WELCOME

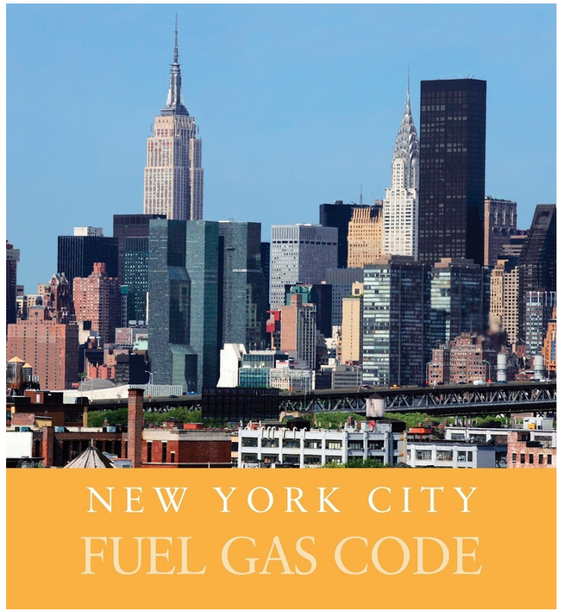
2022 New York City Fuel Gas Code Revisions

February 2, 2022 – 5:30 pm to 7:00pm

Via Zoom (www.aspenyc.org) – Presented by Philip F. Parisi Jr., P.E.

TODAY'S AGENDA

1. CODE REVISION COMMITTEE STRUCTURE
2. CODE REVISION CYCLE PROCESS
3. 2017 CONSTRUCTION CODE REVISIONS
4. FUEL GAS CODE REVISION OVERVIEW
5. FUEL GAS CODE (FGC) REVISIONS
   - A. PRIMARY ASSIGNMENTS
     - FGC CHAPTERS 4 & 7
     - FGC APPENDICES E & G
   - B. SECONDARY ASSIGNMENTS
     - FGC CHAPTER 1, 2
     - BC CHAPTERS 12, 15, 17, Appendix G
     - MC CHAPTERS 10 & 14
     - ADMINISTRATIVE CODE 28-408 & 28-409

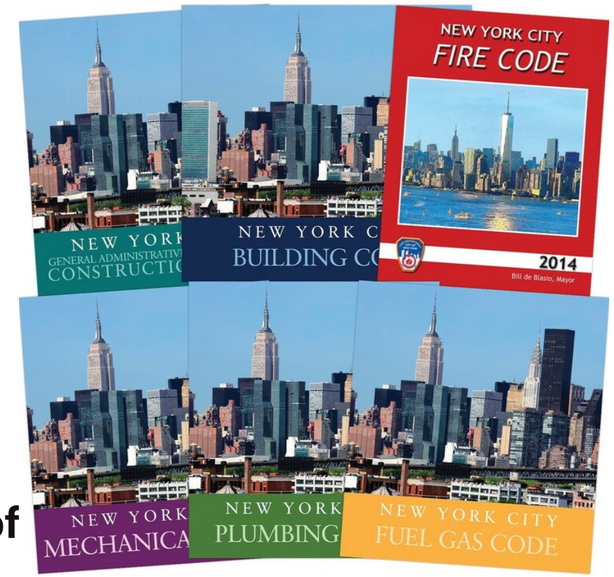


Code Revision Committee Structure

- **Consensus-Based Approach**
  - Members work together to find a mutually acceptable solution.
- **Assistant Commissioner of Technical Affairs**
  - Responsible for overseeing the Construction Codes revision cycle.
- **Managing Committee**
  - Responsible for reviewing technical and advisory committee proposals.
  - Consists of the Chairs, Vice Chairs of the Managing, Technical and Advisory Committees.
  - Also consists of representatives from construction, labor, real estate, government, professional organizations and other industry stakeholders.
  - May require guess experts and working panels.

Code Revision Committee Structure

- **Technical Committees**
  - Consists of 20-25 members including a Chair, Vice Chair and other members from construction, labor, real estate, government, professional organizations and other industry stakeholders. May include guest experts or working panels.
  - Responsible for reviewing specific chapters of the NYC Construction Codes and crafting, modifying or developing proposed language.
  - Focuses on primary and secondary assignments.
- **Advisory Committees**
  - May be formed at the discretion of the Assistant Commissioner to consider portions of the code and issues that relate Department operations, inspection, permits, fees, etc.
  - Is not required to achieve consensus. Recommendations will be considered but not binding.



