ORDINANCE NO. BL2007-1390

An ordinance amending Titles 2, 10 and 16 of the Metropolitan Code of Laws to adopt the 2006 Fire Code, Building Code, Energy Code, Gas/Mechanical Code, Plumbing Code, and amendments thereto.

NOW, THEREFORE, BE IT ENACTED BY THE COUNCIL OF THE METROPOLITAN GOVERNMENT OF NASHVILLE AND DAVIDSON COUNTY:

FIRE CODE SECTIONS Sections 1 through Section 5

Section 1. Section 2.28.170 of the Metropolitan Code of Laws is hereby amended by deleting Section 2.28.170 and substituting the following:

2.28.170 Orders to remedy dangerous conditions--Appeals.

Whenever the fire marshal shall find any building or other structure within the A. county which, for want of repair or by reason of age or dilapidated condition, or for any cause, is especially liable to fire, and which is so situated as to endanger other buildings, structures or property, or whenever he shall find in any building or structure within the general services district, an improper or dangerous arrangement or condition of stoves, ranges, furnaces or other heating appliances of any kind whatsoever, including chimney, flues and pipes with which the same may be connected, or a dangerous condition or arrangement of lighting devices or system, or a dangerous or unlawful storage of explosives, petroleum, gasoline, kerosene, dangerous chemicals, vegetable products, fireworks, ashes, combustibles, inflammables, or refuse materials, or other conditions which, in his opinion, may constitute a dangerous fire hazard, or be liable to cause or promote fire or to create conditions dangerous to the emergency responders or to occupants of the building or to adjoining property, he shall serve an order in writing upon the owner, lessee, occupant or agent of the building for the dangerous condition or arrangement, specified and described in such written order, to be removed or remedied, within a time, not less than five days, to be designated in the order, and such order shall be within the designated time complied with by the owner, lessee and occupant or agent of such building; provided, that if the owner, lessee, occupant or agent deems himself aggrieved by such order, he may, before the next meeting of the Board of Fire and Building Code Appeals, from the service of such order, appeal to said board, by written petition addressed to the board who shall hear such appeal as soon as it can be conveniently heard, and who may make investigation and hear testimony of any witnesses, and issue subpoena for any witnesses, and who may, upon such hearing, either affirm, modify or revoke the order of the fire marshal. If the order of the fire marshal is affirmed or modified, such order so affirmed or modified shall forthwith be complied with by the owner, lessee, occupant or agent.

B. Every such order in writing issued and served by the fire marshal shall be dated and signed by him, and copies of such order shall be kept and preserved in an order record by the fire marshal.

C. Should the fire marshal determine that a change, addition or renovation of a privately owned building or structure is warranted to abate a fire hazard, he shall send written notice by return receipt certified mail to the owner of the building or structure. The fire marshal shall take no official action to require the change, addition or renovation until he has received return of the certified mail indicating that the owner of the property has received notice of the alleged dangerous condition.

Section 2. Section 10.64.010 of the Metropolitan Code of Laws is hereby amended by deleting Section 10.64.010 and substituting the following:

Section 10.64.010 Fire prevention code adopted

The metropolitan government adopts the 2006 NFPA 1 Uniform Fire Code of the National Fire Protection Association (Fire Prevention Code), which references the 2006 edition of the printed volumes of the National Fire Code, as amended in this chapter, to be applicable throughout the metropolitan government. A copy of such fire prevention code is attached to the ordinance codified in this section and hereof, the same as if copied verbatim herein.

Section 3. Section 10.64.012 is hereby amended by deleting Section 10.64.012 and substituting the following:

Section 10.64.012 Amendments to the 2006 NFPA 1 Uniform Fire Code The following amendments, deletions, or additions to the 2006 FIRE Prevention Code are adopted by reference, as fully as though copied into such Fire Code, and thereby made a part of the Metropolitan Fire Prevention Code.

A. Section 1-7 of the 2006 edition of the NFPA 1, Fire Prevention Code, which is part of the National Fire Codes, is hereby amended by adding the following new subsection 1.7.3.3:

Section 1.7.3.3 The provisions of this code do not apply to one and two family dwellings in the normal use or maintenance thereof.

Exception No. 1: This code shall apply whenever the activity or use of such dwelling creates a fire hazard to life or property.

Exception No. 2: Where provisions of annexed codes specifically apply to one or two-family dwelling.

Exception No. 3: This code shall apply to one and two family dwellings for access of emergency vehicles and fire protection water supply.

Exception No. 4: This code shall apply for fire investigations.

B. Section 1.10 Board of Appeals of the 2006 edition of the NFPA 1 Uniform Fire Code which is a part of the National Fire codes is deleted in it's entirety and the following paragraph is substituted in lieu thereof:

The Board of Appeals created and empowered to act on all appeals under this Metropolitan Fire Prevention Code shall be the Metropolitan Board of Fire and Building Code Appeals (Board) as established and provided for in the Metropolitan Code of Laws, Chapter 2.80 and Section 16.08.010. The Board shall hear all appeals for variances in or interpretations of this Metropolitan Fire Prevention Code by the Fire Marshal of the Metropolitan Government. When acting under this Metropolitan Fire Prevention Code, the Board shall transmit its decisions to the Fire Marshal.

C. Section 1.12 of the 2006 Edition of the NFPA 1 Uniform Fire Code, which is a part of the National Fire Code, is hereby amended by adding the following subsection 1.12.2.5 and 1.12.21

Section 1.12.2.5 Permit approval shall be obtained and issued prior to the construction, alteration, repair, equipment, maintenance process, display, storage or use for the purpose in which the permit was issued.

Section 1.12.21 Permit fees shall be established by the authority having jurisdiction.

D. Table 1.12.20(a) of the 2006 edition of the NFPA 1 Uniform Fire Code which is a part of the National Fire Code, is hereby amended by adding the following operations:

Operations and Materials	Permits Required
Special Events	As deemed necessary by the authority having Jurisdiction (AHJ) when a Fire Watch is required by the AHJ to assure life safety during the event.

E. Section 3.3.165 of the 2006 edition of the NFPA 1 Uniform Fire Code which is a part of the National Fire Code, is hereby amended by adding the following subsection 3.3.165.19.2:

Section 3.3.165.19.2 Bed and Breakfast Homestay. A private home, inn or other unique residential facility located in a structure of historical significance as defined in Tennessee Code Annotated Section 68-14-503 (3), offering bed and breakfast accommodations and one (1) daily meal and having less than four (4) guest rooms furnished for pay, with guest staying not more than fourteen (14) days, and where the innkeeper resides on the premises or property, or immediately adjacent to it. Guest rooms shall be established and maintained distinct and separate from the innkeeper's quarters.

F. Section 3.3.230 of the 2006 edition of the NFPA 1 Uniform Fire Code which is a part of the National Fire Code, is hereby amended by deleting the subsection 3.3.230 and substituting the following:

Section 3.3.230 Street Floor – A story or floor level accessible from the street or from the outside of a building at ground level, with the floor level at the main entrance located not more than three risers above or below ground level and arranged and utilized to qualify as the main floor or level of exit discharge.

G. Section 11.1 of the 2006 Edition of the NFPA 1 Uniform Fire Code, which is a part of the National Fire Code, is hereby amended by deleting the subsection 11.1.5 and substituting the following:

11.1.5 Extension cords shall not be used as a substitute for permanent wiring. Surge protectors for sensitive electrical equipment only and power strips in healthcare facilities meeting NFPA 99-8.25.2.1.7 requirements may be allowed. Piggy back use of devices is prohibited.

H. Section 11.5.2 of the 2006 Edition of the NFPA 1 Uniform Fire Code, which is a part of the National Fire Code, is hereby amended by adding the following subsection 11.5.2.4:

Section 11.5.2.4 Use of portable kerosene heaters can be prohibited by the AHJ.

I. Section 13.3.2.15 of the 2006 Edition of the NFPA 1 Uniform Fire Code, which is a part of the National Fire Code, is hereby amended by adding an exception to subsection 13.3.2.15.4:

Section 13.3.2.15.4.1 In buildings classified as a high rise by this code, sprinklers will be required in all rooms including closets and bathrooms regardless of size.

J. Section 13.3.2.24 of the 2006 Edition of the NFPA 1 Uniform Fire Code, which is a part of the National Fire Code, is hereby amended by deleting the subsection 13.3.2.24.2.1 in its entirety.

K. Section 13.3.2.24 of the 2006 Edition of the NFPA 1 Uniform Fire Code, which is a part of the National Fire Code, is hereby amended by deleting the subsection 13.3.2.24.2.3 and substituting the following:

Section 13.3.2.24.2.3 The entire building shall be required to be protected by an approved automatic sprinkler system by January 3, 2007.

L. Section 13.3.3 of the 2006 Edition of the NFPA 1 Uniform Fire Code, which is a part of the National Fire Code, is hereby amended by deleting the subsection 13.3.3.4.4.1 and substituting the following:

Section 13.3.3.4.4.1 Corrections and repairs shall be performed by an approved Tennessee licensed sprinkler contractor.

M. Section 13.4.2 of the 2006 Edition of the NFPA 1 Uniform Fire Code, which is a part of the National Fire Code, is hereby amended by deleting the subsection 13.4.2.1.1 and Table 13.4.2.1.1 and substituting the following:

Section 13.4.2.1.1 Fire pump enclosures shall be reinforced concrete block or 2 hour concrete enclosures.

N. Section 13.5 of the 2006 Edition of the NFPA 1 Uniform Fire Code, which is a part of the National Fire Code, is hereby amended by adding the following subsection 13.5.3.2:

Section 13.5.3.2 Backflow prevention devices on automatic fire extinguishment systems shall be serviced by an approved Tennessee Licensed sprinkler contractor.

O. Section 13.6.1 of the 2006 Edition of the NFPA 1 Uniform Fire Code, which is a part of the National Fire Code, is hereby amended by adding the following occupancy to the subsection Table 13.6.1.2:

Section 13.6.1.2 and table 13.6.1.2

Occupancy Use	Where Required
Historic Bed & Breakfast	yes

P. Section 13.7.4.4 of the 2006 Edition of the NFPA 1 Uniform Fire Code, which is a part of the National Fire Code, is hereby amended by adding the subsection 13.7.4.4.2:

13.7.4.4.2. Fire alarm and fire detection systems upon testing shall have displayed at the main fire alarm panel location a compliance tag/sticker. This tag/sticker shall bear the fire alarm contractor's name and phone number and a space for an inspection date. A green tag/sticker shall indicate that the alarm system has no deficiencies. A yellow tag shall indicate a system that is operational yet has trouble signals indicated. A red tag/sticker shall indicate any fire alarm system with deficiencies that leaves the system inoperable. The red and yellow tag/sticker shall remain in place until repairs are completed.

Q. Section 18.3. of the 2006 Edition of the NFPA 1 Uniform Fire Code, which is a part of the National Fire Code, is hereby amended by deleting the subsection 18.3.1 and substituting the following:

Section 18.3.1 An approved water supply capable of supplying the required fire flow for fire protection shall be provided to all premises upon which facilities, buildings, or portions of buildings are hereafter constructed or moved into the jurisdiction. The required fire flow shall meet the requirements of Annex H of this code.

R. Section 31.3.2. of the 2006 Edition of the NFPA 1 Uniform Fire Code, which is a part of the National Fire Code, is hereby amended by deleting the subsection 31.3.2.1.11 and substituting the following:

Section 31.3.2.1.11 Combustible waste materials such as bark, sawdust, chips, and other debris shall not be permitted to accumulate in a quantity or location that constitutes an undue fire hazard as determined by the AHJ.

S. Section 41.1.5 of the 2006 Edition of the NFPA 1 Uniform Fire Code, which is a part of the National Fire Code, is hereby amended by adding the following new subsection:

41.1.5.1.1 Permits shall be obtained prior to hot works operation.

T. Section 42.2.7.2.5 of the 2006 Edition of the NFPA 1 Uniform Fire Code, which is a part of the National Fire Code, is hereby amended by adding the following sentence to subsection 42.2.7.2.5.4.

Section 42.2.7.2.5.4 The words "WARNING, No Smoking and Stop Motor" shall be at least four inches in height with a stroke width of one inch. They shall be in a contrasting color that is acceptable to the Authority Having Jurisdiction.

