

## COMMERCIAL KITCHEN HOODS

The plan requirements for commercial hoods are as follows:

1. Complete kitchen floor plan with: measurements, equipment location and sizes, section call outs, hood size and location, etc. **(must have EID stamped and approved floor plan)**
2. Elevations with: measurements both vertical and horizontal, equipment location and sizes, section call outs, hood size and location, etc.
3. Provide sections of kitchen with: material of walls, separations for equipment and hood to combustibles, noncombustible construction materials and methods, etc.
4. Provide complete ventilation calculations based on UMC 508.4 and include make up air calculations, equipment and locations.
5. A smoke test or equal will be required, note this on the plans.
6. For other than standard types of hoods, complete professional design plans will be required.
7. Provide installation instructions for all equipment and hood at the time of plan submittal. (If available)
8. The plans need to be to scale, 1/8" minimum.
9. Any method or use of other than UMC requirements requires engineering, stamped and signed (original).

### **Exhaust Hoods for Commercial Cooking Equipment**

#### **UL 710**

##### **1 Scope**

1.1 These requirements cover Type I commercial kitchen exhaust hoods intended for placement over commercial cooking equipment. Exhaust hoods with and without exhaust dampers are covered by these requirements.

1.2 Exhaust hoods with and without exhaust fire actuated fire dampers are covered by these requirements.

**1.3 Exhaust hoods are evaluated relative to minimum exhaust air flow required and maximum supply air flow allowed for capture and containment of cooking effluents under laboratory conditions.**

1.4 Exhaust hoods may incorporate non-continuous welded joints, seams, and penetrations when evaluated by these requirements.

1.5 Exhaust hoods with fire actuated fire exhaust dampers are intended to have the exhaust fire actuated dampers automatically close to prevent exhaust duct gas temperatures from exceeding 375°F (191°C).

1.6 All exhaust hoods are intended for use with fire extinguishing system units.

1.7 These requirements cover exhaust hoods provided with manually or automatically operated cleaning or washing systems. These requirements do not cover the fire extinguishing aspects of such systems.

1.8 These requirements do not cover evaluation of Ultra Violet (UV) systems for use in commercial kitchen exhaust systems. The Outline for Ultraviolet Radiation Systems for Use in the Ventilation Control of Commercial Cooking Operations, UL 710C, covers these products.

1.9 These requirements do not cover evaluation of Electrostatic Precipitators (ESP's) for use in commercial kitchen ventilation. Electrostatic Precipitators (ESP's) are covered under the Standard for Electrostatic Air Cleaners, UL 867.

1.10 These requirements do not cover evaluation of commercial electric cooking appliances provided with integral recirculating systems (previously referred to as ductless hoods) and nonintegral recirculating systems, both of which are intended for installation in commercial establishments for the preparation of food. The Standard for Recirculating Systems, UL 710B, covers these products.

**1.11 Exhaust hoods covered by these requirements are intended for installation in accordance with the following:**

- a) The Standard for Ventilation Control and Fire Protection of Commercial Cooking Operations, NFPA 96;
- b) The National Electrical Code, NFPA 70; and/or

**c) Other codes such as the International Mechanical Code (IMC) and the Uniform Mechanical Code (UMC).**

1.12 These requirements cover products rated 600 volts or less.

1.13 These requirements do not cover evaluation of the exhaust hoods with respect to their grease extraction efficiency. Note: Capture efficiency of a kitchen hood filter can be measured using ASTM F2519 "Standard Test Method for Grease Particle Capture Efficiency of Commercial Kitchen Filters and Extractors".