing. Interior sheathing shall be a minimum of ½ inch (12.7mm) gypsum fastened every 7 inches

(178 mm) on edges and every 7 inches (178 mm) at intermediate supports.

R301.2.2.3.8.5. Garage door openings. Brace wall panels are required for garage openings as per Section R602.10.6 of this Code.

Exception - An engineered pre-manufactured wall panel is allowed to be used at garage openings.

R301.2.2.3.8.6.APA Narrow Wall systems are not permitted. Use of APA narrow wall systems is not permitted for establishing compliance with these requirements.

R301.2.2.3.8.7 Connections across floor joist space. 18 gauge galvanized steel coil strapping (ex. CS 18) installed at 48 inch (1219 mm) on center across floor joist space or equivalent is required on all exterior walls and stacked interior structural walls. Strapping shall run vertical along edge of studs and shall be centered on floor joist space. Studs shall be vertically aligned.

R301.2.2.3.8.8 Roof framing connections. Roof framing members shall be fastened to wall top plate with 18 gauge galvanized steel clips (ex. H2.5A) or equivalent, not to exceed 48 inches (1219 mm) on center maximum. Provide clips in addition to fastening requirements in Table R602.3(1). This requirement applies to all contact points with load bearing walls. In the event wind fastening requirements differ, the more stringent shall apply.

R301.2.2.3.8.9 Shearwall holddowns.

1. Exterior walls: A single holddown shall be installed at each end of each wall over 8 feet (2438 mm) in length (2 holddowns per wall length). Holddown capacity (P), in pounds, shall be equal to 210 lbs/ft times wall height ($P = 210 * H$)
2. Wall height (H): distance from wall bottom plate to wall top plate.
3. A cut sheet of the holddown type(s) used shall be provided to code enforcement when requested by the Building Official. Cut sheet shall show tested product load rating and manufacturer information.

R301.2.2.3.8.10 Opening straps/clips. This section applies only to window and door openings and only to openings located in exterior walls and interior structural walls. Louver, pipe penetrations, dryer vents, and all other wall openings are not required to meet this section unless they exceed 4 sq. ft. in area.

1. Studs above and below headers and window sill plates: Provide 18 gauge galvanized steel clips (ex. H2.5A) or equivalent at 32 inches (813 mm), top and bottom of studs, minimum 2 clips per opening width at headers and sills.

2. Headers: Headers shall bear on minimum 1 ply jack post and be fastened to post with 18 gauge galvanized steel clips (ex. H2.5A), or continuous sheathing from king post to header or sill or equivalent.
3. Window Sill plate: Sill plate shall be end nailed with three 10d nails each end through minimum 1 ply of king/jack posts, or continuous sheathing from king post to header or sill, or equivalent.
4. King/Jack posts: Provide 20 gauge galvanized steel stud plate connector (ex. SP1) or equivalent from post to wall plate, top and bottom. Post plies shall be nailed together with 10d nails at 8 inches (204 mm) on center staggered full height.

R301.2.2.3.8.11 Brick veneer.

1. Exterior brick veneer shall not exceed 25 feet (7620 mm) in height above non-combustible foundation. Brick at gable peaks shall not exceed 40 feet (12 192 mm) in height above non-combustible foundation.
2. Exterior brick veneer shall comply with all other applicable Chapter 7 IRC requirements.
3. Interior brick veneer and masonry chimneys shall comply with Chapter 7 IRC requirements.

R301.2.2.3.8.12 Floor openings. When floor openings in the second or third floors exceed 15 percent of the ground floor square footage, garage space excluded, they shall be considered as large floor openings.

1. The gross floor area shall be the area bounded by exterior walls.
2. Openings for stairs and egress are excluded from the net floor opening area.
3. Perimeter interior walls bounding a large floor opening shall be considered structural and shall be subject to all requirements as such. If perimeter walls are not present below opening perimeter (i.e. beam and column system is used), the supporting structure shall be engineered.

(All of Section R301.2.2.3.8 and the subsections under it were 2013 Amendment)

Amend the first sentence in the “Exception” to Section R302.2 to require a 2-hour fire-resistance-rated wall assembly in lieu of a 1-hour wall. This is the current requirement which was reduced in this code when these townhouses were to be sprinkled. Therefore this exception will read as follows when amended.

Exception: A common 2-hour fire-resistance-rated wall assembly tested in accordance with ASTM E-119 or UL 263 is permitted for townhouses if such walls do not contain plumbing or mechanical equipment, ducts or vents in the cavity of the common wall. The wall shall be rated for fire exposure from both sides and shall extend to and be tight against exterior walls and the underside of the roof sheathing. Electrical installations shall be installed in accordance with

Chapter 34 through 43. Penetrations of electrical outlet boxes shall be in accordance with Section R302.4.

