FIRE DEPARTMENT • CITY OF NEW YORK

STUDY MATERIAL FOR THE

CERTIFICATE OF FITNESS EXAMINATION

F-02

Fire Guard for Shelter (Citywide)

All applicants are required to apply and pay for an exam online before arriving at the FDNY. It can take about 30 minutes to complete.

Simplified instructions for online application and payment can be found here:

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

Create an Account and Log in to:

http://fires.fdnycloud.org/CitizenAccess

This book is provided to the public for free by the FDNY.

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EXAM SPECIFIC INFORMATION FOR
F-02 CERTIFICATE OF FITNESS

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REQUIREMENTS FOR CERTIFICATE OF FITNESS APPLICATION

General requirements:
Review the General Notice of Exam:
http://www1.nyc.gov/assets/fdny/downloads/pdf/business/general-notice-of-exam-cof.pdf

Special requirements for the: F-02 Certificate of Fitness:
F-02 Certificate of Fitness holders are **NOT** required to obtain an additional F-01 Certificate of Fitness for Citywide Fire Guard for Impairment. F-02 Certificate of Fitness holders can perform F-01 C of F duties in shelters only. F-02 Certificate of Fitness is authorized to perform all fire guard duties within the shelter.

Application fee (Cash is NO LONGER ACCEPTED):
Pay the **$25** application fee online or in person by one of the following methods:

- Credit card (*American Express, Discover, MasterCard, or Visa*)
- Debit card (*MasterCard or Visa*)
- In person: Personal or company check or money order (*made payable to the New York City Fire Department)*

A convenience fee of 2% will be applied to all credit card payments.

For fee waivers submit: ***(Only government employees who will use their COF for their work- related responsibilities are eligible for fee waivers.)***

- A letter requesting fee waiver on the Agency's official letterhead stating applicant full name, exam type and address of premises; ***AND***
- Copy of identification card issued by the agency

REQUIREMENTS FOR ALTERNATIVE ISSUANCE PROCEDURE (AIP)

No AIP available. This certificate of fitness can only be obtained by passing the computer exam at the FDNY Headquarters.

