

## Commercial Kitchen Hood Suppression Submittal Requirements

These guidelines are to be followed when a business, facility or organization proposes to perform cooking operations that will involve grease-laden vapors. Kitchen hood protection is required for cooking surfaces which includes 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.

All commercial cooking operations for the purposes of this guideline and the requirements of the Lake Cities Fire Department shall conform to NFPA 17, NFPA 17A, and the current adopted International Fire Code and amendments by Hickory Creek, Shady Shores, Lake Dallas, and Corinth.

This guide does not replace, nor supersede any codes and/or ordinances adopted by Hickory Creek, Shady Shores, Lake Dallas, Corinth.

INCOMPLETE PERMIT APPLICATIONS WILL NOT BE REVIEWED.

### PERFORMANCE AND INSTALLATION REQUIREMENTS

- 1. The piping shall be rigidly supported to prevent excessive movement and shall be protected from mechanical or other damage.
- 2. All systems shall meet UL 300.
- 3. Both a manual and automatic means of activation shall be provided. A minimum of one (1) manual activation pull station shall be provided in the path of egress and shall be located no more the 5 ft. 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.
- 4. Where multiple manual actuators are installed for protection of separate extinguishing systems, they shall be clearly identified as to the hood being protected.
- 5. Distinctive audible and/or visual alarms shall be provided to indicate system operation and activation. Specifically, an audible/visual notification device shall be provided to indicate system operation, requiring personnel attention and system recharge.
- 6. When a building fire alarm system is provided, the hood 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. It shall transmit full addressable information in accordance with the Fire Alarm Operational Guidelines NFPA 72.
- 7. Activation of the hood fire suppression system shall automatically shut-off the fuel supply, ventilation controls (**if required**), recirculation (make-up air) fans, electrical equipment, and any other equipment necessary located under the hood system. Shut-off valves and switches shall be of the types that require a manual action to reset.
- 8. On activation of hood fire suppression system, it shall automatically **Turn On** the hood ventilation system if it is in the **OFF** position.
- 9. One "K" Class and One 2A10BC fire extinguisher will also be required within the kitchen area where it is easily accessible and in a conspicuous location.

### **PERMITTING REQUIREMENTS**

10. Pre-engineered fire suppression systems shall be installed only by companies and individuals licensed by the State of Texas State Fire Marshal's Office.

- 11. A "Wet" FEL signature required for non-pre-engineered systems.
- 12. Provide a copy of Licenses and Certificates issued by State of Texas Fire Marshal's Office:
  - a. Fire Extinguisher License Kitchen Hood Systems
  - b. Fire Extinguisher Certificate of Registration
- 13. A minimum of three (3) sets of plans shall be submitted. Plans shall contain sufficient detail to enable the plan reviewer to accomplish a complete review. The following information shall be provided on the plans:
  - a. Indicate scale or acceptable dimensions
  - b. Include manufacturer's data sheets
  - c. Include hood dimensions
  - d. Include duct perimeter
  - e. Include appliance dimensions
  - f. Include piping schematic
  - g. Indicate nozzle type, direction and number
  - h. Indicate the location and temperature of the fusible links
- 14. The plenum space within the hood and exhaust ducts shall be protected.
- 15. A minimum of one (1) floor plan shall be provided and shall indicate the location of the kitchen hood itself, electrical panel, manual pull station, and suppression system cabinet.
- 16. Scope of Work.
- 17. A minimum of one (1) set of specifications shall be provided. Manufacturer documentation for all parts and materials used in the project.
- 18. Equipment List.
- 19. Plans shall indicate the interconnection to the building fire alarm system. (If applicable)
- 20. Plans shall indicate the interconnection to the fuel supply shut-off and indicate the type of fuel supply.
- 21. The title block shall contain the following:
  - a. Location of the installation

- b. Name and complete address of the business
- c. Name and complete address of the installing company
- d. Licensing information
- e. "Wet" signature, if required
- 22. Drawings shall be submitted for review and approval, **PRIOR** to installation.
- 23. Drawings shall be generated by the installing company specific to the installation. Drawings shall show plan view and other pertinent information.
- 24. Submittal package must identify and include all the above requirements to be accepted for review.

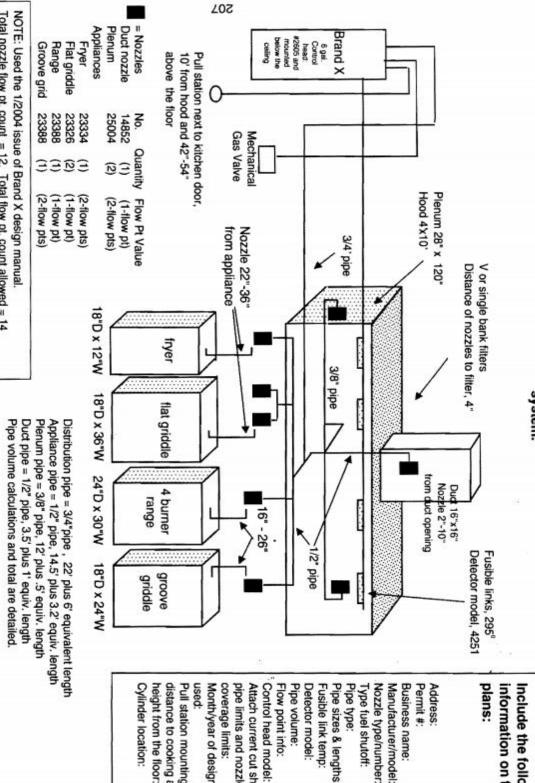
### **GENERAL SUBMITTAL REQUIREMENTS**

- 25. Each submittal shall have a completed Permit Application.
- 26. Plans approved by the Fire Marshal's Office give authorization for installation. Final approvals are subject to field verification. Any approval issued by the Fire Code Official does not release the contractor or property owner from the responsibility of full compliance with all applicable codes and ordinances.
- 27. All fire department inspection forms and permits shall be kept on the job site until final inspection and testing.
- 28. All installations shall comply with the approved plans. Any deviation from the approved plans requires a resubmittal to the Fire Code Official.

### NOTE:

29. Re-inspection fee – If the system is does not meet the requirements or fails to operate, there may be a re-inspection fee.

# This example illustrates the minimum information required for plan submittal for a Type I hood fire suppression system.



plans: information on the Include the following

Business name: Permit #: Address:

Nozzle type/number: Manufacturer/model: Type fuel shutoff:

Pipe sizes & lengths Fusible link temp: Detector model:

Flow point info: pipe limits and nozzle Attach current cut sheets of Control head model:

Pull station mounting location distance to cooking area and Month/year of design manual

Total nozzle flow pt. count = 12, Total flow pt. count allowed = 14

The issuance of a Fire Department Construction Permit from the Lake Cities Fire Department does not relieve the applicant of any permits required by the Cities of Hickory Creek, Shady Shores, Lake Dallas, or Corinth Building Department.

# Submit Plans To

**Lake Cities Fire Department** 

3501 FM 2181 Suite B Corinth, TX 76210 Phone: 940-279-4590 Fax: 940-497-3455