



**CITY OF BLAINE  
SAFETY SERVICES  
Fire Inspections  
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## **COMMERCIAL KITCHEN HOODS AND DUCTS**

All class I commercial kitchen hoods and ducts must meet the minimum requirements of this policy.

### **General Requirements**

Submittals of a fire permit application, fee and a scaled site plan or floor plan including type and location of cooking equipment, the type and location of sprinkler heads or nozzles and the distance between heads or nozzles and the cooking surface.

System shall comply with the Minnesota State Fire Code Section 609, Minnesota Mechanical Code 904 and applicable NFPA Standards.

Coverage shall include, cooking surfaces, deep fat fryers, griddles, upright broilers, charbroilers, range tops, ovens and conveyor ovens with grease laden vapors and enclosed plenum space within the hood above filters and exhaust ducts serving the hood.

System shall be interconnected so as to shut off all cooking equipment and electrical receptacles, which are located under the hood when the system is activated. Valves used to shut off gas and electric must be manual reset type valves.

A system operation test is required to verify proper operation of all components. Fire Inspector must witness tests.

Access plates shall be provided at every change in direction of ducts and in additional locations as required by the code.

All deep fat fryers shall be installed with at least a 16-inch space between the fryer and surface flames from adjacent equipment, unless an 8-inch steel or tempered glass baffle is installed between the appliances.

Non-class I hoods great than four feet in depth must have sprinkler protection to provide adequate floor coverage.

### **Fire Sprinkler System Requirements**

The Gem model EA-1 Protectospray head may be installed in accordance with its' previous listing to protect deep fat fryers.

Dry heads must be used where there is potential for freezing.

Automatic sprinkler systems used to protect cooking equipment shall be supplied from a separate, readily accessible indicating-type control valve that is identified and monitored as a supervisory alarm.

### **Acceptable Chemical Systems**

Preengineered automatic dry and wet chemical systems shall be tested in accordance with UL 300. Other types shall be listed and labeled for specific use as protection for commercial cooking operations. All chemical systems must be designed and installed in accordance with the Fire Code and the manufacturers requirements. Ventilation exhaust must remain on and the make up air shall shut down upon activation unless otherwise specified by the manufacture.

Manual actuation device shall be located near a means of egress, minimum of 10 feet and maximum of 20 feet from the exhaust kitchen hood. The device shall be located a minimum of 4.5 and a maximum of 5 feet above the floor.

Chemical extinguishing systems must be centrally monitored.

### **Fire-resistive Construction and Alternatives for Hoods and Shafts**

Gypsum wallboard shaft with access panels.

UL listed insulative wrap with access panels.

Construction details and/or documentation must include installation specifications for any UL listed insulative wraps.

### **Portable Fire Extinguisher**

A K- class wet chemical fire extinguisher must be provided in an approved location, within 30 feet of commercial food heat-processing equipment.

### **Inspection Checklist**

Rough in –nozzles, fusible link and manual pull station locations.

System activation by release of a fusible link.

System activation by manual pull station.

Gas and Electric shut down with manual reset.

Exhaust air continues running and makeup air shuts down.

Fire-rated shaft enclosure inspection.

Central monitoring.

**Note:** Extinguishing systems must be 100% tested prior to calling for an inspection. If a system fails an inspection, a re-inspection must be scheduled. Re-inspection fees are \$50.00.

### **Required Maintenance**

Hoods, grease-removal devices, fans, ducts and other appurtenances shall be cleaned in intervals necessary to prevent the accumulation of grease. Documentation of cleaning shall be maintained on the premises.

Cleanings shall be recorded and records shall state the extent, time and date of cleaning. Such records shall be maintained on the premises.

Extinguishing systems shall be serviced at least every six months or after activation of the system. Inspections shall be by qualified individuals, and a Certificate of Inspection shall be forwarded to the Fire Inspection Department upon completion.

Fusible links and automatic sprinklers heads shall be replaced at least annually (except frangible bulbs), and other protection devices shall be serviced or replaced in accordance with the manufacturer's instructions.