REFERENCE STANDARD RS 14
HEATING AND COMBUSTION EQUIPMENT

*LIST OF REFERENCED NATIONAL STANDARDS

**NFiPA No. 90B	Standard for the Installation of Warm Air Heating and Air Conditioning and Ventilating Systems, As Modified ……1996
AGA/ANSI-Z223.1 /NFiPA 54	National Fuel Gas Code, and Addenda ANSI Z223.1a-1987……..……1984
ANSI/NFiPA	Standard for the Installation of Oil Burning No. 31 Equipment..……1983
ANSI/NFiPA 211	Standard for Chimneys, Fireplaces, Vents, and Solid Fuel Burning Appliances….. 1988
ANSI/ASME	Boiler and Pressure Vessel Code, Sections I, IV and VIII……..……1986
ANSI-Z21.1	Household Cooking Gas Appliances and Addenda Z21.1a-1982, Z21.1b-1984……1982
ANSI-Z21.2	Gas Hose Connectors for Portable Indoor Gas-Fired Equipment, and Addenda Z21.2a-1985, Z21.2b-1987.....…….....…….…….……. 1983
ANSI-Z21.3	Hotel and Restaurant Gas Ranges and Unit Broilers...……...…..……. 1982
ANSI-Z21.5.1	Gas Clothes Dryers, Volume I, Type 1 Clothes Dryers……...…..……. 1982
ANSI-Z21.5.2	Gas Clothes Dryers, Volume II, Type 2 Clothes Dryers, and Addenda Z21.5.2a-1981, Z21.5.2b-1982.....…...…….. 1979
ANSI-Z21.8	Installation of Domestic Gas Conversion Burners.....……...…....……. 1984
ANSI-Z21.10.1	Gas Water Heaters, Volume I. Storage Water Heaters with Input Ratings of 75,000BTU per Hour or less…….…….……1987
ANSI-Z21.10.3	Gas Water Heaters, Volume III — Storage with Input Ratings above 75,000 BTU per Hour, Circulating and Instantaneous Water Heaters.....……..1987
ANSI-Z21.11.1	Gas-Fired Room Heaters, Volume I, Vented Room Heaters, and Addenda Z21.11.1a-1985..1983
ANSI-Z21.11.2	Gas-Fired Room Heaters, Volume II, Unvented Room Heaters, and Addenda Z21.11.2a-1984.....…….....…….……1983
ANSI-Z21.12	Draft Hoods and Addenda Z21.12a-1983.....…..….....…….. 1981
ANSI-Z21.13	Gas-Fired Low Pressure Steam and Hot Water Boilers, and Addenda Z21.13a…… 1982
ANSI-Z21.15	Manually Operated Gas Valves, and Addenda Z21.15a-.1981 Z21.15b-1984…….. 1979
ANSI-Z21.17	Domestic Gas Conversion Burner……..…….…….…….. 1984
ANSI-Z21.19	Refrigerators Using Gas Fuel, and Addenda Z21.19a-1984……..…….……1983
ANSI-Z21.20	Automatic Gas Ignition Systems and Components, and Addenda Z21.20a-1987...… 1985
ANSI-Z21-21	Automatic Valves for Gas Appliances, and Addenda Z21.21a-1977, Z21.21b-1981…...1974
ANSI-Z21.22	Relief Valves and Automatic Gas Shut Off Devices for Hot Water Supply Systems…. 1986
ANSI-Z21.23	Gas Appliance Thermostats, and Addenda Z21.23a-1985……. 1980
ANSI-Z21.24	Metal Connectors for Gas Appliances.....…….....…….. 1987
ANSI-Z21.27	Hotel and Restaurant Gas Deep Fat Fryers, and Addenda Z21.27a-1975, Z21.27b-1978... 1974
ANSI-Z21.28	Commercial Gas Baking and Roasting Ovens, and Addenda Z21.28a-1975, Z21.28b-1978..1974
ANSI-Z21.31	Gas Counter Appliances, and Addenda Z21.31a-1978……..…..…… 1975
ANSI-Z21.34	Gas-Fired Duct Furnaces, and Addenda Z21-34a-1974, Z21.34b-1974…… 1971
ANSI-Z21.40.1	Gas-Fired Absorption Summer Air Conditioning Appliances, and Addenda Z21.40.1a-1982... 1981
ANSI-Z21.41	Quick-Disconnect Devices for Use with Gas Fuel, and Addenda Z21.41a-1981, Z21.41b-1983……..……1971
ANSI-Z21.42	Gas-Fired Illuminating Appliances, and Addenda Z21.42a-1973, Z21.42b-1981…. 1971
ANSI-Z21.44	Gas-Fired Gravity and Fan Type Direct Vent Wall Furnaces, and Addenda Z21.44a-1985... 1985
ANSI-Z21.45	Flexible Connectors of Other than All Metal Construction for Gas Appliances, and Addenda Z21.45a-1987...…….....…….....……. 1985
ANSI-Z21.46	Gas-Fired Kettles, Steam Cookers and Steam Generators, and Addenda Z21.46a-1975, Z21.46b-1978.....…….....…….. ……1974
ANSI-Z21.47	Gas-Fired Central Furnaces (Except Direct Vent Central Furnaces) ……1987
ANSI-Z21.48	Gas-Fired Gravity and Fan Type Floor Furnaces.....…….....……... 1986
ANSI-Z21.49	Gas-Fired Gravity and Fan Type Vented Wall Furnaces...…….....……1986
ANSI-Z21.50	Vented Decorative Gas Appliances.....…….....…….. 1986
ANSI-Z21.52	Gas-Fired Single Firebox Boiler, and Addenda Z21.52a-1973…….. 1971
ANSI-Z21.54	Gas Hose Connectors for Portable Outdoor Gas-Fired Appliances, and Addenda Z21.54a 1983, Z21.54b-1985.....…….....…….……. 1979
ANSI-Z21.55	Gas-Fired Sauna Heaters, and Addenda Z21.55a-1980, Z21.55b-1981……. 1979
ANSI-Z21.56	Gas-Fired Pool Heaters, and Addenda Z21.56a-1987…….……... 1986

