



BUILDING DEPARTMENT POLICY/INTERPRETATION

TO: Whom it may concern
FROM: George Reid, Chief Building Official
DATE: 8/10/2016
SUBJECT: Exemption from Mechanical Ventilation Policy

A non-residential kitchen with cooking equipment that is proposed without mechanical ventilation must complete the "APPLICATION FOR EXEMPTION FROM MECHANICAL VENTILATION". The application must be reviewed and approved by the Chief Building Official prior to approval of a kitchen without mechanical ventilation.

The exemption shall not be deemed to supersede any local building and fire code requirements. Further, the exemption does not preclude any local enforcement agency from requiring the installation of mechanical exhaust ventilation when the operation of the cooking equipment in a specific location results in a sanitation or safety violation.

Chief Building Official  Date 08/10/2016



BUILDING DEPARTMENT

APPLICATION FOR EXEMPTION FROM MECHANICAL VENTILATION

1. Applicant Name(s): _____ Telephone: (____) _____ - _____

Applicant Name(s): _____ Telephone: (____) _____ - _____

2. Facility Name: _____ Facility Address: _____

3. Facility Type: Restaurant ____ Market ____ Bakery ____ Other _____

4. Appliance Type (rotisserie, oven, etc.): _____ Weight: _____

5. Equipment Manufacturer: _____

Address: _____ Model: _____

Specifications Included? Yes ____ No ____

6. Heat Source: Electric ____ Gas ____ Solid (wood, charcoal, etc.) ____ Microwave ____

Other (specify): _____

7. Certified to meet NSF/ANSI Standard 4? Yes ____ No ____ Don't Know ____

If "yes", certifying organization: NSF Int'l ____ ETL/I ____ UL Sanitation (EPH) ____

Other certifying organization (specify): _____

8. Hours per day of operation of appliance: _____ Number of days/week: _____

9. Approximate size of facility (square feet): _____ Of area/room with cooking equipment _____

10. Area/Room ceiling height _____ Ventilation (CFM) in room/area _____

11. # of appliances currently in use that have been previously approved for use without mechanical ventilation: _____

12. How many appliances are you requesting to install without mechanical exhaust ventilation? _____

13. Types of foods to be cooked in the appliance (check all that apply):

a. Pre-cooked wrapped/packaged foods-reheat only: _____

b. Baked goods: (including bread, rolls, pastries, pies, cookies, cakes, etc.): _____

c. Vegetables: (including baked potatoes, steamed vegetables, beans, etc.): _____

d. Pizza: ____ frozen par baked: _____ made fresh: _____

e. Sandwiches: (containing only ready to eat fillings): _____

f. Raw meats and/or raw eggs: (meat, fish, poultry): _____

g. Open cooking: (sauté, grill, etc.): _____

h. Deep fat fried foods: _____

i. Other (specify): _____

14. "Ductless" ventilation provided: Yes ____ No ____

If yes, is it included with appliance? _____ or installed separately? _____

▶ Ductless Hood Manufacturer: _____ Model: _____

▶ Complies with UL Standard 197? Yes ____ No ____ Don't know ____

APPLICANT SIGNATURE DATE

FOR OFFICE USE ONLY

Approved Denied

Chief Building Official _____ Date ____/____/____

RESOURCES

The proposed cooking equipment considered for exemption must be tested and certified by an ANSI-accredited testing organization as complying with the requirements of the National Sanitation Foundation (NSF) and Underwriters Laboratory (UL) standards. These following resources may be applicable in evaluation of the cooking equipment:

