Mechanical Code

Chapter 1

General

Fire and smoke dampers 102.4.2.1	New/expanded requirement	In cases where the building's passive fire-resistance protection design, including rated construction, corridors and fire separations, complies with 1968 or prior codes, the determination as to whether a fire or smoke damper is required shall be permitted to be made pursuant to the 1968 Building Code, or at the election of the applicant, the New York City Mechanical Code.
Guards and access to roofs and elevated structures 102.4.2.2	New/expanded requirement	The provisions of Section 304.10 relating to guards and Section 306.5 relating to permanent means of access shall not apply where the equipment or appliances replace existing equipment or appliances in the same location.
Vibration isolators for cooling towers 102.4.2.3	New/expanded requirement	Where a replacement cooling tower is installed and physical limitations prohibit compliance with the vibration isolator requirements of Section 928.2.7, such isolators may be omitted provided the devices shall comply with the New York City Noise Control Code.
Non-combustible fill for cooling towers 102.4.2.4	New/expanded requirement	Where an existing exterior cooling tower with combustible fill within 15 feet (4572 mm) of the lot line is replaced, such replacement shall be permitted to have combustible fill, notwithstanding the provisions of Section 908.3.2.

Seismic supports 102.4.2.5	New/expanded requirement	The determination as to whether seismic requirements apply to an alteration shall be made in accordance with the 1968 Building Code and interpretations by the department relating to such determinations. Any applicable seismic loads and requirements shall be permitted to be determined in accordance with Chapter 16 of the New York City Building Code or the 1968 Building Code and Reference Standard RS 9-6 of such code.
Wind resistance 102.4.2.6	New/expanded requirement	Equipment, appliances and supports that are exposed to wind shall be designed and installed to resist the wind pressures determined in accordance with Chapter 16 of the New York City Building Code.
Refrigerating Systems 106.9	New/expanded requirement	Refrigerant density calculations must be shown for systems containing more than 6.6 lbs of refrigerant.

Mechanical Code

Chapter 2

Definitions

202 (AIR DISPERSION SYSTEM)	New/expanded requirement	New 2009 IMC definition; Air dispersion systems usually connect to the supplying air duct at a sidewall.
202 (APPROVED TESTING AGENCY)	Clarification for ease of use	Definition of APPROVED TESTING AGENCY modified by the Administrative and Enforcement Committee; change adopted in Mechanical Code to be consistent with Administrative Code.
202 (BREATHING ZONE)	New/expanded requirement	2009 IMC previously called this definition OCCUPIED ZONE. Committee adopted 2009 IMC definition.
202 (COMBINATION FIRE/SMOKE DAMPER)	New/expanded requirement	Committee agreed to adopt 2009 IMC definition as IMC was previously silent; consistent with BC Chapter 7 (Fire Protection Systems) definition.

202 (COMMERCIAL COOKING APPLIANCES)	Other	Committee relocated this definition to maintain alphabetical order. No change to current code.
202 (DECORATIVE SHROUD)	New/expanded requirement	New definition added from NFPA 211 for clarification purposes; consistent with the definitions in proposed FGC Chapter 2 and proposed BC Chapter 21.
202 (ENGINEERED SMOKE CONTROL SYSTEM)	New/expanded requirement	New definition added to be consistent with the proposed BC Chapter 09 and to clarify its use in MC Chapter 06.
202 (FIELD ERECTED BOILER)	New/expanded requirement	New definition added to address "FIELD ERECTED BOILERS" as per proposed requirements in MC Chapter 10.
202 (INTERLOCK)	New/expanded requirement	New 2009 IMC definition; makes the code clear on what type of control arrangement was actually intended.

202 (LABEL)	New/expanded requirement	New definition added by the Administrative and Enforcement Committee; change adopted in Mechanical Code to be consistent with Administrative Code.
202 (LABELED)	Clarification for ease of use	Definition of LABELED modified by the Administrative and Enforcement Committee; change adopted in Mechanical Code to be consistent with Administrative Code.
202 (LIMITED COMBUSTIBLE MATERIAL)	New/expanded requirement	Committee added new definition for LIMITED COMBUSTIBLE MATERIAL taken from RS 13-01; consistent with the proposed requirements in MC Chapter 09 and definition also included in proposed BC Chapter 12.
202 (NET OCCUPIABLE FLOOR AREA)	New/expanded requirement	New 2009 IMC definition; this is a measurable floor area used to calculate the breathing zone outdoor air requirements in proposed MC Chapter 4.

202 (OCCUPIABLE SPACE)	New/expanded requirement	New 2009 IMC definition; this is generally all of the spaces within a structure that can be used by people for daily activities.
202 (PUSH-FIT JOINTS)	New/expanded requirement	New 2009 IMC definition; these joints are relatively new technology intended primarily for use with copper pipe and tubing. They are considered to be a type of mechanical joint.
202 (REFRIGERANT)	New/expanded requirement	Committee recommended modifying this definition to agree with ASHRAE 15 and the NYC Fire Code.
202 (SLEEPING UNIT)	New/expanded requirement	Committee agreed to include the definition for SLEEPING UNIT; consistent with the proposed BC Chapter 2 and the NYC Housing Maintenance Code.
202 (ZONE)	New/expanded requirement	New 2009 IMC definition; a zone is an occupiable space or spaces that have the same characteristics and demands upon the HVAC systems.

Mechanical Code

Chapter 3

General Regulations

301.4	Listed and labeled	Clarification for ease of use	Mechanical appliances must be listed and labeled to show that they comply with the applicable national standards.
301.4 Exception	Listed and labeled. Exception	New/expanded requirement	New 2009 IMC exception; consistent with the refrigeration requirements of MC Chapter 11.

303.3	Gas Fired Appliances	New/expanded requirement	Appliances shall not be located in sleeping rooms, bathrooms, toilet rooms, storage closets or surgical rooms, or in a space that opens only into such rooms or spaces. Direct vent appliances permitted in non-sleeping rooms. 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 fireplaces are permitted in rooms that meet the required volume criteria.
303.4	Gas Fired Appliances	New/expanded requirement	Appliances must be protected from physical damage.

303.5.1	Gas Fired Appliances	Interagency consistency	Committee recommended this new section to clarify the use of gas fire appliances. The 350,000 BTU threshold is where the equipment changes from residential to commercial. This is also the threshold for having every boiler inspected by DOB, for registering a device with DEP emissions, and where the construction of the equipment is more substantial. Changes in this section are consistent with proposed sections BC 509 and FGC 303.5.1.
304.3.1	Gas Fired Appliances	New/expanded requirement	Combustion appliances shall be separated from garage occupancies by a vestibule providing a two-doorway separation unless the combustion is sealed.
304.4	Prohibited equipment and appliance location	New/expanded requirement	New 2009 IMC provision; the installation of appliances and equipment having an ignition source within Group H occupancies or control areas where combustible, flammable or explosive materials are used is prohibited regardless of elevation of the ignition source. Although this section is new for the 2009 IMC, the requirements were previously included in MC section 304.3. Because of the importance of not placing ignition sources in Group H occupancies, this requirement was placed in this independent section.

