Restaurant Fire Safety Guide







NYC
Fire Department

Bill de Blasio Mayor

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INTRODUCTION

Welcome to the FDNY Restaurant Fire Safety Guide. It is intended to provide a summary of important legal requirements which apply to restaurants and other eating and drinking establishment locations. This guide will use "restaurants" to represent all eating and drinking establishments where food or beverages are offered for purchase, and/ or are available to or are consumed by customers.

The scope of "restaurant" in this Guide includes, but is not limited to:

- Restaurants
- Cabarets
- Bars
- Taverns

- Nightclubs
- Pubs and lounges
- Banquet hall
- · Catering establishments

Why is the FDNY providing this Guide? Why Now?

It provides an effective summary of important FDNY regulations governing the restaurants. The purpose is to minimize fires and accidents and protecting life and property.

Many restaurants are coming back or new ones are starting. This Guide serves as a useful tool to meet the legal requirements while operating within New York City.

Effective communication between the FDNY and the restaurant industry hopefully creates a dialogue so that facilities can operate in a legal and safe manner.

How to use this guide?

There are various topics in this guide. Not every topic may apply to your restaurant. You should read the following table to decide which requirements may apply to you. The FDNY does, however, recommend that you read the entire document to learn about the common requirements which apply to restaurants.

Check which ones apply to your restaurant. (If you are not sure, contact FDNY Business or registered design professional or master fire suppression contractor for clarification.

Check if it applies	Requirements	FDNY Inspection Unit	Topics	Page
✓	Commercial food establishment.	Every FDNY Inspection Unit	Portable Fire extinguisher	10
	My kitchen has commercial cooking (gas or electric stoves, fryers, ovens,	Rangehood Unit	Cooking exhaust system	14
	charcoal for cooking in hibachis, etc) appliances with exhaust and fire extinguishing systems.	Rangehood Unit	fire extinguishing system for commercial cooking systems	20
	My restaurant is located in one of the following buildings: • Higher than 75 ft in height • 2 or more stories with more than 10,000 sq.ft. areas at any floor • 3 stories or more with more than 7,500 sq.ft. area on any floor	Every FDNY Inspector Unit.	Standpipe system	23

Check if it applies	Requirements	FDNY Inspection Unit	Topics	Page
	My restaurant is designed with one of the following fire areas: • more than 5,000 sq.ft. in size • for 300 occupants or more (a restaurant/club providing food, drink, music, a dance floor, and often a floor show) • cabaret	Every FDNY Inspection Unit	Sprinkler system	26
	My restaurant is designed with one of the following areas that can be occupied by: • 300 occupants or more (exception – spaces built or significantly altered before July 01, 2008) • 75 occupants or more in a cabaret (a restaurant/club providing food, drink, music, a dance floor, and often a floor show) • 75 occupants or more in the restaurant with a stage	Every FDNY Inspection Unit	Fire alarm system	30
	 The refrigerating system in my premises: uses a group A2, A3, B1, B2 or B3 refrigerant OR uses a group A1 refrigerant with 5 horsepower compressor or more OR is mounted on or suspended from a roof or ceiling. 	District Office	Refrigerating system	35
	Soda fountain(s) is installed in my premises.	District Office	Carbon dioxide beverage systems	37
	My restaurant is occupied by more than 74 people with Certificate of Operation issued by the DOB.	Public Assembly Unit	Place of assembly	41
	Open-flame or open -flame devices are used (e.g. candle, gas light lanterns, flaming foods, sternos, etc.) in my premises.	Public Assembly Unit	Open flame	44
	Non-tobacco hookah establishments are sold/used in my premises.	Public Assembly Unit	Non-Tobacco Hookah Establishments	47
	Special effects (pyrotechnic, laser products, fog, haze etc.) used at my premises for entertainment or for filming purposes.	Explosives Unit	Special effect	49
	I have stored hazardous materials in my restaurant, such as propane containers, alcohols, kerosene or solid fuels (charcoal, Sterno, etc.).	Rangehood Unit or Public Assembly Unit	Storage of Hazardous Materials	51

Why do these requirements exist? Why are there so many requirements?

Fires and hazards in restaurants are common. According to NFPA research, an estimated average of around 7,500 structural fires in restaurants with a loss of \$165 million are reported each year throughout the US. During 2017-2021, there were about 200 fires in restaurants in NYC each year.

According to the FEMA (Federal Emergency Management Agency), the majority of fires happened on Saturday and Sunday. The majority also occurred in the morning.

Fires can lead restaurants to lost revenue and even permanent closure. Only through proper installation, maintenance and staff training can the employees, customers and business be protected from danger.

It can be safely said that some of the fires might have been avoidable. Nearly 60% of the fires were caused by cooking equipment, but failure to clean was a factor in nearly a quarter of these fires.

Does this Guide have all regulations and information to comply with FDNY regulations?

No, this is a summary of the important regulations. We are including some of the most common ones, but the Fire Code and Rules of the City of New York can be viewed at the FDNY website (http://www1.nyc.gov/site/fdny/codes/fire-code/fire-code.page) if you wish to learn more information.

Furthermore, regulations are constantly changing. This edition reflects current regulations.

What is unique about this Guide?

The format consists of pertinent FDNY requirements, and common violations related to this area, although inspectors may apply regulations that are not listed in this Guide during inspections. This Guide still can help restaurant owners to prevent fires and minimize damage. The goal is to educate the owners of what is required in order to avoid summonses and other penalties.

Is this Guide available in other languages?

Yes, this Guide will be available in 10 other languages. All language Guides can be viewed on http://www1.nyc.gov/site/fdny/business/support/support.page.

Starting a restaurant in NYC

Having a successful restaurant in New York City is not easy, and the New York Restaurant Starter Guide can help you to plan your way to start up your restaurant.

http://www.nyc.gov/html/nycbe/downloads/pdf/nycstarter_guide_restaurant.pdf

Starting a restaurant, requires compliance with all New York City regulations. You will need to hire a registered architect or professional engineer to submit plans to the NYC Department of Buildings, NYC Department of Health, NYC Fire Department, and NYC Department of Transportation (sidewalk regulations).

You may also learn some more information through the roadmap from the following website:

Use this roadmap for information about starting a restaurant in New York City.

http://www1.nyc.gov/nycbusiness/startabusiness/restaurant

Requesting an inspection from the FDNY

Effective 9/7/2021, all inspections/ building system tests, and all cancellations must be rescheduled on the FDNY Business website. See instructions (below) on how to get started.

http://www1.nyc.gov/assets/fdny/downloads/pdf/business/test-inspection-request.pdf

FDNY Business requires a user account on NYC.gov (NYCID). After creating a new account, you can log into your FDNY business account to request an inspection or look up your permit information:

http://fires.fdnycloud.org/CitizenAccess/SAML/NYCIDLogin.aspx

Certificate of Fitness (COF) application

If you (or your staff) need to obtain any Certificate of Fitness from the FDNY, you should visit: http://www1.nyc.gov/site/fdny/business/all-certifications/certificates-of-fitness.page to obtain the study material and prepare for a Certificate of Fitness exam.

The exams can be taken at FDNY Headquarters. Most COF exams are walk-in exams. Exam fees can be paid by credit/debit card, check or money order only. Cash is no longer accepted. For quicker service, applicants can complete the application and payment online on the FDNY Business website. See instructions below to get started.

http://www1.nyc.gov/assets/fdny/downloads/pdf/business/fdny-business-cof-individuals.pdf

Special requirements related to restaurant during this pandemic:

You can refer to the website below for updated requirements for restaurant during the COVID-19 pandemic.

http://www1.nyc.gov/nycbusiness/article/nyc-restaurant-reopening-guide

The NYC Department of Small Business Services (SBS) offers one-on-one free virtual compliance consultations to help you understand how to comply with key City rules. You can sign up for the Virtual Compliance Consultation service at no cost by logging into your SBS Connect account or creating a new account: http://sbsconnect.nyc.gov/profile/signin/

Questions or concerns

Contact FDNY Business (FDNY.BusinessSupport@FDNY.nyc.gov) to request a clarification.

CHECK LIST

Items	Check list	Note
General restaurant fire safety house keeping	□ Voo: □ No	
Access doors, aisles and exit doors clear of obstructions.	☐ Yes; ☐ No	
Required portable fire extinguishers are properly installed.	☐ Yes; ☐ No	
Restaurant staff training		
All restaurant staff members know the proper procedure for	☐ Yes; ☐ No	
 Using the portable fire extinguishers; 		
 the use of all components of the grease removal 		
system;		
 cleaning of filters; 		
 activating the cooking fire extinguishing system; 		
 reporting to 911 for emergency situations (fire, non-fire, 		
gas leak, etc.);		
 notifying the related COF holder(s) for the malfunction 		
of systems listed in the booklet.		
All restaurant staff members know the location of:	☐ Yes; ☐ No	
 the portable fire extinguishers 		
the exits		
the egress routes		
FRANK AND MARKET AND		
FDNY permits are posted and up to date		
Commercial cooking system	☐ Yes; ☐ No; ☐ N/A	
Refrigerating system	☐ Yes; ☐ No; ☐ N/A	
Bulk Carbon dioxide beverage system	☐ Yes; ☐ No; ☐ N/A	
Place of assembly Open flame	☐ Yes; ☐ No; ☐ N/A ☐ Yes; ☐ No; ☐ N/A	
Hookah establishment	☐ Yes; ☐ No; ☐ N/A	
Special effect	☐ Yes; ☐ No; ☐ N/A	
Storage of hazardous materials	☐ Yes; ☐ No; ☐ N/A	
Storage of flazardods filaterials		
Record keeping		
Valid FDNY rangehood decal/sticker posted.	☐ Yes; ☐ No	
Exhaust hood cleaning company receipt.	☐ Yes; ☐ No	
Staff training record for	☐ Yes; ☐ No	
 the use of all components of the grease removal system, 		
 cleaning of filters 		
 activating the cooking fire extinguishing system 		
A record of the inspection, servicing and testing of the fire	☐ Yes; ☐ No; ☐ N/A	
extinguishing system.		
Valid FDNY fire extinguisher tags attached on the	☐ Yes; ☐ No; ☐ N/A	
extinguishers.		
Tags are attached on the control valves of standpipe/sprinkler		
systems		
The approval document of the standpipe system is available.	☐ Yes; ☐ No; ☐ N/A	
The approval document of the sprinkler system is available.	☐ Yes; ☐ No; ☐ N/A	
The approval document of the fire alarm system is available.	☐ Yes; ☐ No; ☐ N/A	
The approval document of the refrigerating system is available.	☐ Yes; ☐ No; ☐ N/A	

Items	Check list	Note
A record of inspection, maintenance and testing of the	☐ Yes; ☐ No; ☐ N/A	
standpipe system.		
A record of inspection, maintenance and testing of the sprinkler	☐ Yes; ☐ No; ☐ N/A	
system.		
A record of inspection, maintenance and testing of the fire	☐ Yes; ☐ No; ☐ N/A	
alarm system and smoke detectors.		
Fire alarm logbook and/or smoke detectors logbook	☐ Yes; ☐ No; ☐ N/A	
NYC Health Department permit for non-tobacco hookah	☐ Yes; ☐ No; ☐ N/A	
establishments		
Flame proofing affidavit is maintained. (required for place of	☐ Yes; ☐ No; ☐ N/A	
assembly, open flame, hookah establishments, special effect)		
Drill records	☐ Yes; ☐ No; ☐ N/A	
Doutoble fine outing wieles as		
Portable fire extinguishers	D Vac. D Na	
Monthly quick checks are performed to ensure the fire	☐ Yes; ☐ No	
extinguishers are functional.	□ Voo: □ No	
Annual service is performed by an FDNY approved fire	☐ Yes; ☐ No	
extinguisher company.	□ Voo: □ No	
All fire extinguishers are conspicuously located where they are	☐ Yes; ☐ No	
designated and readily accessible.		
Cooking exhaust system		
Any alteration of the system is approved by the FDNY and the	☐ Yes; ☐ No	
approval document is well maintained.	□ 103, □ 1 1 0	
Grease accumulation on grease filters is less than 1/8 inches	☐ Yes; ☐ No	
Grease filters are cleaned by the trained staff member as the	☐ Yes; ☐ No	
required frequency.		
All commercial cooking exhaust systems, grease filters, high-	☐ Yes; ☐ No	
volume cooking, solid fuel cooking and the exhaust flue are	_ : : : : : : : : : : : : : : : : : : :	
inspected by the trained staff member as the required		
frequency.		
I used the QR code to check if the commercial cooking	☐ Yes; ☐ No	
cleaning company I hired is listed on the FDNY approved		
company list.		
The cleaning company places the FDNY issued sticker after	☐ Yes; ☐ No	
cleaning.		
The cleaning company provides you with before and after	☐ Yes; ☐ No	
pictures with time stamps for proof of work.		
Commercial cooking fire extinguishing system		
The grease built up on the fire extinguishing system is cleaned	☐ Yes; ☐ No	
regularly by the FDNY approved cleaning company.		
The fire extinguishing system is inspected/tested/serviced by a	☐ Yes; ☐ No	
licensed master fire suppression piping contractor once every 6		
months.	☐ Yes; ☐ No	
A valid tag is attached to the extinguishing system.	·	
Required instruction and signs are posted.	☐ Yes; ☐ No	
Standpipe system		
An S-13/S-14 COF holder with a qualified license perform the	☐ Yes; ☐ No; ☐ N/A	
required inspection, maintenance and testing periodically.	_ 100, ш INO, ш IN/ <i>F</i> \	
The required signs are posted.	☐ Yes; ☐ No; ☐ N/A	

