CHAPTER 9
SPECIFIC APPLIANCES, FIREPLACES AND SOLID FUEL-BURNING EQUIPMENT

SECTION MC 901
GENERAL
901.1 Scope. This chapter shall govern the approval, design, installation, construction, maintenance, alteration and repair of the appliances and equipment specifically identified herein and factory-built fireplaces. The approval, design, installation, construction, maintenance, alteration and repair of gas-fired appliances shall be regulated by the New York City Fuel Gas Code.

901.2 General. The requirements of this chapter shall apply to the mechanical equipment and appliances regulated by this chapter, in addition to the other requirements of this code, and installed in accordance with the requirements of NFPA 31, NFPA 54 and NFPA 211.

901.3 Hazardous locations. Fireplaces and solid fuel-burning appliances shall not be installed in hazardous locations.

901.4 Fireplace accessories. Listed fireplace accessories shall be installed in accordance with the conditions of the listing and the manufacturer’s installation instructions.

901.5 Inspection of solid fuel-burning heating appliances, chimneys and flues. Inspections of solid fuel-burning heating appliances, chimneys and flues shall be in accordance with the New York City Building Code.

901.6 Fireplaces. Fireplaces (solid-fuel-type or ANSI Z21.50) shall be installed with tight-fitting noncombustible fireplace doors to control infiltration losses in construction types listed here:

1. Masonry or factory-built fireplaces designed to allow an open burn.
2. Decorative appliances (ANSI Z21.60 gas-log style unit) installed in a vented solid fuel fireplace.

Fireplaces shall be provided with a source of combustion air as required by the fireplace construction provisions of the New York City Building Code and Chapter 7 of this code.

SECTION MC 902
MASONRY FIREPLACES

902.1 General. Masonry fireplaces shall be constructed in accordance with the New York City Building Code.

SECTION MC 903
FACTORY-builtin FIREPLACES

903.1 General. Factory-built fireplaces shall be listed and labeled and shall be installed in accordance with the conditions of the listing. Factory-built fireplaces shall be tested in accordance with UL 127.

903.2 Hearth extensions. Hearth extensions of approved factory-built fireplaces and fireplace stoves shall be installed in accordance with the listing of the fireplace. The hearth extension shall be readily distinguishable from the surrounding floor area.

903.3 Unvented gas log heaters. The installation of unvented gas-fired space heaters, gas stoves, gas logs, gas fireplaces and gas fireplace inserts is prohibited.

903.4 Flues. Separate flues shall be provided for every fireplace and fireplace stove.

903.5 Combustion air supply. All installations of factory-built fireplaces shall comply with the requirements of the Energy Conservation Construction Code of New York State concerning combustion air supply.

SECTION MC 904
PELLET FUEL-BURNING APPLIANCES

904.1 General. Pellet fuel-burning appliances shall be listed and labeled and shall be installed in accordance with the terms of the listing. If permitted, such appliances shall be operated in accordance with the New York City Air Pollution Control Code.

SECTION MC 905
FIREPLACE STOVES AND ROOM HEATERS

905.1 General. Fireplace stoves and solid-fuel-type room heaters shall be listed and labeled and shall be installed in accordance with the conditions of the listing. Fireplace stoves shall be tested in accordance with UL 737. Solid-fuel-type room heaters shall be tested in accordance with UL 1482. Fireplace inserts intended for installation in fireplaces shall be listed and labeled in accordance with the requirements of UL 1482 and shall be installed in accordance with the manufacturer’s installation instructions.

905.2 Connection to fireplace. The connection of solid fuel appliances to chimney flues serving fireplaces shall comply with Sections 801.7 and 801.10.

905.3 Air pollution. All fireplace stoves and room heaters shall comply with the requirements of the New York City Air Pollution Control Code.

905.4 Combustion air supply. All fireplace stoves and room heaters shall comply with the requirements of the Energy Conservation Construction Code of New York State concerning combustion air supply.