Delete the phrase “equipped with a self-closing devise” at the end of Section 302.5.1 so that when modified the Section shall read as follows:

R302.5.1 Opening Protection. Openings from a private garage directly into a room used for sleeping purpose shall not be permitted. Other openings between the garage and residence shall be equipped with solid wood doors not less than 1 3/8 inches (35mm) in thickness, solid or honeycomb-core steel doors not less than 1 3/8 inches (35mm) thick, or 20-minute fire-rated doors.

Delete Section R313.1 “Townhouse automatic fire system”, its Exception and Section 313.1.1 “Design and installation” in their entirety with no replacement

Delete Section R313.2 “One and two-family dwellings automatic fire system”, its Exception and Section 313.2.1 “Design and installation” in their entirety with no replacement.

Delete Section R315.3 “Where required in existing dwellings” in its entirety with no replacement.

Chapter 4 Foundations

Delete Section 401.3 and its Exception in their entirety and substitute the following:

401.3 Drainage and foundation elevation. – Surface drainage shall be diverted to a storm sewer conveyance or other approved point of collection that does not create a hazard. Lots shall be graded to drain surface waste away from foundation walls. The finish floor (elevation) shall be nominal 10 inches above the exterior finish grade (ground) and the finish grade shall slope a minimum of 8% (1 in 12) away from foundation for a minimum of 3 feet for drainage.

Section R403.1.1 “Minimum size” is deleted in its entirety and replaced with the following:

R403.1.1 Minimum size. Minimum size for concrete and masonry footings shall be as set fourth in Table R403.1 and Figure R403.1 (1). The footing width, *W*, shall be based on the load-bearing value of the soil in accordance with Table R401.4.1. All footings shall be at least 10 inches (255mm) in thickness. Footing projections, *P*, shall be at least 2 inches (51mm) and shall not exceed the thickness of the footing. The size of footing supporting piers and columns shall be based on the tributary load and allowable soil pressure in accordance with Table R401.4.1.

Figure R403.1 (2) entitled “Permanent Wood Foundation Basement Wall Section” and Figure R403.1 (3) entitled “Permanent Wood Foundation Crawl Space Section” are deleted with no replacement provided.

Section R403.1.4 “Minimum depth” is deleted in its entirety and replaced with the following language.

R403.1.4 Minimum depth. All footings shall bear on undisturbed or properly compacted soils a minimum of 13 inches (330mm) below grade. When applicable the depth of footing shall also conform to Section R403.1.4.1 through R403.1.4.2.

Section R403.2 is deleted in its entirety and replaced with the following language.

Section R403.2. Reserved

Section R404.2: is deleted in its entirety and replaced with the following language.

Section R404.2 Reserved

Section R405.2 is deleted in its entirety and replaced with the following language.

Section R405.2. Reserved

Section R406.3 is deleted in its entirety and replaced with the following language.

Section R406.3. Reserved

Section R504 is deleted in its entirety and replaced with the following language.

Section R504. Reserved

Section R702.3.8.1 entitled “Limitations” delete the phrase “or in areas subject to continuous humidity” so that when modified it reads as follows:

R702.3.8.1 Limitations. Water resistant gypsum backing board shall not be used where there will be direct exposure to water.

Section R703.2 entitled “Water-resistant barrier” is amended by adding the phrase “, including TYVEK sheathing of the exterior sheathing,” after the words “water-resistant barrier” in the first sentence so when amended it shall read:

Section R703.2 Water resistant barrier- One layer of No. 15 asphalt felt, free from holes and breaks, complying with ASTM D 226 for Type 1 felt or other approved water-resistant barrier, including TYVEK sheathing of the exterior sheathing, shall be applied over studs or sheathing of all exterior walls. Such felt or material shall be applied horizontally, with the upper layer lapped over the lower layer not less than 2 inches (51mm). Where joints occur, the felt or other material shall be lapped not less than 6 inches (152mm).

Delete Chapter 11 in its entirety and replace it with the following Sections:

Chapter 11 Energy efficiency

Section N1101 – General

N1101.1 Scope. This chapter sets forth the energy-efficiency related requirements for the design and construction of buildings regulated by this code.

Exception: Provided that they are separated by building envelope assemblies from the remainder of the building, portions of the building that do not enclose conditioned space shall be exempt from the building envelope provision, but shall comply with the provisions for building mechanical and service water heating systems.

N1101.2 Compliance for one and two family dwellings. Compliance for one and two family dwellings shall be demonstrated by meeting the requirements of the 2009 Edition of the *ICC International Code Council Energy Conservation Code* for detached one and two family dwellings in Climate Zone 3A as found in Chapters 2, 3, 4, 5, and 6.