Items	Check list	Note
The system is fully functional.	□ Yes; □ No; □ N/A	If no, "out-of- service" procedures must be
The fire department connection and hose connections are readily accessible for use.	☐ Yes; ☐ No; ☐ N/A	implemented
Sprinkler system		
An S-12/S-15 COF holder with a qualified license perform the required inspection, maintenance and testing periodically.	☐ Yes; ☐ No; ☐ N/A	
The required signs are posted.	☐ Yes; ☐ No; ☐ N/A	
The system is fully functional.	☐ Yes; ☐ No; ☐ N/A	If no, "out-of- service" procedures must be implemented
The fire department connection is readily accessible for use.	☐ Yes; ☐ No; ☐ N/A	
Fire alarm systems		
An S-95/F-53/F-89/T-89/F-80 COF holder performs visual inspections periodically on the fire alarm systems.	☐ Yes; ☐ No; ☐ N/A	
An F-53/F-89/T-89/F-80 COF holder supervise the fire alarm panel. (only applicable to the fire alarm systems with voice communication system)	☐ Yes; ☐ No; ☐ N/A	
The fire alarm system is monitored by an FDNY approved central station. (only applicable to the systems required monitoring)	☐ Yes; ☐ No; ☐ N/A	
The fire alarm system is periodically tested by an S-97/S-98 COF holder employed by an FDNY approved fire alarm company.	☐ Yes; ☐ No; ☐ N/A	
The smoke detectors are periodically cleaned and maintained by an F-78/S-78/S-97/S-98 COF holder.	☐ Yes; ☐ No; ☐ N/A	
The required signs are posted.	☐ Yes; ☐ No; ☐ N/A	
The system is fully functional.	□ Yes; □ No; □ N/A	If no, "out-of- service" procedures must be implemented
Refrigerating system		
The required signs are posted.	☐ Yes; ☐ No; ☐ N/A	
Carbon dioxide beverage system		
CO2 tank & piping NOT physically damaged and does not have extreme build-up of frost on gauges.	☐ Yes; ☐ No; ☐ N/A	if there is, it will indicate there is a leak
CO2 tank is chained to wall or properly secured.	☐ Yes; ☐ No; ☐ N/A	
Valid/unexpired G-82 Certificate of Fitness(s) inspect/fill the	☐ Yes; ☐ No; ☐ N/A	
system.		
CO2 storage area is clean & maintained.		

Items	Check list	Note
Carbon dioxide detection and alarm system is installed and	☐ Yes; ☐ No; ☐ N/A	
functional.		
Warning sign is posted.	☐ Yes; ☐ No; ☐ N/A	
Restaurant staff is trained by a G-82 COF holder	☐ Yes; ☐ No; ☐ N/A	
Place of assembly		
Capacity certificates, permits and Certificate of Occupancy are properly posted.	☐ Yes; ☐ No; ☐ N/A	
Unblocked exits, functional emergency lighting, free	☐ Yes; ☐ No; ☐ N/A	
aisles/hallways are properly maintained.	, ,	
No storage of combustible material/waste in corridors.	☐ Yes; ☐ No; ☐ N/A	
Emergency lighting and exit signs in working order.	☐ Yes; ☐ No; ☐ N/A	
Smoke, fire alarm, sprinkler systems, standpipe systems and	☐ Yes; ☐ No; ☐ N/A	
fire extinguishers are in proper working order.		
The number of persons occupying the space does not exceed	☐ Yes; ☐ No; ☐ N/A	
the posted capacity.		
The required F-03/F-04 COF is present on the premises.	☐ Yes; ☐ No; ☐ N/A	
The required F-53/T-89/F-89 COF is present on the premises	☐ Yes; ☐ No; ☐ N/A	
(only applicable to the fire alarm system equipped with voice		
communication system)		
Onen flame		
Open flame No flammable/combustible item is placed near heat-producing	☐ Yes; ☐ No; ☐ N/A	
equipment or open flames.	□ 165, □ NO, □ N/A	
Emergency lighting and exit signs in working order.	☐ Yes; ☐ No; ☐ N/A	
Smoke, fire alarm, sprinkler systems, standpipe systems and	☐ Yes; ☐ No; ☐ N/A	
fire extinguishers are in proper working order.		
Flame proofing affidavit is maintained.		
· · · · · · · · · · · · · · · · · · ·		
Hookah establishments		
F-61 Certificate of Fitness is on site.	☐ Yes; ☐ No; ☐ N/A	
No excessive storage of coals. The storage area is well-	☐ Yes; ☐ No; ☐ N/A	
maintained. All coals are stored in a metal or non-combustible		
container with a securely-fitting lid.		
CO alarms are properly installed.	☐ Yes; ☐ No; ☐ N/A	
Special effects		
All special effects equipment are installed/placed/maintained	☐ Yes; ☐ No; ☐ N/A	
complying with the FDNY inspector's direction.	, ,	
Storage of hazardous materials		
No excessive storage.	☐ Yes; ☐ No; ☐ N/A	
All hazardous materials are properly stored/located at the	☐ Yes; ☐ No; ☐ N/A	
permitted area(s).	103, _ 140, _ 14/A	
All required portable fire extinguishers are installed at the	☐ Yes; ☐ No; ☐ N/A	
designated locations and unblocked.		

PORTABLE FIRE EXTINGUISHERS

INTRODUCTION

What are portable fire extinguishers?

You will need Class K extinguishers for kitchen fires involving cooking grease, fats and oils that burn at high temperatures. Class K fire extinguishers are only intended to be used after the activation of a built-in hood fire extinguishing system. Keep Class ABC extinguishers in other areas for all other fires (paper, wood, plastic, electrical, etc.).



Are portable fire extinguishers required in my restaurant?

All restaurants with cooking equipment are required to have at least one Class K extinguisher. Other fire extinguishers (typically Class ABC) will also be required to be installed outside of the cooking area. You must follow the FDNY representative's instructions regarding the requirements of portable fire extinguishers.

What hazardous situation(s) may it cause?

Fire extinguishers are essential tools when a fire breaks out. When used early and properly at the onset of a fire, they can help contain and extinguish the flames before they become uncontrollable. However, if not properly maintained or serviced, over time, they can deteriorate and lose their effectiveness. A failing fire extinguisher is the last thing you need when a fire starts nearby, so it is important to install the correct type of functional fire extinguishers and to keep all fire extinguishers in working order.

ISSUANCE AND RENEWAL OF FDNY PERMIT/APPROVAL

Do the fire extinguishers need an FDNY permit or other FDNY approval?

Fire extinguishers do not need an FDNY Permit. However, EVERY fire extinguisher must have the standard FDNY tag attached.

The standard PFE tags come with security measures, which include:

- QR code: Allows public and FDNY inspectors to access the FDNY approved company list.
- **Hologram:** Virtually impossible to copy. **TIPS:**
- A real hologram strip is 3 inches long by ¼ inch wide.
- Counterfeit tags will NOT have a high-quality silver hologram.
- The hologram on a counterfeit tag will NOT change color as it is moved against the light.



Portable Fire Extinguishers

Which FDNY unit will perform the inspection or re-inspection of the fire extinguishers? How often?

Since there is no permit requirement, there is no specific inspection fee for the fire extinguishers. However, during every inspection for all other FDNY permits the extinguishers will be checked to make sure they comply with the Fire Code. If they do not, you may be subjected to enforcement actions by the Fire Department.

MAINTENANCE AND PRECAUTIONS

How do I choose a portable fire extinguisher service company?

Only buy from an FDNY approved company. The list of approved companies is updated on the FDNY website every 30 days.

Here is the link and QR code to the website:



http://www1.nyc.gov/site/fdny/business/all-certifications/portable-fire-extinguishers-company-certificates.page

Where must the fire extinguishers be installed?

At least one K-class portable fire extinguisher must be placed in the cooking area, the extinguisher must be placed within 30 feet of the commercial cooking equipment.

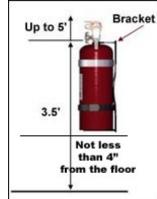
When a deep fat fryer is installed in a cooking area, Class K portable fire extinguishers must be provided as follows:

- 1. For up to four fryers individually having a maximum cooking medium capacity of 80 pounds and a maximum surface area of 6 square feet: One having a minimum 1½ gallon capacity.
- 2. For every additional group of up to four fryers, individually having a maximum cooking medium capacity of 80 pounds and a maximum surface area of 6 square feet each: One additional Class K portable fire extinguisher having a minimum 1½ gallon capacity.
- 3. For individual fryers having a maximum cooking medium capacity exceeding 80 pounds or 6 square feet in surface area: Provide Class K portable fire extinguishers in accordance with the portable fire extinguisher manufacturer's recommendations.

Other types of fire extinguishers will be required outside of cooking area(s), you must follow the FDNY inspector's instruction for proper placement. AFTER THE INSTALLATION, THE EXTINGUISHER (see image) MUST:

- NOT be placed on the floor;
- have the bottom be at least 4 inches off the floor;
- NOT have the top be higher than 5 feet from the floor.

All fire extinguishers must be located where they are visible and readily accessible.



Portable Fire Extinguishers

What is required once I have any fire extinguisher installed?

Monthly inspection and annual servicing are required to maintain functional fire extinguishers.

What is a monthly inspection and who can do it?

A visual inspection is a <u>monthly</u> "quick check" that any trained individual can do (a Certificate of Fitness is NOT required).

MONTHLY INSPECTION PROCEDURES

Inspection of extinguishers must include a check of the following items:

- Properly mounted on wall and in the correct location;
- Immediately accessible;
- Operating instructions are on the nameplate which is facing outward;
- Check for physical damage;
- Tag is attached;
- Pressure gauge reading in the good range (should be in green area);





After each monthly inspection, write the date and initials on the extinguisher tag.

What is the annual servicing and who can do it?

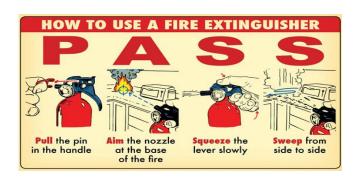
Portable fire extinguishers must be serviced yearly, at the time of the hydrostatic testing, or if discharged, or if physical damage to the extinguisher is visible during a monthly inspection. It must be done by a W-96 COF holder employed by an FDNY approved fire extinguisher company.

Service/maintenance is a detailed examination of the portable fire extinguisher.

It is done to guarantee that the extinguisher will operate correctly and safely. Maintenance is another word for repairs, recharging or replacement of the extinguisher.

How do I use fire extinguisher?

Instructions on proper use can be found on the extinguisher label. Use the acronym P.A.S.S. to easily remember how to safely use an extinguisher. Pull the pin in the handle, Aim the nozzle at the base of the fire, Squeeze the level slowly, and Sweep from side to side.



