

CHAPTER II
DEFINITIONS

201 GENERAL

201.1

For the purpose of this code, the following terms shall have the meaning indicated in this chapter.

201.2

No attempt is made to define ordinary words which are used in accordance with their established dictionary meaning except where the word has been loosely used and it is necessary to define its meaning as used in this code to avoid misunderstanding.

201.3

Because the primary purpose is to define terms rather than words, the definitions are arranged alphabetically according to the first work of the term rather than the noun.

202 STANDARD GLOSSARY OF TERMS RELATING TO CHIMNEYS, GAS VENTS AND HEAT PRODUCING APPLIANCES (NFPA No. 87M-1966)

97M AIR COMBUSTION

AIR CONDITIONING—The treatment of air so as to control simultaneously its temperature, humidity, cleanness and distribution to meet the requirements of a conditioned space. *

AIR FILTERS

AIR HEATER—An indirect-fired vented appliance intended to supply heated air for space heating and other purposes, but not intended for permanent installation. *

AIR INLET, AIR OUTLET, AIR TERMINAL UNIT, APPLIANCE

APPLIANCE CASING—An enclosure forming the outside of the appliance, no part of which is likely to be subjected to intense heat. *

* **APPROVED**—The word “approved” refers to approval by the authority having jurisdiction. (This is an official definition adopted by the NFPA Board of Directors.)

APPLIANCE FLUE—The flue passages within the appliance.

Boiler Room, Co

LISTED—The word “listed” refers to appliances and accessories which are shown in a list published by a nationally recognized testing agency such as the American Gas Association, Inc., Laboratories, Underwriters’ Laboratories, Inc., Underwriters’ Laboratories of Canada and Factory Mutual Laboratories, qualified and equipped for experimental testing, and maintaining an adequate periodic inspection of current production of listed models and whose listing states either that the appliance or accessory complies with nationally recognized safety requirements or has been tested and found safe for use in a specified manner. Such listed appliances or accessories may be installed in the manner specified. Compliance may be determined by the presence on the appliance or accessory of a label or identification mark of such a nationally recognized testing agency.

ATTIC APPLIANCE—An appliance designed specifically for installation in an attic or in a space with low head room, normally unoccupied.

BAFFLE, APPLIANCE—An object placed in an appliance to direct the flow of air or flue gases.

BARBECUE—A portable or stationary open hearth or brazier used for cooking. It may be of a type in which fuel is burned, or it may be one provided with electric elements.

BASE—The main supporting frame or structure of the assembly, exclusive of legs.

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BLOWER—A fan used to force air under pressure into an affected area.

BOILER, HIGH-PRESSURE—A boiler furnishing steam at pressures in excess of 15 psi or hot water at temperatures in excess of 250 F or at pressures not in excess of 160 psi.

BOILER, LOW-PRESSURE HOT-WATER AND LOW-PRESSURE STEAM—A boiler furnishing hot water at pressures not exceeding 160 psi and at temperatures not more than 250 F or steam at pressures not more than 15 psi.

Boiler, Room
BUILT-IN COOKING APPLIANCE—A cooking appliance designed to be recessed into or attached to counters, cabinets, walls, or partitions.

BURNER, AUTOMATICALLY LIGHTED—One where fuel to the main burner is normally turned on and ignited automatically.

BURNER, GAS—A device for the final conveyance of the gas, or a mixture of gas and air, to the combustion zone.

BURNER, MANUALLY LIGHTED—One where fuel to the main burner is turned on only by hand and ignited under supervision.

CHIMNEY—(Also see Gas Vents.) One or more passageways, vertical or nearly so, for conveying flue gases to the outside atmosphere.

a. **Factory-Built Chimney**—A chimney composed of listed factory-built components assembled in accordance with the terms of listing to form the completed chimney.

b. **Masonry Chimney**—A chimney of solid masonry units, bricks, stones, listed masonry units or reinforced concrete, lined with suitable flue liners.

c. **Metal Chimney**—A chimney constructed of metal.

* **CHIMNEY CONNECTOR**—The pipe which connects a fuel-burning appliance to a chimney.

