



City of Chesapeake

Chesapeake Fire Department
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**The following are selected Fire Safety and General Requirements for Mobile cooking units based on the Virginia Statewide Fire Prevention Code (SFPC)
Effective Date: March 1, 2011**

This handout is intended to serve as a general reference document, provide broad guidelines and identify code requirements concerning mobile cooking operations inside vehicles and trailers. There are additional Fire Code requirements for outdoor cooking operations and cooking under tents. It is not all inclusive or complete in content. This informational handout only covers the most frequently occurring applicable requirements.

In summary, if your mobile cooking operation produces grease latent vapors, you are required to have a Type I exhaust hood along with an approved automatic fire suppression system. In other words, if you have an open cooking operation that consists of basically cooking anything, other than boiling water, you are required to have a Type I exhaust hood along with an approved automatic fire suppression system.

INSPECTION AND INSTALLATION OF SYSTEMS: As required in Fire Code, Fire Extinguishers and Fire Suppression systems must be installed and inspected by a professional fire protection company. There are several companies located in the Hampton Roads area. They may be contacted and they will respond to your location to perform the installation or inspection. Some companies will allow you to bring the portable fire extinguisher to them for the inspection. These companies may be found in the yellow pages of the telephone book under Fire Protection Companies or a search of the internet may be conducted. The Fire Department does not inspect fire suppression systems and extinguishers.

For additional information or questions, please contact Deputy Fire Marshal Greg Orfield of the Chesapeake Fire Marshal's Office at (757) 382-6471 or at gorfield@cityofchesapeake.net

1. COMMERCIAL COOKING OPERATIONS

SFPC 110.1 Turkey Fryers.

Turkey fryers will not be permitted at events open to the public or held on city property. Turkey fryers are highly discouraged at all events since they pose an above average fire and burn risk. Turkey fryers may be used to boil water only, as long as the pots width is equal to or greater than its height, to prevent a spilling or tipping hazard.

SFPC 609.1 General.

Commercial kitchen exhaust hoods shall comply with the requirements of the International Mechanical Code.

SFPC 602.1 Definitions.

The following words and terms shall, for the purposes of this chapter and as used elsewhere in this code, have the meanings shown herein.

[M] COMMERCIAL COOKING APPLIANCES. Appliances used in a commercial food service establishment for heating or cooking food and which produce grease vapors, steam, fumes, smoke or odors that are required to be removed through a local exhaust ventilation system. Such appliances include deep fat fryers; upright broilers; griddles; broilers; steam-jacketed kettles; hot-top ranges; under-fired broilers (charbroilers); ovens; barbecues; rotisseries; and similar appliances. For the purpose of this definition, a food service establishment shall include any building or a portion thereof used for the preparation and serving of food.

[M] hood. An air-intake device used to capture by entrapment, impingement, adhesion or similar means, grease and similar contaminants before they enter a duct system.

Type I. A kitchen hood for collecting and removing grease vapors and smoke.

SFPC 609.2 Where required.

Type I hood 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.

SFPC 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.

SFPC 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.

SFPC 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.

**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 businesses and senior centers | 12 months |
| Cooking operations utilizing solid-fuel burning cooking appliances | 1 month |
| All other cooking operations | 6 months |

SFPC 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.

SFPC 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, maintained on the premises for a minimum of three years and be copied to the fire code official upon request.

2. FIRE EXTINGUISHERS AND OTHER FIRE PROTECTION EQUIPMENT

SFPC 903.2.11.5 Commercial cooking operations.

An automatic sprinkler system shall be installed in a commercial kitchen exhaust hood and duct system where an automatic sprinkler system is used to comply with Section 904.

SFPC 904.2.1 Commercial hood and duct systems.

Each required commercial kitchen exhaust hood and duct system required by Section 609 to have a Type I hood shall be protected with an approved automatic fire-extinguishing system installed in accordance with this code.

SFPC 901.6.1 Standards.

Fire protection inspections

Fire protection systems shall be inspected, tested and maintained in accordance with the referenced standards listed in Table 901.6.1.

Automatic Fire suppression systems in cooking hoods shall be inspected every 6 months. Portable fire extinguishers shall be inspected annually.