ANSI-Z21.57	Recreational Vehicle Cooking Gas Appliances, and Addenda Z21.57a-1982, Z21.57b-1984.	1982
ANSI-Z21.58	Outdoor Cooking Gas Appliances	1987
ANSI-Z21.59	Gas-Fired High Pressure Steam and Hot Water Boilers	1974
ANSI-Z21.60	Decorative Gas Appliances for Installation in Vented Fireplaces, and Addenda Z21.60a-1982, Z21.60b-1984	1981
ANSI-Z21.64	Direct Vent Central Furnaces, and Addenda Z21.64a-1986, Z21.64b-1987	1985
ANSI-Z21.65	Separated Combustion System Central Furnaces	1978
ANSI-Z21.69	Connectors for Movable Gas Appliances, and Addenda Z21.69a-1983, Z21.69b-1985.	1979
ANSI-Z83.2	Gas Atmosphere Generators	1977
ANSI-Z83.3	Gas Utilization Equipment in Large Boilers, and Addenda Z83.3a-1972, Z83.3b-1976.	1971
ANSI-Z83.4	Direct Gas-Fired Make-Up Air Heaters, and Addenda Z83.4a-1986	1985
ANSI-Z83.6	Gas-Fired Infrared Heaters, and Addenda Z83.6a-1984, Z83.6b-1985	1982
ANSI-Z83.7	Gas-Fired Construction Heaters	1974
ANSI-Z83.8	Gas Unit Heaters, and Addenda Z83.8a-1986	1985
ANSI-Z83.9	Gas-Fired Duct Furnaces	1986
ANSI-Z83.11	Gas Food Service Equipment- Ranges and Unit Broilers	1986
ANSI-Z83.12	Gas Food Service Equipment- Baking and Roasting Ovens	1986
ANSI-Z83.13	Gas Food Service Equipment- Deep Fat Fryers	1986
ANSI-Z83.14	Gas Food Service Equipment- Counter Appliances	1986
ANSI-Z83.15	Gas Food Service Equipment- Kettles, Steam Cookers, and Steam Generators	1986
*ANSI-UL-815	Electric Sauna Heating Equipment, January 1986 Revision	1983
ANSI-C33.87/UL 174	**Household Electric Cooking Appliances, January 1986 Revision	1983
ANSI/UL-197	Commercial Electric Cooking Appliances, September 1986 Revision	1982
UL 127	Standard for Factory-Built Fireplaces	1988
UL 252	Compressed Gas Regulators, May 1986 Revision	1984
ANSI-Z96.2/UL 296	Oil Burners, August 1985 Revision	1980
ANSI-B130.1/UL 343	Pumps for Oil-Burning Appliances	1986
UL 412	Refrigeration Unit Coolers, December 1984 Revision	1980
ANSI/UL 471	Commercial Refrigerators and Freezers, November 1985 Revision	1985
ANSI/C33.1/UL 499	Electric Heating Appliances, March 1985 Revision	1978
UL 560	Electric Home-Laundry Equipment	1986
ANSI/UL 574	Electric Oil Heaters, May 1985 Revision	1980
ANSI/UL 737	Standard for Fireplace Stoves	1988
UL 586	Test Performance of High Efficiency, Particulates, Air-Filter Units	1986
ANSI-Z96.3/UL 726	Oil-Fired Boiler Assemblies, June 1986 Revision	1975
ANSI-Z96.1/UL 727	Oil-Fired Central Furnaces, November 1986 Revision	1986
ANSI-Z96.4/UL 729	Oil-Fired Floor Furnaces, December 1980 Revision	1976
ANSI-Z96.5/UL 730	Oil-Fired Wall Furnaces, December 1980 Revision	1974
ANSI-Z96.2/UL 731	Oil-Fired Unit Heaters, January 1985 Revision	1975
ANSI-Z95.3/UL 732	Oil-Fired Water Heaters, December 1980, Revision, January 1985 Revision	1974
UL 733	Oil-Fired Air Heaters and Direct-Fired Heaters, August 1985 Revision	1975
UL 795	Commercial-Industrial Gas-Heating Equipment, February 1986 Revision	1973
UL 834	Electric Heating Water Supply, and Power Boilers, October 1983 Revision	1980
UL 867	Electrostatic Air Cleaners	1981
ANSI-C33.75/UL 875	Electric Dry Bath Heaters, October 1984 Revision	1983
UL 1025	Electric Air Heaters, October 1986 Revision	1980
UL 1042	Electric Baseboard Heating Equipment, May 1985 Revision	1979
ANSI-C33.104/UL10096	Electric Central Air-Heating Equipment, July 1986 Revision	1986
UL 1206	Electric Commercial Clothes-Washing Equipment	1979
UL 1240	Electric Commercial Clothes-Drying Equipment,July 1984 Revision	1979
UL 1261	Electric Water-Heaters for Pools and Tubs, April 1986 Revision	1985
UL 1453	Electric Booster and Commercial Storage Tank Water Heaters,May 1983 Revision	1982
UL 1482	Standard for Room Heaters, Solid Fuel Type (September 1988 Revision	1988
ANSI/UL 1555	Electric Coin-Operated Clothes-Washing Machine	1982††
UL 1556	Electric Coin-Operated Clothes-Drying Equipment, July 1984 Revision	1982
ANSI/ASTM-C64	Specifications for Refractories for Incinerators and Boilers (Reapproved 1977)	1972
ANSI/ASTM-C401	Classification of Castable Refractories	1984
ANSI/ASTM-C612	Standard Specification for Mineral Fiber Block and Board Thermal Insulation	1983
ASTM-E84	Method of Test for Surface Burning Characteristics of Building Materials	1961

As enacted but "ANSI-UL-875" probably intended.

****As enacted but "Household Electric Storage Tank Water Heaters" probably intended.***

††As enacted but "1983" probably intended.

ANSI/ASTM-D396	Specification for Fuel Oils……	1984
ANSI/ASTM-D93	Method of Test for Flash Points by Pensky-Martens Closed Tester…….	1985
ANSI/ASTM-C105	Specifications for Ground Fire Clay as a Mortar for Laying-up FireClay Brick, (Reapproved 1981)……	1947
*SMACNA	Fibrous Glass Duct Construction Standard, as Modified.....…….	1992
**SMACNA	HVAC Duct Construction Standards – Metal and Flexible, as Modified……..	1995
**SMACNA	HVAC Air Duct Leakage Test Manual, as Modified.....……..…….	1985

Note: Wherever in these standards reference is made to the "National Electrical Code" the work so covered shall meet the requirements of the Electrical Code of the City of New York.
946-87 BCR; Local Law 80-1989
****DOB 5-4-02***

* REFERENCE STANDARD RS 14-1

ANSI/NFiPA- 90 B 1996, as modified—Standard for the Installation of Warm Air Heating and Air Conditioning Systems.
The provisions of ANSI/NFiPA No. 90 B-96 together with the modifications thereto shall constitute Reference Standards RS 13-4 and RS 14-1.
The appendices to ANSI/NFiPA No. 90 B-96 are not part of this Reference Standard. These are for informational purposes only.
Wherever reference is made to the "National Electrical Code" it shall be changed to read "Electrical Code of the City of New York."
The New York State Energy Conservation Construction Code also regulates the design and construction of heating, ventilating, and air conditioning systems in New York City.

