NFPA 97
Standard Glossary of Terms Relating to Chimneys, Vents, and Heat-Producing Appliances

2000 Edition

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An International Codes and Standards Organization

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Terms Relating to Chimneys, Vents, and Heat-Producing Appliances

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This edition of NFPA 97, *Standard Glossary of Terms Relating to Chimneys, Vents, and Heat-Producing Appliances*, was prepared by the Technical Committee on Chimneys, Fireplaces, and Venting Systems for Heat-Producing Appliances, and acted on by the National Fire Protection Association, Inc., at its November Meeting held November 14–17, 1999, in New Orleans, LA. It was issued by the Standards Council on January 14, 2000, with an effective date of February 11, 2000, and supersedes all previous editions.

This edition of NFPA 97 was approved as an American National Standard on February 11, 2000.

Origin and Development of NFPA 97

This glossary of terms was prepared by the NFPA Committee on Chimneys and Heating Equipment. It was submitted to the Association for tentative adoption at the annual meeting in 1959 and was adopted on that basis. In the year following, minor revisions were made by the committee, and it was submitted and received final adoption by the Association on May 18, 1960. The glossary was revised in 1961, 1966, and 1968. It was extensively revised in 1972, and additional definitions were included in 1979 and 1984.

The committee hopes that this glossary will be used by all NFPA committees responsible for standards involving chimneys, gas vents, and heat-producing appliances. The objective is to achieve uniformity in the use and definitions of the terms defined in the glossary. The 1988 edition contained a new definition of Smoke Chamber and a change in the definition of Fireplace Stove.

Several definitions were added or revised in the 1992, 1996, and 2000 editions to keep the glossary consistent with changes in NFPA 211, *Standard for Chimneys, Fireplaces, Vents, and Solid Fuel-Burning Appliances*.

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NOTE: Membership on a committee shall not in and of itself constitute an endorsement of the Association or any document developed by the committee on which the member serves.

Committee Scope: This Committee shall have primary responsibility for documents on fire safety for the construction, installation, and use of chimneys, fireplaces, vents, venting systems, and solid fuel-burning appliances. It also shall be responsible for documents on clearances of heat-producing appliances from combustible materials and terms relating to chimneys, vents, and heat-producing appliances.

Contents

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NOTICE: An asterisk (*) following the number or letter designating a paragraph indicates that explanatory material on the paragraph can be found in Appendix A.

Information on referenced publications can be found in Chapter 2.

Changes other than editorial are indicated by a vertical rule in the margin of the pages on which they appear. These lines are included as an aid to the user in identifying changes from the previous edition. Where one or more complete paragraph(s) has been deleted, the deletion is indicated by a bullet in the margin between the paragraphs that remain.

Chapter 1 Glossary of Terms

1-1 NFPA Official Definitions.

1-1.1* Approved. Acceptable to the authority having jurisdiction.

1-1.2* Authority Having Jurisdiction. The organization, office, or individual responsible for approving equipment, materials, an installation, or a procedure.

1-1.3 Labeled. Equipment or materials to which has been attached a label, symbol, or other identifying mark of an organization that is acceptable to the authority having jurisdiction and concerned with product evaluation, that maintains periodic inspection of production of labeled equipment or materials, and by whose labeling the manufacturer indicates compliance with appropriate standards or performance in a specified manner.

1-1.4* Listed. Equipment, materials, or services included in a list published by an organization that is 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 that either the equipment, material, or service meets appropriate designated standards or has been tested and found suitable for a specified purpose.

1-1.5 Shall. Indicates a mandatory requirement.

1-2 General Definitions.

1-2.1 Accessible. Having access thereto, where applied to a fixture, connection, appliance, or equipment, possibly necessitating the removal of an access panel, door, or similar obstruction.

1-2.2 Accessible, Readily. Capable of being reached easily and quickly for operation, adjustment, or inspection, without necessitating those seeking access to climb over or remove obstacles or to resort to the use of items such as portable ladders or chairs.

1-2.3* Air Change. A quantity of air, provided through a fuel burner, equal to the volume of furnace and boiler gas passes. (*See also definition 1-2.165, Purge.*)

1-2.4 Air Conditioning. The treatment of air to control simultaneously its temperature, humidity, purity, and distribution to meet the needs of a conditioned space.

1-2.5 Air, Dilution. The air that enters the relief opening of a draft hood or draft diverter, or the air that enters another opening in an appliance flue or venting system.

1-2.6 Air Duct. A conduit or passageway for conveying air to or from heating, cooling, air conditioning, or ventilating equipment, but not including the plenum.

1-2.7 Air Filter. Fire Hazard Classification.

1-2.7.1 Air Filter, Class 1. An air filter that, when clean, does not contribute fuel when attacked by flame and emits only negligible amounts of smoke when tested in accordance with UL 900, *Standard for Safety for Air Filter Units.*

1-2.7.2 Air Filter, Class 2. An air filter that, when clean, burns moderately when attacked by flame or emits moderate amounts of smoke, or both tested in accordance with UL 900, *Standard for Safety for Air Filter Units.*

1-2.8 Air Heater. An indirect-fired appliance intended to supply heated air for space heating and other purposes, but not intended for permanent installation.

1-2.9 Air Seal. Air supplied to any device at a significantly higher pressure than the surrounding air for the specified purpose of excluding contamination by the surrounding atmosphere.

1-2.10 Air Shutter. An adjustable device for varying the size of the air inlet(s) regulating primary or secondary air.

1-2.10.1 Air Shutter, Automatically Operated. An air shutter operated by an automatic control.

1-2.10.2 Air Shutter, Manually Operated. An air shutter manually set and locked in the desired position.

1-2.11 Alarm. An audible or visible signal indicating an off-standard or abnormal condition.

1-2.12 Aluminum-Coated Steel. Steel in which the bond between the steel and the aluminum is an iron-aluminum alloy.

1-2.13 Antiflooding Device. A safety control that causes the flow of (liquid) fuel to be shut off when a rise in fuel level occurs or when excess fuel is received, and that operates before the hazardous discharge of fuel can occur.

1-2.14 Appliance. Utilization equipment, normally built in standardized sizes or types, that is installed or connected as a unit to perform one or more functions such as clothes washing, air conditioning, food mixing, cooking, heating, or refrigeration.

1-2.14.1 Appliance, Automatically Lighted Fuel-Burning. A fuel-burning appliance in which fuel to the main burner is normally turned on and ignited automatically.

1-2.14.2 Appliance, Building Heating. A fuel-burning or electric boiler operating at a gauge pressure not over 50 psi (345 kPa), a central furnace, or a heater intended primarily for heating spaces having a volume exceeding 25,000 ft^3 (708 m^3).

1-2.14.3 Appliance, Cooking (Floor-Mounted Restaurant-Type). A range, oven, broiler, or other miscellaneous cooking appliance, designated for use in hotel and restaurant kitchens and for mounting on the floor.

1-2.14.4 Appliance, Counter (Gas). Appliances such as gas-operated coffee brewers and coffee urns and any appurtenant

water-heating equipment, food and dish warmers, hot plates, and griddles.

1-2.14.5 Appliance, Factory-Built. A manufactured appliance furnished by the manufacturer as a single assembly or as a package set of subassemblies or parts, and including all the essential components necessary for it to function normally where installed as intended.