905.5 Flues. Separate flues and independent combustion air source shall be provided for every fireplace stove and room...
SPECIFIC APPLIANCES, FIREPLACES AND SOLID FUEL-BURNING EQUIPMENT

heater. Combustion air shall be provided in accordance with the manufacturer’s recommendations and Chapter 7.

SECTION MC 906
FACTORY-BUILT BARBECUE APPLIANCES

906.1 General. Factory-built barbecue appliances shall be of an approved type and shall be installed in accordance with the manufacturer’s installation instructions, this chapter and Chapters 3, 5, 7, 8 and the New York City Fuel Gas Code. All provisions for the construction and installation of fireplaces shall be complied within the construction and installation of barbecue grills.

SECTION MC 907
INCINERATORS AND CREMATORIES

907.1 General. Incinerators and crematories shall be listed and labeled in accordance with UL 791 and NFPA 82 and shall be installed in accordance with the manufacturer’s installation instructions.

907.2 Compliance. All incinerators and crematories shall be installed, altered and maintained in buildings in conformity with the applicable provisions of the Administrative Code and the New York City Air Pollution Control Code.

SECTION MC 908
COOLING TOWERS, EVAPORATIVE CONDENSERS AND FLUID COOLERS

908.1 General. A cooling tower used in conjunction with an air-conditioning appliance shall be installed in accordance with the manufacturer’s installation instructions.

908.2 Access. Cooling towers, evaporative condensers and fluid coolers shall be provided with ready access.

908.3 Location. Cooling towers, evaporative condensers and fluid coolers shall be located to prevent the discharge vapor plumes from entering occupied spaces. Plume discharges shall be not less than 5 feet (1524 mm) above or 20 feet (6096 mm) away from any ventilation inlet to a building. Location on the property shall be as required for buildings in accordance with the New York City Building Code.

908.3.1 Indoor. Cooling towers, evaporative condensers and fluid coolers located inside of buildings shall be constructed of noncombustible materials including fill and drift eliminators.

908.3.2 Outside. Cooling towers shall be constructed of noncombustible materials.

Exception: Fill and drift eliminators may be made of limited combustibility materials provided all the following conditions are met:

1. The cooling tower is located on a building in construction Group 1-A or 1-B of the New York City Building Code.

2. The cooling tower, fill and drift eliminators are located at least 30 feet (9144 mm) away from windows or fresh air intakes which are at an elevation above the roof on which the cooling tower is located, whether in the same building or in an adjoining building.

3. The cooling tower is located not less than 15 feet (4572 mm) from the lot line.

4. The cooling tower is located not less than 10 feet (3048 mm) from any chimney, except that the distance shall not be less than 20 feet (6096 mm) from a chimney venting products of combustion other than from gas- or oil-fired appliances, whether on the same or an adjoining building.

908.4 Support and anchorage. Supports for cooling towers, evaporative condensers and fluid coolers shall be designed in accordance with the New York City Building Code. Seismic restraints shall be as required by the New York City Building Code. Adequate vibration isolation shall be provided in accordance with the manufacturer’s installation guidelines and as required for the supporting structure, and in accordance with the following:

908.4.1 Cooling towers. All moving parts of cooling towers located on a roof or floor other than a floor on grade shall be installed on vibration isolators providing a minimum isolation efficiency of 85 percent at fan rotor rpm with a maximum static deflection of 4 inches (102 mm). Each isolator shall incorporate a leveling device and a resilient pad having a minimum thickness of 1/4 inch (6 mm).

908.4.2 Evaporative condensers. Evaporative and air cooled condensers located on a roof or floor other than a floor on grade shall be mounted on vibration isolators providing a minimum isolation efficiency of 85 percent at fan rotor rpm with a maximum static deflection of 4 inches (102 mm). Each isolator shall incorporate a leveling device and a resilient pad having a minimum thickness of 1/4 inch (6 mm).

908.5 Water supply. Water supplies and protection shall be as required by the New York City Plumbing Code.

908.6 Drainage. Drains, overflows and blowdown provisions shall be indirectly connected to an approved disposal location. Discharge of chemical waste shall be approved by the appropriate regulatory authority.