STANDARD FOR THE INSTALLATION OF WARM AIR HEATING AND AIR CONDITIONING SYSTEMS

ANSI/NFiPA No. 90 B-1996, AS MODIFIED

Delete the NOTICE.
Delete asterisks from all section numbers having them.
Material in [brackets] is to be deleted.
Underlined material is new.
** * * denotes unchanged text.*
Section numbers are from ANSI/NFiPA No. 90 B-1996.

CONTENTS

Chapter 1 General

1-1 Scope. This standard shall apply to all systems for the movement of environmental air in structures that[:] are otherwise exempted by Section 27-777(b) of the Administrative Code, or whose heating systems are subject to Section 27-812 of the Administrative Code.
[(a) Serve one- or two-family dwellings; or
(b) Serve spaces not exceeding 25,000 ft^3 (708 m^3) in volume in any occupancy.
Exception: Buildings of combustible construction over three stories in height shall be in accordance with NFPA 90A, Standard for the Installation of Air Conditioning and Ventilating Systems.]

1-1.1 The provisions of this standard are not intended to be applied retroactively. Where the system is being altered, extended, or renovated, the requirements of Article 4 of Subchapter 1 of Chapter 1 of Title 27 of the Administrative Code shall govern the applicability of this standard.
* * *

1-3 Definitions.
Accepted - Means "Accepted" by the Materials and Equipment Acceptance Division of the Department of Buildings.
NOTE: The MEA Division is the "authority having jurisdiction" in use of materials, assemblies, forms, methods of construction, and service equipment subject to the acceptance requirements of Building Code Sections 27-131 and 27-135.

Air Filter. [A device used to reduce or remove air-borne solids from heating, ventilating, and air conditioning systems.]

(a) A Class 1 air filter is one which, when clean, does not contribute fuel when attacked by flame, and emits only negligible amounts of smoke when tested in accordance with RS 13-15.

(b) A Class 2 air filter is one which, when clean, burns moderately when attacked by flame or emits moderate amounts of smoke or both when tested in accordance with RS 13-15.

Approved. [Acceptable to the authority having jurisdiction.] See subchapter 2 of the Building Code for definition.

Authority Having Jurisdiction. [The organization, office, or individual responsible for approving equipment, an installation, or a procedure.] The Commissioner of the Department of Buildings or his designee.

* * *

Listed - Equipment, materials or services included in a list published by an organization acceptable to the "authority having jurisdiction" and concerned with evaluation of products or services that maintains periodic inspection of production of listed equipment or materials or periodic evaluation of services, and whose listing states either that the equipment, material or service meets identified standards or has been tested and found suitable for use in a specified purpose.

NOTE: The means for identifying listed equipment may vary for each organization concerned with product evaluation, some of which do not recognize equipment as listed unless it is also labeled. The "authority having jurisdiction" should utilize the system employed by the listing organization to identify a listed product.

Noncombustible Material. [A material that, in the form in which it is used and under the conditions anticipated, cannot ignite, burn, support combustion, or release flammable vapors when subjected to fire or heat. When tested in accordance with ASTM E 136, Standard Test Method for Behavior of Materials in a Vertical Tube Furnace at 750 Degrees C, materials that successfully pass the test shall be considered noncombustible.] See subchapter 2 of the Building Code for definition.

* * *

[**Should.** Indicates a recommendation or that which is advised but not required.]

* * *

Chapter 2 System Components

* * *

2-1.1.1 Supply ducts shall be:

(a) Class 0 or Class 1 rigid or flexible air ducts tested in accordance with UL 181/96, *Standard for Safety Factory-Made Air Ducts and Air Connectors*; or

(b)Of sheet metal having a nominal thickness as shown in Table 2-1.1.1.

Exception No. 1: Supply ducts that are completely encased in not less than 2 in. (51 mm) of concrete in a floor slab shall not be required to meet the requirements of 2-1.1.1, except within 2 ft (0.61 m) of the furnace supply plenum and within 2 ft (0.61 m) of a vertical connection to a riser or register.

Exception No. 2: Supply ducts for a separate air cooling system, not interconnected to any warm air heating system, serving a single-family dwelling shall not be required to meet the requirements of 2-1.1.1, provided that they are not closer than 2 ft (0.61 m) to any furnace or its supply plenum, boiler, or other heat-producing appliances and that they comply with 2-2.1.1, 2-2.1.3, 2-2.2, 2-2.3, and 2-2.4 as specified for return ducts.

Exception No. 3: Vibration isolation connectors in duct systems shall be made of approved flame-retardant fabric or shall consist of sleeve joints with packing of approved noncombustible material. The fabric shall not exceed 10 in. (254 mm) in length in the direction of airflow.

Exception No. 4: A Class 0 or Class 1 rigid or flexible air duct shall not be used as a vertical air duct that is more than two stories in height.

Exception No. 5: A Class 0 or Class 1 rigid or flexible air duct shall not be used in an air duct containing air at a temperature in excess of 250°F (121°C).

2-1.1.2 Supply ducts shall be installed in conformance with:

(a) Class 0 or Class1 rigid or flexible air ducts tested in accordance with UL 181/96, *Standard for Safety Factory-Made Air Ducts and Air Connectors*; or

(b) Of sheet metal having a nominal thickness as shown in table 2-1.1.1

(b) RS 14-22 [SMACNA *Fibrous Glass Duct Construction Standards*;

(c) SMACNA *HVAC Duct Construction Standards — Metal and Flexible*;

(d) SMACNA *Installation Standards for Residential Heating and Air Conditioning Systems*.]

2-1.2 Air Connectors. Air connectors are limited-use, flexible air ducts that shall not be required to conform to the requirements for air ducts, provided they conform to the following provisions:

(a) Air connectors shall conform to the requirements for Class 0 or Class 1 connectors when tested in accordance with UL 181/96, *Standard for Safety Factory-Made Air Ducts and Air Connectors*.

(b) Class 0 or Class 1 air connectors shall not be used in ducts containing air at temperatures in excess of 250°F (121°C).

(c) An air connector run shall not exceed 14 ft (4.3 m) in length.

