

Memphis
and
Shelby County

2012 Fuel Gas Code

Adopted by:

Shelby County Commission – Ordinance # 420 (09/10/12)

Memphis City Council- Ordinance #5481 (12/18/12)

Delete Chapter 1 in its entirety and replace it with the following:

**CHAPTER 1
ADMINISTRATION**

**SECTION 101 (IFGC)
GENERAL**

101.1 Title. – The regulations shall be known as the Memphis and Shelby County 2012 Fuel Gas Code, hereinafter referred to as “this code.”

101.2 Scope. - This code shall apply to the installation of fuel-gas piping systems, fuel-gas utilization equipment and related accessories in accordance with Sections 101.2.1 through 101.2.5.

Exceptions:

1. **Reserved**
2. **Reserved**

101.2.1 Gaseous Hydrogen Systems. - Gaseous hydrogen systems shall be regulated by Chapter 7.

101.2.2 Piping Systems. - These regulations cover piping systems for natural gas with an operating pressure of 125 pounds per square inch gauge (psig) (862 kPa gauge) or less, and for LP-gas with an operating pressure of 20 psig (140 kPa gauge) or less, except as provided in Section 402.6.1. Coverage shall extend from the point of delivery to the outlet of the equipment shutoff valves. Piping systems requirements shall include design, materials, components, fabrication, assembly, installation, testing, inspection, operation and maintenance.

101.2.3 Gas Utilization Equipment. - Requirements for gas utilization equipment and related accessories shall include installation, combustion and ventilation air and venting and connections to piping systems.

101.2.4 Reserved

101.2.5 Other Fuels. - The requirements for the design, installation, maintenance, alteration and inspection of mechanical systems operating with fuels other than fuel gas shall be regulated by the *International Mechanical Code*, as locally amended.

101.3 Appendices. - Provisions in the appendices shall not apply unless specifically adopted, and the provision of the following appendix shall apply:
Appendix A - Gas Permit and Inspection Fees.

101.4 Intent. - The purpose of this code is to provide minimum standards to safeguard life or limb, health, property and public welfare by regulating and controlling the design, construction, installation, quality of materials, location, operation and maintenance or use of fuel gas systems.

101.4.1 Quality Control. – Quality control of materials and workmanship is not within the purview of the Technical Codes except as it relates to the purposes stated herein.

101.5 Severability. - If a section, subsection, sentence, clause or phrase of this code is, for any reason, held to be unconstitutional or otherwise unenforceable; such decision shall not affect the validity of the remaining portions of this code.

**SECTION 102 (IFGC)
APPLICABILITY**

102.1 General. - The provisions of this code shall apply to all matters affecting or relating to structures and premises, as set forth in Section 101. Where, in a specific case, different sections of this code specify different materials, methods of construction or other requirements, the most restrictive shall govern.

102.1.1 Federal And State Authority. – The provisions of the Technical Codes shall not be held to deprive any Federal or State agency, or any applicable governing authority having jurisdiction, of any power or authority which it had on the effective date of the adoption of the Technical Codes or of any remedy then existing for the enforcement of its orders, nor shall it deprive any individual or corporation of its legal rights as provided by law.

102.2 Existing Installations. - Except as otherwise provided for in this chapter, a provision in this code shall not require the removal, alteration or abandonment of, nor prevent the continued utilization and maintenance of, existing installations lawfully in existence at the time of the adoption of this code. The Building Official shall determine the extent to which the existing system shall be made to conform to the requirements of the Technical Codes for new construction.

[EB] 102.2.1 Existing Buildings. - Additions, alterations, renovations or repairs related to building or structural issues shall be regulated by the *International Building Code*, including the

International Existing Building Code, both as locally amended.

102.3 Maintenance. - Installations, both existing and new, and parts thereof shall be maintained in proper operating condition in accordance with the original design and in a safe, hazard free, sanitary condition. Devices or safeguards which are required by this code shall be maintained in compliance with the code edition under which they were installed. The owner or the owner's designated agent shall be responsible for maintenance of installations. To determine compliance with this provision, the Building Official shall have the authority to require an installation to be reinspected. Maintenance shall be performed by a registered or licensed contractor.

[EB] 102.4 Additions, Alterations Or Repairs. - Additions, alterations, renovations or repairs to installations shall conform to that required for new installations without requiring the existing installation to comply with all of the requirements of this code. Additions, alterations or repairs shall not cause an existing installation to become unsafe, hazardous or overloaded.

Minor additions, alterations, renovations and repairs to existing installations shall meet the provisions for new construction, unless such work is done in the same manner and arrangement as was in the existing system, is not hazardous and is approved.

[EB] 102.5 Change In Occupancy. - It shall be unlawful to make a change in the occupancy of a structure which will subject the structure to the special provisions of this code applicable to the new occupancy without approval. The Building Official shall certify that such structure meets the intent of the provisions of law governing building construction for the proposed new occupancy and that such change of occupancy does not result in any hazard to the public health, safety or welfare.

[EB] 102.6 Historic Buildings. - The provisions of this code relating to the construction, alteration, repair, enlargement, restoration, relocation or moving of buildings or structures shall not be mandatory for existing buildings or structures identified and classified by the state or local jurisdiction as historic buildings when such buildings or structures are judged by the Building Official to be safe and in the public interest of health, safety and welfare regarding any proposed construction, alteration, repair, enlargement, restoration, relocation or moving of buildings.

102.7 Moved Buildings. - Except as determined by Section 102.2, installations that are a part of buildings or structures moved into or within the jurisdiction shall comply with the provisions of this code for new installations.

102.8 Referenced Codes And Standards. - The codes and standards referenced in this code shall be those that are listed in Chapter 8 and such codes and standards shall be considered part of the requirements of this code to the prescribed extent of each such reference. Where differences occur between provisions of this code and the referenced standards, the provisions of this code shall apply.

Exception: Where enforcement of a code provision would violate the conditions of the listing of the equipment or appliance, the conditions of the listing and the manufacturer's installation instructions shall apply.

102.9 Requirements Not Covered By Code. - Requirements necessary for the strength, stability or proper operation of an existing or proposed installation, or for the public safety, health and general welfare, not specifically covered by this code, shall be determined by the Building Official.

SECTION 103 (IFGC)

Memphis Shelby County Office of Construction Code Enforcement (MSCCE)

103.1 Creation Of Enforcement Agency. - Joint Resolution/Ordinance #3333 was adopted and approved by the City of Memphis and the Shelby County legislative bodies, to create the Memphis and Shelby County Office of Construction Code Enforcement (MSCCE) this joint agency charged with enforcement of the MSC Building, MSC Existing Building, MSC Electrical, MSC Fuel Gas, MSC Plumbing and this code, which are to be known collectively as MSCCE 2005 Technical Codes

103.2 Employee Qualifications

103.2.1 Building Official Qualifications. - As established by Ordinance #3333

103.2.2 Chief Inspector Qualification - The Building Official, with the approval of the Administrator, may designate chief inspectors to administer the provisions of the 2005 Technical Codes for Memphis and Shelby County. The qualifications of the Chief Inspectors shall be as established by Ordinance #3333.

103.2.3 Inspector Qualifications. –The Building Official, with the approval of the Administrator, may hire such numbers of officers, inspectors, assistants, and other employees as shall be authorized from time to time. For employee minimum qualifications, see the Shelby County Administration Job Class Master.

103.2.4 Deputy Building Official Qualifications. – The Building Official may designate as his deputy as employee in the department who shall, during the absence or disability of the building Official, exercise all the powers of the Building Official. The Deputy Building Official should have the same qualifications listed in 103.2.2.

103.3 Restriction On Employees. – An officer or employee connected with the department, except one whose only connection is as a member of the Boards established by the Technical Codes, shall not be financially interested in the furnishing of labor, material or appliances for the construction, alteration, or maintenance of a building, structure, service, system or in the making of plans or of specifications thereof, unless he is the owner of such. This officer or employee shall not engage in any other work, which is inconsistent with the duties or conflicts, or may appear to conflict, with the interest of the department.

103.4 Records. – The Building Official shall keep, or cause to be kept, official records of applications received, permits and certificates issued, fees collected, reports of inspections, and notices and orders issued. Such reports shall be retained in the official records for the period required for the retention of public records and shall be open to public inspection.

103.5 Liability. – Any officer or employee, or member of the Joint Board of Appeals or Mechanical and Fuel Gas Advisory Board, charged with the enforcement of the Technical Codes, acting for the applicable governing authority in the discharge of his duties, shall not thereby render himself personally liable, and is hereby relieved from all personal liability, for any damage that may accrue to persons or property as a result of any act required or permitted in the discharge of his duties. Any suit brought against any officer or employee or member because of such act performed by him in the enforcement of any provision of the Technical Codes shall be defended by the department of law until the final termination of the proceedings.

103.6 Reports – The Building Official shall submit annually a report covering the work of the OCCE during the preceding year. He may incorporate in said

report a summary of the decisions of the Joint board of Appeals during said year.

SECTION 104 (IFGC) DUTIES AND POWERS OF THE BUILDING OFFICIAL

104.1 General. – The Building Official is hereby authorized and directed to enforce the provisions of the Technical Codes. The Building Official is further authorized to render interpretations of the Technical Code which are consistent with its spirit and purpose and to adopt policies and procedures in order to clarify the application of its provisions. Such interpretations, policies, and procedures shall be in compliance with the intent and purpose of this code. Such policies and procedures shall not have the effect of waiving requirements specifically provided for in this code.

104.2 Right Of Entry

104.2.1 Authorization - Whenever necessary to make an inspection to enforce any of the provisions of the Technical Codes, or whenever the Building Official has reasonable cause to believe that there exists in any building or upon any premises any condition or code violation which makes such building, structure, premises, electrical, gas, mechanical, or plumbing system unsafe, dangerous or hazardous, the Building Official may enter such building, structure, or premises at all reasonable times to inspect the same or to perform any duty imposed upon the Building Official by the Technical Codes. If such building or premises are occupied, he shall first present proper credentials and request entry. If such building, structure, or premises are unoccupied, he shall first make a reasonable effort to locate the owner or other persons having charge or control of such and request entry. If entry is refused, the Building Official shall have recourse to every remedy provided by law to secure entry.

104.2.2 Inspection With Warrant - When the Building Official shall have first obtained a proper inspection warrant or other remedy provided by law to secure entry, no owner or occupant or any other persons having charge, care or control of any building, structure, or premises shall fail or neglect, after proper request is made as herein provided, to promptly permit entry therein by the Building Official for the purpose of inspection and examination pursuant to the Technical Codes.

104.3 Stop Work Order – Upon notice from the Building Official, work on any building, structure,

electrical, gas, mechanical or plumbing system that is being done contrary to the provisions of the Technical Codes or is a dangerous or unsafe manner, shall immediately cease. Such notice shall be in writing and shall be given to the owner of the property, or his agent, or to the person doing the work. The notice shall state the conditions under which the work may be resumed. When an emergency exists, the Building Official shall not be required to give a written notice prior to stopping the work.

104.4 Revocation Of Permits

104.4.1 Misrepresentation Of Application. - The Building Official may revoke a permit or approval, issued under the provisions of the Technical Codes, in case there has been any false statement or misrepresentation as to the material fact in the application or plans on which the permit or approval was based.

