



CHARLESTON FIRE DEPARTMENT



Fire Marshal Division

Information Bulletin

Commercial Kitchen Fire Prevention

Restaurants face a greater risk of fire emergencies than many other industries and a fire emergency can occur at any time. When you run a busy kitchen, business survival depends on your ability to quickly detect, report, and respond to an emergency to help protect your restaurant, your staff, and your customers.

FIRE SUPPRESSION SYSTEMS: Preventable commercial kitchen fires cause millions of dollars in damages each year. Reduce your potential for a loss by contracting a licensed fire protection contractor to inspect and service the kitchen fire suppression system every 6 months. Locate your hood suppression system's manual pull station and ensure it is visible, unobstructed, and all employees are trained on proper activation.

GREASE EXHAUST SYSTEMS: Grease vapors given off during the cooking operation will accumulate on the hood, duct, and fan of your exhaust system. The grease residue is combustible at approximately 700°F and the heat within a flare-up on appliances can easily reach 2,000°F. If the flames linger long enough the internal grease buildup will ignite, creating an uncontrolled fire that can quickly be pulled through the entire length of the exhaust duct. In order to reduce the fire hazard these residues must be removed on a regular basis from the filters, hood, ductwork, and exterior exhaust fan or housing. Refer to the Commercial Kitchen Hood Cleaning Information Bulletin for more information on kitchen hood cleaning intervals.

Additionally, maintain proper clearances between combustibles and cooking equipment. Cooking operations generate enough radiant heat to ignited combustible materials within close proximity to the cooking area.

EMERGENCY PLANNING AND STAFF TRAINING: Restaurant fires can be mitigated through education and understanding of the situation. Each restaurant, bar, and nightclub is required to develop an emergency plan and provide training for their employees. A few key elements should be considered while planning for an emergency in the kitchen area:

PLAN: Create emergency response and evacuation plans. Ensure your entire staff is trained to properly respond to a fire emergency, how and when to use a fire extinguisher, how to manually engage your kitchen's fire suppression system, and how to assist customers in the safe evacuation from your premises. Conduct routine training with staff to ensure they are familiar with your expectations and they are ready to react.

PREVENT: Ensure proper inspection, testing, maintenance and cleanliness of fire suppression and grease exhaust systems. Maintain at least 3 years of inspection, maintenance, testing, and repair documentation. Create a plan to recheck staff or contractor cleaning activities. Never pile boxes or other combustible materials under hoods or near cooking equipment.

RESPOND: In the event of an emergency, call 911 from a safe location. Manually deploy the fire suppression system if it does not automatically activate. Safely evacuate all staff and customers from the premises.

For additional safety information visit: www.charleston-sc.gov/fire.