304.13	Rooftop access and obstructions	New/expanded requirement	New provision proposed by the committee; consistent with the rooftop access and obstructions requirements of the NYC Fire Code and the proposed FGC 306.7.
306.1	Rooftop access and obstructions	New/expanded requirement	Appliances shall be accessible for inspection, service, repair without disassembling fire resistive materials, venting systems or other equipment. A level working space at least 30 inches deep and 30 inches wide shall be provided in front of the control side to service an appliance. Clearance shall also be provided as required by the New York City Electrical Code.

306.5	Equipment and appliances on roofs or elevated structures	Clarification for ease of use	Committee agreed to modify the text for clarification purposes as it incorporates OSHA regulations and 2009 IBC language. Previously, the requirements in this section were in conflict with OSHA regulations. Changes are consistent with FGC 306.5
306.5.1	Sloped roofs	New/expanded requirement	2009 IMC change with committee recommendations; this section is intended to provide protection for service personnel and will facilitate inspection, servicing and repair of appliances and equipment. Changes are consistent with FGC 306.5.1.
307.1.1	Condensate disposal	New/expanded requirement	New provision proposed by the Plumbing Committee; this requirement to neutralized the pH of condensate to between 6 and 8. This section is consistent with FGC 307.2.1 and PC 314.1.1.

307.2.3 Item 4	Auxiliary and secondary drain systems	New/expanded requirement	Committee recommended deleting the reference to UL 508. Committee only found one UL 508 listed high-level condensate switch from one manufacturer; this device is a mechanical ball-float of much lower quality than the electronic level sensors commonly used in this application in NYC buildings. A water-level detection device shall be provided that will shut off the equipment served in the event that the primary drain is blocked.
307.2.3.1	Auxiliary and secondary drain systems	New/expanded requirement	On down-flow units and all other coils that do not have a secondary drain or provisions to install a secondary or auxiliary drain pan, a water-level monitoring device shall be installed inside the primary drain pan. This device shall shut off the equipment served in the event that the primary drain becomes restricted. Devices installed in the drain line shall not be permitted.
307.2.3.2	Auxiliary and secondary drain systems	New/expanded requirement	Where an appliance, equipment or insulation is subject to water damage when auxiliary drain pans fill, that portion of the appliance, equipment or insulation shall be installed above the rim of the pans.

Mechanical Code

Chapter 4

Ventilation

401.1	Scope	Clarification for ease of use	This section establishes the scope of the chapter and the basic requirements for where, when and how ventilation is to be provided. Smoke control systems, smoke venting, mechanical exhaust systems and combustion air supplies are not within the scope of this chapter.
401.2	Ventilation required	Clarification for ease of use	Text added as a clarification; Ventilation should be mandatory for habitable space as defined in Chapter 12 of the NYC Building Code. Consistent with the NYS Multiple Dwelling Law.
401.4	Item 3	Correct Cross References	Text recommended as per NYCDEP; includes a cross reference to MC 501.2.1 – exhaust outlets. Mechanical and gravity outdoor air intake openings shall be located not less than 10 feet from any contaminant source.
401.4	Item 4	Clarification for ease of use	This item addresses those cases where the required separation cannot be met. The code assumes that the contaminants are buoyant in air because of their temperature or specific gravity and they will rise above and away from the intake opening. Iintake openings shall be located not less than 3 feet below contaminant sources.

401.4	Item 6	New/expanded requirement	New requirement with NYC specific modifications to prevent floodwaters from entering a building through an air intake opening. Must comply with Appendix G of the NYCBC.
401.4	Exception Intake Openings Exception	Clarification for ease of use	Group R-3 occupancies are not required to comply with this section. Healthcare facilities must comply with the minimum requirements of the NYS Health Code.
402.1	General: Natural ventilation	Resolve discrepancy between sections	Inserted 'and habitable' as a clarification dictated by Chapter 12 of the NYC Building Code – Interior Environment.
403.3	Outdoor airflow rate Exception 2	Other	Committee recommended adding a requirement to create a transient space; 1968 NYC Building Code, 27-753, provision inadvertently omitted from the 2008 NYC Mechanical Code – 2 hour period.

401.4	Item 6	New/expanded requirement	New requirement with NYC specific modifications to prevent floodwaters from entering a building through an air intake opening. Must comply with Appendix G of the NYCBC.
401.4	Exception Intake Openings Exception	Clarification for ease of use	Group R-3 occupancies are not required to comply with this section. Healthcare facilities must comply with the minimum requirements of the NYS Health Code.
402.1	General: Natural ventilation	Resolve discrepancy between sections	Inserted 'and habitable' as a clarification dictated by Chapter 12 of the NYC Building Code – Interior Environment.
403.3	Outdoor airflow rate Exception 2	Other	Committee recommended adding a requirement to create a transient space; 1968 NYC Building Code, 27-753, provision inadvertently omitted from the 2008 NYC Mechanical Code – 2 hour period.

403.3	Exception 3.1 through 3.3	New/expanded requirement	Committee inserted new requirements for Demand Controlled Ventilation to align with ASHRAE 62.1-2007. Supported by REBNY; cost savings because the technology is inexpensive.
Table 403.3	Required Outdoor Ventilation Air	Clarification for ease of use	ICC deleted this table (Required Outdoor Ventilation Air) and replaced it with a new Table 403.3 (Minimum Ventilation Rates)
Table 403.3	Minimum Ventilation Rates	New/expanded requirement	Table 403.3 is used to determine the maximum occupant load of any room or space and it is this number that must be the basis for the design capacity of a mechanical ventilation system when the ventilation rate is based on the number of occupants. Based on ASHRAE 62.1-2007. Supported by REBNY; cost savings because the technology is inexpensive.
Table 403.3	Footnote i	New/expanded requirement	Footnote i was proposed by the Committee to clarify outdoor ventilation air requirements in R2 buildings less than 125 feet in height and for buildings 125 feet and greater; as new multiple dwellings are constructed in a tighter manner (less air in leakage) makeup air must be supplied when the exhaust exceeds a specified limit. 75 cfm was determined by infiltration rates as per the NYC Energy Conservation Code and air infiltration through the entry door. REBNY supported change; cost savings; energy efficient.

403.4	Demand Control Ventilation	New/expanded requirement	Provides means for reducing ventilation rates for short-term occupancies.
403.7	Ventilation Control for VAV systems	New/expanded requirement	Variable air volume air distribution systems, other than those designed to supply only 100-percent outdoor air, shall be provided with controls to regulate the flow of outdoor air.

Mechanical Code

Chapter 5

Exhaust Systems

501.2.1	Location of exhaust outlets	Clarification for ease of use	The 2008 NYCMC provisions for exhaust opening location used to be located in 401, but they have been appropriately moved to MC Chapter 5. This section details the requirements for the termination points of exhaust ducts; it provides distances that must be maintained, depending on the type of exhaust, and is more specific than the general requirement that the discharge of exhaust must not create a nuisance.
501.2.2	Exhaust opening protection	New/expanded requirement	New 2009 IMC provision; exhaust air terminations must be equipped with corrosion-resistant screens, grilles or louvers to prevent foreign objects (such as insects or debris) from entering the system or the building.
501.3	Pressure equalization	New/expanded requirement	2009 IMC provision with committee modifications; last sentence clarifies that you cannot use a window. The volume of air supplied to a space and the volume of air removed from a space must be approximately equal.
502.3	Battery-charging areas for powered vehicles and equipment	Clarification for ease of use	Committee modified this provision to remove the ambiguity for passenger and commercial vehicle charging stations.

