2018 NC Mechanical Code 202 Definitions. (190611 Item B-1)

EXTRA-HEAVY-DUTY COOKING APPLIANCE. Extra-heavy-duty cooking appliances are those utilizing open flame combustion of solid fuel at any time.

These appliances shall not use solid fuel to provide a source of heat for cooking. Pellets and chips if used as flavoring shall not be in a state of open flame combustion at any time. Smoldering chambers shall not introduce embers into the flue at any time.

HEAVY-DUTY COOKING APPLIANCE. Heavy-duty cooking *appliances* include electric under-fired broilers, electric chain (conveyor) broilers, gas under-fired broilers, gas chain (conveyor) broilers, gas open-burner ranges (with or without oven), electric and gas wok ranges, smokers, smoker ovens, and electric and gas over-fired (upright) broilers and salamanders.

Such an appliance shall not use solid fuel to provide a source of heat for cooking. Pellets and chips if used as flavoring shall not be in a state of open flame combustion at any time. Smoldering chambers shall not introduce embers into the flue at any time.

2018 NC Residential Code M1411.3.2 Drain pipe materials and sizes. (190611 Item B-2)

M1411.3.2 Drain pipe materials and sizes. Components of the condensate disposal system shall be ABS, cast iron, copper, cross-linked polyethylene, CPVC, galvanized steel, PE-RT, polyethylene, polypropylene or PVC pipe or tubing. Components shall be selected for the pressure and temperature rating of the installation. Joints and connections shall be made in accordance with the applicable provisions of Chapter 30. Condensate waste and drain line size shall be not less than 3/4 -inch (19 mm) nominal diameter from the drain pan connection to the place of condensate disposal. Where the drain pipes from more than one unit are manifolded together for condensate drainage, the pipe or tubing shall be sized in accordance with an approved method.

<u>Provisions shall be made to prevent the formation of condensation on the exterior of primary condensate drain piping if condensate dripping off the pipe could cause damage to any building component.</u>

2018 NC Residential Code M1502.1 General. (190611 Item B-3)

M1502.1 General. Clothes dryers shall be exhausted in accordance with the manufacturer's instructions.

M1502.1.1 (504.6) Makeup air.

Where a closet is designed for the installation of a clothes dryer, an opening having an area of not less than 100 square inches (0.0645 m²) shall be provided in the closet enclosure or *makeup air* shall be provided by other *approved* means.

2018 NC Residential Code M1502.4.2 Duct installation. (190611 Item B-4)

M1502.4.2 Duct installation. Exhaust ducts shall be supported at intervals not to exceed 12 4 feet (3658 mm) and shall be secured in place. The insert end of the duct shall extend into the adjoining duct or fitting in the direction of airflow. Exhaust duct joints shall be sealed in accordance with Section M1601.4.1 and shall be mechanically fastened. Ducts shall not be joined with screws or similar fasteners that protrude into the inside of the duct. Ducts shall be sealed in accordance with Section M1601.4.1.
a. Nonmetallic mechanical fasteners (tie-straps) shall be listed to UL 181B.
b. Metal band duct clamps are not required to be listed.

2018 NC Residential Code M1602.3 (603.18) Return-air intake (nonengineered systems). (190611 Item B-5)

M1602.3 (603.18) Return-air intake (nonengineered systems). If only one central return-air grille is installed, it shall be of a size sufficient to return a volume of air compatible with the CFM requirements and the temperature rise limitations specified by the equipment manufacturer. The face velocity of return air grilles shall not exceed 450 feet per minute (fpm) (2.3 m/s). At least one separate return shall be installed on each level of a multi-level structure. For split-level and split-foyer structures, one return may serve more than one level if located within the split area and the total area of the levels does not exceed 1,600 square feet (148.6 m2). Return-air grilles shall not be located in bathrooms. The return air from one residential living unit shall not be mixed with the return air from other living units.

