



TOWN OF BRIGHTON
Office of the Fire Marshal
 2300 Elmwood Avenue
 Rochester, New York 14618
 (585) 784-5220 Office
 (585) 784-5207 Fax

Kitchen Fire Suppression Permit Application

In accordance with the New York State Fire Prevention and Building Code plan submittals and installation shall be in accordance with the requirements detailed and contained in the National Fire Protection Association (NFPA) Chapter 17A Standard - 2009 Edition (Standard for Wet Chemical Extinguishing Systems) and the current manufacturer specifications.

Make Checks Payable – Town of Brighton

Kitchen Fire Suppression Installation Permit - \$50.00

| | | | | | | | |
|--|---|------------------|----------------|----------------|---------------|-------|----------|
| Applicant & Property Information | Business Name | | | | | | |
| | Address | | | Suite | City | State | Zip Code |
| | Telephone | | Work Telephone | | Email Address | | |
| | Property Owner or Mailing Address if different from above | | | | | | |
| | Name or DBA | | | | | | |
| | Address | | | Suite | City | State | Zip Code |
| | Telephone | | Work Telephone | | | | |
| | Installation Company / Agent to Owner | Name | | | | | |
| Contact Name | | | | | | | |
| Address | | | City | State | Zip Code | | |
| Telephone | | Mobile Telephone | | Work Telephone | | | |
| Rochester Fire Department Extinguisher License # | | | | | | | |

The undersigned represents that this application for a permit as described herein will be in accordance with all ordinances of the Town of Brighton and the Fire and Building Code of New York State and that any plans or specifications submitted with this application are the plans or specifications relating to this permit and no other.

Refer to Kitchen Fire Suppression Installation Plan Review and Permit Submittal Requirements

| | | | | | | |
|---------------------|------------|---------------------|------------------------|---------|----------------|--------------------------|
| Applicant Signature | | | Applicant Name (Print) | | | Application Date |
| Permit Number | Issue Date | New Expiration Date | Fee Paid | Check # | Receipt Number | Evacuation Plan Received |

Kitchen Fire Suppression Plan Review Checklist

Purpose

This information packet has been developed in an effort to provide the highest level of service to the residents and visitors of the Town of Brighton. The major goal of plan reviews conducted by the Office of the Fire Marshal is to ensure the design of wet chemical commercial kitchen suppression systems meet the minimum requirements of the adopted codes and ordinances. To meet this goal, the submitted plans and supporting documentation must contain the information needed to conduct a thorough review.

Scope

This packet outlines the minimum requirements set forth in the Fire Code of New York State local amendments, and departmental policies and procedures as they relate to the installation of wet chemical commercial kitchen suppression systems. This packet is not intended to provide an all-inclusive listing of submittal and inspections requirements, as it would be virtually impossible to cover all situations. This packet only covers requirements set forth in the latest edition of applicable NFPA standards current adopted by New York State. Also included in this packet is information covering items required to be included on the working drawings and supporting documents.

Administration

A design engineer or licensed design professional will typically provide a preliminary design within the construction documents that will contain sufficient detail to identify the scope of the work and allow for competitive bidding. The design engineer's or licensed design professional's responsibilities include but are not limited to:

1. Evaluate the broad range of hazards and fire protection schemes required to develop a workable, integrated fire sprinkler solution.
2. Provide design documents as outlined in this guideline.
3. Review shop drawings and submittals to ensure conformance with design documents and applicable codes and standards.
4. Monitor the installation of fire protection systems and participate in their acceptance and commissioning.

Construction Documents

Fire Protection drawings and specifications prepared by the design engineer or licensed design professional and included in the bid documents constitute a 'preliminary design' and shall be sealed by the design engineer or licensed design professional of record registered in New York State as required by the New York State Department of Education Law.

This 'preliminary' design is a basis for bidding and may be referenced to herein as 'construction documents'. A basic understanding of hazard and occupancy classifications; and a working knowledge of fire protection codes and standards is expected from the design engineer or licensed design professional of record.

Construction Documents should comply as applicable with NFPA 17, NFPA 17A, NFPA 96, Fire Code of New York State and this guideline.

Details such as piping sizes and head locations are not required to be part of the Construction Documents. Such layouts when provided shall be denoted as being provided for general coordination and information only.

Review and Approval of Shop Drawings and Calculations

The following procedure for review and approval of working shop drawings is applicable and shall be included in the construction documents as necessary to ensure the Kitchen Fire Suppression Installation contractor understands their responsibility.

