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SECTION 609

COMMERCIAL KITCHEN HOODS

[M] 609.1 General.
Commercial kitchen
exhaust hoods shall
comply with the
requirements of the
International Mechanical
Code.

[M] 609.2 Where required. A Type I hood shall be installed at or above all commercial cooking appliances and domestic cooking appliances used for commercial purposes that produce grease vapors.

Exception: A Type I hood shall not be required for an electric cooking appliance where an approved testing agency provides documentation that the appliance effluent contains 5 mg/m3 or less of grease

when tested at an exhaust flow rate of 500 cfm (0.236 m3/s) in accordance with UL 710B.

609.3 Operations and maintenance.
Commercial cooking systems shall be operated and maintained in accordance with Sections 609.3.1 through 609.3.4.

609.3.1 Ventilation system. The ventilation system in connection with hoods shall be operated at the required rate of air movement, and classified grease filters shall be in place when equipment under a kitchen grease hood is used.

609.3.2 Grease extractors. Where grease extractors are installed, they shall be operated when the commercial-type cooking equipment is used.

609.3.3 Cleaning. Hoods, grease-removal devices, fans, ducts and other appurtenances shall be cleaned at intervals as required by Sections 609.3.3.1 through 609.3.3.3.

609.3.3.1 Inspection. Hoods, grease-removal devices, fans, ducts and other appurtenances shall be inspected at intervals specified in Table 609.3.3.1 or as approved by the fire code official. Inspections shall be completed by qualified individuals.



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TABLE 609.3.3.1
COMMERCIAL COOKING SYSTEM INSPECTION FREQUENCY

TYPE OF COOKING OPERATIONS	FREQUENCY OF INSPECTION
High-volume cooking operations such as 24- hour cooking, charbroiling or wok cooking	3 months
Low-volume cooking operations such as places of religious worship, seasonal busi- nesses and senior centers	12 months
Cooking operations utilizing solid fuel-burn- ing cooking appliances	1 month
All other cooking operations	6 months

TABLE 609.3.3.1

COMMERCIAL COOKING SYSTEM INSPECTION FREQUENCY

609.3.3.2 Grease accumulation. If during the inspection it is found that hoods, grease-removal devices, fans, ducts or other appurtenances have an accumulation of grease, such components shall be cleaned in accordance with ANSI/IKECA C 10.

609.3.3.3 Records. Records for inspections shall state the individual and company performing the inspection, a description of the inspection and when the inspection took place. Records for cleanings shall state the individual and company performing the cleaning and when the cleaning took place. Such records shall be completed after each inspection or cleaning and maintained.

609.3.3.3.1 Tags. When a commercial kitchen hood or duct system is inspected, a tag containing the service provider name, address, telephone number and date of service shall be provided in a conspicuous location. Prior tags shall be covered or removed.

609.3.4 Extinguishing system service.
Automatic fire extinguishing systems protecting commercial cooking systems shall be serviced as required in Section 904.12.6.

609.4 Appliance connection to building piping. Gas-fired commercial cooking appliances installed on casters and appliances that are moved for



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cleaning and sanitation purposes shall be connected to the piping system with an appliance connector listed as complying with ANSI Z21.69. The commercial cooking appliance connector installation shall be configured in accordance with the manufacturer's installation instructions. Movement of appliances with casters shall be limited by a restraining device installed in accordance with the connector and appliance manufacturer's instructions.

SECTION 610

COMMERCIAL KITCHEN COOKING OIL STORAGE

610.1 General. Storage of cooking oil (grease) in commercial cooking operations utilizing

above-ground tanks with a capacity greater than 60 gal (227 L) installed within a building shall comply with Sections 610.2 through 610.7 and NFPA 30. For purposes of this section, cooking oil shall be classified as a Class IIIB liquid unless otherwise determined by testing.

610.2 Metallic storage tanks. Metallic cooking oil storage tanks shall be listed in accordance with UL 142 or UL 80, and shall be installed in accordance with the tank manufacturer's instructions.

610.3 Nonmetallic storage tanks.
Nonmetallic cooking oil storage tanks shall be installed in accordance with the tank

manufacturer's instructions and shall also comply with all of the following:

- 1. Tanks shall be listed for use with cooking oil, including maximum temperature to which the tank will be exposed during use.
- 2. Tank capacity shall not exceed 200 gallons (757 L) per tank.

610.4 Cooking oil storage system components.
Cooking oil storage system components shall include but are not limited to piping, connections, fittings, valves, tubing, hose, pumps, vents and other related components used for the transfer of cooking oil, and are permitted to be of either metallic or nonmetallic construction.



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610.4.1 Design standards. The design, fabrication and assembly of system components shall be suitable for the working pressures, temperatures and structural stresses to be encountered by the components.

610.4.2 Components in contact with heated oil. System components that come in contact with heated cooking oil shall be rated for the maximum operating temperatures expected in the system.

610.5 Tank venting.
Normal and emergency venting shall be provided for cooking oil storage tanks.

610.5.1 Normal vents.
Normal vents shall be located above the maximum normal liquid line, and shall have a minimum effective area not smaller than the largest filling or withdrawal connection.
Normal vents shall be permitted to vent inside the building.

others of construction.

Emergency vents shall be permitted to vent inside the building.

610.6 Heating of cooking oil. Electrical equipment used for heating cooking oil in cooking oil storage systems shall be listed to UL 499 and shall comply with NFPA 70. Use of electrical immersion heaters shall be prohibited in nonmetallic tanks.

610.7 Electrical equipment. Electrical equipment used for the operation of cooking oil storage systems shall comply with NFPA 70.

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