104.4.2 Violation Of Code Provisions. - The Building Official may revoke a permit upon determination by the Building Official that the construction, erection, alteration, repair, moving, demolition, installation, or replacement of the building, structure, electrical, gas, mechanical or plumbing system for which a permit was issued is in violation of, or not in conformity with, the provisions of the Technical Codes.

104.5 Unsafe Building Or Systems. - All buildings, structures, electrical, gas, mechanical or plumbing systems which are unsafe, unsanitary, or do not provide adequate egress, or which constitute a fire hazard, or are otherwise dangerous to human life, or which in relation to existing use, constitute a hazard to safety or health, are considered unsafe buildings or service system. All such unsafe buildings, structures or service systems are hereby declared illegal and shall be abated by repair and rehabilitation or by demolition.

104.6 Identification. - The Building Official shall carry proper identification when inspecting structures or premises in the performance of duties under this code.

104.7 Notices And Orders. - The Building Official shall issue all necessary notices or orders to ensure compliance with this code.

SECTION 105 (IFGC) APPROVAL

105.1 Modifications. - Whenever there are practical difficulties involved in carrying out the provisions of this code, the Building Official shall have the authority to grant modifications for individual cases, provided the Building Official shall first find that special individual reason makes the strict letter of this code impractical and that such modification is in compliance with the intent and purpose of this code and does not lessen health, life and fire safety requirements.

105.2 Alternative Materials, Methods And Equipment. - The provisions of this code are not intended to prevent the installation of any material or to prohibit any method of construction not specifically prescribed by this code, provided that any such alternative has been approved. An alternative material or method of construction shall be approved where the Building Official finds that the proposed design is satisfactory and complies with the intent of the provisions of this code, and that the material, method or work offered is, for the purpose intended, at least the equivalent of that prescribed in this code in quality, strength, effectiveness, fire resistance, durability and safety.

105.3 Required Testing. - Whenever there is insufficient evidence of compliance with the provisions of this code, evidence that a material or method does not conform to the requirements of this code, or in order to substantiate claims for alternative materials or methods, the Building Official shall have the authority to require tests as evidence of compliance to be made at no expense to the jurisdiction.

105.3.1 Test Methods. - Test methods shall be as specified in this code or by other recognized test standards. In the absence of recognized and accepted test methods, the Building Official shall approve the testing procedures.

105.3.2 Testing Agency. - All tests shall be performed by an approved agency.

105.3.3 Test Reports. - Reports of tests shall be retained by the Building Official for the period required for retention of public records.

105.4 Material And Equipment Reuse. - Materials, equipment and devices shall not be reused unless such elements have been reconditioned, tested and placed in good and proper working condition, and approved.

SECTION 106 (IFGC)

PERMITS

106.1 Permit Application

106.1.1 When Required – Any owner, authorized agent, or contractor who desires to construct, enlarge, alter, repair, move, demolish or change the occupancy of a building or structure, or to erect, install, enlarge, alter, repair, remove, convert, or replace any electrical, gas, mechanical, or plumbing system or to cause any such work to be done shall first hire or cause to be hired a licensed and/or registered Contractor. Contractor shall first make application to the Building Official and obtain required permits for the work.

Exception – Where equipment and appliance replacements or repairs must be performed in an emergency situation, the permit application shall be submitted within the next working business day of the department of mechanical inspection.

106.1.2 Permit Required For Appurtenances To Buildings And Other Structures And Apparatus –

A permit shall be required to erect, install, alter, or repair any of the following list of building appurtenances, new structures, and apparatus, and shall include, but not be limited to, the following:

1. Conveyor systems (Permit and Inspection Fees are as set forth in the latest adopted Memphis and Shelby County fee ordinance);
2. Racking systems/Shelving (Permit and Inspection Fees are as forth in the latest adopted Memphis and Shelby County fee ordinance);
3. Process Piping System (Permit and Inspection Fees for Process Piping System will be as set forth in the latest adopted Memphis and Shelby County fee ordinance) -mechanical
4. Amusement Rides

106.1.3 Permits For Specific Structures – A permit, and the payment of the appropriate fees, shall be required to erect, install, alter, or repair any of the following list of building appurtenances, new structures and apparatus, and shall include, but not be limited to, the following:

Mechanical Code /Electric Code /Plumbing Code –

1. Air Conditioning, heating, mechanical ventilating, blower, or exhaust systems
2. Cooling towers
3. Fire Protection, sprinkler systems
4. Mechanical refrigeration systems
5. Pressure Piping Systems

Building Code/Electric Code/Plumbing Code

1. Special events permit (See policy and procedures for requirements.)
2. Temporary construction trailers
3. Elevators

Building Code/Electric Code/Mechanical Code

1. Generators; except outdoor self contained units (no MC)
2. Incinerator
3. Spray Booth

Building Code/Mechanical Code/Plumbing Code

1. Storage tank or bin

Building Code/Electric Code

1. Fire Alarms

Mechanical Code/Electric Code

1. Fire suppression systems, including commercial kitchen hoods

Fuel Gas Code/Electric Code

1. Liquefied petroleum gas systems

Mechanical Code

1. Medical gas systems

Plumbing Code

1. Potable water systems
2. Sewer private (Private Drive); (See policy and procedures for requirements.)

106.2 Permits Not Required. - Permits shall not be required for the following:

1. The replacement of any minor part that does not alter the approval of such equipment or an appliance or make such equipment or appliance unsafe.

Exemption from the permit requirements of this code shall not be deemed to grant authorization for work to be done in violation of the provisions of this code or other laws or ordinances of this jurisdiction.

106.3 Application For Permit. - Each application for a permit, with the required fee, shall be filed with the Building Official on a form furnished for that purpose and shall contain a general description of the proposed work and its location. The application shall be signed by the owner or an authorized agent. The permit application shall indicate the proposed occupancy of all parts of the building and of that portion of the site or lot, if any, not covered by the building or structure and shall contain such other information required by the Building Official.

106.3.1 Construction Documents. - Construction documents, engineering calculations, diagrams and other data shall be submitted in four sets with each application for a permit. The Building Official shall require construction documents, computations and specifications to be prepared and designed by a registered design professional when required by state law. Construction documents shall be drawn to scale and shall be of sufficient clarity to indicate the location, nature and extent of the work proposed and show in detail that the work conforms to the provisions of this code. Construction documents for buildings more than two stories in height shall indicate where penetrations will be made for mechanical systems, and the materials and methods for maintaining required structural safety, fire-resistance rating and fireblocking.

Exception: The Building Official shall have the authority to waive the submission of construction documents, calculations or other data if the nature of the work applied for is such that reviewing of construction documents is not necessary to determine compliance with this code.

106.3.2 Design Professional. – The design professional shall be an architect or engineer legally registered under the laws of this state regulating the practice of architecture or engineering and shall affix his official seal to said plans, specifications and accompanying data, for the following:

1. All group A, E and I occupancies.
2. Buildings and structures three stories or more high
3. Buildings and structures 5,000 square feet or more in area. For all other buildings and structures, the submittal shall bear the certification of the applicant that some specific state law permits its preparation by a person not so registered.

Exception: Group R3 buildings, regardless of size shall require neither a registered architect nor engineer nor a certification that an architect or engineer is not required.

106.4 Permit Issuance. - The application, construction documents and other data filed by an applicant for a permit shall be reviewed by the Building Official. If the Building Official finds that the proposed work conforms to the requirements of this code and all laws and ordinances applicable thereto, and that the fees specified in Section 106.5 have been paid, a permit shall be issued to the applicant.

106.4.1 Reviewed Construction Documents. - When the Building Official issues the permit where construction documents are required, the construction documents shall be endorsed in writing and stamped "REVIEWED." Such reviewed construction documents shall not be changed, modified or altered without authorization from the Building Official. Work shall be done in accordance with the reviewed construction documents. The Building Official shall have the authority to issue a permit for the construction of part of an installation before the construction documents for the entire installation have been submitted or reviewed, provided adequate information and detailed statements have been filed complying with all pertinent requirements of this code. The holder of such permit shall proceed at his or her own risk without assurance that the permit for the entire mechanical system will be granted.

106.4.2 Validity. - The issuance of a permit or review of construction documents shall not be construed to be a permit for, or an approval of, any violation of any of the provisions of this code or of other ordinances of the jurisdiction. A permit presuming to give authority to violate or cancel the provisions of this code shall be invalid.

The issuance of a permit based upon construction documents and other data shall not prevent the Building Official from thereafter requiring the correction of errors in said construction documents and other data or from preventing building operations from being carried on thereunder when in violation of this code or of other ordinances of this jurisdiction.

106.4.2.1 No Warranty To Be Construed. - The inspection of any building, system or plans by any jurisdiction, under the requirements of the Technical Codes, shall not be construed in any court as a warranty of the physical condition of such building, system or plans or their adequacy. No jurisdiction or any employee thereof shall be liable in tort for damages for any defect or hazardous or illegal condition or inadequacy in such building, system or plans, or for any failure of any component of such, which may occur subsequent to such inspection or permitting.

106.4.3 Time Limitation – An application for a permit for any proposed work shall be deemed void if the application is inactive for a period of 6 months. Works shall be considered suspended if an approved inspection has not been made within a 6 month period. One or more extensions of time for periods of not more than 90 days each may be allowed for active applications or permits by the Building Official for

the application, provided the extension is requested in writing and justifiable cause is demonstrated.

106.4.4. Action On Permit. – The Building Official shall act upon an application for a permit without unreasonable delay. If the Building Official is satisfied that the work described in an application for a permit and the contract documents filed therewith conform to the requirements of the Technical Codes and other pertinent laws and ordinances, he shall issue a permit to the applicant. Permits shall be only issued to a licensed and/or registered contractor who performs the work. If work is subcontracted both the contractors shall be licensed and/or registered.

106.4.5 Suspension Or Revocation Of Permit. - The Building Official shall revoke a permit or approval issued under the provisions of this code in case of any false statement or misrepresentation of fact in the application or on the construction documents upon which the permit or approval was based.

106.4.6 Retention Of Construction Documents. - One set of construction documents shall be retained by the Building Official until final approval of the work covered therein. One set of reviewed construction documents shall be returned to the applicant, and said set shall be kept on the site of the building or work at all times during which the work authorized thereby is in progress.

106.5 Fees. - A permit shall not be issued until the fees prescribed in Appendix A have been paid, nor shall an amendment to a permit be released until the additional fee, if any, due to an increase of the installation, has been paid.

106.5.1 Work Commencing Before Permit Issuance. - Any person who commences work on an installation before obtaining the necessary permits shall be subject to 100 percent of the usual permit fee in addition to the required permit fees.

106.5.2 Fee Refund. – The procedures to apply for a refund and the amount of any refund provided to an applicant will be determined by the refund procedures established in the fee ordinance and shown in Appendix A.

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

106.7 Work Authorized. - A mechanical permit shall carry with it the right to construct or install the work, as shown in the drawings set forth in the specifications filed with the application for a permit. When additional work is not shown on the drawings and covered by the specifications submitted with the application, additional permits will be required.

