City of Maple Grove

Guidelines and Permit Information: Comm. Kitchen Hood Suppression

Permit Required: 2020 MSFC

Automatic fire-extinguishing systems.
A construction permit is required for installation of or modification to an automatic fire-extinguishing system. Maintenance performed in accordance with this code is not considered to be a modification and does not require a permit.

Fees: The City of Maple Grove Fee Schedule is available for review on the city website.

Code Guidance/ General Requirements: MSFC, NFPA 96, and Chapter 18 City Ord., MNFGC

- ☐ Permit shall be posted on site
- ☐ A 'Type I' commercial cooking hood shall be provided in all cooking areas where grease-laden vapors are produced.
- ☐ All new or modified 'Type I' commercial cooking hood duct work shall be leak tested. Documentation of leak testing shall be provided to the MGFD. MGFD may require testing to be witnessed.
- ☐ Coverage must include cooking surfaces, deep fat fryers, griddles, upright broilers, char broilers, range tops, ovens and conveyor ovens with grease laden vapors, the enclosed plenum space within the hood above filters and exhaust ducts serving the hood.
- ☐ Protected appliances shall be a minimum of (6) inches inside the vertical edge of the hood
- ☐ Pre-engineered wet chemical systems must be installed and tested in accordance with UL 300.
    - Other types of suppression systems 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.
- ☐ Exhaust ventilation must remain on and the makeup air must shut down upon activation of the system unless otherwise specified by the manufacturer
- ☐ A manual actuation device (pull station) must be located in the path of egress
- ☐ 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.
- ☐ All valves shall be visible and accessible
- ☐ 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, when required.
- ☐ Access plates shall be provided at every change in direction of ducts and in additional locations as required by the code.
- ☐ Chemical extinguishing systems must be centrally monitored if building has a monitored fire alarm system

- ☐ Service personnel installing, providing, or conducting maintenance on automatic fire extinguishing systems shall possess a valid certificate issued by an approved organization for the type of system and work performed. (MNSFC 904.1.1)
- ☐ All wheeled or movable appliances must have an approved securement means (MNFGC)
- ☐ All discharge nozzles shall be provided with caps or other suitable devices to prevent the entrance of grease, vapors, moisture or other foreign material into the piping

Water Backed Kitchen Fire Suppression System

- ☐ System must be designed and installed per manufacturer recommendations
- ☐ A licensed sprinkler contractor must connect the system to the sprinkler system
  - A separate permit is required for this scope of work
- ☐ Control valves shall be placed in easily identifiable and accessible locations

Plan Submittal:

Plans shall include the following as applicable:

- ☐ Fully dimensioned plans to scale
- ☐ Kitchen layout, including exits, pantry and access to dining area
- ☐ Hood and duct dimensions
- ☐ Appliance type and size (show or list dimensions)
  - If a back shelf will be installed (show or list dimensions)
- ☐ Piping (size and length)
- ☐ Nozzles (type and distance to the appliance)
- ☐ Fuel shut-off devices and their listing type
- ☐ Agent storage container (type and size)
- ☐ Manual actuation device and related cable installation in the kitchen
- ☐ Type and size of systems
- ☐ Contractor's name, telephone number, and address
- ☐ Proof of certification to install specific equipment (If this is not provided, application will be rejected)

All plans shall be submitted electronically through ePermits online. No paper plans accepted.

Inspections Required:

- 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.
- Exhaust fan will automatically start if not operating.
- Fire-rated shaft enclosure inspection.
- Central monitoring.

Systems should be fully inspected by contractor and operational prior to calling for a final inspection. If system fails inspection, and a re-inspection is required a re-inspection fee could be charged.

Click HERE to go to the ePermits website.