908.7 Refrigerants and hazardous fluids. Heat exchange equipment that contains a refrigerant and that is part of a closed refrigeration system shall comply with Chapter 11. Heat exchange equipment containing heat transfer fluids which are combustible or hazardous shall comply with the New York City Fire Code. Flammable heat transfer fluids are prohibited.

SECTION MC 909
VENTED WALL FURNACES

909.1 General. Vented wall furnaces shall be installed in accordance with their listing and the manufacturer’s installation instructions. Oil-fired furnaces shall be tested in accordance with UL 730.

909.2 Location. Vented wall furnaces shall be located so as not to cause a fire hazard to walls, floors, combustible furnishings
or doors. Vented wall furnaces installed between bathrooms and adjoining rooms shall not circulate air from bathrooms to other parts of the building.

909.3 Door swing. Vented wall furnaces shall be located so that a door cannot swing within 12 inches (305 mm) of an air inlet or air outlet of such furnace measured at right angles to the opening. Doorstops or door closers shall not be installed to obtain this clearance.

909.4 Ducts prohibited. Ducts shall not be attached to wall furnaces. Casing extension boots shall not be installed unless listed as part of the appliance.

909.5 Manual shutoff valve. A manual shutoff valve shall be installed ahead of all controls.

909.6 Access. Vented wall furnaces shall be provided with access for cleaning of heating surfaces, removal of burners, replacement of sections, motors, controls, filters and other working parts, and for adjustments and lubrication of parts requiring such attention. Panels, grilles and access doors that must be removed for normal servicing operations shall not be attached to the building construction.

SECTION MC 910
FLOOR FURNACES

910.1 General. Floor furnaces shall be installed in accordance with their listing and the manufacturer’s installation instructions. Oil-fired furnaces shall be tested in accordance with UL 729. Unvented floor furnaces are prohibited.

910.2 Placement. Floor furnaces shall not be installed in any corridor, in the floor of any aisle or passageway of any auditorium, public hall, place of assembly, or in any egress element from any such room or space.

With the exception of wall register models, a floor furnace shall not be placed closer than 6 inches (152 mm) to the nearest wall, and wall register models shall not be placed closer than 6 inches (152 mm) to a corner.

The furnace shall be placed such that a drapery or similar combustible object will not be nearer than 12 inches (305 mm) to any portion of the register of the furnace. Floor furnaces shall not be installed in concrete floor construction built on grade. The controlling thermostat for a floor furnace shall be located within the same room or space as the floor furnace or shall be located in an adjacent room or space that is permanently open to the room or space containing the floor furnace. Floor furnaces shall be located so as to be accessible. Floor furnaces shall be installed only in floors of noncombustible construction having at least a 2-hour fire rating, except as where required for one- and two-family dwellings.

910.3 Bracing. The floor around the furnace shall be braced and headed with a support framework design in accordance with the New York City Building Code.

910.4 Clearance. The lowest portion of the floor furnace shall have not less than a 6-inch (152 mm) clearance from the grade level; except where the lower 6-inch (152 mm) portion of the floor furnace is sealed by the manufacturer to prevent entrance of water, the minimum clearance shall be reduced to not less than 2 inches (51 mm). Where these clearances are not present, the ground below and to the sides shall be excavated to form a pit under the furnace so that the required clearance is provided beneath the lowest portion of the furnace. A 12-inch (305 mm) minimum clearance shall be provided on all sides except the control side, which shall have an 18-inch (457 mm) minimum clearance.

910.5 Enclosures. Enclosures of floor furnaces shall be constructed entirely of noncombustible materials with a fire-resistance rating of at least 1 hour and shall be provided with adequate outdoor air to ensure proper combustion. The enclosure shall be provided with adequate means of access for serving the furnace.

910.6 Duct temperature. The outlet duct temperature of warm air heating furnaces shall not be greater than 250°F (121°C).