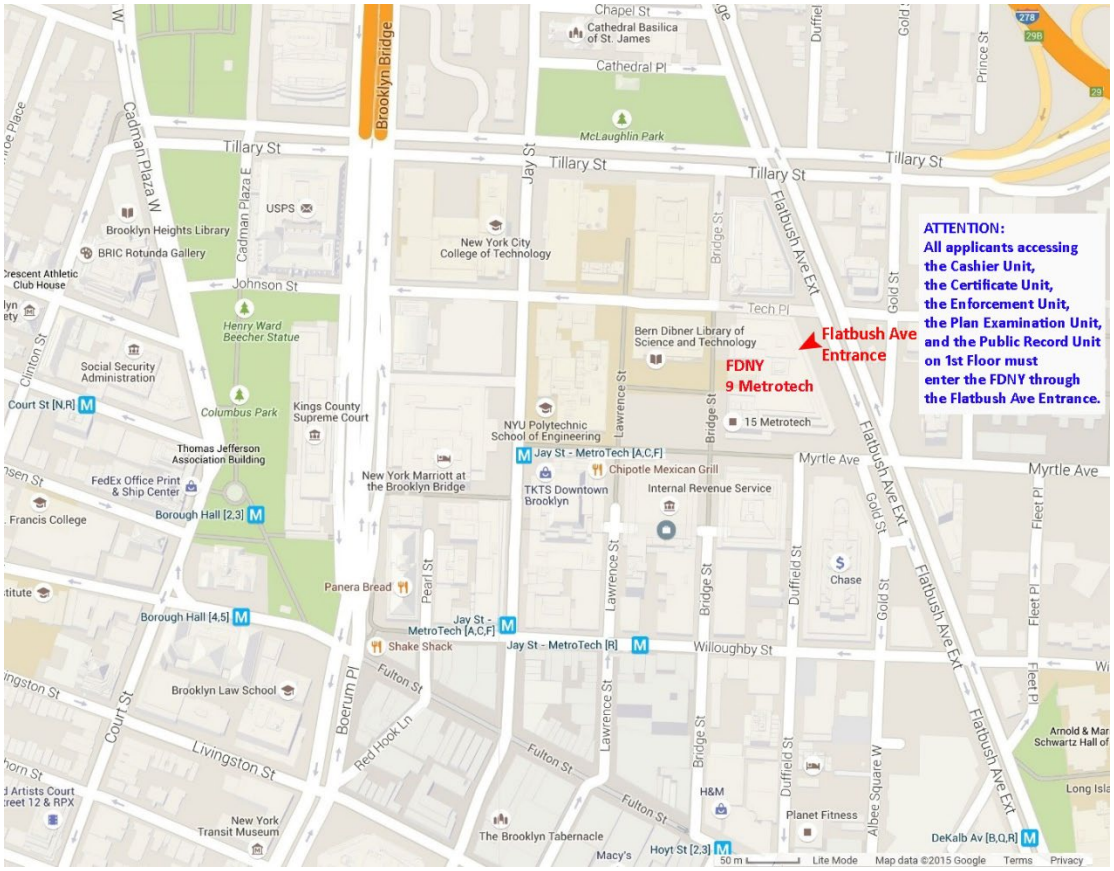
EXAM INFORMATION

The **F-02** exam will consist of **20** multiple-choice questions, administered on a "touch screen" computer monitor. It is a time-limit exam. Based on the amount of the questions, you will have 30 minutes to complete the test. A passing score of at least 70% is required in order to secure a Certificate of Fitness.

Call (718) 999-1988 for additional information and forms.

Please always check for the latest revised booklet at FDNY website before you take the exam.
http://www1.nyc.gov/assets/fdny/downloads/pdf/business/cof-f02-noe-study-materials.pdf

Exam site: **FDNY Headquarters,** 9 MetroTech Center, Brooklyn, NY. Enter through the **Flatbush Avenue entrance (between Myrtle Avenue and Tech Place)**.



RENEWAL REQUIREMENTS

General renewal requirements:
Review the General Notice of Exam:
http://www1.nyc.gov/assets/fdny/downloads/pdf/business/general-notice-of-exam-cof.pdf

Special renewal requirements for F-02 COF: None

The FDNY strongly recommends the F-02 COF holders to renew the COF on-line. To learn the simplified on-line renewal:
http://www1.nyc.gov/assets/fdny/downloads/pdf/business/cof-simplified-renewal-short.pdf

QUESTIONS?

FDNY Business Support Team: For questions, call 311 and ask for the FDNY Customer Service Center or send an email to FDNY.BusinessSupport@fdny.nyc.gov

SAMPLE QUESTIONS

The following questions represent the "format" of the exam questions, not the content of the real exam.

1. **While taking a Certificateof Fitness exam at 9 Metro tech center, I am allowes to use _____ to assist with answering test questions.**

A. cell phone
B. study material booklet
C. reference material provided by the FDNY test administrator
D. study notes

Only reference material provided by the FDNY test administrator is allowed to be used during Certificate of Fitness examinations. Therefore, the correct answer would be C. You would touch "C" on the computer terminal screen.

2. **If the screen on your computer terminal freezes during your examination, who should you ask for help?**

A. the person next to you
B. someone in the lobby
C. the test administrator
D. 311

If you have a computer related question, you should ask the test administrator in the testing room. Therefore, the correct answer would be C. You would touch "C" on the computer terminal screen.

3. If you do not know the answer to a question while taking an examination, who should you ask for help?

A. the person next to you
B. someone in the lobby
C. the test administrator
D. you should not ask about test questions since FDNY staff can not assist applicants.

You should not ask about examination questions or answers since FDNY staff cannot assist applicants with their tests. Therefore, the correct answer would be D. You would touch "D" on the computer terminal screen.

1. Introduction

Buildings or parts occupied or operated as emergency shelters must be regularly patrolled by a fire guard. Every area of the building must be patrolled at least once every hour. F-02 holders may additionally be assigned to monitor, for fires, other areas in a shelter where the fire protection system is out of service.