U. Section 65.9 of the 2006 Edition of the NFPA 1 Uniform Fire Code, which is a part of the National Fire Code, is hereby amended by deleting the subsection 65.9.2.2 and substituting the following:

Section 65.9.2.2 A separate permit, valid for the duration of the project but not to exceed one year, shall be required to conduct blasting operations.

Section 4. 10.64.015 Amendments to the 2006 NFPA 101 Life Safety Code The following amendments, deletions, or additions to the 2006 NFPA Life Safety Code are adopted by reference, as fully as though copied into such Fire Code, and thereby made a part of the Metropolitan Fire Prevention Code.

A. Section 3-3 of the 2006 Edition of the NFPA 101 Life Safety Code, which is apart of the National Fire Code, is hereby amended by adding the following new subsection 3.3.168.16

3.3.168.16 Bed and Breakfast Homestay. A private home, inn or other unique residential facility located in a structure of historical significance as defined in Tennessee Code Annotated Section 68-14-503(3), offering bed and breakfast accommodations and one (1) daily meal and having less than four (4) guest rooms furnished for pay, with guest staying not more than fourteen (14) days, and where the innkeeper resides on the premises or property, or immediately adjacent to it. Guest rooms shall be established and maintained distinct and separate from the innkeeper's quarters.

B. Section 3.3.239 of the 2006 Edition of the NFPA 101 Life Safety Code, which is apart of the National Fire Code, is hereby amended by deleting subsection 3.3.239 and substituting the following:

3.3.239 Street Floor – A story or floor level accessible from the street or from the outside of a building at ground level, with the floor level at the main entrance located not more than three risers above or below ground level and arranged and utilized to qualify as the main floor or level of exit discharge.

C. Section 7.1.3.2 of the 2006 Edition of the NFPA 101 Life Safety Code, which is apart of the National Fire Code, is hereby amended by deleting subsection 7.1.3.2.1(2) item (c) in its entirety.

D. Section 7.2.2.4.5 of the 2006 Edition of the NFPA 101 Life Safety Code, which is apart of the National Fire Code, is hereby amended by adding the new subsections 7.2.2.4.5.2(4) and 7.2.2.4.5.2(5):

7.2.2.4.5.2 (4) New guards on open or glazed sides of stairs and ramps shall be permitted to be 38 inches high. Guards exceeding 38 inches high shall have a handrail located not less than 34 inches or more than 38 inches above the leading edge of a tread.

7.2.2.4.5.2 (5) The top element of a guard at the inside open or unenclosed edge of any intermediate stairway landing where the stairs reverse directions may be at the same height as the stairway handrails when the horizontal distance between the stair flights is 1 ft or less and then a continuous handrail as specified in 7.2.2.4.2 and 7.2.2.4.3 is provided.

E. Section 7.7.1 of the 2006 Edition of the NFPA 101 Life Safety Code, which is apart of the National Fire Code, is hereby amended by adding the following new subsection 7.7.1.5:

7.7.1.5 Exit termination that requires easement agreements from the other property owners, to insure access to public ways, shall be "permanent easements", protecting all future owners and occupants. Permanent easements can be voided in the future when exit termination from structures is in accordance with NFPA 7.7.1 exit termination requirements.

F. Section 8.2.1.3 of the 2006 Edition of the NFPA 101 Life Safety Code, which is apart of the National Fire Code, is hereby amended by deleting subsection 8.2.1.3(1) and substituting the following:

8.2.1.3(1) Separate buildings, if a 4-hour or greater vertically-aligned fire wall in accordance with NFPA 221, Standard for Fire Walls and Fire Barrier Walls, exists between the portions of the building.

Exception: The requirements of 8.2.1.3(1) shall not apply to previously approved separations between buildings.

G. Section 9.6.3 of the 2006 Edition of the NFPA 101 Life Safety Code, which is apart of the National Fire Code, is hereby amended by deleting subsections 9.6.3.2.1 and 9.6.3.2.3 in their entirety.

H. Section 9.7.2 of the 2006 Edition of the NFPA 101 Life Safety Code, which is apart of the National Fire Code, is hereby amended by adding the following new subsection 9.7.2.1.1:

9.7.2.1.1 Fire Pumps used in fire protection shall have the following signals transmitted to an approved Central Station Alarm Monitoring Service or an approved proprietary Service:

Electric Fire Pumps	Diesel Fire Pumps
1. Fire Pump Run	1. Fire Pump Run
2. Phase Reversal	2. Low Batteries
3. Power Failure	3. Failure to Start
4. Main Water Flow	4. Main Water Flow

I. Section 11.8 of the 2006 Edition of the NFPA 101 Life Safety Code, which is apart of the National Fire Code, is hereby amended by adding the following new subsection 11.8.6:

11.8.6 Operating Features – A written Emergency Evacuation Plan approved by the Authority Having Jurisdiction shall be provided in the Fire Control Room. In existing buildings that do not have a fire control room the plan shall be accessible at the buildings Fire Alarm annunciator panel.

J. Section 14.1.4.2 of the 2006 Edition of the NFPA 101 Life Safety Code, which is apart of the National Fire Code, is hereby amended by deleting the subsection 14.1.4.2 in its entirety and substituting the following:

Section 14.1.4.2 Education occupancies shall include part-day preschools, kindergartens and other levels in schools whose purpose is primarily grade school education, even though the children who attend such classes are of preschool age.

K. Section 14.3.6 of the 2006 Edition of the NFPA 101 Life Safety Code, which is apart of the National Fire Code, is hereby amended by adding the following new subsection 14.3.6(6):

14.3.6(6) In buildings protected throughout by an approved automatic sprinkler system, classroom doors shall not require self-closing devices.

L. Section 15.4.1.2 of the 2006 Edition of the NFPA 101 Life Safety Code, which is apart of the National Fire Code, is hereby amended by deleting the subsection 15.1.4.2 in its entirety and substituting the following:

Section 15.1.4.2 Education occupancies shall include part-day preschools, kindergartens and other levels in schools whose purpose is primarily grade school education, even though the children who attend such classes are of preschool age.

M. Section 15.3.1.3 of the 2006 Edition of the NFPA 101 Life Safety Code, which is apart of the National Fire Code, is hereby amended by deleting subsection in its entirety.

N. Section 15.3.6 of the 2006 Edition of the NFPA 101 Life Safety Code, which is apart of the National Fire Code, is hereby amended by adding the following new subsection 15.3.6(6):

15.3.6(6) In buildings protected throughout by an approved automatic sprinkler system, classroom doors shall not require self-closing devices.

O. Section 16.2.2.1 of the 2006 Edition of the NFPA 101 Life Safety Code, which is apart of the National Fire Code, is hereby amended by deleting the subsection 16.2.2.1 and substituting the following:

16.2.2.1 Components of means of egress shall be limited to the types described in 16.2.2.2 through 16.2.2.7.

P. Section 17.2.2.1 of the 2006 Edition of the NFPA 101 Life Safety Code, which is apart of the National Fire Code, is hereby amended by deleting the subsection 17.2.2.1 and substituting the following:

17.2.2.1 Components of means of egress shall be limited to the types described in 17.2.2.2 through 17.2.2.7.

Q. Section 28.2.2.1.2 of the 2006 Edition of the NFPA 101 Life Safety Code, which is apart of the National Fire Code, is hereby amended by deleting the subsection 28.2.2.1.2. in its entirety

R. Section 28.3.1.1.3 of the 2006 Edition of the NFPA 101 Life Safety Code, which is apart of the National Fire Code, is hereby amended by deleting the subsection 28.3.1.1.3 in its entirety.

S. Section 29.2.2.1.2 of the 2006 Edition of the NFPA 101 Life Safety Code, which is apart of the National Fire Code, is hereby amended by deleting the subsection 29.2.2.1.2 in its entirety.

T. Section 30.3.4.5.1 of the 2006 Edition of the NFPA 101 Life Safety Code, which is apart of the National Fire Code, is hereby amended by deleting the subsection 30.3.4.5.1 in its entirety and substituting the following:

Section 30.3.4.5.1 Approved single-station smoke alarms shall be installed in accordance with 9.6.2.9 inside every sleeping area, hallway/corridor, living rooms and on all levels of the dwelling unit, including basements.

U. Section 30.3.4.5.2 of the 2006 Edition of the NFPA 101 Life Safety Code, which is apart of the National Fire Code, is hereby amended by deleting the subsection 30.3.4.5.2 in its entirety.

V. Section 30.3.5 of the 2006 Edition of the NFPA 101 Life Safety Code, which is apart of the National Fire Code, is hereby amended by adding an exception to subsection 30.3.5.4:

Section 30.3.5.4. exception: In buildings classified as a high rise by this code, sprinklers will be required in all rooms including closets and bathrooms regardless of size.

W. Section 32.2.3.5.1 of the 2006 edition of the NFPA Life Safety Code which is apart of the National Fire Code is hereby amended by deleting it in it's entirety and substituting the following:

Section 32.2.3.5.1 All facilities shall be protected throughout by an approved automatic sprinkler system, installed in accordance with 32.2.3.5.3 using quick-response or residential sprinklers.

X. Section 32.2.3.5.2 of the 2006 edition of the Life safety Code which is a part of the National Fire Code is hereby amended by deleting it in it's entirety.

Y. Section 32.2.3.5.3.2 of the 2006 NFPA Life safety Code which is a part of the National Fire Code is hereby amended by deleting it in it's entirety and substituting the following:

Section 32.2.3.5.3.2 An automatic sprinkler system with a 30-minute water supply, and complying with the following requirement and with NFPA 13D, Standard for the Installation of Sprinkler Systems in One- and Two-Family Dwellings and Manufactured Homes, shall be permitted for facilities that have 8 or fewer residents.

(1) All habitable areas and closets shall be protected by an automatic sprinkler system.

Z. Section 33.2.3.5.2.1 of the 2006 NFPA Life Safety Code which is a part of the National Fire Code is hereby amended by deleting it in it's entirety and substituting the following:

33.2.3.5.2.1 In prompt evacuation capability facilities, the following requirements shall be met:

(1) An automatic sprinkler system in accordance with NFPA 13D, Standard for the Installation of Sprinkler Systems in One- and Two-Family Dwellings and Manufactured Homes, shall be permitted for all facilities with 8 or fewer residents. All facilities with more than 8 residents shall be protected throughout with an automatic sprinkler system to comply with NFPA 13 or NFPA 13R.

(2) Automatic sprinklers in NFPA 13D and NFPA 13R systems shall not be required in closets not exceeding 24 ft2 (2.2 m2) and in bathrooms not exceeding 55 ft2 (5.1 m2), provided that such spaces are finished with lath and plaster or materials providing a 15-minute thermal barrier.

AA. Section 33.2.3.5.3 of the 2006 edition of the NFPA Life Safety Code which is a part of the National Fire Code is hereby amended by deleting it in its entirety and substituting the following:

Section 33.2.3.5.3 All facilities shall be protected throughout by an approved, supervised automatic sprinkler system in accordance with 33.2.3.5.2

BB. Section 33.3.3.5.2 of the 2006 NFPA Life Safety Code which is a part of the National Fire Code is hereby amended by deleting it in its entirety an substituting the following:

33.3.3.5.2 High-Rise Buildings. All high-rise buildings shall be protected throughout by an approved, supervised automatic sprinkler system in accordance with NFPA 13 and other provisions as required by this code. Such systems shall initiate the fire alarm system in accordance with Section 9.6.

CC. Section 33.3.3.5.3 of the 2006 NFPA Life Safety Code which is a part of the National Fire Code is hereby amended by deleting it in its entirety :

DD. Section 36.3.2.3 of the 2006 Edition of the NFPA 101 Life Safety Code, which is apart of the National Fire Code, is hereby amended by deleting subsections 36.3.2.3(1) and 36.3.2.3(2) in their entirety.

EE. Section 37.3.2.3 of the 2006 Edition of the NFPA 101 Life Safety Code, which is apart of the National Fire Code, is hereby amended by deleting subsections 37.3.2.3(1) and 37.3.2.3(2) in their entirety.

Section 5. 10.64.017 Amendments to Miscellaneous NFPA Codes & Standards (Sprinkler, Stationary pumps & Fire Walls etc.)

The following amendments, deletions, or additions to the NFPA Codes are adopted by reference, as fully as though copied into such Fire Code, and thereby made a part of the Metropolitan Fire Prevention Code.

A. Section 8.6.7 of the 2002 Edition of the NFPA 13 Standard for the Installation of Sprinkler Systems, which is part of the National Fire Code, is hereby amended by deleting the subsection 8.6.7.2 in its entirety.