CHIMNEY FLUE—The flue gas conveying passageway in a chimney.

CLEARANCE—The distance between a heat-producing appliance, chimney, chimney connector, vent, vent connector, or plenum, and other surfaces.

CLOTHES DRYER—An appliance used to dry wet laundry by means of heat. Dryer classifications are as follows:

a. **Type 1**—(Residential Type) A clothes dryer primarily used in family living environment. May or may not be coin-operated for public use.

b. **Type 2**—(Commercial Type) A clothes dryer primarily used in business and which may or may not be operated by the public.

COMBUSTIBLE MATERIAL—Combustible material, as pertaining to materials adjacent to or in contact with heat-producing appliances, chimney connectors and vent connectors, steam and hot-water pipes, and warm-air ducts, means material made of or surfaced with wood, compressed paper, plant fibers, or other material that will ignite and burn. Such material shall be considered as combustible even though flameproofed, fire-retardant treated, or plastered.

COMBUSTION—As used herein, the rapid oxidation of fuel accompanied by the production of heat, or heat and light. Complete combustion of a fuel is possible only in the presence of an adequate supply of oxygen.

COMBUSTION CHAMBER—The portion of an appliance within which combustion occurs.

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COMBUSTION PRODUCTS—Effluents resulting from the combustion of a fuel including the inerts, but excluding excess air.

^{CONDENSER}
CONDENSATE—The liquid which separates from a gas (including flue gases) due to a reduction in temperature. *

^{CONNECTOR, GAS APPLIANCE}
CONTROL—A device designed to regulate the fuel, air, water, or electrical supply to the controlled equipment. It may be automatic, semiautomatic, or manual. *

^{CONTAINED SPACE}
CONTROL CIRCUIT, SAFETY—A circuit involving one or more safety controls. *

CONTROL INPUT (COMBUSTION)—A control which automatically regulates the firing rate at predetermined air-fuel ratio in accordance with load demand. It may be a type which positions the air and fuel supplies for low fire and for high fire as required to meet the load demands, or it may be a modulating type which gradually varies the air and fuel supplies within limits to meet the load demand.

CONTROL, LIMIT—An automatic safety control responsive to changes in liquid level, pressure, or temperature and normally set beyond the operating range for limiting the operation of the controlled equipment by shutting off the energy supply.

CONTROL, OPERATING—A control, other than a safety control or interlock, 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 may also actuate auxiliary equipment.

CONTROL, SAFETY—Automatic controls and interlocks (including relays, switches, and other auxiliary equipment used in conjunction therewith to form a safety control system) which are intended to prevent unsafe operation of the controlled equipment.

CONTROL, PRIMARY SAFETY (FLAME SAFEGUARD)—A control responsive directly to flame properties, sensing the presence of flame and, in event of ignition failure or unintentional flame extinguishment, causing safety shutdown.

^{COOLING UNIT}
DAMPER—A valve or plate for controlling draft or the flow of gases including air. *

DAMPER, FIRE—A damper arranged to seal off air flow automatically through part of an air duct system, so as to restrict the passage of heat. A fire damper may also be used as a smoke damper if location lends itself to the dual purpose.

DAMPER, FLUE GAS—A damper located on the downstream side of the combustion chamber, usually in a flue passage of the appliance or in the chimney or vent connector.

DAMPER, SMOKE—A damper arranged to seal off air flow automatically through a part of an air duct system, so as to restrict passage of smoke. A smoke damper may be a standard louvered damper serving other control functions if location lends itself to the dual purpose. A smoke damper does not need to meet all the requirements of a fire damper.

DEEP-FAT FRYER, RESTAURANT TYPE—An appliance including a vessel in which oils or fats are placed to such a depth that the cooking food is essentially supported by displacement of the cooking fluid or a perforated container immersed in the cooking fluid rather than by the bottom of the vessel, designed primarily for use in hotels, restaurants, clubs, and similar institutions.

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DIRECT-FIRED APPLIANCE—An appliance in which combustion products (flue gases) are mixed with the medium (e.g., air) being heated.