Fire guards are responsible for the safety of all shelter occupants and employees by eliminating fire hazards and assisting in the evacuation of occupants during drills and in case of an emergency. Fire guards are responsible for making sure that the shelter is in compliance with all fire safety regulations. They should be familiar with and knowledgeable of the location and operation of all parts of the fire alarm systems throughout the shelter in which they are employed. Fire guards are supervised by the impairment coordinator, Coordinator of Fire Safety & Alarm Systems or Fire and Life Safety Director on the premises. Fire guards must also maintain records of their patrols.

1.1 F-02 Certificate of Fitness Requirements

Buildings operating as emergency shelters have the unique requirement of fire guards on the premises at all times. Fire guards in shelters have a larger span of responsibility than fire guards in most other occupancies. It is mandatory that fire guards make consistent patrols as required and are knowledgeable about the procedures to follow when performing a fire watch in the case of an out-of-service situation.

F-02 holders are qualified to work in shelters with homeless occupants on a daily basis and to perform hourly patrols, and are additionally qualified to perform fire watch in an out-of-service situation. The information below explains the relationship between the F-01 and F-02 Certificates of Fitness:

F-01 Citywide Fire Guard for Impairment →	• Citywide Certificate of Fitness (non premise-related) • Qualified to perform fire watch in out-of-service situations
F-02 Fire Guards for Shelters →	• Qualified to perform hourly patrols in shelters • Qualified to perform fire watch in out-of-service situations • Citywide Certificate of Fitness

F-02 Certificates of Fitness are valid for three years from the date of issuance. Please be advised that certificate renewals are at the discretion of the commissioner in the interest of public safety. The department may review the certificate holder's

qualifications and fitness and may require a certificate holder to complete a department-approved continuing education program and/or provide other proof of the holder's continuing qualifications and fitness.

FDNY Permits and Certificate of Fitness

Relevant COFs that may be found within Shelter locations.

Type	**Description**
F-53	Emergency One-Way Voice Announcement Personnel
F-80	Coordinator of Fire Safety and Alarm Systems in Homeless Shelters
F-03/04	Indoor/ Temp/ Outdoor Place of Assembly Safety Personnel (F-03: Site-Specific)
F-89/T-89	Fire and Life Safety Director (Site-Specific)
S-12/S-15	Supervision of Sprinkler System (Citywide) / Supervision of Foam-water Sprinkler Systems (Citywide)
S-13	Supervision of Standpipe System (Citywide)
S-95	Supervision of Fire Alarm Systems (Site-Specific)
S-97/S-98	Fire Alarm System Inspection, Testing and Servicing (Citywide)
W-96	Full-Service Shop of Portable Fire Extinguishers (Citywide)

1.2 Denial, Non-Renewal, Suspension and Revocation of Certificates

Certificate of Fitness holders should be aware that they may be required to demonstrate their knowledge and proficiency in their duties related to their certificate at the time of original and renewal application, and at any time Fire Department representatives are conducting an inspection of the premises. The Fire Department can deny, not renew, suspend or revoke a certificate for misconduct, which would include the failure of the certificate holder to properly fulfill his or her duties for any reason.

In addition to any other penalties provided by law, misconduct on the part of an applicant or holder of a certificate of fitness is grounds for denial, non-renewal, suspension or revocation of a certificate, and denial of an application for a certificate or the opportunity to take a certificate examination. Such misconduct includes, but is not limited to:

- the failure of certificate holders to properly fulfill their duties

- any false and fraudulent conduct in connection with an application for a certificate or the duties of a certificate holder, including:
    - false or fraudulent statements or submissions
    - unauthorized changes to or use of a certificate or possession of a fraudulent certificate
    - cheating on an examination
    - impersonating another person or allowing oneself to be impersonated
- the failure to promptly notify the Fire Department of any change in the applicant's or certificate holder's residence address, or work location
- any other conduct that decreases the integrity or reliability of an applicant or certificate holder
- compromising the integrity or confidentiality of a Fire Department examination

2. Definitions

BUILDING OCCUPANTS – All persons in the shelter, including employees, clients, staff and visitors.

CENTRAL STATION COMPANY – A facility that receives alarm signals from a protected premise and retransmits or otherwise reports such alarm signals to the FDNY.