B. Section 8.14.13 of the 2002 Edition of the NFPA 13 Standard for the Installation of Sprinkler Systems, which is part of the National Fire Code, is hereby amended by deleting the subsection 8.14.13 in its entirety.

C. Section 11.2.3.3 of the 2002 Edition of the NFPA 13 Standard for the Installation of Sprinkler Systems, which is part of the National Fire Code, is hereby amended by deleting the subsection 11.2.3.3 in its entirety.

D. Section 16.1 of the 2002 Edition of the NFPA 13 Standard for the Installation of Sprinkler Systems, which is part of the National Fire Code, is hereby amended by deleting the subsection 16.1 and substituting the following:

16.1 The installing contractor shall be a licensed State of Tennessee Sprinkler Contractor and shall do the following:

(1) Notify the authority having jurisdiction and owner's representative of the time and date testing will be performed

(2) Perform all required acceptance tests (see Section 16.2)

(3) Complete and sign the appropriate contractor's material and test certificate(s) (see Figure 16.1)

(4) Shall be responsible for the installation of Fire Protection Sprinkler Systems from the point of underground connection to the approved water supply, beginning where the line becomes solely a fire protection line.

E. Section 4.3 of the 2002 Edition of NFPA 13D Standard for the Installation of Sprinkler Systems in One- and Two-Family Dwellings and Manufactured Homes, which is part of the National Fire Code, is hereby amended by deleting the subsection 4.3.1 and substituting the following:

Section 4.3.1 a single 1 $\frac{1}{2}$ inch female swivel fire department pumper connection shall be installed on all 13 D systems.

F. Section 6.2.8.3 of the 2003 Edition of NFPA 14 Standard for the Installation of Standpipe and Hose Systems, which is part of the National Fire Code, is hereby amended by deleting the subsection 6.2.8.3 in its entirety.

G. Section 7.3. of the 2003 Edition of NFPA 14 Standard for the Installation of Standpipe and Hose Systems, which is part of the National Fire Code, is hereby amended by adding the following new subsection:

7.3.2.4 Class I and Class III systems shall be provided with 2 $\frac{1}{2}$ inch with 1 $\frac{1}{2}$ inch reducer hose stations so that all portions of each floor level of the building are within 130 ft of a hose connection. Additional hose stations may be necessary for complete floor coverage.

H. Section 5.12.1.1 of the 2003 Edition NFPA 20 Standard for the Installation of Stationary Pumps for Fire Protection, which is part of the National Fire Code, is hereby amended by deleting the subsection 5.12.1.1 and substituting the following:

5.12.1.1 Fire pump enclosures shall be reinforced concrete block or 2 hour concrete enclosures.

I. Section 5.19.2 of the 2003 Edition NFPA 20 Standard for the Installation of Stationary Pumps for Fire Protection, which is part of the National Fire Code, is hereby amended by deleting the subsection 5.19.2 and substituting the following:

5.19.2 A test header shall be provided for testing on all fire pumps.

J. Section 5.23 of the 2003 Edition NFPA 20 Standard for the Installation of Stationary Pumps for Fire Protection, which is part of the National Fire Code, is hereby amended by deleting the subsection 5.23 and substituting the following:

5.23 When required by other sections of this standard, alarms shall call attention to improper conditions in the fire pump equipment. Fire Pumps used in fire protection shall have the following alarm signals transmitted to an approved Central Station Alarm Monitoring Service or an Approved Proprietary Service:

Electric Fire Pumps	Diesel Fire Pumps
1. Fire Pump Run	1. Fire Pump Run
2. Phase Reversal	2. Low Batteries
3. Power Failure	3. Failure to Start
4. Main Water Flow	4. Main Water Flow

K. Section 4.3.1 of the 2002 edition of NFPA 72 National Fire Alarm Code which is a part of the National Fire Code, is hereby amended by deleting it in its entirety and substituting the following:

4.3.1 Equipment. Equipment constructed and installed in conformity with this Code shall be listed for the purpose for which it is used. Fire alarm system components shall be installed in accordance with the manufacturers' installation instructions. Fire alarm control panels shall be listed for fire alarm use. Fire alarm control panels that also have burglar alarm listings can be used for approved fire alarm systems as long as they are used for fire use only. The outside of the panel shall read "Fire Alarm Control Panel" and shall not state burglar on the exterior of the panel.

BUILDING CODE SECTIONS

Section 6. Section 16.08.010A of the Metropolitan Code of Laws is hereby amended by deleting Section 16.08.010A and substituting the following:

A. 2006 Edition of the International Building Code, Sections 201 through 1611.3, Sections 1613 through 3409.9.4, Chapter 35 inclusive and Appendices C, D, E, H, and I.

Section 7. Section 16.08.012 of the Metropolitan Code of Laws is hereby amended by deleting Section 16.08.012 and substituting the following:

16.08.012 Amendments to the International Building Code. The following amendments, deletions, or additions to the 2006 Edition of the International Building Code are adopted by reference, as fully as though copied into such Building Code, and thereby made a part of the Building Code.

A. Section 201 of the 2006 Edition of the International Building Code is hereby amended by adding the following new Section 201.5 to Section 201:

201.5 Interchangeability with The International Codes. The International Existing Building Code shall be construed to be the NFPA 101 Life Safety Code. The International Fire Code shall be construed to be The NFPA Fire Codes. The International Property Maintenance Code shall be construed to mean the Property Standards Code of the Metropolitan Government. The International Private Sewage Disposal Code shall be construed to mean the Subsurface Sewage Disposal Systems Code of the Metropolitan Government. The ICC Electrical Code shall be construed to mean the National Electrical Code.

B. Section 202 of the 2006 Edition of the International Building Code is hereby amended by adding the following new definitions:

BED AND BREAKFAST HOMESTAY -- means a private home, inn, or other unique residential facility located in a structure of historical significance as defined in Tennessee Code Annotated Section 68-14-503(3) offering bed and breakfast accommodations and one (1) daily meal and having less than four (4) guest rooms furnished for pay, with guests staying not more than fourteen (14) days, and where the innkeeper resides on the premises or property, or immediately adjacent to it. Guest rooms shall be established and maintained distinct and separate from the innkeeper's quarters. Bed and Breakfast Homestays are classified as R3.

BREEZEWAY – A covered connector between two buildings or structures, open at each end but less than 50 percent open, located at, above, or below grade level, that may be used as a means of egress from a building or structure.

BOARD -- shall mean the Metropolitan Board of Fire and Building Code Appeals.

CODE OFFICIAL - shall mean the Director of the Metropolitan Department of Codes Administration, his deputy or duly authorized representative.

DIRECTOR -- shall mean the Director of the Metropolitan Department of Codes Administration, his deputy or duly authorized representative.

FAMILY -- is an individual, two or more persons related by blood, marriage or law, or a group of not more than any five unrelated persons living together in a dwelling unit.

FARM ACCESSORY BUILDING -- shall be defined as barns, animal and poultry houses, silos, storage and feed sheds, animal shelters and similar farm structures provided that no such building or structure is designed for or intended to be used as a place of human habitation.

NORMAL MAINTENANCE REPAIRS -- shall be defined as repairs to an existing building or structure, including but not limited to exterior and interior painting, papering, glazing of windows and doors, floor finishing, minor repairs to chimneys, stairs, porches, underpinning, and repairs to an existing roof not to exceed 33 percent of the roof area.

PHYSICAL VALUE -- shall mean the actual cost of replacement of a building or structure with materials of a like kind erected of a like manner to that of the original construction or the physical value shall be the fair market value or the appraised value of the building or structure, exclusive of land values, as may be recorded in the Tax Digest of the Metropolitan Government whichever shall be greater.

TEMPORARY -- shall mean not more than 90 calendar days.

C. Section 202 of the 2006 Edition of the International Building Code is hereby amended by deleting the following definitions and substituting the definitions to Section 202:

BUILDING OFFICIAL -- shall mean the Director of the Metropolitan Department of Codes Administration, his deputy or duly authorized representative.

D. Section 310.1, subsection R-3 of the 2006 Edition of the International Building Code is hereby amended by adding the following to use to R-3 :

R-3 Bed and breakfast homestay

E. Section 406.2.1 of the 2006 Edition of the International Building Code is hereby amended by adding the following :

Refer to Metro Code of Laws, Chapter 13.40 Parking Lots, Decks and Garages for additional requirements.

F. Section 501.2 of the 2006 Edition of the International Building Code is hereby amended by deleting Section 501.2 and substituting the following:

501.2. Premises Identification. All buildings and structures within Metropolitan Nashville and Davidson County shall have approved address numbers posted in accordance with following:

1. Residences are to have their numbers at least three (3) inches in size, on a contrasting background, and in a position to be plainly visible and legible from the street or road fronting the property. The numbers may be attached to the residence or the mailbox, if the mailbox is next to the street.

2. Numbers posted on the outside of nonresidential buildings must be six inches, or larger, on a contrasting background, and in a position to be plainly visible and legible from the street or road fronting the premises. Numbers posted on interior doors or spaces (such as a lease space in a mall) must be at least three inches in size.

3. Multifamily buildings shall have their numbers displayed to be plainly visible and legible, on a contrasting background, and a minimum size of six inches in height. Identifying numbers, at least three inches in height shall also be posted on or at the doors of individual dwelling units.

G. Table 602 of the 2006 Edition of the International Building Code is hereby amended by adding the following new footnote "f" to Table 602:

f. Mini-warehouse buildings of II construction may have unlimited exterior unprotected wall openings when buildings are spaced a minimum of twenty (20) feet apart and/or twenty (20) feet from a property line when the openings face the property line.

H. Section 705.4 and Table 705.4 of the 2006 Edition of the International Building Code is hereby amended by deleting Section 705.4 and Table 705.4 and substituting the following:

705.4 Fire-resistance rating. Fire walls shall have a fire-resistance rating of not less than four (4) hours.

EXCEPTION

Attached multiple single-family dwellings (townhouses) not more than three stories high with separate means of egress and their accessory structures shall be a 2 hours non load bearing (fire wall) or 2 -1 hour load bearing fire walls to separate single family dwellings from each other. The fire walls shall be fire rated from both sides of the fire wall.

I. Section 708.1 of the 2006 Edition of the International Building Code is hereby amended by deleting Section 708.1 and substituting the following:

708.1 General. Wall assemblies installed as required by Sections 310.3, 402.7.2 and 1004.3.2.1 shall comply with this section. These include:

1. Walls separating dwelling units in same building.

2. Walls separating sleeping units in occupancies in Group R-1, hotel occupancies, R-2, R-4 and I-1.

3. Walls separating tenant spaces in covered mall buildings as required by Section 402.7.2.

4. Corridor walls as required by Section 1017.1.

5. Elevator lobby separation as required by Section 707.14.1.

6. Walls separating tenant spaces from breezeways exit access shall be installed from the foundation to the roof sheathing and fire rated from both sides in R-I and R-2 occupancies.

J. Section 708.3 of the 2006 Edition of the International Building Code is hereby amended by adding a new Section 708.3.1 as follows:

708.3.1. In sprinklered buildings in accordance with Section 903.3.1.1 of a Group A, B, E, & M occupancy, a wall, either full or partial glass, forming a smoke partition may be used in lieu of a required one (1) hour fire resistant wall (tenant separation and corridor walls only) where automatic sprinklers are spaced six (6) feet or less along both sides of the separation wall and not more than one (1) foot away from the glass and so designed that the entire surface of the glass is wet upon activation of the sprinkler system. The wall glass shall be in a gasketed steel frame so installed that the framing system may deflect without breaking (loading) the glass before the sprinkler system operates.

K. Section 716.5.3.1 Exception 1.1 of the 2006 Edition of the International Building Code is hereby amended by deleting Section 716.5.3.1 Exception 1.1 and substituting the following:

1.1 Steel exhaust sub ducts extend at least 22 inches (559 mm) vertically in an exhaust riser duct installed in a shaft provided there is a continuous airflow upward to the outside.