Portable Fire Extinguishers

RECORDKEEPING

What record must I keep?

After every monthly inspection and annual servicing, make sure all tags are attached and completed correctly.

As a customer, you should always get a service or purchase receipt.

The receipts should clearly include:

name(s) of technician that did the work; phone number of the company; if equipment is new or previously used; extinguisher model number.

AVOIDING VIOLATIONS

What are the FDNY inspectors commonly looking for during any inspection?

Every FDNY inspector who performs any inspection will also inspect the following items:

- The fire extinguishers must be installed correctly at the designated locations.
- All fire extinguishers are visible and readily accessible.
- The fire extinguishers are functional and charged.
- A valid standard FDNY tag is attached to each fire extinguisher.

What are the most common violations that are related to fire extinguishers?

- Wrong installation or wrong type of the fire extinguishers.
- The fire extinguishers are not maintained in good working order.
- Failure to attach the correct FDNY issued tag.
- Failure to perform the monthly quick check.
- Expired FDNY issued tag.

REPORT ISSUES OR ASK QUESTIONS

How do I report illegal company or possible fraud/counterfeiting with the fire extinguisher service company?

You can report issues to FDNY Business (FDNY.BusinessSupport@FDNY.nyc.gov).

INTRODUCTION

What is a Cooking Exhaust System?

A Cooking exhaust system, also called a Rangehood, is a system that is made up of several components. The first component being a canopy hood hanging above and over the commercial cooking equipment in the kitchen. It must be equipped with baffle type grease filters. This will help catch grease while the removal of odors, airborne grease, fumes, combustion products, smoke, heat, and steam are being exhausted from the air in the kitchen cooking area through the approved ductwork up to the exhaust fan.



Is this system required in my restaurant?

All cooking operations with cooking appliances producing grease laden vapors/fumes and/or smoke are required to install this cooking exhaust system.

What hazardous situation(s) may it cause?

1 in every 5 of kitchen fires had failure to clean as the main reason. If these hoods and ducts are not properly cleaned, it may cause a fire. If a flame flares up on the stove and comes in contact with the exhaust hood, it can cause the build-up grease to be ignited. Since the exhaust fan is on, air is drawn into the hood, moving through the filters and up the duct, pulling the flame along with it. If a lot grease residue exists on the interior of the duct, this can act as fuel and spread the fire up the duct, potentially into the exhaust fan.

This will cause your business to be shut down until the system is put back into service and final approval issued by the FDNY to commence business.





ISSUANCE AND RENEWAL OF FDNY PERMIT/APPROVAL

Does this system need an FDNY permit or other FDNY approval?

The cooking exhaust system must be filed, installed and approved by the NYC Department of Buildings. The installation of rangehoods and other required ventilation equipment must be performed by a licensed professional. The FDNY also encourages the restaurant owner to consult with the FDNY Rangehood Unit (FDNY.BusinessSupport@FDNY.nyc.gov) regarding any installation or alteration issue of the commercial cooking system.

During the preliminary inspection, the FDNY Rangehood Unit inspector will:

- Inspect commercial cooking exhaust system and fire extinguishing system for compliance with the approved/accepted plans, codes, and manufacturer's specifications.
- Witness acceptance test of the fire extinguishing system.
- Witness performance test of the commercial cooking exhaust system.

The FDNY will issue an annual permit for the commercial cooking system. An FDNY permit is required to maintain or operate commercial cooking systems.

Which FDNY unit will perform the inspection or re-inspection? How often? What is the fee?

The preliminary inspections and tests for issuing the initial FDNY permit is conducted by the Bureau of Fire Prevention Rangehood Unit. **The FDNY permit needs to be renewed annually**. Reinspections are conducted annually by the Rangehood Unit.

What is the fee?

Cost of Permit: \$70 per system

MAINTENANCE AND PRECAUTIONS

How must this system be maintained to prevent the hazardous situations?

Regular inspection and cleaning are the key to preventing hazardous situations. You must hire an FDNY approved company to clean the system. The cleaning of the exhaust system ducts and other system components above the hood must be done by an FDNY approved licensed companies and their certified employees on a quarterly basis or as often as needed.



The list of approved companies is constantly updated. Here is the link and QR code to the website: http://www1.nyc.gov/site/fdny/business/all-certifications/certificates-commercial-cooking-exhaust.page

The cleaning must be conducted by employees of an approved company who hold valid Certificate of Fitness cards (W-64/P-64). However, grease filters must be inspected and be cleaned by a trained and knowledgeable person (does NOT need to be a Certificate of Fitness holder).

How often should it be inspected and who should perform the inspection?

Types of Cooking Device/ Equipment/System	Minimum Frequency of Inspection	Qualifications
All commercial cooking exhaust systems, except ductless hoods	Every 3 months or as often as needed.	W-64/P-64 COF holder by an FDNY approved cleaning company
Ductless hoods	Not less than once every three months ^a	Trained/knowledge person (can be a restaurant staff member)
Grease filters	Daily	Trained/knowledge person (can be a restaurant staff member)
High-volume cooking ^b	Weekly	Trained/knowledge person (can be a restaurant staff member)
	Monthly (exhaust hood, ducts and fans)	W-64/P-64 COF holder by an FDNY approved cleaning company
Solid fuel cooking	Monthly	Trained/knowledge person (can be a restaurant staff member)
Commercial cooking appliance exhaust flue	Monthly	Trained/knowledge person (can be a restaurant staff member)

a. it may need to be done more frequently based on the conditions of the certificate of approval and the manufacturer's instructions

b. It is a recommended practice for appliances that generate a large volume of greaseladen vapors

As a business owner, you may choose to use the "grease depth gauge comb" (see image) to determine how often the cleaning should be done in your business. Before using the grease depth gauge comb, you should consult with your servicing company.

How often should it be cleaned (FDNY's recommendation)?

(1) Cleaning of grease filters and other grease removal devices

Types of Grease removal devices	Minimum Frequency of cleaning or replacement	Qualifications
Grease filters	 To be cleaned as necessary, but at least once a month; or when grease accumulation exceeds 1/8 inch. 	Trained/knowledge person (can be a restaurant staff member)
Charcoal grease filters	To be replaced not less than once every 3 months*.	W-64/P-64 COF holder by an FDNY approved cleaning company
Grease removal devices-grease traps	To be cleaned at least once a week.	Trained/knowledge person (can be a restaurant staff member)
Grease removal devices- all other types of grease removal devices/equipment/systems	To be cleaned at least once a month.	Trained/knowledge person (can be a restaurant staff member)

^{*} More cleaning may be needed based on the certificate of approval or the manufacturer's instructions.

(2) exhaust systems in different types of commercial kitchen

Types of commercial kitchen	Cleaning Required	Minimum frequency of cleaning	Qualifications
 Commercial kitchen that runs more than 8 hours a day; using two or more chain; using over-fired/under-fired broilers; using salamanders; using fryers or wok ranges; 	 All hoods; All exhaust ducts and fans for a distance of 3 floors above such kitchen; All exhaust duct elbows and other horizontal portions on all floors; All emission control devices. 	Monthly	W-64/P-64 COF holder by an FDNY approved cleaning company
using chicken rotisseries cooking 12 or more chicken a day; or any combination thereof.	Exhaust ducts and fans on floors more than 3 floors above such kitchen	Every 3 months	W-64/P-64 COF holder by an FDNY approved cleaning company
All other commercial kitchens	 All hoods; All exhaust ducts and fans for a distance of 3 floors above such kitchen; All exhaust duct elbows and other horizontal portions on all floors; All emission control devices 	Every 3 months	W-64/P-64 COF holder by an FDNY approved cleaning company
	Exhaust ducts and fans on floors more than 3 floors above such kitchen	Every 6 months	W-64/P-64 COF holder by an FDNY approved cleaning company

For all affected areas of all commercial kitchens: When **grease accumulation** in the commercial cooking exhaust system **exceeds 1/8 inch, additional cleaning is required**.

What risks do I run if cleaning is not performed by an FDNY approved company?

First of all, you are risking your business, your customers, first responders, and the public. Grease fires often occur and can easily damage your business. You will receive violation(s) if unsafe conditions exist. Furthermore, your insurance company will have an issue with any claims you make.

How do I know if the service company performed a good cleaning job?

Have the company provide you with before and after pictures (see examples below) with time stamps for proof of work. Insist on getting proof. In case of a claim, your insurance company may require photos. Insist on receiving copy of the checklist of work that was done during the cleaning.





Light Grease

What do restaurant staff and employee need to know?

The restaurant owner or operator must train all staff in the proper procedures for the use of all components of the grease removal system, cleaning of filters, and the manual operation of the fire extinguishing system.

RECORDKEEPING

What record must I keep?

The servicing company is required to place a decal (sticker) (see example on next page) on one or more hoods identifying:

- ✓ Servicing company;
- ✓ Address and phone number;
- ✓ FDNY certificate number:
- Individual Certificate of Fitness holders who conducted the cleaning;
- Date the cleaning was performed.

DECAL THAT WOULD BE PLACED ON THE HOOD AFTER THE SERVICE IS COMPLETED BY THE SERVICE COMPANY.

Ensure that the compliance decal is authentic.
Fake ones will NOT have the FDNY shaped

metallic security feature or it will appear darker. **Blurry font** on the decal is also an indication that the decal may be FAKE, real decal will have crisp, high quality font.

Filter Cleaning Records

The business owner is responsible to keep all records of grease filter inspections and cleaning that are required. Records must include the date, and what was done.

The cleaning company posted a yellow decal after the cleaning, what does that mean? What do I have to do?

If the cleaning company staff has the following issues (deficiencies) when they tried to perform the cleaning, they will post the non-compliant decal on the hood:

- Not accessible, missing, and/or damaged access doors.
- The company is unable to perform a complete FDNY required cleaning.
- You are not willing to have service performed and simply want a compliance decal to be affixed to the hood to show compliance.
- Incomplete jobs when the cleaning does not meet required codes and regulations.



You must contact the cleaning company to request a deficiency report to find out what the deficiencies are and how you can correct them. If the deficiency is related to the system installation, you must contact a licensed professional to fix or repair the system.

The cleaning company is required to report the deficiencies within your system to the FDNY. The FDNY inspector may perform a site inspection of your restaurant. You may be subject to enforcement actions by the Fire Department if you do not take an immediate action to fix the problem.

AVOIDING VIOLATIONS

What are the FDNY inspectors commonly looking for during the re-inspection of cooking exhaust system?

The following items must always be on site:

- 1) Unexpired and valid range hood cleaning company sticker;
- 2) Required Portable Fire Extinguishers are located in the correct locations with appropriate signage; and
- 3) Required posting: Duct schematic, cleaning and operating instructions.

What are the most common reasons that restaurants fail an annual inspection by FDNY?

- Failure to post the FDNY permit.
- Failure to post the FDNY issued sticker.
- The system is different from the original permitted installation.
- Excessive grease build-up in the cooking exhaust system.

REPORT ISSUES OR ASK QUESTIONS

Whom should I consult with if I want to change/modify my commercial cooking system?

Any modifications or alteration of the commercial cooking system must obtain FDNY approval. The FDNY strongly recommends that you contact FDNY Business (<u>FDNY.BusinessSupport@FDNY.nyc.gov</u>) to request a free consultation with the Rangehood Unit before making any changes to your commercial cooking system.

How do I report an improper cleaning or possible fraud with the service company?

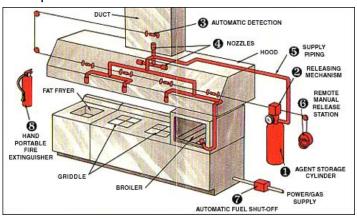
You can report issues to FDNY Business (FDNY.BusinessSupport@FDNY.nyc.gov) .

COMMERCIAL COOKING FIRE EXTINGUISHING SYSTEMS

INTRODUCTION

What is a commercial cooking fire extinguishing system?

The system must include an automatic fire-extinguishing system installed over the cooking equipment as the primary means of protection. The fire extinguishing system connects to both the hood over your cooking station and the gas line running through the cooking station. The system must automatically activate during a fire. If the fire extinguishing system is activated, the gas line or other source of power for cooking appliances should automatically shut off. This kills the fuel source of the fire. The nozzles installed through the ventilation system in the hood over your cooking station also discharge a specially designed fire suppressant, which is designed to combat grease fires. There must also be a manual pull device which can also be used to activate the system.