(d) Air connectors shall not pass through any wall, partition, or enclosure of a vertical shaft that is required to have a fire resistance rating of 1 hour or more.

(e) Air connectors shall not pass through floors.

(f) Air connectors shall be installed in conformance with the conditions of their approval.

* * *

2-3.1.2 Duct coverings and linings shall not flame, glow, smolder, or smoke when tested in accordance with ASTM C 411/97, *Standard Test Method for Hot-Surface Performance of High-Temperature Thermal Insulation*, at the temperature to which it is exposed in service. In no case shall the test temperature be below 250°F (121°C).

* * *

2-3.2 Joints. Joints and seams shall be fastened securely and made substantially airtight. Slip joints shall have a lap of at least 1 in. (25.4 mm) and shall be fastened individually (*see Figure 2-3.2*). Tape shall be permitted to be used for sealing joints but, where exposed to the air in the system, it shall not be more combustible than fabric complying with [NFPA 701, *Standard Methods of Fire Tests for Flame-Resistant Textiles and Films*] RS 7-3.

Closure systems for use with rigid air ducts tested in accordance with UL 181/96, *Standard for Safety Factory-Made Air Ducts and Air Connectors*, shall have been tested and listed in accordance with UL 181A/94, *Standard for Safety Closure Systems for Use with Rigid Air Ducts and Air Connectors*, and used in conformance with the conditions of the listing.

* * *

2-3.5.1 Registers shall be constructed of metal or shall conform with the following:

(a) Registers shall be made of a material classified as 94 HB when tested as described in UL 94/96, *Standard for Safety Test for Flammability of Plastic Materials for Parts in Devices and Appliances*.

(b) Floor registers shall resist, without structural failure, a 200-lb (90.7-kg) concentrated load on a 2-in. (51-mm) diameter disc applied to the most critical area of the exposed face of the register. For this test, the register shall be at a temperature not less than 165°F (74°C) and shall be supported in accordance with the manufacturer's instructions.

* * *

2-3.5.3 Fittings connecting the registers to the duct system shall be constructed of metal or material that complies with the requirements of Class 0, Class 1, or Class 2 ducts in UL 181/96, *Standard for Safety Factory-Made Air Ducts and Air Connectors*.

* * *

4-1.1.3 Construction.

(a) Where the warm air supply is from a warm air furnace, heating panels shall be enclosed on all sides with material that is wholly noncombustible or that possesses a flame spread classification of not over 25 as determined in accordance with [NFPA 255, *Standard Method of Test of Surface Burning Characteristics of Building Materials*] RS 5-5. This enclosing material shall be attached securely to the building structure; joints and seams shall be substantially airtight. Braces and hangers inside the chamber shall be noncombustible.

(b) Where the warm air supply is from a steam or hot water heat exchanger, heating panels shall either comply with 4-1.1.3(a) or shall be enclosed on all sides with material not more flammable than 1-in. (25.4-mm) (nominal) wood boards. This enclosing material shall be attached securely to the building structure; joints and seams shall be substantially airtight. No single vertical heating panel shall serve more than one story.

* * *

4-1.12 Air filters shall have either a Class 1 or Class 2 rating in accordance with [UL 900, *Standard for Safety Air Filter Units*, 1994] RS 13-15.

* * *

4-1.3.3 Liquid adhesive coatings used on filters shall have a flash point not less than 325°F (163°C) in accordance with [ASTM D 93, *Standard Test Methods for Flash Point by Pensky-Martens Closed Cup Tester*] RS 14-13.

4-1.3.4 All air filters shall be kept free of excess dust and combustible material. Unit filters shall be renewed or cleaned when the resistance to airflow has increased to two times the original resistance or when the resistance has reached a value of recommended replacement by the manufacturer. A permanently installed draft gauge shall be provided for this purpose. Where the filters are of the automatic liquid adhesive type, sludge shall be removed from the liquid adhesive reservoir regularly.

4-1.4 Air-Cooling Equipment.

Mechanical refrigeration used with air duct systems shall be installed in accordance with [ANSI/ASHRAE 15, *Safety Code for Mechanical Refrigeration*] RS 13-6.

* * *

4-2 Electric Wiring and Equipment.

Electric wiring and equipment shall be adequate for safe operation and shall be installed in accordance with [NFPA 70, *National Electrical Code*®] the *New York City Electrical Code*. In addition, a disconnecting means shall be installed within sight and easy reach in the ungrounded leads of each power circuit to electrically operated components that are in unprotected locations and in other locations not readily accessible for service.

* * *

4-3.2 Fan Control for Stoker-Fired Furnaces.

Where a warm air furnace equipped with a fan to circulate the air is stoker-fired, it also shall be equipped with an automatic overrun control to start the fan when the air in the furnace bonnet or at the beginning of the main supply duct at a point not affected by radiated heat

reaches a temperature not higher than 200°F (93°C) after the stoker and fan (in its normal operation) have been shut down as a result of a satisfied thermostat. If a manual disconnect is installed in the air circulating fan electrical circuit, it shall be installed to deenergize both the fan and the stoker simultaneously. Solid fuel may be used only as permitted by Local Law 93/85.

* * *

4-3.4 Thermostatically Controlled, Hand-Fired, Solid-Fuel Burning Furnaces.

Hand-fired, solid-fuel burning furnaces on which the furnace draft is controlled by a thermostat shall be equipped with the following:

(a) A fail-safe 250°F (121°C) limit control installed not more than 10 in. (254 mm) above the top surface of the heat exchanger in a supply plenum that extends at least 12 in. (305 mm) above the top surface of the heat exchanger; and

(b) A barometric draft control operated by draft intensity and permanently set to limit the draft to a maximum intensity of 0.13 in. (32.4 Pa) of water gauge. A fail-safe limit control is a limit control that automatically checks the furnace in the event of power failure or shutoff or that automatically checks the furnace when a temperature of 250°F (121°C) is reached, whether or not power is available.

(c) Solid fuel may be used only as permitted by Local Law 93/85.

4-3.5 Air-Circulating Fan Controls.

Where a hand-fired, solid-fuel burning furnace is equipped with a fan to circulate the air, it shall be equipped with fan controls as required for stoker-fired furnaces by 4-3.2. Solid fuel may be used only as permitted by Local Law 93/85.