L. Section 907.2.10.1.2 of the 2006 Edition of the International Building Code is hereby amended by deleting Section 907.2.10.1.2 and substituting the following:

907.2.10.1.2 Groups R-2, R-3, R-4 and I-1. Single-or multiple-station smoke alarms shall be installed and maintained in Groups R-2, R-3, R-4 and I-1, regardless of occupant load at all of the following locations:

1. On the ceiling or wall outside of each separate sleeping area in the immediate vicinity of bedrooms.

2. In each room used for sleeping purposes.

3. In each story within a dwelling unit, including basements, garages and cellars but not including crawl spaces and uninhabitable attics. In dwellings or dwelling units with split levels and without an intervening door between the adjacent levels, a smoke alarm installed on the upper level shall suffice for the adjacent lower level provided that the lower level is less than one full story below the upper level.

Exception: Heat detectors may be substituted for smoke detectors installed in cellars and attached garages.

907.2.10.1.2.1 Additions, alterations or repairs to Group R. Where an addition, alteration or repair to an individual dwelling unit or guestroom in Group R requires a permit, smoke

alarms shall be installed within that individual dwelling unit or guestroom in accordance with this section. Where one or more sleeping rooms are added or created in an existing Group R, smoke alarms shall be installed in accordance with this section.

EXCEPTION: Repairs to the exterior surfaces of occupancies in Group R are exempt from the requirements of this section.

M. Section 1013.2 and Section 1013.3 of the 2006 Edition of the International Building Code are hereby amended by deleting Section 1013.2 and Section 1013.3 and substituting the following:

1013.2. Height. Guards shall form a protective barrier not less than 42 inches (1067 mm) high, measured vertically above the leading edge of the tread, adjacent walking surface or adjacent seat board.

EXCEPTIONS:

1. For occupancies in Group R-3, and within individual dwelling units in occupancies in Group r-2, guards whose top rail also serves as a handrail shall have a height not less than 34 inches (864 mm) and not more than 38 inches (965 mm) measured vertically from the leading edge of the stair tread nosing.

2. The height in assembly seating areas shall be in accordance with Section 1025.14.

3. The top element of a guard at the inside open or unenclosed edge of any intermediate stairway landing where the stairs reverse direction may be at the same height as the stairway handrails when the horizontal distance between the stair flights is 1 ft (305mm) or less and when a continuous handrail as specified in Section 1009.11 is provided.

1013.3 Opening limitations. Open guards shall have balusters or ornamental patterns such that a 4-inch-diam-eter (102 mm) sphere cannot pass through any opening up to a height of 34 inches (864 mm). From a height of 34 inches (864 mm) to 42 inches (1067 mm) above the adjacent walking surfaces, a sphere 8 inches (203 mm) in diameter shall not pass. A bottom rail or curb shall be provided that a 2-inch (51.5 mm) in diameter sphere can not pass

EXCEPTIONS:

1. The triangular openings formed by the riser, tread and bottom rail at the open side of a stairway shall be of a maximum size such that a sphere of 6 inches (152 mm) in diameter cannot pass through the opening.

2. At elevated walking surfaces for access to and use of electrical, mechanical, or plumbing systems or equipment, guards shall have balusters or be of solid materials such that a sphere with a diameter of 21 inches (533 mm) cannot pass through any opening.

3. In areas that are not open to the public within occupancies in Group I-3, F, H or S, balusters, horizontal intermediate rails or other construction shall not permit a sphere with a diameter of 21 inches (533 mm) to pass through any opening.

4. In assembly seating areas, guards at the end of aisles where they terminate at a fascia of boxes, balconies, and galleries shall have balusters or ornamental patterns such that a 4-inch-diameter (102 mm) sphere cannot pass through any opening up to a height of 26 inches (660 mm). From a height of 26 inches (660 mm) to 42 inches (1067 mm) above the adjacent walking surfaces, a sphere 8 inches (203 mm) in diameter shall not pass.

N. Section 1026.1 of the 2006 Edition of the International Building Code is hereby amended by deleting Section 1026.1 and substituting the following:

1026.1 General. In addition to the means of egress required by this chapter, provisions shall be made for emergency escape and rescue in Group R as applicable in Section 101.1 and Group I-1 occupancies. Every sleeping room on the first, second, third and forth story or within basements of Group R occupancies shall have at least one operable window or exterior door approved for emergency egress or rescue. Such opening shall open directly into a public street, public alley, yard or court.

Exceptions:

1. Group R1 occupancies equipped with an approved automatic sprinkler system in accordance with Section 903.3.1.1.

2. Group R1 occupancies with sleeping rooms provided with a door to a rated corridor or balcony having access to two remote exits in opposite directions.

3. The emergency escape and rescue opening may open onto a balcony within an atrium provided the balcony provides access to an exit and the dwelling unit or sleeping room has a means of egress which is not open to the atrium.

O. Section 1503.4.1 of the 2006 Edition of the International Building Code is hereby amended by deleting Section 1503.4.1 and substituting the following:

1503.4.1 Gutter and Leaders. All buildings other than private garages shall be provided with adequate gutters and leaders of a non-combustible material or a minimum of schedule 40 plastic pipe. See Chapter 11 of the International Plumbing Code for sizing of vertical leaders and horizontal storm drains. All leaders shall be terminated in an approved storm drain or storm sewer system where such is available. Where a public storm sewer system is not available, adequate provision shall be made by the owner for the disposal of all storm water.

1503.4.2. Where leaders and storm drains are required along a public right of way adjacent to public sidewalks or paved public walkways, the discharge from such leaders shall be piped under such sidewalk or paved public walkway to the nearest storm sewer or sidewalk curb. No storm water shall be discharged in such a manner as will permit it to flow over or across any public sidewalk or paved public right of way area.

Р. Section 2308.9.1 and Table 2308.9.1 of the 2006 Edition of the International Building Code are amended by deleting Section 2308.9.1 and Table 2308.9.1 and substituting the following:

2308.9.1. Studs in one and two story buildings shall not be less than 2 X 4 with the wide face perpendicular to the wall. In three story buildings, studs in first story shall not be less than 2 X 4s @ 12 in. o.c., 3 X 4s or 2 X 6s. Studs shall be spaced in accordance with Table 2308.9.1.

SIZE, HEIGHT AND SPACING OF WOOD STUDS						
	BEARING WALLS			NON BEAH	RING	
					WALL	S
Stud	Lateral	Supporting	Supporting	Supporting	Lateral	Spacin
Size	unsupported	Roof and	1 floor, roof	2 floors,	Unsupported	g
5120	stud	Ceiling	and ceiling	roof and	stud	(in)
	height ^{a}	Only (in)	(in)	ceiling (in)	height ^{a}	
	(ft)				(ft)	
2X3 ^{b}					10	16
2X4	10	24	16	12	14	24
3X4	10	24	24	16	14	24
2X5	10	24	24		16	24
2X6	10	24	24	16	20	24

TABLE 2308.9.1

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm.

{a} Listed heights are distances between points of lateral support placed perpendicular to the plane of the wall. Increases in unsupported height are permitted where justified by an analysis.

{b} Shall not be used in exterior walls.

Q. Table 2902.1 of the 2006 Edition of the International Building Code is hereby amended by adding the following footnotes e & f to Table 2902.1.

{e} For day nurseries, a minimum of one bathtub shall be required.

{f} The minimum number of service sinks shall be 1 per building or 1 per tenant space over 7,500 gross square feet. This applies to all locations that require service sinks.

R. Section 2902.2 of the 2006 Edition of the International Building Code is hereby amended by deleting Section 2902.2 and substituting the following:

2902.2 Separate facilities. Where plumbing fixtures are required, separate facilities shall be provided for each sex.

EXCEPTIONS:

1. Separate facilities shall not be required for dwelling units and sleeping units

2. Separate facilities shall not be required in structures or tenant spaces with a total gross square footages in the following occupancies.

Occupancy	Gross Square footage
Business	1,500
Education	1,500
Factory	3,000
Mercantile	2,000
Pools	1,000
Restaurants	1,000
Storage	7,500

Table 2902.2 Occupancies with one bathroom for both sexes.

EXCEPTION: Any business that dispenses gasoline or diesel oil to the public shall have separate facilities for each sex.

S. Section 2902.4 of the 2006 Edition of the International Building Code is hereby amended by deleting Section 2902.4 and substituting the following:

2902.4 Public facilities. Customers, patrons and visitors shall be provided with public toilet facilities in structures and tenant spaces intended for public utilization. Public toilet facilities shall be located not more than one story above or below the space required to be provided with public toilet facilities and the path of travel to such facilities shall not exceed a distance of 500 feet (152 m). The path of travel to the public facilities shall not pass through a stock room or similar room.

2902.4.1 Location of toilet facilities in occupancies other than covered malls. In occupancies other than covered malls, the required public and employee toilet facilities shall be located not more than one story above or below the space required to be provided with toilet facilities and the path of travel to such facilities shall not exceed a distance of 500 feet(152 m).' Minimum employee facilities are 1 water closet, 1 lavatory and 1 drinking fountain.

EXCEPTION:

1. The location and maximum travel distance to required employee facilities in factory and industrial occupancies are permitted to exceed that required by this section, provided that the location and maximum travel distance are approved.

2. In education occupancies, the maximum travel distance to bathrooms shall be 300 ft and the facilities shall be located on the same floor level.

2902.4.2 Covered malls. In covered mall buildings, the path of travel to required toilet facilities shall not exceed a distance of 300 feet (91m). The required facilities shall be based on total gross square footage, and facilities shall be installed in each individual

store or in central toilet areas located in accordance with this section. Restaurants other than food tenants in the food court shall have the required facilities installed within their tenant space. The maximum travel distance to the central toilet facilities in covered mall buildings shall be measured from the main entrance of any store or tenant space.

2902.4.3 Pay facilities. Required facilities shall be free of charge and designated by legible signs for each sex. Where pay facilities are installed, such facilities shall be in excess of the required minimum facilities.

2902.4.4 Public lavatories. In employee and public toilet rooms, the required lavatory shall be located in the same room as the required water closet. Exception. Educational occupancies

T. Section 2902.6 of the 2006 Edition of the International Building Code is hereby amended by adding a new Section 2902.6 as follows:

2902.6 Unisex toilet and bathing rooms. In assembly and mercantile occupancies, an accessible unisex toilet room shall be provided where an aggregate of six or more male or female water closets are required. In buildings of mixed occupancy, only those water closets required for the assembly or mercantile occupancy shall be used to determine the unisex toilet room requirement. In recreational facilities where separate-sex bathing rooms are provided, an accessible unisex bathing room shall be provided.

2902.6.1 Standard. Unisex toilet and bathing rooms shall comply with Section 404 of the Standard Plumbing Code and ICC/ANSI A117.1

U. Section 3103 of the 2006 Edition of the International Building Code is hereby amended by deleting Section 3103 and substituting the following:

3103 TEMPORARY STRUCTURES

3103.1 General. The provisions of this section shall apply to structures erected for a period of 90 days or less. Tents and other membrane structures erected for a period of 90 days or less shall comply with the Metropolitan Fire Code. Those erected for a longer period of time shall comply with applicable sections of this code.

3103.1.1 Permit required. Temporary structures that cover an area in excess of 120 square feet (11.16 m^2) , including connecting areas or spaces with a common means of egress or entrance which are used or intended to be used for the gathering together of ten or more persons, shall not be erected, operated or maintained for any purpose without obtaining a permit from the building official.

V. Section 3202.2 of the 2006 Edition of the International Building Code is hereby amended by deleting Section 3202.2 and substituting the following:

3202.2 Encroachments above grade and below 8 feet in height. Encroachments into the public right-of-way above grade and below 8 feet (2438 mm) in height shall be prohibited. Doors and windows shall not open or project into the public right-of-way above grade and below 8 feet in height.

3202.2.1 Awnings, canopies, marquees and signs. The vertical clearance from the public right-of-way sidewalk to the lowest part of any awning, canopies, marquees and signs, shall be 8 feet (2438 mm) minimum.

W. Section 3202.3.1 of the 2006 Edition of the International Building Code is hereby amended by deleting Section 3202.3.1 and substituting the following:

3202.3.1 Awnings, canopies, marquees and signs. Awnings, canopies, marquees and signs shall be constructed so as to support applicable loads as specified in Chapter 16. Awnings, canopies, marquees and signs with less than 15 feet (4572 mm) clearance above the sidewalk shall not extend into or occupy more than two-thirds the width of the sidewalk measured from the building.