1-2.14.6 Appliance, Nonresidential.

1-2.14.7 Appliance, Nonresidential, 1400°F. A commercial, industrial, or institutional appliance needing a chimney capable of withstanding a continuous flue gas temperature not exceeding 1400°F (760°C).

1-2.14.8 Appliance, Nonresidential, High-Heat. A commercial, industrial, or institutional appliance needing a chimney capable of withstanding a continuous flue gas temperature exceeding 1800°F (982°C).

1-2.14.9 Appliance, Nonresidential, Low-Heat. A commercial, industrial, or institutional appliance needing a chimney capable of withstanding a continuous flue gas temperature not exceeding 1000°F (538°C).

1-2.14.10 Appliance, Nonresidential, Medium-Heat. A commercial, industrial, or institutional appliance needing a chimney capable of withstanding a continuous flue gas temperature not exceeding 1800°F (982°C).

1-2.14.11 Appliance, Portable. An appliance that is actually moved or can easily be moved from one place to another in normal use.

1-2.14.12 Appliance, Residential-Type Heating. Fuel-burning and electric heating appliances, not including high-pressure steam boilers, for heating building spaces having a volume of not more than 25,000 ft^3 (708 m^3), and other heat-producing appliances of the type mainly used in residences but that might be used in other buildings, such as cooking stoves and ranges, clothes dryers, fireplace stoves, domestic incinerators, laundry stoves, water heaters, and heat pumps.

1-2.14.13 Appliance Branch Fuel Piping. Any run of piping or tubing and its fittings, not part of an appliance, that is used to convey fuel from the main piping manifold to a heat-producing appliance.

1-2.14.14 Appliance Casing (or Jacket). An enclosure forming the outside of the appliance.

1-2.14.15 Appliance Flue. See 1-2.80.1, Flue, Appliance.

1-2.15 Ash. The solid residue that remains after combustion is complete.

1-2.16 Ash Receptacle Door. A door below the grade level providing access to the ash receptacle.

1-2.17 Atomizing Medium. A supplementary fluid, such as steam or air, that assists in breaking down oil into a finely divided state.

1-2.18 Atmospheric Tank. A storage tank that has been designed to operate at gauge pressures from atmospheric through 0.5 psi (3.45 kPa).

1-2.19 Attic-Type Heating Appliance. A heating appliance designed specifically for installation in an attic or in a space with low headroom that normally is unoccupied.

1-2.20 Automatic Electric Igniter. A device for fuel burners designed to utilize electric energy for ignition of a fuel–air mixture at the burner.

1-2.21 Baffle. An object placed in an appliance to change the direction of, or to retard, the flow of air, air–fuel mixtures, or flue gases.

1-2.22 Base. The main supporting frame or structure of an assembly, exclusive of its legs.

1-2.23 Blower. A fan used to force air under pressure into an affected area.

1-2.24 Body. The principal structure of an appliance, including the supporting frame.

1-2.25 Boiler. A closed vessel in which water is heated, steam is generated, steam is superheated, or in which any combination thereof takes place by the application of heat from combustible fuels, in a self-contained or attached furnace.

1-2.25.1 Boiler, Combination-Fuel. A single boiler unit designed to burn more than one type of fuel (gas, oil, or solid), either separately or simultaneously, using either separate or common combustion chambers and flues.

1-2.25.2 Boiler, High-Pressure. A boiler for generating steam at gauge pressures in excess of 15 psi (103 kPa), or for heating water to a temperature in excess of 250°F (121°C) or at a gauge pressure in excess of 160 psi (1103 kPa).

1-2.25.3 Boiler, Hot Water Supply. A low-pressure hot water boiler having a volume exceeding 120 gal (454 L), or a heat input exceeding 200,000 Btu/hr (58.6 kWh), or an operating temperature exceeding 200°F (93°C) that provides hot water to be used outside the boiler.

1-2.25.4 Boiler, Low-Pressure. A boiler for generating steam at gauge pressures not in excess of 15 psi (103 kPa) or for furnishing water at a maximum temperature of 250°F (121°C) at a maximum gauge pressure of 160 psi (1103 kPa).

1-2.25.5 Boiler, Supplementary. A boiler designed to burn one type of fuel (gas, oil, or solid) that is intended for supplementing a boiler burning another type of fuel (gas, oil, or solid) by means of a common heat transfer medium.

1-2.26 Bond. Where referring to bricklaying and masonry chimneys, that connection between brick, stone, or other masonry units formed by lapping them upon one another in carrying up the work, thereby forming an inseparable mass.

1-2.27 Breeching. The conduit conveying flue gas from the appliance to the chimney.

1-2.28 Btu. Abbreviation for British thermal unit. The quantity of heat needed to raise the temperature of 1 pound of water 1°F.

1-2.29 Burner.

1-2.29.1 Burner, Automatically Ignited. A burner equipped so that the main burner fuel can be turned on and ignited automatically.

1-2.29.2 Burner, Combination Gas–Oil. A burner designed to burn either gas or oil, or both, simultaneously.

1-2.29.3 Burner, Conversion Gas. A burner designed to burn gas in an appliance originally designed to utilize another fuel.

1-2.29.4 Burner, Dual Fuel. A burner designed to burn either gas or oil, but not both, simultaneously.

1-2.29.5 Burner, Manually Ignited. A burner equipped so that the main burner fuel is turned on only by hand and ignited under supervision.

1-2.29.6 Burner, Mechanical Draft–Type. A burner that includes a power-driven fan, blower, or other mechanism as the primary means for supplying the air for combustion.

1-2.29.7 Burner, Natural Draft–Type. A burner that depends primarily on the natural draft created in the chimney or venting system to induce the air needed for combustion into the burner.

1-2.30 Central Heating Appliance. A stationary heating appliance comprising the following: boilers, central furnaces, floor furnaces, and wall furnaces. A floor-mounted unit heater to be connected to a duct system is classified also as a central heating appliance.

1-2.31 Central Warm-Air Heating System. A heating system consisting of a central furnace connected to a supply system and a return system. (*See also definition 1-2.86, Furnace, Central Warm-Air.*)

1-2.32 Centralized Oil Distribution System. A system of piping through which oil is supplied from a remote central supply tank or tanks to one or more buildings, mobile homes, recreational vehicles, or other structures.

1-2.33 Chimney. A structure containing one or more vertical or nearly vertical passageways for conveying flue gases to the outside atmosphere. [*See also definitions 1-2.212.1, Vent, Gas; and 1-2.219, Venting System (Flue Gases).*]

1-2.33.1 Chimney, Factory-Built, 1400°F Type. A chimney suitable for continuous use at 1400°F (760°C), composed of listed, factory-built components, intended for open, nonenclosed use at specified minimum clearances to combustibles and for use in noncombustible locations, and assembled in accordance with the terms of the listing to form the completed chimney.

1-2.33.2 Chimney, Factory-Built, Building Heating Appliance Type. A heating appliance chimney suitable for continuous use at 1000°F (538°C), composed of listed, factory-built components, designed for open, nonenclosed use at specified minimum clearances to combustibles, and assembled in accordance with the terms of the listing to form the completed chimney.

