ORDINANCE 2020 - 06

AN ORDINANCE TO AMEND TITLE XV, LAND USAGE, CHAPTER 150: BUILDING REGULATIONS OF THE TOWN OF COLLIERVILLE CODE OF ORDINANCES BY DELETING §150.020 THROUGH §150.090 IN THEIR ENTIRETY AND REPLACING THEM WITH NEW SECTIONS THAT ADOPT AND REFERENCE UPDATED VERSIONS OF THE 2018 INTERNATIONAL CODE COUNCIL (ICC) FAMILY OF CODES AS MODIFIED AND AMENDED, INCLUDING THE INTERNATIONAL BUILDING CODE, INTERNATIONAL FUEL GAS CODE, INTERNATIONAL PLUMBING CODE, INTERNATIONAL MECHANICAL CODE, INTERNATIONAL RESIDENTIAL CODE, INTERNATIONAL ENERGY CONSERVATION CODE, INTERNATIONAL SWIMMING POOL AND SPA CODE, INTERNATIONAL EXISTING BUILDING CODE, INTERNATIONAL PROPERTY MAINTENANCE CODE, AND THE 2017 NATIONAL ELECTRICAL CODE.

WHEREAS, the Board of Mayor and Aldermen of the Town of Collierville has chosen to adopt and enforce building construction codes for all construction projects to promote and protect the public health, safety and welfare; and,

WHEREAS, for a local government to maintain its authority to enforce building construction codes, the State of Tennessee requires that a local government's adopted building construction safety code publications are within seven (7) years of the date of the latest editions of the publications; and,

WHEREAS, the date of the latest ICC edition is 2018 which the State of Tennessee will require the Town of Collierville to update its adopted publications from the 2012 edition in order to remain within the seven (7) year period and maintain its authority to enforce building construction codes; and,

WHEREAS, the updated ordinances relative to buildings, uses and structures, and systems will consolidate the Town's regulations and provide improved clarity, conciseness, and consistency between building construction codes adopted and enforced in the Town and those adopted and enforced in surrounding jurisdictions; and,

WHEREAS, the Collierville Construction Board of Adjustments and Appeals reviewed this ordinance and its proposed updated versions of the ICC family of codes at a meeting held on July 24, 2020, and made a unanimous recommendation (six yes votes and one absent) to the Board of Mayor and Aldermen for approval; and,

WHEREAS, a public hearing before the Board of Mayor and Aldermen was held on August 24, 2020 pursuant to notice thereof published in a newspaper of general circulation within the community on August 13, 2020;

NOW, THEREFORE, BE IT ORDAINED by the Board of Mayor and Alderman for the Town of Collierville that sections of the Town Code delineated below be amended as follows:

Section 1. Sections 150.020 through 150.120 are hereby amended as reflected on Exhibit A attached hereto.

Section 2. The Town Administrator is hereby authorized to take steps necessary to assure that amendments reflected on Exhibit A hereto are properly codified and promulgated.

Section 3. This ordinance shall become effective January 1, 2021, in accordance with the Charter of the Town of Collierville, the public welfare requiring it.

Passed First Reading: August 10, 2020

Passed Second Reading: August 24, 2020

Passed Third Reading: September 14, 2020

Stan Joyner, Mayor

Lynn Carmack, Town Clerk

Collierville, TN Code of Ordinances

CHAPTER 150: BUILDING REGULATIONS

§150.020 TRANSITIONAL RULES.

The purpose of transitional regulations is to resolve the status of pending applications or recent approvals of permit applications for construction projects which may not be completed on January 1, 2021. Construction projects which are under a valid permit shall be allowed to be completed in compliance with the code editions under which the permit was issued. Buildings, uses or structures with outstanding violations as of January 1, 2021 are still in violation. Any violation of previous versions of this chapter shall continue to be a violation under Ordinance 2020-06, unless the use, building or structure complies with the provisions of the adopted code referenced by Ordinance 2020-06. Payment shall be required for any civil penalty assessed under the previous regulations, even if the original violation is no longer considered to be a violation under Ordinance 2020-06.
(Amended Ordinance 2011-23, passed 1-23-2012)

§150.030 INTERNATIONAL BUILDING CODE

The following modifications and amendments to the 2018 International Building Code (IBC) are hereby adopted:

IBC Modification

Whenever the International Building Code refers to the "code official" it shall mean the person appointed or designated by the municipal governing body to administer and enforce the provisions of the Building Code.

1. **Amend Section 101.1 "Title" by adding the term "The Town of Collierville" in the parenthetic phrase so when amended it reads as follows:**

101.0 Title. These regulations shall be known as the Building Code of the Town of Collierville, hereinafter referred to as "this code".

2. **Delete Sections 113.1 "General", 113.2 "Limitations on authority" and 113.3 "Qualifications" in their entirety and replace with the following:**

113.1 Board establishment. There is hereby established a board to be called the Construction Board of Adjustments and Appeals. The purpose of the Board is: 1) to hear and decide appeals of orders, decisions, or determinations made by the Building Official and/or the Fire Code Official regarding the application and interpretation of the various provisions of the building construction and fire codes adopted by the Town of Collierville; 2) to review and make recommendations to the Board of Mayor and Alderman regarding the adoption and amendments to building, construction and fire codes; and 3) to provide recommendations to the Building Official regarding the suitability of alternate materials and methods of

Ord. 2020-06

construction. The Board shall consist of seven (7) members and shall be appointed by the Board of Mayor and Alderman.

113.2 Membership. The Construction Board of Adjustments and Appeals shall consist of seven (7) members. Such board members shall be composed of individuals with knowledge and expertise in the technical codes, such as design professionals, contractors or building industry representatives.

113.3 Election of officers. The Board shall annually select, from its members, a Chairperson and Vice-Chairperson.

113.4 Conflict of interest. A member shall not hear an appeal in which that member has any personal, professional or financial interest.

113.5 Terms. The term of office of the board members shall be one year.

§150.031 BUILDING DEVELOPMENT PRIVILEGE TAX.

A. (1) A Building Development Privilege Tax of $300 per single family dwelling units; $100 per multi-family apartment and $100 per room for hotel and motels; $.15 per square foot for all retail buildings; $.10 per square foot for all office buildings and $.10 per square foot for the office areas of all industrial warehousing and storage buildings and $.01 per square foot for the warehousing and storage portions of industrial buildings be assessed on each new building and shall be paid at the execution of a Development Agreement authorizing such construction.

(2) If the amount of the privilege tax paid at the time of execution of a Development Agreement is found to be incorrect upon approval by the Town of final plans, the parties shall make an appropriate adjustment between themselves.

B. Square footage for the purpose of this section shall be measured from the centerline of all walls and shall include both heated and unheated areas of such improvements.

C. The Building Development Privilege Tax shall be assessed and collected upon the issuance of any Development Agreement for structures within the Town.