Code Revision Cycle Process

- **Department Review**
  - The Department of Buildings (DOB) reviewed the 2014 NYC Construction Codes referenced I-Codes with reference standards.
- **Presentation of Proposed Revisions**
  - The DOB presents to the Technical Committee or Advisory Committee the proposed language to be utilized for review.
- **Committee Review of Proposed Revisions**
  - The technical or advisory committee will review, discuss, modify and come to consensus on language.
  - Ad-Hoc Working Meetings – if necessary will form working groups to further develop specific code language.

Code Revision Cycle Process

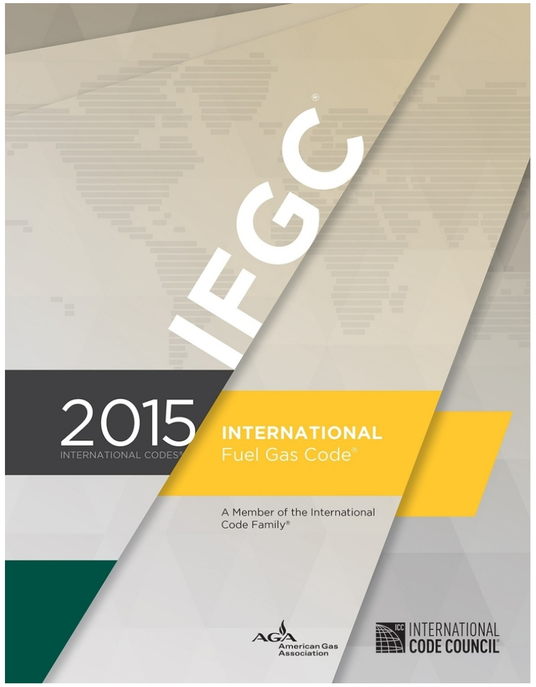
- **Legal Review**
  - **All proposed revisions from the technical and advisory committees are reviewed by the Law Department. Once approved it's sent to Managing Committee for presentation.**
- **Managing Committee Review**
  - **Proposed local law text that contains Code revisions are forwarded for review and ultimately accepted for inclusion in a bill to be submitted to City Council.**
- **Mediation**
  - **When the technical committee cannot achieve consensus.**
  - **When rejected by the Managing Committee.**
  - **Avoided where possible.**

Goals for 2017 Code Revision Cycle

- Assembled Committees and kickoff began March 2017
- Submit Revisions to the City Council beginning EOY 2018
- Revisions utilize the 2015 I-Codes with NYC Modifications
- Achieve Consensus and Avoid/Limit Mediation
- Plumbing Committee
  - Consisted of 41 members including Chair and Vice Chair, Alternate Members and Guest Experts
  - Meetings were conducted bi-weekly kicking off July 2017.
  - Responsible for entire Plumbing Code, Building Code Chapter 29, Fuel Gas Code Chapters 4, 7 & Appendices E & G.

Overview

- **NYC Plumbing Code**
  - **Revisions Began September 2017 & Completed June 2019**
  - **Incorporated in Intro No. 1481-A for City Council Submission**
  - **Became Local Law 14 of 2020 (waiting on balance of NYCCC)**
- **NYC Fuel Gas Code**
  - **Revisions Begin February 2019 & Completed June 2019**
  - **Incorporated in Intro No. 2261 for City Council Submission**
  - **Became Local Law 126 of 2021 (includes balance of NYCCC)**
- **NYC Existing Building Code is progressing, awaiting submission to City Council.**



Chapter 1 – Administration

- **Section 102.4.2.1 – Fuel gas piping in prohibited locations**
  - **Clarifies that replacement of existing fuel gas piping in the same locations shall not be subject to Section 404.3.**
- **Section 106.6 – Permits with respect to LAA's. Sections 28-101.5 and 28-104.6, Exception 1 of the Administrative Code.**
  - **LAA Category 1 - The installation of new fuel gas piping conjunction with the addition of not more than five (5) gas appliances or six (6) unit heaters, limited to residential gas barbecue, Category 1 vented hot water heater, gas infrared heater, gas light, gas oil burner pilot, gas pool heater in conjunction with an R-3 occupancy group, one commercial gas appliance and gas unit heater, including any associated fuel gas piping necessary to serve such additional appliances.**

Chapter 1 – Administration

- **Section 106.6 – Permits with respect to LAA's.**

Sections 28-101.5 and 28-104.6, Exception 1 of the Administrative Code.