910.7 One- and two-family dwellings. Floor furnace enclosures shall be constructed of noncombustible materials with a fire-resistance rating of at least 1 hour. Means shall be provided for supporting the furnace when the grille is removed. Clearances shall be provided as per NFPA 54.

SECTION MC 911
DUCT FURNACES

911.1 General. Duct furnaces shall be installed in accordance with the manufacturer’s installation instructions. Electric furnaces shall be tested in accordance with UL 1995. Unvented furnaces are prohibited.

911.2 Access panels. Ducts connected to duct furnaces shall have removable access panels on both the upstream and downstream sides of the furnace.

911.3 Location of draft hood and controls. The controls, combustion air inlets and draft hoods for duct furnaces shall be located outside of the ducts. The draft hood shall be located in the same enclosure from which combustion air is taken.

911.4 Circulating air. Where a duct furnace is installed so that supply ducts convey air to areas outside the space containing the furnace, the return air shall also be conveyed by a duct(s) sealed to the furnace casing and terminating outside the space containing the furnace. The duct furnace shall be installed on the positive pressure side of the circulating air blower.

911.5 Duct temperature. The outlet duct temperature of duct furnaces shall not be greater than 250°F (121°C).

SECTION MC 912
INFRARED RADIANT HEATERS

912.1 Support. Infrared radiant heaters shall be safely and adequately fixed in an approved position independent of fuel and electric supply lines. Hangers and brackets shall be noncombustible material.

912.2 Clearances. Heaters shall be installed with clearances from combustible material in accordance with the manufacturer’s installation instructions.
SPECIFIC APPLIANCES, FIREPLACES AND SOLID FUEL-BURNING EQUIPMENT

SECTION MC 913 CLOTHES DRYERS

913.1 General. Clothes dryers shall be installed in accordance with the manufacturer’s installation instructions. Electric commercial clothes dryers shall be tested in accordance with UL 1240. Electric residential and coin-operated clothes dryers shall be tested in accordance with UL 2158.

913.2 Exhaust required. Clothes dryers shall be exhausted in accordance with Section 504.

Exception: Electric clothes dryers provided with a condensate drain.

913.3 Clearances. Clothes dryers shall be installed with clearances to combustibles in accordance with the manufacturer’s instructions.

SECTION MC 914 SAUNA HEATERS

914.1 Location and protection. Sauna heaters shall be located so as to minimize the possibility of accidental contact by a person in the room.

914.1.1 Guards. Sauna heaters shall be protected from accidental contact by an approved guard or barrier of material having a low coefficient of thermal conductivity. The guard shall not substantially affect the transfer of heat from the heater to the room.

914.2 Installation. Sauna heaters shall be listed and labeled and shall be installed in accordance with their listing and the manufacturer’s installation instructions.

914.3 Access. Panels, grilles and access doors that are required to be removed for normal servicing operations shall not be attached to the building.

914.4 Heat and time controls. Sauna heaters shall be equipped with a thermostat that will limit room temperature to 194°F (90°C). If the thermostat is not an integral part of the sauna heater, the heat-sensing element shall be located within 6 inches (152 mm) of the ceiling. If the heat-sensing element is a capillary tube and bulb, the assembly shall be attached to the wall or other support, and shall be protected against physical damage.

914.4.1 Timers. A timer, if provided to control main burner operation, shall have a maximum operating time of 1 hour. The control for the timer shall be located outside the sauna room.

914.5 Sauna room. A ventilation opening into the sauna room shall be provided. The opening shall be not less than 4 inches by 8 inches (102 mm by 203 mm) located near the top of the door into the sauna room.

914.5.1 Warning notice. The following permanent notice, constructed of approved material, shall be mechanically attached to the sauna room on the outside:

WARNING: DO NOT EXCEED 30 MINUTES IN SAUNA. EXCESSIVE EXPOSURE CAN BE HARMFUL TO HEALTH. ANY PERSON WITH POOR HEALTH SHOULD CONSULT A PHYSICIAN BEFORE USING SAUNA.

