



# Williamson County

## Emergency Services District No. 4

### Liberty Hill Fire Department

[www.libertyhillfire.org](http://www.libertyhillfire.org)

#### **COMMERCIAL COOKING HOOD FIRE SUPPRESSION SYSTEM**

These guidelines are to be followed when a business, facility or organization proposes to perform cooking operations that will involve grease-laden vapors, within WCESD No.4 District.

This guideline identifies protection for cooking surfaces which include; deep fat fryers, griddles, upright broilers, char broilers, range tops and grills, open face ovens, salamanders, cheese melters, woks, open face pizza ovens, and other similar equipment.

#### **PERFORMANCE AND INSTALLATION REQUIREMENTS**

- The piping shall be rigidly supported to prevent excessive movement and shall be protected from mechanical or other damage.
- All systems shall meet UL 300.
- Both a manual and automatic means of activation shall be provided. A minimum of one manual activation pull station shall be provided in the path of egress, and shall be located 42" to 48" above the floor. The manual actuation device shall be located a minimum of 10 ft. and a maximum of 20 ft. from the kitchen exhaust system.
- Where multiple manual actuators are installed for protection of separate extinguishing systems, they shall be clearly identified as to the hood being protected.
- The fire suppression system shall be interconnected to the building fire alarm system. Activation of the Kitchen Hood Fire Suppression System shall cause the fire alarm to activate throughout the building.
- When a building fire alarm system is provided, activation of the fire suppression system shall transmit full addressable information in accordance with the Fire Alarm Operational Guidelines.
- Activation of the fire suppression system shall automatically shut-off the fuel supply, ventilation controls if required, fans, and any other equipment necessary. Shut-off valves and switches shall be of the types that require a manual action to reset.
- A "K" Class fire extinguisher shall be installed at an approved location, and within 30 feet of commercial food heat-processing equipment, as measured along an unobstructed path of travel.
- Pre-engineered fire suppression systems shall be installed only by companies and individuals licensed by the State of Texas State Fire Marshal's Office.

No hood suppression systems shall be installed on the site until a Permit has been issued. Any work performed prior to the issuance of this permit may result in a citation being issued for violation of Sec. 113.3 of the 2015 International Fire Code.

To expedite the plan review and inspection processes, please refer to the information listed below.

### **PERMIT PLAN SUBMITTAL REQUIREMENTS**

- A “Wet” FEL signature required for all non-pre-engineered systems.
- Scope of Work.
- Equipment List.
  
- A floor plan shall be provided and shall indicate the location of the kitchen hood itself, electrical panel, manual pull station, K Class fire extinguisher and suppression system cabinet.
- Plans shall indicate the interconnection to the building fire alarm system;
- Plans shall indicate the interconnection to the fuel supply shut-off and indicate the type of fuel supply.
- The title block shall contain the following:
  - Location of the installation.
  - Name and complete address of the business.
  - Name and complete address of the installing company.
  - Licensing information.
  - “Wet” signature, if required.
- A minimum of two (2) sets of plans shall be submitted. One paper copy and one electronic copy (PDF) on thumb drive or CD. Plans shall contain sufficient detail to enable the plan reviewer to accomplish a complete review. The following information shall be provided on the plans:
  - Indicate scale or acceptable dimensions.
  - Include manufacturer’s data sheets.
  - Include hood dimensions.
  - Include duct perimeter.
  - Include appliance dimensions.
  - Include piping schematic.
  - Indicate nozzle type, direction and number.
  - Indicate the location and temperature of the fusible links.
- The plenum space within the hood and exhaust ducts shall be protected.
- A minimum of one drawing shall be provided in 3D/Isometric view of the hood, ductwork and protected appliances.
- Drawings shall be generated by the installing company specific to the installation. Drawings shall show plan view and other pertinent information.
- Provide a copy of installing company’s State of Texas State Fire Marshal’s Office license.
- Provide a copy of installing company’s insurance.
- Drawings shall be submitted for review and approval, PRIOR to installation.

Submittal package must identify and include all the above requirements to be accepted for review.

All commercial cooking operations for the purposes of this guideline and any other guidelines or requirements of the Fire Marshal shall conform to NFPA 17, NFPA 17A, and the International Fire Code, as adopted and amended by WCESD No.4 Board.