  - **Category 2 - The repair or replacement to an existing piping systems such as replacement of appliances in kind, hot water heaters and direct vent appliances of 350,000 Btu/hr.**
  - **Clarifies that LAA's do not require a registered design professional.**

- **Section 107.6 – Fuel Gas Piping Plans**
  - **Requires operating pressure, gas meter and distribution piping and means of venting.**

- **Section 108.2 – Inspections and Testing**
  - **Requires underground inspection requirements for testing of piping, valves, fittings, support, anti-corrosion equipment before backfilling.**

Chapter 1 – Administration

- **Section 108.2 – Inspections and Testing**
  - **Rough-In inspections required to verify design, materials, fabrication and all requirements.**
  - **Rough-In inspection is not required when replacing a gas appliance in place.**
  - **Rough-In inspection is not required when gas is reestablished by a utility company.**
  - **Gas final inspections are required once the appliances are completely installed.**
  - **Gas final inspections are permitted to be completed in sections.**
  - **Periodic Inspections – language inserted to align with LL152.**
- **Section 108.3 – Gas Testing (Exceptions)**
  - **Not required when an existing appliance is replaced and not piping replaced.**
  - **Not required when gas is reestablished by a utility company.**

Chapter 2 – Definitions

- **Branch – Section of gas piping downstream from a riser leading to appliances or equipment on no more than two (2) consecutive floors.**
- **Excess Flow Valve – Safety shut-off valve designed to activate to interrupt the flow of gas through it exceeds a prescribed flow rate.**
- **Fireplace – An assembly consisting of a hearth and fire chamber, use with solid fuel.**
- **Flashback Arrestor Check Valve – A device that will prevent the backflow of gas into the supply system of another gas or flame into the system.**

Chapter 2 – Definitions

- **Hydrogen Gas Room – A separately vented, fully enclosed room housing the generation of hydrogen for on-premises use with in indoor fuel cells, not dispensing.**
- **Noncombustible Materials – adds clarity and specifics to NC materials.**
- **Point of Delivery – Service meter assembly outlet. Where a valve is provided downstream of the assembly it is considered downstream of the POD.**
- **Rough-In – Parts of the system that are installed prior to the installation of appliances or equipment.**

Chapter 3 – General Regulations

- Section 301.7.1 – Appliance Fuel Conversion
  - Provides detailed requirements for fuel conversions for appliances.
- Section 303 – Appliance Location
  - Section 303.3.1 - Gas-Fired Direct Vent Appliances
    - Section 303.3.1.1 - Addresses space heating direct vented appliances, i.e. a “fireplace” in a sleeping area, commonly seen in condominiums and hotels.
    - Section 303.3.1.2 – Carbon Monoxide Detector required integral to or remote within 5 feet from the appliance and hard wired.
    - Section 303.3.1.2 – Internal safety controls required to have a hard-wired carbon monoxide detector in a supervisory mode and interrupt the startup sequence if needed.
    - Section 303.3.1.5 – Venting must be derived from and flue gases discharged to the outdoors.

Chapter 3 – General Regulations

- **Section 303.3.1.6 - Gas-Fired Direct Vent Appliance Installation**
  - **Carbon monoxide detectors installed with the appliance shall be provided in addition to code required devices in dwelling units.**
  - **Carbon monoxide detectors installed with the appliance shall not be interconnected to other devices within the dwelling units.**
  - **Device must be installed by a Licensed Master Plumber, hence the natural gas requirement.**
- **Section 303.3.1.7 - Gas-Fired Direct Vent Appliance Clearances**
  - **Defines clearance requirements for the appliances including PTACs and PTHPs.**

Chapter 3 – General Regulations

- **Section 307 – Condensate Disposal**
  - **Section 307.2 – Adds reference to the NYCPC Section 803 for condensate piping material.**
  - **Section 307.3 – Adds the reference for polypropylene piping limited to lengths of 12 feet for individual drain applications only.**
  - **Section 307.5 – Auxiliary drain pans for Category II or IV condensing appliances shall be provided with a local alarm to indicate water collection.**
  - **Section 307.5 - Exception added to eliminate the auxiliary drain pan when a floor drain is provided.**
  - **Section 307.6 – Condensate pump requirements for uninhabited spaces. The requirements outline the need for limiting appliance operation when pump is not operating or leak detection is required.**
  - **Section 307.7 – Drain line maintenance requirements are provided to allow cleaning without cutting the drain line, i.e. adding cleanouts similar to sanitary drainage piping.**