1-2.33.3 Chimney, Factory-Built, Masonry. A field-constructed chimney of solid masonry units, bricks, stones, listed masonry chimney units, or reinforced portland cement concrete that is lined with suitable chimney flue liners and built in accordance with Chapter 4 of NFPA 211, *Standard for Chimneys, Fireplaces, Vents, and Solid Fuel-Burning Appliances.*

1-2.33.4 Chimney, Factory-Built, Medium-Heat Appliance Type. A chimney used with appliances that produce maximum flue gas temperatures of 1800°F (982°C), composed of listed, factory-built components, suitable for open, nonenclosed use at specified minimum clearances to combustibles, and assembled in accordance with the terms of the listing to form the completed chimney.

1-2.33.5 Chimney, Factory-Built, Residential Type and Building Heating Appliance Type. A chimney suitable for continuous use at 1000°F (538°C), composed of listed, factory-built components that might be fully enclosed in combustible, residential-type construction, and that is assembled in accordance with the terms of the listing to form the completed chimney.

1-2.33.6 Chimney, Factory-Built, Unlisted Metal Chimney, Smokestack. A manufactured or field-constructed chimney intended only for nonresidential applications having one or more metal walls, or made of metal with a refractory lining, and that is capable of withstanding the flue gas conditions of its use.

1-2.34 Chimney Cap. A protective covering or housing for the top of a chimney, intended to prevent the entry of rain, snow, animals, and birds, and to prevent downdrafts.

1-2.35 Chimney Connector. The pipe that connects a fuel-burning appliance to a chimney.

1-2.36 Chimney Flue Base (Base of Flue). The lowest point of a flue within a chimney.

1-2.37 Cleanout Opening. An opening or hole in a chimney, usually located near its base, designed to allow access to the flue for purposes of removing ash, creosote, soot, and other extraneous matter that becomes trapped.

1-2.38 Clearance. The distance between a heat-producing appliance, chimney, chimney connector, vent, vent connector, or plenum and other surfaces.

1-2.39 Closed Water Piping System. A system of water piping where a check valve or other device prevents the free return of water or steam to the water main.

1-2.40 Clothes Dryer. A device used to dry wet laundry by means of heat derived from the combustion of fuel or from electric heating elements.

1-2.40.1 Clothes Dryer, Type 1. A factory-built, mass-produced dryer, primarily used in a family living environment. It might or might not be coin-operated for public use and usually is the smallest unit both physically and in function.

1-2.40.2 Clothes Dryer, Type 2. A factory-built, mass-produced dryer used in a commercial business. It might or might not be operated by the public or a hired attendant. It might or might not be coin-operated and is not designed for use in an individual family living environment. It can be small, medium, or large in size.

1-2.41 Combustible Material. Material made of or surfaced with wood, compressed paper, plant fibers, plastics, or other material that can ignite and burn, whether flame proofed or not, or whether plastered or unplastered.

1-2.42 Combustion. A chemical process of oxidation that occurs at a rate fast enough to produce heat and usually light in the form of either a flow or flame.

1-2.42.1 Combustion, Complete. The complete oxidation of a fuel.

1-2.42.2 Combustion, Incomplete. Burning with an insufficient supply of air so that the burning substance is only partially consumed and could be burned further with an additional air supply.

1-2.43 Combustion Air. The air necessary to provide for the complete combustion of fuel and usually consisting of primary air, secondary air, and excess air.

1-2.43.1 Combustion Air, Excess. Air supplied for combustion in excess of theoretical air.

1-2.43.2 Combustion Air, Primary. The air introduced into a burner that mixes with the fuel before it reaches the ignition zone.

1-2.43.3 Combustion Air, Secondary. The air externally supplied to the flame in the combustion zone.

1-2.43.4 Combustion Air, Theoretical. The chemically correct amount of air necessary for complete combustion of a given quantity of a specific fuel.

1-2.43.5 Combustion Chamber. That portion of an appliance within which combustion occurs.

1-2.43.6 Combustion Detector. That part of a primary safety control that is responsive directly to flame properties.

1-2.43.7 Combustion Products. Constituents resulting from the combustion of a fuel with the oxygen of the air, including the inerts but excluding excess air.

1-2.43.8 Combustion Safeguard. See definition 1-2.49.8, Control, Primary Safety (Combustion Safeguard).

1-2.43.9 Combustion Tests. The sampling of combustion products to determine the percentage of constituents and the temperature of same above ambient.

1-2.43.10 Combustion Volume. The space necessary for the satisfactory burning of a fuel.

1-2.44 Condensate (Condensation). The liquid that separates from a gas (including flue gases) due to a reduction in temperature.

1-2.45 Condenser. A piece of equipment that lowers the temperature of a vapor to the point where it changes to a liquid.

1-2.46 Confined Space. A space whose volume is less than 50 ft^3/1000 Btu/hr (1.42 m^3/293 W) of the aggregate input rating of all appliances installed in that space.

1-2.47 Connector, Gas Appliance. A listed product used to connect a gas appliance to the building gas supply.

1-2.48 Constant-Level Valve. A device for maintaining a constant level of oil fuel within a reservoir for delivery to an oil burner.

1-2.49 Control. A device designed to regulate the fuel, air, water, or electrical supply to the controlled equipment and that it can be automatic, semiautomatic, or manual.

1-2.49.1 Control, Automatic. A control having a self-acting or self-regulating mechanism that performs a necessary function at a predetermined point in an operation.

1-2.49.2 Control, Fan. An automatic control that responds to changes in temperature and is intended to control the operation of the fan on forced-air appliances.

1-2.49.3 Control, Input (Combustion). A control that automatically regulates the firing rate at a predetermined air–fuel ratio in accordance with load demand.

1-2.49.4 Control, Input (Combustion), High/Low Firing. The action of a combustion control that positions the air and fuel supply for low and high firing in accordance with load demand.

1-2.49.5 Control, Input (Combustion), Modulating. The action of a combustion control that gradually varies the air and fuel supplies within the specified limits of the load demand.

1-2.49.6 Control, Limit. An automatic safety control that responds to changes in fluid flow or level, pressure, or temperature, which is normally set beyond the operating range to limit the operation of the controlled equipment by shutting off the energy supply.

1-2.49.7 Control, Operating. A control, other than a safety control or interlock, used to start or regulate burner firing according to load demand and to stop or regulate firing on satisfaction of demand or upon reaching normal temperature or pressure in the appliances being fired. Operating controls also might be used to actuate auxiliary equipment.

1-2.49.8 Control, Primary Safety (Combustion Safeguard). A safety control that responds directly to flame properties, that senses the presence or absence of flame, and, in the event of ignition failure or unintentional flame extinguishment, causes safety shutdown.

1-2.49.9 Control, Primary Safety, Nonrecycling-Type (Combustion Safeguard). A primary safety control that, upon accidental flame failure during a normal firing cycle, causes a safety shutdown.

1-2.49.10 Control, Primary Safety, Recycling-Type (Combustion Safeguard). A primary safety control for automatically lighted burners that, upon accidental flame failure during a normal firing cycle and the subsequent shutoff of main burner fuel, provides one attempt to automatically light the main burner after a preestablished shutdown period and under a normal starting program.

1-2.49.11 Control, Primary Safety, Relight-Type (Combustion Safeguard). A primary safety control providing interrupted ignition for automatically lighted burners that, upon accidental flame failure during a normal firing cycle, will cause the ignition energy to be restored in not more than 0.8 second; then, if the main burner flame is not established, causes a safety shutdown.