D. The proceeds from this Building Development Privilege Tax shall be deposited in the Town general funds

E. If any division or specific provision of this section is found by a court of competent jurisdiction to be invalid for any reason, the decision of the court shall not affect the validity of any other section, provision or standard of this section except the provision in question. The other portions of this section not affected by such decision of the court shall remain in fill force and effect.

§150.032 THE FOLLOWING APPENDICES ARE HEREBY ADOPTED:

APPENDIX C - GROUP U – AGRICULTURAL BUILDING

§150.040 INTERNATIONAL FUEL GAS CODE

The following modifications and amendments to the 2018 International Fuel Gas Code (IFGC) are hereby adopted:

IFGC Modification

Whenever the International Fuel Gas Code refers to the "code official" it shall mean the person appointed or designated by the municipal governing body to administer and enforce the provisions of the Fuel Gas Code.

1. **Amend Section 101.1 "Title" by adding the term "The Town of Collierville" in the parenthetic phrase so when amended it reads as follows:**

101.0 Title. These regulations shall be known as the Fuel Gas Code of the Town of Collierville, hereinafter referred to as "this code".

2. **Delete Section 109 "Means of Appeal" in its entirety and replace with the following:**

Section 109 Means of Appeal

109.1 General. The Town of Collierville, Construction Board of Adjustments and Appeals shall be the appeals body which is authorized to hear and decide appeals of orders, decisions, or determinations made by the code official regarding the application and interpretation of this code.

§150.041 THE FOLLOWING APPENDICES ARE HEREBY ADOPTED:

APPENDIX A – Sizing and Capacities of Gas Piping

APPENDIX B – Sizing of Venting Systems Serving Appliances Equipped with Draft Hoods, Category I Appliances and Appliances Listed for Use with Type B Vents

APPENDIX C – Exit Terminals of Mechanical Draft and Direct-Vent Venting Systems

§150.050 INTERNATIONAL PLUMBING CODE

The following modifications and amendments to the 2018 International Plumbing Code (IPC) are hereby adopted:

IPC Modification

Whenever the International Plumbing Code refers to the "code official" it shall mean the person appointed or designated by the municipal governing body to administer and enforce the provisions of the Plumbing Code.

1. **Amend Section 106.1 "Where required" so when amended it reads as follows:**

106.1 Where required. Any owner, owner's authorized agent or contractor who desires to construct, enlarge, alter, repair, move, demolish or change the occupancy of a building or structure, or to erect, install, enlarge, alter, repair, remove, convert or replace any plumbing

system (including residential and non-residential irrigation sprinkler systems), the installation of which is regulated by this code, or to cause any such work to be performed, shall first make application to the code official and obtain the required permit for the work.

2. **Amend Section 106 "Permits" by adding the following section:**

106.3.4 Irrigation located in the right-of-way. Components of the irrigation system located within the public right-of-way or easements are installed at the owner's risk and shall be the owner's responsibility to replace and/or repair in the event of the utilization of the easement or right-of-way.

3. **Amend Section 301.6 "Prohibited locations" so when amended it reads as follows:**

301.6 Prohibited locations. Plumbing systems shall not be located in an elevator shaft or in an elevator equipment room.

Exception: Floor drains, sumps and sump pumps shall be permitted at the base of the shaft provided they are indirectly connected to the plumbing system, and that the elevator is not operated by a hydraulic system. Elevators operated by petroleum hydraulic systems and that will connect to sanitary plumbing system shall be provided with an oil water separator before connecting to the plumbing system. The oil/water separator shall be sized and designed by a State of Tennessee Licensed and Registered Mechanical Engineer. Shaft drains may be piped or pumped to containment. The containment vessel or tank shall be sized by the elevator manufacturer.

4. **Amend Section 305.4.1 "Sewer depth" by inserting the number 12 in place of both bracketed words [NUMBER] so when amended it reads as follows:**

305.4.1 Sewer depth. Building sewers that connect to private sewage disposal systems shall be a maximum of 12 inches below finished grade at the point of septic tank connection. Building sewers shall be a minimum of 12 inches below grade. The dimensions shall be taken from the top of the pipe.

5. **Amend Section 312.3 "Drainage and vent air test" so when amended it reads as follows:**

312.3 Drainage and vent air test. An air test shall be made by forcing air into the system until there is a uniform gauge pressure of 5 psi (34.5 kPa) or sufficient to balance a 10-inch (254 mm) column of mercury. This pressure shall be held for a test period of not less than 15 minutes. Any adjustment to the test pressure required because of changes in ambient temperature or the sealing of gaskets shall be made prior to the beginning of the test period.

Exception: Testing of plastic piping shall not exceed 5 psi

6. **Amend Section 403.2 "Separate facilities", Exception #3 so when amended it reads as follows:**

Exceptions:

3. Separate facilities shall not be required in mercantile occupancies with a maximum net floor area of 3000 square feet.

7. **Amend Section 504.7.1 "Pan size and drain" by increasing the size of the drain pipe from ¾" to 1" so when amended it reads as follows:**

   The pan shall be drained by an indirect waste pipe having a diameter of not less than 1 inch (25.4 mm).

8. **Amend Section 603.1 "Size of water service pipe" by increasing the water service pipe size from ¾ inch to 1 inch so when amended it reads as follows:**

   603.1 Size of water service pipe. The water service pipe shall be sized to supply water to the structure in the quantities and at the pressures required in the Code. The minimum diameter of water service pipe shall be 1 inch (25.4 mm).

9. **Amend Tables 605.3 "Water Service Pipe" and 605.4 "Water Distribution Pipe" to delete all references to Type M and WM Copper or Copper-alloy**

10. **Amend Section 605.5 "Fittings" to add the following sentence at the end of the section as follows:**

    Water distribution fittings shall not be placed under slab installations unless prior approval is made with the Code Official.

11. **Amend Section 608.17.5 by adding section 608.17.5.1 as follows:**

    608.17.5.1 A reduced pressure backflow preventer and all components shall be installed to meet the following conditions:

    1. A valve shall be placed within close proximity of the water meter.
    2. A minimum of schedule 40 service pipe shall be installed from the meter to the backflow preventer.
    3. The schedule 40 service pipe shall be buried at a minimum depth of 12 inches.
    4. There shall be a minimum of 12 inches of gravel at the bottom of the backflow preventer.
    5. Each backflow preventer shall be tested and certified by an individual certified by the State of Tennessee to test such devices. The test results shall be on site at the time of inspection.

12. **Amend Table 709.1 by increasing the minimum size of a shower drain to 2 inches and adding footnote "i" as follows:**

    i. For showers with two or more shower valves the drain and strainer shall be 3 inches in diameter or additional drains shall be added.

13. **Amend Section 903.1 by inserting the number 10 in place of the bracketed word [NUMBER] so when amended it reads as follows:**

    903.1 Roof extension. Open vent pipes that extend through a roof shall be terminated not less than 10 inches (254 mm) above the roof. Where a roof is to be used for assembly or as a promenade, observation deck, sunbathing deck or similar purposes, open vent pipes shall terminate not less than 7 feet (2134 mm) above the roof.