Is this system required in my restaurant?

All restaurants with cooking appliances produce grease or smoke are required to install this commercial cooking fire extinguishing system.

What hazardous situation(s) may it cause if the system is not working? How does it happen?

A malfunctioning fire-extinguishing system cannot effectively extinguish the fire. Some types of grease buildup can even cause fire-extinguishing systems to malfunction by clogging up their mechanisms. This grease buildup is one of the primary causes of commercial kitchen fire-extinguishing system failure and adds to the hazards of improperly cleaned hoods.

Although the extinguishing system is designed to be activated automatically, the fusible link may be broken so the automatic means cannot be activated. An untrained kitchen staff member who does not know how to manually activate the extinguishing system or how to use the fire extinguisher can lead to serious injury.





COMMERCIAL COOKING FIRE EXTINGUISHING SYSTEM

ISSUANCE AND RENEWAL OF FDNY PERMIT/APPROVAL

Does this system need an FDNY permit or other FDNY approval?

The installation of commercial cooking fire extinguishing system must be performed by a NYC DOB licensed Class A or C master fire suppression piping contractor.

During the preliminary inspection, the FDNY Rangehood Unit inspector will:

- Inspect commercial cooking exhaust system and fire extinguishing system for compliance with the approved/accepted plans, codes, and manufacturer's specifications.
- Witness the acceptance test of the fire extinguishing system.
- Witness the performance test of the commercial cooking exhaust system.

The FDNY will issue an annual permit for the commercial cooking system. An FDNY permit is required to maintain or operate commercial cooking systems.

Which FDNY unit will perform the inspection or re-inspection? How often? What are the fees?

The preliminary inspections and tests for issuing the initial FDNY permit is conducted by the Bureau of Fire Prevention Rangehood Unit. **The FDNY permit needs to be renewed annually**. Reinspections are conducted annually by the Rangehood Unit.

What are the fees?

- Cost of plan review: \$210
- Cost of document management for fire extinguishing system application: \$165
- Cost of acceptance test: \$285 (Mechanical only); \$580 (Mechanical and electrical)
- Cost of Permit: \$70 per system

MAINTENANCE AND PRECAUTIONS

How must this system be maintained to prevent the hazardous situations?

Regular cleaning, inspection, proper signage, and staff training are the key to prevention of hazardous situations.

You must hire an FDNY approved company to clean the system. The
cleaning of the exhaust system ducts and other system components above the
hood must be done by an FDNY approved licensed companies and their certified
employees.

The list of approved companies is constantly updated.

Here is the link and QR code to the website:

http://www1.nyc.gov/site/fdny/business/all-certifications/certificates-commercial-cooking-exhaust.page

• You are required to have a licensed master fire suppression piping contractor inspect, test and service the fire extinguishing system a minimum of once every 6 months.

COMMERCIAL COOKING FIRE EXTINGUISHING SYSTEM

- A placard stating, "the fire extinguishing system
 must be activated prior to using a portable fire
 extinguisher". The instructions for manual operation of
 the fire extinguishing system must be posted, under glass
 or laminated, near the system's manual activation device.
 Information must be clearly and concisely written.
- Training on how to activate the fire extinguishing system must be repeated every 6 months.



RECORDKEEPING

What record must I keep?

The contractor will check your entire fire extinguishing system. A written report of the inspection will be provided to you and it will show any defects that are found during the inspection. If the system is in good working order, the contractor will provide you with a tag. This tag will have the following information on it:

- The date issued;
- The name and license number of the master fire suppression piping contractor;
- Detailed report of service and maintenance of the system that the system was found to be in good working order.

You must also maintain the staff training records for annual inspection.

AVOIDING VIOLATIONS

What are the FDNY inspectors commonly looking for during the re-inspection of commercial cooking fire extinguishing system?

The FDNY representative will inspect the items listed below:

- Maintenance and testing record of the fire extinguishing system (approval documents).
- Tag on the cylinder of the fire extinguishing system (service tag).
- Required signs/placards for the fire extinguishing system (instructional signage).
- Nozzles have their nozzle caps and the nozzles are properly pointing over the designated cooking equipment.

What are the most common reasons that restaurants fail an annual inspection by the FDNY?

- Excessive grease build-up in the cooking exhaust system.
- Unapproved alterations to the cooking equipment from the originally approved plans layout.
- · Lack of inspections and servicing.
- Missing required portable fire extinguishers.

STANDPIPE SYSTEMS

INTRODUCTION

What is a standpipe system?

A standpipe system is the piping installed in a building that assists to transfer water to hose connections located within the building for firefighting purposes. A standpipe system serves as a fire hydrant inside of a building. These systems are located in high-rise/low rise commercial and residential buildings, shopping malls, parking garages, stadiums, warehouses, etc.







Is this system required in my restaurant?

Since 1968, standpipe systems are required in the following buildings:

- Buildings higher than 75 ft in height
- 2 or more stories with more than 10,000 sqft, areas at any floor
- 3 stories or more with more than 7,500 sqft. area on any floor

What hazardous situation(s) may it cause if the system is not working? How does it happen?

A standpipe system provides a reliable water source for the firefighters to extinguish or control an interior fire in the high-rise or large buildings. Standpipes are not fail-safe systems. Improper maintenance can cause system failures during operations. Without a functioning standpipe system, the firefighters cannot deploy attack hose lines quickly nor access adequate water pressure and volume to attack a fire.

Who can install the standpipe system?

The installation of standpipe system must be performed by a NYC DOB licensed Class A or B master fire suppression piping contractor or a master plumber.

ISSUANCE AND RENEWAL OF FDNY PERMIT/APPROVAL

Does this system need an FDNY permit or other FDNY approval?

The initial acceptance is done by the Department of Buildings. The FDNY Suppression Unit will conduct the 5-year hydrostatic and flow test.

You must maintain the DOB approval documents.

STANDPIPE SYSTEM

Which FDNY unit will perform the inspection or re-inspection? How often? What are the fees?

Since there is no permit requirement, there is no specific inspection fee for the standpipe system. However, every inspection for any other FDNY permit will always check if the standpipe system complies with the Fire Code. If not, you may be subject to enforcement actions by the Fire Department.

In addition to the annual inspection, at least once every 5 years, the standpipe system must be subjected to a hydrostatic pressure test and a flow test to demonstrate its suitability for department use. These tests must be conducted by an S-13/S-14 COF holder with a master plumber license or master fire suppression piping contractor license (A or B), in the presence of a representative of the Fire Department.

What are the fees?

Cost of FDNY's witness of the hydrostatic pressure test and flow test:

Flow test: \$105

• One fire department connection: \$365

• Each additional fire department connection: \$210

MAINTENANCE AND PRECAUTIONS

How must this system be maintained to prevent the hazardous situations?

Inspection, testing and maintenance of the standpipe systems must be regularly done by an S-13/S-14 COF holder. Some tasks will require additional licenses (e.g. Q-01 Certificate of Qualification, Master Plumber or NYC DOB licensed Class A or B master fire suppression piping contractor, etc.). See the S-13/S-14 COF study material for further information.

What must I do if I am aware that the standpipe system is out of service?

An out of service system is also called an impaired system. Some arrangement must be made if there is an out of service situation. The owner or impairment coordinator must **provide fire watch immediately**.

The impairment coordinator needs to perform the following steps to protect the occupants:

- 1. notify the COF holder responsible for supervising the maintenance of the fire protection system;
- 2. find out the extent and expected duration of the out-of-service condition;
- 3. inspect the areas involved and assess the increased risks:
- 4. make recommendations to the owner;
- 5. notify the FDNY;
- 6. notify the central station and insurance carrier if applicable;
- 7. notify the responsible person designated by the owner to issue hot work authorizations;
- 8. have a tag placed at each FDNY connection, standpipe and sprinkler system control valve and fire command center, indicating which fire protection system, or part thereof, is out of service.

STANDPIPE SYSTEM

When should I hire a fire guard to perform the fire watch?

A qualified fire guard must hold an F-01 COF. It is not required to hire a fire guard for the first 4 hours of an out of service condition when the affected area does not exceed 50,000 square feet. Any trained and knowledgeable building staff member can perform the fire watch if it is under 4 hours and under 50,000 square feet. However, if the affected area is more than 50,000 square feet or after 4 hours of an out of service condition, the fire watch must be performed by an F-01 fire guard. The area to be patrolled by each fire guard must not exceed more than 50,000 square feet of floor area.

RECORDKEEPING

What record must I keep?

The S-13/S-14 COF holder will inspect, maintain and test your standpipe system. The COF holder must provide you a written report of the inspection/maintenance/testing.

The approved card must bear the dates of each inspection, COF number and signature of the COF holder. The card must be posted on the premises near the main water supply control valve. Detailed report of inspection, testing and maintenance must be maintained for at least 5 years and be available upon FDNY's request.

AVOIDING VIOLATIONS

What are the FDNY inspectors commonly looking for during any inspection?

Every FDNY inspector who performs inspection will also inspect the following items:

- Control valves are in the open position.
- No physical damages to any part of the system.
- The impairment procedures have been complied with the Fire Code requirements.
- There is enough heat and light in the riser room.
- An inspection/maintenance/testing record is in its proper place and is up-to-date.
- The S-13/S-14 COF is current and valid.
- There is a hydraulic placard affixed to the riser.
- Exposed piping and control valve handles are appropriately color coded.
- Accessibility to hose stations and fire department connections.
- The fire department connection is accessible without any obstructions. The caps are appropriately color coded.
- All required signs are posted.

What are the most common violations that are related to the standpipe system?

- The standpipe system has been altered without approval from the NYC Department of Buildings.
- The control valves of water supply are not kept open.
- The FDNY connections are blocked or not correctly maintained.
- The standpipe system is not inspected/maintained/tested by an S-13/S-14 COF holder with the qualified license.
- Failure to keep the inspection/maintenance/testing record.
- Required signs are not properly posted.

SPRINKLER SYSTEMS

INTRODUCTION

What is a sprinkler system?

A sprinkler system is a fire extinguishing system that most times uses water as the extinguishing agent. You may find sprinkler systems in residential buildings, retail stores, restaurants or possibly day care centers.





Is this system required in my restaurant?

Since 2008, sprinkler systems are required in the following buildings:

- Buildings with fire areas more than 5,000 sq.ft.
- Buildings with areas designated for 300 occupants or more
- in a cabaret (a restaurant/club providing food, drink, music, a dance floor, and often a floor show)

What hazardous situation(s) may it cause if the system is not working? How does it happen?

Sprinkler systems will help to control the fire. Fire sprinkler systems react so quickly, they can dramatically reduce the heat, flames and smoke produced in a fire. However, sprinkler systems are not fail-safe systems. Improper maintenance can cause system failures during emergencies. Without a functioning sprinkler system, the fire cannot be controlled.

Who can install the sprinkler system?

The installation of sprinkler system must be performed by a NYC DOB licensed Class A or B master fire suppression piping contractor.

ISSUANCE AND RENEWAL OF FDNY PERMIT/APPROVAL

Does this system need an FDNY permit or other FDNY approval?

The initial acceptance is done by the Department of Buildings. The FDNY Suppression Unit will conduct the 5-year performance tests.

You must maintain the DOB approval documents.

Each additional FDNY connection: \$275 Trip test (per valve) (per hour): \$210

SPRINKLER SYSTEM

Which FDNY unit will perform the inspection or re-inspection? What are the fees?

Since there is no permit requirement, there is no specific inspection fee for the sprinkler system. However, every inspection for any other FDNY permit will always check if the sprinkler system is maintained in good working order. If not, you may be subject to enforcement actions by the FDNY.

However, an FDNY representative from the Suppression Unit will need be present for the following tests conducted by an S-12/S-15 COF holder with a master fire suppression piping contractor (MFSPC) license (A or B):

- sprinkler system: a hydrostatic pressure test and a flow test (at least once every 5 years)
- dry-pipe sprinkler system: a full flow trip test (at least once every 5 years)

What are the fees?

