



Lafayette Fire Department

Commercial Kitchen Fire Suppression Worksheet

This **Commercial Kitchen Automatic Fire Suppression Worksheet** has been created to assure all documentation has been submitted to assist you in assuring proper plans and documentations has been submitted and reviewed by Lafayette Fire Inspectors in an orderly manner to help streamline your project. Although this form is not required to be submitted for review, it can be submitted along with the permit application. Please contact us with any questions. LFD-FirePrevention@lafayette.in.gov or (765) 807-1600.

Project Information

Business Name:

Address:

Phone Number:

Email:

New or Existing Restaurant:

New or Existing Hood:

Owner/Occupant:

Printed Name:

Signature:

Address:

Phone Number:

Email:

System Designer:

Printed Name:

Signature:

Address:

Phone Number:

Email:

System Installer:

Printed Name:

Signature:

Address:

Phone Number:

Email:

Design Requirements

<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1. Has a Construction Design Release (CDR) from the State of Indiana been issued for your project? A CDR is required for a new Class 1 Structure or the remodel of a Class 1 Structure per <i>675 IAC 12-6-3</i> and <i>12-6-4</i> .
<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2. Is the system designed to meet NFPA 17A Standard-2002 Edition (Wet Chemical Extinguishing Systems- UL 300)?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3. Documentation provided by manufacturer included in application or on file that certifies <u>designer</u> has acquired instruction necessary to safely design Pre-Engineered Wet Chemical Systems (NFPA 17A)?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4. You have submitted your plans to the City of Lafayette Engineer's Office; this will include the Lafayette Fire Department, for a local building permit. (10 Business Days review period)

Drawings (All of the following indicated)

<input type="checkbox"/> Yes <input type="checkbox"/> No	5. Type and location of appliances
<input type="checkbox"/> Yes <input type="checkbox"/> No	6. Means to ensure appliances correctly positioned
	7. Fuel type: Gas <input type="checkbox"/> Electric <input type="checkbox"/>
<input type="checkbox"/> Yes <input type="checkbox"/> No	8. Fuel Gas piping size and location
<input type="checkbox"/> Yes <input type="checkbox"/> No	9. Location of fuel shut off devices (Mechanical / Electric gas valves)
<input type="checkbox"/> Yes <input type="checkbox"/> No	10. Location of actuation control box
<input type="checkbox"/> Yes <input type="checkbox"/> No	11. Chemical container location
<input type="checkbox"/> Yes <input type="checkbox"/> No	12. Nozzle location and piping (all supply and branch piping indicated))
<input type="checkbox"/> Yes <input type="checkbox"/> No	13. Nozzle flow points and total system flow points identified
<input type="checkbox"/> Yes <input type="checkbox"/> No	14. Automatic Detection system (detector locations indicated)
<input type="checkbox"/> Yes <input type="checkbox"/> No	15. Quantity and temperature of all fusible links identified
<input type="checkbox"/> Yes <input type="checkbox"/> No	16. Manual pull station location(s)
<input type="checkbox"/> Yes <input type="checkbox"/> No	17. Plenum and duct size(s) indicated

System Information

18. Manufacturer of system to be installed:	
19. Model Number of system:	
20. Chemical Agent size (gallons):	
<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	21. System shall be designed in accordance with manufacturer's instructions?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	22. Designed on the basis of the flow and extinguishing characteristics of the chemical agent?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	23. Nozzles shall be placed in accordance with manufacturer's instructions?

System Installation

<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	24. Documentation provided by manufacturer included in application or on file that certifies <u>installer</u> has acquired instruction necessary to safely install Pre-Engineered Wet Chemical Systems (NFPA 17A)?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	25. Is this suppression system pre-owned or "used"?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	26. Agent container shall be readily accessible for inspection
<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	27. Agent container location not more than 8 feet above floor

System Actuation provided with:

<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	28. Both Automatic and Manual activation?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	29. Both Automatic and Manual activation shall activate the Fire Alarm System (when applicable)

Automatic Activation

At least one (1) fusible link or heat detector shall be installed:

Yes No N/A

30. Within 12 inches of the exhaust duct opening?

Yes No N/A

31. At each branch "duct-to common duct" opening?

Manual Activation

(Manual pull station provided in accordance with mfg. instruction, for each individual system, and to be located at or near egress from the cooking area)

Yes No N/A

32. Minimum of 10 feet and a maximum of 20 feet from the kitchen exhaust system and not less than 42 inches or more than 48 inches above the floor?

