



# MOBILE FIRE - RESCUE DEPARTMENT FIRE CODE ADMINISTRATION

## Kitchen Hood Suppression System Plan Review IFC 2009, IMC 2009, NFPA 17A and NFPA 13

Date of Review \_\_\_/\_\_\_/\_\_\_

BLD201\_\_ - \_\_\_\_\_

Project Address: \_\_\_\_\_ Project Name: \_\_\_\_\_

Contractor's Business Name: \_\_\_\_\_ Phone: \_\_\_\_\_

Contractors Name: \_\_\_\_\_

System Manufacturer \_\_\_\_\_ System Model \_\_\_\_\_

Reference numbers following worksheet statements represent an NFPA code section unless otherwise specified.

**Worksheet Legend:**    ✓ or OK = acceptable    N = need to provide    NA = not applicable

1. \_\_\_\_\_ Two sets of drawings.
2. \_\_\_\_\_ The fire-extinguishing system is listed in accordance with UL 300.

### **Floor Plan Showing:**

3. \_\_\_\_\_ Scale: a common scale shall be used and plan information is legible.
4. \_\_\_\_\_ An equipment symbol legend is provided.
5. \_\_\_\_\_ Cross-sectional view of the room and equipment is provided.

### **Pre-engineered Wet Chemical and Water Spray Systems:**

6. \_\_\_\_\_ Total number of nozzles provided is \_\_\_\_\_ and aggregate flow rate is \_\_\_\_\_

7. \_\_\_\_\_ System model is provided and the plan indicates the permissible number of flow points.
8. \_\_\_\_\_ Description and measurements of the appliances to be protected are provided, 17A:6.3.2.
9. \_\_\_\_\_ Measurements of hood, plenum, and duct are provided, 17A:6.3.1.
10. \_\_\_\_\_ Pipe size and length for supply, branches, etc., are provided, and if applicable, the equivalent pipe length of fittings, 17A:6.3.3.
11. \_\_\_\_\_ Pipe volumes are provided with calculations when required as part of the listing, 17A:6.3.2.
12. \_\_\_\_\_ The pipe configuration complies with the listed manufacturer's design manual, 17A:6.3.3.
13. \_\_\_\_\_ Piping and nozzles are adequately braced, 17A:6.3.2.
14. \_\_\_\_\_ Type of fuel or power shutoff device is described and detailed 17A:6.3.2.
15. \_\_\_\_\_ Fuel or power shutdown device shall be arranged such that upon activation it requires a manual means of being reset, IFC 904.11.2.
16. \_\_\_\_\_ All equipment under the hood shall shut down when the fire-extinguishing system activates, IFC 904.11.2.
17. \_\_\_\_\_ Nozzle types are identified and are correct for the appliance hazard, type of use, and coverage area, 17A:6.3.3.
18. \_\_\_\_\_ Nozzle placement complies with the manufacturer's data sheet, distances from each nozzle to the protected hazard surface are detailed and distance from appliances to filters and duct opening are detailed, 17A:6.3.3.
19. \_\_\_\_\_ Plenum and duct areas are protected in accordance with the manufacturer's design manual.
20. \_\_\_\_\_ If provided, the fire-extinguishing system is connected to the building fire alarm system, 17A:5.2.1.9
21. \_\_\_\_\_ At least one accessible manual pull station is provided in path of egress, 10 ft. to 20 ft. from the hood and 42 in. to 48 in. above the floor level, IFC 904.11.1.
22. \_\_\_\_\_ The control head model number is identified and the wet chemical container installation location is detailed and complies with Section 17A:6.3.2.

- 23.\_\_\_\_\_ Heat detectors or fusible links are located in accordance with the manufacturer's design manual and the detector part number is provided, 17A:6.3.4(1).
- 24.\_\_\_\_\_ Fusible link temperature is in accordance with fire extinguishing systems' listing requirements, 17A:6.3.2.
- 25.\_\_\_\_\_ Simultaneous activation of systems occurs when protecting common hoods, plenums, and ducts, 17A:5.1.4.

**NFPA 13:7.9 Sprinkler Protection:**

- 26.\_\_\_\_\_ Duct, hood, and appliance configuration(s) are detailed and measurements provided.
- 27.\_\_\_\_\_ Sprinkler protection is provided for cooking equipment, plenum area, and the duct(s).
- 28.\_\_\_\_\_ Location of duct sprinklers complies with Section 7.10.3.1.
- 29.\_\_\_\_\_ Sprinkler spacing in ducts and sprinkler temperature ratings comply with Section 7.10.3.3.
- 30.\_\_\_\_\_ Sprinklers are installed above duct collars and the temperature ratings comply with Section 7.10.4.1.
- 31.\_\_\_\_\_ The location of sprinklers required in the plenum chamber complies with Section 7.10.5.
- 32.\_\_\_\_\_ Sprinklers used to protect deep fat fryers will be listed for that use, 7.10.8.2.1.
- 33.\_\_\_\_\_ The operation of a sprinkler automatically shuts off all sources of fuel and heat to all equipment under the hood, 7.10.8.3.1.
- 34.\_\_\_\_\_ A listed indicating control valve for the water supply is provided, 7.10.9.
- 35.\_\_\_\_\_ A listed strainer for the water supply is provided when required by Section 7.10.10.
- 36.\_\_\_\_\_ Adequate water pressure and flow are available to operate the system and meet the listing requirements of the sprinklers, pressure and flow information are provided, 7.10.1.
- 37.\_\_\_\_\_ A supervised water supply valve is provided, 7.9.1.
- 38.\_\_\_\_\_ Sprinklers in ducts are accessible for maintenance, 7.9.7.
- 39.\_\_\_\_\_ Sprinklers are a minimum 6 ft. apart unless baffled in accordance with NFPA 13.

40. \_\_\_\_\_ Sprinklers exposed to temperatures of 300°F or less will be 325-375°F but if temperatures exceed 300°F then a higher temperature sprinkler will be used, 7.10.6.

41. \_\_\_\_\_ A test connection to verify equipment shutdown is detailed, 7.10.11.

**Fire Extinguishers:**

42. \_\_\_\_\_ Solid fuel appliance with firebox volume of 5 cu. ft. or less shall be equipped with at least one 2.5 gallon or two 1.5 gallon K extinguishers. The extinguishers shall be located within 30 ft., IFC 904.11.5.

43. \_\_\_\_\_ Class K extinguisher is within 30 ft. of the appliance. Provide one 1.5 gallon extinguisher for up to four deep fat fryers with a maximum cooking medium capacity of 80 pounds and one additional extinguisher for every additional group of four fryers. For fryers exceeding 6 sq. ft. provide an extinguisher in accordance with the manufacturer's recommendations, IFC 904.11.5.

**Additional Comments:**

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**Review Date:** \_\_\_\_\_

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**Fire Code Administration Staff Captain**