N1101.3 Compliance for townhouses. Compliance for townhouses shall be demonstrated by meeting the requirements of the 2009 Edition of the *ICC International Energy Conservation Code* for residential buildings of Group R-2 or townhouses in Climate Zone 3A as found in Chapters 2, 3, 4, 5, and 6.

Delete CHAPTER 12 in its entity and replace it with the following:

CHAPTER 12 MECHANICAL ADMINISTRATION

Section M1201 General. The administration of the Mechanical Provisions of this Code shall be determined by reference to the latest adopted Memphis and Shelby County Mechanical Code.

Delete CHAPTER 13 in its entity and replace it with the following:

CHAPTER 13 GENERAL MECHANICAL SYSTEM REQUIREMENTS

Section M1301 General. The General Mechanical System Requirements Provisions of this Code shall be determined by reference to the latest adopted Memphis and Shelby County Mechanical Code

Delete CHAPTER 14 in its entity and replace it with the following:

CHAPTER 14 HEATING AND COOLING EQUIPMENT

Section M1401 General. The heating and cooling equipment provisions of this Code shall be determined by reference to the latest adopted Memphis and Shelby County Mechanical Code.

Delete CHAPTER 15 in its entirety and replace it with the following:

Chapter 15 EXHAUST SYSTEMS

Section M1501 General. The exhaust system provisions of this Code shall be determined by reference to the latest adopted Memphis and Shelby County Mechanical Code.

Delete CHAPTER 16 in its entirety and replace it with the following:

Chapter 16 DUCT SYSTEMS

Section M1601 General. The provisions of this code relating to the construction and operation of duct system shall be determined by reference to the latest adopted Memphis and Shelby County Mechanical Code.

Delete Chapter 17 in its entirety and replace it with the following:

CHAPTER 17 COMBUSTION AIR

Section M1701 General. The provisions of this code relating to the construction and operation of combustion air shall be determined by reference to the latest adopted Memphis and Shelby County Mechanical Code.

Delete Chapter 18 in its entirety and replace it with the following:

CHAPTER 18 CHIMNEYS AND VENTS

Section M1801 General. The provisions of this code relating to the construction and operation of chimneys and vents shall be determined by reference to the latest adopted Memphis and Shelby County Mechanical Code.

Delete Chapter 19 in its entirety and replace it with the following:

CHAPTER 19 SPECIAL FUEL BURNING EQUIPMENT

Section M1101 General. The provisions of this code relating to the construction and operation of special fuel burning equipment shall be determined by reference to the latest adopted Memphis and Shelby County Mechanical Code.

Delete Chapter 20 in its entirety and replace it with the following:

CHAPTER 20 BOILERS AND WATER HEATERS

Section M2001 General. The provisions of this code relating to the installation and operation of boilers and gas water heaters shall be determined by reference to the latest adopted Memphis and Shelby County Mechanical Code.

Delete Chapter 21 in its entirety and replace it with the following:

CHAPTER 21 HYDRONIC PIPING

Section M2101 General. The provisions of this code related to the installation and operation of hydronic piping shall be determined by reference to the latest adopted Memphis and Shelby County Mechanical Code.

Delete Chapter 22 in its entirety and replace it with the following:

CHAPTER 22 SPECIAL PIPING AND STORAGE SYSTEMS

Section M2201 General. The provisions of this code related to the installation and operation of special piping and storage systems shall be determined by reference to the latest adopted Memphis and Shelby County Mechanical Code.

Delete Chapter 23 in its entirety and replace it with the following:

CHAPTER 23 SOLAR SYSTEM

Section M2301 General. The provisions of this code related to the installation and operation of Solar Energy Systems shall be determined by reference to the latest adopted Memphis and Shelby County Mechanical Code.

Delete Chapter 24 in its entirety and replace it with the following:

CHAPTER 24 FUEL GAS

Section G2401 General. The provisions of this code related to the installation and operation of Fuel Gas shall be determined by reference to the latest adopted Memphis and Shelby County Fuel Gas Code.

Delete Chapter 25 in its entirety and replace it with the following:

CHAPTER 25 PLUMBING ADMINISTRATION

Section P2401 General. The provisions of this code related to the Plumbing Administration shall be determined by reference to the latest adopted Memphis and Shelby County Plumbing Code.

Delete Chapter 26 in its entirety and replace it with the following:

CHAPTER 26 GENERAL PLUMBING REQUIREMENTS

Section P2601 General. The provisions of this code related to the General Plumbing Requirements shall be determined by reference to the latest adopted Memphis and Shelby County Plumbing Code.

Delete Chapter 27 in its entirety and replace it with the following:

CHAPTER 27 PLUMBING FIXTURES

Section P2701 General. The provisions of this code related to the Plumbing Fixtures shall be determined by reference to the latest adopted Memphis and Shelby County Plumbing Code.