SECTION 107 (IFGC) INSPECTIONS AND TESTING

107.1 Required Inspections And Testing. - The Building Official, upon notification from the permit holder or the permit holder's agent, shall make the following inspections and other such inspections as necessary, and shall either release that portion of the construction or notify the permit holder or the permit holder's agent of violations that are required to be corrected. The holder of the permit shall be responsible for scheduling such inspections.

1. Underground inspection shall be made after trenches or ditches are excavated and bedded, piping is installed and before backfill is put in place. When excavated soil contains rocks, broken concrete, frozen chunks and other rubble that would damage or break the piping or cause corrosive action, clean backfill shall be on the job site.
2. Rough-in inspection shall be made after the roof, framing, fireblocking and bracing are in place and components to be concealed are complete, and prior to the installation of wall or ceiling membranes.
3. Final inspection shall be made upon completion of the installation.
4. All work concealed prior to inspection and/or test shall be uncovered in its entirety for inspector and subject to any reinspection fee.

The requirements of this section shall not be considered to prohibit the operation of any heating equipment installed to replace existing heating equipment serving an occupied portion of a structure in the event a request for inspection of such heating equipment has been filed with the department not more than 48 hours after replacement work is completed, and before any portion of such equipment is concealed by any permanent portion of the structure.

107.1.1 Approved Inspection Agencies. - The Building Official shall accept reports of approved agencies, provided that such agencies satisfy the requirements as to qualifications and reliability.

107.1.2 Evaluation And Follow-Up Inspection Services. - Prior to the approval of a prefabricated construction assembly having concealed work and the issuance of a permit, the Building Official shall require the submittal of an evaluation report on each prefabricated construction assembly, indicating the complete details of the installation, including a description of the system and its components, the basis upon which the system is being evaluated, test results and similar information and other data as necessary for the Building Official to determine conformance to this code.

107.1.2.1 Evaluation Service. - The Building Official shall designate the evaluation service of an approved agency as the evaluation agency, and review such agency's evaluation report for adequacy and conformance to this code.

107.1.2.2 Follow-Up Inspection. - Except where ready access is provided to installations, service equipment and accessories for complete inspection at the site without disassembly or dismantling, the Building Official shall conduct the in plant inspections as frequently as necessary to ensure conformance to the approved evaluation report or shall designate an independent, approved inspection agency to conduct such inspections. The inspection agency shall furnish the Building Official with the follow-up inspection manual and a report of inspections upon request, and the installation shall have an identifying label permanently affixed to the system indicating that factory inspections have been performed.

107.1.2.3 Test And Inspection Records. - Required test and inspection records shall be available to the Building Official at all times during the fabrication of the installation and the erection of the building; or such records as the Building Official designates shall be filed.

107.2 Testing. - Installations shall be tested as required in this code and in accordance with Sections 107.2.1 through 107.2.3. Tests shall be made by the permit holder and observed by the Building Official.

107.2.1 New, Altered, Extended Or Repaired Installations. - New installations and parts of existing installations, which have been altered, extended, renovated or repaired, shall be tested as prescribed herein to disclose leaks and defects.

107.2.2 Apparatus, Instruments, Material And Labor For Tests. - Apparatus, instruments, material

and labor required for testing an installation or part thereof shall be furnished by the permit holder.

107.2.3 Reinspection And Testing. - Where any work or installation does not pass an initial test or inspection, the necessary corrections shall be made so as to achieve compliance with this code. The work or installation shall then be resubmitted to the Building Official for inspection and testing.

107.2.4 Re-inspection Fee For Excessive Or Repeat Inspection Calls. - When an inspector rejects an inspection of part or all of a gas system or equipment due to the work being in violation or incomplete, or no plainly visible street address is posted on the job site, an additional fee shall be as set forth in the Fee Ordinance and Appendix A and charged for second re-inspection of the same infraction and each re-inspection thereafter until the infraction is corrected.

107.2.4.1 Review Of Fee. - Any person, firm or corporation aggrieved by the assessment of any re-inspection fee may appeal to the Chief Inspector for a review of the facts involved and a possible reduction or dismissal of said re-inspection fee.

107.2.4.2 When Paid. - Re-inspection fees shall be paid before the next inspection.

107.3 Approval. - After the prescribed tests and inspections indicate that the work complies in all respects with this code, a notice of approval shall be issued by the Building Official.

107.3.1 Written Release. - Work shall not be done on any part of a building, structure, electrical, gas, mechanical or plumbing system beyond the point indicated in each successive inspection without first obtaining a written release from the Building Official. Such written release shall be given only after an inspection has been made of each successive step in the construction or installation as indicated by each of the foregoing three inspections.

107.3.2 Connection Of Service Utilities. - No person shall make connection from a utility, source of energy, fuel or power to any building or system, which is regulated by the Technical Codes for which a permit is required, until released by the Building Official.

107.4 Temporary Connection. - The Building Official shall have the authority to allow the temporary connection of an installation to the sources of energy for the purpose of testing the installation or for use under a temporary certificate of occupancy.

SECTION 108 (IFGC) VIOLATIONS

108.1 Unlawful Acts. - It shall be unlawful for a person, firm or corporation to erect, construct, alter, repair, remove, demolish or utilize an installation, or cause same to be done, in conflict with or in violation of any of the provisions of this code.

108.2 Notice Of Violation. - The Building Official shall serve a notice of violation or order to the person responsible for the erection, installation, alteration, extension, repair, removal or demolition of work in violation of the provisions of this code, or in violation of a detail statement or the reviewed construction documents thereunder, or in violation of a permit or certificate issued under the provisions of this code. Such order shall direct the discontinuance of the illegal action or condition and the abatement of the violation.

108.3 Prosecution Of Violation. - If the notice of violation is not complied with promptly, the Building Official shall request the legal counsel of the jurisdiction to institute the appropriate proceeding at law or in equity to restrain, correct or abate such violation, or to require the removal or termination of the unlawful occupancy of the structure in violation of the provisions of this code or of the order or direction made pursuant thereto.

108.4 Violation Penalties. - Persons who shall violate a provision of this code or shall fail to comply with any of the requirements thereof or who shall erect, install, alter or repair mechanical work in violation of the reviewed construction documents or directive of the Building Official, or of a permit or certificate issued under the provisions of this code, shall be guilty of a civil offense, punishable by a fine of not more than Fifty (\$50) dollars per day per violation. Each day that a violation continues shall be deemed a separate offense.

108.5 Stop Work Orders. - Upon notice from the Building Official that work is being done contrary to the provisions of this code, or in a dangerous or unsafe manner, such work shall immediately cease. Such notice shall be in writing and shall be given to the owner of the property, the owner's agent, or the person doing the work. The notice shall state the conditions under which work is authorized to resume. Where an emergency exists, the Building Official shall not be required to give a written notice prior to stopping the work. Any person who shall continue any work on the system after having been served with a stop work order, except such work as that person is

directed to perform to remove a violation or unsafe condition, shall be in violation of this code.

108.6 Abatement Of Violation. - The imposition of the penalties herein prescribed shall not preclude the legal officer of the jurisdiction from instituting appropriate action to prevent unlawful construction, restrain, correct or abate a violation, prevent illegal occupancy of a building, structure or premises, or stop an illegal act, conduct, business or utilization of the installations on or about any premises.

108.7 Unsafe Installations. - An installation that is unsafe, constitutes a fire or health hazard, or is otherwise dangerous to human life, as regulated by this code, is hereby declared an unsafe installation. Use of an installation regulated by this code constituting a hazard to health, safety or welfare by reason of inadequate maintenance, dilapidation, fire hazard, disaster, damage or abandonment is hereby declared an unsafe use. Such unsafe installations are hereby declared to be a public nuisance and shall be abated by repair, rehabilitation, demolition or removal.

108.7.1 Authority To Condemn Installations. - Whenever the Building Official determines that any installation, or portion thereof, regulated by this code has become hazardous to life, health or property, he or she shall order in writing that such installations either be removed or restored to a safe condition. A time limit for compliance with such order shall be specified in the written notice. A person shall not use or maintain a defective installation after receiving such notice.

When such installation is to be disconnected, written notice as prescribed in Section 108.2 shall be given. In cases of immediate danger to life or property, such disconnection shall be made immediately without such notice.

108.7.2 Authority To Disconnect Service Utilities. - The Building Official shall have the authority to require disconnection of utility service to the building, structure or system regulated by the technical codes in case of emergency where necessary to eliminate an immediate hazard to life or property. The Building Official shall notify the serving utility, and wherever possible, the owner and occupant of the building, structure or service system of the decision to disconnect prior to taking such action. If not notified prior to disconnection, the owner or occupant of the building, structure or service system shall be notified in writing, as soon as practicable thereafter.

108.7.3 Connection After Order To Disconnect. - A person shall not make energy source connections to installations regulated by this code which have been disconnected or ordered to be disconnected by the Building Official, or the use of which has been ordered to be discontinued by the Building Official until the Building Official authorizes the reconnection and use of such installations. When an installation is maintained in violation of this code, and in violation of a notice issued pursuant to the provisions of this section, the Building Official shall institute appropriate action to prevent, restrain, correct or abate the violation.

SECTION 109 (IFGC) MEANS OF APPEAL

109.1 Membership Of Joint Board Of Appeals – The Memphis and Shelby County Joint Board of Appeals shall consist of a total of 17 members. 13 appointed members, 4 members who hold the position in their capacity as Chairperson or as appointed representative of other Code Advisory Boards Board and 2 ex-officio members. Those appointed members, and representative members from other Boards, shall not be employees of any government unit.

109.2 Composition Of Board. - Membership shall include representatives from the following classes:

1. Tennessee Licensed Architect
2. Tennessee Licensed Structural Engineer
3. Tennessee Licensed Building Contractor
4. Licensed Electrical Engineer
5. Licensed Electrical Contractor
6. Licensed Elevator Contractor or Manufacturer
7. Licensed Heating and Air Condition Contractor
8. Licensed Mechanical Engineer
9. Licensed Plumbing Contractor
10. Licensed Residential Contractor
11. Fire Prevention Representative
12. Licensed Fire Protection Contractor
13. Citizen-at-large
14. Member of the Building Code Advisory Board (Chairperson or Board Member appointed by the Chairperson)
15. Member of the Electrical Code Advisory Board (Chairperson or Board Member appointed by the Chairperson)
16. Member of the Mechanical Code Advisory Board (Chairperson or Board Member appointed by the Chairperson)
17. Member of the Plumbing Code Advisory Board (Chairperson or Board Member appointed by the Chairperson)

109.3 Appointed Ex-officio Members. - After the above categories of members have been appointed, the Mayors shall appoint such other person as each may deem qualified to serve as ex-officio members.

109.4 Other Ex-officio Members – In addition, the building official of the City of Memphis and Shelby County and the fire Marshall of the City of Memphis shall serve as ex-officio members without a vote.

109.5 Appointments. – All appointed members of the Board shall be appointed by both Mayors and approved by the Memphis City Council and Shelby County Board of Commissioners.

109.6 Term Of Office. – The term of office of the board members shall be staggered so no more than 1/3 of the Board is appointed or replaced in any 12 month period. The two alternates, if appointed, shall serve one year terms.