1-2.49.12 Control, Safety. Automatic controls (including relays, switches, and other auxiliary equipment used in conjunction to form a safety control system) that are intended to prevent unsafe operation of the controlled equipment.

1-2.50 Control Circuit, Safety. A circuit involving one or more safety controls.

1-2.51 Corbel. Units of masonry projecting from or projecting upward and outward from the face of a wall or chimney in courses to form a support or ledge for a beam, rafter, or other member.

1-2.52 Cubic Foot of Gas. The amount of gas that occupies 1 ft^3 (0.0283 m^3) when at a temperature of 60°F (16°C), saturated with water vapor and under a pressure equivalent to 30 in. (101 kPa) of mercury.

1-2.53 Damper. A valve or plate for controlling draft or the flow of gases, including air.

1-2.53.1 Damper, Automatically Operated. A damper operated by an automatic control.

1-2.53.2 Damper, Fire. A damper arranged to seal off airflow automatically through part of an air duct system to restrict the passage of heat. A fire damper also can be used as a smoke damper, provided the location lends itself to the dual purpose.

1-2.53.3 Damper, Flue Gas. A damper located on the downstream side of the combustion chamber of a fuel-burning appliance, usually in a flue passage of the appliance or in the chimney or vent connector.

1-2.53.4 Damper, Manually Operated. An adjustable damper manually set and locked in the desired position.

1-2.53.5 Damper, Smoke. A damper arranged to seal off airflow automatically through a part of an air duct system, to restrict the passage of smoke. A smoke damper also can be a standard louvered damper serving other control functions, provided the location lends itself to the dual purpose. A smoke damper is not required to meet all the design functions of a fire damper.

1-2.54 Deep-Fat Fryer, Restaurant-Type. An appliance including a cooking vessel in which oils or fats are placed at such a depth that the cooking food is essentially supported by displacement of the cooking fluid rather than by the bottom of

the vessel and designed primarily for use in hotels, restaurants, clubs, and similar institutions.

1-2.55 Design Working Pressure. The maximum allowable working pressure for which a specific part of a system is designed.

1-2.56 Detector, Combustible Gas or Vapor. An instrument for determining concentration of combustible gas or vapor in the air.

1-2.57 Dilution Air. Air that enters a draft hood or draft regulator and mixes with the flue gases.

1-2.58 Direct Vent Appliance (Sealed Combustion System Appliance). A system consisting of an appliance, combustion air and flue gas connections between the appliance and the outside atmosphere, and a vent cap supplied by the manufacturer, and constructed so that all air for combustion is obtained from the outside atmosphere and all flue gases are discharged to the outside atmosphere.

1-2.59 Direct-Fired Appliance. A fuel-burning appliance in which the products of combustion (flue gases) are mixed with the medium (e.g., air) being heated.

1-2.60 Direct-Fired Oven. An oven in which the products of combustion from fuel-burning flow through the oven compartment.

1-2.61 Diversity Factor. The ratio of the maximum probable demand to the maximum possible demand.

1-2.62 Draft. The pressure differential that causes the flow of air or gases through a chimney, gas vent, or venting system.

1-2.62.1 Draft, Mechanical. Draft produced by a fan or an air or steam jet. When a fan is located so as to push the flue gases through the chimney or vent, the draft is forced. When the fan is located so as to pull the flue gases through the chimney or vent, the draft is induced.

1-2.62.2 Draft, Natural. Draft produced by the difference in the weight of a column of flue gases within a chimney or vent and a corresponding column of air of equal dimension outside the chimney or vent.

1-2.63 Draft Hood. A device built into an appliance, or made a part of the vent connector from an appliance, that is designed (1) to provide for the ready escape of the flue gases from the appliance in the event of no draft, backdraft, or stoppage beyond the draft hood, (2) to prevent a backdraft from entering the appliance, and (3) to neutralize the effect of stack action of the chimney or gas vent upon the operation of the appliance.

1-2.64 Draft Hood Relief Opening. The opening provided in a draft hood to allow the ready escape to the atmosphere of the flue gases in the event of no draft, backdraft, or stoppage beyond the draft hood, and to allow the inspiration of air into the draft hood to neutralize strong chimney or vent updraft.

1-2.65 Draft Regulator, Barometric. A device built into a fuel-burning appliance, or made a part of a chimney connector or vent connector, that functions to reduce excessive draft through an appliance to a desired value by admitting ambient air into the appliance chimney, chimney connector, vent, or vent connector.

1-2.66 Drip. A container placed at a low point in a system of piping to collect condensate and from which the condensate can be removed.

1-2.67 Duct System. A continuous passageway for the transmission of air that, in addition to ducts, might include duct fittings, dampers, plenums, fans, and accessory air-handling equipment.

1-2.68 Electrical Circuits.

1-2.68.1 Electrical Circuits, Isolated Limited Secondary. A circuit of limited energy derived from an isolated secondary winding of a transformer having a maximum capacity of 100 volt-amperes and an open-circuit secondary voltage rating not exceeding 1000 volts.

1-2.68.2 Electrical Circuits, Line-Voltage. A circuit involving a potential of not more than 600 volts and having circuit characteristics in excess of those of low-voltage and isolated limited secondary circuits.

1-2.68.3 Electrical Circuits, Low-Voltage. A circuit involving a potential of not more than 30 volts and supplied by a primary battery or by a standard Class 2 transformer; or by a suitable combination of transformer and fixed impedance that, as a unit, complies with all the performance requirements for a Class 2 transformer. (A circuit derived from a supply source classified as a line-voltage circuit, by connecting resistance in series with the supply circuit as a means of limiting the voltage and current, is neither considered to be a low-voltage nor an isolated secondary circuit.)

1-2.69 Electrical Diagrams.

1-2.69.1 Electrical Diagrams, Connection. A diagram that shows the connections of an installation or its component devices or parts. It can cover internal or external connections, or both, and contains such detail as is needed to make or trace connections that are involved. The connection diagram usually shows the general physical arrangement of the component devices or parts.

1-2.69.2 Electrical Diagrams, Ladder Form of Schematic. A diagram drawn in the form of a vertical ladder, in which the outer vertical lines represent the electrical supply conductors, and the horizontal steps represent each individual circuit with all component devices.

1-2.69.3 Electrical Diagrams, Schematic. A diagram that shows, by means of graphic symbols, the electrical connections and functions of a specific circuit arrangement. The schematic diagram facilitates tracing the circuit and its functions without regard to the actual physical size, shape, or location of the component device or parts.

1-2.70 Electrical Enclosure. A case enclosing electrical equipment and wiring that is designed expressly to prevent (1) a person from accidentally contacting uninsulated live parts, (2) burning or molten materials from contacting adjacent combustible materials or falling onto combustible materials, (3) conductive or combustible materials from dropping onto uninsulated live parts, and (4) mechanical abuse of electrical equipment not designed or approved to withstand the intended normal use without such additional enclosure.