Delete Chapter 28 in its entirety and replace it with the following:

CHAPTER 28 WATER HEATER

Section P2801 General. The installation and operation of electric water heaters shall be determined by reference to the latest adopted Memphis and Shelby County Plumbing and Electrical Codes.

Delete Chapter 29 in its entirety and replace it with the following:

CHAPTER 29 WATER SUPPLY AND DISTRIBUTION

Section P2901 General. The provisions of this code related to the installation and operation of water supply and distribution systems shall be determined by reference to the latest adopted Memphis and Shelby County Plumbing Code.

Delete Chapter 30 in its entirety and replace it with the following:

CHAPTER 30 SANITARY DRAINAGE

Section P3001 General. The provisions of this code related to the installation and operation of sanitary drainage systems shall be determined by reference to the latest adopted Memphis and Shelby County Plumbing Code.

Delete Chapter 31 in its entirety and replace it with the following:

CHAPTER 31 VENTS

Section P3101 General. The provisions of this code related to the installation and operation of Vents systems and related devices attached to a plumbing system

shall be determined by reference to the latest adopted Memphis and Shelby County Plumbing Code.

Delete Chapter 32 in its entirety and replace it with the following:

CHAPTER 32 TRAPS

Section P3201 General. The provisions of this code related to the installation and operation of traps that are part of or attached to plumbing systems shall be determined by reference to the latest adopted Memphis and Shelby County Plumbing Code.

Delete Chapter 33 in its entirety and replace it with the following:

Chapter 33 Storm Drains

Section P3301 Scope. The provision of this code related to the design, materials, construction and installation of storm drains shall be determined by reference to the latest adopted Memphis and Shelby County Plumbing Code.

Delete Chapter 34 in its entirety and replace it with the following:

CHAPTER 34 GENERAL REQUIREMENTS

Section E3401 General. The provisions of this code related to the General Requirements for electrical installations shall be determined by reference to the latest adopted Memphis and Shelby County Electric Code.

Delete Chapter 35 in its entirety and replace it with the following:

CHAPTER 35 ELECTRIC DEFINITIONS

Section E3501 Electric Definitions. The provisions of this code related to the Electric Definitions shall be determined by reference to the latest adopted Memphis and Shelby County Electric Code.

Delete Chapter 36 in its entirety and replace it with the following:

CHAPTER 36 SERVICES

Section E3601 Services. The provisions of this code related to the electrical services shall be determined by reference to the latest adopted Memphis and Shelby County Electric Code.

Delete Chapter 37 in its entirety and replace it with the following:

CHAPTER 37 BRANCH CIRCUIT AND FEEDER REQUIREMENTS

Section E3701 General. The provisions of this code related to Branch Circuit and Feeder Requirements for electrical installations shall be determined by reference to the latest adopted Memphis and Shelby County Electric Code.

Delete Chapter 38 in its entirety and replace it with the following:

CHAPTER 38 WIRING METHODS

Section E3801 General. The provisions of this code related to the General Requirements for electrical installations shall be determined by reference to the latest adopted Memphis and Shelby County Electric Code.

Delete Chapter 39 in its entirety and replace it with the following:

CHAPTER 39 POWER AND LIGHTING DISTRIBUTION

Section E3901 General. The provisions of this code related to Power and Lighting Distribution for electrical installations shall be determined by reference to the latest adopted Memphis and Shelby County Electric Code.

Delete Chapter 40 in its entirety and replace it with the following:

CHAPTER 40 DEVICES AND LUMINAIRES

Section E4001 General. The provisions of this code related to Devices and Lighting Fixtures shall be determined by reference to the latest adopted Memphis and Shelby County Electric Code.

Delete Chapter 41 in its entirety and replace it with the following:

CHAPTER 41 APPLIANCE INSTALLATION

Section 4101 General. The provisions of this code related to Application Installation for electrical installations shall be determined by reference to the latest adopted Memphis and Shelby County Electric Code.

Delete Chapter 42 in its entirety and replace it with the following:

CHAPTER 42 SWIMMING POOLS

Section E4201 General. The provisions of this code related to the electric installations for swimming pools shall be determined by reference to the latest adopted Memphis and Shelby County Electric Code. Those related to building

matters will be determined by reference to the latest adopted Shelby County Building Code.

Delete Chapter 43 in its entirety and replace it with the following:

CHAPTER 43 CLASS 2 REMOTE-CONTROL, SIGNALING AND POWER-LIMITED CIRCUITS

Section E4301 General. The provisions of this code related to Class 2 Remote-control, signaling and Power-limited Circuits shall be determined by reference to the latest adopted Memphis and Shelby County Electric Code.