The words shall contrast with the background and the wording shall be in letters not less than 0.25-inch (6.4 mm) high.

Exception: This section shall not apply to one- and two-family dwellings.

SECTION MC 915 ENGINE AND GAS TURBINE-POWERED EQUIPMENT AND APPLIANCES

915.1 General. The installation of liquid-fueled stationary internal combustion engines and gas turbines, including fuel storage and piping, shall meet the requirements of NFPA 37 and Chapter 13 of this code.

915.2 Powered equipment and appliances. Permanently installed equipment and appliances powered by internal combustion engines and turbines shall be installed in accordance with the manufacturer’s installation instructions and NFPA 37.

SECTION MC 916 POOL AND SPA HEATERS

916.1 General. Pool and spa heaters shall be installed in accordance with the manufacturer’s installation instructions. Oil-fired pool and spa heaters shall be tested in accordance with UL 726. Electric pool and spa heaters shall be tested in accordance with UL 1261.

SECTION MC 917 COOKING APPLIANCES

917.1 Cooking appliances. Cooking appliances that are designed for permanent installation, including ranges, ovens, stoves, broilers, grills, fryers, griddles and barbecues, shall be listed, labeled and installed in accordance with the manufacturer’s installation instructions. Oil-fired cooking appliances are prohibited. Solid fuel-fired ovens shall be tested in accordance with UL 2162.

917.2 Prohibited location. Cooking appliances designed, tested, listed and labeled for use in commercial occupancies shall not be installed within dwelling units or within any area where domestic cooking operations occur.

917.3 Domestic appliances. Cooking appliances installed within dwelling units and within areas where domestic cooking operations occur shall be listed and labeled as household-type appliances for domestic use.

917.4 Domestic range installation. Domestic ranges installed on combustible floors shall be set on their own bases or legs and shall be installed with clearances of not less than that shown on the label.

917.5 Open-top broiler unit hoods. A ventilating hood shall be provided above a domestic open-top broiler unit, unless otherwise listed for forced down draft ventilation.
917.5.1 Clearances. A minimum clearance of 24 inches (610 mm) shall be maintained between the cooking top and combustible material above the hood. The hood shall be at least as wide as the open-top broiler unit and be centered over the unit.

917.6 Commercial cooking appliance venting. Commercial cooking appliances, other than those exempted by Section 501.8 of the New York City Fuel Gas Code, shall be vented by connecting the appliance to a vent or chimney in accordance with this code and the appliance manufacturer's instructions or the appliance shall be vented in accordance with Section 501.1.1 of the New York City Fuel Gas Code.

917.7 Domestic ventilation. When a hood is required for proper ventilation of a domestic cooking appliance, the exhaust and makeup air systems shall be properly engineered and designed in accordance with Chapter 5.

SECTION MC 918
FORCED-AIR WARM-AIR FURNACES

918.1 Forced-air furnaces. Oil-fired furnaces shall be tested in accordance with UL 727. Electric furnaces shall be tested in accordance with UL 1995. Solid fuel furnaces shall be tested in accordance with UL 391. Forced-air warm-air furnaces shall be installed in accordance with the listings and the manufacturer's installation instructions. Forced-air warm-air furnaces shall be installed in accordance with the requirements of NFPA 31 and the New York City Fuel Gas Code. Unvented furnaces are prohibited.

918.2 Minimum duct sizes. The minimum unobstructed total area of the outside and return air ducts or openings to a forced-air warm-air furnace shall be not less than 2 square inches per 1,000 Btu/h (4402 mm²/kW) output rating capacity of the furnace and not less than that specified in the furnace manufacturer's installation instructions. The minimum unobstructed total area of supply ducts from a forced-air warm-air furnace shall not be less than 2 square inches for each 1,000 Btu/h (4402 mm²/kW) output rating capacity of the furnace and not less than that specified in the furnace manufacturer's installation instructions.

Exception: The total area of the supply air ducts and outside and return air ducts shall not be required to be larger than the minimum size required by the furnace manufacturer's installation instructions and in accordance with NFPA 54.