Yes No N/A

33. Provided with signage that clearly identifies system, (zone) coverage?

Yes No N/A

34. Shall require a maximum force of 40 lbs?

Yes No N/A

35. Shall require a maximum movement of 14 inches (or per mfg. instructions)?

"Automatic" Shutoff Devices

Yes No N/A

36. All sources of fuel and electric power that produces heat to appliances under the hood shall shut down upon activation of suppression system?

Yes No N/A

37. Makeup Air and/or Return Air shall shut down upon activation of suppression system?

Yes No N/A

38. Hood System Exhaust Air shall **NOT** shut down upon activation of suppression system, and must remain operational?

Portable Fire Extinguishers provided:

Yes No N/A

39. Class K "portable" fire extinguisher(s) for wet chemical systems

Yes No N/A

40. Portable Extinguisher "placard" or sign must be placed near the extinguisher that states the "automatic fire extinguishing system shall be activated **prior to** using the portable fire extinguisher".

INFORMATION

Required Inspections

Pre Drywall

- a. Kitchen Duct "light test" & "Duct Access Panels" with fire department.
- b. 1st Layer of "Duct Wrap" to meet clearance to combustibles.
- c. 2nd Layer of "Duct Wrap" to meet clearance to combustibles. (*Note: this can be performed as a portion of the actual Above Ceiling Inspection*)

Final Inspection Scheduling Process

You must have all Fire Systems Final Inspections (*i.e., Sprinkler, Fire Alarm, Kitchen Hood*) completed prior to scheduling Final Building Inspection.

Kitchen Hood Suppression Final Inspection

Have verified and submitted Pre-Inspection Kitchen Hood Suppression Acceptance Test documentation to fire department, before scheduling actual Fire Suppression System Final

Kitchen Hood Suppression Systems that interface with the Fire Alarm System must have a qualified fire alarm system installer present during Hood Fire Suppression Final.

Kitchen Suppression Systems that interface with the Buildings HVAC System must have a qualified mechanical system installer present during Hood Suppression Final.

Fire Suppression System Final Inspection

Have verified and submitted Pre-Inspection Commercial Kitchen Fire Suppression System Final Acceptance Test documentation to fire department, before scheduling actual System Final Inspection.

DISCLAIMER: The information presented above is the basic requirements for commercial construction and is not to be relied upon for the complete requirements for commercial construction. It is to your advantage to use a design professional or a professional contractor to assist you with those areas of construction with which you are unfamiliar. Unfamiliarity with the building codes may cause unplanned delays and unforeseen costs to comply with building code regulations. **Plan ahead!**

Owner or General Contractor

(Printed Name)

(Signature)

(Date)

(Company Name)

(Email and Phone Contact)