* * *

Chapter 5 Referenced Publications – Delete

Appendix A – Delete
Appendix B - Delete
****DOB 5-4-02;946-87 BCR; 938-80 BCR***

****REFERENCE STANDARD RS 14-2**

AGA/ANSI-Z223.1/NFiPA 54-1984 -National Fuel Gas Code and Addenda ANSI Z223.1a-1987.
*****946-87 BCR; 916-82 BCR; 938-80 BCR***

*****REFERENCE STANDARD RS 14-3**

ANSI/NFiPA No. 31 1983 -Standard for the Installation of Oil Burning Equipment.
Section 1-5 Air for combustion and ventilation.
******938-80 BCR***

****REFERENCE STANDARD RS 14-4**

ANSI/ASME Boiler and Pressure Vessel Code 1986.
*****946-87 BCR; 916-82 BCR; 938-80 BCR***
Section VIII Pressure Vessels.

****REFERENCE STANDARD RS 14-5A**

ANSI/ASME Boiler and Pressure Vessel Code 1986.
Section I Power Boilers
*Section IV Heating Boilers.

***Rule HG-614 LOW - WATER FUEL CUTOFF**

(a) Each automatically fired hot water boiler shall have an automatic low-water fuel cutoff which has been designed for hot water service, and it shall be so located as to automatically cut off the fuel supply when the surface of the water falls to the level established in (b) below. (see Fig. HG-703.2).

(b) As there is no normal waterline to be maintained in a hot water heating boiler, any location of the low- water fuel cutoff above the lowest safe permissible water level established by the boiler manufacturer is satisfactory.

(c) A coil-type boiler or a watertube boiler requiring forced circulation to prevent overheating of the coils or tubes shall have a flow-sensing device installed in the outlet piping in lieu of the low-water fuel cutoff required in (a) above to automatically cut off the fuel supply when the circulating flow is interrupted.

*****946-87 BCR; 916-82 BCR; 938-80 BCR***
****DOB 3-8-96***

†REFERENCE STANDARD RS 14-5B

UL 834 - 1980 - Electric Heating, Water Supply, and Power Boilers, and November 1982 Revision.
†1045-83 BCR

††REFERENCE STANDARD RS 14-6

ANSI-Z21.1-1982 - Household Cooking Gas Appliance, and Addenda Z21.1a-1982, Z21.1b-1984.
ANSI-Z21.1-1983 - Gas Hose Connectors for Portable Indoor Gas-Fired Equipment, and Addenda Z21.2a-1985.
ANSI-Z21.3-1982 - Hotel and Restaurant Gas Ranges and Unit Boilers.
ANSI-Z21.5.1-1982 - Gas Clothes Dryers, Volume I, Type 1 Clothes Dryers.
ANSI-Z21.5.2-1979 - Gas Clothes Dryers, Volume II, Type 2 Clothes Dryers, and Addenda Z21.5.2a-1981, Z21.5.2b-1982.
ANSI-Z21.8-1984 - Installation of Domestic Gas Conversion Burners.
ANSI-Z21.10.1-1984 - Gas Water Heaters, Volume I, Storage Water Heaters with Input Ratings of 75,000 BTU per Hour or Less, and Addenda Z21.10.1a-1982, Z21.10.1b-1986.
ANSI-Z21.10.3-1984 - Gas Water Heaters, Volume III Storage with Input Ratings above 75,000 BTU per Hour, Circulating and Instantaneous Water Heaters, and Addenda Z21.10.3a-1985, Z21.10.3b-1985.
ANSI-Z21.11.1-1983 - Gas Fired Room Heaters, Volume I, Vented Room Heaters, and Addenda Z21.11.1a-1985.
ANSI-Z21.11.2-1983 - Gas Fired Room Heaters, Volume II, Unvented Room Heaters, and Addenda Z21.11.2a-1984.
ANSI-Z21.12-1981 - Draft Hoods and Addenda Z21.12a-1983.
ANSI-Z21.13-1982 - Gas-Fired Low Pressure Steam and Hot Water Boilers, and Addenda Z21.13a.
ANSI-Z21.15-1979 - Manually Operated Gas Valves, and Addenda Z21.15a-1981, Z21.15b-1984.
ANSI-Z21.17-1984 - Domestic Gas Conversion Burners.
ANSI-Z21.19-1983 - Refrigerators Using Gas Fuel, and Addenda Z21.19a-1984.
ANSI-Z21.20-1985 - Automatic Gas Ignition Systems and Components.
ANSI-Z21.21-1974 - Automatic Valves for Gas Appliances, and Addenda Z21.21a-1977, Z21.21b-1981.
ANSI-Z21.22-1986 - Relief Valves and Automatic Gas Shut-Off Devices for Hot Water Supply Systems.
ANSI-Z21.23-1980 - Gas Appliances Thermostats, and Addenda Z21.23a-1985.
ANSI-Z21.24-1981 - Metal Connectors for Gas Appliances, and Addenda Z21.24a-1983, Z21.24b-1985.
ANSI-Z21.27-1974 - Hotel and Restaurant Gas Deep Fat Fryers, and Addenda Z21.27a-1975, Z21.27b-1978.
ANSI-Z21.28-1974 - Commercial Gas Baking and Roasting Ovens, and Addenda Z21.28a-1975, Z21.28b-1978.
ANSI-Z21.31-1975 - Gas Counter Appliances, and Addenda Z21.31a-1978.
ANSI-Z21.34-1971 - Gas-Fired Duct Furnaces, and Addenda Z21.34a-1974, Z21.34b-1974.
ANSI-Z21.40.1-1981 - Gas-Fired Absorption Summer Air Conditioning Appliances, and Addenda Z21.40.1a-1982.
ANSI-Z21.41-1978 - Quick-Disconnect Devices for Use with Gas Fuel, and Addenda Z21.41a-1981, Z21.41b-1983.
ANSI-Z21.42-1971 - Gas-Fired Illuminating Appliances, and Addenda Z21.42a-1973, Z21.42b-1981.
ANSI-Z21.44-1985 - Gas-Fired Gravity and Fan Type Direct Vent Wall Furnaces, and Addenda Z21.44a-1985.
ANSI-Z21.45-1985 - Flexible Connectors of Other than All Metal Construction for Gas Appliances, and Addenda Z21.45a-1987.
ANSI-Z21.46-1974 - Gas-Fired Kettles, Steam Cookers and Steam Generators, and Addenda Z21.46a-1975, Z21.46b-1978.
ANSI-Z21.47-1983 - Gas-Fired Central Furnaces (Except Direct Vent Central Furnaces), and Addenda Z21.47a-1985, Z21.47b-1986.
ANSI-Z21.48-1986 - Gas-Fired Gravity and Fan Type Floor Furnaces.
ANSI-Z21.49-1986 - Gas-Fired Gravity and Fan Type Vented Wall Furnaces.
ANSI-Z21.50-1986 - Vented Decorative Gas Appliances.
ANSI-Z21.52-1971 - Gas-Fired Single Firebox Boiler, and Addenda Z21.52a-1973.
ANSI-Z21.54-1979 - Gas Hose Connectors for Portable Outdoor Gas-Fired Appliances, and Addenda Z21.54a 1983, Z21.54b-1985.
ANSI-Z21.55-1979 - Gas-Fired Sauna Heaters, and Addenda Z21.55a-1980, Z21.55b-1981.
ANSI-Z21.56-1986 - Gas-Fired Pool Heaters.
ANSI-Z21.57-1982 - Recreational Vehicle Cooking Gas Appliances, and Addenda Z21.57a-1982, Z21.57b-1984.
ANSI-Z21.58-1982 - Outdoor Cooking Gas Appliances, and Addenda Z21.58a-1983, Z21.58b-1985.
ANSI-Z21.59-1974 - Gas-Fired High Pressure Steam and Hot Water Boilers.
ANSI-Z21.60-1982 - Decorative Gas Appliances for Installation in Vented Fireplaces, and Addenda Z21.60a-1982, Z21.60b-1984.
ANSI-Z21.64-1985 - Direct Vent Central Furnaces, and Addenda Z21.64a-1986.
ANSI-Z21.65-1978 - Separated Combustion System Central Furnaces.
ANSI-Z21.69-1979 - Connectors for Movable Gas Appliances, and Addenda Z21.69a-1983, Z21.69b-1985.
ANSI-Z83.2-1977 - Gas Atmosphere Generators.
ANSI-Z83.3-1971 - Gas Utilization Equipment in Large Boilers, and Addenda Z83.3a-1972, Z83.3b-1976.
ANSI-Z83.4-1985 - Direct Gas-Fired Make-Up Air Heaters, and Addenda Z83.4a-1986.
ANSI-Z83.6-1982 - Gas-Fired Infrared Heaters, and Addenda Z83.6a-1984, Z83.6b-1985.