3202.3.1.1 SUPPORT. Fixed awnings, marquees, signs or canopies shall be entirely supported from the building.

X. Section 3202.4 of the 2006 Edition of the International Building Code is hereby amended by deleting Section 3202.4 and substituting the following:

3202.4 Temporary encroachments. Where allowed by the local authority having jurisdiction, vestibules and storm enclosures shall not be erected for a period of time exceeding 90 days in any one year and shall not encroach more than 3 feet (914 mm) nor more than one-fourth of the width of the sidewalk beyond the street lot line. Temporary entrance awnings shall be erected with a minimum clearance of 8 feet (2438 mm) to the lowest portion of the hood or awning where supported on removable steel or other approved noncombustible support from the building.

Y. Section 3410 of the 2006 Edition of the International Building Code is hereby amended by deleting Section 3410 in its entirety.

Z. Section D101.2 of the 2003 Edition of the International Building Code is hereby amended by deleting Section D101.2 and substituting the following:

D101.2 Establishment of Area. The Fire District shall include such territory or portion thereof as established by the official Fire Zone Map of the Metropolitan Government of Nashville and Davidson County, Tennessee.''

ENERGY CONSERVATION CODE SECTIONS

Section 8. Section 16.08.010D of the Metropolitan Code of Laws is hereby amended by deleting Section 16.08.010D and substituting the following:

D. 2006 Edition of the International Energy Conservation Code, Sections 1.01.1 through Chapter 10 inclusive, and Appendix. This code edition shall apply to 1 & 2 family Dwellings, and commercial buildings.

Section 9. Section 16.08.016 of the Metropolitan Code of Laws is hereby amended by deleting the section in its entirety and substituting the following:

16.08.016 Amendments to the International Energy Conservation Code

The following amendments, deletions, or additions to the 2006 Edition of the International Energy Conservation Code are adopted by reference, as fully as though copied into such Energy Code, and thereby made a part of the International Energy Conservation Code.

A. Section 101.4.1 of the 2006 Edition of the International Energy Conservation Code is hereby amended by adding new sections as follows:

101.4.1.3 Buildings and structures used as nonresidential farm building.

101.4.1.4 Temporary buildings used exclusively for construction purposes.

101.4.1.5. Additions to one and two family dwellings which:A. Are less than ten percent (10%) of the square footage of the dwelling and;B. Have more than fifty percent (50%) of the total outside wall and roof space composed of glass."

B. Section 202 of the 2006 Edition of the International Energy Conservation Code is hereby amended by deleting the following definitions and substituting as follows:

CODE OFFICIAL. - shall mean the Director of the Metropolitan Department of Codes Administration, his deputy or a duly authorized representative.

RESIDENTIAL BUILDING, GROUP R-2. Residential occupancies containing more than two dwelling units where the occupants are primarily permanent in nature such as apartment houses, boarding houses (not transient), convents, monasteries, rectories, fraternities and sororities, dormitories and rooming houses. For the purpose of this code, reference to Group R-2 occupancies shall refer to buildings that are three stories or less in height above grade.

RESIDENTIAL BUILDING, GROUP R-4. Residential occupancies shall include buildings arranged for occupancies as Residential Care/Assisted Living Facilities including more than five but not more than 16 occupants, excluding staff. For the purpose of this code, reference to Group R-4 occupancies shall refer to buildings which are Three stories or less in height above grade.

GAS/MECHANICAL SECTIONS

Section 10. Sections 16.16.190B and D of the Metropolitan Code of Laws are hereby amended by deleting Sections 16.16.190B and D and substituting the following:

B. The 2006 Edition of the International Fuel Gas Code, Sections 201 through Section 634 and Chapter 8 inclusive and Appendixes A, B, C, and D.

D. The 2006 Edition of the International Mechanical Code, Sections 201 through Chapter 15 inclusive with Appendix A;"

Section 11. Section 16.16.240 of the Metropolitan Code of Laws is hereby amended by deleting Section 16.16.240 and substituting the following:

"16.16.240 Local Amendments to International Fuel Gas Code.

The following amendments, deletions, or additions to the 2006 Edition of the International Fuel Gas Code are adopted by reference, as fully as though copied into such, and thereby made a part of the Metropolitan Gas/Mechanical Code.

A. Section 201 of the 2006 Edition of the International Fuel Gas Code is hereby amended by adding the following new Section 201.5 to Section 201:

201.5 Interchangeability with The International Codes. The International Existing building Code shall be construed to be the NFPA 101 Life Safety Code. The International Fire Code shall be construed to be The NFPA Fire Codes. The International Property Maintenance Code shall be construed to mean the Property Standards Code of the Metropolitan Government. The International Private Sewage Disposal Code shall be construed to mean the Subsurface Sewage Disposal Systems Code of the Metropolitan Government. The ICC Electrical Code shall be construed to mean the National Electrical Code.

B. Section 202 of the 2006 Edition of the International Fuel Gas Code is hereby amended by adding the following new definition as follows:

ADMINISTRATIVE AUTHORITY -- shall mean the Director of the Metropolitan Department of Codes Administration, his deputy or duly authorized representative.

GAS OFFICIAL -- shall mean the Director of the Metropolitan Department of Codes Administration, his deputy or duly authorized representative.

C. Section 202 of the 2006 Edition of the International Fuel Gas Code is hereby amended by deleting the definition of "Code Official" and substituting the following:

CODE OFFICIAL -- shall mean the Director of the Metropolitan Department of Codes Administration, his deputy or duly authorized representative.

D. Section 304.6.2 and Figure 304.6(2) of the 2006 Edition of the International Fuel Gas Code are hereby amended by deleting the section and figure in their entirety.

E. Section 402.6 of the 2006 Edition of the International Fuel Gas Code is hereby amended by deleting Section 402.6 and substituting the following:

402.6 Maximum design operating pressure. The maximum design operating pressure for piping systems located inside buildings shall not exceed 5 psig (34 kPa gauges) unless approved by the authority having jurisdiction and one or more of the following conditions are met:

1. The piping system may be threaded. Piping system over 5 psig shall be welded.

2. The piping is located in a ventilated chase or otherwise enclosed for protection against accidental gas accumulation.

3. The piping is located inside buildings or separate areas of buildings used exclusively for:

- 3.1 Industrial processing or heating,
- 3.2 Research,
- 3.3 Warehousing, or
- 3.4 Boiler or mechanical equipment rooms.

4. The piping is a temporary installation for buildings under construction.

F. Section 404.8 of the 2006 Edition of the International Fuel Gas Code is hereby amended by adding a new section 404.8.3 as follows:

404.8.3. Cathodic protection. Cathodic protection shall be required on metallic gas piping installed underground. The following chart may be used to determine requirement for anodes as to size and number required:

Coated Pipe				
	Anode Spacing In Feet			
Anode Weight	³ /4"	1"	2"	3"
1#	809'	643'	352'	238'
5#	1079'	857'	470'	317'
17#	1798'	1428'	783'	528'

Exception: Coated and wrapped metallic gas piping run underground that does not exceed thirty (30) feet in length shall not require additional cathodic protection.

G. Section 404.14.1 of the 2006 Edition of the International Fuel Gas Code is hereby amended by adding a new Section 404.14.1 Exception 3 as follows:

3. Plastic piping shall not be used for consumer's gas piping when operating pressures are in excess of 2 psi, unless approved by the Director of Codes Administration or his duly authorized representative.

H. Sections 406.4.1 and 406.4.2 of the 2006 Edition of the International Fuel Gas Code are hereby amended by deleting Sections 406.4.1 and 406.4.2 and substituting the following:

406.4.1. Method of Testing. Low pressure (not in excess of 0.5 psi) gas piping shall withstand a pressure of at least 10.0 psi for a period of not less than twenty (20) minutes without showing any drop in pressure. For 2 psi or higher pressure piping must stand a pressure of at least 20 psi, but never less than ten (10) times the maximum pressure to which the piping will be subjected in operation, for a period of not less than twenty (20) minutes without showing any drop in pressure. An overnight test of larger piping systems may be required. The test shall be verified in writing on forms authorized by the Department of Codes Administration witnessed and signed. Retest or additional certification, in special situations, may be required by the Director of Codes Administration or by his/her duly authorized representative. Necessary apparatus for conducting the test shall be furnished by the permit holder.

I. Section 410.1 of the 2003 Edition of the International Fuel Gas Code is hereby amended by deleting Section 410.1 and substituting the following:

410.1 Pressure regulators. A line pressure regulator shall be installed where the appliance is designed to operate at a lower pressure than the supply pressure. Access shall be provided to pressure regulators. Pressure regulators shall be protected from physical damage. Regulators installed on the exterior of the building shall be approved for outdoor installation.

410.1.1. Shutoff value. An accessible gas shutoff valve shall be provided upstream of each gas pressure regulator. Where two gas pressure regulators are installed in series in a single gas line, a manual valve is not required at the second regulator.

410.1.2 Venting of Pressure Regulators. A vent line(s) from a gas appliance pressure regulator and a bleed line(s) from a diaphragm type valve shall not be connected to a common manifold terminating in a combustion chamber. Vent lines shall not terminate in positive pressure type combustion chambers.

J. Chapter 4 of the 2006 Edition of the International Fuel Gas Code is hereby amended by adding a new Section 417 as follows:

Section 417 2# PSI Piping System.

417.1 General. 2 psi gas piping systems designed in accordance with this section and other requirements of this code are intended for use where the building service regulator has been set to deliver gas at 2 psi. Piping systems shall be designed to allow a maximum pressure drop of one and one half $(1\frac{1}{2})$ psi between the meter and the regulator that reduces the pressure to seven (7) inch w.c. Piping systems shall be further designed to

allow up to one (1) inch w.c. pressure drop between the above first cut regulator and the appliance or the appliance regulator if used.

417.2 Gas Piping Materials. All piping shall be metallic material only, and comply with 403. Piping installed for 2 psi pressure shall be (1) type L copper tubing, (2) refrigeration service tubing having a wall thickness of not less than .030", (3) corrugated stainless steel conduit, (4) iron pipe. All piping and tubing shall be sized so as to not exceed the capacities shown on tables 1003A, 1003B, or 1003C. Iron pipe already in service may be retained. Aluminum tubing will not be installed or used for this service. All horizontal tubing shall be supported at approximately four (4) foot intervals.

417.3 Marking. All piping in the 2 psi portion of the system shall be marked at the beginning, all ends with a metal tag stating "2 psi." All such tubing or piping must also be marked at intervals not to exceed six (6) feet with approved means of identification designating 2 psi gas pressure.

417.4 Piping in Partitions. When copper tubing is installed in a hollow partition in a new piping installation, a metallic sleeve, or equivalent means, shall be used to protect the tubing where it passes through a wood plate or other structural member of the wall. The sleeve, if used, shall extend at least four (4) inches on either side of the structural member in the partition. Iron pipe may be used for the sleeve. The ends must be reamed to avoid sharp edges which may come in contact with copper tubing. Tubing in the partition shall have some slack. Concealed tubing joints are prohibited.

417.5 General Piping. All fuel lines from the meter shall pass through the foundation with iron pipe, then a pipe to flare adapter may be installed for the copper tubing. In such case that the piping system cannot pass through the foundation, iron pipe will run from the meter to the outside wall of structure and attach with suitable pipe straps then adapt to copper tubing. Installation procedures must guard against dirt, tubing cutting chips, or other material entering the fuel line. Blow out lines before connecting and testing.

417.6 Joints and Fittings, Tubing. All joints and fittings in 2 psi tubing shall be made with standard SAE heavy duty short shoulder flare fittings having a forty-five (45) degree flare. All joints and fittings in 2 psi corrugated stainless steel conduit shall be made with approved fitting design for that system. Brazed or silver soldered joints made with an alloy having a melting temperature in excess of 1000 degrees Fahrenheit are permitted. Soft solder joints are not permitted.

All joints in existing copper tubing must be inspected and tested before being used for 2 psi service. All soft solder joints will be replaced with a flare fitting or with a silver solder joint. All bends should be smooth without any binds in tubing. Bending springs or tubing benders should be used.

417.7 MP Regulators. MP pressure regulators installed in the 2 psi portions of the piping shall comply with the following provisions:

417.7.1 The MP regulator shall comply with Sections 402.1 and 402.13 and shall be stated by its manufacturer as being suitable for the inlet and outlet gas pressures for which it is to be used.

417.7.2. The MP regulator shall maintain a reduced outlet pressure under lock-up (no flow) conditions and shall be so installed on the piping system that they cannot be concealed by building construction.

417.7.3. The capacity of the MP regulator, determined by published ratings of its manufacturer, shall be adequate to supply the appliances served by it.