109.6.1 Filling Unexpired Terms. - Vacancies shall be filled for the unexpired term in the manner in which the original appointments are required to be made. All appointed Board members shall be residents of Shelby County and shall serve without pay.

109.6.2 Oath. - All members shall qualify and take an oath to uphold the Constitution of the United States and the State of Tennessee and faithfully discharge the duties of their office.

109.6.3 Absence Shall Be Cause For Removal. – Continued absence of any member from required meeting of the Board shall, at the discretion of the applicable governing body, render any such member subject to immediate removal from office.

109.7 Quorum And Voting. – A simple majority of the Board shall constitute a quorum. In varying any provision of this code, the affirmative votes of $\frac{3}{4}$ members present, but not less than five affirmative votes, shall be required. In modifying a decision of the building official, not less than five affirmative votes of the members present. In approving an equal to or better method, the majority affirmative votes shall be required. In the event that regular members are unable to attend and a quorum is not present, the Building Official shall be empowered to appoint alternative members to obtain a quorum.

109.8 Absence Of Members. – During absence of a member by reason of disability or disqualification, the Administrator shall designate a qualified substitute. However, 3 successive unexcused absences from any

regular or special meetings shall be grounds for termination at the will and pleasure of the appointing Mayor without the necessity of a hearing and the action shall be final.

109.9 Chairperson And Vice Chairperson Of The Joint Board Of Appeals. – At the first meeting of each year, the Board shall select one of its members to serve as Chairperson for the year, and one of its members to serve as Vice Chairperson.

109.10 Secretary Of The Board. – The Building Official shall act as secretary of the Board and shall make a detailed record of all of its proceedings, which shall set forth the reasons for its decisions, the vote of each member, and the absence of a member and any failure by a member to vote.

109.11 Power. – The Joint Board of Appeals shall have power, as further defined in section 109.12 of the Technical Codes to hear appeals of decisions and interpretations of the Building Official and consider variances of the technical codes.

109.12 Appeals

109.12.1 Decisions Of The Building Official – The owner of a building, structure or service system, or his duly authorized agent, may appeal a decision of the Building Official to the Joint Board of Appeals whenever any one of the following conditions are claimed to exist:

1. The Building Official rejected or refused to approve the mode or manner of construction proposed to be followed or materials to be used in installation or alteration of a building, structure or service system.
2. The provisions of this code do not apply to this specific case
3. That an equally good or more desirable form of construction can be employed in any specific case.
4. The true intent and meaning of the code or any of the regulations thereunder have been misconstrued or incorrectly interpreted.

109.13 Variances. – The Joint Board of Appeals, when so appealed to and after hearing, may vary the application of any provision of this code to any particular case when, in its opinion, the enforcement thereof would do manifest injustice and would be contrary to the spirit and purpose of this or the technical codes or public interest, and also finds all of the following:

1. That special conditions and circumstances exist which are peculiar to the building, structure or service system involved and which are not applicable to others.

2. That the special conditions and circumstances do not result from the action or inaction of the applicant;
3. That granting the variance requested will not confer on the applicant any special privilege that is denied by the code to other buildings, structures, or service systems.
4. That the variance granted is the minimum variance that will make possible the reasonable use of the building, structure or service system.
5. That the grant of the variance will be in harmony with the general intent and purpose of this code and will not be detrimental to the public health, safety and general welfare.

109.14 Conditions On The Variance. – In granting the variance, the Board may prescribe a reasonable time limit within which the action for which the variance is required shall be commenced or completed or both. In addition, the board may prescribe appropriate conditions and safeguards in conformity with this code. Violations of the conditions of a variance shall be deemed a violation of this code.

109.15 Notice Of Appeal, - Notice of appeal shall be in writing and filed within 30 calendar days after the decision is rendered by the building official. Appeals shall be in a form acceptable to the building official.

109.16 Unsafe Or Dangerous Building Or Service System. – In the case of a building, structure or service system which in the opinion of the building official is unsafe, unsanitary or dangerous, the building official may, in his order, limit the time for such appeals to a shorter period.

109.17 Procedures Of The Board

109.17.1 Rules And Regulations – The board shall establish rules and regulations for its own procedure not inconsistent with the provisions of this code. The board shall meet on call of the Chairperson. The Board shall meet within 30 calendar days after notice of appeal has been received.

109.18 Decisions. - The Joint Board of Appeals shall, in every case, reach a decision without unreasonable or unnecessary delay. Each decision of the Board shall also include the reasons for the decision. If a decision of the Board reverses or modifies a refusal, order or disallowance of the Building Official or varies the application of any provision of this code, the building official shall immediately take action in accordance with such decision. Every decision shall be promptly filed in writing in the office of the Building Official and shall be open to public inspection. A certified copy shall be kept publicly

posted in the office of the building official for two weeks after filing. Every decision of the board shall be final; subject however to such remedy as any aggrieved party might have at law or in equity.

Section 110 Violations and Penalties

110.1 Violation A Civil Offense – Any person, firm, corporation or agent who shall violate a provision of the Technical Codes, or fail to comply therewith, or with any of the requirements thereof, or who shall erect, construct, alter, install, demolish or move any structure, electrical, gas, mechanical or plumbing system, or has erected, constructed, altered, repaired, moved or demolished a building, structure, electrical, gas, mechanical or plumbing system in violation of a detailed statement or drawing submitted and permitted thereunder, shall be guilty of a civil offense. Each such person shall be considered guilty of a separate offense for each and every day or portion thereof during which any violation of any of the provisions of the Technical Codes is committed or continued, and upon conviction of any such violation such person shall be punished within the limits and as provided by state law.

110.2 Fines Established – Any person, firm or corporation who shall violate a provision of the Technical Codes or fail to comply with any of the provisions thereof, or violate a detailed statement or plans submitted or reviewed, shall be guilty of a separate offense for each day during which any of the violation of any of the provisions of the Technical Codes is committed or continued, and upon conviction in the court of jurisdiction for any such violation such person shall be punished by a fine of not more than \$50.00. Each day that a violation continues shall be deemed a separate offense.

110.3 Prohibition Of Interference. – Any person interfering with the Building Official or his assistance in the performance of their duties shall be guilty of a violation of this code.

110.4 Authority To Institute Suit. – When, in the decision of the Building Official or his assistants, there has been a violation of the Technical Codes, the Building Official or any other officer, board, or properly authorized person, in addition to any other remedies provided by law and the Technical Codes, is hereby authorized to institute suit in any appropriate manner to prevent, enjoin, or abate such violation.

110.5 Withholding Permits. – The failure to respond to official correspondence from the Building

Official or his designee after registered mailing by said Board to the contractor's address of record (record with the Office of Construction Code Enforcement) shall be deemed a sufficient reason to withhold permits, and every contractor shall be held responsible for the violation of the Technical Codes by his employees. Permits shall be issued only to a licensed and/or registered contractor. No permit shall be issued to any licensed and/or registered contractor during the time that he shall fail to remedy defective work or fail to call for inspections after being informed by the Building Official or his designee that he has been held responsible therefore under the Technical Codes. Any other violation of the Technical Codes shall also be grounds for withholding permits.

110.6 Sale Of Dangerous Appliances, Devices And Material. – It shall be a violation for any person in the County to sell or offer for sale, any electrical, gas, mechanical or plumbing appliance, devices and materials that when used, are dangerous to life, health or property. Appliances, devices, and materials without an approved label from a recognized testing laboratory may be determined unsafe.

110.7 Cutting Off Utility Service Which Is Unsafe Or Improperly Installed.

110.7.1 Authority Provided. - The Building Official or his duly authorized representative is empowered, and it shall be his duty, to cause the termination of electric, gas, or water service supplying buildings, wiring systems, equipment, plumbing systems, and/or devices which are deemed by him to be unsafe, or which have not been installed in conformity with the provisions of the Technical Codes, and such power shall not be resumed until all the provisions of the Technical Codes are complied with and approved.

110.7.2 Notification To Owner. – The Building Official or his duly authorized representative shall notify the owner or user and the person performing electrical, gas, and/or plumbing in violation of the Technical Codes, as defined in Section 110.7.1, to correct such violations immediately or within the time designated. Failure to comply with said notice shall require the Building Official to order the serving utility to terminate part of or all utilities service supplying service to the building's wiring systems, equipment, gas system, plumbing systems, and/or devices which are deemed by him to be in an unsafe condition or installed in violation of the requirements of the Technical Codes until the notice is complied with and approved.

110.7.2.1 Absentee Owners Of Rental Property. – Absentee owners of rental property receiving notice of defective or unsafe, unsanitary or dangerous conditions in a building, structure or service system who fail to have such condition corrected as specified in the notice, shall be guilty of violating the Technical Codes and shall be fined not less than \$50.

110.7.3 Authority To Disconnect Service Utilities. – The Building Official shall have the authority to authorize disconnection of utility service to the building, structure or system regulated by the Technical Codes, in case of emergency where necessary to eliminate an immediate hazard to life or property. The Building Official shall notify the serving utility, and wherever possible the owner and occupant of the building, structure or service system of the decision to disconnect prior to taking such action. If not notified prior to disconnecting, the owner or occupant of the building, structure or service system shall be notified in writing, as soon as practicable thereafter.

110.8 Removal Of Defective Work. – Construction work installed in violation of the Technical Codes or in an otherwise unlawful manner, shall be removed in its entirety on order, in writing, from the Building Official or his duly authorized representative and shall be reinstalled in a lawful manner as prescribed by the Technical Codes.

110.9 Code Does Not Affect Liability For Damages

110.9.1 Responsibilities – The Technical Codes shall not be construed to affect the responsibilities or liabilities of any person owning, operating, controlling or installing material, devices, appliances, or equivalent for damages to persons or property caused by any defects therein, nor shall the City of Memphis and/or Shelby County be held to assume any such liability by reason of the approval of any material, device, appliance, or equipment authorized herein.

110.9.2 Governmental Purpose Of Technical Codes. – The regulations provided in the Technical Codes and/or Ordinances are hereby declared to be governmental and for the benefit of the public. Any member of the governing bodies of Memphis or Shelby County, or any official or employee, or board member charged with the enforcement of the Technical Codes acting for the City and County in the discharge of his duty, shall not thereby render himself personally liable, and he is hereby relieved from all personal liability for any damage that may accrue to

persons or property as the result of an act required or permitted in the discharge of his duties. Any suit brought against such official or employee, because of such act performed by him in the enforcement of any provision of the Technical Codes shall be defended by the County and/or City Attorney until the final adjudication of the proceedings.

110.10 False Representation

110.10.1 Violation For False Advertising. – It shall be a violation for any person engaged in the contracting business to exhibit any sign or advertise in any media representing himself to be other than that for which he has been licensed as required by the Technical Codes.

110.10.1.1 Advertising By Name. – It shall be a violation for any person, firm, corporation or any other business that engages in, seeks to engage in, or follows the business or occupation of contracting to advertise in any form or media under any name other than the same company name on the application Licensed or Certified State Contractor has on file with the Office of Construction Code Enforcement.

110.10.2 Inspector. – It shall be a violation for persons not employed by the authority having jurisdiction established in State statute and local ordinances, to represent themselves to the public as an inspector.