EMERGENCY PREPAREDNESS PLAN – Emergency preparedness plans ensure that, in the event of a fire or a non-fire emergency, there are procedures in place that can be timely implemented to provide the information, guidance, direction and assistance needed to protect the safety of building occupants, including, if necessary, effecting their evacuation, relocation or sheltering in place. Such emergency preparedness plans assures that knowledgeable assistance is readily available on the premises to emergency response personnel responding to a fire or non-fire emergency at the premises. *The emergency preparedness plan is also known as the fire safety and evacuation plan and/or emergency action plan.*

EVACUATION – the emptying of a building of all building occupants in response to a fire or an emergency.

FIRE ALARM SYSTEM – any system, including any interconnected fire alarm sub-system, of components and circuits arranged to monitor and annunciate the status of fire alarm or supervisory signal-initiating devices.

FIRE GUARD – A person holding a Certificate of Fitness for such purposes, who is trained in and responsible for maintaining a fire watch.

FIRE PROTECTION SYSTEM – Approved devices, equipment and systems or combinations of systems used to detect a fire, activate an alarm, extinguish or control a fire, control or manage fire alarm systems, sprinkler systems and standpipe systems.

FIRE WATCH – A temporary measure intended to ensure continuous and systematic surveillance of a building or portion thereof by one or more qualified individuals for the purposes of identifying and controlling fire hazards, including detecting early signs of fire, raising an alarm of fire, notifying the department, and performing such other fire safety duties as may be prescribed by the commissioner.

IMPAIRMENT – Any condition in which a fire protection system cannot perform its designed fire safety function. Fire protection systems include sprinkler systems, standpipe systems and fire alarm systems. Examples of an impaired sprinkler or standpipe system may include an out-of-service fire pump. An example of an out-of service fire alarm system may include a shutdown of a floor's fire alarm system

detecting devices (to prevent an unnecessary alarm) while torch work associated with construction work is conducted.

IMPAIRMENT COORDINATOR – The person designated by the building owner who is responsible for ensuring that proper notification and safety precautions are taken when a standpipe system, sprinkler system or fire alarm system is out of service. In the absence of a specific designee, the owner will be considered the impairment coordinator.

NON-FIRE EMERGENCY – A biological, chemical or nuclear incident or release; declaration of emergency by a lawful authority; explosion; medical emergency; natural disaster; or other emergency affecting the premises or the safety of building occupants.

OWNER – The owner of the freehold of any real property (as defined in section two of the Real Property Law), or of a lesser estate therein, a mortgage or vendee in possession, assignee of rents, received, executor, trustee, lessee, agent or any other person, firm or corporation, directly or indirectly in control of real property. Any reference in this code to the owner of any building, structure or premises will be deemed to designate collectively any and all of the foregoing, including, but not limited to, the owner of the freehold or lesser estate therein and a managing agent designated by such owner.

OWNER/OCCUPANT RESPONSIBILITY – The owner is responsible at all times for the safe maintenance of a building, structure and premises in accordance with this code. Correction and abatement of violations of this code and the rules is the responsibility of the owner. If an occupant creates, or allows to be created, hazardous conditions in violation of this code or the rules, the occupant are also responsible for the abatement of such hazardous conditions.

TWO-WAY VOICE COMMUNICATION – a form of transmission in which both parties involved can transmit information. This is useful during an emergency and allows staff members to report the conditions of a fire emergency from the fire floor back to the Fire and Life Safety Director or Coordinator of Fire Safety & Alarm Systems in Homeless Shelters or Fire and Emergency Drill Conductor in the lobby at the fire command center. Two-way voice communication uses warden phones that are placed at several locations throughout the building, usually near the exit stairways in the building.

3. Fires in Homeless Shelters

Homelessness is a significant problem in New York City, and the number of men, women and children that need shelter continues to rise. In September of 2023, it was estimated that there are approximately 87,907 homeless people, including 31,510 homeless children, sleeping each night in New York City's main municipal shelter system.

According to the numbers of late 2023, the number of homeless single adults in New Yorker is *106% higher* than it was 10 years ago. The averages length of stay in the Department of Homeless Services shelter system is about 412 days for single adults and 437 days for families with children.