14. **Amend Table 913.4 by adding footnote "a" as follows:**

    a. A minimum 2" diameter main vent is required on all installations.

§150.051 THE FOLLOWING APPENDICES ARE HEREBY ADOPTED:

APPENDIX B – Rates of Rainfall for Various Cities

APPENDIX E – Size of Water Piping System

§150.060 INTERNATIONAL MECHANICAL CODE

The following modifications and amendments to the 2018 International Mechanical Code (IMC) are hereby adopted:

IMC Modification

Whenever the International Mechanical Code refers to the "code official" it shall mean the person appointed or designated by the municipal governing body to administer and enforce the provisions of the Mechanical Code.

1. **Amend Section 101.1 "Title" by adding the term "The Town of Collierville" in the parenthetic phrase so when amended it reads as follows:**

R101.0 Title. These regulations shall be known as the Mechanical Code of the Town of Collierville, hereinafter referred to as "this code".

2. **Delete Section 109 "Means of Appeal" in its entirety and replace with the following:**
Section 109 (IMC) Means of Appeal
R109.1 General. The Town of Collierville, Construction Board of Adjustments and Appeals shall be the appeals body which is authorized to hear and decide appeals of orders, decisions, or determinations made by the code official regarding the application and interpretation of this code.

§150.070 INTERNATIONAL RESIDENTIAL CODE

The following modifications and amendments to the 2018 International Residential Code (IRC) are hereby adopted:

IRC Modification

Whenever the International Residential Code refers to the "code official" it shall mean the person appointed or designated by the municipal governing body to administer and enforce the provisions of the Residential Code.

1. **Amend Section R101.1 "Title" by adding the term "The Town of Collierville" in the parenthetic phrase so when amended it reads as follows:**

R101.0 Title. These provisions shall be known as the Residential Code for One-and Two-Family Dwellings of the Town of Collierville, and shall be cited as such and will be referred to herein as "this code."

2. **Amend Section R101.2 "Scope" by deleting exceptions 2 thru 5 so when amended it reads as follows:**

Exception: The following shall be permitted to be construction in accordance with this code where provided with a residential fire sprinkler system complying with Section P2904.

1. Live/work units located in townhouses and complying with the requirements of Section 419 of the International Building Code.

3. **Delete Section R103 "Department of Building Safety" and all subsections under it and reserve the section number so when amended it reads as follows:**

Section R103 - Reserved

4. **Amend Section R105.1 "Required" so when amended it reads as follows:**

R105.1 Required. Any owner or authorized agent who intends to construct, enlarge, alter, repair, move, demolish or change the occupancy of a building or structure, or to erect, install, enlarge, alter, repair, remove, convert or replace any electrical, gas, mechanical, plumbing system or irrigation 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.

5. **Delete Exemptions 1, 2, 3, 4, and Amend No.5 under Section R105.2 "Work exempt from permit" category "Building:" so when amended it reads as follows:**

1. Reserved
2. Reserved
3. Reserved
4. Reserved
5. Sidewalks and driveways on private property not more than 30" above adjacent grade

6. **Amend Section R105.8 "Responsibility" by adding the following subsection:**

R105.8.1 Components of the irrigation system located within the public right-of-way or utility easements are installed at the owner's risk and shall be the owner's responsibility to replace and/or repair in the event of the utilization of the easement or right-of-way by any and all franchised utility

7. **Delete Section R106.5 "Retention of construction documents" in its entirety with no replacement.**

8. **Delete Section R108 "Fees" and all subsections under it and reserve the section number so when amended it reads as follows:**

Section R108 - Reserved

9. **Amend Section R112.1 "General" so when amended it reads as follows:**

R112.1 General. The Town of Collierville, Construction Board of Adjustments and Appeals shall be the appeals body which is authorized to hear and decide appeals of orders, decisions,

or determinations made by the code official regarding the application and interpretation of this code.

10. **Amend the "WALLS" definition in Section R202 "Definitions" by adding the following:**

Structural wall. An interior load-bearing wall and/or a wall that forms the perimeter of a floor opening, as defined by R301.2.2.3.8.11.3.

Ord. 2020-06

11. **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[o]	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]	Special Wind Region[l]	Wind-borne Debris Zone[m]		Weathering[a]	Frost Line Depth[b]	Termite[c]					
10 lb/ft²	89 VASD	NO	NO	NO	D_0	MODERATE	5 INCHES	MODERATE TO HEAVY	18	NO	Feb 6, 2013	158	61.8

MANUAL J DESIGN CRITERIA[n]

ELEVATION	LATTITUDE	WINTER HEATING	SUMMER COOLING	ALTITUDE CORRECTION FACTOR	INDOOR DESIGN TEMP	DESIGN TEMPERATURE COOLING	HEATING TEMPERATURE DIFFERENCE
380	35	21	94	-	70	75	-
COOLING TEMPERATURE DIFFERENCE	**WIND VELOCITY HEATING**	**WIND VELOCITY COOLING**	**COINCIDENT WET BULB**	**DAILY RANGE**	**WINTER HUMIDITY**	**SUMMER HUMIDITY**	
-	-	-	77	M	77.5	82.5	

For SI: 1 pound per square foot=0.0479 kPa, 1 mile per hour=0.447 m/s.

a. Weathering may require a higher strength concrete or grade of masonry than necessary to satisfy the structural requirements of this code. The weathering column shall be filled in with the weathering index, "negligible," "moderate," or "severe" for concrete as determined from Figure R301.2(3). The grade of masonry units shall be determined from ASTM C 34, C 55, C 62, C 73, C 90, C 129, C 145, C 216 or C 652.

b. The frost line depth may require deeper footings than indicated in Figure R403.1(1). The *jurisdiction* shall fill in the frost line depth column with the minimum depth of footing below finish grade.

c. The *jurisdiction* shall fill in this part of the table to indicate the need for protection depending on whether there has been a history of local subterranean termite damage.

d. The *jurisdiction* shall fill in this part of the table with the wind speed form the basic wind speed map [Figure R301.2(4)A]. Wind exposure category shall be determined on a site-specific basis in accordance with Section R301.2.1.4.