DRAFT HOOD—A device built into a gas appliance, or made a part of a chimney or vent connector from the appliance, which is designed to (1) assure the ready escape of the flue gases in the event of no draft, back draft, or stoppage beyond the draft hood; (2) prevent a back draft from entering the appliance; and (3) neutralize the effect of stack action of the chimney or gas vent upon the operation of the appliance.

DRAFT REGULATOR, BAROMETRIC—A device which functions to maintain a desired draft in the appliance by automatically reducing the chimney draft to the desired value. A double-action regulator is one whose balancing damper is free to move in either direction to relieve back draft as well.

EXCESS AIR—Air in excess of that which is theoretically required for complete combustion which passes through the combustion chamber and the appliance flues. *DUCT COVERING, DUCT LINING, DUCT RISER, DUCT SYSTEM **

EXHAUSTER, AIR—A fan used to withdraw air from an affected area.

EXHAUSTER, FLUE GAS (DRAFT BOOSTER)—A fan installed in or on a chimney, vent, or chimney or vent connector to induce a draft at the appliance.

FAN—An assembly comprising blades or runners and housings or casings, and being either a blower or exhauster.

FIREPLACE—A hearth, fire chamber, or similarly prepared place and a chimney.

- a. **Factory-Built Fireplaces**—A fireplace composed of listed factory-built components assembled in accordance with the terms of listing of form the completed fireplace.
- b. **Masonry Fireplace**—A hearth and fire chamber of solid masonry units such as bricks, stones, listed masonry units, or reinforced concrete, provided with a suitable chimney.

FIREPLACE STOVE—A chimney-connected, solid fuel burning stove having part of its fire chamber open to the room.

FLAME SAFEGUARD—See "Control, Primary Safety."

FLUE, APPLIANCE—The flue passages within an appliance.

FLUE COLLAR—That portion of an appliance designed for attachment of the chimney or vent connector.

FLUE-FED INCINERATOR (apartment house type)—means an incinerator having a chimney flue which serves also as the refuse chute and which has provisions for feeding waste materials directly into the flue from one or more floors above the incinerator.

FLUE GASES—Combustion products and excess air.

FORCED-AIR SYSTEM—A central warm-air heating system that is equipped with a fan which provides the primary means for circulation of air.

FURNACE, CENTRAL, WARM-AIR—A self-contained appliance designed to supply heated air through ducts to spaces remote from or adjacent to the appliance location. *FURNACE ATTIC **

- a. **Forced-Air Type**—A central furnace equipped with a fan or blower which provides the primary means for circulation of air.

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- b. **Gravity Type.** A central furnace depending primarily on circulation of air by gravity.

FURNACE, DOWNFLOW. A forced-air type central furnace designed with air flow through the furnace essentially in a vertical path, discharging air at or near the bottom of the furnace.

FURNACE, DUCT. A central furnace designed for installation in a duct of an air-distribution system to supply warm air for heating and which depends for air circulation on a blower not furnished as part of the furnace.

FURNACE, FLOOR. A self-contained furnace designed to be suspended from the floor of the space being heated.

FURNACE, HORIZONTAL. A forced-air type central furnace designed with air flow through the furnace essentially in a horizontal path.

FURNACE, UPFLOW. A central furnace designed with air flow through the furnace essentially in a vertical path, discharging air at or near the top of the furnace.

FURNACE, ROOM
GAS VENT. A passageway, vertical or nearly so, composed of listed factory-built components assembled in accordance with the terms of listing for conveying flue gases from gas appliances or vent connectors to the outside atmosphere.

- a. **Type B Gas Vent.** A gas vent for venting gas appliances with draft hoods listed for use with Type B gas vents.
- b. **Type BW Gas Vent.** A gas vent for venting listed gas-fired wall furnaces.

HEAT EXCHANGER, DIRECT. A heat exchanger in which heat generated in the combustion chamber of the appliance is transferred direct through walls of the heat exchanger to the 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, hence a direct heat-transfer device.

HEAT EXCHANGER, INDIRECT. A heat exchanger which encloses or contains a heating medium (such as air, 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.

HEAT PUMP. A refrigeration system arranged to accomplish either heating or cooling.

INCINERATOR. An appliance or combustion chamber for the reduction by burning of rubbish, garbage, and other waste matter.