This increase comes new fire safety concerns. It is very important that fire guards ensure that shelters are maintained in a manner that provides for the safety of the residents and employees in the event of a fire or other emergency, to immediately correct or report any fire safety violations that arise and to be familiar with the emergency preparedness plan.

Unfortunately, in New York City and elsewhere, disastrous fires have occurred in homeless shelters. Fortunately, the lessons learned from these fires can be used to help prevent them from occurring in the future. Three significant fires that occurred in homeless shelters are listed below:

Fire Summary:

Location: Red Roof Inn, Sutton, Mass.
Date: September 13, 2023

Tragedy struck A central Massachusetts hotel when a fire erupted at an emergency shelter site in a Red Roof Inn, housing displaced and migrant families.

Local officials have long been concerned about the safety of these families and the state's struggle to secure temporary housing for the homeless and migrants. The fire began "in the area of a stove in a hotel staff area." Cooking left unattended on a stove is being blamed for the fire at the Red Roof Inn on Route 146 in Sutton. The fire happened the same day the National Guard was deployed to some migrant shelters and members of the guard helped people get out of their rooms during the fire.

No serious injuries were reported but one person was taken to the hospital after breathing in too much smoke.

Although local fire officials had previously voiced their concerns about their ability to respond to emergencies at the Sutton hotel, these concerns seemed to fall on deaf ears. Sutton Fire Department had expressed concern to state officials regarding the potential for a fire at the hotel, noting that it would likely require the assistance of every department in the fire district, and possibly even neighboring districts. The

state's decision has been questioned as their use of hotels without essential safety features such as sprinklers and fully addressable alarm systems, especially considering the language barrier faced by many occupants.

A firefighter outside of the Red Roof Inn shelter fire

Lessons Learned:

- Periodic Fire Department inspections should be conducted as required
- Cooking appliances in use must never be left unattended
- Lack of fire prevention devices in the shelter increases the probability of fatal fires

Fire Summary:

Location: Homeless shelter in Bronx, NY
Date: December 7, 2012 and December 9, 2012

At this Bronx, NY shelter, improperly stored mattresses were ignited in two separate incidents only two days apart. The first incident occurred when a child was playing with a match, and set a mattress on fire on the second floor of the building. This was a small fire that resulted in no injuries and was quickly extinguished. The second fire started when another child was playing with matches who also ignited a mattress that had been stored in the building's lobby. Smoke and flames from the resulting fire spread into the stairwell and the upper floor hallways. There were no building wide alarms or hallway smoke detectors in the building to notify occupants of the fire. Two building occupants tried to use portable fire extinguishers to extinguish the fire but found them empty and inoperable. With the smoke and flames having filled the hallways, many occupants tried to escape by using the fire escapes. However, occupants reported that some of the fire escapes were broken, having missing steps and jammed ladders. The fire resulted in four adults and two children being seriously injured. It was determined that the mattresses that were involved in these fires had not been properly removed from the building. Instead, they were stacked in the lobby and propped against walls in common areas of the building. It was also determined that the fire escapes were not in good working order, many of the fire extinguishers were not operable, and that the building did not have a fire alarm or sprinkler system. All of these factors contributed to the devastation that resulted from this fire.

Pictures show the interior of the Bronx, NY shelter after the second mattress fire. There was severe smoke and fire damage in the hallways and stairwells.

Lessons Learned:

- Excess debris and improper storage presents a fire hazard
- Lack of a building wide fire alarm system will cause significant delays in implementing a building evacuation
- Fire escapes must be inspected to ensure that they are in working order
- Fire extinguishers must be visually inspected monthly to ensure that they are in working order

Fire Summary:

Location: Homeless shelter in New York, NY
Date: August 28, 2012

A homeless shelter in New York City caught fire and required complete evacuation. The fire started when a lit cigarette left unattended by a tenant ignited a mattress on the fourth floor. The fire was quickly extinguished by the building's sprinkler system. One resident suffered from and was treated for smoke inhalation. Fortunately, the fire was confined to a single apartment. The shelter had recently been fined more than $45,000 by the Department of Buildings for safety violations, including a violation for failure to provide sprinkler protection. Records show that the building had seven active building violations at the time of the fire.