502.6	Dry cleaning plants	Clarification for ease of use	Committee modified this provision to address dry cleaning plant separation requirements (previously included in the 1968 NYC Building Code 27-431.)
502.7.3.2	Recirculation of spray booth exhaust	New/expanded requirement	In the event of shutdown of the vapor concentration monitor, 100 percent of the air volume specified in Section 510 is automatically exhausted.
502.8.1.1	System requirements (Item 5)	New/expanded requirement	2009 IMC modification; because the density of vapor depends on the hazardous material in each case, the system must be designed to consider the vapor density of the chemicals being stored.
502.8.1.1	System requirements (Item 7)	New/expanded requirement	2009 IMC modification; hazardous vapors must not be recirculated back into the storage room or to any other portion of the building. This requirement prevents buildup of vapors over time to hazardous levels and also prevents contamination of other areas.

504.4	Dryer Exhaust	New Requirement	Multiple dryer installations shall not have a backdraft damper.
504.6.1	Dryer Exhaust	New Requirement	Minimum 4” dryer exhaust duct diameter.
504.6.2	Dryer Exhaust	New Requirement	Exhaust ducts shall be supported at 4-foot intervals. Insert end of the duct shall extend into the adjoining duct or fitting in the direction of airflow. Ducts shall not be joined with screws or similar fasteners that protrude into the inside of the duct.
504.6.4.1	Dryer Exhaust	New Requirement	Max 35 foot developed length.
504.6.4.2	Manufacturer ’s instructions	New/expanded requirement	New 2009 IMC provision; this section allows the 35 foot limit to be exceeded where longer exhaust duct lengths are allowed by the appliance manufacturer's instructions.

504.8	Common exhaust systems for clothes dryers located in multistory structures (Item 3)	New/expanded requirement	New 2009 IMC provision; Item 3 requires the shaft to be lined with rigid metal ductwork. The moisture from the dryer exhaust may be detrimental to the materials that make up the construction of the shaft. Gypsum board is commonly used to construct fire-resistance-rated shafts and requiring metal ductwork prevents the gypsum enclosure itself from serving as the exhaust passageway.
504.8	Common exhaust systems for clothes dryers located in multistory structures (Item 4)	New/expanded requirement	New 2009 IMC provision; Item 4 helps to reduce the effects of friction that may occur at offsets that in turn may reduce the airflow velocity within the shaft. Additionally, offsets could become a collection point for lint accumulation.
505.2	Makeup air required	New/expanded requirement	New 2009 IMC provision; this section requires a makeup air supply system at the prescribed threshold and further requires it to be tied to the exhaust system controls such that both systems operate simultaneously.

506.3.2.5	Grease duct test	New/expanded requirement	New 2009 IMC provision with committee modifications; this section was amended with MC Section 810.3 language to provide clarification for grease duct requirements. The light test was replaced with the smoke test because the 100 watt light bulb test is not adequate to show potential leaks under operating system static pressures. Additionally, the light test will not always reveal defects. Smoke test requirements were modified to appropriately reflect the requirements of a grease duct system. This change should not result in any additional cost burden.
506.3.6	Grease duct clearances (Exception 3)	New/expanded requirement	New 2009 IMC provision; this exception is applicable to field-applied grease duct enclosure systems (e.g. duct wrap systems) which have, as a part of their listing, a specific allowable clearance from the outside of the enclosure system to adjacent combustible materials.

506.3.10	Grease duct enclosure	New/expanded requirement	Expanded 2009 IMC requirement; a grease duct enclosure must serve only a single grease duct, and it must not contain any other ducts, piping or wiring. Considering the hazards associated with a grease duct and the expectation that there could be a fire within a grease duct, the grease duct enclosure can serve only a single grease duct.
506.3.10.1	Shaft enclosure	New/expanded requirement	New 2009 IMC provision; the reference to the Building Code for shaft construction means that the Building Code regulates the fire-resistance rating and construction of the assemblies that form the duct enclosure (shaft), whereas this code determines when and where an enclosure is required.
506.3.10.2	Field-applied grease duct enclosure	New/expanded requirement	New 2009 IMC provision; provides a second option for providing a duct enclosure: a field-applied grease duct enclosure. This system must be evaluated in accordance with ASTM E 2336.

506.3.10.3	Factory-built grease duct assemblies	New/expanded requirement	New 2009 IMC provision; provides a second option for providing a duct enclosure: a factory-built grease duct enclosure. This system must be evaluated in accordance with ASTM E 814 or UL 1479.
506.4.2	Type II terminations	New/expanded requirement	New 2009 IMC provision; this section provides prescriptive requirements for the termination of Type II exhaust systems.
507.2.1	Type I hoods	New/expanded requirement	2009 IMC provision with committee modifications; this section requires Type I hoods for medium-duty, heavy-duty, and extra heavy-duty cooking appliances that produce grease or smoke.
507.2.2	Type II hoods	New/expanded requirement	2009 IMC provision with committee modifications; this section requires Type II hoods for dishwashers and light-duty appliances that produce heat or moisture and do not produce grease or smoke, except where the heat or moisture loads are incorporated into the HVAC system.

507.13	Kitchen Exhaust Hoods	New requirements for Type I and Type II hoods	Defines requirements for Type I and Type II hoods serving extra heavy-duty appliances, heavy-duty appliances, medium duty appliances, light duty appliances and dishwashers.
508.1.1	Kitchen Exhaust Hood Make-Up Air	New requirements for make-up air supply temperature	Make-up air cannot be more than 10 degrees from room temperature unless the make-up air is part of a larger air conditioning system or the air does not make the space uncomfortable.

510.1	General (Hazardous Exhaust Systems)	New/expanded requirement	New 2009 IMC provision; the definition of "laboratories" provided in this section is intended to describe those environments that, unlike manufacturing operations that may use large quantities of chemicals on a constant basis, are characterized by the use of a wide variety of chemicals in very small quantities, and often for very short periods of time or an infrequent basis. These are operations in which standard laboratory exhaust practices provide significant "in duct" dilution, which prevent in-duct incompatible material reactions and buildup of flammable vapors.
510.4	Laboratory Exhaust	Lab Exhaust Systems Must be Independent	Not required when: All of the hazardous exhaust ductwork and other laboratory exhaust within both the occupied space and the shafts serve the same fire area, operate continuously and are under negative pressure while in operation. Each control branch has a flow regulating device. No perchloric acid hoods. Radioisotope hoods are equipped with filtration and/or carbon beds where required by the registered design professional. Biological safety cabinets are filtered.

510.7	Suppression required (Exception 3)	New/expanded requirement	2009 IMC modified this provision. Exception 3 recognizes that a fire suppression system within a laboratory hood exhaust ducts increases the potential for workers to be exposed to chemicals. The dilution that occurs in laboratory exhaust ducts, and the further dilution that occurs when exhaust ducts are manifolded together, reduce the need for suppression. Similar language used in NFPA 45.
511.1.1	Collectors and separators (Exception 1)	New/expanded requirement	New 2009 IMC exception; recognizes that in some buildings, locating the collector or separator outdoors results in having to use larger capacity systems and motors than would ordinarily be necessary, as well as installing long runs of duct that often must pass through fire-resistance-rated construction. This exception is necessary in order to avoid conflicts with the Fire Code and to apply the appropriate explosion protection standards for specific types of combustible dust-producing operations.