110.10.2.1 Inspections Not Prohibited – This section does not preclude licensed engineers and contractors from making inspections as required in performing their duties.

110.10.3 Penalty For Violation. - Any person, firm or corporation who violates this provision shall be punished by a fine of not less than \$1 nor more than \$50 for each offense. Each day during which the violation shall be continued shall be a separate offense.

110.11 Concealed Improper Or Defective Building, Electrical, Gas, Mechanical And/Or Plumbing Systems. – Any person intentionally concealing from view improperly connected joints or any defective or substandard construction work including but not limited to, spliced wires, piping, gas lines, framing, etc., shall be guilty of a violation and punishable by a fine as provided in Section 110.1 and 110.2.

110.12 Connecting Or Utilizing Electric Gas Or Water Services. - Any person who shall connect or

utilize service at a job site where the electrical, gas or plumbing work has been provided in a manner contrary to the provisions and regulations of the Technical Code shall be guilty of a violation and subject to a fine according to the provisions of section 110.1 and 110.2

Section 111 Technical Code Boards

111.1 Scope. -The public safety requires that persons engaged in the activities listed below, and any related activities, be qualified to perform such duties competently and in compliance with the Technical Codes.

1. The construction, alteration, repair, equipment, use and occupancy, location, maintenance, removal and demolition, of every building or structure or any appurtenances connected or attached to such building or structures
2. The installation of electrical systems, including alterations, repairs, replacement, equipment, appliances, and related accessories as covered by the Technical Codes.
3. The installation of mechanical systems, including alterations, repairs, cooling, air conditioning and refrigeration systems, incinerators, and other energy related systems.
4. Plumbing installation, including alterations, repairs, replacement, equipment, appliances, fixtures, fittings and appurtenances, and connections to a water or sewage system.

The introduction of new materials and assemblies, recommendations of the contractors and other circumstances may, require changes in the Technical Codes: and since the Administrator, Building Official and the Chief Inspectors may require professional, qualified and experience consultants to advise them in matters pertaining to construction work, the Boards are herewith established.

111.2 Duties Of The Technical Advisory Boards.

– The duties of the technical advisory boards shall consist of, but are not limited to, the following:

1. Recommend the use of new materials or assemblies of materials for acceptance and approval or rejection
2. Recommend changes in the Technical Codes suggested by changes in the International Codes and National Electric Code.
3. Recommend any other proposed changes in the Technical Codes.
4. Act as advisors to the Administrator, Building Official or the Chief Inspectors and when necessary

suspending or revoking the license of or otherwise disciplining a license holder.

5. Recommend license, registration and examination fee changes to the Administrator when appropriate

111.3 Membership of Mechanical/Fuel Gas Code Advisory Board. – The Mechanical/Fuel Gas Advisory Board shall consist of 8 appointed members, who shall serve for a period of three years with their term staggered so that no more than 4 terms expire in any one year. All appointed members of the Board shall be appointed by either the Mayor of Memphis or the Mayor of Shelby County and approved respectively by the City Council or the County Commission. Each Mayor will make half of the appointments that are to be made in one year. The Building Official and Chief Mechanical Inspector shall serve as ex-officio members without a vote. Additionally, representatives of the MLGW, Fire Marshall’s Office for the City of Memphis and for the County of Shelby, shall serve as ex-officio members without the right to vote.

111.3.1 Composition of the Mechanical/Fuel Gas Advisory Board. – Membership of the Mechanical/Fuel Gas Advisory Board shall include the following:

1. Master Mechanical/Gas contractor primarily doing residential work
2. Master Mechanical/Gas contractor primarily doing commercial work
3. Master Mechanical/Gas contractor primarily doing industrial work
4. Mechanical/Gas contractor primarily doing residential work
5. Mechanical/Gas contractor primarily doing commercial and industrial work
6. Mechanical/Gas equipment manufacturer or supplies
7. State of Tennessee Engineer (mechanical) experienced in designing Mechanical/Gas systems.
8. Citizen Member

111.3.2 Ex-Officio Members. - After the above categories have been appointed, the Mayors may appoint such other persons as each may deem qualified to serve as ex-officio members. Such members shall not have the right to vote.

111.4 Absence Of Members. – During the absence of members by reason of disability or disqualification, the Administrator or Building Official shall designate a qualified substitute. However, 3 successive unexcused absences from any regular or special meetings shall be grounds for termination at the will

and pleasure of the appointing Mayor without the necessity of a hearing and such action shall be final.

111.5 Chairpersons, Vice-Chairperson, and Secretary to the Mechanical/Fuel Gas Advisory Board. – At the first meeting of each year, the Board shall select one of its members to serve as Chairperson for that year and one of its members to serve as Vice-Chairperson. The Building Official shall serve as Secretary for the Board. The chairperson of the meeting shall be excluded from any vote at that meeting except to break a tie. The Chairperson or Vice-Chairperson, or selected board member of the Mechanical/Fuel Gas Advisory Board shall serve on the Joint Board of Appeals with one vote representing these two disciplines.

111.6 Meetings of the Board – The Board shall be subject to meetings at the call of the Chairperson, the Administrator or the Building Official. Each member shall be given 5 days notice before the date of any called meeting.

111.7 Decisions And Findings Of The Board

111.7.1 Administrative Issues. – The Board shall report its decisions, findings and recommendations in writing to the Administrator, who, if he approves, shall cause recommendations concerning the administration of the OCCE to be proposed for enactment.

111.7.2 Technical Issues. - The Board shall report its decisions, findings and recommendations in writing to the Building Official, who, if he approves, shall cause recommendations concerning the technical codes of the OCCE to be enacted.

111.8 Quorum. – A simple majority of the Board shall constitute a quorum. In the event that the regular members are unable to attend and a quorum is not present, the Administrator or the Building Official shall be empowered to appoint alternate members to obtain a quorum.

111.8.1 Minutes Of Meetings – The Administrator or Building Official shall designate one of the employees of the OCCE to complete accurate minutes at each meeting and make them available to the Board members.

Section 112 License

112.1 General.

112.1.1 License Required. - A person shall not engage in or work on the installation, extension, or alteration of consumer gas piping or certain gas appliances, until such person shall have secured a license as hereinafter provided, and shall have executed and delivered a good and sufficient bond in the sum prescribed and as set forth in Section 112.1.4, with corporate surety, conditioned for the faithful performance of all such work, entered upon or contracted for, in compliance with the provisions of the Technical Codes.

112.1.2 Time For Securing License. - Upon arrival of said bond, the person desiring to do such work shall secure from the Office of Construction Code Enforcement a license to do business which shall run concurrent with the fiscal policy of the authority.

112.1.3 Other License Requirements. - Contractors shall comply with the State of Tennessee Contractor’s License Law & Rules and Regulations: TCA, Title 62 Chapter 6. This includes specifically TCA 62-6-103 entitled “ License requirement” in subsection (B) which states “Except in counties with a population of not less than seven hundred seventy seven thousand one hundred thirteen (777,113) according to the 1980 federal census or any subsequent federal census, a person or firm specified in subdivision (a)(2)(A) shall not make more than one (1) application for a permit to construct a single residence or shall not construct more than one (1) single residence within a period of two (2) years. There shall be a rebuttable presumption within that such person or firm intends to construct for purpose of resale, lease, rent or any other similar purpose if more than one (1) single residence is constructed within a period of two (2) years. No provision of this subdivision shall be construed to alter the definition of “contractor” as defined in Section 62-6-102.

112.1.4 Contractor Responsibilities

112.1.4.1 Financial Assurance. - In order to enhance enforcement of Technical Code provisions, every person doing business in Memphis and Shelby County as a registered and/or licensed gas (Master A & B) contractor shall file with the Building Official at its initial licensing, registration or first renewal of same after the effective date of this section, a permit bond on a form acceptable to the Building Official in the penal sum of \$25,000, and issued by an incorporated insurance company authorized to do business in the State of Tennessee. Upon arrival of said permit bond, the person desiring to do such work shall secure from the Office of Construction Code Enforcement, a registration to do business, which shall run concurrent

with the fiscal policy of such authority. When a single legal entity maintains two or more such licenses or registrations with Office of Construction Code Enforcement or two or more permits, the total penal sum of the bond for all such licenses and permits shall not exceed \$50,000. A single bond may be used to meet this requirement.

112.1.4.1.1 Conditions. –The conditions of the bond shall be that the principle and surety shall indemnify the City of Memphis and the County of Shelby for their own use, and/or to any citizen against loss by improper compliance with the Technical Codes and any other law or ordinance governing such work: that the principal will suffer no work to be done without a permit, and will report done for inspection by the Building Official in conformity with the Technical Codes.

112.1.4.1.2 Duration. – Such bond shall be continuous and remain in effect every year thereafter, unless canceled by providing 10 days written notice to the principal and obligee. Immediately upon receiving written notice of cancellation, the Building Official shall require that a new bond be furnished. The proper bond form will be provided by the Building Official.

112.1.4.1.3 Failure To Furnish. – Every contractor who fails to furnish a new bond as required above shall be deemed to have ceased to engage in the business of contracting. No further permits for work under the Technical Codes shall be issued, nor shall work proceed on permitted work until the required bond is furnished.

112.1.4.2 Compliance with Licensing And Registration Requirements. - It shall be the duty of every contractor who shall make contracts for the installation or repair of buildings, structure, electrical, gas, mechanical or plumbing systems, for which a permit is required, to comply with state and local rules and regulations concerning the registration and /or licensing which are applicable governing authority may have adopted.

112.2 License Required. – Any person desiring to engage in or work at the business of installing, replacing, repairing, extending or altering any system of pipe on the downstream side of the gas meter for the conveyance, distribution or use of illumination of fuel gas, or connection, repairing, installing, or maintaining any gas burning device connected to any gas system of gas piping in any building or structure shall first be licensed with the Office of Construction Code Enforcement conforming to the licensing requirement established by the Mechanical/Fuel Gas

Code Advisory Board. No person shall employ any person to do such work on properties under the Technical Codes for which a license is required, unless he is licensed to perform such work. Gas contractors shall furnish full names of their employees when requested in writing, by the Chief Mechanical Inspector.

112.2.1 Minimum Requirements For Examination.

- Before making application for the Master “A” or “B” Gas Contractor License, the Applicant must meet the following requirements:

1. Be 21 years of age or older, and
2. Have experience (full time employment and actively engaged in either installation and/or design in the appropriate field) a minimum of
 - a. 4 years for a Master Gas “A” license, or
 - b. 2 years for a Master Gas “B” license.

112.2.2 Examination in Writing. - The examination provided for this Section shall be in writing and shall be confined to questions, the answer to which will determine the fitness of the applicant for the intended service.

112.3 Display of License: Carrying Of Work Card; Advertising.

112.3.1 Carrying Work Card. – Every gas contractor shall receive a license under the Technical Codes, when employed at work regulated under the Technical Codes, shall have on his person his work card for the examination by qualified persons requesting the examination of his card.