Working shop drawings can be produced by technicians, designers or contractors after successfully passing the "Restaurant Fire Suppression Systems Examination" administered by National Association of Fire Equipment distributors (NAFED) or International Codes Council (ICC). However, the working shop drawings, hydraulic calculations, and product data shall be reviewed and approved by the design professional or licensed design professional in responsible charge prior to submittal to the Office of the Fire Marshal.

Working Shop drawings shall include and be in accordance with working plan requirements of Chapter 904 of Fire Code of New York State and NFPA 17A.

Product data should include and identify all material, equipment, and accessory selections to be installed.

The Kitchen Fire Suppression Installation contractor must provide all necessary materials and labor for a system fully compliant with all applicable NFPA requirements and the construction documents.

Any discrepancies should be brought to the attention of the Specifying Engineer or licensed design professional of record.

The Specifying Engineer or licensed design professional has primary responsibility for review and approval of fire suppression system working shop drawings and hydraulic calculations. The Specifying Engineer or licensed design professional review shall determine compliance with applicable codes and standards and the project contract documentation.

Accompanying the shop drawings shall be a stamp on the drawings or sealed letter from the design professional in responsible charge stating the shop drawings have been reviewed and have been found in general compliance to the design document(s).

If comments by the design engineer or licensed design professional are limited, the specifying engineer may, at their discretion, forward the shop drawings to the Office of the Fire Marshal in parallel with comment resolution by the Kitchen Fire Suppression Installation contractor.

All comments made by the specifying designer or licensed design professional shall be forwarded to the Office of the Fire Marshal with the review package including comments from previous review iterations, if any.

As noted above the documents outlining the design strategy must be stamped by the registered Engineer\Architect and the shop drawings and other supporting documents must bear a **SHOP DRAWING REVIEW** stamp indicating review and approval from the originating design engineer or licensed design professional.

Your compliance with these requirements will enable us complete the review process faster and more efficiently with less rejections due to improper submittals.

| | |
|---|---|
| SHOP DRAWING / SUBMITTAL REVIEW | |
| <input type="checkbox"/> APPROVED | <input type="checkbox"/> APPROVE WITH CHANGES NOTED |
| <input type="checkbox"/> REVISE AND RESUBMIT | <input type="checkbox"/> REJECTED _____ |
| SUBMITTAL WAS REVIEWED FOR DESIGN CONFORMITY AND GENERAL CONFORMANCE TO CONTRACT DOCUMENTS ONLY. THE SUBCONTRACTOR IS RESPONSIBLE FOR CONFIRMING AND CORRELATING DIMENSIONS AT JOBSITE FOR TOLERANCE, CLEARANCE, QUANTITIES, FABRICATION PROCESSES AND TECHNIQUES OF CONSTRUCTION, COORDINATION OF HIS WORK WITH OTHER TRADES AND FULL COMPLIANCE WITH CONTRACT DOCUMENTS | |
| By: _____ | Date: _____ |
| ABC Construction Ltd Besttown, IA 12345 | |

Specifications for Plan Submittal

Preferred Construction Documents Size - Sheet "D" 24" X 36" (Chief Fire Marshal may approve other sizes by request)

Scale or suitable dimensions

Copies shall all be the same size, drawn in indelible ink.

Sheets that are cut and pasted, taped, or that have been altered by any means (pen, pencil, marking pen, etc.) will not be accepted for plan review.

Plans that are not legible may be rejected as unacceptable for plan review purposes.

Distinguish new from existing equipment with "N" and "E" subscripts.

All Applicable codes: Ensure the current adopted codes and editions are listed on the plans.

Authority Having Jurisdiction (Town of Brighton – Office of the Fire Marshal)

A copy of City of Rochester Fire Department Extinguisher license is required for the installing company

A copy of company's liability insurance with the Town of Brighton listed as the "Certificate Holder".

The following information shall be provided on the plans:

a. The title block shall contain the following:

1. Location of the installation
2. Name and complete address of the business
3. Name and complete address of the installing company
4. Licensing information

Scope of work: Brief project description as it pertains to your plan submittal.

Permit Requirements

When modifications are made to an existing system that involves the changing of tank size a permit is required.

Work such as re-piping for a new appliance arrangement requires a permit.

Any abandoned pipe or conduit from a previous installation shall be removed from within the hood, plenum and exhaust duct. Penetrations and holes resulting from the removal of conduit or piping shall be sealed with listed or equivalent liquid tight sealing devices.

If a hood and resulting system are taken down and re-installed, then an inspection is required to confirm control functions and interlock function as intended. (NFPA 96:10.2.7).