511.1.1	Collectors and separators (Exception 2)	New/expanded requirement	New 2009 IMC exception; allows combustible dust collectors in independent exhaust systems to be installed indoors. This exception is necessary in order to avoid conflicts with the Fire Code and to apply the appropriate explosion protection standards for specific types of combustible dust-producing operations.
511.1.3	Conveying systems exhaust discharge	New/expanded requirement	2009 IMC modified this provision; because of the potential fire and explosion hazard, dust, stock and refuse conveyor systems must discharge the solids and the transport medium (air) flow to a location on the exterior of the building. If equipment is provided that can reduce the contaminants to an acceptable level and the vapor concentrations are monitored, the exhaust system discharge is permitted to be recirculated. This will allow the designer more flexibility to employ energy recovery methods to save energy and reduce costs.
513.11	Power systems	New/expanded requirement	2009 IMC provision with committee modifications; this section requires isolation from normal building power systems via a 2-hour fire barrier or 2-hour horizontal assembly or both depending upon the location within the building. This increases the reliability and reduces the likelihood that a single event could remove both power supplies.

Mechanical Code

Chapter 6

Duct Systems

601.2	Air movement in corridors (Exception 4)	New/expanded requirement	New 2009 IMC modification; exception 4 recognizes that some rooms in health care facilities require positive pressurization to significantly reduce the spreading of germs and contaminants into the room.
601.3	Exits	New/expanded requirement	New 2009 IMC provision with committee modifications; where exit enclosures are ventilated by mechanical systems, the mechanical equipment and duct systems must be installed as required by this section. Heating, ventilating and air-conditioning (HVAC) systems serving an exit enclosure must not serve any other room or space.
603.7	Rigid duct penetrations	New/expanded requirement	New 2009 IMC provision with committee modifications; this section has an exception that allows ducts to penetrate the wall or ceiling separating a dwelling and a private garage without installing fire and smoke dampers. This exception only applies if the ducts are continuous, are a minimum of 26 gage galvanized sheet metal, and there are no openings in the ducts into the garage.

603.17.2	Prohibited locations	New/expanded requirement	New 2009 IMC provision with committee modifications; the Building Code requires nonabsorbent floor surfaces in toilet and bathing rooms, other than in private dwellings, including extending the surface of the wall at least 6 inches. This is required to facilitate cleaning on the floor surface. Placing an HVAC register or grille in the floor or the upturned extension will allow water to accumulate in the duct during normal cleaning. This moisture can promote the growth of mold and bacteria in the ducts, creating a health hazard for the occupants.
605.2.1	Standards for air-handling units	Incorporation of text as per Rule	This section was added per Local Law 72 of 2011, in relation to filtering soot from incoming air in buildings.
607.1.1	Ducts that penetrate fire-resistance-rated assemblies without dampers (Exception)	New/expanded requirement	Committee recommended carrying over the exception for ducts 20 square inches or less passing through fire-rated assemblies from the 1968 Building Code (RS 13-1, 3.3, 3.4.1 and 3-3.4.4) that were inadvertently omitted from the 2008 NYC Mechanical Code.

607.3.3.2 Also see – Buildings Bulletin 2014-004 regarding redundant smoke detectors no longer required by 607.3.2.1, item 1 (BC 716 not updated)	Smoke damper actuation	Other	The 1968 Code did not require a smoke detector in the duct or on both sides of the smoke barrier in which the smoke or fire/smoke damper was installed provided the space which the fire/smoke damper (FSD) was located was served by a supply air system smoke detector and return air or area detectors that automatically shut-down the supply system and all associated FSD closed. It was not the intent to change this in the 2008 Mechanical Code but appears to have been inadvertently added from the IMC, and Exception #1 re-enacts the intent of the 1968 code. In addition, smoke detectors located in the supply air system before any outlets shut-down the supply fan and all associated FSD so there will not be smoke migration or the need for additional duct smoke detectors. Deleted mention of Group B, Mix Use or other Group Classifications serving office and administration areas. Exception should be applicable to all group classifications. Approved by the NYC Fire Department.
607.3.3.3	Combination fire/smoke damper actuation	Other	The 1968 Code did not require a smoke detector in the duct or on both sides of the smoke barrier in which the smoke or fire/smoke damper was installed provided the space which the fire/smoke damper (FSD) was located was served by a supply air system smoke detector and return air or area detectors that automatically shut-down the supply system and all associated FSD closed. It was not the intent to change this in the 2008 Mechanical Code but appears to have been inadvertently added from the IMC, and the exemptions re-enact the intent of the 1968 code. In addition, smoke detectors located in the supply air system before any outlets shut-down the supply fan and all associated FSD so there will not be smoke migration or the need for additional duct smoke detectors. Deleted mention of Group B, Mix Use or other Group Classifications serving office and administration areas. Exemption should be applicable to all group classifications. Approved by the NYC Fire Department.

607.5.5	Shaft enclosures (Exception 8)	New/expanded requirement	Committee recommended this new provision because smoke dampers are redundant when exhaust fans are in operation.

Mechanical Code

Chapter 7

Combustion, Ventilation and Dilution Air

701: Chapter Heading	Combustion, Ventilation, and Dilution Air	Other: Consistency with the Fuel Gas Code	Proposed change to chapter heading to reflect Fuel Gas Code section 304; now reads 'Combustion, Ventilation and Dilution Air'.
701.2	Combustion, Ventilation, and dilution air required	Other: Consistency with the Fuel Gas Code	Retained 2008 NYCMC with modifications per the Fuel Gas Code. 'Outdoor Atmosphere' was removed due to multiple interpretations and industry confusion; requirement was clarified in MC 701.3.2. Required from outdoors for appliances > 350 MBH.
701.3.1	Makeup air for fuel burning devices	Other: Consistency with the Fuel Gas Code	New proposed section to NYCMC with modifications per Fuel Gas Code section 304.9.1. Section was added to further clarify the use of exhaust fans for ventilation.
701.3.2	Ventilation air for fuel burning devices	Other: Consistency with the Fuel Gas Code	New proposed section to NYCMC with modifications per Fuel Gas Code section 304.9.1. Section was added to further clarify the use of exhaust fans for ventilation.

701.5	Prohibited sources	Other: Consistency with the Fuel Gas Code.	Retained 2008 NYCMC with modifications per current DOB Boiler Division enforcement requirements.
703.1	All air from the outdoors	Other: Consistency with the Fuel Gas Code	Retained 2008 NYCMC language with modifications to clarify that a door opening could not be considered a direct opening from a boiler room.
706.1.1	Appliance interlock	Other: Consistency with the Fuel Gas Code	New proposed section to the NYCMC with modifications per Fuel Gas Code section 304.9.2. Included provision for appliance interlock within a mechanical air supply system.
708.1	Combustion Air Ducts Item 9	Other: Consistency with the Fuel Gas Code	New proposed section to the NYCMC with modification per Fuel Gas Code section 304.11 Item #7. Included provision to prohibit the remaining space surrounding a chimney or chimney liner to be used as to supply combustion, ventilation and dilution air.

708.1	Combustion Air Ducts Item 9	Other: Consistency with the Fuel Gas Code	New proposed section to the NYCMC with modification per Fuel Gas Code section 304.11 Item #7.
709.3	Caution sign	New/expanded requirement	New safety provision added requiring caution signs around combustion air openings to prevent it from being blocked or altered.