Cost of FDNY's witness of the hydrostatic pressure test and flow test:

Sprinkler system:

• Flow test: \$105

• One FDNY connection: \$320

Combination sprinkler/standpipe system:

Flow test: \$105

One FDNY connection: \$365 (each additional: \$210)

Acceptance tests of fire extinguishing systems, mechanical and electrical, (per system) (per hour)

• Foam: \$210

MAINTENANCE AND PRECAUTIONS

How must this system be maintained to prevent the hazardous situations?

Inspection, testing and maintenance of the sprinkler systems must be regularly performed by an S-12/S-15 COF holder. Some tasks will require additional licenses (e.g. Q-01 Certificate of Qualification, master plumber or NYC DOB licensed Class A or B master fire suppression piping contractor, etc.). See the S-12/S-15 COF study material for further information.

What must I do if I am aware that the sprinkler system is out of service?

An out of service system is also called an impaired system. Some arrangement must be made if there is an out of service situation. The owner or impairment coordinator must provide fire watch immediately.

The impairment coordinator needs to perform the following steps to protect the occupants:

- 1. notify the COF holder responsible for supervising the maintenance of the fire protection system.
- 2. find out the extent and expected duration of the out-of-service condition.
- 3. inspect the areas involved and assess the increased risks.
- 4. make recommendations to the owner.
- 5. notify the FDNY if the sprinkler system is or will be out of service on more than one floor of a building or the system is or will be out of service for more than 8 hours or another fire protection system(s) is also impaired.
- 6. notify the FDNY approved central station and insurance carrier if applicable.
- 7. notify the responsible person designated by the owner to issue hot work authorizations.
- 8. have a tag placed at each FDNY connection, standpipe and sprinkler system control valve and fire command center, indicating which fire protection system, or part thereof, is out of service.

SPRINKLER SYSTEM

When should I hire a fire guard to perform the fire watch?

A qualified fire guard must hold an F-01 COF. It is not required to hire a fire guard for the first 4 hours of an out of service condition when the affected area does not exceed 50,000 square feet. Any trained and knowledgeable building staff member can perform the fire watch if it is under 4 hours and under 50,000 square feet. However, if the affected area is more than 50,000 square feet or after 4 hours of an out of service condition, the fire watch must be performed by an F-01 fire guard. The area to be patrolled by each fire guard must not exceed more than 50,000 square feet of floor area.

RECORDKEEPING

What record must I keep?

The S-12/S-15 COF holder will inspect, maintain and test your sprinkler system. The COF holder must provide you with a written report of the inspection/maintenance/testing. The approved card must bear the dates of each inspection, COF number and signature of the COF holder. The card must be posted on the premises near the main water supply control valve. Detailed report of inspection, testing and maintenance must be maintained for at least 5 years and be available upon FDNY's request.

AVOIDING VIOLATIONS

What are the FDNY inspectors commonly looking for during any inspection?

Every FDNY inspector who performs inspection will also inspect the following items:

- Control valves are in the open position.
- No physical damages to any part of the system.
- The impairment procedures have been in compliance with the Fire Code requirements.
- There is enough heat and light in the riser room.
- An inspection/maintenance/testing record is in its proper place and is up-to-date.
- The S-12/S-15 COF is current and valid.
- There is a hydraulic placard affixed to the riser.
- Exposed piping and control valve handles are appropriately color coded.
- Accessibility to hose stations and fire department connections.
- The fire department connection is accessible without any obstructions. The caps are appropriately color coded.
- All required signs are posted.
- There are 6 extra sprinkler heads (or more as required by the Fire Code) and a wrench.

SPRINKLER SYSTEM

What are the most common violations that are related to the sprinkler system?

- The sprinkler system has been altered without approval from the NYC Department of Buildings.
- The control valves of water supply are not kept open.
- The FDNY connections are blocked or not correctly maintained.
- Obstruction of sprinkler heads.
- The sprinkler system is not inspected/maintained/tested by an S-12/S-15 COF holder with the qualified license.
- Failure to keep the inspection/maintenance/testing record.
- Required signs are not properly posted.





INTRODUCTION

What is a fire alarm system?

A fire alarm system is a system that detects and alerts people when smoke or fire is present. The devices include but not limited to smoke detectors, heat detectors, audible devices such as horns, strobes, manual fire alarm pull stations, fire alarm control panel, etc. They are commonly found in day care centers, restaurants, high-rise buildings and catering halls.



Is this system required in my restaurant?

Since 1968, fire alarm systems are required in the following buildings:

 75 occupants or more in a cabaret (a restaurant/club providing food, drink, music, a dance floor, and often a floor show)

Since 2008, fire alarm systems are required in the following buildings:

- 300 occupants or more
- 75 occupants or more in a cabaret (a restaurant/club providing food, drink, music, a dance floor, and often a floor show)

What hazardous situation(s) may it cause if the system is not working? How does it happen?

A working fire alarm system provides early warning notification of fire/smoke conditions to the building occupants. If the fire alarm system is monitored by an FDNY approved central station, the fire alarm signal will be transferred to the FDNY. However, some restaurants may only install interior fire alarm systems that only warn building occupants of a fire in the building. These systems will NOT automatically send the fire alarm signals to the FDNY.

Fire alarm systems are not fail-safe systems. Lack of proper maintenance can cause system failures during emergencies. Without a functioning fire alarm system, the occupants and/or the FDNY will not get the early warning notification. The response of the FDNY can be delayed.

Who can install the fire alarm system?

The fire alarm system (including the smoke detectors or CO detectors) must be installed by electrical contractors licensed by the NYC DOB and programmed by an S-97/S-98 Certificate of Fitness holder employed by a company approved to install fire alarm systems in NYC.

ISSUANCE AND RENEWAL OF FDNY PERMIT/APPROVAL

Does this system need an FDNY permit or other FDNY approval?

An FDNY inspector will perform an inspection and test upon plan approval and installation to ensure the system has been installed correctly.

The approved fire alarm company list can be found via the following link:

http://www1.nyc.gov/assets/fdny/downloads/pdf/business/approved-companies-fire-alarm-system-inspection-testing-service.pdf

Which FDNY unit will perform the inspection or re-inspection? How often?

Since there is no permit or annual inspection requirement, there is no specific inspection fee for the fire alarm system by the FDNY. However, every inspection will always check if the fire alarm system is maintained in good working order. If not maintained, your restaurant may be subject to enforcement actions by the Fire Department.

MAINTENANCE AND PRECAUTIONS

What should I do in case the fire alarm activates?

- 1. Close the door to the room where the fire is and leave the restaurant.
- 2. Be sure that EVERYONE leaves with you. Close, but do not lock, the door.
- 3. Alert EVERYONE on your way to the exit.
- 4. Use the nearest stairwell to exit the building. DO NOT USE THE ELEVATOR unless directed by the FDNY or the FLSD.
- 5. **Always call 911 once you reach a safe location.** Do not assume the FDNY has been notified by the fire alarm system automatically.
- 6. Meet the employees/members of your restaurant at the predetermined location outside the building. Notify firefighters if you know that anyone is unaccounted for.

Smoke detectors are installed in my restaurant, but do I need to have CO detectors installed?

NYC local law now requires that all restaurants protected by a fire alarm system must have installed CO detectors no later than 07/01/21 when these restaurants contain fuel burning equipment, an enclosed parking garage, or a loading dock.

These restaurants must check <u>1 RCNY §908-01</u> or consult with a Registered Design Professional (e.g. PE or architect) to know where the CO detectors must be installed.

What shall I do if I received a summons for not installing required smoke/CO detectors?

Refer to http://www1.nyc.gov/assets/fdny/downloads/pdf/business/tips-fire-alarm-systems.pdf
The basic steps:

- a) Hire a NYS registered licensed professional engineer to create a filing and drawings.
- b) Obtain approval from Fire Alarm Plan Exam.
- c) Hire a licensed installation company to install the devices, pre-test the devices, request an inspection.
- d) Obtain approval from Fire Alarm Inspection Unit.

What are unwarranted/nuisance alarm? What might cause this type of alarm?

An UNWARRANTED ALARM is an alarm that is the result of a defective condition or other cause when no danger may exist.

Common reasons for unwarranted alarms from a smoke detector include:

- Cooking combustion particles, e.g. from stove spills or broiling
- Excessive dust, mold or mildew build-up
- Heavy steam conditions within a closed room
- Ceiling paint or other wall coatings

Common reasons for unwarranted alarms from a CO detector include:

- Detector(s) located too close to a fuel-burning appliance.
- Vapors from the following household substances: paint, paint thinners, adhesives, hair spray, strong perfumes, plug-ins and other aerosol type air fresheners, and household cleaning solvents with strong odors such as pine.

What are the consequences of unwarranted alarms?

Unnecessary and unwarranted alarms may impact fire and life safety in many ways, such as diverting essential services from emergencies or posing an unnecessary risk to first responders, etc. They also cause business disruptions that can lead to loss of revenue, productivity and promote a negative public view of fire alarm systems. As the owner of a restaurant, you are responsible for preventing these unwarranted alarms. If the smoke detectors are connected to a monitored fire alarm system, it is unlawful to transmit two or more unnecessary or unwarranted alarms in any three-month period. You will be subject to enforcement actions by the Fire Department.

How must this system be maintained to prevent the hazardous situations or unwarranted alarms?

Regular maintenance and testing of the fire alarm system can ensure that your fire alarm system is in a good working order and prevent unwarranted alarms.

When the fire alarm system is monitored by a central station, the central station will notify the owner's representative if there is any trouble conditions or issues regarding the system. However, some fire alarm systems are not monitored, these fire alarm systems must be inspected more frequently. Inspection, testing and maintenance of the fire alarm systems must be regularly done by certified individuals. Basically, an S-95/F-53/F-89/T-89/F-80 COF holder can perform visual inspection but cannot perform testing and maintenance of the system. Only S-97/S-98 Certificate of Fitness holder employed by an FDNY approved fire alarm company can test and maintain the system.

In addition, smoke detectors must be regularly maintained/cleaned by F-78/S-78/S-97/S-98 Certificate of Fitness holders. The approved smoke detector maintenance company list can be found via the following link:

http://www1.nyc.gov/site/fdny/business/all-certifications/certificates-smoke-detector-maintenance.page

What must I do if I am aware that the fire alarm system is out of service?

An out of service system is also called an impaired system. Some arrangement must be made if there is an out of service situation. The owner or impairment coordinator must **provide fire watch immediately**.

The impairment coordinator needs to perform the following steps to protect the occupants:

- 1. notify the COF holder responsible for supervising the maintenance of the fire protection system.
- 2. find out the extent and expected duration of the out-of-service condition.
- 3. inspect the areas involved and assess the increased risks.
- 4. make recommendations to the owner.
- 5. notify the FDNY if the fire alarm system is or will be out of service on more than one floor of a building or the system is or will be out of service for more than 8 hours.
- 6. notify the central station and insurance carrier if applicable.
- 7. notify the responsible person designated by the owner to issue hot work authorizations.
- 8. have a tag placed at the fire command center/the fire alarm panel (if applicable), indicating which part(s) of the fire alarm system is/are out of service.

When should I hire a fire guard to perform the fire watch?

A qualified fire guard must hold an F-01 COF. It is not required to hire a fire guard for the first 4 hours of an out of service condition when the affected area does not exceed 50,000 square feet. Any trained and knowledgeable building staff member can perform the fire watch if it is under 4 hours and under 50,000 square feet. However, if the affected area is more than 50,000 square feet or after 4 hours of an out of service condition, the fire watch must be performed by an F-01 fire guard. The area to be patrolled by each fire guard must not exceed more than 50,000 square feet of floor area.

RECORDKEEPING

What record must I keep?

As the restaurant owner, you are responsible to maintain a bounded Fire Alarm Log Book and smoke detector maintenance records on premises. The log books and the smoke detector maintenance records must be retained for a period of 3 years from the date of the last entry. They must be readily available for inspection by any FDNY representatives. The log books must include all system off-line entries, activated alarm entries, and notification entries.

The S-95/F-53/F-89/T-89 COF holders must inspect the fire alarm system periodically. The S-97/S-98 COF holder must maintain and test your fire alarm system. Only these COF holders can make entries on the Fire Alarm Log Books.