Chapter 6 – Specific Appliances

- **Section 633 – Stationary Fuel Cell Power Systems**
  - **Section 633.1 – General**
    - **Increased the power output for stationary fuel cells to 10MW from 1MW.**
    - **Added references to the New York City Electrical Code in lieu of NEC Article 592.**
    - **Added the reference for hydrogen generating systems to be in accordance with Section 706.**
- **Section 636 – Outdoor Decorative Appliances**
  - **New section added for the installation of outdoor decorative appliances such as fire pits, etc..**
  - **Section 636.1 – addresses permanently fixed-in-place outdoor appliances in accordance with ANSI Z21.97/CSA 2.41 and comply with manufacturers instructions.**

Chapt 7 – Gaseous Hydrogen Systems

- **Section 701.1 – Scope**
  - **Revised references to Chapters 53 & 58 of the New York City Fire Code**
- **Sections 702 thru 706 – all new sections added.**
  - **Sections 702, 704, 705 - Reserved**
- **Section 703 – General Requirements**
  - **Section 703.1 – Hydrogen Generation for immediate on-premises use in indoor fuel cells or other energy production process is permitted and must comply with Section 706.**
  - **Exhaust ventilation is required in accordance with NFPA 2–2016 (Hydrogen Technologies Code).**

Chapt 7 – Gaseous Hydrogen Systems

- **Section 706 – Location of Gaseous Hydrogen Systems**
  - **Section 706.1 – Exception: Outdoor stationary fuel cell power plants in accordance with Section 633 (non-hydrogen producing) does not apply to this section.**
  - **Section 706.2 – Indoor Gaseous Hydrogen Systems require compliance with NYC BC, NYC MC, NYC Fire Code and NFPA 2.**
  - **Section 706.3 – Outdoor Gaseous Hydrogen Systems require compliance with only the NYC Fire Code.**

Chapter 8 - Reference Standards

- **Revisions to Reference Standards**
  - **NFPA 2-2016 – Hydrogen Technologies Code**
  - **NFPA 37-2015 – Standard for the Install & Use of Stationary Combustion Engines & Gas Turbines**
  - **NFPA 54-2016 – National Fuel Gas Code**
  - **NFPA 56-2012 – Std. for Fire & Explosion Prevention During Cleaning & Purging of Flam. Gas Piping**
  - **NFPA 68-2007 – Standard for Explosion Protection by Deflagration Venting**
  - **NFPA 69-2014 – Standard for Explosion Prevention Systems**
  - **NFPA 72-2016 (As modified by Appendix Q) – National Fire Alarm and Signaling Code**
  - **NFPA 853-2015 – Installation of Stationary Fuel Cell Power Systems**
  - **UL 536-2014 – Flexible Metallic Hose**

App E – Meters and Gas Service Piping

- **Section E.2.1.2 – Redefined language for inside gas meter piping.**
  - **The maximum developed length from the outlet of the service head valve to the inlet of the farthest regulator shall be limited as follows… (See table in gas utility book)**
- **Section E.2.2 – Added clarification for flood hazard areas.**
  - **For buildings located in flood hazard areas, gas regulator vent outlets shall be installed in accordance with the additional requirements of Appendix G of the NYCBC.**
- **Section E.3 – Gas Meter Location**
  - **Exception added Item 1 - Gas meter location in 1 & 2-family dwellings shall not require ventilation.**

App E – Meters and Gas Service Piping

- Section E.3 – Gas Meter Location (cont.)
  - Modified Item 2 – Removed last two sentences explaining requirements for existing boilers and additional meters.
- Section E.4 – Gas Meter Room Ventilation
  - Item 2 - Clarified that you can utilize a pipe or duct for gas meter room ventilation.
  - Item 2 – Removed clarification for ducts longer than the maximum length of 15 feet.

Appendix G – High Pressure Gas Installations

- There are no significant changes in Appendix G.
- Changes include grammar, units of measure and references.

