RICHLAND COUNTY DEPARTMENT OF EMERGENCY SERVICES

1410 Laurens St. Columbia, SC 29204, (803) 576-3400 Office, (803) 748-5055 Fax



Instruction Guide for Automatic Fire Suppression Submission:

Automatic Fire Suppression plans and specifications shall be submitted for review by the Office of Richland County Fire Marshal.

Shop drawings for automatic fire suppression systems shall be submitted for review and approval prior to system installation, and shall include, but not be limited to, all of the following:

- 1. Drawings are to be of uniform size and drawn to a recognized scale or fully dimensioned.
- 2. Drawings shall contain sufficient detail to evaluate the protection of the hazard(s). Provide floor plan and elevation views with hood location, appliances, pull station and appliances with nozzle locations.
- 3. Drawings shall show a detail of the hood and associated ductwork to include dimensions. Drawing(s) shall show the location of all appliances indicating which appliances require protection, their arrangement under the hood and the hazard area of each appliance.
- 4. Details on the system shall include the size, type, brand, length and arrangement of connected piping and the description and location of nozzles so that the adequacy of the system can be determined.
- 5. Information shall be submitted pertaining to the location and function of detection devices, operating devices, auxiliary equipment, and electrical circuitry, if used.
- 6. Drawing(s) shall indicate maximum flow points available, flow point(s) of each nozzle type; number of each nozzle type utilized, and total flow points actually utilized.
- 7. A fusible link or heat detector shall be provided above each cooking appliance or group of appliances protected by a single nozzle.
- 8. Automatic detection and system actuation shall be in accordance with the manufacturer's listed installation and maintenance manual. Indicate specific temperature rating of the fusible link or heat detector utilized.
- 9. At least one manual actuator (pull station) shall be located between 42 inches and 48 inches above the finished floor. The actuating device shall be a minimum of 10 ft. and a maximum of 20 ft. from the kitchen exhaust system and be convenient and easily accessible at all times, including the time of fire
- 10. An automatic means shall be provided to ensure the shutoff of all fuel or power sources to the protected appliances located under ventilating equipment protected by the extinguishing system, upon system actuation.

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- 11. An alarm or indicator shall be provided to show that the system has operated, and that the system is in need of recharge. If a fire alarm system is provided for the building, the extinguishing system shall be connected in accordance with the requirements of NFPA 72, National Fire Alarm Code to the building system. The actuation of the extinguishing system will sound the fire alarm as well as provide the function of the extinguishing system.
- 12. Multiple systems protecting back-to-back or adjacent non-separated hoods shall be installed to ensure the simultaneous operation of all systems protecting the hoods. Automatic protection shall be provided for all portions of a common exhaust duct.
- 13. A "K" type extinguisher shall be provided in accordance with NFPA 10. Portable extinguisher shall be compatible with the extinguishing agent utilized for the system. Portable fire extinguishers shall be installed within 5 feet of each means of manual activation for the exhaust hood fire-suppression system
- 14. Provide Manufacturer's data sheets for the following:
 - a. Hood and ductwork configuration with listed protection criteria.
 - b. Appliances with listed protection criteria.
 - c. Pipe and fittings
 - d. Nozzles
 - e. Extinguishing agent containers
 - f. Detectors, indicators and alarms
 - g. Operating devices
 - h. Fuel shutoff devices
 - i. Portable fire extinguishers

Notes:

1. Omission of required information will delay the review process. Please ensure submitted plans fully address all applicable items.

2. Plans shall be drawn to scale with scale indicated on the plans.