In dwellings with 1,600 square feet (148.6m2) or less of conditioned area, a central return is permitted. When the dwelling contains more than 1,600 square feet (148.6m2) of conditioned area, additional returns shall be provided. Each return shall serve not more than 1,600 square feet (148.6 m2) of area and shall be located in the area it serves. Return air may travel through the living space to the return-air intake if there are no restrictions, such as solid doors, to the air movement. Undercut doors are allowed. When panned joists are used for return air, the structural integrity shall be maintained. Air capacity for joists 16 inches (406 mm) on center shall be a maximum of 375 cubic feet per minute (0.177 m3/s) for 8-inch (203 mm) joists and 525 cubic feet per minute (0.248 m3/s) for 10-inch (254 mm) joists. Wiring located in spaces used for return-air ducts shall comply with the *North Carolina Electrical Code*.

304.4 Valet Trash Collection Services for R-2 Occupancies

- 304.4.1. Combustible trash in a means of egress. Combustible trash or recyclable materials shall not be placed in exits, exit passageways, enclosures for stairways or ramps, corridors, elevator lobbies, or on egress balconies, except as permitted by Section 304.4.2.
- 304.4.2. Combustible trash or recyclable materials in corridors or on egress balconies of Group R-2 occupancies that are awaiting scheduled valet trash collection is allowed as described in Sections 304.4.2.1 through 304.4.2.3.
- 304.4.2.1. Trash or recyclable materials awaiting valet trash collection shall only be placed in a corridor or on an egress balcony within 5 hours of scheduled pickup and shall not obstruct the minimum egress width required by Section 1031.
- 304.4.2.2. Trash or recyclable materials awaiting valet trash collection shall be placed completely inside of one or more containers with a closed lid that complies with Section 304.4.2.3. Additional trash or recyclable material placed outside of the containers, as described in 304.4.2.3, are prohibited.
- 304.4.2.3. Containers used for valet trash collection shall not exceed a capacity of 2.0 cubic feet (15 gallons, 0.06 cubic meters) and shall be provided with tight-fitting or self-closing lids. Containers and lids shall comply with either:
- 1. Containers and lids located in an area that is protected by fire sprinklers shall be constructed entirely of noncombustible materials or materials that meet a peak rate of heat release not exceeding 300 kW/m2 when tested in accordance with ASTM E 1354 at an incident heat flux of 50 kW/m2 in the horizontal orientation. Containers and lids shall be listed or bear the label of an approved agency that validates compliance with this requirement; or
- 2. Containers and lids located in an area that is not protected by fire sprinklers shall be constructed entirely of noncombustible materials or materials that meet a peak rate of heat release not exceeding 150 kW/m2 when tested in accordance with ASTM E 1354 at an incident heat flux of 50 kW/m2 in the horizontal orientation. Containers and lids shall be listed or bear the label of an approved agency that validates compliance with this requirement.

2018 NC Residential Code P2603.5.2 Frost protection. (190611 Item B-8)

P2603.5.2 Frost protection. No traps of soil or waste pipe shall be installed or permitted outside of a building or concealed in outside walls or in any place where they may be subjected to freezing temperatures, unless *approved* provisions are made to protect them from freezing.

P3201.3 (1002.7) Trap setting and protection. Traps shall be set level with respect to their water seals and shall be protected from freezing. Trap seals shall be protected from siphonage, aspiration or back pressure by an approved system of venting (see Sections P3101 and P2603.5.2).

2018 NC Residential Code R506.2.1 Fill. (190611 Item B-9)

R506.2.1 Fill. Fill material shall be free of vegetation and foreign material. The fill shall be compacted to ensure uniform support of the slab, and except where *approved*, the fill depths shall not exceed 24 inches (610 mm) for clean sand or gravel and 8 inches (203 mm) for earth.

Exception: #57 or #67 stone may be used as fill without a compaction test for a maximum depth of 4 feet.