- a. **Commercial and Industrial Incinerator**—An incinerator intended for burning waste matter resulting from or incidental to any class of occupancy.
- b. **Flue-Fed Incinerator (Apartment House Type)**—An incinerator having a chimney flue which serves also as the refuse chute and which has provisions for feeding waste materials directly into the flue from one or more floors above the incinerator.
- c. **Residential Incinerator**—An incinerator intended primarily for use by not more than two families for the burning of ordinary combustible waste materials and garbage incidental to domestic occupancy and having a firebox or charging compartment of not over 5 cubic feet in capacity.

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INDIRECT-FIRED APPLIANCE—An appliance in which combustion products (flue gases) are not mixed in the appliance with the medium (e.g., air) being heated.

INDUSTRIAL APPLIANCES —

- a. **Low-heat Industrial Appliance**—An industrial appliance such as a building heating appliance for heating building spaces having a total volume exceeding 25,000 cubic feet except residential type appliances, a steam boiler operating at not over 50 pounds per square inch gage pressure, a commercial cooking range, pressing machine boiler at any pressure, bake oven, candy furnace, stereo-type furnace, drying and curing appliance, and other furnaces classified as low-heat appliances in accordance with nationally recognized good practice. Appliances otherwise classed as medium-heat appliances may be considered as low-heat appliances if not larger than 100 cubic feet in size.
- b. **Medium-Heat Industrial Appliance**—An industrial appliance such as an annealing furnace (glass or metal), charcoal furnace, galvanized furnace, gas producer, commercial or industrial incinerator, and steam boiler operating at over 50 pounds per square inch gage pressure when such appliance is larger than 100 cubic feet in size, and other furnaces in which material is being heated or melted at temperatures above 1500 F.
- c. **High-Heat Industrial Appliance**—An industrial appliance such as billet and bloom furnace, blast furnace, brass melter, cupola, glass furnace, open-hearth furnace, and ceramic kiln and vitreous enameling oven (ferrous metals) when such appliances are larger than 100 cubic feet in size, and other furnaces classified as high-heat appliances in accordance with nationally recognized good practice.

INFRARED RADIANT HEATER—A heater which directs a substantial amount of its energy output in the form of infrared radiant energy into the area to be heated. Such heaters may be of either the vented or unvented type.

INSTITUTION—A building used for purposes such as medical or other treatment or care of persons suffering from physical or mental illness, disease or infirmity, for the care of infants, convalescents or aged persons, and for penal or corrective purposes. An institution ordinarily provides sleeping facilities for the occupants.

INTERLOCK—A device to prove the physical state of a required condition, and to furnish that proof to the primary safety control circuit.

LIQUEFIED-PETROLEUM GAS—A material composed predominately of any of the following hydrocarbons or mixtures of them; propane, propylene, butanes (normal butane or isobutane), and butylene.

LOW-TEMPERATURE VENTING SYSTEM (Type L)—A venting system composed of listed factory-built components assembled in accordance with the terms of listing for venting appliances listed for use with Type L venting systems of Type B gas vents.

LP-GAS AIR MIXTURE—Liquefied-petroleum gases distributed at relatively low pressures and normal atmospheric temperatures which have been diluted with air to produce desired heating value and utilization characteristics.

Machinery Room
MAIN-BURNER FLAME-ESTABLISHING PERIOD—The interval of time the main-burner fuel safety shutoff valves are permitted to be open before the primary safety is required to supervise the main-burner flame.

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MANUAL RESET—The manual operation required after safety shutdown before the appliance can be restarted. *

MECHANICAL EQUIPMENT 1210
PILOT—A flame, smaller than the main flame, which is utilized to ignite the fuel at the main burner or burners.

PILOT, CONTINUOUS—A pilot that burns without turndown throughout the entire time the burner assembly is in service, whether the main burner is firing or not.

PILOT, EXPANDING—A pilot that burns throughout the entire time the burner assembly is in service, whether the main burner is firing or not. Upon a call for heat, the pilot is automatically expanded. The pilot may be turned down automatically at the end of main-burner flame-establishing period.