Ord. 202-06

e. The outdoor design dry bulb temperature shall be selected from the columns of 97 ½-percent values for winter from Appendix D of the International Plumbing Code. Deviations from the Appendix D temperatures shall be permitted to reflect local climates or local weather experience as determined by the building official.
f. The *jurisdiction* shall fill in this part of the table with the seismic design category determined from Section R301.2.2.1.
g. The *jurisdiction* shall fill in this part of the table with (a) the date of the *jurisdiction's* entry into the National Flood Insurance Program (date of adoption of the first code or ordinance for management of flood hazard areas), (b) the date(s) of the Flood Insurance study and (c) the panel numbers and dates of the currently effective FIRMs and FBFMs or other flood hazard map adopted by the authority having jurisdiction, as amended.
h. In accordance with Sections R905.1.2, R905.4.3.1, R905.5.3.1, R905.6.3.1, R905.7.3.1, R905.8.3.1, where there has been a history of local damage from the effects of ice damming, the *jurisdiction* shall fill in this part of the table with "YES." Otherwise, the *jurisdiction* shall fill in this part of the table with "NO."
i. The *jurisdiction* shall fill in this part of the table with the 100-year return period air period air freezing index (BF-days) from figure R403.3(2) or from the 100-year (99 percent) value on the National Climatic Data Center data table "Air Freezing Index-USA Method (Base 32°F)."
j. The *jurisdiction* shall fill in this part of the table with the mean annual temperature from the National Climatic Data Center data table "Air Freezing Index-USA Method (Base 32°F)."
k. In accordance with Section R301.2.1.5, where there is local historical data documenting structural damage to buildings due to topographic wind speed-up effects, the *jurisdiction* shall fill in this part of the table with "YES." Otherwise, the *jurisdiction* shall indicate "NO" in this part of the table.
l. In accordance with Figure R301.2(4)A, where there is local historical date documenting unusual wind conditions, the jurisdiction shall fill in this part of the table with "YES." Otherwise, the *jurisdiction* shall indicate "NO" in this part of the table.
m. In accordance with Section R301.2.1.2.1, the *jurisdiction* shall indicate the wind-borne debris wind zone(s). Otherwise, the *jurisdiction* shall indicate "NO" in this part of the table.
n. The jurisdiction shall fill in these sections of the table to establish the design criteria using table 1a or 1b from ACCA Manual J or established criteria determined by the jurisdiction.
o. The jurisdiction shall fill in this section of the table using the Ground Snow Loads in Figure R301.2(6).

12. **Amend Section R301.2.2 "Seismic provisions" number 2 so when amended it reads as follows:**

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.

13. **Amend the 2018 IRC by adding a new Section R301.2.2.3.8 entitled "Alternative compliance method for structural requirements" along with its Subsections R301.2.2.3.8.1 through R301.2.2.3.8.12 so that when amended the new section with its subsections 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 through R301.2.2.3.7, except as modified by this amendment, 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.

Exception: Section R301.2.2.3.8, Alternative compliance method for structural requirements, shall not be used for additions not structurally independent of the existing structure.

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 minimum .229 inch by 3 inch by 3 inch (5.8 mm by 76 mm by 76 mm) washers, embedded in the foundation a minimum of 7 inches (178 mm). 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 two anchors per plate section is required.

2. **Foundation**: Pre-fabricated mudsill anchors 1(ex. FA3 or MASA) 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 two 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, double rim boards shall be provided and nailed per Table R602.3 (1). The Rim board shall be fastened to the wall top plate with metal connector plates at 6 feet (1829 mm) on center; installed plate shall provide a minimum vertical and horizontal capacity of 440 pounds minimum.

R301.2.2.3.8.2 Anchorage of all interior structural walls (Sole Plates). Interior structural walls shall be secured by one of the following methods:

1. **Foundation**: ½ inch (12.7mm) anchor bolts, with minimum .229 inch by 3 inch by 3 inch (5.8 mm by 76 mm by 76 mm) plate washers, embedded a minimum of 7 inches (178 mm) in a continuous footing (sized per Table R403.1(1) at 4 feet (1219 mm) on center maximum and within 12 inches (305mm) of the end of each plate section. A minimum of two anchors per plate section is required.

2. **Foundation**: By powder 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 two 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) center to center 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 walls shall be continuously sheathed with a minimum of 7/16 inch (11mm) exterior rated OSB or plywood. Sheathing is to be fastened every 6 inches (152 mm) on the edges and 12 inches (305 mm) at intermediate supports with minimum 8d common nails.

R301.1.2.2.3.8.4.2 Interior wall sheathing. Interior walls shall have sheathing on both sides. Sheathing shall be a minimum of ½ inch (12.7 mm) gypsum board with fasteners spaced at a maximum of 7 inches (178 mm), on edges and 7 inches (178 mm) at intermediate supports. Minimum fastener size shall be 5d cooler or wallboard nails or 1¼" #6 Type S or W screws.

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 Connections across floor joist space. A Minimum 36" long by 1 ¼" wide by 18 gauge (1219 mm by 31.75 mm by 1.31 mm) galvanized steel coil strap 1(ex. RS200 or CS18) installed at 4 feet (1219 mm) on center across floor joist space or equivalent is required on all exterior walls and stacked interior structural walls. Straps shall run vertical along the edge of studs and shall be centered on floor joist space. Studs shall be vertically aligned.

R301.2.2.3.8.7 Roof framing connections. Roof framing members shall be attached to wall top plates with 18 gauge galvanized steel clips (ex. RT7A or H2.5A) or equivalent spaced not more than 4 feet (1219 mm) on center. Provide clips in addition to the fastening requirements in Table R602.3(1). This requirement applies to all contact points

with structural walls. In the event wind fastening requirements differ, the more stringent shall apply.

R301.2.2.3.8.8 Braced wall hold-downs.

1. **Exterior walls:** A single hold-down shall be installed at each end of each wall over 8 feet (2438 mm) in length (two hold-downs per wall length). Hold-down 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 hold-down 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.

R301.2.2.3.8.9 Opening straps/clips. This section applies only to window and door 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 1(ex. RT7A or H2.5A) or equivalent at 32 inches (813 mm), top and bottom of studs, minimum two clips per opening width at headers and sills.

2. **Headers:** Headers shall bear on a minimum 2x jack post and be fastened to the post with minimum 18 gauge galvanized steel clips 1(ex. RT7A or H2.5A), or continuous sheathing from king post to header or sill.

3. **Window Sill plate**: Sill plate shall be end nailed with three 10d nails each end through a minimum 2x 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. SPT22 or SP1) or equivalent from post to wall plate, top and bottom. King and jack posts shall be nailed together with 10d nails at 8 inches (204 mm) on center staggered full height.

R301.2.2.3.8.10 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.

R301.2.2.3.8.11 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 walls 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 structures shall be engineered.

14. **Amend Section R313.1 "Townhouse automatic fire sprinkler systems" and add exception #2 so when amended it reads as follows:**

R313.1 Townhouse Automatic Fire Sprinkler Systems. An automatic residential fire sprinkler system complying with NFPA 13 shall be installed in townhouses.

Exceptions:
1. An automatic residential fire sprinkler system shall not be required where additions or alterations are made to existing townhouses that do not have an automatic residential fire sprinkler installed.
2. An automatic residential fire sprinkler system complying with NFPA 13-D may be installed in townhouses less than 4 stories.

