



Hood Suppression Permitting Process



Permitting and Inspection Information

Where the MN Mechanical Code or MN Fire Code require Type I hoods in commercial kitchens, automatic fire extinguishing systems are required. Examples of equipment requiring Type I hoods are deep fat fryers, griddles, upright broilers, char broilers, range tops and grills, open face pizza ovens and other similar equipment.

Commercial cooking hood fire suppression systems are regulated by the Minnesota State Building and Fire Codes and permits are required for installation, repair or replacement. Commercial cooking operations shall conform to NFPA 17, NFPA 17A and Minnesota Building and Fire Codes. All scenarios described previously require a Fire Protection Systems permit. To obtain a permit, applicants should bring a completed Fire Protection Systems Permit Application and Intake Checklist to Construction Services and Inspections at City Hall, 411 W 1st St Room 100.

Work shall not commence until plans have been approved (when required) and the permit has been issued. In order to approve the installation, inspections will be required at certain stages of the process. Most scenarios will require a rough in and final inspection. To schedule an inspection, please contact the Fire Protection Systems Plans Examiner and Inspector at 730-5185. Please allow for 24 hour advanced notice prior to needing an inspection.

Additional Intake Checklist Information

DRAWING SUBMITTAL REQUIREMENTS
1) Provide three (3) sets of drawings, one (1) set of the equipment technical data sheets, voltage drop calculations, battery calculations, and a copy of the scope of work letter
2) Drawings must be to scale with a graphic scale (1/8" = 1 ft scale is preferred)
3) Label all rooms
4) Drawing scale or dimensions
5) Hood dimensions consistent with approved mechanical plans
6) Duct perimeter consistent with mechanical plans
7) All kitchen equipment
8) Piping schematic
9) Nozzle type, direction and number
10) Location and temperature of fusible links
11) Interconnection to the building fire alarm system
12) Interconnection with hood exhaust and make-up air
13) Interconnection to the to the fuel supply shut-off and indicate type of fuel supply
14) Drawings shall show plan view and other pertinent information
15) Floor plan indicating the location of the kitchen hood, electrical panel, manual pull stations, K Class fire extinguisher and suppression system cabinet
16) One drawing shall be provided in 3D/isometric view of the hood, ductwork and protected appliances
17) Equipment list
18) Manufacturer's data sheets
19) One set of specifications
20) Name and contact information for the system installer
21) Installers credentials for the type of system proposed
22) Valuation for the work, including labor and materials

Post-permit Requirements

- The permit authorizes the installation
- Inspections are required
- Installation shall comply with approved plans and all applicable codes and ordinances
- Deviation from approved plans requires submittal of revised plans and other information
- Approved plans must be kept on the job site until final inspection
- Installers credentials for the type of system proposed
- Valuation for the work, including labor and materials
- Plans will be reviewed and work inspected by Duluth Fire Marshal. Call 218-730-4380 to schedule inspections or with questions about installation requirements.

Installation and Performance Requirements

- Pre-engineered fire suppression systems shall be installed by individuals certified by the manufacturer.
- All systems shall conform with UL 300.
- Both a manual and automatic means of activation shall be provided.
- A minimum of one manual activation pull station shall be provided in the path of egress and shall be located between 42" and 48" above the floor. The manual actuation device shall be located a minimum of 10 feet and a maximum of 20 feet from the kitchen exhaust system.
- Pull stations shall be clearly identified as to the hood being protected.
- Distinctive audible and/or visible alarms shall be provided to indicate system operation and activation. An audible/visual notification device shall be provided to indicate system operation which requires personnel attention and system recharge.
- The hood suppression system shall be interconnected to the fire alarm system. Activation of the kitchen hood fire suppression system shall cause the fire alarm to activate throughout the building in accordance with NFPA 72.
- The actuation of the fire suppression system shall automatically shut down the fuel or electrical power supply to the cooking equipment. The fuel and electrical supply reset shall be manual.
- A sodium bicarbonate or potassium bicarbonate dry-chemical type portable fire extinguisher having a minimum rating of 40-B shall be installed at an approved location and within 30 feet of commercial food heat processing equipment as measured along an unobstructed path of travel. A K Class fire extinguisher shall be provided.