112.3.2 Vehicle Used By Gas/Mechanical Contractors To Have Signs Identifying Ownership.

112.3.2.1 Owned Vehicles. – All trucks and similar vehicles used by mechanical contractors or their employees shall be conspicuously displayed on the body of both sides of said vehicle, in any color in contrast to the color of the vehicle’s body, the following identification: the full name of the firm to which it belongs, in lettering at least two inches high on the top line, and in the wording MSC in lettering at least 1-1/2 inches high on the second line.

112.3.2.2 Vehicles For Temporary Use. – In the event a contractor obtains a vehicle for temporary use, he shall be permitted to identify said vehicle by placing on it, in a clearly visible position on both sides, a temporary sign or decal letters which may be easily removed. Said temporary sign or letters shall conform to the same requirements as the permanent lettering described hereinabove.

112.3.3 Advertising And Contracting With The Public

112.3.3.1 Required Content. - Any advertisement by a gas contractor, including but not limited to, yellow pages and newspaper advertisement, shall include the license number of the contractor.

112.3.3.2 Licensed Only Allowed. – Only persons licensed to obtain permits or to perform the work without supervision (where the work is regulated by the Technical Codes, but no permit is required) may advertise or solicit from the public any such work.

112.4 Altering, Or Transferring Licenses; Use Of Another’s License; Evading of Licensure. - It shall be a violation of this code for any person licensed under the Technical Codes to alter, transfer, lend or rent his license certificate, or to use a license not his own. It shall also be a violation of this code for a person to falsely represent himself to be licensed under the Technical Codes, or to wrongfully use a license issued by the Mechanical/Fuel Gas Code Advisory Board.

112.4.1 False Representation Concerning Business Relationship. – It shall also be a violation of this code for any person to falsely represent the nature or extent of the business relationship between any 2 or more persons, firms, or corporations for the purpose of evading the licensing requirements of the Technical Codes.

112.5 Applications And Registration

112.5.1 Application For License. – Application for license under the Technical Code shall be made to the Mechanical/Fuel Gas Code Advisory Board on a form to be supplied by the Chief Mechanical Inspector, which form shall contain the name, address and proof of experience and other information deemed proper by the Mechanical/Fuel Gas Code Advisory Board, to show the applicant to be qualified for the type of work he desires to perform. The Chief Mechanical inspector shall oversee the review the qualifications of each applicant after payment of the fee and proof of experience relevant to the level of license requested by the applicant.

112.5.1.1 Fees For Registration. - Fees for registration of gas contractors shall be as follows:

- 1 Class A master gas contractor (unlimited)
\$150
2. Class B gas contractors (residential)
\$150

3. State Gas Contractor \$150

112.5.2 Category Of Licenses. – A gas license shall be issued in the following categories upon receiving a passing score on an examination approved by the Mechanical/Fuel Gas Code Advisory Board.

1. Class A Master Gas Contractor to those persons who have four or more years experience as a gas installer, who may work without supervision and who are qualified to do unlimited gas fitter work.

2. Class B Master Gas Contractor to those persons who are qualified to do up to, and including the work necessary for residential piping and appliance work, except central heating plants.

112.6 Expiration Of License: Annual and Renewal Fees. - Annual renewal fees shall be as follows:

1. Class A master gas contractors \$110
2. Class B master gas contractors \$110
3. State Gas Contractor \$110

112.6.1 Renewal Requirements. - All gas licenses shall expire on December 31 of each year. Annual renewal of each license shall be made during the month of December. A late fee of \$10 shall accompany any request for renewal of license received after the date of expiration but not later than two years after the date of expiration. Any person whose license is not renewed within 2 years after the expiration thereof shall be required to make a new application, pass the required examination, and pay the appropriate fees before his new license is issued. Payment of the late fee shall not relieve the license holder of any other penalties which may arise from performing work with an expired license. Shelby County Business tax required.

112.6.2 Retired License Status. - As used in the Technical Code, inactive Class “A” and “B” master gas contractor is defined to include any individual who is duly licensed and holds a current license under the Technical Code but is not presently active in his license capacity. Any person holding a retired gas license shall be required to pay a retired license renewal fee of \$15 per year, or the license shall expire. Before resuming duties as an active license holder, the required annual/renewal fee shall be paid and financial assurance document and a copy of the license holders Shelby County business license shall be provided to the Chief Mechanical Inspector.

112.7 Suspension Or Revocation Of License

112.7.1 Generally. - Any license under the Technical Codes may be suspended or revoked by the Mechanical/Fuel Gas Code Advisory Board upon a violation of the terms of this chapter or any other ordinance or law governing the installation or inspection of gas work; provided however, charges shall be preferred in writing by the Board and served upon the licensee, and the licensee shall be given a right to a hearing concerning such charges.

112.7.1.1 Conspiracy To Evade. – Any person licensed under this chapter who conspires with another person or firm to evade any of the provisions of this chapter or other ordinance or laws governing gas work shall have that license suspended or revoked, either temporarily or permanently, by the Mechanical/Fuel Gas Code Advisory Board upon submission of proof that such a conspiracy exists or did exist.

112.7.1.2 Repeated Failure Of Work. - Violations of any provisions of the Technical Codes and repeated failure to have his work pass inspection shall be grounds for suspension or revocation of licenses issued under the Technical Codes. No person licensed under the Technical Codes shall have his license revoked without an opportunity to appear before the Mechanical/Fuel Gas Code Advisory Board and to be heard in his own defense.

112.7.1.3 Prohibition During Suspension Or Revocation. - It shall be unlawful for any person whose license has been suspended or revoked to do any work for the performance of which a license is required under the Technical Codes.

112.7.2 Special Grounds For Revoking Or Suspending Licenses

112.7.2.1 Use Of Unlicensed Employee. - It shall be grounds for the Mechanical/Fuel Gas Code Advisory Board to suspend or revoke the license of any contractor licensed under this chapter upon proof that said contractor used as an employee, for the purpose of performing any work for which a license is required and for which it is required to obtain a permit

under the Technical Codes, any unlicensed person or firm.

112.7.2.2 Failure To Complete Work Or Cure Defects. - All licensed contractors shall be responsible for completing all work performed under permits issued in their names in accordance with the provisions of the Technical Codes and to the satisfaction of the Chief Mechanical Inspector. Failure to satisfactorily complete said work or to cure any defect in said work shall be grounds for the suspension or revocation of the contractor's license.

112.7.2.3 Failure To Properly Supervise. - The failure of any contractor to properly supervise, direct or control any and all work performed under a permit issued through his license as a contractor shall be grounds for suspension or revocation of this license by the Mechanical/Fuel Gas Code Advisory Board, regardless of whether said work was performed by an employee of the contractor that they represent.

112.7.2.4 Failure To Respond To Official Correspondence. - The failure of any licensed contractor to answer official correspondence from the Chief Mechanical Inspector or the Mechanical/Fuel Gas Advisory Board without good cause within 15 days after it receipt by certified mail shall be grounds for the suspension of that contractor's license until such time as an appropriate response is received.

113 Qualified Installing Agency. -

Installation and replacement of consumer gas piping or gas appliances and repair and servicing of consumer gas appliance shall be performed only by a qualified, licensed and bonded agency. By the term "qualified licensed and bonded agency" is meant any individual firm corporation or company which is engaged in and is responsible for the installation, replacement or repair of consumer gas piping, or the connection installation repair or servicing of gas appliances, who is experienced in such work, familiar with all precautions required, and has complied with all requirements of the Office of Construction Code Enforcement

Amend Section 202 by inserting the following definitions in the appropriate alphabetic location within the Section:

ADMINISTRATIVE AUTHORITY. Whenever the term “Administrative Authority” is used in the Joint Gas Code herein adopted, it shall mean the Building Official.

ADMINISTRATOR. Whenever the term “Administrator” is used in the Joint Gas Code herein adopted, it shall mean the Administrator of the Memphis and Shelby County OCCE.

BOARD OF ADJUSTMENTS AND APPEALS. Whenever the term “Board of Adjustments and Appeals” is used in the Joint Gas Code herein adopted, it shall mean the Joint Board of Appeals of Memphis and Shelby County.

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

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

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

CONFINED SPACE. A space in which the volume is not greater than 50 cubic feet per 1,000 BTU per hour of the aggregate input rating of all appliances installed in that space. Rooms communicating directly with the space in which the appliances are installed, through openings not furnished with a door, are considered a part of this space for volume determination.

EMPLOYEE. Whenever the word “employee” is used in the Joint Gas Code herein adopted, it shall mean a person working directly for a licensed contractor for wages or salary subject to federal and/or state payroll tax laws.

GAS CONTRACTOR. Whenever the term “Gas Contractor” is used in the Joint Gas Code herein adopted, it shall mean a gas contractor who holds a license issued by the Office of Construction Code Enforcement.

GAS OFFICIAL. Whenever the term “Gas Official” is used in the Joint Gas Code herein adopted, it shall mean the Building Official of the Memphis and Shelby County, Tennessee.

GAS SECTION. Whenever the term “Gas Section” is used in the Joint Gas Code herein adopted, it shall mean the Mechanical Section of the Memphis and Shelby County Office of Construction Code Enforcement.

INTERNATIONAL GAS CODE. Whenever the term “International Gas Code” is used in the Technical Codes herein adopted, it shall mean the International Gas Code with Local Amendments and will be known as the Joint Gas Code (JGC) of Memphis and Shelby County, Tennessee.

INTERNATIONAL MECHANICAL CODE. Whenever the term “International Mechanical Code” is used in the Technical Codes herein adopted, it shall mean the International Mechanical Code with Local Amendments and will be known as the Joint Mechanical Code (JMC) of Memphis and Shelby County, Tennessee.

PERMANENT ACCESS. Ladder, inside stairway, pulldown stairs (no scuttle holes).

SUPERVISION. Whenever the term “supervision” is used in the Joint Gas Code, herein adopted, in reference to a gas contractor, the term shall be construed to mean first hand knowledge of the work being performed by an employee whose work relies on the license held by the gas contractor and shall include the requirements of active training of the employee working under the gas contractor’s license, and shall further require the gas contractor to sign all gas permit applications prior to a permit being issued as signifying his or her approval thereof before or at the time of inspection of the completed work by the Building Official, the gas contractor will certify by written affidavit to said Official that such work has been satisfactorily completed, and will further furnish the names of those employees under his supervision upon request.

Delete Section 301.3 entirely and substitute the following:

301.3 Approval Installation Of Listed Or Unlisted Equipment.

All listed appliances and equipment shall be installed in accordance with their listings. All unlisted appliances and equipment shall be installed in accordance with the manufacturer’s instructions, the Technical Codes, and the Building Official. All appliances shall be equipped with a gas appliance pressure regulator which will satisfactorily limit the gas supply pressure, unless not required by the appliance’s listing.

Add Section 301.12.1 and the indicated subsections as follows:

301.12.1 Seismic Protection Requirements

301.12.1.1 Contractor Responsibility - Each contractor responsible for the construction of a main wind- or seismic-force-resistant system, designated seismic system or wind or seismic resisting component listed in the statement of special inspection shall submit a written statement of responsibility to the building official and to the owner prior to commencement of work on the system or component. The contractor statement of responsibility shall contain acknowledgment of awareness of the special requirements contained in the statement of special inspection.