Lessons Learned:

- Periodic Fire Department inspections should be conducted
- Ignition sources, such as lit cigarettes, should not be left unattended
- Fire safety education may be beneficial to homeless shelter residents

Picture shows firefighters in the street near the New York, NY shelter after the fire was extinguished. The fire was ignited by an unattended cigarette.

All three shelter fires demonstrate how important it is for shelter staff to be proactive. Fire guards and other safety staff should make it a priority to identify any potential fire safety violations and correct them before they are identified by the Fire Department or Buildings Department.

4. Fire Guard Responsibilities

The responsibilities of shelter fire guards include:

- being familiar with the fire alarm system of the shelter in which they are employed and the emergency preparedness plan for that shelter.
- continuously patrolling all areas of the shelter at least once an hour.
- patrolling the area(s) affected by the out-of-service fire protection system, keeping constant watch for fires.
- maintaining a record of patrols
- immediately reporting any fire to the department and notifying emergency preparedness staff designated for the shelter.
- assisting with evacuating shelter occupants and other employees during emergency drills and actual emergencies.
- being aware of the location of portable fire extinguishers
- being knowledgeable in the use of portable fire extinguishers,
- performing other fire-safety related duties as dictated by their supervisors.

F-02 Certificate of Fitness holders are generally supervised by one of the following:

- F-80 Certificate of Fitness holder for Coordinator of Fire Safety & Alarm Systems in Shelters
- F-89/T-89 Certificate of Fitness holder for Fire and Life Safety Director
- Impairment Coordinator

In most shelters the role of the Impairment Coordinator will be delegated by the building owner to either the F-80 or F-89/T-89 Certificate of Fitness holder. In the absence of a specific designee, the building owner will be considered the impairment coordinator. All shelters require either an F-80 or F-89/T-89 holder on the premises at all times depending on the type of fire alarm system installed. F-80 holders are required in any building or occupancy required to have a one-way voice communication system, regardless of occupancy classification, and that is operated or occupied for more than fifteen persons for a period of more than 30 days, including emergency shelters.

The Certificate of Occupancy is the official document that establishes the maximum number of occupants authorized to be in the shelter. If the Certificate of Occupancy establishes the lawful occupancy as being more than 15 persons, an F-80 C of F holder is required, even if there are actually less than 15 persons in the building at any particular time. Any shelter that is required to or voluntarily installs a fire alarm system with one-way voice requires an F-53 Certificate of Fitness holder and two-way voice communication will require a Fire and Life Safety Director on the premises.

The F-02 Certificate of Fitness holder will take instructions regarding their responsibilities from their supervisor. If an out of service condition occurs, the F-02 C of F holder who is performing regular fire watch patrols in that area may continue to patrol the area surrounding the out-of-service condition while paying special attention to the fire hazard. It is at the discretion of the F-02 C of F holder's supervisor to assign fire guards their patrols. F-02 Certificate of Fitness holders should be knowledgeable of and prepared to fulfill any of these responsibilities.

Although the F-02 Certificate of Fitness may be familiar with the shelter in which they are employed, they should receive an orientation from their supervisor or other responsible person designated by the building owner upon the start of their employment. This orientation must include information to ensure they are familiar with the emergency preparedness plan for the shelter.

Fire guards and their supervisors should review the topics and questions below:

- Does the fire guard have a working cell phone for the purpose of communicating with their supervisor, other staff and to call 911 if necessary?
    - If the answer is no, the fire guard must obtain a working cell phone prior to starting their patrols

- Are fire extinguishers provided in the fire guards area of responsibility?
    - If yes, where are they located?
    - If no, the fire guard must carry an extinguisher with them

- Are fire alarm pull stations provided and operational in the fire guard's area of responsibility?
    - If yes, the fire guard should be made aware of their location.
    - If no, the procedures that will be used to notify the building occupants of a fire should be discussed.

- Discuss the name and contact information of building personnel to notify upon discovery of building hazards or fire. This information should be readily available to the fire guard during patrols.