- **ANSI/UL 197:** These requirements cover commercial electric cooking appliances rated 600 volts or less. Cooking equipment to meet this standard for exemption.
- **ANSI/UL 710:** These requirements cover exhaust hoods intended for placement over commercial cooking equipment. Non-exempt cooking equipment must have an exhaust hood.
- **ANSI/UL 710B:** These requirements cover commercial electric cooking appliances provided with integral recirculating hood ventilation systems (previously referred to as ductless hoods) and non-integral recirculating hood ventilation systems, both of which are intended for installation in commercial establishments for the preparation of food. These devices incorporate an air filtering system enclosed in a hooded or otherwise contained area intended to capture air from the cooking process area. The hood assembly generally includes a fan, collection hood, or equivalent design feature, air filtering system (consisting of a grease filter with other filters), a fire actuated damper, and a fire extinguishing system unit.
- **U.S. Environmental Protection Agency (EPA) Test Method 202:** The test method for condensable particulate used to exempt cooking equipment from having an exhaust system.
 - Identifies a TLV concentration of 5mg/m³ at 500 CFM rate of exhaust for commercial cooking equipment exemption.
 - Equates to total condensable particulate (grease)/hour of .01mg.
- **NFPA 96:** This standard provides the minimum fire safety requirements related to the design, installation, operation, inspection, and maintenance of all cooking operations.
- **UL KNLZ:** Commercial cooking equipment with integral systems for limiting the amount of grease laden air including the use of catalytic combustion technology integral with the cooking equipment. EPA 202 Standards are used.
- **UL KNKG:** Cooking equipment such as deep fat fryers, griddles and other appliances covered in this category is manufactured with an integral recirculating ventilation system intended for use in commercial kitchens, restaurants, or other business establishments where food is prepared. Additional to UL 710B.
- **ASHRAE** (American Society for Heating, Refrigeration and Air-conditioning Engineers) Standard 154-Ventilation of Commercial Cooking Processes: Takes into account the effect of the cooking appliance on the ventilation system of the building and classifies according to a “duty” rating of light duty, medium duty, heavy duty and extra heavy duty.

PROCEDURES

1. Dependent on the type of equipment used, cooking is limited to food products that produce little or no grease laden vapors during the cooking process. Typically, these products are packaged, pre-cooked foods and certain unpackaged, uncooked foods such as rolls, bread, muffins, baked potatoes etc. Uses that will require that mechanical ventilation be installed over the unit include cooking meats, poultry, fish, or other foods that may produce grease laden vapors.
2. Cooking equipment operating temperatures are low enough that the existing room ventilation can compensate for the heat generated by the equipment without creating unsafe or hazardous conditions in the kitchen.
3. Cooking apparatus is equipped with an air purifying system of baffles, filters, etc. (with or without fire suppression), that effectively removes all toxic gases, smoke, grease, vapors, and heat from the air released by the equipment.
4. Equipment may, due to design or size, cook certain food without producing significant amounts of toxic gases, smoke, grease, vapors, or heat.
5. An equipment specification sheet and any available emissions test data (usually supplied by the equipment manufacturer or distributor) must accompany the application for exemption.
6. In some cases, a site specific determination by a licensed Mechanical Engineer that the equipment does not produce toxic gases, smoke, grease, vapors, or heat when operated under maximum use conditions using the specific menu items of the proposed facility may be needed.
7. In all cases, cooking equipment must be installed and maintained in accordance with manufacturer's recommendations, must be installed in well ventilated areas approved for food preparation, and must comply with all local building and fire codes.

STANDARDS FOR WHICH AN EXEMPTION CAN BE CONSIDERED

1. Factors for consideration for the cooking equipment:
 - a. Has the appliance been tested by a certified ANSI laboratory for grease and heat emissions?
 - b. Does it qualify as a low grease emission appliance (no more than 5 milligrams per cubic meter during an 8 hour test)?
 - c. Documentation of the condensable particulate emissions from a stationary source.
 - d. How much heat or steam does the cooking equipment produce during a normal cooking cycle? Does it affect the HVAC system?
 - e. Does the electrical appliance (e.g., hot plate) exceed the 1.5 KW rating?
 - f. Does the electrical appliance (e.g., convection oven) exceed the 12 KW rating?

2. Contents of Exemption Letter:
 - a. What type of cooking equipment is being exempted including make and model number?
 - b. Statement of types of foods to be cooked & handled regularly by the equipment.
 - c. Number of units covered by each letter.
 - d. Statement that ownership changes with menu change voids variance.
 - e. Location of the equipment-address general ventilation issues of smaller rooms, lower ceilings, or presence of other mechanical ventilation systems in the room.

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