15. **Amend Section R313.2 "One- and two-family dwellings automatic fire sprinkler systems" so when amended it reads as follows:**

R313.2 One- and two-family dwelling automatic fire sprinkler system: An automatic residential fire sprinkler system shall be installed in one- and two-family dwellings with a finished floor area (excluding garages) of 5500 square feet or greater.

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

R313.2.1 One- and two-family dwelling located more than 300 feet from the nearest point of public access: An automatic fire sprinkler system shall be installed in one- and two-family dwellings which exceed 2000 square feet (excluding garages) and have driveways or private access roads which exceed 300 feet in length.

16. **Amend Section R401.3 "Drainage" so when amended it reads as follows:**

R401.3 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 water away from foundation walls. The finish floor elevation, except for basements, shall

be a minimum of 10 inches above the exterior finish ground. The grade away from the foundation walls shall fall a minimum of 6 inches within the first 10 feet.

Exception: Where lot lines, walls, slopes or other physical barriers prohibit 6 inches of fall within 10 feet, drains, or swales shall be provided to ensure drainage away from the structure.

17. **Delete Chapter 11 "Energy Efficiency" in its entirety and replace with the following:**

    Residential energy efficiency requirements shall be designed and constructed per the 2018 International Energy Conservation Code as amended by the Town of Collierville.

18. **Amend Section MI305.1.2 "Appliances in attics" by adding new section as follows:**

    1305.1.2.2 Access to mechanical equipment located in the attic of one and two family dwelling units shall be provided by permanent stairs or pull down stairs if access is provided from the floor below.

19. **Amend Section M1411.3 "Condensate disposal" by adding the following sentence to the end of the paragraph:**

    Units shall drain to a sanitary sewer drain through an indirect waste located within two feet of the equipment, or to an approved French drain which extends two feet below grade and provides 8 cubic feet of drain material for a unit three tons (10.6 kW) nominal capacity or less or sixteen cubic feet of drain material for a unit larger than three tons.

20. **Amend Section P2801.6.1 "Pan size and drain" by increasing the size of the drain pipe ¾ inch to 1 inch so when amended it reads as follows:**

    The pan shall be drained by an indirect waste pipe of not less than 1 inch (25.4 mm) diameter.

21. **Delete Section P2902.5.3 "Lawn irrigation systems" in its entirety and replace with the following:**

    P2902.5.3 Lawn Irrigation Systems: The reduced pressure, backflow preventer and all components shall be installed to meet the following conditions:
    1. A valve shall be placed within close proximity of the water meter if a separate meter is not installed solely for the irrigation system.
    2. A minimum of schedule 40 service pipe shall be installed from the meter to the backflow preventer.
    3. The schedule 40 service pipe shall be buried at a minimum depth of 12 inches.
    4. There shall be a minimum of 12 inches of gravel at the bottom of the backflow preventer.
    5. Each backflow preventer shall be tested and certified by the State of Tennessee to test such devices. This test shall be on site at the time of inspection.

22. **Amend Section P2903.7 "Size of water-service mains, branch mains and risers" by increasing the water service pipe size from ¾ inch to 1 inch so when amended it reads as follows:**

    The size of the water service pipe shall be not less than 1 inch (25.4 mm) diameter.

23. **Amend Tables P2906.4 "Water Service Pipe" and 2906.5 "Water Distribution Pipe" by deleting the references to Type M with Type L copper alloy tubing:**

TABLE P2906.4
Water Service Pipe

MATERIAL	STANDARD
Acrylonitrile butadiene styrene (ABS) plastic pipe	ASTM D 1527; ASTM D 2282
Chlorinated polyvinyl chloride (CPVC) plastic pipe	ASTM D 2846; ASTM F 442; CSA B137.6
Chlorinated polyvinyl chloride/aluminum/chlorinated polyvinyl chloride (CPVC/AL/CPVC) plastic pipe	ASTM F 2855
Copper or copper-alloy pipe	ASTM B 42; ASTM B 43; ASTN B 302
Copper or copper-alloy tubing (Type K, WK, WL or WM)	ASTM B 75; ASTM B 88; ASTM B 251; ASTM B 447
Cross-linked polyethylene/aluminum/cross-linked polyethylene (PEX-AL-PEX) pipe	ASTM F 1281; ASTM F 2262; CSA B137.10
Cross-linked polyethylene/aluminum/high-density polyethylene (PEX-AL-HDPE) pipe	ASTM F 1986
Cross-linked polyethylene (PEX) plastic tubing	ASTM F 876; AWWA C904; CSA B137.5
Ductile iron water pipe	AWWA C115/A21.15; AWWA C151/A21.51
Galvanized steel pipe	ASTM A 53
Polyethylene/aluminum/polyethylene (PE-AL-PE) pipe	ASTM F 1282; CSA B137.9
Polyethylene (PE) plastic pipe	ASTM D 2104; ASTM D 2239; AWWA C901; CSA B 137.1
Polyethylene (PE) plastic tubing	ASTM D 2737; AWWA C901; CSA B137.1
Polyethylene of raised temperature (PE-RT) plastic tubing	ASTM F 2769; CSA B137.18
Polypropylene (PP) plastic tubing	ASTM F 2389; CSA B137.11
Polyvinyl chloride (PVC) plastic pipe	ASTM D 1785; ASTM D 2241; ASTM D 2672; CSA B137.3
Stainless steel (Type 304/304L)pipe	ASTM A 312; ASTM A 778
Stainless steel (Type 316/316L)pipe	ASTM A 312; ASTM A 778

TABLE P2906.5
WATER DISTRIBUTION PIPE

MATERIAL	STANDARD
Chlorinated polyvinyl chloride (CPVC) plastic pipe and tubing	ASTM D 2846; ASTM F 441; ASTM F 442; CSA B137.6
Chlorinated polyvinyl chloride/aluminum/chlorinated polyvinyl chloride (CPVC/AL/CPVC) plastic pipe	ASTM F 2855
Copper or copper-alloy pipe	ASTM B 42; ASTM B 43; ASTM B 302
Copper or copper-alloy tubing (Type K, WK, WL or WM)	ASTM B 75; ASTM B 88; ASTM B 251; ASTM B 447
Cross-linked polyethylene (PEX) plastic tubing	ASTM F 876; CSA B137.5
Cross-linked polyethylene/aluminum/cross-linked polyethylene (PEX-AL-PEX) pipe	ASTM F 1281; ASTM F 2262; CSA B137.10
Cross-linked polyethylene/aluminum/high-density polyethylene (PEX-AL-HDPE) pipe	ASTM F 1986
Galvanized steel pipe	ASTM A 53
Polyethylene/aluminum/polyethylene (PE-AL-PE) composite pipe	ASTM F 1282
Polyethylene of raised temperature (PE-RT) plastic tubing	ASTM F 2769; CSA B137.18
Polypropylene (PP) plastic pipe or tubing	ASTM F 2389; CSA B137.11
Stainless steel (Type 304/304L) pipe	ASTM A 312; ASTM A 778

24. **Amend Section 2906.6 "Fittings" by adding the following Subsection:**

2906.6.2 Water Distribution fittings shall not be placed under slab installations unless prior approval is made with the Code Official.