1-2.71 Engineered Venting or Chimney System. A system that has been sized and configured in accordance with approved engineering methods (1) The vent capacity tables in NFPA 54, *National Fuel Gas Code*; (2) The fuel-burning manufacturers' venting instructions; (3) Drawings, calculations, and specifications provided by the venting equipment manufacturer or by a professional engineer; (4) Use of calculations from the ASHRAE *Handbook, HVAC Systems and Equipment*, Chapter 31, "Chimney, Gas Vent, and Fireplace Systems"; (5) Application of the VENTII computer program, developed under Gas Research Institute sponsorship for vent design and analysis.

1-2.72 Exhauster, Air. A fan used to withdraw air from an affected area.

1-2.73 Fan. A blower or exhauster assembly comprising blades or runners and housings or casings.

1-2.74 Fireplace. A hearth, fire chamber, or similarly prepared area and a chimney.

1-2.74.1 Fireplace, Factory-Built. A fireplace composed of listed, factory-built components assembled in accordance with the terms of the listing.

1-2.74.2 Fireplace, Masonry. A hearth and fire chamber of solid masonry units, such as bricks, stones, listed masonry units, or reinforced concrete, provided with a suitable chimney.

1-2.75 Fireplace Stove. A freestanding, chimney-connected, solid fuel-burning appliance that is designed to be operated with the fire chamber either open or closed.

1-2.76 Flame Safeguard. See definition 1-2.49.8, Control, Primary Safety (Combustion Safeguard).

1-2.77 Flame Spread Rating. A relative measurement of the surface burning characteristics of building materials when tested in accordance with NFPA 255, *Standard Method of Test of Surface Burning Characteristics of Building Materials.*

1-2.78 Flame-Failure Response Time. The interval between the occurrence of flame extinguishment and the de-energizing of the safety shutoff means.

1-2.79 Floor Protector. A noncombustible surfacing applied to the floor area underneath and extending in front, to the sides, and to the rear of a heat-producing appliance.

1-2.80 Flue. The general term for a passage through which flue gases are conveyed from the combustion chamber to the outer air.

1-2.80.1 Flue, Appliance. The flue passage within an appliance.

1-2.80.2 Flue, Chimney. The passage in a chimney for conveying the flue gases to the outside atmosphere.

1-2.80.3 Flue, Dilution. A passage designed to effect the dilution of flue gases with air before discharge from an appliance.

1-2.81 Flue Collar. That portion of an appliance designed for attachment of a chimney or vent connector or a draft hood.

1-2.82 Flue Gases. Combustion products from fuel-burning appliances along with excess air.

1-2.83 Flush-to-Wall–Type Range. A range designed for installation in direct contact with back and side walls without spacing means.

1-2.84 Fuel Gases. Any gas used as a fuel source, including natural gas, manufactured gas, sludge gas, liquefied petroleum gas–air mixtures, liquefied petroleum gas in the vapor phase, and mixtures of these gases. See NFPA 54, *National Fuel Gas Code.*

1-2.84.1 Fuel Gases, Liquid Petroleum. Material composed predominantly of any of the following hydrocarbons, or mixtures of them: propane, propylene, butanes (normal butane or iso-butane), and butylenes.

1-2.84.2 Fuel Gases, LP-Gas–Air Mixture. Liquefied petroleum gases distributed at relatively low pressures and normal atmospheric temperatures that have been diluted with air to produce desired heating value and utilization characteristics.

1-2.84.3 Fuel Gases, Manufactured. A mixture of gases usually composed of various proportions of some of the following: (1) coal gas — formed by distillation or cracking of bituminous coal, (2) coke-oven gas — produced in a similar manner as a by-product in the manufacture of coke, (3) carbureted water gas — formed by flowing steam through incandescent carbon, (4) oil gas — made by "cracking" petroleum oils.

1-2.84.4 Fuel Gases, Natural. A mixture of gases, principally methane and ethane, obtained from gas wells and from which less volatile hydrocarbons such as propane and butane have been removed, leaving a mixture of gases that will remain in the gaseous state at all pressures and temperatures encountered in the distribution system.

1-2.85 Fuel Oil. Any hydrocarbon oil as specified by ASTM D 396, *Specification for Fuel Oils*, or the Canadian Government Specification Board, 3-GP-2e, *Heating Fuel Oil*, and having a minimum flash point of 100°F (38°C).

1-2.86 Furnace, Central Warm-Air. A self-contained indirect-fired or electrically heated appliance designed to supply heated air through ducts to spaces remote from or adjacent to the appliance location.

1-2.86.1 Furnace, Central Warm-Air, Forced-Air. A central furnace equipped with a blower that provides the primary means for the circulation of air.

1-2.86.2 Furnace, Central Warm-Air, Forced-Air, Attic-Type. A forced-air–type furnace designed specifically for installation in an attic or in a space with low headroom that is normally occupied.

1-2.86.3 Furnace, Central Warm-Air, Forced-Air, Downflow-Type. A forced-air–type furnace designed with airflow essentially in a vertical path, discharging air at or near the bottom of the furnace.

1-2.86.4 Furnace, Central Warm-Air, Forced-Air, Horizontal-Type. A forced-air–type furnace designed with airflow through the furnace essentially in a horizontal path.

1-2.86.5 Furnace, Central Warm-Air, Forced-Air, Upflow-Type. A forced-air–type furnace designed with airflow essentially in a vertical path, discharging air at or near the top of the furnace.

1-2.86.6 Furnace, Central Warm-Air, Gravity-Type. A central furnace depending primarily on circulation of air by gravity.

1-2.86.7 Furnace, Central Warm-Air, Gravity-Type with Booster Fan. A central furnace equipped with a booster fan that does not materially restrict free circulation of air by gravity flow when such a fan is not in operation.

1-2.86.8 Furnace, Central Warm-Air, Gravity-Type with Integral Fan. A central furnace equipped with a fan as an integral part of its construction and operable on gravity systems only, where the fan is used only to overcome the internal resistance to airflow.

1-2.87 Furnace, Combination-Fuel. A single furnace unit designed to burn more than one type of fuel (gas, oil, or solid), either separately or simultaneously, using either separate or common combustion chambers and flues.

1-2.88 Furnace, Duct. A central furnace designed for installation in a duct of an air distribution system to supply warm air for heating and that depends on a blower not furnished as part of the furnace for air circulation.

1-2.89 Furnace, Floor. A self-contained indirect-fired or electrically heated furnace designed to be suspended from the

floor of the space to be heated. A fuel-burning floor furnace is designed to take air for combustion from outside the space being heated and is provided with means for observing the flame and lighting the appliance from such space.

1-2.89.1 Furnace, Floor, Fan-Type. A floor furnace equipped with a blower that provides the primary means for circulation of air.

1-2.89.2 Furnace, Floor, Gravity-Type. A floor furnace depending primarily on circulation of air by gravity. This classification also includes floor furnaces equipped with booster-type fans that do not materially restrict free circulation of air by gravity flow when such fans are not in operation.

1-2.90 Furnace, Supplementary. A furnace designed to burn one type of fuel (gas, oil, or solid) that is intended for supplementing a central warm-air furnace burning another type of fuel (gas, oil, or solid) by means of a common warm-air supply plenum.

1-2.91 Gallon of Oil. The amount of oil that will occupy one standard U.S. gal (4.55L) [231 $in.^3$ (3.79 dm^3)] at a temperature of 60°F (16°C).

1-2.92 Gas Vent. See definition 1-2.212.1, Vent, Gas.