301.12.1.2 Applicable Designated Seismic Systems As also may required by the Building Code, the following systems and components in new structures in locations in Shelby County within seismic categories design C and D shall be covered by the statement of special inspection were applicable:

1. Heating, ventilation and air conditioning (HVAC) ductwork, containing hazardous materials and anchorage to such ductwork.
2. Piping systems and mechanical units containing flammable, combustible or highly toxic materials

301.12.1.3 Mechanical and Fuel Gas Components. Special inspections for mechanical and fuel gas equipment shall be as follows:

1. Periodic special inspection is required during installation of piping systems intend to carry flammable, combustible, or highly toxic contents and there associated equipment in structures assigned to seismic design category C, D, E or F.
2. Periodic special inspection is required during installation of HVAC ductwork that will contain hazardous materials in structures assigned to seismic design category C, D, E or F.

301.12.1.4 Designated Seismic System Verification – The special inspector shall examine designated seismic systems requiring seismic qualification in compliance with Section 1708.4 of the Memphis and Shelby County Building Code and verify the labels, anchorages and mountings conform to the certification of compliance.

Add Sections 301.15.1 and 301.15.2 as follows:

301.15.1 – Prohibition In Duct Systems. - Gas piping inside any building shall not be run through an air duct, clothes-chute, chimney or vent, ventilating duct, dumbwaiter or elevator shafts. Where the Chief Mechanical/Gas Inspector finds that it is impossible to avoid installing gas piping through or in the building duct system for heat, ventilating or air conditioning, the gas pipe may be installed in a casing of non-combustible, rigid, gas tight material.

301.15.2 – Piping Prohibited In Nonaccessable Plenum Spaces. - Gas piping shall be prohibited in plenum spaces unless such spaces are accessible. This provision shall not apply to gas piping in nonplenum concealed locations. Shut off valves for gas piping shall be prohibited in all concealed locations and all spaces used as plenums.

Amend Section 303.3 by deleting it in its entry and inserting the following so when amended the entire section shall read as follows:

303.3 Prohibited Locations. – Appliances shall not be located in a sleeping rooms, bathrooms, toilets, storage closets or surgical rooms, or in a space that opens only into such rooms or spaces, except where the installation complies with one of the following:

1. The appliance is a direct-vent appliance installed in accordance with the conditions of the listing and the manufacturer’s instructions

2. Vented room heaters, wall furnaces, vented decorative appliances, vented gas fireplaces, vented gas fireplace heaters and decorative appliances for installation in vented solid fuel-burning fireplace are installed in rooms that meet the required volume criteria of Section 304.5
3. Appliances installed in an enclosure in which all combustion air is taken from the outdoors, in accordance with Section 304.6. Access to such enclosures shall be through a solid weather-stripped door, equipped with an approved self-closing device.
4. The appliance is installed in a room or space that opens only into a bedroom or bathroom and such room or space is used for no other purpose and is provided with a solid weather-stripped door, equipped with an approved self-closing device All combustion air shall be taken directly from the outside in accordance with Section 304.6.

Add Section 303.3.1 as follows:

303.3.1 –Unvented Appliances Prohibited Locations. - No gas fired, unvented appliances shall be installed in bedrooms, bathrooms, or rooms generally kept closed.

Add Section 305.4.1 as follows:

305.4.1 Gas Utilization Equipment.- Gas utilization equipment may be installed in a repair garage when there is no dispensing or transferring of liquefied petroleum gas or other flammable liquids, provided all burners, burner flames, and burner ignition devices are located not less than 18” above the floor, and provided continuous mechanical ventilation is supplied at a rate of not less than one cubic foot per minute per square foot of floor area. For installations in below-grade areas, an approved means shall be provided for introducing an equal amount of outdoor air. The equipment and the ventilation system shall be interlocked so the equipment will not operate unless the ventilation system is in operation. Gas utilization equipment shall be located or protected so it is not subject to physical damage by a moving vehicle.

Add Section 306.3.2 as follows:

306.3.2 Accessibility. - Every appliance shall be located so that it will be accessible for operation and servicing. For attic installations, the passageway and servicing area adjacent to the appliance shall be floored. Such attics shall have flooring under and around such water heaters or gas appliances and shall be provided with a continuous, floored passageway at least 2 feet wide. When mechanical equipment is to be installed in the attic and only an interior access is to be provided, permanent access is required.

Delete Section 306.5 in its entirety and substitute the following:

306.5 Appliances On Roofs Or Elevated Structures. -Appliances on roofs or other elevated locations shall be accessible by permanent means. The extent of which shall be from grade or

floor level to the appliance's level service space. Such access shall not require climbing over obstructions greater than 30 inches high or walking on roofs having a slope greater than 4 and 12 pitch (33 percent slope).

Permanent ladders installed to provide the required access shall comply with the following minimum design criteria.

1. The side railing shall extend above the parapet or roof edge not less than 30 inches (762 mm).
2. Ladders shall have a rung spacing not to exceed 14 inches (356 mm) on center.
3. Ladders shall have a toe spacing not less than 6 inches (152 mm) deep.
4. There shall be a minimum of 18 inches (457 mm) between rails.
5. Rungs shall have a minimum diameter of 0.75-inch (19 mm) and shall be capable of withstanding a 300-pound (136.1 kg) load.
6. Ladders over 30 feet (9144 mm) in height shall be provided with offset sections and landings capable of withstanding a load of 100 pounds per square foot (488.2 kg/m²).
7. Ladders shall be protected against corrosion by approved means.
8. The inside means of access shall be a permanent, or foldaway, inside stairway or ladder, terminating in an enclosure, scuttle or trap door. Such scuttles or trap doors shall be at least 24" by 24" in size, shall open easily and safely under all conditions, especially snow, and shall be constructed so as to permit access from the roof side unless deliberately locked on the inside.

At least 6 feet of clearance shall be available between the access opening and the edge of the roof or similar hazard, or rigidly fixed rails or guards at least 42 inches in height shall be provided on the exposed side; parapets or other building structure at least 42 inches in height may be utilized in lieu of guards or rails.

Catwalks installed to provide the required access shall be not less than 24 inches wide (610 mm) and shall have railings as required for service platforms.

Exception: This section shall not apply to Group R-3 occupancies.

Add Section 306.7 as follows:

306.7 Accessibility – Ceilings. - Units installed above drop ceilings, equipment height of 10 feet or more, must have a work platform on service side of equipment.

24A

Add Section 401.1.2 as follows:

401.1.2 Medical Gas Systems. - Medical gas systems shall be installed in accordance with the requirements of NFPA 99C gas and vacuum systems.

Add Section 401.1.3 as follows:

401.1.3 Gas Safety Inspection for Out Of Service Locations - No fuel gas system which has been out of service for 365 consecutive days or more on residential property or 90 consecutive days or more on commercial property shall not be used without a successful safety inspection being conducted by OCCE. An inspection will be made once a licensed or registered gas contractor has obtained a permit for the required tests and/or repairs and requested the safety inspection. In emergency situations the Building Official is authorized to issue a temporary

authorization for use until an inspection can be made. This section shall apply to new buildings which have never been occupied as well as previously occupied vacant buildings.

Amend Section 402.3 by adding the following methods:

4. When the gas pressure is 0.5 pounds per square inch or less, all consumer gas pipe from the point of delivery of the first branch in the house piping shall not be less than one inch in diameter. The minimum size of pipe outlets shall be ½ inch. The maximum length of ½ inch pipe shall be one foot in length.
5. In CSST Piping Systems, ½ inch tubing allowed if sized to manufacturer specification.

Add new item # 6 to Section 402.3 “Sizing” that reads as follows:

6. All piping in the 2-psi portion of the system shall be marked at the beginning, all ends and at not more than six (6) foot intervals along its length designating 2-psi gas pressure.

Add new Subsection 402.3.1 “Piping Plan” that shall read as follows:

402.3.1 Piping Plan. – Before proceeding with the installation of a gas piping system, a piping sketch or plan may be required showing the proposed location of the piping as well as the size of different branches. Adequate consideration should be given to future demands and provisions made for added gas services. When an additional appliance is to be served, the existing piping shall be checked to determine if it has adequate capacity. If inadequate the existing system shall be enlarged as required or separate gas piping of adequate capacity shall be provided.

Amend Section 402.6 by deleting Item 1 and substituting in its place the following new Item 1 and Exception:

1. All gas piping 5 pounds or greater shall be welded.

Exception: Three threaded fittings at cut off valve to regulator on 5-pound systems.

Add Section 403.1.1 as follows:

403.1.1 - Construction Material Allowed. - Copper, brass and aluminum tubing or piping shall be used only for specialty use on natural gas with prior approval by the Chief Gas Inspector.

Add the following as the last sentence of Section 404.6.:

No threaded connectors may be used on piping in solid floors.

Amend Section 404.9 so when amended it shall read as follows:

404.9 Protection Against Corrosion. - Metallic pipe or tubing exposed to corrosive action, such as soil condition or moisture, shall be protected in an approved manner. Zinc coatings (galvanizing) shall not be deemed adequate protection for gas piping underground. Ferrous metal exposed in exterior locations shall be protected from corrosion in a manner satisfactory to the Building Official. Where dissimilar metals are joined underground, an insulating coupling or fitting shall be used. Piping shall not be laid in contact with cinders. Dielectric unions shall be installed at each end of underground piping. Anode bags shall be installed on all metallic piping underground.

Amend Section 404.10 so when amended it shall read as follows:

404.10 Minimum depth - No gas piping shall be placed underground closer than 8” from a water pipe or a sewer line. Piping shall be buried at a 12-inch, minimum depth and covered in a manner so as to protect the piping system from physical damage.

Delete Section 404.10.1 in its entirety and replace it with the following:

404.10.1 Individual Outside Appliances. - Individual lines to outside lights, grills or other appliances shall be installed a minimum of 12 inches below finished grade, provided that such installation is approved and is installed in locations not susceptible to physical damage.

Add Sections 404.10.1.1 through 404.10.1.3 as follows:

404.10.1.1 Piping Beneath Building Floor Slab. - Installation of buried underground piping beneath building floor slab shall be subject to prior approval of the Administrative authority.

404.10.1.2 Piping Beneath Manufactured Homes Prohibited. - Piping shall not be installed underground beneath manufactured homes or house trailers. Trailers shall be connected to the gas piping system with rigid pipe or listed connections of adequate size and installed so as to be protected against physical damage.

404.10.1.3 Location, Protection And Sizing Of Riser. - Where information is not available on the location of the trailer supply connection, the gas riser of each trailer site should be placed in the rear one-third section of the site and not less than 18” from the roadside wall of the trailer. It shall be located and protected or supported so as to minimize the likelihood of damage by moving vehicles. When the gas pressure at the terminal of the gas riser at each trailer site is 0.5 psig or less, the minimum size of the gas piping outlet shall be 1 inch for other than undiluted liquefied petroleum gases.

Delete Section 406.4.1 in its entirety and substitute the following:

406.4.1 Method Of Testing.

Low pressure (not in excess of 2 pounds per square inch gauge) (psig) gas piping shall withstand a pressure of 30 psig for period of not less than 10 minutes without showing any drop in pressure.