25. **Amend Tables P3002.1 (1) "Above-Ground Drainage and Vent Pipe" and P3002.1(2) "Underground Building Drainage and Vent Pipe" by adding the following footnote to both tables:**

a. Type M and Type DWV Copper Tube and Copper Pipe are not allowed for drain and waste material.

26. **Amend Table 3004.1 "Drainage Fixture Unit (d.f.u.) Values for Various Plumbing Fixtures" by adding the following footnote d.:**

d. For showers with two or more shower valves, the drain and strainer shall be increased from 2 inch to 3 inch or additional drains shall be provided.

27. **Amend Section P3113.1 "Size of vents" by adding the following section:**

P3113.1.1 A minimum 2 inch (50.8 mm) diameter main vent is required on all installations.

28. **Amend Table 3201.7 "Size of Traps for Plumbing Fixtures" by replacing the smallest trap size (1 ½") in showers with 2" so when amended it reads as follows:**

Table P3201.7
Size of Traps for Plumbing Fixtures

Plumbing Fixture	Trap Size (Minimum)
Bathtub (with or without showerhead and/or whirlpool attachments)	1 1/2
Bidet	1 1/4
Clothes washer standpipe	2
Dishwasher (on separate trap)	1 1/2
Floor drain	2
Kitchen sink (one or two traps, with or without dishwasher and food waste disposer)	1 1/2
Laundry tub (one or more compartments)	1 1/2
Lavatory	1 1/4
Shower (based on the total flow rate through showerheads and body sprays)	
Flow rate:	
5.7 gpm and less	2
More than 5.7 gpm up to 12.3 gpm	2
More than 12.3 gpm up to 25.8 gpm	3
More than 25.8 gpm up to 55.6 gpm	4

For SI: 1 inch=25.4mm

29. **Delete Chapters 34 through 43 in its entirety and replace with the following:**

One- and Two-Family dwelling electrical wiring shall be installed in compliance with and according to NFPA 70, 2017 National Electrical Code with Town of Collierville amendments.

§150.071 THE FOLLOWING APPENDICES ARE HEREBY ADOPTED:

A. Sizing and Capacity of Gas Piping

B. Sizing of Venting Systems Serving Appliances with Draft Hoods, Category I Appliances and Appliances Listed for Use with Type B Vents

C. Exit Terminals of Mechanical Draft and Direct-Vent Systems

§150.080 NATIONAL ELECTRICAL CODE

The following modifications and amendments to the 2017 National Electrical Code (NEC) are hereby adopted:

NEC Modification

Whenever the National Electrical Code refers to the "code official" it shall mean the person appointed or designated by the municipal governing body to administer and enforce the provisions of the Residential Code.

1. **Amend Article 90 "Introduction" by adding Section 90.10 "Appeals" so that when amended it reads as follows:**

90.10 Appeals. The Town of Collierville, Construction Board of Adjustments and Appeals shall be the appeals body which is authorized to hear and decide appeals of orders, decisions, or determinations made by the code official regarding the application and interpretation of this code.

2. **Amend Article 110, Section 110.5 "Conductors" by adding section 110.5(a) so when amended it reads as follows:**

110.5(a) Dwelling Conductors. Inside one- or two-family or multi-family dwellings, aluminum conductors shall not be permitted.

3. **Amend Article 210, Section 201.52(B)(3) "Kitchen Receptacle Requirements" so when amended it reads as follows:**
210.52(B)(3) Kitchen Receptacle Requirements. Receptacles installed in a kitchen to serve countertop surfaces shall be supplied by two or more 20 AMP small-appliance branch circuits, and each such circuit shall supply not more than three receptacle outlets. These small-appliance circuits shall be installed in every kitchen in new buildings, where kitchens are completely remodeled, or where kitchens are added to existing buildings and shall serve not more than one kitchen. A vent-a-hood or gas cook top ignition receptacle may be added as a fourth outlet on a small appliance branch circuit.

4. **Amend Article 210, Section 210.52(C)(2) "Island Countertop Spaces" by adding the following exception:**
Exception: The installation of receptacles for island countertop spaces shall be optional.

5. **Amend Article 210, Section 210.52(C)(3) "Peninsular Countertop Spaces" by adding the following exception:**

Exception: The installation of receptacles for peninsular countertop spaces shall be optional.

6. **Amend Article 220, Section 220.1 "Scope" by adding a new section 220.1(a) so that when amended it reads as follows:**

220.1(a) Any person, firm, corporation or contractor, designing or installing new electrical systems or adding load to an existing electrical system shall be responsible for determining that the main service equipment, feeders and all equipment be of the proper size for the total connected load as required by the 2017 National Electrical Code as amended by the Town of Collierville.

7. **Delete Article 220, Section 220.10 "General" in its entirety and replace with the following:**

220.10 General. Branch-circuit loads shall be calculated as shown in 220.12, 220.14, and 220.16. Branch circuit load calculations shall be provided as part of or prior to the "Rough Electric" inspection.

Exception: In one- and two-family dwellings the branch-circuit load calculations are not required if wired according to the following:
1) No more than 16 convenience outlets, single or duplex, shall be connected on any circuit and no single circuit shall supply an area of more than 750 sq. ft. Receptacle circuits shall be wired with a 12-gauge wire and protected by a 20-ampere over-current device. Not more than 12 outlets connected to any circuit where lighting and receptacle outlets are combined on one 20-ampere arc-fault protected over-current device.
2) At least one lighting circuit shall be installed for each 750 sq. ft. of floor area or fraction of this area. Not more than 12 lighting outlets shall be connected to any one lighting circuit. Lighting circuits may be wired with 14-gauge wire and protected by 15-ampere over-current devices.

8. **Amend Article 220, Section 220.14(I) "Receptacle Outlets" by adding a new section 220.14(I)(1) so that when amended it reads as follows:**

220.14(I)(1). In other than one- and two-family dwellings, not more than six convenience outlets or floor box receptacles, single or duplex, shall be connected to one 120-volt circuit in installations unless designed by a Tennessee licensed Electrical Engineer.

9. **Delete Article 230, Section 230.70(A)(1) "Readily Accessible Location" in its entirety and replace with the following:**

230.70(A)(1) Readily Accessible Location. The service disconnecting means shall be installed at a readily accessible location either outside of a building or structure or inside nearest the point of entrance of the service conductors. Service conductors shall not extend more than 15 feet of total conductor length inside a building or structure, measured from the point of entrance, prior to over-current protection.

10. **Amend Article 250.50(A)(3), "Concrete Encased Electrode" by adding the following sentence at the end of the section:**

The installation of the electrode shall be verified by a Town of Collierville electrical inspection or by an engineer prior to placement of concrete.