The smoke detector maintenance records must be made by F-78/S-78/S-97/S-98 COF holders.

AVOIDING VIOLATIONS

What are the FDNY inspectors commonly looking for during any inspection?

Every FDNY inspector who performs inspections will also inspect the following items to determine if:

- the fire alarm system is in a good working order;
- the fire alarm system is accessible to the FDNY inspector;
- the fire alarm system is supervised by a qualified COF holder (e.g. S-95/F-53/F-89/T-89/F-80);
- the smoke detectors are properly and periodically cleaned by a qualified COF holder (e.g. F-78/S-78/S-97/S-98);
- the fire alarm system is tested/maintained by an FDNY approved fire alarm company;
- the fire alarm system log book and smoke detector log book;

What are the most common violations that are related to the fire alarm system?

- The fire alarm system has been altered without approval from the FDNY.
- The fire alarm system is not in a good working order, including but not limited to: The system is off-line (without valid reasons acceptable to the FDNY).
 The system has trouble signals.
- The fire alarm system is not supervised by a S-95/F-53/T-89/F-89/F-80 COF holder with the qualified license.
- The fire alarm system is not inspected/maintained/tested by an S-97/S-98 COF holder.
- The smoke detector is not cleaned periodically by an F-78/S-78/S-97/S-98 COF holder.
- Failure to keep the Alarm Log Books.

REFRIGERATING/HVAC SYSTEMS

INTRODUCTION

What is a refrigerating/heating, ventilation, air conditioning (HVAC) system?

Refrigerating or HVAC systems are commonly installed in restaurants, commercial buildings, office buildings and institutional buildings. The systems generally deal with regulating the air temperature, such as freezing or cooling products. Refrigerating system normally needs the use of chemicals (refrigerants) and water to remove heat.







Is this system required in my restaurant?

Air conditioning control systems are commonly installed in restaurants for human comfort.

What hazardous situation(s) may it cause if the system is not working? How does it happen?

The risks associated with the use of refrigerants in refrigeration and air-conditioning equipment can include toxicity, flammability, asphyxiation, and physical hazards. Some were also highly reactive, resulting in accidents (e. g., leak, explosion) because of equipment failure, poor maintenance, or human error. Air conditioners cause an average of 20 deaths, 140 injuries, and \$82 million in property damage annually, according to a 2016 report by the National Fire Protection Association. If refrigerating systems are overworked and overheated or there are some electrical issues, it can catch nearby combustibles on fire.

Rooftop units also pose dangers to firefighters: the unit increase load on the roof and the increase in heat may lead to failure of the roof structure and the unit falling on firefighters working in the building.

ISSUANCE AND RENEWAL OF FDNY PERMIT/APPROVAL

Does this system need an FDNY permit or other FDNY approval?

Refrigerating system. An FDNY permit is required to install and operate a refrigerating system that

- (1) uses a group A1, A2, A3, B1, B2 or B3 refrigerant, OR
- (2) is mounted on or suspended from a roof or ceiling.

(Exception: A refrigerating system of less than five horsepower that uses a group A1 refrigerant and that is not mounted on or suspended from a roof or ceiling).

REFRIGERATING/HVAC SYSTEMS

Which FDNY unit will perform the inspection or re-inspection? How often? What is the fee?

The preliminary inspections and tests for issuing the initial FDNY permit is conducted by the Bureau of Fire Prevention District Offices. The FDNY permit needs to be renewed annually. Re-inspections will also be conducted annually by a District Office.

What is the fee?

Cost of Permit: \$105 (per compressor)

MAINTENANCE AND PRECAUTIONS

How must this system be maintained to prevent the hazardous situations?

Obtain a valid FDNY permit to ensure that the system is installed/operated correctly.

RECORDKEEPING

What record must I keep?

For non-high powered systems (i.e. split and package units), the restaurant owner should keep the DOB Certificate-of-Compliance (formerly: Equipment Use permit) of each unit(s) to present to the inspector when requested.

AVOIDING VIOLATIONS

What are the FDNY inspectors commonly looking for during the annual inspection of refrigeration system?

- System must be maintained in good order.
- The system information plate should be attached on each refrigerating system.

What are the most common violations that are related to the refrigeration system?

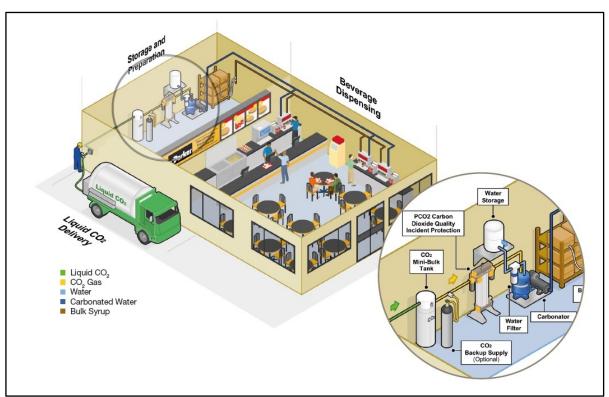
- Lack of the DOB Certificate-of-Compliance
- The refrigerating systems are not accessible for FDNY inspections (e.g. no ladder for accessing the roof-top unit or locked stairway to access the unit)

BULK CARBON DIOXIDE BEVERAGE SYSTEMS

INTRODUCTION

What is a bulk carbon dioxide beverage system?

Many restaurants use Carbon Dioxide (CO2) in bulk form to carbonate soft drinks. The carbonated soft drinks dispenser is commonly known as a 'Soda Fountain' combines flavored syrup and carbon dioxide (CO2) with chilled, purified water. It is the carbon dioxide gas that is responsible for the fizziness.



Is this system required in my restaurant?

Typically, restaurants with soda fountains install carbon dioxide beverage systems.

What hazardous situation(s) may it cause?

Several fatal carbon dioxide incidents have occurred in restaurants where CO2 leaked from large storage tanks serving carbonated beverage dispensers. Symptoms of overexposure by carbon dioxide inhalation include dizziness, headache, nausea, rapid breathing, shortness of breath, deeper breathing, increased heart rate, lack of concentration, sweating, restlessness, vomiting, shaking, confusion, etc.

Who can install the carbon dioxide beverage system?

The installation of carbon dioxide beverage system must be performed by a soda & carbonation company or a compressed gas company that installs, maintains and refills the bulk CO2 tank.

BULK CARBON DIOXIDE BEVERAGE SYSTEM

ISSUANCE AND RENEWAL OF FDNY PERMIT/APPROVAL

Does this system need an FDNY permit or other FDNY approval?

The design and installation, operation and maintenance of a carbon dioxide beverage system using more than 100 pounds (874 SCF) of carbon dioxide must comply with the FDNY requirements. If the quantity of the carbon dioxide tanks of the beverage system exceeds 515 pounds (4,500 SCF), an FDNY permit is required to store, handle or use carbon dioxide. The installation and maintenance of low pressure carbon dioxide beverage dispensing systems must be performed by a G-82 COF holder. An FDNY inspector will perform a preliminary inspection and test upon installation to ensure the system has been installed correctly.

A carbon dioxide detection and an alarm system MUST be installed (regardless of install date) for bulk storage tanks located below grade. The alarm system does not need to be connected to the main alarm panel as it is a stand-alone type and the alarm is part of the annual FD inspection.

Which FDNY unit will perform the inspection or re-inspection? How often? What is the fee?

The preliminary inspections and tests for issuing the initial FDNY permit for the carbon dioxide beverage dispensing systems will be conducted by the Bureau of Fire Prevention District Office. **The FDNY permit needs to be renewed annually**. Re-inspections will also be conducted annually by a District Office.

What is the fee?

Permit for storage, handling or use low pressure carbon dioxide beverage dispensing systems: \$210

MAINTENANCE AND PRECAUTIONS

How must this system be maintained to prevent the hazardous situations?

The filling of a carbon dioxide container from any source must be performed by a G-82 COF holder.

All carbon dioxide beverage dispensing systems should also be equipped with a carbon dioxide detection and alarm system. This is used to alert occupants for any possible carbon dioxide leaking, especially below grade areas.

The carbon dioxide beverage dispensing systems should be operated and maintained as the following:

- 1. Warning signs should be posted.
- 2. Periodic inspections of the system should be performed by a G-82 COF holder.
- 3. User safety training should be administered by a G-82 COF holder periodically.
- 4. 911 must be notified in the event of a carbon dioxide leak.
- 5. The system should be properly protected from physical damage.

If the system is altered or repaired, the owner needs to ensure that the installer/contractor filing the affidavit to the FDNY.

Regular inspection will also prevent the hazardous situations. G-82 COF holders who install and fill the beverage system must perform a quick visual inspection of the system at least once every 3 months and a full inspection at least once a year.

BULK CARBON DIOXIDE BEVERAGE SYSTEM

Staff training

At time of installation of a carbon dioxide beverage system, and at least once a year thereafter, the G-82 COF holder must verbally and in writing communicate the carbon dioxide safety information to the restaurant staff members at the premises to ensure that they are aware of the hazards associated with the system, and understand how to operate and monitor the system. The staff must know the importance of:

- (1) immediately reporting any malfunction of the system to the G-82 COF holder and ensuring the system is inspected and repaired on an expedited basis;
- (2) upon discovering any leak of carbon dioxide from the system, immediately reporting to 911 and the G-82 COF holder and keeping all persons away from the carbon dioxide system upon any release of carbon dioxide.

RECORDKEEPING

What record must I keep?

The business owner must maintain on the premises for at least 3 years the following documentation: For all installations over 100 lbs of carbon dioxide:

- 1) A tag or other record of each quick check and annual inspection indicating:
 - The date of the inspection;
 - Whether the system is in good working order, and, if not, any conditions that require correction, and, if so, the date the condition was corrected and by whom; and
 - The name and certificate number of the COF holder who performed the inspection;
- 2) The names and titles of the responsible person(s) at the premises trained in the use of the system;
- 3) A copy of the manufacturer's manual for the carbon dioxide beverage dispensing system.

For installations over 400 lbs of carbon dioxide: (in addition to (1), (2) and (3) above)

4) A copy of the Installer's Affidavit for new and altered systems or any emergency alarm activation/ carbon dioxide release.

AVOIDING VIOLATIONS

What are the FDNY inspectors commonly looking for during the annual inspection?

- CO2 tank & piping NOT physically damaged and does not have extreme build-up of frost on gauges (if there is, it will indicate there is a leak).
- CO2 tank is chained to wall or properly secured.
- CO2 Alarm provided, & powered (with no error or leaking warnings).
- CO2 storage area is clean & maintained.
- CO2 system & warning signs/markings are posted at conspicuous places in the premises.
- Valid/unexpired G-82 Certificate of Fitness(s) are provided.
- Up-to-date records of the CO2 bulk tank last filling/ 3-month quick check & annual check done by a G-82 COF holder.
- Current and long-time employee personnel are trained on the CO2 system annually by a G-82 COF holder.

BULK CARBON DIOXIDE BEVERAGE SYSTEM

What are the most common violations that are related to the carbon dioxide system?

- CO2 tank or piping is physically damaged or has build-up of frost on gauges
- CO2 tank is not chained or properly secured.
- CO2 alarm is not provided or not functioning.
- CO2 storage area is not correctly maintained.
- CO2 system & warning signs/markings are not posted at required areas.
- No valid G-82 Certificate of Fitness holder supervises the system.
- The record for inspection or filling is not maintained and not checked by a G-82 COF holder.
- The current and long-time employee personnel are not trained on the CO2 system annually.

PLACE OF ASSEMBLY

INTRODUCTION

What is a place of assembly?

A place of assembly space is where large groups of people gather for any activity. Nightclubs, large restaurants, catering hall theaters and auditoriums differ from office buildings because they contain many people in one main space.

What hazardous situation(s) may it cause?

Fires in a building with many people have shown to be some of the most deadly when the proper features, systems and construction materials were not present. History has produced many deadly fires in public assembly buildings. For example, in 1942, a fire started in a Boston's night club. In less than 15 minutes, 492 people were dead and another 166 injured, making the blaze the deadliest nightclub fire in U.S. history. In 2003, the fire in Rhode Island's nightclub caused 100 death. During an emergency evacuation where overcrowding exists, exit doors can become congested with people, restricting egress. The inability to leave a building when confronted with a fire or smoky conditions can lead to panic.