918.3 Heat pumps. The minimum unobstructed total area of the outside and return air ducts or openings to a heat pump shall be not less than 6 square inches per 1,000 Btu/h (13 208 mm²/kW) output rating or as indicated by the conditions of listing of the heat pump. Electric heat pumps shall be tested in accordance with UL 1995.

918.4 Dampers. Volume dampers shall not be placed in the air inlet to a furnace in a manner that will reduce the required air to the furnace.

918.5 Circulating air ducts for forced-air warm-air furnaces. Circulating air for fuel-burning, forced-air-type, warm-air furnaces shall be conducted into the blower housing from outside the furnace enclosure by continuous air-tight ducts.

918.6 Prohibited sources. Outside or return air for a forced-air heating system shall not be taken from the following locations:

1. Closer than 10 feet (3048 mm) from an appliance vent outlet, a vent opening from a plumbing drainage system or the discharge outlet of an exhaust fan, unless the outlet is 3 feet (914 mm) above the outside air inlet.

2. Where there is the presence of objectionable odors, fumes or flammable vapors; or where located less than 10 feet (3048 mm) above the surface of any abutting public way or driveway; or where located at grade level by a sidewalk, street, alley or driveway.

3. A hazardous or unsanitary location or a refrigeration machinery room as defined in this code.

4. A room or space, the volume of which is less than 25 percent of the entire volume served by such system. Where connected by a permanent opening having an area sized in accordance with Sections 918.2 and 918.3, adjoining rooms or spaces shall be considered as a single room or space for the purpose of determining the volume of such rooms or spaces.

Exception: The minimum volume requirement shall not apply where the amount of return air taken from a room or space is less than or equal to the amount of supply air delivered to such room or space.

5. A closet, bathroom, toilet room, kitchen, garage, mechanical room, boiler room or furnace room.

6. A room or space containing a fuel-burning appliance where such room or space serves as the sole source of return air.

Exceptions:

1. This shall not apply where the fuel-burning appliance is a direct-vent appliance.

2. This shall not apply where the room or space complies with the following requirements:

   2.1. The return air shall be taken from a room or space having a volume exceeding 1 cubic foot for each 10 Btu/h (9.6 L/W) of combined input rating of all fuel-burning appliances therein.

   2.2. The volume of supply air discharged back into the same space shall be approximately equal to the volume of return air taken from the space.

   2.3. Return-air inlets shall not be located within 10 feet (3048 mm) of any appliance firebox or draft hood in the same room or space.

3. This shall not apply to rooms or spaces containing solid fuel-burning appliances, provided that return-air inlets are located not less than 10 feet (3048 mm) from the firebox of such appliances.
918.7 Outside opening protection. Outdoor air intake openings shall be protected in accordance with Section 401.6.

918.8 Return-air limitation. Return air from one dwelling unit shall not be discharged into another dwelling unit.

SECTION MC 919
CONVERSION BURNERS

919.1 Conversion burners. The installation of conversion burners shall conform to ANSI Z21.8.

SECTION MC 920
UNIT HEATERS

920.1 General. Unit heaters shall be installed in accordance with the listing and the manufacturer’s installation instructions. Oil-fired unit heaters shall be tested in accordance with UL 731.

920.2 Support. Suspended-type unit heaters shall be supported by elements that are designed and constructed to accommodate the weight and dynamic loads. Hangers and brackets shall be of noncombustible material. Suspended-type oil-fired unit heaters shall be installed in accordance with NFPA 31.

920.3 Ductwork. A unit heater shall not be attached to a warm-air duct system unless listed for such installation.

SECTION MC 921
VENTED ROOM HEATERS

921.1 General. Vented room heaters shall be listed and labeled and shall be installed in accordance with the conditions of the listing and the manufacturer’s instructions.

SECTION MC 922
KEROSENE AND OIL-FIRED STOVES

922.1 General. The installation of kerosene and oil-fired stoves is prohibited.

SECTION MC 923
SMALL CERAMIC KILNS

923.1 General. The provisions of this section shall apply to kilns that are used for ceramics, have a maximum interior volume of 20 cubic feet (0.566 m³) and are used for hobby and noncommercial purposes.