11. **Amend Article 300.5(D) "Protection from Damage" by adding requirement number 5 so when amended it reads as follows:**

300.5(D) Protection from Damage. Direct-buried conductors and cables shall be protected from damage in accordance with 300.5(D)(1) through (D)(5).

(5) Separation from gas piping. Direct-buried conductors, raceways, conduits, etc., shall be separated from gas pipe by a minimum of 12 inches when installed in the same ditch, trench, slab, etc…

12. **Amend Article 310.15(B)(7) "Single-Phase Dwelling Service and Feeders" by adding section 301.15(B)(7)(5) so when amended it reads as follows:**

310.15(B)(7) Single-Phase Dwelling Service and Feeders. For one- and two-family dwellings and the individual dwelling units of two-family and multi-family dwellings, service and feeder conductors supplied by a single-phase, 120/240-volt system shall be permitted to be sized in accordance with 310.15(B)(7)(1) through (5).

(5) The service conductor ampere rating shall not be less than the MAIN overcurrent protective device rating or the bar rating of a MAIN LUG ONLY panel.

13. **Amend Article 334, Section 334.12(A) "Type NM, NMC and NMS" by adding a new section 334.12(A)(11) so that when amended it reads as follows:**

334.12(A)(11) In non-residential occupancies

14. **Amend Article 340, Section 340.12 "Uses Not Permitted" by adding a new section 340.12(12) so that when amended it reads as follows:**

340.12(12) In non-residential occupancies

15. **Amend Article 422, Section 422.16(B)(2) "Built-In Dishwashers and Trash Compactors" by adding an exception to condition 2 so that when amended it reads as follows:**

Exception: An approved minimum 14 gauge factory molded flexible cord with factory installed cord cap and identified as suitable for the purpose may be used. The length of the cord shall be a maximum of 6 feet measured from the face of the attachment plug to the electrical termination point of the built-in appliance.

§150.090 INTERNATIONAL PROPERTY MAINTENANCE CODE

The following modifications and amendments to the 2018 International Property Maintenance Code (IPMC) are hereby adopted:

IPMC Modification

Whenever the International Property Maintenance Code refers to the "code official" it shall mean the person appointed or designated by the municipal governing body to administer and enforce the provisions of the Property Maintenance Code.

1. **Amend Section 101.1 "Title" by adding the term "The Town of Collierville" in the parenthetic phrase so when amended it reads as follows:**

R101.0 Title. These regulations shall be known as the Property Maintenance Code of the Town of Collierville, hereinafter referred to as "this code".

2. **Delete Section 111 "Means of Appeal" in its entirety and replace with the following:**

Section 111 Means of Appeal
R111.1 General. The Town of Collierville, Construction Board of Adjustments and Appeals shall be the appeals body which is authorized to hear and decide appeals of orders, decisions, or determinations made by the code official regarding the application and interpretation of this code.

§150.091 THE FOLLOWING APPENDIX IS HEREBY ADOPTED:

APPENDIX A – Boarding Standard

§150.100 INTERNATIONAL ENERGY CONSERVATION CODE

The following modifications and amendments to the 2018 International Energy Conservation Code (IECC) are hereby adopted:

1. **Amend Section C101.1 "Title" so when amended it reads as follows:**

C101.1 Title. This code shall be known as the Energy Conservation Code of the Town of Collierville, and shall be cited as such and will be referred to herein as "this code."

2. **Delete Section C104 "Fees" and all subsections under it and reserve the section number so when amended it reads as follows:**

Section C104-Reserved

3. **Amend Section C105.2.6 "Final inspection" so when amended it reads as follows:**

C105.2.6 Final inspection. The building shall have a final inspection and shall not be occupied until approved. The final inspection shall include verification of the installation and proper operation of all required building controls.

4. **Amend Section C109.1 "General" so when amended it reads as follows:**

C109.1 General. The Town of Collierville, Construction Board of Adjustments and Appeals shall be the appeals body which is authorized to hear and decide appeals of orders, decisions, or determinations made by the code official regarding the application and interpretation of this code.

5. **Delete Section C109.2 "Limitations on authority" without replacement.**

6. **Delete Section C109.3 "Qualifications" without replacement.**

7. **Amend Section C301.1 "General" so when amended it reads as follows:**

C301.1 General - Climate zones in Figure C301.1 or Table C301.1 shall be used in determining the applicable requirements from Chapters 4 and 5.

8. **Amend Section C403.5 "Economizers" by adding a new exception #7 which reads as follows:**

   7. Buildings, which due to their size or intended use, and based on an analysis provided by the engineer and satisfactory to the Building Official, will not realize an economic payback on the use of this equipment within a 10 year equipment life assumption.

9. **Amend Section C405.2.3 "Daylight response controls" by adding a new exception #5 which reads as follows:**

   5. Any area or room which classifies as a single daylight control zone which does not have fenestration that exceeds 250 square feet.

10. **Delete Section C408 "Maintenance information and system commissioning" and all its subsections, without replacement.**

11. **Amend Section C503.2 "Change in space conditioning" so when amended it reads as follows:**

    C503.2 Change in space conditioning- Any non-conditioned space that exceeds 5% of the building, in which it is located, which is altered to become conditioned space shall be required to be brought into full compliance with this code. The Building Official may look back for two years prior to the application to capture other projects during that time that increased the floor area of conditioned space and total those previously conditioned areas with the proposed project's area to determine if the applicable area threshold is exceeded.

12. **Amend Section R101.1 "Title" so when amended it reads as follows:**

    R101.1 Title. This code shall be known as the Energy Conservation Code of the Town of Collierville and shall be cited as such. It is referred to herein as "this code."

13. **Delete Section R104 "Fees" and all subsections under it and reserve the section number so when amended it reads as follows:**

    Section R104-Reserved

14. **Delete Section R109.1 "General" in its entirety and replace with the following:**

    R109.1 General. The Town of Collierville, Construction Board of Adjustments and Appeals shall be the appeals body which is authorized to hear and decide appeals of orders, decisions, or determinations made by the code official regarding the application and interpretation of this code.