PILOT FLAME-ESTABLISHING PERIOD—The interval of time fuel is permitted to be delivered to a proved pilot before the primary safety control is required to prove pilot flame.

PILOT, INTERMITTENT—A pilot which is lighted automatically each time there is a call for heat. It burns during the entire period that the main burner is firing.

PILOT, INTERRUPTED—A pilot which is lighted automatically each time there is a call for heat. The pilot fuel is cut off automatically at the end of the main-burner flame-establishing period.

PILOT, PROVED—A pilot flame supervised by a primary safety control.

PIPING—The word "piping" refers to either pipe or tubing, or both.

- a. Pipe—Refers to a rigid conduit of iron, steel, copper, brass, or aluminum.
- b. Tubing—Refers to a semirigid conduit of copper, steel, or aluminum. *

PIPING, CONCEPT OF
PLENUM—An air compartment or chamber to which one or more ducts are connected, and which forms part of an air supply or return system.

- a. Furnace Supply Plenum—A furnace plenum attached directly to, or an integral part of, the supply outlet of the furnace.
- b. Furnace Return Plenum—A furnace plenum attached directly to, or an integral part of, the return-air inlet of the furnace. *

PIPING, HOUSE GAS
PORTABLE APPLIANCE—A self-contained, free-standing appliance designed to be carried safely from one location to another.

PRIMARY AIR—The air introduced into a burner which mixes with the fuel before it reaches the ignition zone.

PURGE—To introduce air into the combustion chamber and the appliance flue passages in such volume and manner as to completely replace the air or gas-air mixture contained therein.

QUICK DISCONNECT DEVICE
RANGE, RESIDENTIAL TYPE—A self-contained, free-standing appliance primarily for residential cooking purposes and having a top section and an oven section. It may have a broiling section. *

RANGE, RESTAURANT TYPE—A range of the type designed for use primarily in restaurant and hotel kitchens.

READILY ACCESSIBLE—Capable of being reached easily and quickly for operation, adjustment, and inspection.

RECESSED HEATER—A self-contained appliance complete with grilles or equivalent, designed for incorporation in our permanent attachment to a wall and which furnishes heated air directly into the space to be heated

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through openings or boots in the casing as supplied by the manufacturer as an integral part of the heater.

Refrigerating System
REGULATOR, GAS-PRESSURE—A device for controlling and maintaining a uniform outlet gas pressure. *

RELIEF VALVE—A safety valve designed to forestall the development of a dangerous condition by relieving excessive pressure, temperature, or vacuum.

RESIDENTIAL-TYPE APPLIANCE—Fuel-burning or electric heating or cooking appliance not larger than 100 cubic feet in size (excluding any burner equipment and blower compartment) intended mainly for use in residences but which may be used also in other buildings. Such appliances include cooking stoves and ranges, clothes dryers, fireplace stoves, domestic incinerators, laundry stoves, room heaters, water heaters, heat pumps, floor furnaces, wall furnaces and central heating furnaces and boilers, except high-pressure steam boilers.

ROOM HEATER—A self-contained, free standing, heating appliance intended for installation in the space being heated and not intended for duct connection.

ROOM HEATER, CIRCULATING—A room heater with an outer jacket surrounding the heat exchanger arranged with openings at top and bottom so that air circulates between the heat exchanger and the outer jacket. Room heaters that have openings in the outer jacket to permit some direct radiation from the heat exchanger shall be classed as radiant type.

ROOM HEATER, RADIANT—A room heater designed to transfer heat primarily by direct radiation.

ROOMS LARGE IN COMPARISON WITH THE SIZE OF THE APPLIANCE—Rooms having a volume equal to at least 12 times the total volume of the furnace and at least 16 times the total volume of the boiler. Total volume of furnace or boiler is determined from exterior dimensions and is to include fan compartments and burner vestibules, when used. When the actual ceiling height of a room is greater than 8 feet, the volume of a room shall be figured on the basis of a ceiling height of 8 feet.

SAFETY CONTROL—See "Control, Safety."

SAFETY SHUTDOWN—The action of shutting off all fuel and ignition energy to the appliance by means of a safety control or controls such that restart cannot be accomplished without manual reset.