923.1.1 Installation. Kilns shall be installed in accordance with the manufacturer’s installation instructions and the provisions of this code.

SECTION MC 924
STATIONARY FUEL CELL POWER PLANTS

924.1 General. Stationary fuel cell power plants having a power output not exceeding 1,000 kW, shall be tested in accordance with ANSI Z21.83 and shall be installed in accordance with manufacturer’s installation instructions and NFPA 853. Such fuel cell plants shall be powered by hydrogen derived on-site from piped natural gas, except where the storage, handling and use of hydrogen or other flammable gas is authorized by the New York City Fire Code for such purposes and approved by the fire commissioner.

SECTION MC 925
MASONRY HEATERS

925.1 General. Masonry heaters shall be constructed in accordance with the New York City Building Code.

SECTION MC 926
NOISE CONTROL REQUIREMENTS

926.1 Minimum air-borne noise insulation requirements.

926.1.1 Exterior mechanical equipment. Mechanical equipment in a building in any occupancy group, when located outside of the building in a yard or court or on a roof, or where the equipment opens to the exterior of the building, shall be subject to the noise output limitations given in Table 926.1 where one or more windows of a dwelling unit in any building in Occupancy Groups R-1, R-2, and R-3, are located within a sphere of 100-foot radius (30.480 mm) whose center is any part of the equipment or its housing, unless it can be shown that the sound pressure levels, in octave bands, of the exterior mechanical equipment as measured within the dwelling unit do not exceed the levels given in Table 926.1(2).

### TABLE 926.1(2)

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a. Measurements shall be obtained with a sound level meter and octave band analyzer, calibrated both electronically and acoustically before and after the measurements are made.

926.1.2 Noise Control Code. Sound sources shall also comply with any applicable requirements of Section 24-232 of the Administrative Code, also known as the New York City Noise Control Code.
Minimum structure-borne noise and vibration isolation requirements. All isolators shall comply with the requirements of Sections 926.2.1 through Section 926.2.9.

### 926.2.1 Boiler rooms.

- **926.2.1.1 Boilers.** All boilers supported on floors above a story having dwelling units shall be supported on resilient isolators having a minimum static deflection of 1 inch (25 mm). The isolators shall be installed directly under the structural frame of the boiler.

- **926.2.1.2 Boiler breeching and piping.** When boilers are equipped with mechanical draft fans, the boiler breeching and piping that are supported from or on slabs, floors or walls that are contiguous to the dwelling unit shall be supported for a distance of 50 pipe diameters on or from resilient isolators. Each isolator shall have a minimum static deflection of 1 inch (25 mm).

### 926.2.2 Incinerator charging chutes.

- **926.2.2.1 Metal chutes.** Metal chutes, metal chute supports, and/or metal chute bracing shall be free of direct contact with the shaft enclosure and the openings provided in the floor construction. Metal chutes shall be resiliently supported at each structural support location. Isolators shall provide a minimum static deflection of 0.30 inches (7.62 mm). All chutes shall be plumb.

- **926.2.2.2 Masonry chutes.** The interior chute wall shall be plumb and without obstructions for the full height of the shaft and shall have a smooth interior finish.

### 926.2.3 Piping.

Equipment piping shall be installed as follows:

1. Metal piping connected to power driven equipment shall be resiliently supported from or on the building structure for a distance of 50 pipe diameters from the power driven equipment. The resilient supports shall have a minimum static deflection of 1 inch (25 mm) for all piping with a 4 inch (25 mm) or larger in actual outside diameter and 1/2 inch (12.7 mm) for piping with less than 4 inches (25 mm) in actual outside diameter. Piping connected to fluid pressure-reducing valves shall be resiliently isolated for a distance of 50 pipe diameters from pressure-reducing valves and isolators shall provide a minimum static deflection of 1/2 inch (12.7 mm).

