

Fire Prevention Tips for Restaurants

The fire exposures of a restaurant vary based on the type of building construction, the size of the facility, the seating arrangements and the types of equipment used. The loss of life, equipment and buildings are primary fire-loss concerns. There are steps you can take to help prevent fires and minimize the damage.

Cooking Equipment

According to the National Fire Protection Association, cooking equipment causes 57% of restaurant fires. Two of the most common types of equipment that produce grease are deep fat fryers and flat grills. Cleaning exhaust hoods is especially important since grease buildup can restrict air flow. Empty grease traps regularly. The kitchen's floors and walls around cooking appliances need to be regularly cleaned to prevent the accumulation of grease. Floor and wall coverings surrounding the cooking equipment need to be an appropriate material that will prevent grease saturation and be easy to clean and maintain.

Deep Fat Fryers

Deep fat fryers are a major cause of kitchen fires. Oil can splash and easily come into contact with an open flame on an adjacent piece of cooking equipment, such as a gas-fire range top. A 16-inch clearance must be maintained between the deep fat fryer and the open flame cooking equipment. If a 16-inch clearance is not possible, a vertical steel barrier extending 12 inches above the top of the deep fat fryer or open flame appliance(s) can be used as an alternative means of protection. All deep fat fryers should be equipped with a high temperature limiting device which will shut off the fuel or energy in the event the cooking oil exceeds a temperature of 475 degrees Fahrenheit.

Flat Grills

To adequately control the fire hazard associated with flat grills, two fire protection components must be installed: a hood and ventilation system and an automatic extinguishing system.

Protection Systems

- **Central Station Alarms and Automatic Sprinkler Systems**

Fire alarm systems are essential to keep your restaurant safe. Restaurants should be equipped with a central station alarm system that alerts staff and customers about a fire emergency. Automatic sprinkler systems provide 24-hour fire protection and can isolate a fire and prevent it from spreading throughout the restaurant.

- **Automatic Extinguishing System**

These systems automatically dispense chemicals to suppress the flames and also have a manual switch. Activating the system automatically shuts down the fuel or electric supply to nearby cooking equipment. The automatic extinguishing system should meet the Underwriters Laboratory (UL) 300 standard. UL 300 went into effect in 1994 as the result of high temperature oils used in cooking today. Dry-chemical systems do not adequately extinguish grease fires associated with these high temperature cooking oils. ProHost USA requires UL 300 compliant extinguishing systems over all cooking surfaces. Automatic extinguishing systems must be inspected at least every six months by a qualified contractor.

- **Hood and Ventilation System**

A kitchen hood and ventilation system will include an exhaust hood, ductwork, fan system, and a means of providing adequate make-up air. This system will effectively remove the heat, grease and grease laden vapors from the cooking area. The hood and ventilation system should be professionally installed according to National Fire Protection Association Standard 96 (NFPA 96). Local fire officials also should be consulted as additional requirements for the local jurisdictions may apply. The hood must be equipped with the appropriate baffle style grease removal filters.

- **Portable Fire Extinguishers**

Class K extinguishers are for kitchen fires involving grease, fats and oils that burn at high temperatures. Class K fire extinguishers are only intended to be used after the activation of a built-in hood suppression system. Keep Class ABC extinguishers elsewhere for all other fires (paper, wood, plastic, electrical, etc.).

Potential Fire Hazards beyond Cooking Equipment

- **Poor housekeeping.** Fire can quickly spread in dirty and cluttered walkways and storage areas. Store paper products, linens, boxes and food away from heat and cooking sources. Properly dispose of soiled rags, trash, cardboard boxes and wooden pallets at least once a day. Store flammable liquids properly in their original containers or puncture-resistant, tightly sealed containers in well-ventilated areas away from supplies, food, food-preparation areas or any source of flames. Regularly clean grill surfaces.
- **Faulty or frayed electrical cords.** Do not use defective equipment or frayed power cords. Frayed electrical cords or faulty equipment are more likely to spark and cause an electrical fire. Check cords regularly to ensure they are in good condition.

- **Careless disposal of smoking materials.** Smoking should only be allowed in a restricted outdoor area with proper receptacles provided for disposal. Never smoke in or near storage areas.

Employee Training

Restaurant owners and managers must provide proper training in order to protect their employees, customers and business from fire. Here are some ways employers can minimize the dangers of a fire a restaurant:

Train employees on fire extinguisher use and to power down. Train employees on each shift how to properly use a fire extinguisher and activate the overhead fire suppression system, so in the event of a fire, someone on the cook line will know what to do. Train at least one employee per shift on how to shut off gas and electrical power in case of emergency.

Keep aisles uncluttered. Cluttered walkways will hamper employees and customers trying to escape from a fire.

Have an evacuation plan. Designate one staff member per shift to be evacuation manager. That person should be in charge of calling 911, determining when an evacuation is necessary and ensuring that everyone exits the restaurant safely.

Provide sufficient lighting. The emergency exit route needs to be adequately lit so employees and customers can see where they are going in case of an emergency.

Make sure exit signs are functioning. This allows employees and guests to quickly identify the exit in an emergency.

ProHost USA, Inc. is an insurance program administrator founded in 1989 and based in Minneapolis, Minnesota. For more than 25 years, ProHost has insured restaurants and related risks working with independent retail insurance agents across the country that recognize the value of their extensive underwriting expertise. To learn more, visit www.prohostusa.com.