Maintenance is defined as the work necessary to keep equipment operable or to make repairs. Replacement of fusible links or repairing damaged components is considered maintenance and does not require a permit.

General

All systems shall meet UL 300, NFPA 17A and NFPA 96

A minimum of one drawing shall be provided in 3D/Isometric view of the hood, Nozzle type, number, and location, ductwork and duct perimeter and location and temperature of the fusible links with respect to the protected appliances.

When applicable, provide calculations that demonstrate minimum and maximum volume quantities meet manufacture's specifications per the General Piping requirements.

Indication that only equipment that is referenced in the manufacturer's listed installation and maintenance manual or alternate suppliers' components that are listed for use with the specific extinguishing system shall be used.

Show the kitchen layout, identification of the hazard to be protected; location, physical dimensions and type of cooking equipment, exhaust and supply duct systems, exhaust and supply air fans, fuel or electrical power supply, automatic fire extinguishing system and manual pull system activation location, means of egress, prep tables, cabinets, electrical control panels, fire alarm system activation and monitoring, and extra hazard fire extinguisher location.

Piping shall be rigidly supported to prevent movement. Swivel nozzles shall be rotated to a predetermined aiming point and then tightened to hold that angle. Careful attention shall be given at the time of designing the system as nozzles cannot be moved "out of the way" once approved in the field.

Any moving of the pipe or nozzles shall require an approved contractor to evaluate the pipe/nozzle layout.

Fire extinguishing protection is required for open pizza ovens. If the pizza oven is closed, and no protection is provided, this must be specified on the plan.

System Design

Both a manual and automatic means of activation shall be provided.

A minimum of one manual activation pull station per system shall be located a minimum of 10-feet and a maximum of 20-feet from the kitchen exhaust system along the path of egress, and shall be located no more than 48-inches not less than 42-inches above the floor.

Where multiple manual actuators are installed for protection of separate extinguishing systems, they shall be clearly identified as to the hood being protected.

Automatic activation shall be by means of a fusible link or heat detector. A fusible link or heat detector shall be provided above each cooking appliance, or group of appliances protected by a single nozzle, and at the exhaust opening. Appliances located below, or within 12 inches of the duct opening do not require separate detection. (NFPA 17A: Section 5-6.1.4, 5-6.1.5 & 5-6.1.6).

Automatic fire extinguishing systems shall be interconnected to the fuel and/or electrical current supply for the cooking equipment. The interconnection shall be arranged to automatically shut off all cooking equipment gas supply and circuits feeding electrically supplied equipment located under the hood. Shut-off valves or switches shall be of a type that requires manual operation to reset.

Distinctive audible and/or visual alarms shall be provided to indicate system operation and activation. Specifically, an audible/visual notification device shall be provided to indicate system operation, requiring personnel attention, and system recharge. The fire suppression system shall be interconnected to the building fire alarm system. Activation of the Kitchen Hood Fire Suppression System shall cause the fire alarm to activate throughout the building.

Upon activation of any cooking equipment fire extinguishing system all equipment protected by the system shall automatically shut-off the fuel supply, all electricity (lighting under the hood and to appliances), ventilation controls if required, fans, and any other equipment necessary. Shut-off valves and switches shall be of the types that require a manual action to reset.

Make-up air fans that are integral to the hood SHALL shut down upon system activation, unless listed otherwise. Exhaust fans SHALL continue to operate after system activation. Non-integral make up air may continue to operate after activation.

A heat sensor, or other approved means, should be utilized to automatically activate the exhaust fan whenever cooking operations occur. Other approved means could be a current sensing relay, an optic sensor, or an energy management system with appropriate controls.

Movable cooking equipment shall be provided with a means to ensure that it is correctly positioned in relation to the appliance discharge nozzle during cooking operations. (NFPA 17A: 5.6.4)

All deep fat fryers shall be installed with either a 16 inch clear space or a minimum 8 inch high stainless steel baffle between the fryer and surface flames from adjacent cooking equipment.

All discharge nozzles shall be provided with caps, covers, or other suitable protective devices to prevent the entrance of grease, vapors, moisture or other foreign materials into the piping. (NFPA 17A: 4.3.1.5)

The inside edge of the hood shall overhang a horizontal distance of not less than 6 inches beyond the edge of the cooking surface on all open sides, and the vertical distance between the lip of the hood and the cooking surface shall not exceed 4 feet unless the manufacturer's specifications state otherwise.

