2.02 Submittal Requirements for Kitchen Hood and Duct Extinguishing Systems (2016)

Reference: 2016 SFBC, Section 1.11.3; 2016 SFFC, Sections 609, 904, and 906; 2013 NFPA 17 and 17A

Purpose: All commercial-type cooking equipment must be protected by a fire extinguishment system. All new extinguishing equipment must conform to UL Standard 300.

Scope: This bulletin describes the information to be provided on plans submitted for a building permit to install or modify a kitchen hood and duct fire suppression system.

I. SUBMITTAL REQUIREMENTS

A. Working plans shall be drawn to an indicated scale (not smaller than 1/8" = 1’), on sheets of uniform size (11” x 17” minimum), including a kitchen floor plan showing exits. Two sets are needed with the designers' wet signature on each page.

The following items must be included in the plans:
- Names of owner and occupant;
- Address of building, including assessor's block and lot number;
- Contractor's name, address, telephone number, and license number;
- Point of compass;
- Symbol list;
- Drawing showing kitchen layout, including exits, pantry and access to dining area; This should include hood, duct, plenum, and appliance dimensions; Indicate the actual surface dimension being protected as well as the size of the unit (e.g. 36" griddle with 30" x 24" cooking surface); All appliances must be locked in place; If the appliance is moveable for cleaning, permanent markers shall be installed to ensure that the appliance is returned to its proper design location.
- Location of all parts of the system:
  - Panels; Piping (size and length); Nozzles (type and distance to the appliance); Mechanical fuel shut-off devices; Agent storage container (type and size); Manual pull station and related cable (show installation height above floor); Detection devices and related cables; Type K portable fire extinguisher.
- Attach to the plans the manufacturers' specification sheets for all the above. Highlight all proposed parts (use the same terminology on the plans as is in the design manual; i.e. range not stove or burner); all parts must be installed according to the manufacturers' specifications; all listed systems must be UL Standard 300.
- Pipe length calculations (both actual and equivalency); Indicate actual, maximum and minimum lengths of pipe and equivalent lengths; Show the actual and maximum vertical rise; Show branch line limitations;
- Flow point calculations;
- If the building is provided with a building fire alarm system, show how the hood suppression system is connected to the system (any activation shall be indicated by alarm status at the FACU);
- Alarm or indicator that shows system has activated;
GENERAL INFORMATION

A. The system shall be serviced at least every 6 (six) months and after system activation. Records shall be maintained per the 2016 SFFC Section 609.3.3.3.
B. Comply with section 609 of the SFFC for cleaning and maintaining Type I Commercial Kitchen Hoods. NOTE: Cleaning intervals have increased for systems that have a high volume of use and systems using solid fuels.
C. Fusible links and sprinkler heads must be replaced as required by Section 904.12.6.3 of the 2016 SFFC.

II. EXISTING DRY CHEMICAL SYSTEMS

A. 2016 SFFC Section 904.12 requires all existing dry-chemical and wet chemical extinguishing systems comply with UL 300 requirements. Systems that do not meet the UL 300 standard are not in compliance and shall be upgraded immediately.