**TABLE 901.6.1
FIRE PROTECTION SYSTEM MAINTENANCE STANDARDS**

| SYSTEM | STANDARD |
|--|-----------------|
| Portable fire extinguishers | NFPA 10 |
| Carbon dioxide fire-extinguishing system | NFPA 12 |
| Halon 1301 fire-extinguishing systems | NFPA 12A |
| Dry-chemical extinguishing systems | NFPA 17 |
| Wet-chemical extinguishing systems | NFPA 17A |
| Water-based fire protection systems | NFPA 25 |
| Fire alarm systems | NFPA 72 |
| Water-mist systems | NFPA 750 |
| Clean-agent extinguishing systems | NFPA 2001 |

SFPC 904.11 Commercial cooking systems.

The automatic fire-extinguishing system for commercial cooking systems shall be of a type recognized for protection of commercial cooking equipment and exhaust systems of the type and arrangement protected. Preengineered automatic dry- and wet-chemical extinguishing systems shall be tested in accordance with UL 300 and listed and labeled for the intended application. Other types of automatic fire-extinguishing systems shall be listed and labeled for specific use as protection for commercial cooking operations. The system shall be installed in accordance with this code, its listing and the manufacturer's installation instructions. Automatic fire-extinguishing systems of the following types shall be installed in accordance with the referenced standard indicated, as follows:

1. Carbon dioxide extinguishing systems, NFPA 12.
2. Automatic sprinkler systems, NFPA 13.
3. Foam-water sprinkler system or foam-water spray systems, NFPA 16.
4. Dry-chemical extinguishing systems, NFPA 17.
5. Wet-chemical extinguishing systems, NFPA 17A.

Exception: Factory-built commercial cooking recirculating systems that are tested in accordance with UL 710B and listed, labeled and installed in accordance with Section 304.1 of the International Mechanical Code.

SFPC 904.11.1 Manual system operation.

A manual actuation device shall be located at or near a means of egress from the cooking area a minimum of 10 feet (3048 mm) and a maximum of 20 feet (6096 mm) from the kitchen exhaust system. The manual actuation device shall be installed not more than 48 inches (1200 mm) nor less than 42 inches (1067 mm) above the floor and shall clearly identify the hazard protected. The manual actuation shall require a maximum force of 40 pounds (178 N) and a maximum movement of 14 inches (356 mm) to actuate the fire suppression system.

Exception: Automatic sprinkler systems shall not be required to be equipped with manual actuation means.

SPFC 904.11.2 System interconnection.

The actuation of the fire extinguishing system shall automatically shut down the fuel or electrical power supply to the cooking equipment. The fuel and electrical supply reset shall be manual.

**SFPC 904.11.5 Portable fire extinguishers for commercial cooking equipment.
Fire Extinguishers-Hood Systems.**

Portable fire extinguishers shall be provided within a 30-foot (9144 mm) travel distance of commercial-type cooking equipment. Cooking equipment involving solid fuels or vegetable or animal oils and fats shall be protected by a Class K rated portable extinguisher in accordance with Sections 904.11.5.1 or 904.11.5.2, as applicable.

If no Class K extinguisher is required, a MINIMUM rated 2A:10BC Fire Extinguisher is required to be present.

SFPC 904.11.5.1 Portable fire extinguishers for solid fuel cooking appliances.

All solid fuel cooking appliances, whether or not under a hood, with fireboxes 5 cubic feet (0.14 m³) or less in volume shall have a minimum 2.5-gallon (9 L) or two 1.5-gallon (6 L) Class K wet chemical portable fire extinguishers located in accordance with Section 904.11.5.

SFPC 904.11.5.2 Class K portable fire extinguishers for deep fat fryers.

When hazard areas include deep fat fryers, listed Class K portable fire extinguishers shall be provided as follows:

1. For up to four fryers having a maximum cooking medium capacity of 80 pounds (36.3 kg) each: One Class K portable fire extinguisher of a minimum 1.5 gallon (6 L) capacity.
2. For every additional group of four fryers having a maximum cooking medium capacity of 80 pounds (36.3 kg) each: One additional Class K portable fire extinguisher of a minimum 1.5 gallon (6 L) capacity shall be provided.
3. For individual fryers exceeding 6 square feet (0.55 m²) in surface area: Class K portable fire extinguishers shall be installed in accordance with the extinguisher manufacturer's recommendations.

SFPC 906.5 Conspicuous location.

Portable fire extinguishers shall be located in conspicuous locations where they will be readily accessible and immediately available for use. These locations shall be along normal paths of travel, unless the fire code official determines that the hazard posed indicates the need for placement away from normal paths of travel.