Chapter 4 – Gas Piping Installations

- **Section 401 – General**
  - **Section 401.1.2 – Meters for gas consumption monitoring has been added to codify the installation of gas meters and bypass capability for monitoring and verification purposes.**
  - **Section 401.7 & 401.9 – Identification of gas piping has been added to align with ASME A13.1 reference standard and fittings and pipe shall bear the identification of the manufacturer.**
  - **Section 401.10 – Third-party testing requirements have been added, requiring pipe, tubing and fittings to be approved or certified by a third-party testing or certification agency.**

Chapter 4 – Gas Piping Installations

- **Section 402 – Pipe Sizing**
  - **Section 402.2 – Clarification has been added such that the volumetric flow rate shall be the sum of the maximum input of the appliances. The volumetric flow rate may be adjusted where the installation is above 2,000 feet and Table 402.2 was deleted.**
  - **Tables 402.4(3) & (4) – Tables added for pressures less than 2 psi with a 3 inch w.c. and 6 inch w.c. pressure drop.**
  - **Section 402.6 – Limits the gas distribution in buildings to ½ psig. However, exceptions are provided to exceed this limit only where appliances that require a higher pressure are installed, Exceptions 1 thru 3.**

Chapter 4 – Gas Piping Installations

- **Section 403 – Piping Materials**
  - **Section 403.1.1 Item 1 – Added reference for gas piping materials to comply with Appendix G with operating pressures of 15 psig or greater.**
  - **Section 403.1.1 Item 4 – Added clear language that requires all piping regardless of operating pressure greater than 4 inch in diameter shall be welded.**
  - **Section 403.1.1 Item 5 – New language requiring all piping 2-1/2 inch or greater shall be butt welded and piping less than 2-1/2 inch may be socket welded.**
  - **Section 403.5.1 – Added reference standard UL 536 for stainless steel multiple leg hose assembly.**
  - **Section 403.9.3 – Added language prohibiting joint tape use at pressure regulator connections.**
  - **Section 410.1.1 – Prohibits the use of close nipples and adds an exception to permit the installation of unions installed downstream of appliance valves.**

Chapter 4 – Gas Piping Installations

- **Section 403 – Piping Materials**
  - **Section 403.12 – Flange section was revised entirely to include steel, ductile iron, raised face and lapped flanges. The section also prohibits the use of nonferrous flanges.**
  - **Section 403.13 – Added language that prohibits rubber-faced and elastomeric gaskets.**
  - **Section 403.13.1 & 2 – Adds reference standards for metallic and nonmetallic gaskets.**
  - **Section 403.14 – Added section to require corrosion resistant flange bolts and hardware.**

Chapter 4 – Gas Piping Installations

- **Section 404 – Piping System Installation**
  - **Section 404.2 – Pipe movement and seismic requirements were moved from Section 405. This section provides the requirements for pipe movement resulting from thermal changes and seismic forces.**
  - **Section 404.3 – Prohibited Locations**
    - **Item 4 – Fire Rated Construction section was clarified such to prohibit the installation of gas piping within a wall assembly required to have a fire-resistance rating. It also clarifies that through penetrations of fire resistance-rated constructed assemblies are permitted but must be in accordance with Chapter 7 of the NYC BC.**

Chapter 4 – Gas Piping Installations

- **Section 404 – Piping System Installation**
  - **Section 404.3 Item 5 Exceptions – Prohibited Locations, Public Corridors**
    - **Item 1 – Added to clarify that gas piping may be installed within public corridors where separated by fire-resistance rated assemblies meeting the hour rating and impact-resistance rating required for the corridor or exit enclosure.**
    - **Item 2 – Added to clarify that gas piping may be installed in public corridors within residential buildings that do not have floors below grade or in multi-use buildings with a residential occupancy. The requirements are limited to the lowest level, requirements remain the same.**
  - **Section 404.5 – Limits fittings in concealed locations to threaded elbows, tees, couplings and welded fittings. Essentially does not allow unions.**
  - **Section 404.6 – Provides requirements for sleeves when piping passes through a foundation wall.**

Chapter 4 – Gas Piping Installations

- **Section 404 – Piping System Installation**
  - **Section 404.11 – Section has been revised to better outline the requirement for piping exposed to weather and exterior locations. Requirements were organized in 404.11.2 and 404.11.3.**
  - **Section 404.11.1 – Clarifies that threaded or welded uncoated fittings and joints are prohibited when in contact with soil or subject to corrosion.**
  - **Section 404.15 – Outlet closure section was provided with exceptions to clarify that test ports for gas riser valves and outlets for gauges and pressure sensors are permitted to avoid confusion.**
  - **Section 404.18 – Prohibits the use of flammable or combustible gas to clean piping.**
  - **Section 404.19 – Added exception under prohibited devices for gas meters for monitoring.**
  - **Section 404-21 –Qualifications for gas work section creating relocating all welding requirements from Section 406 to this section.**

