



**City of White Bear Lake  
Building Department  
4701 Highway 61 N.  
White Bear Lake, Minnesota 55110  
651-429-8518 | [www.whitebearlake.org](http://www.whitebearlake.org)  
[buildingdepartment@whitebearlake.org](mailto:buildingdepartment@whitebearlake.org)**



## **COMMERCIAL KITCHEN HOOD FIRE SUPPRESSION SYSTEM**

This handout is a summary of the permit & inspection process. All Commercial Kitchen Hood systems must be designed and installed per current applicable standards to meet the minimum requirements of the Minnesota State Fire Code (MSFC) and NFPA standards.

### **Permit Submission Requirements:**

- A completed permit application signed by a state licensed contractor
- Provide 2 copies of hard copy plans or email electronic plans to [buildingdepartment@whitebearlake.org](mailto:buildingdepartment@whitebearlake.org)
- The scaled plans shall include the 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
- Provide equipment data sheets on all material being used for installation of the system

**Fire Suppression Permit Fees:** See the White Bear Lake Fee Schedule at [www.whitebearlake.org](http://www.whitebearlake.org)

### **Licensing Requirements:**

- Contractor must be licensed in the State of Minnesota

### **Inspection Requirements:**

- Fire suppression system shall activate the fire alarm system if provided.
- Extinguishing systems must be 100% tested prior to calling for an inspection. If a system fails an inspection, a re-inspection must be re-scheduled.
- Rough in - nozzles, fusible link and manual pull station locations.
- System activation by release of a fusible link.
- System activation by a manual pull station.
- Gas and Electric shut down with manual reset.
- Exhaust air continues running and make up air shuts down.

### **Information and Guidelines:**

- Fire suppression system shall comply with the Minnesota State Fire Code Section 607 & 904.12, Minnesota Mechanical Code 509 and applicable NFPA standards.
- Coverage shall include cooking surfaces, deep fat fryers, griddles, upright broilers, char broilers, 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 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 Marshal must witness tests.

- Access plates shall be provided at every change in direction of ducts and in additional locations required by 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 hood greater than four feet in depth must have sprinkler protection to provide adequate floor coverage.
- Ventilation exhaust must remain on and the make-up air shall shut down upon activation unless otherwise specified by the manufacturer.
- Manual activation devices 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.
- A K-class wet chemical fire extinguisher must be provided in an approved location, which is within 30 feet of the commercial food heat-processing equipment.

*This document is for informational purposes only and not intended to address every situation for the permitting and plan review process.*

2022