

PORT ARTHUR FIRE DEPARTMENT

FIRE PREVENTION DIVISION

COMMERCIAL KITCHEN HOOD EXTINGUISHING SYSTEMS 9-1-2017

The following guidelines are to be followed when a commercial kitchen hood extinguishing system is installed or modified within the City of Port Arthur. These guidelines are not to be interpreted as containing all data required for proper design, installation, or approval. Complete details for the design and installation of fire sprinkler systems are found in the referenced standards.

Standards

- 2015 edition of the International Building Code and all related codes, (Mechanical, Fuel Gas, etc.)
- 2015 edition of the International Fire Code as adopted and amended by the City of Port Arthur
- 2013 edition, NFPA 17 or 17A as applicable
- 2014 edition NFPA 96
- Texas Insurance Code, Chapter 6001 and Texas Fire Extinguisher Rules

Plan Submittals

- Allow at least 10 business days to process all submittals and required permits
- Plans shall be submitted by a State of Texas Fire Extinguisher License Type PL, A, or K designing contractor.
- Extinguisher ECR license is required for the installing company.
- Plans shall be clear and legible and all sheets shall be in a common and appropriate scale (preferably computer generated). A minimum of two (2) sets of plans and minimum of one (1) set of specifications/cut sheets shall be submitted. Plans shall contain sufficient detail to enable the plan reviewer to accomplish a complete review. Plans that do not conform to the submittal requirements and/or are not clearly legible will be rejected and require a re-submittal.
- Title block that contains the following:
 - Business name & address of installation
 - Installing company's name, address, and phone #
 - Licensing information
 - Date Drawn / Drawn by
- A legend that contains the following: Symbols, descriptions, manufacturer, model number, and quantity for all devices shown on plans
- Square footage and scale of diagram or measurements of building
- Location of means of egress
- Drawings shall include hood dimensions, appliance(s) description, piping schematic, nozzle type and location, location and temperature of the fusible links, system flow point capability, and system flow points used.
- Submit a completed City of Port Arthur Fire Protection System permit application.
- Specification booklet shall contain the following:
 - Scope of Work if not on floor plan.
 - Data specifications sheets for all devices and equipment
 - Listing of the system design, operation, and rest functions
 - Specific materials in the specification booklet are to be identified by an arrow or highlighter
 - Equipment List

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Extinguishing System Design Criteria

- Activation of fire extinguishing system shall cause the shut-off of fuel and/or power for all appliances under vent-hood.
- Activation of fire extinguishing system shall cause the shut-off of makeup air supply to vent-hood.
- Exhaust ventilation shall continue to operate upon activation of fire extinguishing system.
- Activation of fire extinguishing system shall initiate activation of the fire alarm system, if one is present.
- Extinguishing system's manual pull station shall be located along the path of egress. (Minimum of 10 feet and a maximum of 20 feet from protected kitchen exhaust system and at a maximum height of 48 inches and a minimum height of 42 inches)
- Label multiple manual pull stations.
- Mount a Class K rated fire extinguisher and approved signage within 30 feet from protected kitchen exhaust system.

Acceptance Testing

- Contact Fire Prevention Division at least 24 hours in advance to schedule acceptance tests or other inspections.
- Inspection times are normally Monday-Friday from 9:00am to 11:00am and 1:00pm to 3:30pm.
- Acceptance testing will not be conducted until kitchen hood installation has been inspected by a City of Port Arthur Building Mechanical Inspector.
- Permit and Fire Department stamped drawings shall be at job site during all work related to fire extinguishing system.
- Natural gas and/or electric utilities shall be in service for all protected appliances at time of extinguishing system acceptance test.
- Protected kitchen appliances with casters shall have channels or other means to relocate back to original position. (NFPA 96 12.1.2.3.1)
- Type K fire extinguisher mounted within 30-foot travel distance of cooking equipment. Minimum of 1.5-gallon extinguisher to cover up to (4) fryers with 80 pound capacity each. (IFC 904.12.5)
- Placard at fire extinguisher stating to use after suppression system activation (NFPA 96 – 10.2.2)
- Installation certificate completed & copy given to Inspector. (NFPA 96 - 10.9.2.2 & TDI Code 6001)
- Installation label on system (28 TAC 34.519 & NFPA 96 - 11.2.5)
- Discharge / Air test (air flow through all nozzles) (NFPA 17A 6.4.2)
- Make-up air shut must shut off.
- Exhaust fan must remain on.
- Fire alarm activation and verification of monitoring station notification or audible/visual activation if no alarm system.