ANSI-Z83.7-1974 - Gas-Fired Construction Heaters.
ANSI-Z83.8-1985 - Gas Unit Heaters, and Addenda Z83.8a-1986.
ANSI-Z83.9-1986 - Gas-Fired Duct Furnaces.
ANSI-Z83.11-1986 - Gas Food Service Equipment - Ranges and Unit Broilers.
ANSI-Z83.12-1986 - Gas Food Service Equipment - Baking and Roasting Ovens.
ANSI-Z83.13-1986 - Gas Food Service Equipment - Deep Fat Fryers.
ANSI-Z83.14-1986 - Gas Food Service Equipment - Counter Appliances.
ANSI-Z83.15-1986 - Gas Food Service Equipment - Kettles, Steam Cookers and Steam Generators.
†††ANSI/UL 815-1983 - Electric Sauna Heating Equipment, January 1986 Revision.
ANSI C33.87/UL 174-1983 - **Household Electric Cooking Appliances, January 1986 Revision.
ANSI/UL 197-1982 - Commercial Electric Cooking Appliances, September 1986 Revision.
UL 252-1984 - Compressed Gas Regulators, May 1986 Revision.
ANSI Z96.2/UL 296-1980 - Oil Burners, August 1985 Revision.
ANSI B130.1/UL 343-1986 - Pumps for Oil-Burning Appliances.
UL 412-1980 - Refrigeration Unit Coolers, December 1984 Revision.
ANSI/UL 471-1985 - Commercial Refrigerators and Freezers, November 1985 Revision.
ANSI-C33.1/UL 499-1978 - Electric Heating Appliances, March 1985 Revision.
ANSI/UL 574-1980 - Electric Oil Heaters, May 1985 Revision.
UL 560-1986 - Electric Home-Laundry Equipment.
UL 586-1985 - Test Performance of High Efficiency, Particulates Air-Filters Units.
ANSI Z96.3/UL 726-1975 - Oil-Fired Boiler Assemblies, June 1986 Revision.
ANSI Z96.1/UL 727-1986 - Oil-Fired Central Furnaces, November 1986 Revision.
ANSI Z96.4/UL 729-1976 - Oil-Fired Floor Furnaces, December 1980 Revision.
ANSI Z96.5/UL 730-1974 - Oil-Fired Wall Furnaces, December 1980 Revision.
ANSI Z95.2/UL 731-1975 - Oil-Fired Unit Heaters, January 1985 Revision.
ANSI Z99.2/UL 732-1974 - Oil-Fired Water Heaters, January 1985 Revision.
UL 733-1975 - Oil-Fired Air Heaters and Direct-Fired Heaters, August 1985 Revision.
UL 795-1973 - Commercial-Industrial Gas-Heating Equipment, February 1986 Revision.
UL 834-1980 - Electric Heating, Water Supply and Power Boilers, October 1983 Revision.
*UL 867-1981 - Electrostatic Air Cleaners.
ANSI-C33.75/UL 875-1983 - Electric Sauna Heating Equipment, October 1984 Revision.
UL 1025-1980 - Electric Air Heaters, October 1986 Revision.
UL 1042-1979 - Electric Baseboard Heating Equipment, May 1985 Revision.
ANSI C33.104/UL1096-1986 - Electric Central Air-Heating Equipment, July 1986 Revision.
UL 1206-1979 - Electric Commercial Clothes-Washing Equipment.
UL 1240-1979 - Electric Commercial Clothes-Drying Equipment, July 1984 Revision.
UL 1261-1981 - Electric Water Heaters for Pools and Tubs, April 1986 Revision.
UL 1453-1982 - Electric Booster and Commercial Storage Tank Water Heaters, May 1983 Revision.
†UL 1555-1982 - Electric Coin-Operated Clothes Washing Machine.
UL 1556-1982 - Electric Coin-Operated Clothes-Drying Equipment, July 1984 Revision.

††946-87 BCR
****As enacted but "UL 867-1980" probably intended.***
*****As enacted but "Household Electric Storage Tank Water Heaters" probably intended.***
†***As enacted but "UL-1555-1983" probably intended.***
†††***As enacted but "ANSI/UL 875-1983" probably intended.***

*REFERENCE STANDARD RS 14-7

ANSI/ASTM-C64 1972 - Specifications for Refractories for Incinerators and Boilers (Reapproved 1977).
****1045-83 BCR***

**REFERENCE STANDARD RS 14-8

ANSI/ASTM-C401 1984 - Classification of Castable Refractories.
*****946-87 BCR; 938-80 BCR***

*REFERENCE STANDARD RS 14-9

ANSI/ASTM-C64 1972 - Specifications for Refractories for Incinerators and Boilers (Reapproved 1977).
****1045-83 BCR***

**REFERENCE STANDARD RS 14-10

ANSI/ASTM-C612 1983 - Standard Specification for Mineral Fiber Block and Board Thermal Insulation.
*****946-87 BCR; 938-80 BCR***

REFERENCE STANDARD RS 14-11

ASTM-E84 1961 - Method of Test for Surface Burning Characteristics of Building Materials.