Mechanical Code

Chapter 8

Chimneys and Vents

801.2.1	Design	Clarification for ease of use	Committee modified section for clarification purposes; chimneys and vents are to be designed to resist the effects of condensation.
801.20	Termination requirements	Interagency consistency	Committee modified text; height of chimneys extending above the highest point of construction has been changed from 2 to 3 feet. This is to clarify a contradiction in the present 2008 NYCMC. Sizing as per NYC Department of Environmental Protection requirements.
801.21	Drains	Resolve discrepancy between sections	New committee recommended section requiring drains to remove rain water and condensation on chimneys and gas vents; consistent with PC 1002.
803.8	Vent connector construction	Resolve discrepancy between sections	Committee deleted current provision and text with modifications; consistent with FGC 503.10.2.4 and NFPA 211. Added requirements for non-residential low heat appliances.

804.1	Direct-vent terminations	Resolve discrepancy between sections	Committee modified 2009 IMC text; nine termination requirements were added to be consistent with the proposed NYCFGC Section 503.8.
804.2	Appliances with integral vents	Resolve discrepancy between sections	Committee modified 2009 IMC text; this section refers to appliances which have built-in gravity or power venting means and must be installed to comply with their listings and the manufacturer's installation instructions. In addition, nine termination requirements were included to be consistent with the proposed NYCFGC Section 503.8. These nine termination requirements are modified slightly to pertain to integral vents (vs. direct vent). The notable change includes Exception #2 and the use of "vent terminal" which is terminology used by the 2009 IMC.
804.2.1	[Terminal clearances] Reserved	Resolve discrepancy between sections	Committee deleted this section on termination clearance because the general termination requirements should be followed according to MC Section 804. This section is now RESERVED.

804.3.3	Termination - Mechanical Draft Systems	Resolve discrepancy between sections	Committee added "unless otherwise approved by the Commissioner." This allows for chimney extensions typically required by MC Section 801.1. These extensions occasionally use mechanical draft to ensure proper outlet pressure for the connected appliances.
804.3.4	Horizontal terminations	Resolve discrepancy between sections	Committee modified this section as it pertains to mechanical draft systems. Per current DOB practice/enforcement, horizontal terminations are only allowed for direct vent appliances or appliances with integral vents not appliances that take combustion air from the mechanical room.
804.3.5	Vertical terminations	Resolve discrepancy between sections	Committee modified this section on vertical terminations as general termination requirements should be followed according to MC Section 801.20.
804.3.8	Mechanical draft systems for manually fired appliances and fireplaces (Item 3)	New/expanded requirement	Committee added Carbon Monoxide detector; safety enhancement.

805.2	Solid fuel appliances	New/expanded requirement	2009 IMC modification; the requirements found in this section addresses specific solid fuel-burning appliances served by factory-built chimneys.
811.1 811.2 & 811.3	Exhaust pipe construction	New/expanded requirement Emergency & SB Generators	Committee added requirements for exhaust pipes that run inside of a building but outside of a generator room; consistent with the requirements of NYC Building Code.

Mechanical Code

Chapter 9

Specific Appliances, Fireplaces, Solid Fuel-Burning Equipment, and Noise Control Requirements

908.3.2	Outside (Cooling Towers) Exception 1	New/expanded requirement	A new exception was wadded to this section to address fill and drift eliminators that are made of limited combustible materials; carried over 1968 Building Code as it was missing from the 2008 NYCMC. *Limited Combustible Materials* is now a defined term proposed in MC Chapter 02.
915.1	General (Engine and Gas Turbine-Powered Equipment and Appliances)	New/expanded requirement	This section addresses liquid-fueled internal combustion engines and turbines. Exhaust and combustion air were added to ensure that the requirements for these specific items are met in accordance with this chapter, NFPA 37, and Mechanical Code chapters 7, 8, and 13.

928.2	Noise from exterior mechanical equipment	Clarification for ease of use	Committee modified this section by including cross references to the subsequent sections. For clarification the section title was amended by adding “Noise from exterior.”
928.2.1	Design and installation	Interagency consistency	Committee modified this item to be consistent with the NYC Noise Control Code as per NYC Department of Environmental Protection.
928.2.2	Operation	Interagency consistency	Committee modified this item to be consistent with the NYC Noise Control Code as per NYC Department of Environmental Protection.
Table 928.1(1)	Maximum Sound Power Levels Permitted For Exterior Mechanical Equipment Adjoining Buildings	Clarification for ease of use	Committee recommended deleting this table as it was inconsistent with the NYC Noise Control Code.

Table 928.1(2)	Noise Output Limitations for Exterior Mechanical Equipment Maximum Sound Pressure Level	Clarification for ease of use	Committee recommended deleting this table as it was inconsistent with the NYC Noise Control Code.
928.1.2	Noise Control Code	Clarification for ease of use	Committee recommended deleting this table as it is redundant; having a cross-reference to the NYC Noise Control Code is repetitive.
928.3.2	Refuse charging chutes	Clarification for ease of use	Minor editorial clarification recommended by committee; replaced the word "incinerator" charging chutes with "refuse" charging chutes, as directed by NYC Department of Environmental Protection.

928.3.4	Fans	Clarification for ease of use	Committee modified text; motors less 1/2 horse power do not generate enough vibration to warrant inclusion.
928.3.5	Pumps	New/expanded requirement	Committee modified text; changed minimum isolation efficiency percent from 85 to 90 to address vibration isolation for pumps.
928.3.6	Compressors	New/expanded requirement	Committee modified text; changed minimum isolation efficiency percent from 85 to 90 to address vibration isolation for compressors.
928.3.7	Cooling towers and fluid coolers	New/expanded requirement	Committee modified text; changed minimum isolation efficiency percent from 85 to 90 to address vibration isolation for cooling towers. Fluid coolers added to section to be consistent with 2009 IMC. The addition of a cutoff switch will eliminate vibration that is excessive enough to cause damage to the structure; it is a reasonable safety adaptation.

928.3.8	Evaporative condensers	New/expanded requirement	Committee modified text; changed minimum isolation efficiency percent from 85 to 90 to address vibration isolation for evaporative condensers. The addition of a cutoff switch will eliminate vibration that is excessive enough to cause damage to the structure; it is a reasonable safety adaptation.
928.3.10	Ceiling suspended packaged HVAC units with compressors	New/expanded requirement	New to code; this provision clarifies the requirements of HVAC units with compressors that are suspended from a structure. Safety enhancement.

Mechanical Code

Chapter 10

Boilers, Water Heaters And Pressure Vessels

1001.1	Scope	New/expanded requirement	Committee agreed to adopt 2009 IMC section with modifications to Exception #7. The words "or state" was removed as the state can opt to follow their own code.
1001.2	Thermal safety (spill) switches	New/expanded requirement	New to code; this provision requires a safety device to allow dilution air into chimneys and gas vents.
1002.1	General (Water Heaters)	Interagency consistency	Clarifies that the approval of oil-fired water heaters 350,00 Btu/h and above must be obtained by the New York City Department of Environmental Protection.
1002.2	Water heaters utilized for space heating & hot water	Update referenced standard	Water heaters used for heating the pressure vessel must be built to the ASME 'H' stamp requirements and must be approved by NYC Department of Environmental Protection.
1002.2.2	Temperature limitation over 140°F.	Interagency consistency	ICC and Committee clarified the correct reference standard: ANSI/ASSE 1017-2009 (Performance Requirements for Temperature Actuated Mixing Valves for Hot Water Distribution Systems over 140°F). These devices are used for controlling in-line water temperatures in domestic potable hot water systems and shall be installed at the hot water source. This section coordinates with NYC Plumbing Code Section 501.2.