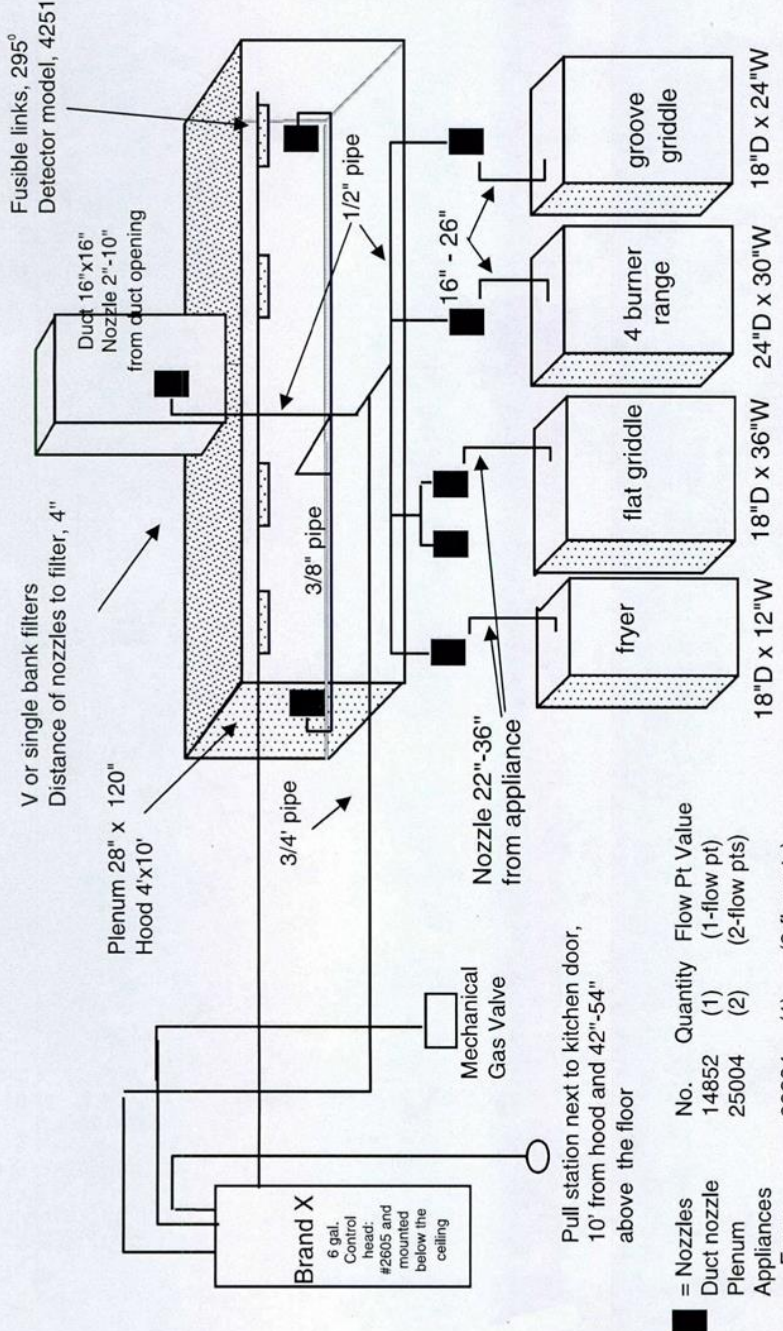
All answers checked "NO", must be provided with a detailed written narrative below:

Empty box for detailed written narrative.

This example illustrates the minimum information required for plan submittal for a Type I hood fire suppression system.

Include the following information on the plans:

Address:
 Permit #:
 Business name:
 Manufacturer/model:
 Nozzle type/number:
 Type fuel shutoff:
 Pipe type:
 Pipe sizes & lengths:
 Fusible link temp:
 Detector model:
 Pipe volume:
 Flow point info:
 Control head model:
 Attach current cut sheets of pipe limits and nozzle coverage limits:
 Month/year of design manual used:
 Pull station mounting location distance to cooking area and height from the floor:
 Cylinder location:



- = Nozzles
- Duct nozzle
- Plenum
- Appliances
- Fryer
- Flat griddle
- Range
- Groove grid

	No.	Quantity	Flow Pt Value
Duct nozzle	14852	(1)	(1-flow pt)
Plenum	25004	(2)	(2-flow pts)
Appliances			
Fryer	23334	(1)	(2-flow pts)
Flat griddle	23326	(2)	(1-flow pt)
Range	23388	(1)	(1-flow pt)
Groove grid	23388	(1)	(2-flow pts)

Distribution pipe = 3/4" pipe, 22' plus 6' equivalent length
 Appliance pipe = 1/2" pipe, 14.5' plus 3.2' equiv. length
 Plenum pipe = 3/8" pipe, 12' plus .5' equiv. length
 Duct pipe = 1/2" pipe, 3.5' plus 1' equiv. length
 Pipe volume calculations and total are detailed.

NOTE: Used the 1/2004 issue of Brand X design manual.
 Total nozzle flow pt. count = 12, Total flow pt. count allowed = 14