All high pressure gas piping must have a minimum of 100 psig test. Higher pressure piping (medical gas) must stand at least 1 ½ times normal working pressure for a period of 24 hours without showing any drop in pressure. Medical gas testing to conform to NFPA 99C.

Delete Section 406.4.2 in its entirety and show the following:

406.4.2 [DELETE]

Add Section 409.1.4 as follows:

409.1.4 Location Of Shutoff Valves. - Outlets for individual manufactured homes or trailers shall be provided with a readily accessible manual shutoff valve located outdoors at the trailer. Trailers shall be connected to the gas piping-system with rigid pipe or listed connections for adequate size and installed so as to be protected against physical damage.

Add Section 409.5.2.1 as follows:

409.5.2.1 Fireplace Logs and Starters. -All fireplace logs and starters must be installed according to their listings and have a readily accessible manual shutoff valve within reach of and extraneous to the fireplace. A manual main shutoff valve shall be installed ahead of all controls including the pilot gas valve.

Delete Section 409.5.3 entitled “Located at manifold” in its entirety with no substitution.

Add new item #7 to Section 410.2 “MP regulators” that reads as follows:

7. MP pressure regulators shall be so installed on the piping system that they cannot be concealed by building construction.

Delete Section 411.1, Item #3 in its entirety and substitute the following:

3. Flexible connectors used outdoors shall be listed for outdoor use. Flexible connectors used in fireplace fireboxes shall be approved for such use or be stainless steel.

Delete Section 411.1.3.1 in its entirety and replace it with the following:

411.1.3.1 Appliance Fuel Connectors .- Connectors shall have an overall length not to exceed 18 inches except for range and domestic clothes dryer connectors, which shall not exceed 3 feet in length. Connectors shall not be concealed within, or extended through, walls, floors, partitions, ceilings or appliance housings. A shutoff valve not less than the nominal size of the connector shall be installed ahead of the connector in accordance with Section 409.5. Connectors shall be sized to provide the total demand of the connected appliance.

Delete the “Exception” for Section 503.5.6.1 with no replacement:

Exception: [DELETE]

Delete the “Exception” of Section 503.10.2.2 in its entirety with no replacement:

Exception: [DELETE]

Delete Section 503.10.2.3, Items 2 through 5 so when amended it shall read as follows:

503.10.2.3 Residential -Type Appliance Connectors. - Where vent connectors for residential-type appliances are not installed in attics or other unconditioned spaces, connectors for listed appliances having draft hoods and for appliances having draft hoods and equipped with listed conversion burners shall be one of the following:

1. Type B or Type L vent material;
2. [DELETE]
3. [DELETE]
4. [DELETE]
5. [DELETE]
6. A listed vent connector.

Vent connectors shall not be covered with insulation.

Exception: Listed insulated vent connectors shall be installed according to the terms of their listing.

Add Section 618.2.1 as follows:

618.2.1 Furnaces Used With Refrigeration Systems And Blowers. - The furnace shall be installed on the discharge side of the blower. The furnace shall be installed parallel with or ahead of the refrigeration coil unless listed for other locations. If the refrigeration coil is installed in the discharge duct from the furnace, the blower shall be of a size and capacity to supply the required amount of air through the furnace to maintain normal temperature rise while operating against the total static pressure existing in the system. Auxiliary drain pans shall be installed under all evaporator coils or vertical furnaces installed in attic spaces.

Delete Section 624.1.1 in its entirety and substitute the following sections and subsections:

624.1.2 Prohibited Installations. - Water heaters, with the exception of those having direct vent systems, shall not be installed in bathrooms and bedrooms or in a closet with access only through

a bedroom or bathroom. However, water heaters of the automatic storage type may be installed as a replacement in a bathroom, when specifically authorized by the gas official, providing they are properly vented and are supplied with adequate combustion air.

Exception: When a closet, having a weather-stripped solid door with an approved door-closing device, has been designed exclusively for the water heater and where all air for combustion and ventilation is supplied from outdoors.

624.1.3 Location.

624.1.3.1 Close To Vents. - Water heaters shall be located as close as practicable to the vent. They should be so located as to provide short runs of water piping to fixtures.

624.1.3.2 Emergency Pans. - All gas water heaters shall rest in a galvanized steel or other metal pan of equal corrosive resistance having a thickness at least equal to 0.0276 inch (0.7 mm) galvanized sheet steel. Pans shall have a minimum depth of 1½ inches (38 mm). All drain pans shall have a minimum 1-inch (25.4 mm) drain. All gas water heater emergency pans shall be installed as per manufacturer listing.

624.1.4 Clearance. - Gas-fired water heaters shall be positioned in relation to combustible construction with a minimum clearance in accordance with Table 624.1.3. In no case shall the clearance in accordance be such as to interfere with the requirements for combustion air and accessibility. See Chapter 3

**TABLE 624.1.3
MINIMUM CLEARANCE FOR LISTED
WATER HEATERS, UNLESS OTHERWISE MARKED**

TYPE OF HEATER	DISTANCE FROM COMBUSTIBLE MATERIAL	
	Nearest Part of Jacket	Flat Side
Type A	6 in	---
Type B	2 in	---
Type C	---	Flush
Counter Type Unit	in accordance with manufacturer's instructions	

624.1.5 Connections. - Water heaters shall be connected in a manner to permit observation, maintenance and servicing.

624.1.6 Closed Systems. - Water heaters shall not be installed in a closed system of water piping unless a water pressure relief valve is provided.

624.1.7 Temperature, Pressure And Vacuum Relief Valves.

624.1.7.1 Standards Applicable. - The installation and adjustment of the temperature, pressure and vacuum valves or combination thereof, and automatic gas shutoff valves shall be in accordance with the requirements of ANSI Z21.10.1 and ANSI Z21.10.3 or with the manufacturer's instruction accompanying such devices.

624.1.7.2 Vacuum Relief Valve. A water heater or tank that has the cold water supply entering at the bottom of the tank shall have a listed vacuum relief valve installed above the top of the tank so as to prevent siphoning of tank.

624.1.8 Circulation Or Tank Types.

624.1.8.1 Method Of Connection. - The method of connecting a circulating water heater to the tank shall assure proper circulation of water through the heater, and permit a safe and useful temperature of water to be drawn from the tank.

624.1.8.2 Piping Size. - The size of the water circulating piping, in general, shall conform with the size of the water connection of the heater.

624.1.8.3 Installation Of Valve For Tank Draining. - A suitable water valve or cock, through which sediment may be drawn off or the tank emptied, shall be installed at the bottom of the tank.

624.1.8.4 Anti-Siphoning Measures. - Means acceptable to the administrative authority shall be provided to prevent siphoning in any boiler or tank to which any water heater is attached. A cold water tube with a hole near the top is commonly accepted for this purpose.

Delete Section 627.10 in its entirety and substitute the following:

627.10 Switches In Electrical Supply Lines.- Means for interrupting the electrical supply to the air conditioning and heating equipment or to its associated cooling tower shall in no case be installed farther than six feet (6') from the service side of the equipment.

Add Section 628.5 as follows:

628.5 Access To Shut-Off Valve. – All illuminating gas appliances must have an accessible manual shutoff valve within reach of and extraneous to the appliance.

Add to Chapter 8 the Following - Referenced Standard

NFPA
1 Batterymarch Park
Quincy, Massachusetts
USA 02169-7471

Standard Reference Number	Title	Referenced in Code Section (s)
99c	Standard on Gas and Vacuum Systems	401.1.2 , 406.4.1

APPENDIX A - Gas Permit and Inspection Fees

G-1 Fees For Amending Permit

G-1.1 After a permit has been issued and an amendment or supplemental revision is applied for, the additional fee or service charge shall be as follows:

G-1.2 For each and every amendment which involves additional work not originally applied for to complete the entire project, the addition fee shall be the normal fee for the work contemplated and shall be computed disregarding the valuation of the work previously permitted.

G-1.3 For each and every amendment or supplement not involving additional work by square footage, volume or dollar value, the minimum fee normally required for such work shall apply even though the project dollar value or building volume may decrease. (Min. fee is \$20)

G-2 Work Commencing Before Permit Issuance

In case any work requiring a permit is started prior to obtaining said permit, as a penalty for violating this Code, the total normal fee applicable shall be doubled. The payment of said fee shall not relieve any persons from fully complying with the requirements of this Code for performance or execution of the work, nor from other penalties prescribed by law. (Section 104.7.2)

G-3 Schedule of Permit Fees

On all gas systems requiring a gas permit, a fee for each gas permit shall be paid as required at the time of filing the application, in accordance with the following:

G-3.1 On all installation requiring a permit, as set forth in this Section, a fee for each permit shall be paid as required, at the time of filing the application, in accordance with the following schedule.

G-3.1.1 For \$1.00 to \$1,000 valuation of installation, the fee shall be \$15 with minimum permit fee of \$15.

G-3.1.2 When the estimated cost exceeds \$1000, the additional fee is \$8 per each \$1000 of valuation.

G-3.1.3 The fee for installing a water heater shall be \$15 for the first \$1000 and \$8 per additional \$1000 of valuation.

Change

G-3.1.4 Single Family Residents Only - additional fee for each gas outlet \$2.50

Add G-3.1.5

Single Family Residents Only – gas piping permit fees shall be based on total valuation (contract price) plus \$2.50 per gas outlet. All other gas permits shall be based on total valuation (contract price).

G-4 Minimum Permit Fee

The minimum permit fee shall be \$15.

G-5 Filing Application for Joint Board of Appeals

Notice of Joint Board of Appeals under Section 108 shall be accompanied by a fee of \$100.

G-6 Refunds

Permit fees may be refunded if no work has commenced and a request for refunds is submitted to the Building Official in writing by the permittee within 6 months of the date of issuance. The permit is surrendered when a request for refund is submitted. The amount of the refund will be 2/3 of the permit fee, but in no case will the amount retained by the Office of Construction Code Enforcement be less than \$15.

G-7 Reinspection Fee For Excessive Or Unessential Inspection Call

G-7.1 A \$50.00 reinspection fee shall be charged for the reinspection and rejection of the same infraction; and for every reinspection thereafter until the infraction is corrected.

G-7.2 Any person, firm or corporation aggrieved by the assessment for any reinspection fee may appeal to the Building Official for a review of the facts involved and a reduction or dismissal of said fees.

Gas Permit and Inspection Fees

2002 Section	Section Title	2002 Fee
G-1	Fees For Amending Permit	
G-1.3	Amendment – Min. Fee	20
G-2	Work Commencing Before Permit Issuance- shall be double	Double Fee
G-3	Schedule of Permit Fees	
G-3.1	Fee \$1 to \$1,000 valuation of installation	15
G-3.1.2	Per each additional \$1,000	8
G-3.1.3	Water heater first \$1000	15
	Per each additional \$1000	8
G-3.1.4	Single Family Residents Only – Additional fee for each gas outlet	2.50
G-4	Minimum Permit Fee	15
G-5	Fee for Joint Board of Appeals	100
G-6	Refund 2/3 of fee – min. fee	15
G-7	Reinspection fee	
G-7.1	First reinspection fee	50
	Additional fee beyond the first	50

Note: \$4.00 Data Processing Fee to be added to all Permits