1003.1	General (Pressure Vessels)	Update referenced standard	All pressure vessels must be designed and constructed in accordance with the ASME Boiler and Pressure Vessel Code. Last sentence was deleted due to redundancy since the first sentence was modified for clarification.
1003.2	Piping	Update referenced standard	All pressure vessels must be designed and constructed in accordance with the ASME Boiler and Pressure Vessel Code. This section addresses the requirements for the types of piping materials, joints, fittings, connections and devices associated with pressure vessels and their ancillary systems.
1003.3	Welding	Update referenced standard	Welding procedures, welders and all types of manual and machine arc and gas welding operations must comply with the ASME Boiler and Pressure Vessel Code and adequately replaces New York City Rules and Regulations for welder qualifications and certification requirements.
1004.1	Standards	Update referenced standard	Committee removed specific ASME sections so that the entire ASME code is followed, as applicable. Updated section with current NFPA 85 nomenclature, in addition to including NYC Department of Environmental Protection approval.
1004.1.1	Field erected boilers requirements	Clarification of text as per Bulletin	This provision was added to address the field-erected boiler industry for New York City. The content was derived from Buildings Bulletin 2011-25, comments from the Mechanical Committee, other industry experts, and technical advisors.

1004.2	Installation	Clarification for ease of use	Committee realized that many operating instructions are too large to be attached to the boiler and agreed that these instructions should just be located in the boiler room and be accessibly adequate.
1004.3	Working clearance	Clarification of text as per Bulletin	Committee modified text for clarity; working clearance is required around the equipment and appliances for retrofitting appliances.
1004.6	Boiler rooms and enclosures	Other: Consistency with the Plumbing Code	Committee inserted a cross-reference to the New York City Plumbing Code for consistency purposes.
1004.7	Operating adjustments and instructions	New/expanded requirement	Added a new requirement for a complete control diagram to be in located in the boiler room and to be readily accessible.
1006.6	Safety and relief valve discharge	Clarification for ease of use	Editorial change for ease of use.

1007.1	General (Boiler Low-Water Cutoff) Exception	Clarification for ease of use	Committee added a new exception for the installation of hot water boilers of limited heat input (size) to be installed with only one low water cut-off as opposed to the code requirement for two low-water cutoff controls. This is a cost savings as the industry could rely on the manufacturer's installations. For residential boiler < 350 MBH.
1007.1.1	High-pressure boiler	Clarification for ease of use	Committee deleted this section as this boiler design is not standard practice or offered by the boiler manufacturers. The design is addressed by ASME.
1009.1	Where required (Hot Water Boiler Expansion Tank)	New/expanded requirement	Committee added a lockable requirement for shutoff valves for consistency with MC 1205.6.1. All expansion tanks require valves for service. Safety enhancement
1011.1	Tests	Clarification for ease of use	Editorial changes for ease of use. 'CSD-1' standard was added for controls.
1011.2	Test gauges	Update referenced standard	Committee modified text for clarity; calibration procedure is required annually. ASME has criteria for calibration process.

1012.1	Maximum temperature	New/expanded requirement	Committee created this new provision to control the temperatures in rooms. The 104 degree F limit is in accordance with UL-508 (Standard for Industrial Control Equipment).

Mechanical Code

Chapter 11

Refrigeration

1101.1	Scope	New/expanded requirement	Committee recommends amending the scope to reflect the fact that this chapter also applies to the alteration of refrigeration systems and the substitution of refrigerants in existing refrigeration systems having a different safety group classification. This scope is consistent with ASHRAE 15 as well as the 1968 Building Code with regard to refrigeration systems.
1102.2	Refrigerants	Interagency consistency	Committee amended this section to require that use of a refrigerant not listed in the new Table 1103.1 may be used only with the approval of the NYC Department of Buildings, and for other than Group A-1 refrigerants, the concurrence of the Fire Department.
Table 1103.1	Refrigerant Data and Safety Classifications	New/expanded requirement	Committee agreed to adopt a new MC Table 1103.1 which is based on ASHRAE 34.
1105.9	Emergency pressure control system	New/expanded requirement	Committee amended this section to reflect that these requirements apply to any system using a refrigerant that is other than a Group A-1 refrigerant (non-flammable and non-toxic). Consistent with the NYC Fire Code.

1105.9.2	Automatic emergency stop	New/expanded requirement	Committee amended this section based on the NYC Fire Department recommendations; a limit was established for systems containing more than 200 pounds of refrigerant which the limit at which a FDNY licensed operator is required.
1105.12	Storing refrigerant	New/expanded requirement	Committee modified this section by removing the storage facility as it is redundant.
1107.1.1	Protection of refrigerant piping	New/expanded requirement	Committee added this new provision to provide physical protection of refrigerant piping. Consistent with ASHRAE 15.
1107.2	Piping location	New/expanded requirement	Committee added this new provision to provide physical protection of refrigerant piping. Consistent with ASHRAE 15.
1107.2.1	Piping in public corridors	New/expanded requirement	Committee added this new provision to provide physical protection of refrigerant piping. Consistent with ASHRAE 15. "Public corridor" was added to provide clarification on refrigerant piping located in a multi-tenant corridor.

1107.2.2	Piping in concrete floors	New/expanded requirement	Committee added this new provision to help prevent plan reviewers and installers from overlooking a few or the more important requirements contained within the standard. Consistent with ASHRAE 15.
1107.2.3	Refrigerant piping penetrations	New/expanded requirement	Committee added this new provision to help prevent plan reviewers and installers from overlooking a few or the more important requirements contained within the standard. Consistent with ASHRAE 15.

Mechanical Code

Chapter 12

Hydronic Piping

1202.1	Piping	Update referenced standard	Committee modified this section to refer to the entire 1202, as the referenced standards were updated throughout.
1203.1.1	Joints between different piping materials	Clarification for ease of use	When joints between different piping materials are used, they must be evaluated and shown to be compatible with pipe material and working fluid. They must also be rated for the maximum operating conditions of the hydronic system.
1203.3.1	Brazed joints	Update referenced standard	Brass tubing and pipe, and copper or copper-alloy tubing and pipe, can be joined by brazing. Committee updated code to the national standard.
1203.3.6	Welded Joints	Update referenced standard	A welded joint uses filler metals of the same material as the pipe or fitting being welded and the welding temperatures reach the melting point of the workpiece. Committee clarified the appropriate use of material standards.
1203.16	Polypropylene (PP) Plastic	New/expanded requirement	ICC added new provision; the fitting manufacturer's installation instructions must be followed when making connections for polypropylene (PP) pipe.

1205.1.6	Expansion tanks	Clarification for ease of use	A shutoff valve is required on the connection to any nondiaphragm expansion tank; required for service.
1209.5	Radiant Floors	New Requirement	Slab on Grade – R-5 insulation beneath the piping Suspended floor applications – R-11 below pipe Thermal break where a heated slab meets a foundation wall or other conductive slab.
1210.1	Scope (High-Pressure Steam and High Temperature Hot Water Piping Systems)	New/expanded requirement	Committee added new language to section 1210 to include high temperature hot water at pressures in excess of 160 psi and temperatures in excess of 250 degrees.
1210.2.1	Design Item 3	New/expanded requirement	Committee recommends the inclusion of Safety Shutoff Valves, allowing for additional safety devices.