***REFERENCE STANDARD RS 14-12**

ANSI/ASTM-D396 1984 - Specification for Fuel Oils.

*****946-87 BCR; 1045-83 BCR***

*REFERENCE STANDARD RS 14-13**

ANSI/ASTM-D93 1980 - Method of Test for Flash Point, by Pensky-Martens Closed Tester.

****1045-83 BCR***

*REFERENCE STANDARD RS 14-14**

ANSI/ASTM-C105 1947 - Specifications for Ground Fire Clay Mortar for Laying-up Fireclay brick (Reapproved 1981)

ANSI/ASTM-C64 1972 - Specifications for Refractories for Incinerators and Boilers (Reapproved 1977)

****1045-83 BCR***

REFERENCE STANDARD RS 14-15
MINIMUM INSTALLATION FOR HEAT PRODUCTION EQUIPMENT[a]

EQUIPMENT		CLEARANCES (in.)				
Residential Type Equipment for Installation in Large Room[b]		Above Top of Casing or Equipment	From Top and Sides of Warm-Air Bonnet or Plenum	From Front[c]	From Back	From Sides
Boilers & Water Heaters - Steam boilers – 15 psi						
Water boilers – 250°F	Automatic oil or comb. gas-oil	6	—	24	6	6
Water heaters – 200°F	Automatic gas……..	6	—	18	6	6
(all water walled or jacketed)	Solid……	6	—	48	6	6
Furnaces, Central – Gravity, upflow, downflow, horizontal and duct. Warm-air 250°F max.	Automatic oil or comb, gas-oil……...	6	6	24	6	6
	Automatic gas…….	6	6	18	6	6
	Solid……	18	18	48	18	18
	Electric……	6	6	18	6	6
Furnaces, Floor For mounting in combustible floor	Automatic oil or comb. gas-oil……..	36	—	12	12	12
	Automatic gas……...	36	—	12	12	12
Heat Exchanger — Steam – 15 psi max.	……	1	1	1	1	1
Hot water – 250°F max .	……	1	1	1	1	1
Room Heaters — Circulating type	Oil and solid. ……..…….	36	—	24	12	12
	Gas……..….	36	—	24	12	12
(vented or unvented)	Oil and solid…….	36	—	36	36	36
Radiant type	Gas……..…….	36	—	36	18	18
(vented or unvented)	Gas with double metal or ceramic back……	36	—	36	12	18
Radiators — Steam or hot water	Gas…….	36	—	6	6	6
Ranges —					Firing	Opp.
Cooking Stoves	Oil…….……...	30[f]	—	—	9	24 18
(vented or unvented)	Gas……...	30[f]	—	—	6	6 6
	Solid-clay-lined firepot…	30[f]	—	—	24	24 18
	Solid-unlined firepot…..	30[f]	—	—	36	36 18
	Electric……	30[f]	—	—	6	6
Clothes Dryers that conform to applicable standards	Gas……..	6	—	24	6	6
	Electric……..……...	6	—	24	0	0

EQUIPMENT		CLEARANCES (in.)				
Commercial-Industrial Type Low Temperature Equipment (Any and all physical sizes except as noted)		Above Top of Casing or Equipment[e]	From Top and Sides of Warm-Air Bonnet or Plenum	From Front	From Back[e]	From Sides[e]
Boilers and Water Heaters- 100 cu. ft. or less (any psi steam)	All fuels…….	18	—	48	18	18
Any size (50 psi or less)	All fuels…….	18	—	48	18	18

Unit heaters — Floor mounted or suspended (any size)	Steam or Hot Water- Oil or comb. gas-oil……	1 6	— —	— 24	1 18	1 18
Suspended (100 cu. ft. or less)	Gas……	6	—	18	18	18
Suspended (100 cu. ft. or less)	All fuels……	18	—	48	18	
Suspended (over 100 cu. ft.)	All fuels……	18	—	48		
Floor mounted (any size)	…….					
Ranges — Floor mounted	All fuels……	48	—	48	18	18
Other Low Temperature Industrial Equipment — floor mounted or suspended	All fuels…….	18	18	48	18	18

(see footnotes, at end of table.)

EQUIPMENT		CLEARANCES (in.)				
Commercial-Industrial Medium Temperature Equipment		Above Top of Casing or Equipment[e]	From Top and Sides of Warm-Air Bonnet or Plenum	From Front	From Back[e]	From Sides[e]
Boilers and water heaters- Over 50 psi or Over 100 cu. Ft.	All fuels……..	48	—	96	36	36
Other med. Temp. industrial equipment-All sizes	All fuels……..	48	36	96	36	36
Incinerators — All sizes	All fuels……..	48	—	96	36	36
Industrial type High-Temperature Equipment						
High temperature equipment All sizes	All fuels…….	180	—	360	120	120

Notes for Reference Standard RS 14-15:

a See reference standard RS 14-16 for reduction of clearance.

b Large rooms are those that are large in comparison to the size of the equipment and have a volume equal to at least 12 times the total volume of a furnace and at least 16 times the total volume of a boiler. If the actual ceiling height of a room is greater than 8 ft., the volume of a room shall be figured on the basis of a ceiling height of 8 ft.

c The minimum dimension shall be that necessary for servicing the equipment, including access for cleaning and normal care, tube removal, etc.

d If the equipment is encased in brick, the 18 in. clearance above and at sides and back may be reduced to not less than 12 in.

e If the equipment is encased in brick the clearance above may be reduced to not less than 36 in., and at sides and back may be reduced to not less than 18 in.

f To combustible material or metal cabinet. If the underside of such combustible material or metal cabinet is protected with asbestos millboard at least 1/4 in. thick covered with sheet metal of not less than no. 28 U.S. Standard guage*, the distance may be reduced to not less than 24 in.