15. **Delete Section R109.2 "Limitations on authority" without replacement.**

16. **Delete Section R109.3 "Qualifications" without replacement.**

17. **Delete Section R401.3 "Certificate" without replacement.**

18. **Amend Table 402.1.2 as follows:**

Table R402.1.2
INSULATION AND FENESTRATION REQUIREMENTS BY COMPONENT

Climate Zone	Fenestration *U*-Factor[b]	Skylight *U*-Factor[b]	Glazed Fenestration SHGC[b]	Ceiling *R*-Factor[h]	Wood Frame Wall *R*-Value	Mass Wall *R*-Value[f]	Floor *R*-Value	Basement Wall *R*-Value[e]	Slab *R*-Value & Depth[d]	Crawl Space Wall *R*-Value[c]
3	.35	.55	.25	38	13	5/8	19	5/13	0	5/13

Footnotes

a- *R*-Values are minimums. *U*-factors and SHGC are maximums. *R*-19 batts compressed into normal 2x6 framing such that the *R*-value is reduced by *R*-1 or more shall be marked with the compressed batt *R*-value in addition to full thickness R-value.

b- The fenestration *U*-factor column excludes skylights. The SHGC column applied to all glazed fenestration.

c- "5/13" means R-5 continuous insulated sheathing on the interior or exterior of the home or R-13 insulation at the interior of the crawl space wall.

d- R-5 shall be added to the required slab edge R-values for heated slabs. Insulation depth shall be the depth of the footing or 2 feet, whichever is less in Zone 3 for heated slabs.

e- Basement wall insulation shall not be required in warm-humid locations as defined by Figure R301 and Table 301.1.

f- The second R-value applies when more than half of the insulation is on the interior of the mass wall.

g- For impact rated fenestration complying with Section R301.2.1.2 of the International Residential Code or Section 1609.1.2 of the International Building Code, the maximum *U*-factor shall be 0.65.

h- A maximum of 50% of the area can be R-30.

19. **Amend Section R402.2.4 entitled "Access hatches and doors" so when amended it reads as follows:**

R402.2.4 Access hatches and doors. Access hatches from conditioned spaces to unconditioned spaces such as attics and crawl spaces shall be weather-stripped.

20. **Amend Section R402.3.3 entitled "Glazed fenestration exemption" so when amended it reads as follows:**

R402.3.3 Glazed fenestration exemption. Up to 45 square feet (4.2 M^2) of glazed fenestration per dwelling unit shall be permitted to be exempt from the *U*-factor and SHGC requirements in Section R402.1.2. This exemption shall not apply to the *U*-factor alternative approach in Section R402.1.4 and the Total UA alternative in Section R402.1.5.

21. **Delete existing Table R402.4.1.1 entitled "Air Barrier and Insulation Component Criteria" and replace it with the following table:**

Table R402.4.1.1
Air Barrier and Insulation Component Criteria

COMPONENT	CRITERIA
Air Barrier and Thermal Insulation	Exterior thermal envelope insulation for framed walls is installed in substantial contact or continuous alignment with the building envelope air barrier. Breaks or joints in air barrier are filled and repaired. Air-permeable insulation is not used as a sealing material. Air-permeable insulation is inside of an air barrier.
Ceiling/Attic	Air barrier in dropped ceiling/soffit is substantially aligned with insulation and any gaps are sealed. Attic access, knee wall door, or drop down stair is sealed.
Walls	Corners and headers are sealed. Junction with foundation and sill plate is sealed.
Windows and Doors	Space between windows/door jams and framing is sealed.
Rim Joists	Rim joints are insulated and include air barrier.
Floors (including above garage and cantilevered)	Insulation installed to maintain permanent contact with underside of subfloor decking. Air barrier is installed at any exposed edge of insulation.
Crawl Space Walls	Insulation is permanently attached to walls. Exposed earth in unvented crawl space is covered with Class 1 vapor retarder with overlapping joints taped.
Shafts, Penetrations	Duct shafts, utility penetrations, knee walls and flue shafts opening to exterior or unconditioned space are sealed.
Narrow Cavities	Batts in narrow cavities are cut to fit, or narrow cavities are filled with sprayed or blown insulation.
Garage Separation	Air sealing is provided between the garage and conditioned spaces.
Recessed Lighting	Recessed light fixtures are air tight, IC rated, and sealed to drywall. Exception-fixtures in conditioned space.
Plumbing and Wiring	Insulation is placed between outside and pipes. Batt insulation is cut to fit around wiring and plumbing, or sprayed/blown insulation extends behind piping and wiring.
Shower/Tub on Exterior Wall	Showers and tubs on exterior wall have insulation and an air barrier separating them from an exterior wall.

Ord. 2020-06

Electrical/Phone Box on Exterior Walls	Air barrier extends behind box or air-sealed type boxes are installed.
Common Wall	Air barrier is installed in common wall between dwelling units.
HVAC Register Boots	HVAC register boots that penetrate building envelope are sealed to subfloor or drywall.
Fireplace	Fireplace walls include an air barrier.
Concealed Sprinklers	When required to be sealed, concealed fire sprinklers shall only be sealed in a manner that is recommended by the manufacturer. Caulking or other adhesive sealants shall not be used to fill voids between fire sprinkler cover plates and walls or ceilings.

22. **Delete Section R402.4.1.2 entitled "Testing" in its entirety and reserve the section number so when amended it reads as follows:**

Section R402.4.1.2-Reserved

23. **Amend Section R403.3.3 entitled "Duct testing" so when amended it reads as follows:**

Section R403.3.3 Duct testing (Mandatory January 1, 2022).

24. **Amend Section R403.3.4 entitled "Duct leakage" so when amended it reads as follows:**

Section R403.3.4 Duct leakage (Prescriptive January 1, 2022)

§150.110 INTERNATIONAL SWIMMING POOL AND SPA CODE

The following modifications and amendments to the 2018 International Swimming Pool and Spa Code (ISPSC) are hereby adopted:

ISPSC Modification

Whenever the International Swimming Pool and Spa Code refers to the "code official" it shall mean the person appointed or designated by the municipal governing body to administer and enforce the provisions of the Swimming Pool and Spa Code.

1. **Amend Section 101.1 "Title" by adding the term "The Town of Collierville" in the parenthetic phrase so when amended it reads as follows:**
R101.0 Title. These regulations shall be known as the Swimming Pool and Spa Code of the Town of Collierville, hereinafter referred to as "this code".

2. **Delete Section 108 "Means of Appeal" in its entirety and replace with the following:**
Section 108 Means of Appeal
R108.1 General. The Town of Collierville, Construction Board of Adjustments and Appeals shall be the appeals body which is authorized to hear and decide appeals of orders, decisions, or determinations made by the code official regarding the application and interpretation of this code.

§150.120 INTERNATIONAL EXISTING BUILDING CODE

The following modifications and amendments to the 2018 International Existing Building Code (IEBC) are hereby adopted:

IEBC Modification

Whenever the International Existing Building Code refers to the "code official" it shall mean the person appointed or designated by the municipal governing body to administer and enforce the provisions of the Existing Building Code.

1. **Amend Section 101.1 "Title" by adding the term "The Town of Collierville" in the parenthetic phrase so when amended it reads as follows:**

R101.0 Title. These regulations shall be known as the Existing Building Code of the Town of Collierville, hereinafter referred to as "this code".

2. **Delete Section 112 "Board of Appeal" in its entirety and replace with the following:**

Section 112 Board of Appeal

R112.1 General. The Town of Collierville, Construction Board of Adjustments and Appeals shall be the appeals body which is authorized to hear and decide appeals of orders, decisions, or determinations made by the code official regarding the application and interpretation of this code.

Ord. 2020-06