Risk navigator

Commercial cooking operations

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Primary casualty

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About Markel's Risk Solution Services team

Risk Solution Services provides technical insight related to existing and potential insured risk at Markel. The team partners with our customers, claims, and underwriters to educate on both current and future risk trends and supports our clients with a broad offering of risk management solutions.

E-mail our team at risksolutions@markel.com.

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Exhaust (hood and duct) systems

An exhaust system must protect cooking equipment used in processes producing smoke or grease-laden vapors.

- Adequate hood clearances must be maintained for combustible materials.
- Lighting in the hood must be protected by glass vapor globes.

Baffle filters must be UL-listed and placed in the hood without any gaps. They must be cleaned in-house frequently (i.e., weekly). Non-approved mesh filters should not be used instead of UL-listed baffle filters.

Systems must be professionally serviced and tagged (frequency dependent on cooking style):

NFPA 96 – Table 11.4 schedule of inspection for grease buildup	
Type or volume of cooking	**Inspection frequency**
Systems serving solid fuel cooking operations	Monthly
*Systems serving high-volume cooking operations	Quarterly
Systems serving moderate-volume cooking operations	Semiannually
+Systems serving low-volume cooking operations	Annually

* High-volume cooking operations include 24-hour cooking, charbroiling, and wok cooking.

\+ Low-volume cooking operations include churches, day camps, seasonal businesses, and senior centers.

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Exhaust systems should terminate contaminants outside the building with fans or ducts in one of three configurations: through the roof, to the roof from the outside, or through a wall.

Openings where fans or grease ductwork exit the building must be sealed and include a weather-protected vented opening.

Combustible materials should not be placed within 18 inches of grease removal devices, exhaust fans, or ducts.

Exhaust termination fans and ducts should be free from accumulated grease and be professionally serviced along with other exhaust system components.

Automatic fire extinguishing systems

An automatic fire extinguishing system must protect cooking equipment used in processes producing grease-laden vapors (i.e., deep fat fryers, griddles, woks, charbroilers, etc.).

Automatic fire extinguishing systems must be UL-300 compliant, as well as professionally serviced and tagged semi-annually.

A manual pull station to activate the extinguishing system must be available or accessible.

Automatic fire extinguishing systems must be connected to an alarm system.

Extinguishing system nozzles must be covered by “blow-off” caps to prevent grease build-up inside the nozzles. Build-up can keep the system from operating properly if activated.

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Class K fire extinguishers

A class K fire extinguisher must be present in the kitchen for cooking appliance hazards that involve combustible cooking media (vegetable oils and animal oils and fats).

Class K fire extinguishers must be accessible and wall-mounted and no farther than 30 feet from the hazard.

Fire extinguishers must be professionally serviced and tagged annually.

A placard must be posted near the class K fire extinguisher stating, “IN CASE OF APPLIANCE FIRE, USE THIS EXTINGUISHER ONLY AFTER FIXED SUPPRESSION SYSTEM HAS BEEN ACTIVATED.”

Cooking appliances

All appliances protected by an automatic fire extinguishing system must be equipped with automatic devices to shut off sources of fuel and electrical power that produce heat.

Cooking appliances should be professionally inspected and serviced at least annually.

Deep fat fryer units must be positioned at least 16 inches away from any adjacent open-flame appliances when there is no baffle plate separating the exposures.

When a baffle plate is installed between a fryer and the adjacent open-flame appliance, it must be at least 8 inches in height.

Fryers must contain a high temperature limit switch to shut off the fuel source if the unit reaches 475 degrees Fahrenheit or above.

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Sources

NFPA 10, Standard for Portable Fire Extinguishers (National Fire Protection Association 2018)

NFPA 17A, Standard for Wet Chemical Extinguishing Systems (National Fire Protection Association 2017)

NFPA 96, Standard for Ventilation Control and Fire Protection of Commercial Cooking Operations (National Fire Protection Association 2017)

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