417.7.4. The MP pressure regulator shall be accessible for servicing and may be located either indoors or outdoors. When located indoors, the regulator shall be vented to outdoors or equipped with a vent limiting device, in either case complying with Section 410.3.

417.7.5. The service regulator shall be set to deliver 2 psi, with flow of 30 CFH, after which the adjusting cap shall be sealed with a copper wire and lead seal. The regulator will be marked with a red cap and a metal tag stating 2 psi attached. The gas meter will be installed with a Red index indicating 2 psi system.

417.8 The regulator which reduces the pressure from 2 psi to seven (7) inch w.c. shall be located as close as practical to the appliance which it serves. This regulator must be installed where it cannot be concealed by building construction. The 2 psi to seven (7) inch w.c. regulator must be vented to the outside atmosphere or must be equipped with a vent limiter device. When installed for one appliance only, the preferred location of the regulator and its shut off cock is above the floor level and immediately adjacent to the appliance it serves.

417.9 Appliance regulators, when used, may be installed on or adjacent to the appliance manifold. Appliance regulators are not required on manually operated room heaters, ranges or similar appliances not equipped with a pilot. A pipe nipple at least six (6) inches long, or equivalent tubing, must be installed between the 2 psi to seven (7) inch w.c. regulator and the appliance regulator. Existing appliance regulator shall be retained on any appliance, unless defective.

417.10 Manual Shutoff Valve. Where there is more than one MP regulator in the complete piping system served by one meter, a listed shutoff valve shall be installed immediately ahead of each MP regulator. A listed shutoff valve shall be installed ahead of each 2 psi to seven (7) inch w.c. regulator. Individual runs of tubing may be made to each appliance from a manifold. The cocks may be at the manifold, but they must be easily accessible, and identified as to the appliance served.

K. Section 503.3.6 of the 2006 Edition of the International Fuel Gas Code are hereby amended by deleting the section and figure in its entirety and replacing with the following:

Vent systems shall not pass through an above-ceiling air-handling space or other nonducted portion of an air-handling system without prior approval of the Building Official.

L. The 2006 Edition of the International Fuel Gas Code is hereby amended by adding the following new Appendix E:

Appendix E Suggested Method for Checking for Leakage.

E1. Use of Lights. Artificial illumination used in connection with a search for gas leakage shall be restricted to battery-operated flashlights (preferably of the safety type) or approved safety lamps. In searching for leaks, electric switches should not be operated. If electric lights are already turned on, they should not be turned off.

E1.1 Checking for Leakage Using the Gas Meter. Immediately prior to the test it should be determined that the meter is in operating condition and has not been bypassed.

Checking for leakage can be done by carefully watching the test dial of the meter to determine whether gas is passing through the meter. To assist in observing any movement of the test hand, wet a small piece of paper and paste its edge directly over the center line of the hand as soon as the gas is turned on. This observation should be made with the test hand on the upstroke. The following table can be used for determining length of observation time.

TABLE E Test Observation Times for Various Meter Dials		
Dial Styles	Test Timer	
Cubic Feet	Minutes	
1/4	5	
1/2	5	
1	7	
2	10	
5	20	
10	30	

In case careful observation of the test hand for a sufficient length of time reveals no movement, the piping shall be purged and a small gas burner turned on and lighted and the hand of the test dial again observed. If the dial hand moves (as it should), it will show that the meter is operating properly. If the test hand does not move or register flow of gas through the meter to the small burner, the meter is defective and the gas should be shut off and the serving gas supplier notified."

MECHANICAL SECTION

Section 12. Section 16.16.260 of the Metropolitan Code of Laws hereby amended by deleting Section 16.16.260 and substituting the following:

16.16.260 International Mechanical Code--Local amendments.

The following amendments, deletions, or additions to the 2006 Edition of the International Mechanical Code are adopted by reference, as fully as though copied into such Mechanical Code, and thereby made a part of the Mechanical Code.

A. Section 201 of the 2006 Edition of the International Building Code is hereby amended by adding the following new Section 201.5 to Section 201:

201.5 Interchangeability with The International Codes. The International Existing building Code shall be construed to be the NFPA 101 Life Safety Code. The International Fire Code shall be construed to be The NFPA Fire Codes. The International Property Maintenance Code shall be construed to mean the Property Standards Code of the Metropolitan Government. The International Private Sewage Disposal Code shall be construed to mean the National Electrical Government. The ICC Electrical Code shall be construed to mean the National Electrical Code.

B. Section 202 of the 2006 Edition of the International Mechanical Code is hereby amended by adding the following new definition of as follows:

ADMINISTRATIVE AUTHORITY -- shall mean the Director of the Metropolitan Department of Codes Administration, his deputy or duly authorized representative.

C. Section 202 of the 2006 Edition of the International Mechanical Code is hereby amended by deleting the definition of "Code Official" and substituting the following:

CODE OFFICIAL -- shall mean the Director of the Metropolitan Department of Codes Administration, his deputy or duly authorized representative.

D. Delete D Table 403.3 of the 2006 Edition of the International Mechanical Code is hereby amended by deleting Table 403.3 and substituting the following:

REQUIRED OUTDOOR VENTILATION AIR			
OCCUPANCY	ESTIMATED MAXIMUM	OUTDOOR AIR[cubic	
CLASSIFICATION	OCCUPANT LOAD	feet per minute (cfm)	
	PERSONS PER 1,000	per person] UNLESS	
	SQUARE FEET ^{a}	NOTED ^{e}	
Correctional facilities			
Cells			
Without plumbing fixt			

TABLE 403.3REQUIRED OUTDOOR VENTILATION AIR

	20	20
With plumbing fixt	20	20
Dining halls	20	20
Guard stations	100	15
	40	15
Dry cleaners, laundries		
Coin-operate dry cleaner		
Coin-operated laundries	20	15
Commercial dry cleaner		
Commercial laundry	20	15
Storage, pick up		
	30	30
	10	25
	10	
	30	35
Education		
Auditoriums	150	15
Classroom	50	15
Corridors	50	0.10 cfm/ft^2
Laboratories	30	20
		20 15
Libraries Locker rooms ^b	20	
		0.50 cfm/ft^2
Music rooms	50	15
Smoking lounges ^{b,g}	70	60
Training shops		
Bathrooms	30	20
		1.0 cfm/ft^2
Food & beverage		
service		
Bars, cocktail lounges	100	30
Cafeteria, fast food		
Dining rooms	100	20
Kitchens (cooking)		
{f,g}	70	20
Bathrooms		
	20	15
	•	1.5 cfm/ft^2
Hospitals, nursing and		
Convalescent homes		
Autopsy rooms ^{b}		
		$0.50 \text{ cfm}/\text{ft}^2$
1		
rooms	20	15
Operating rooms	20	20
Patient rooms	20	30
Physical therapy	10	25

Recovery and ICU	20	15
Recovery and ICO	20 20	15
Hotala motala nagonta	20	13
Hotels, motels, resorts		
And dormitories		
Assembly rooms		
Bathrooms ^{{b,g} }	120	15
Bedrooms		$1.5 \text{ cfm}/\text{ft}^2$
Conference rooms		30 cfm per room
Dorm sleeping areas	50	20
Gambling casinos	20	15
Living rooms		
Lobbies	120	30
		30 cfm per room
	30	15
Offices	50	1.5
Conference rooms	50	20
	30	20
Office spaces	_	20
Reception areas	7	20
Telecommunication	60	15
centers and data entry	60	20
Private dwellings	Based upon	0.35 air changes per
multiple Living areas ^{c}	Number of bedrooms	hour{a} or 15 cfm per
	First bedroom: 2; each	person, whichever is
	additional bedroom: 1	greater
		8
Kitchens ^{g}		
ixitements		100 cfm intermittent
		or 25 cfm continuous
Tailat manual and		$1.0 \text{ cfm}/\text{ft}^2$
Toilet rooms and		1.0 clm /lt
Bathrooms ^{g}		100 0
Garages, separate for		100 cfm per car
each dwelling		
Garages, common for		1.5 cfm/ft^2
multiple units{b}		
Public spaces		
Corridors and utilities		0.05 cfm/ft^2
Elevators ^{g}		
Locker & dress rooms		1.00 cfm/ft^2
{b}		0.5 cfm/ft^2
Toilet rooms ^{b,g}		
		75 cfm per water closet
Smoking loungag {b,g}		or urinal
Smoking lounges ^{b,g}		or urman
	70	60
Retail stores, sales	70	60
Retail stores, sales		

floors		
And showroom floors		
Basement and street		
Dressing rooms		0.30 cfm/ft^2
e		0.50 cm/ ft
Malls and arcades		
Shipping & receiving		0.20 cfm/ft^2
Smoking lounges ^{{b} }		0.20 cfm/ft^2
Storage rooms	70	0.15 cfm/ft^2
Upper floors		
Warehouses		60
		00
Bathrooms		
		0.15 cfm/ft^2
		0.20 cfm/ft^2
		0.05 cfm/ft^2
		1.0 cfm/ft^2
		1.0 0111/10
Specialty shops		
Auto service stations		1.5 cfm/ft^2
Barber		
Beauty	25	15
Clothiers, furniture	25	25
Florists	25	0.30 cfm/ft^2
		0.30 clm/lt
Hardware, drugs, fabrics		
Nail Salons ^(b)	8	15
Pet shops	8	15
Reducing salons		
Supermarkets		25
Supermarkets		1.00 cfm/ft^2
	20	
	20	15
	8	15
Sports and amusement		
Ballrooms & Disco		
	100	25
Bowling alleys		
(seating Areas)	70	25
Game rooms		
Ice arenas	70	25
Playing floors		0.50 cfm/ft^2
(gymnasiums)	30	20
	50	20
Spectator areas	1.50	1.5
Swimming pools (pool	150	15
& deck areas		0.50 cfm/ft ²
Storage		
Repair garages,		1.5 cfm/ft^2
enclosed parking		
are as (d)		$0.05 cfree/cc^2$
garages ^(d)		0.05 cfm/ft^2
Warehouses		
Theaters		

A 1'4 '	1.7.0	1.7
Auditoriums	150	15
Lobbies	150	20
Stages, studios	70	15
Ticket booths	60	20
Transportation		
Platforms	100	15
Vehicles	150	15
Waiting rooms	100	15
Workrooms		
Bank vaults	5	15
Darkrooms		0.50 cfm/ft^2
Duplicating, printing		0.50 cfm/ft^2
Meat processing ^{c}	10	15
Pharmacy	20	15
Photo studios	10	15

For SI:

1 cubic foot per minute = $0.0004719 \text{ ms}^3/\text{s}$, 1 ton = 908 kg, 1 cubic foot per minute per square foot = $0.00508 \text{ m}^3/(\text{s} \cdot \text{m}^2)$, °C = [(°F) -32]/1.8, 1 square foot = 0.0929 m^2 .

{a} Based upon net floor area.

{b} Mechanical exhaust required and the recirculation of air from such space as permitted by Section 403.2.1 is prohibited (see Section 403.2.1).

{c} Spaces unheated or maintained below 50°F are not covered by these requirements unless the occupancy is continuous.

{d} Ventilation systems in enclosed parking garages shall comply with Section 404. A mechanical ventilation system shall not be required in garages having a floor area not exceeding 850 square feet and used for the storage of not more than four vehicles or trucks of 1 ton maximum capacity.

 $\{e\}$ Where the ventilation rate is expressed in cfm/ft², such rate is based upon cubic feet per minute per square foot of the floor area being ventilated.

{f} The sum of the outdoor and transfer air from adjacent spaces shall be sufficient to provide an exhaust rate of not less than 1.5 cfm/ft^2 .

{g} Transfer air permitted in accordance with Section 403.2.2.

E. Sections 506, 507, 508 and 509 of the 2006 International Mechanical Code are hereby amended by deleting Sections 506, 507, 508 and 509 and substituting the following:

Grease hood duct systems must comply with NFPA 96 2006 Edition.

F. Section 601 of the 2006 International Mechanical Code is hereby amended by adding a new Section 601.5. as follows:

601.5 Insulation required. All ductwork installed in non-conditioned and not completely conditioned areas such as crawl, attic and the floor/ceiling assembly shall be insulated

G. Section 607.5.5.1 Exception 1.1 of the 2006 International Mechanical Code is hereby amended by deleting Section 607.5.5.1 Exception 1.1 and substituting the following:

Steel exhaust air subducts extend not less than 22 inches (559 mm) vertically in an exhaust riser duct installed in a shaft providing there is a continuous airflow upward to the outdoors."