SEALED COMBUSTION SYSTEM APPLIANCE—A self-contained appliance which by its inherent design is constructed so that all air supplied for combustion, the combustion system of the appliance, and all products of combustion are completely isolated from the atmosphere of the space in which it is installed.

SECONDARY AIR—The air externally supplied to the flame in the combustion zone.

Smoke Damper, Smoke Detector, Smoke Developed Rating
THERMOSTAT—An automatic control actuated by temperature change to maintain temperatures between predetermined limits. *

Smoke Partition
TYPE B GAS VENT—(See Gas Vents.)

TYPE BW GAS VENT—(See Gas Vents.)

TYPE L VENTING SYSTEM—(See low-Temperature Venting System.)

UNIT HEATER—

- a. **Low-Static Pressure Type**—A self-contained, automatically controlled, vented fuel-burning appliance having integral means for circulation of

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air, normally by a propeller fan (or fans). Such appliances may be equipped with louvers or face extensions made in accordance with the manufacturer's approved specifications.

- b. **High-Static Pressure Type**—A self-contained, automatically controlled, vented fuel-burning appliance having integral means for circulation of air against 0.2 inch or greater static pressure and designed for installation in the space to be heated unless they are equipped with provisions for attaching both inlet and outlet air ducts.

VALVE, MANUAL SHUTOFF—A manually operated valve in a fuel line for the purpose of completely turning on or shutting off the fuel supply to an appliance.

VALVE, SAFETY SHUTOFF—A valve that is automatically closed by the safety control system or by an emergency device. Such valve may be of the automatic or manually opened type.

VENT CONNECTOR—The pipe which connects a fuel-burning appliance to a vent.

VENTING SYSTEM—A continuous open passageway from the flue collar or draft hood of a fuel-burning appliance to the outside atmosphere for the purpose of removing products of combustion.

VENTING SYSTEM, TYPE L LOW TEMPERATURE—A venting system consisting of listed factory made piping and fittings for use with fuel burning appliances listed as exhausting low temperature flue gases and approved for use with a Type L venting system.

WALL FURNACE—A self-contained, vented appliance complete with grills or equivalent, designed for incorporation in or permanent attachment to the structure of a building, mobile home or travel trailer, and furnishing heated air circulated by gravity or by a fan directly into the space to be heated through openings in the casing. Such appliances shall not be provided with duct extensions beyond the vertical and horizontal limits of the casing proper, except that boots not to exceed 10 inches beyond the horizontal limits of the casing for extension through walls of nominal thickness may be permitted. When such boots are provided, they shall be supplied by the manufacturer as an integral part of the appliance. This definition excludes floor furnaces, unit heaters, sealed combustion systems, wall furnaces and central furnaces.

- a. **Gravity-Type Wall Furnace**—A wall furnace depending on circulation of air by gravity.
- b. **Fan-Type Wall Furnace**—A wall furnace equipped with a fan.

WATER HEATER—An appliance for supplying hot water for domestic or commercial purposes other than for space heating.

ZERO GOVERNOR—A regulating device which normally is adjusted to deliver gas at atmospheric pressure within its flow rating.

The following Sections of the 1971 Edition of the N. C. State Building Code, Volume III, Heating have been amended by the Building Code Council as follows:

Section 101.3(a) (1969 G.A.)—Revise Section 101.3(a) to read as follows:

The code shall apply to all new buildings, structures, and additions thereto wherever they might be situated in the state of North Carolina.

This code shall not apply to farm buildings located outside the building regulation jurisdiction of any municipality. (see G.S. 143-138(b) and 160-138(c))

Section 104.3—9-12-72—Meetings—Amend the first sentence to read as follows:

“The Building Code Council shall meet regularly the second Tuesday in March, June, September and December.”

Section 107—Amendments to the State Building Code—Add the following sentence to the end of Rule #1 (a) of Section 107.1:

“In order for the filing to be placed on the agenda for the Building Code Council and to be heard at any regular or called meeting, such filing shall be complete with information required by these rules, together with all substantiating data required and must be filed in accordance with these rules at least 30 days prior to such scheduled hearings.”