1-2.93 Governor, Zero. A regulating device that is normally adjusted to deliver gas at atmospheric pressure within its flow rating.

1-2.94 Header. Where referring to chimneys, a beam set at right angles to floor or roof joists to provide support and framing around the opening.

1-2.95 Hearth. The floor area within the fire chamber of a fireplace or a fireplace stove.

1-2.96 Hearth Extension. The noncombustible surfacing applied to the floor area extending in front of and at the sides of the hearth opening of a fireplace or a fireplace stove; also where applied to the floor area beneath a fireplace stove or beneath an elevated overhanging fireplace hearth.

1-2.97 Heat Exchanger. A chamber in which heat resulting directly from the combustion of fuel, or heat from a medium such as air, water, or steam, is transferred through the walls of the chamber to air passing through the exchanger; or a chamber in which heat from electric resistors is transferred to the air.

1-2.97.1 Heat Exchanger, Direct. A heat exchanger in which heat generated in the combustion chamber of an appliance is transferred directly through the walls of the appliance to a heating medium (such as air, steam, or water) held in close contact with the combustion chamber walls. It is a self-contained combustion and heat-transfer device and, therefore, a direct heat-transfer device.

1-2.97.2 Heat Exchanger, Indirect. A heat exchanger that encloses or contains a heating medium (such as air, electric resistors, steam, or water), the heat from which is transferred to another heating medium separately contained in close contact with or directed through the heat exchanger. It is an indirect heat-transfer device.

1-2.98 Heat Pump. A refrigeration system arranged to accomplish either heating or cooling.

1-2.99 Heat Reclaimer, Chimney Connector–Type. A heat exchanger intended to be installed in a chimney connector between a heating appliance and the chimney to transfer heat from the flue gases through metal to air or water.

1-2.100 Heating Surfaces. All surfaces of a heat exchanger that transmit heat from flames, flue gases, or a heating medium to another medium to be heated.

1-2.101 Heat-Producing Appliance. An appliance that produces heat by utilizing electric energy or by burning fuel.

1-2.102 High Gas Pressure Switch. A pressure-actuated device that is arranged to effect a safety shutdown or to prevent starting when the gas pressure exceeds the preset value.

1-2.103 High Steam Pressure Switch. A pressure-actuated device that is arranged to effect a normal burner shutdown when the steam pressure exceeds a preset pressure.

1-2.104 Hot Plate, Domestic. An appliance consisting of one or more open-top–type burners or electric elements mounted on short legs or a base.

1-2.105 Humidity, Relative. The amount of water vapor or moisture held in suspension by gas or air and expressed as a percentage of the amount of moisture that would be held in suspension at the same temperature if saturated.

1-2.106 Igniter. A device that provides energy to ignite a pilot or main burner immediately.

1-2.106.1 Igniter, Continuous. An igniter that is continuously maintained at ignition temperature for the entire time the burner is in service, whether or not the main burner is firing.

1-2.106.2 Igniter, Intermittent. An igniter that is automatically energized each time the main burner is to be fired, and where ignition is maintained during the entire period that the main burner is firing.

1-2.106.3 Igniter, Interrupted. An igniter that is automatically energized each time the main burner is to be fired, and where ignition is maintained during the main-burner flame-establishing period and then is automatically cut off.

1-2.106.4 Igniter, Manual. An ignition device or source that is manually energized and for which the fuel to the main burner is turned on only by hand and ignited under the supervision of the operator.

1-2.106.5 Igniter, Proved. An igniter that is supervised by a primary safety control that senses the presence of energy for ignition prior to allowing the main-burner fuel to be delivered to the combustion zone.

1-2.106.6 Igniter, Unproved. An igniter assumed to be energized during the main-burner flame-establishing period.

1-2.107 Ignition, Direct Electric. The ignition of a main-burner flame by an electric ignition source such as a high-voltage spark or hot wire.

1-2.108 Illuminating Appliance, Gas-Fired. A gas appliance designed for illumination.

1-2.109 Incinerator. An appliance or combustion chamber for the reduction, by burning, of rubbish, garbage, and other wastes.

1-2.109.1 Incinerator, Chute-Fed (Class IIA). An incinerator designed specifically to be fed refuse from one or more floors above the incinerator directly into the incinerator by a separate chute constructed with a positive means to avoid penetration by smoke or fumes and connected directly over the primary combustion chamber. The incinerator is built with a primary and secondary combustion chamber and a settling chamber. It can include a flue gas washer or scrubber. A separate chimney serves to convey the combustion gases to the outdoors. This class of incinerator is suitable for Type 1 and Type 2 wastes. It generally is used in residential and institutional

buildings, including apartments, clubs, dormitories, churches, schools, and other occupancies where Type 1 and Type 2 wastes are to be incinerated.

1-2.109.2 Incinerator, Commercial-Industrial–Type (Classes III, IV, V, VI, and VII). An incinerator having a charging capacity in excess of 5 ft^3 (0.142 m^3) and suitable for a variety of wastes as follows: (1) Class III — Waste Type 0, Type 1, or Type 2; (2) Class IV — Waste Type 3; (3) Class V — Waste Types 0–4 (municipal incinerators); (4) Class VI — Waste Type 4; (5) Class VII — Waste Types 5 and 6.

1-2.109.3 Incinerator, Flue-Fed (Class II). An incinerator served by a single chimney flue that serves also as the charging chute, where refuse is fed directly to the incinerator through this chimney flue from one or more floors above the incinerator. This class of incinerator is suitable for Type 1 and Type 2 waste materials and garbage incidental to residential occupancy in single- and multifamily buildings. This class of incinerator is generally used in residential and institutional buildings, including apartments, clubs, dormitories, churches, schools, and other occupancies where Type 1 and Type 2 wastes are to be incinerated.

1-2.109.4 Incinerator, Residential-Type. An incinerator for the burning of ordinary combustible waste material and garbage (Type 2 waste) incidental to residential occupancy and having a firebox or charging compartment not greater than 5 ft^3 (0.142 m^3) in capacity. Residential-type incinerators can be self-contained, factory-built units that do not necessitate field construction, or can be of a built-in type designed to be encased in masonry or installed in a masonry wall or chimney.

1-2.110 Indirect-Fired Appliance. A fuel-burning appliance in which products of combustion (flue gases) are not mixed in the appliance with the medium (e.g., air) being heated.

1-2.111 Indirect-Fired Oven. A fuel-fired oven in which the products of combustion do not flow through the oven compartment.

1-2.112 Inerting. A technique by which a combustible mixture is rendered nonignitable by addition of an inert gas or a combustible dust.

1-2.113 Infrared Radiant Heater. A heater that directs a substantial amount of its energy output in the form of infrared radiant energy into the area to be heated. Such heaters can be of either the vented or unvented type.

1-2.114* Input Rating. The fuel-burning capacity of an appliance in Btu per hour as specified by the manufacturer.

1-2.115 Interlock. A control to prove the physical state of a necessary function and to furnish that proof to the primary safety control circuit.

1-2.116 Kerosene Stove. An unvented, self-contained, self-supporting, kerosene-burning range or room heater equipped with an integral fuel tank not exceeding a 2-gal (7.6-L) capacity.