PLUMBING SECTIONS

Section 13. Section 16.12.120 of the Metropolitan Code of Laws is hereby amended by deleting Section 16.12.120 and substituting the following:

16.12.120 Adoption by reference.

A. The following sections and appendices of the 2006 Edition of the International Plumbing Code are adopted and incorporated into this chapter as the technical section of the Plumbing Code of the Metropolitan Government, by reference, as fully as though copied into this code, except as such sections and appendices have been or may be hereafter revised or amended by the Metropolitan Council: Section 201 through Chapter 13 inclusive, Appendices B, C, D, E, and G.

B. The following sections of the Subsurface Sewage Disposal System laws and regulations as published by the Tennessee Department of Environment and Conservation, Ground Water Protection division, as amended October 1993, are adopted and incorporated into this chapter as the Plumbing Code of the Metropolitan Government, by reference, as fully as though copied in this chapter, except as such sections and appendices have been or may be hereafter revised or amended by the Metropolitan Council: Section 1200-1-6.01 through 1200-1-1.13 and 1200-1-6-.20, 1200-1-6-.22 and Appendices I and II." See Chapter 15.72 of the Metropolitan Code of Laws for additional requirements.

Section 14. Section 16.12.130 of the Metropolitan Code of Laws is amended by deleting Section 16.12.130 and substituting the following:

16.12.130 Amendments to the International Plumbing Code

The following amendments, deletions, or additions to the 2006 Edition of the International Plumbing Code are adopted by reference, as fully as though copied into such Plumbing Code, and thereby made a part of the Plumbing Code though copied into such Plumbing Code, and thereby made a part of the Plumbing Code.

A. Section 201 of the 2006 Edition of the International Building Code is hereby amended by adding the following new Section 201.5 to Section 201:

201.5 Interchangeability with The International Codes. The International Existing Building Code shall be construed to be the NFPA 101 Life Safety Code. The International Fire Code shall be construed to be The NFPA Fire Codes. The International Property Maintenance Code shall be construed to mean the Property Standards Code of the Metropolitan Government. The International Private Sewage Disposal Code shall be construed to mean the National Electrical Government. The ICC Electrical Code shall be construed to mean the National Electrical Code.

B. Section 202 of the 2006 Edition of the International Plumbing Code is hereby amended by adding the definition of "Plumbing Official" as follows:

CODE OFFICIAL--shall mean the Director of the Metropolitan Department of Codes Administration, his deputy or duly authorized representative.

C. Sections 305.6 and 305.6.1 of the 2006 Edition of the International Plumbing Code are hereby amended by deleting Sections 305.6 and 305.6.1 and substituting the following:

305.6 Freezing. Plumbing fixtures, water, soil and waste pipes shall not be installed outside of a building, in attics or crawl spaces, concealed in outside walls, or in any other place subjected to freezing temperature unless adequate provision is made to protect such pipes from freezing by insulation and heat or in the case of plumbing fixtures, if the manufacturer provides guidelines for exterior use. Exterior water supply system piping shall be installed not less than twenty –four (24) inches below grade.

305.6.1 Sewer depth. Building sewers that connect to private sewage disposal systems shall be a minimum of twelve (12) inches below finished grade at the point of septic tank connection. Building sewers shall be a minimum of twelve (12) inches below grade. Sewers subject to vehicular traffic require a minimum of twenty-four (24) inches of cover or shall be encased radically in six inches (6) of concrete. A sleeve shall be required to protect the service pipe from the cement encasement in compliance with Section 305.1 Corrosion.

D. Section 307.1 and 307.2 of the 2006 Edition of the International Plumbing Code is hereby amended by deleting Section 307.1 and 307.2 and substituting the following:

SECTION 307 STRUCTURAL SAFETY

307.1 General. In the process of installing or repairing any part of a plumbing and drainage installation, the finished floors, walls, ceilings, tile work or any other part of the

building or premises that must be changed or replaced shall be left in a safe structural condition in accordance with the requirements of the International Building Code.

307.2. Cutting, notching and boring in wood members. Joist notching. Notches on the ends of joists shall not exceed one-fourth the actual joist depth. Holes bored in joists shall not be within 2 inches (51 mm) of the top or bottom of the joist and the diameter of any such hole shall not exceed one third the actual depth of the joist. Notches in the top or bottom of joists shall not exceed one sixth of the actual joist depth and shall not be located in the middle third of the span.

307.2.1. Stud cutting and notching. In exterior walls and bearing partitions, any wood stud is permitted to be cut or notched to a depth not exceeding 25 percent of its actual width. Cutting or notching of studs to a depth not greater than 40 percent of the width of the actual stud width is permitted in nonbearing partitions supporting no loads other than the weight of the partition.

307.2.2. Bored holes. A hole not greater in diameter than 40 percent of the actual stud width is permitted to be bored in any wood stud. Bored holes not greater than 60 percent of the actual width of the stud is permitted in nonbearing partitions or in any wall where each bored stud is doubled, provided not more than two such successive doubled studs are so bored. In no case shall the edge of the bored hole be nearer than 0.625 inch (15.9 mm) to the edge of the stud. Bored holes shall not be located at the same section of stud as a cut of notch.

307.2.3. Cutting, notching and boring holes in structural steel framing. The cutting, notching and boring of holes in structural steel framing members shall be as prescribed by the registered design professional.

307.2.4. Cutting, notching and boring holes in cold-formed steel framing. Flanges and lips of load-bearing cold-formed steel framing members shall not be cut or notched. Holes in webs of load-bearing cold-formed steel framing members shall be permitted along the centerline of the web of the framing member and shall not exceed the dimensional limitations, penetration spacing or minimum hole edge distance as prescribed by the registered design professional. Cutting, notching and boring holes of steel floor/roof decking shall be as prescribed by the registered design professional.

307.2.5. Cutting, notching and boring holes in nonstructural cold-formed steel wall framing. Flanges and lips of nonstructural cold-formed steel wall studs shall not be cut or notched. Holes in webs of nonstructural cold-formed steel wall studs shall be permitted along the centerline of the web of the framing member, shall not exceed 1.5 inches (38 mm) in width or 4 inches (102 mm) in length, and the holes shall not be spaced less than 24 inches (610 mm) center to center from another hole or less than 10 inches (254 mm) from the bearing end.

E. Section 312.6 of the 2006 Edition of the International Plumbing Code is hereby amended by deleting Section 312.6 in its entirety.

F. Chapter 3 of the 2006 Edition of the International Plumbing Code is hereby amended by adding a new Section 315 as follows:

SECTION 315 BASIC PRINCIPLES

The basic principles of this Code are enunciated as basic goals in environmental sanitation worthy of accomplishment through properly designed, acceptably installed, and adequately maintained plumbing systems. Some of the details of plumbing construction must vary, but the basic sanitary and safety principles are the same. The principles may serve to define the intent.

315.1 Principle No.1

All buildings, structures and premises intended for human habitation, occupancy, use for employment; or the preparation or processing of food, drinks or other materials for human consumption shall be provided with an adequate, safe and potable water supply through a safe system of piping to all fixtures, appliances, appurtenances, etc.

315.2 Principle No. 2

Every building having plumbing fixtures installed and intended for human habitation, occupancy, or use on premises abutting on a street, alley, or easement in which there is a public sewer shall have a separate connection with the sewer.

315.3 Principle No. 3

A dwelling type building provided with a drainage system, a public sewer connection or a private sewage disposal system, shall have at least one water closet, one bathtub or shower, one lavatory, one kitchen-type sink, and an adequate source of hot water, for each family unit to meet minimum basic requirements for health, sanitation and personal hygiene. Water heating facilities shall be accessible for emergency maintenance without entering any individual apartment or living unit, except that water heaters may be located within an apartment or living unit when supplying hot water to that unit only.

All other buildings, structures, or premises intended for human occupancy or use shall be provided with adequate sanitary facilities as may be required, but not less than one water closet and one hand washing lavatory.

315.4 Principle No. 4

Plumbing fixtures shall be made of smooth nonabsorbent material, shall be free from concealed fouling surfaces, and shall be located in ventilated enclosures.

315.5 Principle No. 5

Each fixture directly connected to the drainage system shall be equipped with a water-seal trap.

315.6 Principle No. 6

No substance which will clog the pipes, produce explosive mixtures, destroy the pipes or their joints, or interfere unduly with the sewage-disposal process shall be allowed to enter the building drainage system.

315.7 Principle No. 7

Proper protection shall be provided to prevent contamination of food, water, sterile goods, and similar materials by backflow of sewage. When necessary, the fixture, device, or appliance shall be connected indirectly with the building drainage system.

315.8 Principle No. 8 No water closet shall be located in a room or compartment which is not properly lighted and ventilated.

315.9 Principle No. 9

If water closets or other plumbing fixtures are installed in buildings where there is no sewer within a reasonable distance, suitable provision shall be made for disposing of the building sewage by some accepted method of sewage treatment and disposal.

315.10 Principle No. 10

Where a plumbing drainage system may be subject to backflow of sewage, suitable provisions shall be made to prevent its overflow in the building.

315.11 Principle No. 11

Plumbing shall be installed with due regard to preservation of the strength of structural members and prevention of damage to walls and other surfaces through fixture usage.

315.12 Principle No. 12

Sewage or other waste, from a plumbing system, which may be deleterious to surface or subsurface waters shall not be discharged into the ground or into any waterway unless it has first been rendered innocuous through subjection to some acceptable form of treatment.

315.13 Principle No. 13

All plumbing fixtures, devices, appliances, and appurtenances shall be adequately supplied with water in sufficient volume and pressure to enable them to function properly.

315.14 Principle No. 14

The pipes conveying water to plumbing fixtures, appliances, devices and appurtenances shall be of sufficient size as to supply water at rates that will prevent undue pressure drops at any one fixture, when any other fixture, appliance, device or appurtenance, or group, is being flushed, operated or used.

315.15 Principle No. 15

There shall be no direct or indirect cross connections, either existing or potential, between a safe potable water supply and an unsafe, non potable supply.

315.16 Principle No. 16

Adequate protection shall be provided to prevent possible backflow or back siphon age of an unsafe or potentially hazardous fluid or material into a safe water system.

315.17 Principle No. 17

The piping and connections of the plumbing system shall be of durable materials, free from defects in workmanship and materials, and systems shall be designed and constructed to provide adequate service for a reasonable life under stresses imposed by structural loading, temperature variation, vibration and other conditions.

315.18 Principle No. 18

Devices for heating and storing water shall be designed and installed to prevent all danger from overheating and explosion and to prevent undue flow of hot water or steam into the cold water supply pipes.

315.19 Principle No. 19

Refrigerators, coolers, receptacles, sterilizers, vats, and similar equipment used for storing or holding foods, beverages, sterile goods and water conditioning equipment, etc., shall discharge into the building drainage system through an indirect waste.

315.20 Principle No. 20

Water closets, bathtubs, showers, urinals and similar fixtures shall be suitably enclosed and screened for privacy.

315.21 Principle No. 21 Plumbing systems, including fixtures, shall be maintained in sanitary condition and proper working order.

315.22 Principle No. 22

Sewage and wastes from plumbing and drainage systems shall be adequately treated and disposed of in accordance with the requirements of the Plumbing Official.

G. Table 403.1 of the 2006 Edition of the International Plumbing Code is hereby amended by adding footnotes e and f to Table 403.1.

{e} For day nurseries, a minimum of one bathtub shall be required.

{f} The minimum number of service sinks shall be 1 per building or 1 per janitor's closet or 1 per tenant space over 7,500 gross square feet.

H. Section 403.2 of the 2006 Edition of the International Plumbing Code is hereby amended by deleting Section 403.2 and substituting the following:

403.2 Separate facilities. Where plumbing fixtures are required, separate facilities shall be provided for each sex.

EXCEPTIONS:

1. Separate facilities shall not be required for dwelling units and sleeping units

2. Separate facilities shall not be required for private facilities.

3. Separate facilities shall not be required in structures or tenant spaces with a total gross square footages in the following occupancies.

Table 403.2 Occupancies with one bathroom for both sexes.

Occupancy	Gross Square footage
Business	1,500
Education	1,500
Factory	3,000
Mercantile	2,000
Pools	1,000
Restaurants	1,000
Storage	7,500

EXCEPTION: Any business that dispenses gasoline or diesel oil to the public shall have separate facilities for men and female.