2. Equipment such as heat exchangers, absorption refrigeration machines, or similar equipment, that is located on any floor or roof other than a floor on grade, and that is not power driven but is connected by metal piping to power driven equipment, shall be resiliently supported from or on the building structure, for a distance of 50 pipe diameters from the power driven equipment. The resilient supports shall be vibration isolators having a minimum static deflection of 1 inch (25 mm).

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| MINIMUM DISTANCE FROM EQUIPMENT TO EXTERIOR WINDOW (ft.) | MAXIMUM SOUND POWER LEVELS IN OCTAVE BANDS – db re 10^{-13} WATTS*
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For SI: 1 foot = 304.8 mm.

a. The minimum distance shall be measured in a straight line regardless of obstructions. Interpolated levels may be used for distances between those given in this table. See note (a) at end of Table 1207.2.1 in the New York City Building Code.

Notes:

1. In the event sound power level data for the exterior mechanical equipment is not available, the sound pressure levels, in octave bands, of the exterior mechanical equipment shall be measured.

2. The measurements shall be obtained with the microphone of the measuring equipment located at the interior of the dwelling unit affected in a line with the window nearest the exterior mechanical equipment. The window shall be fully open and the microphone shall be located 3 feet away from the open portion of the window.

3. Measurements shall be obtained during times when the ambient sound pressure levels, in octave bands, are at least 6 db lower at all octave bands than the sound pressure levels measured with the exterior equipment operating. By ambient sound pressure levels is meant the measured sound pressure levels, at the above described measuring location, with the exterior equipment not in operation.
SPECIFIC APPLIANCES, FIREPLACES AND SOLID FUEL-BURNING EQUIPMENT

926.2.4 Fans. All fan equipment located on any roof or floor other than a floor on grade shall be mounted on or from vibration isolators. Fan equipment with motor drives separated from the fan equipment shall be supported on an isolated integral rigid structural base supporting both the fan and motor. Fan equipment with motor drives supported from the fan equipment shall be mounted directly on vibration isolators. Each isolator shall have provision for leveling. Isolators shall incorporate resilient pads having a minimum thickness of 1/4 inch (6.4 mm). The vibration isolators shall provide a minimum isolation efficiency of 90 percent at fan rotor rpm with a maximum deflection of 2 inches (51 mm). Fans and compressors of 3 horsepower (2.25 kW) or less assembled in unitary containers may meet this requirement with isolators internal to the container providing the isolators meet the above minimum isolator efficiencies.

926.2.5 Pumps. All pumps of 3 horsepower (2.25 kW) or more located on any floor other than a floor on grade shall be supported on vibration isolators having a minimum isolation efficiency of 85 percent at the lowest disturbing frequency. Each isolator shall incorporate a leveling device and a resilient pad having a minimum thickness of 1/4 inch (6.4 mm).

926.2.6 Compressors. Compressors and drives located on a floor other than a floor on grade shall be mounted on vibration isolators having a minimum isolation efficiency of 85 percent at the lowest disturbing frequency. Each isolator shall incorporate a leveling device and a resilient pad having a minimum thickness of 1/4 inch (6.4 mm).

926.2.7 Cooling towers. All moving parts of cooling towers located on a roof or floor other than a floor on grade shall be installed on vibration isolators providing a minimum isolation efficiency of 85 percent at fan rotor rpm with a maximum static deflection of 4 inches (102 mm). Each isolator shall incorporate a leveling device and a resilient pad having a minimum thickness of 1/4 inch (6.4 mm).

926.2.8 Evaporative condensers. Evaporative and air cooled condensers located on a roof or floor other than a floor on grade shall be mounted on vibration isolators providing a minimum isolation efficiency of 85 percent at fan rotor rpm with a maximum static deflection of 4 inches (102 mm). Each isolator shall incorporate a leveling device and a resilient pad having a minimum thickness of 1/4 inch (6.4 mm).

926.2.9 Duct connections to fan equipment. Flexible connections shall be installed between fan equipment and connecting ductwork.