Section 108—Approved of Local Ordinances—Change the numeral “15” to the numeral “30” in Rule #1 (c) of Section 108.2.

Section 109—3-13-73—Alternate Materials and Methods of Construction—Substitute the following wording for Section 109:

“Although a certain material, or a particular method of construction, is specifically prescribed by this Code, this Code is not intended to prevent the use of a material, or method of construction, different from the material, or method of construction specifically prescribed by the Code, provided any such alternate material or method of construction has been approved and its use authorized by the building official. The building official shall approve any such alternate material, or method of construction, provided the building official, in his sole discretion, finds that the proposed alternate material, or method of construction complies with the provisions of Chapter XII, and that the alternate material, or alternate method of construction is, for the purpose intended, at least the equivalent of that specifically prescribed by the Code in quality, strength, effectiveness, fire-resistance, durability and safety. The building official may require that sufficient evidence or proof be submitted to substantiate any claim that may be made regarding its use, and, in the opinion of the building official, the evidence and proof are not sufficient to justify his approval, the aggrieved party may refer the entire matter to the Building Code Council.”

(6-11-74) Page V Foreword—In sixth paragraph change “1970” to “1971.”

In chapter II *Definitions* make the following changes and additions:

(6-8-76) Section 202—At end of sentence change NFPA87M-1966 to “NFPA97M-1972”.

(6-8-76)—Add the following definitions:

AIR COMBUSTION—The air required to provide for the complete combustion of fuel and usually consisting of primary air, secondary air, and excess air.

AIR FILTERS—

- (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 by the Standard for Air Filter Units (UL 900-1971).
- (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 by the Standard for Air Filter Units (UL 900-1971).

AIR INLET—An air inlet is any opening through which air is removed from a space back to a system.

AIR OUTLET—An air outlet is any opening through which air is delivered to a space from a system.

AIR TERMINAL UNIT—A device that receives air supplied through a duct system and, in turn, changes the temperature, pressure, volume, etc., of the air before delivering it to a space.

APPLIANCE—An appliance is utilization equipment, normally built in standardized sizes or types, which is installed or connected as a unit to perform one or more functions such as clothes washing or drying, food mixing, cooking, etc.

BOILER ROOM—Any room where a boiler is located. This equipment may be producing hot water or steam. For the purposes of this code, this definition shall not include rooms containing domestic type water heaters of less than one hundred-twenty (120) gallons storage capacity or rooms containing boilers in one and two-family residential occupancies (see also "Furnace room" and "Mechanical equipment room").

CONDENSER—A vessel or arrangement of pipe or tubing in which vapor is liquefied by the removal of heat.

CONNECTOR, GAS APPLIANCE—A listed product used to connect gas burning equipment to the building gas supply.

CONFINED SPACE—Any room or enclosed space that has a volume less than 12 times the total volume of a furnace or furnaces and 16 times the total volume of a boiler or boilers located in such room or space. If the actual ceiling height of the room or space is greater than 8 feet, the volume shall be figured on the basis of a ceiling height of 8 feet.

COOLING UNIT—Self contained: A self-contained refrigerating system which has been factory assembled and tested.

COOLING UNIT—Split system equipment: A refrigerating system the components of which are not self-contained.

DUCT COVERING—Duct covering includes materials such as adhesive, insulation, banding, coating(s), film and jacket used to cover the outside surface of a duct, fan casing or duct plenum.

DUCT LINING—Duct lining includes materials such as adhesive, insulation, coating and film used to line the inside surface of a duct, fan casing or duct plenum, exposed to air flow.

DUCT RISER—A duct which extends vertically one full story or more.

DUCT SYSTEM—A duct system is a continuous passageway for the transmission of air which, in addition to ducts, may include duct fittings, dampers, plenums, fans and accessory air handling equipment. May be part of the building construction.

FURNACE, ATTIC—A forced warm-air furnace designed and approved specifically for installation in an attic.

FURNACE ROOM—A room primarily used for the installation of fuel-fired-heating equipment other than boilers (see also "Boiler room" and "Mechanical equipment room").