**** As enacted but "gage" probably intended.***

REFERENCE STANDARD RS 14-16
REDUCED MINIMUM CLEARANCES FOR EQUIPMENT, USING SPECIFIED FORMS OF PROTECTION[a]

Specified Form of Protection	Reduced Clearances (in.)							
	Where the Required Clearance with no Protection is:							
	36 in.		18 in.		12 in.		6 in.	
	Above	Side and Rear	Above	Side and Rear	Above	Side and Rear	Above	Side and Rear
(a)1/4 in. asbestos millboard spaced out 1 in.[b]	30	18	15	9	9	6	3	2
(b) 28 gauge *sheet metal on ¼ in. asbestos millboard	24	18	12	9	9	6	3	2
(c) 28 gauge* sheet metal spaced out 1 in.[b]	18	12	9	6	6	4	2	2
(d) 28 gauge* sheet metal on 1/8 in. asbestos millboard spaced out 1 in.[b]	18	12	9	6	6	4	2	2
(e)1 ½ in. asbestos cement covering on heating equipment	18	12	9	6	6	4	2	1
(f)1/4 in. asbestos millboard on 1 in. mineral fiber bats reinforced with wire mesh or equivalent	18	12	6	6	4	4	2	2
(g) 22 gauge* sheet metal on 1 in. mineral fiber bats reinforced with wire or equivalent	18	12	4	3	2	2	2	2
(h)1/4 in. asbestos cement board or ¼ in. asbestos millboard	36	36	18	18	12	12	4	4
(i)1/4in. cellular asbestos	36	36	18	18	12	12	3	3

Notes:

[a] Except for the protection described in (e), all clearances shall be measured from the outer surface of the equipment to the combustible material disregarding any intervening protection applied to the combustible material.

[b] Spacers shall be of non combustible material. Applicable to the combustible material, unless otherwise specified, and covering all surfaces within the distance specified as the required clearance with no protection.

As enacted but probably "gage" intended.

REFERENCE STANDARD RS 14-17
MINIMUM EQUIPMENT FOUNDATION MOUNTINGS REQUIREMENTS
COMBUSTIBLE CONSTRUCTION

Exceptions Base (in.)	Open Clearance Under Applying To:	Type of Protection Mounted on Combustible Surface	Extention of Protection Beyond Equipment: All Sides (in.)	Extention of Protection Beyond Equipment: Solid Fuel-Firing Side at Ash Removal Side (in.)
Low temperature equipment	18	1/4 in. asbestos	0	18
	8	3/8 in. asbestos millboard covered with no less than 0.24 Mfg's Standard *Gauge Sheet	6	18
	4	4 in. of hollow clay or concrete tile	0	18
	0	2 courses of 4 in. hollow clay or concrete tile covered with 3/16 in. steel plate	0	18
Medium temperature equipment	24	4 in. of hollow clay or concrete tile	0	18
Boilers, furnaces, and warm air furnaces for heating one-family	4	1/4 in. asbestos millboard covered with not less than 0.24 Mfg's Standard *Gauge Sheet		
dwellings; and to floor mounted unit heaters	0	4 in. of hollow clay or concrete tile	0	18
Commercial or restaurant type	18	A metal baffle between burner and floor	0	18
cooking equipment	8	3/8 in. asbestos millboard	6	18
	4	4 in. of hollow clay or concrete tile	0	18
	0	2 courses of 4 in. hollow clay or concrete tile covered with 3/16 in. steel plate	0 0	18 18
Domestic type floor mounted	18	A metal baffle between burner and floor	0	—
cooking and rm. heating eqpt.,.	4	1/2 in. asbestos millboard covered with not less than No. 24 Mfg's Standard *Gauge Sheet	0	18
such as, stoves, heaters, fuel fired steam or hot water radiators and hot water				

Notes for Combustible Construction:
Hollow tile shall be set with ends unsealed and joints matched so as to provide for the circulation of air through the tile. Where two courses of hollow tile are required, the tiles courses shall be laid at right angles to each other with the ends unsealed and joints matched so as to provide for the circulation of air through each course.
Low temperature equipment with a water cooled base and a grate area of less than 3 sq. ft., or low temperature equipment in which the combustion chamber is located at least 12 in. above the floor, may rest directly on a sheet metal base of not less than no. 14 manufacturer's standard *gauge sheet steel without heat insulation on combustible construction.
Where the floor protection used does not provide a monolithic surface of steel, concrete, or cement, the side or surface where ashes are removed or where traffic or other usage would wear the protection away shall be covered with no. 24 manufacturer's standard *gauge sheet steel or equivalent material.
As enacted but "gage"probably intended.

MINIMUM EQUIPMENT FOUNDATION MOUNTINGS REQUIREMENTS

NONCOMBUSTIBLE CONSTRUCTION

Equipment Classification	Fuels	Fire Resistance Rating	Extension Beyond Equipment
Low Temperature	All fuels	2 hr.	18 in. on all sides
Medium Temperature	Gas and liquid fuels	3 hr.	3 ft. on all sides
	Solid fuels	3 hr	3 ft. on all sides and 8 ft. on firing side and ash removal side
High Temperature	All fuels	4 hr.	10 ft. on all sides and 30 ft. at front or side where hot products are removed

***REFERENCE STANDARD RS 14-18**

ANSI/NFiPA 211-1988 - Standard for chimneys, fireplaces, vents and solid fuel burning appliances.
Local Law 80-1989

***REFERENCE STANDARD RS 14-19**

UL 127-1988 - Standard for factory-built fireplaces, as modified by reference standard RS 15-15.
Local Law 80-1989

***REFERENCE STANDARD RS 14-20**

ANSI/UL 737-1988 - Standard for fireplace stoves.
Local Law 80-1989

***REFERENCE STANDARD RS 14-21**

UL 1482-1988 - Standard for room heaters, solid fuel type (September 1988 Revision).
Local Law 80-1989

***REFERENCE STANDARD RS 14-22**

SMACNA 1992 Fibrous Glass Duct Construction Standard; SMACNA 1995 HVAC Duct Construction Standards — Metal and Flexible; and SMACNA 1985 HVAC Air Duct Leakage Test Manual; as modified.

Modifications:

1) Ducts shall be constructed in accordance with Section 2-3.1 of Reference Standard RS 13-1; Chapter 2 of Reference Standard RS 13-4; or Chapter 2 of Reference Standard RS 14-1; as applicable.

2) The New York State Energy Conservation Construction Code sets forth requirements for leakage testing of ducts which supercede those contained in this Reference Standard. The leakage testing requirements of this Reference Standard apply to buildings exempted from compliance with the New York State Energy Conservation Construction Code.
DOB 5-4-02; Local Law 80-1989