Mechanical Code

Chapter 13

Fuel Oil Piping

1301.5	Tanks abandoned or removed	New/expanded requirement	ICC added new safety provision; Section 3404 of the NYC Fire Code provides the requirements for abandoning or removing fuel oil tanks. Exterior fill piping has to be removed due to the potential danger that hundreds of gallons of fuel oil could be accidentally delivered to a facility that did not request it.
1303.1	General (Joints and Connections)	New/expanded requirement	Joining and connecting methods and materials must be compatible with the piping used and must be approved for use in fuel-oil system applications. The 750º F minimum is the melting temperature of commercially available gasket material only. This requirement is the result of numerous discussions between DOB and FDNY.
1305.6.5	Terminal Opening	Clarification for ease of use	Committee and DOB recommended modification; "fuel oil pipe" was changed to "volatile oil pipe" as this is a clarification to prevent the mixing of fuels which may result in a fire.
1305.8.3	Tanks above the lowest floor	New/expanded requirement	Committee added a cross reference to NFPA 30 for normal and emergency vent sizing. Safety enhancement.
1305.9.1	Shaft enclosure	New/expanded requirement for F.O. risers	Committee modified shaft enclosure provision to permit multiple systems within multiple floors. Cost savings.

1305.9.3	Horizontal offsets	Clarification for ease of use	Committee clarified requirements for shaft enclosures and pipes within pipes.
1305.13.2	Above ground; on the lowest floor inside a building; Item 3: Ventilation	New/expanded requirement	Committee provided additional safety and ventilation on the lowest floor similar to the provisions for tanks above the lowest floor, and clarified containment capacity, and added enclosure & fire-extinguishing requirements.
1305.13.3 & 1305.13.4 (outside bldgs.)	Above ground; above the lowest floor inside a building; Item 5: Containment	New/expanded requirement	Committee clarified the containment capacity requirements for fuel-oil tanks, fuel-oil burning equipment, and related equipment to capture any leakage of fuel oil.

Mechanical Code

Chapter 14

Solar Systems

1402.1	Access & Obstructions	Interagency consistency	Added a cross reference to be consistent with the New York City Fire Code.

Mechanical Code

Appendix A

Combustion Air Openings and Chimney Connector Pass-Throughs

Figure A-4.1	All Air From Outdoors Through A Single Duct or Direct Opening	Resolve discrepancy between sections	Added a diagram and note for single opening method, to be consistent with Fuel Gas Code (Section 304.6.2). Also consistent with the text modifications made to the proposed MC Chapter 07 (one sq. in. per 3 MBH).

Fuel Gas Code

Chapter 2

Definitions

202 (APPLIANCE [EQUIPMENT)	Global change in terminology	For the application of the Fuel Gas code provisions, the terms "appliance" and "equipment" are not interchangeable. The term "appliance" generally refers to residential- and commercial-type utilization equipment that is manufactured in standardized sizes or types; it is generally not associated with industrial-type equipment.
202 (CHIMNEY CONNECTOR)	Clarification for ease of use	Committee modified ICC definition by deleting "or duct." Pipe is later defined in the section and general enough to include a duct. Definition consistent with Mechanical Code.
202 (EQUIPMENT)	Global change in terminology	The term "equipment does not refer to or describe anything that is defined as an "Appliance," despite the fact that some appliances are commonly referred to in the field as "pieces of equipment." The term "equipment" includes control devices, pressure regulators, valves, appliance appurtences, gas connectors, power exhausters, and a multitude of other devices that do not fit the description of "appliance."
202 (LEAK CHECK)	New/expanded requirement	New definition in 2009 IFGC added by the committee; a leak check is not the same as the pressure test required in MC Chapter 4.
202 (POINT OF DELIVERY)	Clarification for ease of use	Mechanical Committee agreed with the Plumbing Committee to include this definition; revised to match point of delivery with utility company.

202 (REGULATOR, MEDIUM-PRESSURE)	New/expanded requirement	New 2009 IFGC definition; MP regulators are used to reduce the service pressure to a pressure suitable for delivery to the gas appliances where the appliance regulator may further reduce the pressure.
202 (VALVE: Appliance shutoff)	New/expanded requirement	New 2009 IFGC definition; makes it clear that the primary purpose of an appliance shutoff valve is not related to the emergency shutoff of the appliance.
202 (VENT PIPING: Breather)	New/expanded requirement	New 2009 IFGC definition; a breather vent is distinct from a relief vent and allows the cavity on the air side of the regulator diaphragm to "breathe" by letting air in and out as the diaphragm moves with the regulator housing.
202 (VENT PIPING: Relief)	New/expanded requirement	New 2009 IFGC definition; Relief devices release fuel gas under emergency conditions to prevent over-pressurizing the piping system being monitored and protected.

Fuel Gas Code

Chapter 3

General Regulations

301.7	Fuel Types	New/expanded requirement	New 2009 IFGC provision; appliances are usually designed by the manufacturer to operate on one specifically designated type of fuel. The fuel used in the appliance test must be the type of fuel specified by the manufacturer.
301.7.1	Appliance fuel conversion	New/expanded requirement	New 2009 IFGC subsection; safety measure; a mismatch between an appliance and a fuel will create an extremely hazardous condition that can be avoided by examining the appliance label.
303.3	Prohibited locations	New/expanded requirement	Committee amended this section to coordinate with BC 508.2.4 (Separation of Occupancies), BC 509.4 (Incidental Uses), and MC 303.3 (Prohibited locations). Committee recognized that 350,000 but per hour is the industry standard cut-off for installation in noncommercial applications and consistent with DOB Boiler division regulations.
303.5.1	Gas Fired Appliances	New/expanded requirement	Committee amended this section to coordinate with BC 508.2.4 (Separation of Occupancies), BC 509.4 (Incidental Uses), and MC 303.3 (Prohibited locations). Committee recognized that 350,000 but per hour is the industry standard cut-off for installation in noncommercial applications and consistent with DOB Boiler division regulations.

304.1	General (Combustion, Ventilation and Dilution Air)	New/expanded requirement	2009 IFGC modifications with committee recommendations; terminology change (equipment to appliance). Last sentence added to be consistent with the requirements of MC Chapter 7.
304.4	Circulation of air	Other: Consistency with the Mechanical Code	New proposed section to NYCFGC with modifications per Mechanical Code section 701.3. Section was added to further clarify the use of exhaust fans for ventilation.
304.4.2	Ventilation air for fuel burning devices	Other: Consistency with the Mechanical Code	New proposed section to NYCFGC with modifications per Mechanical Code section 701.3.1. Section was added to further clarify the use of exhaust fans for ventilation.
304.4.3	Prohibited sources+	Other: Consistency with the Mechanical Code	New proposed section to NYCFGC with modifications per Fuel Gas Code section 703.3.2. Section was added to further clarify the use of exhaust fans for ventilation.