LISTED—Equipment or materials included in a list published by a nationally recognized testing laboratory, inspection agency or other organization concerned with product evaluation that maintains periodic inspection of production of listed equipment or materials, and whose listing states either that the equipment or material meets nationally recognized standards or has been tested and found suitable for use in a specified manner. The means for identifying listed equipment may vary for each testing laboratory, inspection agency, or other 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.

MACHINERY ROOM—See Section 1902.42.

MECHANICAL EQUIPMENT ROOM—A room or space in which non-fuel-fired equipment is located (see also "Boiler room" and "Furnace room").

PIPING, CONCEALED—Piping, which, when in place in the finished building, would require removal of permanent construction to gain access to the piping.

PIPING, HOUSE GAS—House gas piping means the system of piping within a structure or a building, either exposed or concealed, which conveys gas from the outlet of the service meter or line to appliances at various places throughout the building.

QUICK-DISCONNECT DEVICE—A listed hand-operated device which provides a means for connecting and disconnecting an appliance or an appliance connector to a fuel supply and which is equipped with an automatic means to shut off the fuel supply when the device is disconnected.

REFRIGERATING SYSTEM—See Section 1902.56.

SMOKE DAMPER—A damper arranged to seal off airflow automatically through a part of an air duct system, so as to restrict passage of smoke. A smoke damper may be a standard louvered damper serving other control functions, if location lends itself to the dual purpose. A smoke damper does not need to meet all the requirements of a fire damper.

SMOKE DETECTOR—A smoke detector is a listed device which senses visible and invisible particles of combustion.

SMOKE DEVELOPED RATING—The smoke developed rating of a material is determined by the *Method of Test of Surface Burning Characteristics of Building Materials* (NFPA 255-1972).

SMOKE PARTITION—The smoke partition is an effective membrane continuous from outside wall to outside wall and from floor slab to floor slab, thereby providing continuity through all concealed spaces, such as those found above a suspended ceiling and including interstitial spaces.

(6-8-76) Page 2-2—**Masonry chimney**—Add to end of definition: "(see Chapter 2700 of North Carolina Building Code Volume I)"

(6-8-76) Page 2-8—Change definition of "**ROOMS LARGE IN COMPARISON WITH THE SIZE OF THE APPLIANCE**" to the following: "See **CONFINED SPACE**"

(6-8-76) Page 3-1—**Principle 3, paragraph a**—Delete the words "home or."

(6-8-76) Page 3-2—Delete Principle No. 6.

(6-8-76) Page 3-3—Delete Principle No. 9.

(6-11-74) Page 3-3—**Principal #11**—Revise last sentence to read as follows: "Once a warm air heating system has been installed there shall be no further welding done on the heat exchanger or the warm air system, unless approved by the authority having jurisdiction."

(6-8-76) Page 3-3—**Principle 12(a)**—Delete: "See appendix for excerpt."

(6-8-76) Page 3-4—Delete: "Principle No. 16."

(6-8-76) Page 3-6—Delete: "Principle No. 19."

(6-11-74) Page 3-7—**Section 303.0**—In heading change (General) to "(Residential)". In Section 303(a) change the word should in lines 1 and 2 to "shall."

In Section 303(b) change the word should in lines 2, 6, 7 and 10 to "shall."

(6-11-74) Page 3-8—In Section 303(c) change the word should in lines 3, 4, 6 and 8 to "shall."

(3-13-73) Page 3-10—**Section 304.2**—Delete item "304.2(b)(6)."

(6-11-74) Page 3-13—**Table 2**—Change the word "not" to "no."

(6-8-76) Page 3-14—**Section 305.2**—Add (Residential and Non-commercial) to heading.

(6-11-74) Page 3-19—**Section 305.10 I (f)**—Delete this paragraph in its entirety.

(6-8-76) Page 3-26—Delete Sections "305.22, 305.23 and 305.24."

(6-8-76) Page 3-28—**Section 305.25**—Add to heading (Blower and Exhaust systems.)

(6-8-76) Page 4-3—Add new paragraph 404.0 as follows: 404.4 **CONTAINER SPACING**: Storage containers shall be located in accordance with Figure 404.0.