1-2.117 Kettle, Gas-Fired. An appliance with a cooking chamber that is heated either by a steam jacket in which steam is generated by gas heat, or by direct gas heat applied to the cooking chamber.

1-2.118 Kilowatt Hour (kWh). A unit of work or energy equal to that done by 1 kilowatt acting for 1 hour (approximately 1.34 horsepower).

1-2.119 Light-Off. To establish the combustion of fuel entering a combustion chamber.

1-2.120 Limited-Combustible. A building construction material not complying with the definition of noncombustible material that, in the form in which it is used, has a potential heat value not exceeding 3500 Btu/lb (8141 kJ/kg), where tested in accordance with NFPA 259, *Standard Test Method for Potential Heat of Building Materials*, and complies with (a) or (b) below. Materials subject to increase in combustibility or flame spread index beyond the limits herein established through the effects of age, moisture, or other atmospheric condition shall be considered combustible. (a) Materials having a structural base of noncombustible material, with a surfacing not exceeding a thickness of $^1/_8$ in. (3.2 mm) that has a flame spread index not greater than 50. (b) Materials, in the form and thickness used, other than as described in (a), having neither a flame spread index greater than 25 nor evidence of continued progressive combustion and of such composition that surfaces that would be exposed by cutting through the material on any plane would have neither a flame spread index greater than 25 nor evidence of continued progressive combustion.

1-2.121 Lintel, Masonry Fireplace. The horizontal, noncombustible member, usually of masonry or steel, spanning the opening of a masonry fireplace to support the load above.

1-2.122 Loads, Connected. The sum of the rated Btu input to individual appliances connected to a piping system.

1-2.123 Lockout Timing. That period of time between the initial ignition trial and lockout by the ignition control system.

1-2.124 Low Gas Pressure Switch. A pressure-actuated switch arranged to open when the gas supply pressure falls below normal gas supply pressure.

1-2.125 Low Oil Pressure Switch. A pressure-actuated switch arranged to open when the oil supply pressure falls below a specified limit.

1-2.126 Low Oil Temperature Switch. A temperature-actuated device that initiates a signal when the oil temperature falls below the limits that are required to maintain the viscosity range recommended by the burner manufacturer.

1-2.127 Low-Water Cutoff. A device that is arranged to effect a shutdown of the burner when the water level in the boiler falls to a predetermined low level.

1-2.128 Main Burner. A device or group of devices essentially forming an integral unit for the final conveyance of fuel or a mixture of fuel and air to the combustion zone, and from which combustion takes place to accomplish the function for which the appliance is designed.

1-2.129 Main-Burner Flame-Establishing Period. The length of time the main-burner fuel-safety shutoff valves are allowed to remain open before the flame-sensing device assumes supervision of the main burner flame.

1-2.130 Mantel. A shelf or facing ornament above a fireplace opening.

1-2.131 Manual Reset. The manual operation that is necessary after safety shutdown before an appliance can be restarted.

1-2.132 Manually Lighted Appliance. An appliance in which fuel to the main burner is turned on only by hand and ignited under supervision.

1-2.133 Manufacturer. The person or persons, company, firm, corporation, partnership, or other organization responsible for turning raw materials or components into a finished product.

1-2.134 Masonry Unit, Solid. A masonry unit whose net cross-sectional area in every plane parallel to the bearing surface is 75 percent or more of its gross cross-sectional area measured in the same plane.

1-2.135 Master Fuel Trip. A device for the rapid automatic shutoff of all fuel, including igniters, to combustion equipment. This device has provision for both manual and automatic initiation.

1-2.136 Measured Gas. Gas that has passed through a meter, the volume of which has been registered by the meter.

1-2.137 Mechanical Draft System. Equipment installed as part of or attached to a chimney or vent that provides an induced or forced draft.

1-2.138 Mechanical Exhaust System. Equipment, installed as part of or attached to a duct, which will cause air flow.

1-2.139 Meter, Fuel. An instrument installed to measure the volume of fuel delivered through it.

1-2.140 Meter Set Assembly, Gas. The piping and fittings installed by the serving gas supplier to connect the inlet side of the meter to the gas service and to connect the outlet side of the meter to the customer's house or yard piping.

1-2.141 Mixer, Gas–Air. A device for mixing gas and air in any desired proportion.

1-2.141.1 Mixer, Gas–Air, Air Jet. A mixer using the kinetic energy of a stream of air issuing from an orifice to entrain the gas necessary for combustion. In some cases, this type of mixer is designed to entrain some of the air for combustion as well as gas.

1-2.141.2 Mixer, Gas–Air, Atmospheric Inspirator. A mixer using the kinetic energy of a jet of gas issuing from an orifice to entrain all or part of the air necessary for combustion. If gas for the jet is available at the spud at gauge pressures below 1 psi (6.9 kPa), the mixer is defined as a "low-pressure atmospheric inspirator" mixer; if at gauge pressure 1 psi (6.9 kPa) or above, the mixer is designated as a "high-pressure atmospheric inspirator."

1-2.141.3 Mixer, Gas–Air, Automatic. A mixer that automatically maintains within its rated capacity a substantially constant air/gas ratio at varying rates of flow. All types defined under Mixer, Gas–Air can be designed to fit this classification.

1-2.141.4 Mixer, Gas–Air, Manual. A mixer that needs manual adjustments to maintain the desired air/gas ratio as rates of flow are changed.

1-2.141.5 Mixer, Gas–Air, Mechanical. A mixer using mechanical means to mix gas and air, neglecting entirely any kinetic energy in the gas and air, and compressing the resultant mixture to a pressure suitable for delivery to its point of use. A mixer in this group utilizes either a centrifugal fan or some other type of mechanical compressor with a proportioning device on its intake through which gas and air are drawn by the fan or compressor suction. The proportioning device can be automatic or can necessitate manual adjustment to maintain the desired air/gas ratio as rates of flow are changed.

1-2.142 Modulate. To gradually vary the fuel and air flows to the burner in accordance with load demand.

1-2.143 Monitor. To sense and alarm a condition needing attention without initiating corrective action.

1-2.144 Noncombustible Material. A material that, in the form in which it is used and under the conditions anticipated, does not ignite, burn, support combustion, or release flammable vapors, when subjected to fire or heat. Materials that are reported as passing ASTM E 136, *Standard Test Method for Behavior of Materials in a Vertical Tube Furnace at 750 Degrees C*, are considered noncombustible materials.

1-2.145 Normal Care. The periodic tasks usually performed to operate and maintain an appliance, such as air, fuel, pressure, and temperature regulation; cleaning; lubrication; and resetting of controls.

1-2.146 Normal Fuel Supply Pressure. The pressure at the fuel service connection for which the fuel-burning system has been designed.

1-2.147 Oil-Burning Stove. A self-contained, freestanding, above-the-floor, indirect-fired appliance equipped with one or more oil burners. It can be equipped with an integral oil tank or can be designed for connection to a separate oil supply tank.

1-2.148 Oil-Fired Unit. An appliance equipped with one or more oil burners and all the necessary safety controls, electrical equipment, and related equipment manufactured for assembly as a complete unit. This definition does not include kerosene stoves or oil stoves.

1-2.149 Operating Range. The region between the maximum input and minimum input for which appliance operation can be maintained as continuous and stable.

1-2.150 Oven. A receptacle or compartment for cooking, baking, drying, or processing by means of heat.

