



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

Clean Agent Fire Suppression System Permit Application

Plan submittals and installation shall be in accordance with the requirements detailed and contained in the National Fire Protection Association (NFPA) Chapter 2001 - 2008 Edition, Fire Code of New York State – Section 904 and the current manufacturer specifications.

Make Checks Payable – Town of Brighton

Clean Agent Fire Suppression System 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.

Please refer to Clean Agent Fire Extinguishing 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

Clean Agent Fire Suppression System

Purpose

This information packet has been developed in an effort to provide the highest level of service to the customers of the Town of Brighton. The major goal of clean agent fire suppression plan reviews conducted by the Office of the Fire Marshal is to ensure the design of clean agent fixed extinguishing 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 special hazard 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 listed below. This packet does not cover wet chemical, foam, water spray or halon systems. 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 protection 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 2001, 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 Hydraulic 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 fire sprinkler contractor understands their responsibility.

Working shop drawings can be produced by technicians, designers or contractors meeting the minimum standards of NICET Level II or better "Special Hazards Suppression Systems ". 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 4 of NFPA 2001 – 2008 Edition.

Product data should include and identify all material, equipment, and accessory selections to be installed. A copy of the water flow test should be included.

The Special Hazards Suppression Systems 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 Special Hazards Suppression Systems 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.

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 and Requirements

At the time of permit application, three (3) sets of plans, drawn to an indicated scale, must be submitted for review and approval. You will be contacted regarding your permit status and plan review fees which shall to be paid at the time you pick up the permit. Please see the Town of Brighton Fee Schedule for specific information.

Submittal packages must contain the following:

1. Plans are to be wet sealed and signed by a NYS Licensed Design Professional as described in the NYS Education Law.
2. Box for AHJ Approval Stamp
3. Name of owner and occupant; location, including street address.
4. Point of compass and symbol legend.
5. Location and construction of protected enclosure walls and partitions and fire walls.
6. Protected area or room is properly sealed and the method is noted on plans, 5.3.
7. Enclosure cross section, full height or schematic diagram, including location and construction of building floor/ceiling assemblies above and below, raised access floor and suspended ceiling. (5.1.2.2(6)).
8. Type of clean agent being used and design extinguishing concentration.
9. Description of occupancies and hazards being protected, designating whether or not the enclosure is normally occupied; exposures surrounding the enclosure; the agent storage containers used including internal volume, storage pressure, and nominal capacity expressed in units of agent mass, or volume at standard conditions of temperature and pressure.
10. Description of nozzle(s), pipe and fittings used including material specifications, grade and pressure rating; description of wire or cable used. The required method of making wire terminations shall be detailed.
11. Location of storage container is easily accessible, (4.1.3).
12. Description of the method of detector mounting. Details of each unique rigid pipe support configuration showing method of securement to the pipe and to the building structure. Details of the method of container securement showing method of securement in accordance with the manufacturer's listing to the container and to the building structure. (4.1.3).
13. Equipment schedule or bill of materials for each piece of equipment or device showing device name, manufacturer, model or part number, quantity and description.

14. Plan view of protected area showing enclosure partitions including, but not limited to, agent storage containers, piping, nozzles; type of pipe hangers and rigid pipe supports, detection alarm, and control system including all devices and schematic of wiring interconnection between them; end-of-line device locations; location of controlled devices such as dampers and shutters; location of instructional signage;
15. Isometric view of agent distribution system showing the length and diameter of each pipe segment; node reference numbers relating to the flow calculations; fittings including reducers and strainers; orientation of tees, nozzles including size, orifice port configuration, flow rate and equivalent orifice area. (5.1.2.2 (18) – (22)).
16. Scale drawing showing the layout of the annunciator panel graphics if required by the authority having jurisdiction.
17. Complete step-by-step description of the system sequence of operations including functioning of abort and maintenance switches, delay timers, and emergency power shutdown. (5.1.2.2 (23)).
18. Point-to-point wire schematic diagrams showing all circuit connections to external or add-on relays
19. Point-to-point wiring schematic diagrams showing all circuit connections to the system control panel graphic annunciator panel.
20. Complete calculations to determine enclosure volume, quantity of clean agent, and size of backup batteries. Method used to determine number and location of audible and visual indicating devices, and number and location of detectors. (5.1.2.2 (26)).
21. Manual pull device is distinct in appearance and not more than 4 ft. above the floor, note or detail, (4.3.3.7).
22. If abort switches are used, they shall be located in protected area near the exit, use a constant manual pressure design, are connected to the alarm signaling devices, and are detailed on the shop drawings, (4.3.5.3).
23. Alarms indicating failure of supervised devices or equipment are provided and detailed, (4.3.5.4).
24. Demonstrate that the main power supply for the system is on a dedicated branch circuit and properly labeled, (7.7.2.4.3).
25. Retrofitted clean agents into existing systems shall result in a listed or approved design, (1.7)
26. Details of any special features.

Testing shall include a review of both the mechanical and electrical components.

The integrity of the enclosure shall be reviewed by a door fan test.

Testing shall also include functional tests.

Preliminary functional tests

- Notify alarm responding company, if applicable prior to any testing;
- Disable each agent storage container so as not to release any agent;
- Check each detector for proper response;
- Check that polarity has been observed on all polarized alarm devices and auxiliary relays;

- Check that all end-of-line resistors have been installed across the detection and alarm bell circuits where required;
- Check all supervised circuits for proper trouble response.

System functional operational test

- Operate detection initiating circuit(s). All alarm functions shall occur according to the design specification.
- Operate the necessary circuit to initiate a second alarm circuit if present. Verify that all second alarm functions occur according to design specifications.
- Operate manual release. Verify that manual release functions occur according to design specifications.
- If supplied, operate abort switch circuit. Verify that abort functions occur according to design specifications. Confirm that visual and audible supervisory signals are received at the control panel.
- Test all automatic valves unless testing the valve will release agent or damage the valve (destructive testing). Where required, check pneumatic equipment for integrity to ensure proper operation.
- Remote monitoring operations test: operate one of each type of input device while on standby power. Verify that an alarm signal is received at remote panel after device is operated. Reconnect primary power supply. Operate each type of alarm condition on each signal circuit and verify receipt of trouble condition at the remote station.
- Control panel primary power source test: Verify that the control panel is connected to a dedicated circuit and labeled properly. This panel shall be readily accessible, yet restricted from unauthorized personnel. Test primary power failure in accordance with the manufacturer's specification with the system fully operated on standby power.
- Return system to full service condition upon completion of tests.

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