ISSUANCE AND RENEWAL OF FDNY PERMIT/APPROVAL

Do place of assembly need an FDNY permit or other FDNY approval?

New York City requires a Place of Assembly (PA) Certificate of Operation for all premises where the Certificate of Occupancy indicates that **75 or more occupants (including restaurant staff) may gather indoors or 200 or more may gather outdoors** for religious, recreational, educational, political or social purposes, to consume food or drink, await transportation, or any similar group activities.

Both the Department of Buildings (DOB) and the Fire Department (FDNY) oversee the regulation of PA spaces. DOB enforces adherence to the Construction Codes and conducts all reviews and inspections for the issuance of a PA Certificate of Operation. FDNY is responsible for all reviews and inspections for annual PA Permits to ensure compliance with the Fire Code.

The application procedure can be found in the following link:

http://www1.nyc.gov/assets/buildings/pdf/pa_guide.pdf

Which FDNY unit will perform the inspection or re-inspection? How often? What is the fee?

The DOB inspector will be looking for general compliance with Construction Codes, in order to issue the PA Certificate of Operation. The PA Certificate of Operation does not expire. However, after your restaurant obtains the PA Certificate of Operation, an FDNY Place of Assembly Inspector will visit the site within a few months for the first annual inspection and will provide you with a FDNY Place of Assembly Permit based on the results of that inspection. This FDNY permit needs to be renewed annually. The inspections will be conducted by the Public Assembly Unit.

What is the fee?

The fee for the FDNY annual inspection is calculated on a sliding scale based on occupancy - the more people that can occupy the restaurant, the higher the fee. All re-inspections are billed at the rate of \$210 per hour. The length of the inspection will also vary by restaurant size.

PLACE OF ASSEMBLY

Does the FDNY require any other permit/COFs for any eating/drinking restaurant with a Place of Assembly permit?

A 'cabaret' is defined in New York City as any room, place or space in which any musical entertainment, singing, dancing or other form of amusement is permitted in connection with the restaurant business or the business of directly or indirectly selling food or drink to the public. Cabaret may include nightclub, bar, karaoke bar, banquet hall, etc.

Occupancies	Seating	Emergency	Sprinklers	Fire Alarm	On site	Fire Drill
Occupancies	Plan	Lighting	System	System	Place of	Conductor
			Installed	Installed	Assembly	(F-07/W-07
			and S-12/S-15	and S-95/F-53 ^b	Personnel	COF)
			COF card	COF card	(F-03 COF)	
			posted	posted		
Restaurant	Yes	Yes	Not always	Not always	No	No
Nestaurant	165	162	required ^a	requireda	INO	INO
Cabaret			Not always	Not always		
(75-300	Yes	Yes	required ^a	requireda	Yes	Yes
occupants)			required	required		
Cabaret (more						
than 300	Yes	Yes	Yes	Yes	Yes	Yes
occupants)						

- a. If you see a fire alarm panel or sprinkler head inside your restaurant/cabaret, An S-95/F-53 COF for the fire alarm system or S-12/S-15 COF for the sprinkler system must be provided.
- b. If you can make announcement via the fire alarm panel, F-53 COF is required. If you cannot make announcement via the fire alarm panel, S-95 COF is required.

MAINTENANCE AND PRECAUTIONS

How must the restaurant be maintained to prevent the hazardous situations?

Develop an emergency preparedness plan and provide periodical staff training.

The on-site personnel need to be familiar with the emergency procedures addressed in the plan and know how to assist in evacuation during any emergency.

• Pre-event inspection.

The acronym **ESCAPE** may be used as a reminder for doing the pre-event inspection:

- **E** Exits All exits are unblocked, unlocked, and properly marked
- **S** Storage The occupancy is clean, orderly and there is no excessive storage. No storage of combustible material and combustible waste in corridors.
- **C** Capacity The number of persons occupying the building or space does not exceed the posted capacity. Capacity certificates are properly posted.
- **A** Aisles All aisles are free and clear at all times.
- **P** Protection Smoke, fire alarm, sprinkler systems, and fire extinguishers are in proper working order and have up-to-date inspection and testing performed.
- **E** Emergency exit lighting All exits signs and emergency exit lighting are working properly.
- Be aware of possible overcrowding by monitoring the amount of people.

PLACE OF ASSEMBLY

RECORDKEEPING

What record must I keep?

Drill logbook must be kept at the premises for a period of at least three (3) years, and made available for inspection by any FDNY representative.

AVOIDING VIOLATIONS

What are the FDNY inspectors commonly looking for during the annual PA Inspection?

In addition to looking for general Fire Code compliance for fire alarms, range hoods, sprinklers and standpipe systems, the FDNY inspector will look at the PA space to ensure that the actual layout complies with the approved DOB plans. The following items must always be on site:

- 1) Set of approved plans and the PA Certificate of Operation from DOB
- 2) Emergency lighting and exit signs in working order
- 3) Maximum occupancy sign posted
- 4) Flame Proofing Affidavit Affirmation that materials in PA space (*e.g.*, curtains, upholstery, etc.) were treated with flame proofing materials or tested to be flame proof, as confirmed by an FDNY C-15 COF holder (individual certified by FDNY to perform such treatment or testing).

- Operating contrary to Certificate of Occupancy (C of O)
- Overcrowding (more people in space than allowed by PA)
- Egress blocked or locked
- Obstruction in travel path (path from PA space to fire-rated safe area, such as stairwell or outside)
- Failure to maintain fire protection systems (Fire Alarm/Sprinkler) in proper working order (refer to standpipe systems, sprinkler systems and fire alarm system).
- Illegal use, handling or storing of LPG containers or other hazardous materials.
- Missing or damaged lighting or exit signs
- Failure to post permits (e.g., PA, maximum occupancy sign, Certificate of Occupancy)
- Failure to produce flame proofing affidavit
- Valid Certificate of Fitness holder not on site (Only applicable for certain types of PA spaces such as banquet halls and cabarets)
- Approved floor plans or PA not on site
- Plans not updated after major renovation
- Observed restaurant name, owner name or use description does not match records
- Failure to maintain rangehood system in proper working order (refer to "commercial exhaust system").
- Failure to provide proper COF for Fire Drill Conductor (F-07/W-07) or Place of Assembly Personnel (F-03/F-04) or Sprinkler System (S-12/S-15) or Fire Alarm System (S-95/F-53).

OPEN FLAME

INTRODUCTION

What is an "open flame"?

"Open flame" is a flame that is generated and not securely enclosed by noncombustible material, such as

- a candle that is unenclosed or enclosed in a globe or lantern,
- a gas light lantern, for decorative and lighting purposes;
- flaming foods and beverages,
- food warming using solid alcohol (e.g. Sternos), etc.

An open flame does not include a flame generated in a sustained and controlled manner in the following devices, equipment and systems:

- Any fireplace, furnace, grill, hot water heater, oven, stove or other similar stationary appliance and any outdoor stationary decorative gas appliance, which must comply with the construction codes and applicable provisions of the fire code (may need to apply for a different FDNY approval/permit or a DOB approval/permit).
- Lighted smoking paraphernalia (may need to apply for a different permit from other City Agencies).









What hazardous situation(s) may it cause?

Candles, burning incense, flaming foods or beverages, and other open flame devices, when used incorrectly or left unattended, can ignite combustible materials and result in personal injury, destruction of property and even loss of life. A stray piece of clothing, sleeve, curtains or napkins may also catch from an open flame.

ISSUANCE AND RENEWAL OF FDNY PERMIT/APPROVAL

Does "open flame" need an FDNY permit or other FDNY approval?

A permit is required to use open flames:

- 1. in any public assembly occupancy (the occupancy with Place of Assembly (PA) Certificate of Operation).
- 2. in any other place of public gathering (all restaurants with an occupancy of less than 75 persons are regulated as a "public gathering place").
- 3. in a covered mall building.

OPEN FLAME

Which FDNY Unit will perform the inspection or re-inspection? How often? What is the fee?

The preliminary inspections for issuing the initial FDNY permit for the open flame is conducted by the Place of Assembly Unit. The Department of Buildings approved floor or seating plan(s) related to the place may be inspected by the inspector. This FDNY permit needs to be renewed annually. The inspections will be conducted by the Public Assembly unit.

What is the fee?

The fee for the FDNY annual inspection of open flame permit is \$210.

MAINTENANCE AND PRECAUTIONS

How must the restaurant be maintained to prevent the hazardous situations?

- Good working order fire alarm system, if applicable, and portable fire extinguishers.
- Do not store or place flammable/combustible items near heat-producing equipment or open flames.
- Loose clothing, curtains or napkins and aerosol cans are all examples of flammable material that can easily catch fire or explode if placed near an open flame or heat source.

AVOIDING VIOLATIONS

What are the FDNY inspectors commonly looking for during the annual inspection of open flame?

- Open flame permit for the use of decorative devices, tabletop candles, liquid or solid fuel devices.
- The flame must be enclosed and made of noncombustible material.

Candle must not be placed in combustible material.





- An open flame must be kept at a safe distance from decorations and other combustible material.
- Lighted candles must be prohibited in areas where occupants stand, or in an aisle or exit.
- Proper storage of flammable or combustible liquids used for preparation of flaming foods or beverages

OPEN FLAME

- Failure to produce flame proofing affidavit.
- Failure to post the required permits (e.g., open flame permit)
- Valid Certificate of Fitness holder not on site (Only applicable for certain types of PA spaces such as banquet halls and cabarets)
- Missing or damaged lighting or exit signs
- Approved floor plans or PA not on site
- Plans not updated after major renovation
- Operating contrary to Certificate of Occupancy (C of O)
- Observed restaurant name, owner name or use description does not match records
- Obstruction in travel path (path from PA space to fire-rated safe area, such as stairwell or outside)
- Egress blocked or locked
- Overcrowding (more people in space than allowed by PA)
- Failure to maintain the required fire protection systems (Fire Alarm/Sprinkler) in proper working order (refer to standpipe systems, sprinkler systems and fire alarm system).
- Failure to maintain rangehood system in proper working order (refer to "commercial exhaust system").
- Failure to provide proper COF for Fire Drill Conductor (F-07/W-07) or Place of Assembly Personnel (F-03/F-04) or Sprinkler System (S-12/S-15) or Fire Alarm System (S-95/F-53) (only applicable for certain types of PA spaces such as banquet halls and cabarets).
- Illegal use, handling or storing of LPG containers.

NON-TOBACCO HOOKAH ESTABLISHMENTS

INTRODUCTION

What is a hookah establishment?

Hookahs, also known as shisha, narghile, argileh, hubble-bubble, and goza, is a single- or multistemmed instrument for heating or vaporizing and then smoking. The smoke is passed through a water basin—often glass-based—before inhalation. **Serving or smoking hookah containing tobacco is prohibited in NYC restaurants and bars.** NYC now also bans establishments from serving or smoking non-tobacco hookah establishment unless they have obtained NYC Department of Health permit and FDNY permit to operate as a non-tobacco hookah establishment.





What hazardous situation(s) may it cause?

In most hookahs, hot charcoal is placed in a bowl on top of the hookah molasses to heat it. The charcoal used in the heating process produces the toxin, carbon monoxide. The use of charcoal can also be a fire hazard if not disposed of properly.

ISSUANCE AND RENEWAL OF FDNY PERMIT/APPROVAL

Does a non-tobacco hookah establishment need an FDNY permit or other FDNY approval?

An FDNY permit is required to use any hookah establishment and such permit is only issued to those non-tobacco hookah establishments that hold a NYC Department of Health permit.

The FDNY permit is to ensure that the premises designed, installed, operated and maintained in accordance with the NYC Fire Code and Fire Department Rules.

Which FDNY unit will perform the inspection or re-inspection? How often? What is the fee?

Proof of a NYC Health Department permit for non-tobacco hookah establishments and the Department of Buildings applications must be obtained before applying the FDNY permit. The preliminary inspections for issuing the initial FDNY permit for the hookah establishments is conducted by the Public Assembly Unit. **This FDNY permit needs to be renewed annually.** The inspections will be conducted by the Place of Assembly Unit.

What is the fee?