I. Section 403.4 of the 2003 Edition of the International Building Code is hereby amended by deleting Section 403.4 and substituting the following:

403.4.1 Location of toilet facilities in occupancies other than covered malls. In occupancies other than covered malls, the required public and employee toilet facilities shall be located not more than one story above or below the space required to be provided with toilet facilities and the path of travel to such facilities shall not exceed a distance of 500 feet(152 m).' Minimum employee facilities are 1 water closet, 1 lavatory and 1 drinking fountain.

EXCEPTION:

1. The location and maximum travel distance to required employee facilities in factory and industrial occupancies are permitted to exceed that required by this section, provided that the location and maximum travel distance are approved.

2. In education occupancies, the maximum travel distance to bathrooms shall be 300 ft and the facilities shall be located on the same floor level.

J. Section 403.6 of the 2006 Edition of the International Plumbing Code is hereby amended by deleting Section 403.6 and substituting the following:

403.4.2 Location of toilet facilities in covered malls. In covered mall buildings, the path of travel to required toilet facilities shall not exceed a distance of 300 feet (91 440 mm). The required facilities shall be based on total gross square footage, and facilities shall be installed in each individual store or in central toilet areas located in accordance with this section. Restaurants other than food tenants in the food court shall have the required facilities installed within their tenant space. The maximum travel distance to the central toilet facilities in covered mall buildings shall be measured from the main entrance of any store or tenant space.

403.6.2 Pay facilities. Required facilities shall be free of charge and designated by legible signs for each sex. Where pay facilities are installed, such facilities shall be in excess of the required minimum facilities.

K. Section 405.3.2 of the 2006 Edition of the International Plumbing Code is hereby amended by deleting Section 405.3.2 and substituting the following:

405.3.2 Public lavatories. In employee and public toilet rooms, the required lavatory shall be located in the same room as the required water closet.

Exception. Educational occupancies

L. Section 406.2 of the 2006 Edition of the International Plumbing Code is hereby amended by deleting Section 406.2 in its entirety.

M. Section 409.2 of the 2006 Edition of the International Plumbing Code is hereby amended by deleting Section 409.2 and substituting the following:

409.2 Water connection. The water supply to a commercial dishwashing machine shall be protected against backflow by an air gap or backflow preventer in accordance with Section 608.

N. Section 410.1 of the 2006 Edition of the International Plumbing Code is hereby amended by deleting Section 410.1 and substituting the following:

410.1 Approval. Drinking fountains shall conform to ASME A112.19.1M, ASME A112.19.2M or ASME A112.19.9M, and water coolers shall conform to ARI 1010. Where water is served in restaurants, drinking fountains shall not be required.

O. Section 411.1 of the 2006 Edition of the International Plumbing Code is hereby amended by deleting Section 411.1 and substituting the following:

411.1 Water connection. Emergency showers and eyewash stations shall be provided with a non valved supply of cold water as required by the manufacturer.

P. Section 412.3 of the 2006 Edition of the International Plumbing Code is hereby amended by deleting Section 412.3 and substituting the following:

412.3 Size of floor drains. Floor drains shall have a minimum 3-inch-diameter (76 mm) drain outlet.

Q. Section 419.1 of the 2006 Edition of the International Plumbing Code is hereby amended by adding:

Waterless urinals shall be provided with a water supply, sized to accommodate the requirements for a flush valve, roughed-in and capped behind the wall above each individual waterless urinal. Waterless urinals shall be serviced and cleaned in accordance with manufacturers recommendations. Maintenance records for waterless urinals shall be maintained on site and available for inspection.

R. Section 420 of the 2006 Edition of the International Plumbing Code is hereby amended by adding a new Section 420.5 as follows:

420.5 Surrounding material. Walls within 2 feet (610 mm) of a water closet shall have a smooth, hard, nonabsorbent surface, to a height of 4 feet (1219 mm) above the floor, and except for structural elements, the materials used in such walls shall be of a type that is not adversely affected by moisture.

S. Section 423.1 of the 2006 Edition of the International Plumbing Code is hereby amended by deleting Section 423.1 and substituting the following:

423.1 Water connections. Baptisteries, ornamental and lily pools, aquariums, ornamental fountain basins, swimming pools, and similar constructions, where provided with water supplies, shall be protected against backflow in accordance with 608. Provide back flow preventer if the fill spout is not provided with an air gap.

T. Section 501.4 of the 2006 Edition of the International Plumbing Code is hereby amended by deleting Section 501.4 and substituting the following:

501.4 Location. Water heaters and storage tanks shall be located and connected so as to provide ready access for observation, maintenance, servicing and replacement.

U. Section 503.1 of the 2006 Edition of the International Plumbing Code is hereby amended by deleting Section 503.1 and substituting the following:

503.1 Cold water line valve. The cold water branch line from the main water supply line to each hot water storage tank or water heater shall be provided with a valve, located within 3 feet of the equipment and serving only the hot water storage tank or water heater. The valve shall not interfere or cause a disruption of the cold water supply to the remainder of the cold water system. The valve shall be provided with ready access on the same floor level as the water heater served.

V. Section 504.7.1 of the 2006 Edition of the International Plumbing Code is hereby amended by deleting Section 504.7.1 and substituting the following:

504.7.1 Pan size and drain. The pan shall be not less than 1.5 inches (51 mm) deep and shall have a minimum clearance from the water heater of two (2) inches on all sides: the pan shall be of sufficient size and shape to receive all dripping or condensate from the tank or water heater. The pan shall be drained by an indirect waste pipe having a minimum diameter of 1 inch.

W. Section 604.9 of the 2006 Edition of the International Plumbing Code is hereby amended by adding the following at the end of the section:

Air chamber water hammer arrestors shall have a minimum of a 12" high air chamber.

X. Section 605.14 of the 2006 Edition of the International Plumbing Code is hereby amended by adding a new Section 605.14.6:

605.14.6 Joints Under Slabs All copper joints under slabs or in inaccessible spaces shall be brazed.

Y. Section 605.15 of the 2006 Edition of the International Plumbing Code is hereby amended by adding a new Section 605.15.4:

605.15.4 Joints Under Slabs All copper joints under slabs or in inaccessible spaces shall be brazed.

Z. Section 608.16.4 Exception 2 of the 2006 Edition of the International Plumbing Code is hereby amended by deleting Section 608.16.4 exception 2 in its entirety.

AA. Footnotes Table 710.1(1) of the 2006 Edition of the International Plumbing Code is hereby amended by adding footnote b to Table 710.1(1):

{b} There shall be 3 water closets maximum on any 3 inch drain line.

AB. Section 903.1 of the 2006 Edition of the International Plumbing Code is hereby amended by deleting Section 903.1 and substituting the following:

903.1 Stack required. Every building in which plumbing is installed shall have at least one 3 inch main vent stack. Such stack shall run undiminished in size and as directly as possible from the building drain through to the open air or to a vent header that extends to the open air.

AC. Chapter 12 of the 2006 Edition of the International Plumbing Code is hereby amended by deleting Chapter 12 in its entirety.

AD. The 2006 Edition of the International Plumbing Code is hereby amended by adding Appendix H as follows:

APPENDIX H REGULATIONS GOVERNING PRIVATE SEWAGE DISPOSAL SYSTEMS

The following regulations shall apply to the manufacture, sale, installation, repair, alteration, extension and relocation of all private sewage disposal systems under the jurisdiction of the Metropolitan Government of Nashville and Davidson County. H101. APPROVED AND LIMITATIONS.

H101.1 ALLOWABLE USE. Septic tanks and soil absorption systems and other similar facilities may be constructed where no public sewerage system is available or is likely to become available within a reasonable time.

H101.2 PUBLIC SEWER CONNECTION. Private domestic sewage treatment and disposal systems shall be discontinued and adequately abandoned when public sewers become available to the building served.

H101.3 PERMISSION TO CONSTRUCT. No plumbing permit shall be issued for the installation of any septic tank or disposal field or for any individual or private sewage disposal system until satisfactory evidence of approval of such system, by the Metropolitan Department of Health, has been submitted to the Department of Codes Administration. On approved and recorded subdivisions, such notification consists of a letter to Codes Administration from the Health Department which covers each subdivided lot.

H101.4 PLANS AND SPECIFICATIONS.

H101.4.1 All manufacturers or distributors of mechanical sewage disposal units, filters, precast septic tanks or any other method of sewage disposal must submit detailed plans and specifications to the Director of Health of the Metropolitan Health Department, and receive approval prior to the manufacture and sale or installation of the product with the Metropolitan area of Nashville and Davidson County.

H101.4.2 Commercial and public buildings, such as but not limited to theaters, food dispensers, assembly halls, schools, churches, apartment buildings, motels, factories, mobile home parks, camp grounds and parks proposed to be constructed in an unsewered area, must submit detailed plans and specifications for the proposed sewage disposal system to the Sanitary Engineering Division of the Metropolitan Health Department for approval prior to any construction.

H101.4.3 The plans and specifications shall be submitted in triplicate and shall include the following:

H101.4.3.1 Detailed plan of the proposed septic tank or treatment tank and effluent disposal system showing building location, and with the distance labeled from building served to system, from system to well, lot line, lake, stream or other watercourse.

H101.4.3.2 The ground slope should be indicated and information submitted relative to the expected use and occupancy of the building to be served.

H101.4.3.3 Provide soil borings and percolation test data.

H101.4.3.4 There shall be maintained at the project site one set of plans bearing the Health Department's stamp of approval."

Section 15. Section 16.08.080 of the Metropolitan Code of Laws is hereby amended by deleting Section 16.08.080 and substituting the following:

16.28.080 Applications—Examination by director—Exception.

A. The director of codes administration shall examine or cause to be examined each application for permit and the drawings and computations filed therewith and shall ascertain by such examinations whether the construction indicated and described is in accordance with the requirements of this chapter and all other pertinent laws or ordinances.

B. The director of codes administration may accept plans and a sworn affidavit from a registered architect or engineer, affixed with his or her seal, stating that the plans submitted conform with all provisions of this chapter and all other pertinent laws or ordinances. The director of codes administration may without any examination or inspection accept such affidavit, provided the architect or engineer who made such affidavit agrees to submit to the director, on the completion of the structure, a certification that the structure has been erected in accordance with the requirements of all provisions of this chapter and all other pertinent laws or ordinances. Where the director relies upon such affidavit, the architect or engineer shall assume full responsibility for the compliance with all provisions of this chapter and other pertinent laws or ordinances. Architects and engineers hereinabove referred to shall be registered under the laws of this state regulating the practice of architecture and engineering.

Section 16. Section 16.28.240 of the Metropolitan Code of Laws is hereby amended by deleting Section 16.28.240 and substituting the following:

16.28.240 Interpretation-Expiration-

Extensions.

A. A permit issued pursuant to this chapter shall be construed to be a license to proceed with the work and shall not be construed as authority to violate, cancel, alter or set aside any of the provisions of this chapter, nor shall such issuance of a permit prevent the director from thereafter requiring a correction of errors in plans or in construction or of violations of this chapter.

B. Any permit issued shall become invalid unless the work authorized by it shall have been commenced within six months after its issuance, or if the work authorized by such permit is suspended or abandoned for a period of one-hundred and eighty (180) days after the time the work is commenced. In no case shall a permit be valid for more than two years after its issuance; provided that for cause, if the work authorized by it is sufficiently under way and is being diligently pursued, one or more extensions of time, for periods not exceeding ninety days each, may be allowed in writing by the director.

C. In the case of a permit issued to demolish a building or structure, such demolition permit shall become invalid unless the work authorized by it shall have been commenced within thirty days after its issuance or unless the work so authorized shall have been completed within sixty days after work is commenced; provided, that extensions of time may be allowed as provided in this section.

D. In the case of a permit issued to move any building or structure into any residential zone district or residential development, such permit shall become invalid unless the work so authorized has been completed by permanently affixing said building or structure on a foundation within thirty days after the date that the building or structure was moved onto the property located within a residential zone district or residential development. Any person who fails to complete such work within the above-mentioned thirty day period shall be subject to the penalties set forth in Section 1.01.030.

Section 17. This Ordinance shall take effect from and after its final passage, the welfare of the Metropolitan Government of Nashville and Davidson County requiring it.

Sponsored by: Sam Coleman, Vivian Wilhoite, Jason Alexander