Chapter 4 – Gas Piping Installations

- **Section 405 – Pipe Bends and Changes in Direction**
  - **Section 405.1 – Added language permitting the use of factory bends or field bends.**
  - **Section 405.2 – Metallic pipe bending parameters have been added including:**
    - **Bends shall be made with bending tools and procedures intended for that purpose.**
    - **All bends shall be smooth free from buckling, cracks, damage, etc..**
    - **Bends shall only be made with seamless pipe. ERW pipe bends shall not be permitted.**
    - **Pipe bends are limited to an arc of 90 degrees.**
    - **The inside radius of a bend shall not be less than six (6) time the outside diameter of the pipe.**
  - **Section 405.5 – Pipe movement section and seismic requirements have been removed from this section and relocated to Section 404.**

Chapter 4 – Gas Piping Installations

- **Section 406 – Inspection, Testing and Purging**
  - **Section 406.1.1.1 – Welding inspection and testing requirements added and subject to special inspection in accordance with Chapter 17 of the NYCBC. Radiographic testing shall be performed on all butt welds for operating pressures exceeding 5 psig.**
  - **Section 406.1.1.1 – Also removed and relocated all welding requirement language to Section 404.21.**
  - **Section 406.1.2 – Repairs and additions are required to be pressure tested, no exceptions.**
  - **Section 406.1.3 – New branches are required to be pressure tested.**
  - **Section 406.1.4 – Provisions for pressure testing in sections has been added to the code and clarifies that a valve cannot be used as a bulkhead or tested against. This provides requirements for a double block. See Buildings Bulletin 2017-001.**

Chapter 4 – Gas Piping Installations

- **Section 406 – Inspection, Testing and Purging**
  - **Section 406.1.5 – Regulators shall be removed and replaced with spool pieces when performing testing of the piping system.**
  - **Section 406.1.6 – This section requires pipe clearing or purging of the system with air or an inert gas prior to testing, potentially clearing of any debris.**
  - **Section 406.2 – Eliminated the use of fresh water as a testing medium.**
  - **Section 406.3 – Appliances and equipment connections not subject to the pressure test shall be tested with a noncorrosive leak-detecting fluid or other gas leak detection method.**
  - **Section 406.4.1 – Test pressure measurement has been clarified to include proper scaled pressure measurement devices and limits the test pressure to 1.5 times the maximum working pressure but not less than 3 psig. However where test pressure exceeds 125 psig, must limit to hoop stress.**

Chapter 4 – Gas Piping Installations

- **Section 406 – Inspection, Testing and Purging**
  - **Section 406.4.1 Exception Item 2 – Gas piping installed in public corridors in accordance with Section 404 shall be tested to a pressure of 10 psig for 30 minutes.**
  - **Section 406.4.1. Exception Item 4 – Modified the requirement for field applied or factory coated piping to be tested at 100 psig for 60 minutes.**
  - **Section 406.4.1.1 – Factory applied coatings new test requirement minimum 1.5 times or 3 psig.**
  - **Section 406.4.1.2 - Field applied coatings new test requirement minimum 1.5 times or 3 psig.**
  - **Section 406.4.2 – Test durations shall be not less than 30 minutes in any case.**
  - **Section 406.4.3 – Minimum gauge standards have been revised to align with ASME B40.100**
  - **Section 406.4.5 – Eliminated witnessing of gas testing by approved agencies, only DOB.**
  - **Section 406.4.6 – Gas testing is limited to an individual with 5 years of experience or more.**

Chapter 4 – Gas Piping Installations

- **Section 406 – Inspection, Testing and Purging**
  - **Section 406.5.1 – Removed language permitting gas detection methods using open flames.**
  - **Section 406.6.2.1 & 2 – Provides detailed language for gas authorization requirements including:**
    - **Testing and inspection required before a certificate is issued.**
    - **De-energized piping shall be required to obtain a certificate of approval.**
    - **Allows for partial gas authorization providing the remainder of the system is locked off.**
  - **Section 406.6.2.2 – Added language for existing locked off gas supplies by utilities and clarifying that proper testing and inspection is required before it can be unlocked.**
  - **Section 406.6.2.4 – Emergency operation of the service head valve is permissible by a Licensed Master Plumber or his employee and must wait on location until the utility arrives to lock the valve.**