The fee for the FDNY annual inspection of hookah establishment permit is \$210.

NON-TOBACCO HOOKAH ESTABLISHMENTS

MAINTENANCE AND PRECAUTIONS

How must the restaurant be maintained to prevent the hazardous situations?

- At least one F-61 Certificate of Fitness holder needs to supervise the lighting and disposal of coals and provides the general supervision of coal storage.
- No excessive storage of hookah coals in the same room as the coal heating device.
- All coals (including used or discarded ones) must be stored in a metal or other noncombustible cabinet/container with a securely-fitting lid and be located at least 3 feet away from an oven or any other heating device.
- You must use approved devices for lighting hookah coals (The FDNY recommends electrically heating options).
- Do not allow customers to handle lighted hookah coals.
- All ashes must be wetted down thoroughly to put out possible continuation of fire in lighted coals.
- All decorations, including smoking areas of a non-tobacco hookah establishment, must be flame resistant.
- A listed and labeled carbon monoxide alarm is required to be in every room where lighted coals are prepared and used.
- At least one portable fire extinguisher having a minimum 2A:10-B: C rating must be provided and maintained within a 75-feet travel distance.

AVOIDING VIOLATIONS

What are the FDNY inspectors commonly looking for during the annual inspection of hookah establishment?

- FDNY permit for the use of Hookah in the establishment and an F-61 Certificate of Fitness.
- NYC Health Department permit for non-tobacco hookah establishments.
- No excessive storage of coals. The storage area is well-maintained.
- All coals (including used or discarded ones) must be stored in a metal or other noncombustible cabinet/container with a securely-fitting lid.
- Flame proofing affidavit.
- Access doors, aisles and exit doors clear of obstructions.
- CO alarms are properly installed.

- Failure to obtain and post the required permits (e.g., FDNY and NYC Health Department permit)
- Hookahs are not properly handled or used.
- The coals are not properly heated/prepared/handled/stored.
- Failure to produce flame proofing affidavit
- An F-61 Certificate of Fitness holder is not on site
- Failure to maintain the CO alarms in good working order.

SPECIAL EFFECTS

INTRODUCTION

What is a special effect?

A visible or audible effect produced by a fire/smoke/pyrotechnic/simulated pyrotechnic device used for **entertainment** and/or before an audience or camera.









What hazardous situation(s) may it cause?

Special effect when staged or performed incorrectly or left unattended, can ignite combustible materials and result in personal injury, destruction of property and even loss of life. Curtains, napkins and hair may catch from an open flame. Fire or the smoke may produce toxic fumes, smoke, or other health hazards that are increased in an enclosed space. The hazards have the potential to affect not only the performers, restaurant staff, actors, but the audience as well. As a result of the increased hazard, open flame or pyrotechnic effects must be integrated into the entire production design – from the restaurant layout, soft goods, to the performance area.

ISSUANCE AND RENEWAL OF FDNY PERMIT/APPROVAL

Do special effects need an FDNY permit or other FDNY approval?

An FDNY Explosives Unit permit is required for any special effect. The permit will cover:

- storage, handling and use of fuel and supplies for special effects.
- a special effect conducted by a person holding a E-18/E-19/E-27/E-28/E-29/E-30 Certificate
 of Fitness

As a restaurant owner, you must ensure the required permits are obtained before the special effect is conducted. Contact FDNY Business (<u>FDNY.BusinessSupport@FDNY.nyc.gov</u>) for the special effect permit application.

Note: If the smoke/fire effect is for decoration or food warming purpose, you may require open flame permit instead of the special effect permit.

SPECIAL EFFECTS

MAINTENANCE AND PRECAUTIONS

How must the restaurant be maintained to prevent the hazardous situations?

- Follow the guidelines of the FDNY Explosives Unit after obtaining the permit.
- All waste must be disposed of according to the Safety Data Sheet (SDS) and federal, state and local regulations.
- Have appropriate amount of operational fire extinguishers in the designated locations (as prescribed in Special Effects permit).
- Flame Proofing Affidavit Affirmation that materials in the special effects area (e.g., curtains, upholstery, carpet) were treated with flame proofing materials or tested to be flame proof, as confirmed by an FDNY C-15 Certificate of Fitness holder (individual certified by FDNY to perform such treatment and testing).

Which FDNY unit will perform the inspection or re-inspection? How often? What are the fees?

The inspection(s) for issuing the FDNY permit for special effects is conducted by the Explosives Unit. The time that the FDNY permit valid for is varies and is dated on the permit.

What are the fees?

Permit for special effects without the presence of an FDNY representative: \$210 Permit for special effects with the presence of an FDNY representative: \$420

AVOIDING VIOLATIONS

What are the FDNY inspectors commonly looking for during the inspection?

In addition to looking for general Fire Code compliance for fire alarms, range hoods, sprinklers and standpipe systems, the FDNY inspector will also look at the special effect space to ensure that

- emergency lighting and exit signs are in working order;
- flame proofing affidavit has been obtained;
- combustible and flammable materials are removed or properly covered;
- there is adequate spacing and staffing for supervision of the effect;
- the correct Certificate of Fitness holder is present; and
- materials used for the special effect are properly stored.

You can also contact FDNY Business (<u>FDNY.BusinessSupport@FDNY.nyc.gov</u>) to request a presite inspection. The pre-site inspection is free of charge and you can discuss with the FDNY inspector to evaluate the special effect and the surrounding area.

STORAGE OF HAZARDOUS MATERIALS

INTRODUCTION

What are hazardous materials?

The common hazardous materials found in a restaurant including but not limited to:

- Propane gases (LPG)
- Solid fuel, such as wood, mesquite, briquettes, charcoal, pellets, solid alcohol/gel chafing fuel (e.g. Sterno), etc.
- Flammable and combustible liquids, such as alcohol (flaming food), K-1 kerosene, Ethanol Fuel, etc.

What hazardous situation(s) may it cause?

Fire risk: The risk of fire increases in kitchens with solid fuel because they produce a great deal of heat, smoke, grease, and flammable debris.

Health risk: Burning solid fuel can increase carbon monoxide levels within the restaurant or facility.

ISSUANCE AND RENEWAL OF FDNY PERMIT/APPROVAL

Does the storage/handling/use of hazardous materials need FDNY permit or other FDNY approval?

The FDNY permit will be required to store/handle/use the following hazardous materials in quantities exceeding amounts in the table below.

Hazardous material	Quantity
LPG	Forty six16.4-ounce containers
Flammable liquid (e.g. alcohol, Ethanol)	5 gallons
Combustible liquid (e.g. kerosene)	10 gallons

If any permit is required for the material listed above, the FDNY inspector will also require certain COF holder (for the specific material) on-site. You must follow FDNY representative's instruction regarding the requirements of the COF.

Which FDNY unit will perform the inspection or re-inspection? How often? What is the fee?

The preliminary inspections for issuing the initial FDNY permit for storing hazardous material may be the Rangehood Unit (if such storage related to commercial cooking) or the Place of Assembly Unit (if such storage is related to hookah establishment or open flame). This FDNY permit needs to be renewed annually.

The Explosives Unit may conduct inspection for storage of hazardous materials as it related to special effects.

What is the fee?

The permit fee for different types and quantity of hazardous material is different. Contact FDNY Business (FDNY.BusinessSupport@FDNY.nyc.gov) for clarification.

STORAGE OF HAZARDOUS MATERIALS

MAINTENANCE AND PRECAUTIONS

How must the restaurant be maintained to prevent the hazardous situations?

- Flammable/combustible liquids:
 - No more than 10 gallons of combustible liquids may be stored on the premises as a reserve fuel supply for lamps and similar open flame decorative devices. If the amount is more than 10 gallons, an additional FDNY permit needs to be obtained.
 - Flammable and combustible liquids must not be used to ignite, or accelerate ignition
 of, the charcoal briquettes or other solid fuel. Such fuels must be ignited in an oven in
 the kitchen.
- Propane (LPG):
 - For food warming and browning purpose:
 - The LPG containers must not exceed 16.4 ounces.
 - No more than 12 LPG containers can be used and stored in the restaurant.
 - For demonstrations and temporary Exhibitions.
 - The LPG containers must not exceed 16.4 ounces.
 - No more than 24 LPG containers can be used and stored in the restaurant.
 - No 20-pound container could be used/stored/bring into buildings or on a roof. Without the FDNY propane storage permit, no 20-pound container is allowed stored onsite (either indoors/outdoors).
 - o Never store any propane container below grade.
 - o Propane is prohibited on streets and roadways.
 - o All not-in-use propane containers must be stored in an approved storage area.
- Solid fuels or combustible materials (e.g. cardboard, cabling, etc.)
 - Never use plenums (A plenum in heating, ventilation, and air conditioning (HVAC) systems is a box that connects to the HVAC system. It has a critical function and that is to bring in, distribute, and remove air.) for storage of combustible or other material.
 - The charcoal briquettes or other solid fuel used for cooking or food warming purposes must be stored in a metal cabinet. Such cabinet must be situated in a cool, dry location.
 - Not more than a one-day supply of solid fuel may be kept in the same room as the solid fuel-burning equipment. Solid fuel in excess of a one-day supply must stored in an approved storage area (must be stored in a sprinklered area or in medal cabinets located outdoors).

STORAGE OF HAZARDOUS MATERIALS

AVOIDING VIOLATIONS

What are the FDNY inspectors commonly looking for during the annual inspection of hazardous materials?

- Storage permit for storing the hazardous material if the quantity reaches permittable requirement.
- Good housekeeping.
- No excessive storage.
- All hazardous materials are stored in the designated place(s). No storage of hazardous material and in corridors.
- The storage area is properly separated from any ignitable resource and incompatible materials. The area is properly protected by required sprinkler system (if required).
- Required additional portable fire extinguishers are visible, correctly installed, and easily accessible.
- All exits are unblocked, unlocked, and properly marked.

- Failure to post the required permits.
- Illegal use, handling or storing of LPG containers or any other hazardous material.
- · Missing or damaged lighting or exit signs
- Egress blocked or locked
- Failure to maintain the required fire protection systems (Fire Alarm/Sprinkler) in proper working order (refer to standpipe systems, sprinkler systems and fire alarm system).

RESTAURANT RELEVANT CERTIFICATION OF FITNESS LIST

Туре	Description	When should this COF holder be present?		
C-15	Supervision of Flame Retardant Treatment (Citywide)	This COF holder does not need to be present at the restaurant.		
E-18/E-19/ E-27/E-28/ E-29/E-30	Explosive/Special Effects Related COFs (Citywide)	Only required when special effects are installed/conducted.		
F-01	Fire Guard for Impairment (Citywide)	Only required when fire watch by a fire guard is required.		
F-03/F-04	Indoor Place of Assembly Safety Personnel/ Temporary Place of Assembly Safety Personnel	Always required when the restaurant requires a place of assembly permit.		
F-07/W-07	Fire and Non-Fire Emergency Drill Conductor	Only required when drill or staff training is conducted.		
F-61	Supervision of Hookah Establishments	Always required when any restaurant has permitted hookah establishments.		
F-78/S-78	Inspection, Cleaning & Testing of Smoke Detectors	Only required when cleaning/inspection of smoke detectors is conducted.		
G-82	Installation and Dispensing of carbon dioxide (co2) beverage dispensing systems (citywide)	Only required when installing the systems or dispensing CO2 from a cargo tank truck into the container is conducted on the premises.		
S-12/S-15	Supervision of Sprinkler System (Citywide) / Supervision of Foam-water Sprinkler Systems (Citywide)	Only required when inspection/maintenance/ testing of the system is performed.		
S-13/S-14	Supervision of Standpipe System	Only required when inspection/maintenance/ testing of the system is performed.		
S-95/F-53/ F-80/F-89/ T-89	These COFs are authorized to supervise the Fire Alarm Systems	Always required when fire alarm system is required.		
S-97/S-98	Fire Alarm System Inspection, Testing and Servicing	Only required when maintenance/testing of the system is performed.		
W-64/P-64	Commercial Cooking Exhaust System Cleaning Technician	Only required when the cleaning of the commercial cooking exhaust system is performed.		
W-96	Full Service Shop of Portable Fire Extinguishers	This COF holder does not need to be present at the restaurant.		