Cut Sheets/Specifications

Minimum of 1 set of manufacturer's product information shall be provided. This is to include information on all devices that are part of or being connected to, the commercial kitchen suppression system; such as piping, valves, control heads, nozzles, fusible links, etc. Any cut sheets showing multiple installation/protection methods, the specific method used shall be highlighted.

Fire Extinguisher Requirements

A fire extinguisher shall be installed within 30 feet of commercial food heat-processing equipment, as measured along an unobstructed path of travel.

Fire extinguishers provided for the protection of cooking appliances that use combustible cooking media (vegetable or animal oils and fats) shall be listed and labeled for Class K fires.

A placard shall be conspicuously placed near the extinguisher that states that the fire protection system shall be activated prior to using the fire extinguisher.

Existing dry chemical extinguishers without a Class K listing that were installed for the protection of Class K hazards shall be replaced with an extinguisher having a Class K listing when the dry chemical extinguishers become due for either a 6-year maintenance or hydrostatic test.

Final Acceptance Testing

The system shall be pre-tested prior to Office of the Fire Marshal inspection to determine that the system is properly installed and functions in accordance with the approved plans and the manufacturer's installation and maintenance manual.

The completed system shall be tested by trained personnel as required by the manufacturer's listed installation and maintenance manual. The tests shall determine that the system has been properly installed and will function as intended.

Prior to requesting a final inspection of the wet chemical fire suppression system, the installer shall certify within a written statement that the system has been installed in accordance with the approved plans, manufacturer's listed installation and maintenance manual. (An example can be provided upon request)

The system shall be tested utilizing an inert gas in lieu of the extinguishing product. Balloons shall be provided at each nozzle location to ensure equal distributions of the gas. The test shall be activated by a test link and again activated by the manual pull station.

Fuse links are required to be a dated links. Dated links must be changed in accordance with the Fire Code of New York State and manufacturer specifications.

Utility Shut-off Test: All utilities connected to the protected cooking devices, shall have automatic shut-off valves. Gas shut off valve visible and accessible.

Make up air shut off and exhaust stayed on upon activation.

Your hood installation and fire protection system must be acceptance tested for the following per the 2010 Editions of the Fire and Mechanical Codes of New York State so that: the protection system is approved and consistent with the hazard type, the location and listing of all devices is correct, the operating instructions are posted, the alarm location and function; a fire extinguishing test per the NFPA requirement by type of system is done, a manual pull test, system interconnection to shut down fuel supply, a ventilation test per MCNYS 507.16, a capture test per MCNYS 507.16.1.

Systems balancing reports shall verify system performance and shall specify that the minimum amount of outdoor air is provided to the ventilation system. Systems balancing reports shall be submitted to Office of the Fire Marshal upon request.

Please read the information below and sign before submitting your application

Your application shall be deemed complete only if this checklist is completed and submitted along with the submittal package.

Submittals not accompanied by a checklist will not be accepted.

Accuracy of the submittal package, including this checklist, is the responsibility of the applicant.

Failure to submit an accurate submittal package will be considered an incomplete application by the Plan Reviewer. An incomplete submittal will result in a **HOLD**.

If work is found to have commenced without approved plans and/or a proper permit, this office reserves the right to shut down any/all portions of the entire project deemed necessary to inspect, investigate and confirm that work has been done.

All installations and/or operations must concur with the approved plans. Any deviation from the approved plans requires a re-submittal to the Office of the Fire Marshal. If changes, alteration or deviation from the approved plans are not submitted for review and approval prior to final inspection by the Office of the Fire Marshal, then the installation permit **fees immediately double**.

When work for which a permit is required has been conducted without a permit or approval, a stop work is immediately posted and all permit **fees immediately double** upon proper application for plan review and due upon issuance of an new installation permit.

If any portion of the work performed is not clearly visible or readily accessible, you will be ordered to demolish, disassemble or remove any and all obstructions regardless of the cost incurred. Failure to comply will result in the suspension/revocation of any building or other permits related to the site.

In addition, it is understood that the installation of fire protection systems shall be made only by persons properly trained and qualified to install the specific fire protection system being provided. The installer shall certify to this authority that the installation is in complete agreement with the terms of the listing and manufacturer's instructions and/or approved design plan.

I hereby apply for a Fire Protection System permit and I acknowledge that the information above is complete and accurate; that the work will be in conformance with the ordinances and codes of the Town of Brighton and the Building/Fire Codes of New York State; that I understand this is not a permit but only an application for permit and construction work is not to start without a permit; that the work will be in accordance with the approved plans.

Print Name

Signature

Date