Chapter 4 – Gas Piping Installations

- **Section 407 – Piping Support**
  - **No significant changes beyond grammar, punctuation and unit measurement.**
- **Section 408 – Drips and Sloped Piping**
  - **Section 408.2 – Drips are no longer permitted.**
  - **Section 408.3 – Test fittings shall be installed as required by the gas supplier and downstream of a lockable branch supply or riser valve. The size of the test fitting shall be limited to the smallest commercially available connection to perform testing.**
  - **Section 408.4 – Sediment traps located at appliances has been clarified by adding a diagram, Figure 408.4 which includes a tee, nipple of any length and cap.**

Chapter 4 – Gas Piping Installations

- **Section 409 – Shutoff Valves**
  - **Section 409.2 – Requires the meter valve to be an approved type by the utility company.**
  - **Section 409.5.1 – This section now limits an appliance shut-off valve to 60 inches above the finished floor.**
  - **Section 409.5.1 Exception – This language has been added to permit the installation of the appliance shut-off valve above 60 inches where the gas connection is also more than 60 inches above the finished floor.**
  - **Section 409.8 – Riser shut-off valves are now required to be equipped with an approved lockable shut-off valve and a test port installed downstream of the valve.**
  - **Section 409.9 – Branches serving more than one (1) appliance shall now be equipped with a lockable shut-off valve and a test port installed downstream of the valve.**

Chapter 4 – Gas Piping Installations

- **Section 410 – Flow Controls**
  - **Section 410.2 – Medium Pressure Regulators**
    - **Item 6 – Language added to permit the installation of a pressure gauge with an isolation valve in addition to the fitting required for measurement purposes.**
    - **Item 7 – New language requiring at least one (1) union to be installed within one (1) foot of either side of the medium pressure regulator.**
  - **Section 410.3 Exception – clarification was added for pressure regulators equipped with a vent limiting device, clarifying that the device shall be installed where there is sufficient ventilation.**
  - **Section 410.4 – Excess Flow Valves**
    - **New language adding the requirement when EFVs are installed they shall be sized and installed in accordance with the manufacturer's instructions.**

Chapter 4 – Gas Piping Installations

- **Section 411 – Appliance and Manufactured Home Conn.**
  - **Section 411.1 Item 1– Added limitations for appliance connectors to 6 feet in length and a maximum of one (1) connector can be used for each appliance.**
  - **Section 411.1 Item 2 – New section outlining requirements for outdoor connectors and limiting the connector to an outdoor appliance connected to a shutoff valve, a quick-disconnect or listed gas convenience outlet.**
  - **Section 411.1.1 – Added language to commercial cooking appliances on casters to limit the movement of the appliance with a restraining device.**
- **Section 412 thru 415**
  - **No significant changes beyond grammar, punctuation and unit measurement.**

Chapter 4 – Gas Piping Installations

- **Section 416 – Overpressure Protection Devices**
  - **Section 416.1 – Clarifies that overpressure protection devices are required where the pressure from the gas supplier is greater than 2 psig serving appliances that operate at 14 inches w.c. or less.**
  - **Section 416.2.1 – Where operating pressure is under 14 inches w.c. the overpressure protection device shall limit the gas pressure to 2 psig or less upon failure.**
  - **Section 416.2.2 – Where operating pressure is over 14 inches w.c. the overpressure protection device shall limit the gas pressure in accordance with the manufacturers reqs.**
  - **Section 416.2.3 – The device shall be capable to limit the pressure independent of other pressure control in the system devices.**

Chapter 4 – Gas Piping Installations

- **Section 416 – Overpressure Protection Devices**
  - **Section 416.2.4 – Each system shall be designed such that the failure of the primary pressure control device is detectable.**
  - **Section 416.2.5 – Where a relief valve is used it shall have the capacity to protect the system if the overpressure protection device failed open and not less than the normal operating limit of the device.**
  - **Section 416.3.7 – Provisions for device maintenance has been added every two (2) years by a Licensed Master Plumber and records must be maintained by Ownership.**
  - **Section 416.3.7 Exception – Where gas pressure is 15 psig or above, the inspection must occur on an annual basis. All other requirements for record keeping applies.**

Thank you for your attending!!