1-2.150.1 Oven, Baking and Roasting. An oven used principally for food preparation.

1-2.150.2 Oven, Baking and Roasting, Cabinet. A single stationary deck oven having more than one deck heated by a single burner or group of burners.

1-2.150.3 Oven, Baking and Roasting, Reel-Type. A single oven employing trays that are moved by mechanical means.

1-2.150.4 Oven, Baking and Roasting, Sectional. A single stationary deck oven or one composed of one or more independently heated stationary decks.

1-2.151 Pellet Fuel. A solid processed fuel of specified size and composition capable of being fed to the appliance combustion system at a controlled rate.

1-2.152 Pellet Fuel–Burning Appliance. A closed combustion pellet vent or chimney-connected solid pellet fuel–burning appliance incorporating a fuel-feed control mechanism.

1-2.153 Pilot. A flame that is used to light the main burner.

1-2.153.1 Pilot, Continuous. A pilot that burns without turndown for the entire time a burner is in service, whether or not the main burner is firing.

1-2.153.2 Pilot, Expanding. A continuously burning pilot that is automatically expanded to ignite the main burner reliably. The pilot can be turned down at the end of the main-burner flame-establishing period.

1-2.153.3 Pilot, Intermittent. A pilot that is lighted automatically each time there is a call for heat and that burns during the entire period that the main burner is firing.

1-2.153.4 Pilot, Interrupted. A pilot that is lighted automatically each time there is a call for heat, where the pilot fuel is cut off automatically at the end of the main-burner flame-establishing period.

1-2.153.5 Pilot, Proved. A pilot flame supervised by a primary safety control that senses the presence of the pilot flame prior

to allowing the main burner fuel to be delivered for combustion.

1-2.154 Pilot Flame–Establishing Period. The interval of time fuel is allowed to be delivered to a proved pilot before the primary safety control proves the pilot flame.

1-2.155 Pipe, Equivalent Length. The resistance of valves, controls, and fittings to flow, expressed as an equivalent length of straight pipe for convenience in calculating pipe sizes.

1-2.156 Piping. Pipe or tubing, or both.

1-2.156.1 Piping, Concealed. Piping that, where in place in the finished building, necessitates removal of permanent construction to gain access to the piping.

1-2.156.2 Piping, Exposed. Piping that is in view in a finished structure.

1-2.156.3 Piping, Pipe. Rigid conduit of iron, steel, copper, brass, aluminum, or plastic.

1-2.156.4 Piping, Tubing. A semirigid conduit of copper, steel, aluminum, or plastic.

1-2.157 Piping System. Piping or tubing, valves, and fittings used to connect fuel-burning utilization equipment to the source of supply.

1-2.158 Plenum. A compartment or chamber to which one or more air ducts are connected, that forms part of the air distribution system, and that is not used for occupancy or storage.

1-2.158.1 Plenum, Furnace Return. A furnace plenum attached directly to, or an integral part of, the return-air inlet of the furnace.

1-2.158.2 Plenum, Furnace Supply. A furnace plenum attached directly to, or an integral part of, the supply outlet of the furnace.

1-2.159 Port. Any opening in a burner head through which fuel or an air–fuel mixture is discharged for ignition.

1-2.160 Portable Appliance. See 1-2.14.11, Appliance, Portable.

1-2.161 Portable Kerosene Heater. An unvented, self-contained, self-supporting heater, with integral reservoir, designed to be carried from one location to another.

1-2.162 Prove. To establish by measurement or test the existence of a specific condition, such as flame, level, flow, pressure, or position.

1-2.163 Pump, Automatic Oil. A pump, not an integral part of an oil burner, that automatically pumps oil from the supply tank and delivers the oil by gravity under a constant head to an oil-burning appliance, and that is designed to stop pumping automatically in case of total breakage of the oil supply line between the pump and the appliance.

1-2.164 Pump, Oil-Transfer. An oil pump, automatically or manually operated, that transfers oil through continuous piping from a supply tank to an oil-burning appliance or to an auxiliary tank, and that is not designed to stop pumping automatically in case of total breakage of the oil supply line between the pump and the appliance.

1-2.165 Purge. A flow of air through the combustion chamber and associated flues that effectively removes any gaseous or suspended combustibles and replaces them with air. Purging also can be accomplished using an inert medium.

1-2.166 Purge Air Change. A quantity of air, provided through a fuel burner, equal to the volume of furnace and boiler gas passes. [Air volume is to be calculated at 14.7 psia [101 kPa (absolute)] and 70°F (21°C).]

1-2.167 Quick-Disconnect Device. A hand-operated device that provides a means for connecting to and disconnecting from a fuel supply an appliance or an appliance connector and that is equipped with an automatic means to shut off the fuel supply when the device is disconnected.

1-2.168 Range. An appliance intended primarily for cooking, including roasting, baking, or broiling or any combination of these functions.

1-2.168.1 Range, Bungalow Utility-Type. A range having an additional section for gas, liquid, or solid fuel that is designed for space heating and heating a solid top section but not for oven heating.

1-2.168.2 Range, Built-in Residential-Type. A range designed to be recessed into, placed upon, or attached to counters, cabinets, walls, or partitions.

1-2.168.3 Range, Residential-Type. A range intended primarily for residential cooking purposes.

1-2.168.4 Range, Restaurant-Type. A range of the type designed for use primarily in restaurant and hotel kitchens.

1-2.168.5 Range, Room Heater–Type. A range having a separate room heater section.

1-2.169 Refrigerant. A substance used to produce refrigeration by its expansion or vaporization.

1-2.170 Refrigerating System. A combination of interconnected refrigerant-containing parts, constituting one closed refrigerant circuit, in which a refrigerant is circulated for the purpose of extracting heat.

1-2.171 Regulator, Gas Pressure. A device, either adjustable, nonadjustable, or convertible, for controlling and maintaining a uniform outlet gas pressure.

1-2.171.1 Regulator, Gas Pressure, Adjustable, Spring-Type, Limited Adjustment. A regulator in which the regulating force acting on the diaphragm is derived principally from a spring, the loading of which is adjustable over a range of not more than 1.0 in. (249 Pa) water outlet pressure.

1-2.171.2 Regulator, Gas Pressure, Adjustable, Spring-Type, Standard Adjustment. A regulator in which the regulating force acting on the diaphragm is derived principally from a spring, the loading of which is adjustable.

1-2.171.3 Regulator, Gas Pressure, Convertible. A regulator whose adjustment means can be positioned from one predetermined outlet pressure setting to another predetermined outlet pressure setting, with no intermediate pressure setting and without addition, deletion, or substitution of parts.

1-2.171.4 Regulator, Gas Pressure, Nonadjustable, Spring-Type. A regulator in which the regulating force acting on the diaphragm is derived principally from a spring, the loading of which is not adjustable.

1-2.171.5 Regulator, Gas Pressure, Nonadjustable, Weight-Type. A regulator in which the regulating force acting on the diaphragm is derived from a weight or combinations of weights.

1-2.172 Regulator Vent. The opening in the atmospheric side of a regulator housing that allows air to move in and out to compensate for the movement of the regulator diaphragm.

1-2.173 Return System, Air Conditioning. An assembly of connected ducts, air passages or plenums, and fittings