304.10	Opening Obstructions, Locations, and Protection	Other: Consistency with the Mechanical Code	Committee proposed deleting this section and replacing it with similar text from the proposed MC Section 709.2 (dampered openings).
304.10.1	Dampered openings	Other: Consistency with the Mechanical Code	Committee proposed deleting this section and replacing it with similar text from the proposed MC Section 709.3 (Caution sign).
304.10.2	Caution sign	Other: Consistency with the Mechanical Code	Committee proposed deleting this section and replacing it with similar text from the proposed MC Section 710.1 (General-Opening Location and Protection). Added safety measures.
304.10.3	Opening Location and Protection	Other: Consistency with the Mechanical Code	Committee proposed new text to be consistent with MC Sections 401.5 and 401.6.

305.3	Elevation of ignition source Exception	New/expanded requirement	2009 IFGC modification; this exception recognizes that new technology exists which allows appliances, such as water heaters, to be tested and listed as being flammable-vapor-ignition resistant and suitable for installation without the 18-inch elevation requirement.
305.3.1	Installation in residential garages	New/expanded requirement	New 2009 IFGC provision; this section will effectively prohibit the installation of most furnaces, boilers, space heaters, clothes dryers, and some water heaters directly on the floor of residential garages.
305.3.2	Parking garages	New/expanded requirement	New 2009 IFGC provision; the exception recognizes that appliances that are suspended 8 feet or more above the floor are installed in accordance with FGC Section 305.3 and NFPA 30A are not likely sources of ignition and therefore, no doors are necessary for installation.
306.5	Equipment and appliances on roofs or elevated structures	New/expanded requirement	Committee modified text as it incorporates OSHA requirements and 2009 IBC language. Consistent with the modifications made to MC Section 306.5.

307.2.1	Condensate disposal	New/expanded requirement	Committee added this provision for corrosion protection. This section is consistent with PC Section 314.1.1 and MC Section 307.1.1.
307.3	Drain pipe materials and sizes	New/expanded requirement	2009 IFGC modifications with committee recommendations to include NYC Code references. Polybutylene was brought back into all 3 Codes (PC, FGC, and MC) to be consistent with the 2009 I-Codes. Condensate drains must be constructed of a material specified in this section and must be corrosion resistant.

Fuel Gas Code

Chapter 5

Chimneys and Vents

501.2.1	Design	New/expanded requirement	Committee modified this section to clarify that chimneys and vents are to be designed to resist the effects of condensation that would cause deterioration.
503.5.6.1	Chimney Lining: Exception	New/expanded requirement	The 2009 IFGC modified the exception; it is intended to allow an unlined chimney to serve a new appliance that is installed to replace a previously served appliance if the new appliance does not create any different operating conditions in the chimney. Before the exception could ever be applied, the chimney would have to be inspected and determined to be clear, clean, free of obstructions, safe for the intended use and properly sized for the appliances served.
503.6.4	Gas vent terminations	New/expanded requirement	2009 IFGC clarification; this section duplicates typical vent manufacturer's instructions and emphasizes that a vent is a system of components that are all necessary for proper functioning. It is a common misapplication for code users to apply chimney termination height requirements to vents, thereby causing vents to extend above roofs much higher than required in many cases.

503.8	Venting system termination location	Resolve discrepancy between sections	Committee modified this section, specifically noting Exception 3 as it was made to be consistent with current DOB practice/enforcement. The current code exception #3 was deleted as it became redundant when the new #3 was modified. The Fuel Gas Code does not differentiate between direct, integral, mechanical venting (same as MC 804).
505.1.2	Interlock requirements	New/expanded requirement	Committee added interlock requirements as a safety measure. Coordinates with MC Section 507 (Commercial Kitchen Hoods).
508.1	Exhaust pipe construction	New/expanded requirement	Committee added requirements for exhaust pipes that run inside of a building but outside of a generator room; consistent with the requirements of NYC Building Code and proposed MC Section 811.

Fuel Gas Code

Chapter 6

Specific Appliances

614.6	Domestic clothes dryer exhaust systems	New/expanded requirement	2009 IFGC expanded requirement; an installation complying with the manufacturer's installation instructions is required, except where the code requirements are more stringent. Therefore, the clothes dryer ducts must not be less than 4 inches in diameter.
614.6.1	Material and size	New/expanded requirement	2009 IFGC expanded requirement and committee modifications; a 4-inch metal duct (minimum) is the basis for the design of the appliance exhaust system.
614.6.5.2	Manufacturer’s instructions	New/expanded requirement	2009 IFGC expanded requirement; this section allows the 35-foot limit of the previous section to be exceeded where longer exhaust duct lengths are allowed by the appliance manufacturer's instructions.
614.8	Common exhaust systems for clothes dryers located in multistory structures	New/expanded requirement	Added construction requirements for common exhaust systems to serve clothes dryers.

618.8	Ducted return air extended outside of furnace room	New/expanded requirement	New 2009 IFGC provision; the intent is to prevent a furnace room, closet, alcove, etc. from developing a negative pressure with respect to the outside of the enclosure. If none of the appliances in the closet are fuel fired, this design is harmless, but, a real hazard is created if any are fuel fired.
623.2.1	Gas Barbeque grills	Interagency consistency	New section added by the committee to be consistent with the NYC Fire Code; Fire Code Section 307.5 regulates barbeque grills on residential premises, to be 10 feet from combustibles.
623.7	Domestic hood Ventilation	New/expanded requirement	2009 IFGC clarification; this section addresses the fire hazard created by having hot surfaces, open flames and, possibly, a cooking fire located under combustible cabinets, soffits, etc., and also under metal cabinets with combustible contents.
624.2	Water heaters utilized for space heating	New/expanded requirement	Water heaters used for heating the pressure vessel must be built to the ASME 'H' stamp requirements. Consistent with NYC Department of Environmental Protection and the New York City Plumbing Code.

Fuel Gas Code

Chapter 7

Gaseous Hydrogen Systems

701.1	Scope (Gaseous Hydrogen Systems)	New/expanded requirement	New provision added by the committee referencing NYC Fire Code chapters; reduces the risk posed by the inadvertent rupture of a pressure vessel and release of its hydrogen gas component or the leakage of the flammable gas associated with a piping rupture. NYCFC Chapter 30 governs the storage, handling, and use of compressed gases. NYCFC Chapter 35 governs the storage, handling, and use of flammable gases. NYCFC Chapter 27 governs the storage, handling, use, and transportation of hazardous materials.
701.2	Permits	New/expanded requirement	New provision added by the committee; this section refers to the applicable administrative rules in the NYC Construction Codes and the NYC Fire Code governing the issuance, suspension, renewal or modification of a permit for work affecting gaseous hydrogen service systems.

Local Laws 99 (Intro 1089-A) and 101 (Intro 1099-A)

99 – 2013 (Intro 1089-A)	1305.11.1.3	Fuel Oil Storage	New/expanded requirement	Permits maximum fuel oil storage capacity of 330 gallons to be increased to 3,000 gallons on the lowest story having its floor above the design 100 or 500-year flood elevation, provided each tank is limited to the quantity specified in the law and enclosed in a separate 3-hour rated vault.
101 – 2013 (Intro 1099-A)	501.2.2.1	Preventing Wind Damage	New requirement	Requires all exterior louvers for exhaust systems to either receive an A rating per AMCA Standard 550 for wind-driven rain at 50 mph and 8 in. / hr., or be installed on a waterproofed plenum equipped with a drain system.