- Discuss information regarding the extent of any out-of-service condition in the fire guard's area of responsibility?
    - Is the alarm system operational?
        - If no, what area or area(s) are out-of-service?
    - Is the sprinkler system operational?
        - If no, what area or area(s) are out-of-service?
    - Is the standpipe system operational?
        - If no, what area or area(s) are out-of-service?

- Are there hazardous materials stored and/or being used on the premises?

    - If hazardous materials are present, the fire guard should assess the risk of the out-of-service situation. The risk may be affected by the following:
        - The level of danger of the hazardous materials
        - The quantity of the hazardous materials
        - The number of building occupants in the affected area
        - The characteristics of the building occupants
            - Will shelter residents require extra assistance during an evacuation?
            - Are there special needs residents in the shelter?
            - Is there a language barrier?
        - The number of impaired fire protection systems in the building.

- How many building occupants are in the shelter?

- What type of building occupancy is the shelter?

- What kind of fire protection covers other building areas?

4.1 Fire Guard Patrols

Fire guards are responsible for patrolling every area of the shelter at least once every hour.
Some shelters assign a fire guard to patrol a particular area of responsibility. For example, if there are four floors in a shelter, depending upon the floor area of each floor, there may be four fire guards on duty at all times, one patrolling each floor. During their patrol they must look for signs of fire and investigate any signs of smoke in the shelter. They must also be alert for any fire safety violations and upon discovery, report them immediately to their supervisor.

In many cases, the fire guard is capable of correcting the fire safety violation during the course of conducting his/her fire guard duties. Ultimately, the Impairment Coordinator or FLSD must ensure that the violation is corrected.

Shelters should be patrolled regardless if an out-of-service condition is present or not. Every area of the shelter should be patrolled at least once every hour. Individual fire guards may be assigned to both perform hourly patrols and perform fire watch during an out-of-service situation. All patrols must be recorded by the fire guard. Please

reference the section “Fire Watch Patrol Record” for more detailed information. Patrols may vary depending on the shelter.

During patrols, fire guards must ensure that they are following these specific guidelines:

- **Inspect all exits, stairways and hallways to determine condition and availability for use.** All exits, stairways and hallways must be kept free of obstructions. Obstructions may prevent occupants from exiting the shelter in case of an emergency. All routes of exit, must be clear, with doors opening in the direction of travel.

  While shelter is occupied, no exit doors can have locks, bolts and chains. If locks are discovered, they must be immediately removed. The fire guard must then report the fire safety violation to the building owner. The building owner must make sure that the chains or locks are permanently removed and not in use.

- **Examine all doors in the area of patrol to determine operation conditions and availability for use.** Particular attention must be paid to the stairways and other areas of the shelter where fire doors are installed. Exit into the stairway must be available from each floor of the building. Panic hardware may be installed on the door. The panic hardware permits the occupants to exit quickly from the premises in case of an emergency. The fire guard must make sure that there are fire doors and they are working condition.

- **Ensure fire doors have hold open devices.** The fire guard must make sure that hold-open devices and automatic door closers, where provided, are working properly. When fire doors have hold open devices that are connected to the building's fire alarm system, it will release, allowing the door to close automatically when the building's fire alarm system is activated.

  If a hold-open device or automatic door closer is out of service for repairs, the door must remain in the closed position. Swinging fire doors must close from the full-open position and latch automatically. The door closer must swing with enough force to close and latch the door from any open position.

- **Ensure that exits are properly identified and that hallways, stairways, etc. are** must clearly indicate the path of egress. Exit directional signs posted above doors and emergency lighting must be illuminated as required by NYC building code.

- **The entire premises must be checked daily for potential ignition sources.** Any potential ignition sources that are discovered must be corrected or immediately removed.

- **Enforcement of no smoking regulations.** The fire guard should make sure that smoking (including vaping) does not occur in the shelter. Smoking tends to occur in bathrooms, hallways and stairwells, so the fire guard should pay particular attention to those areas.

- **Continuously inspect the shelter for accumulation of trash.** garbage must not be allowed to accumulate anywhere inside the shelter. An accumulation of trash is a fire hazard. It may be easily ignited by a stray spark. All trash and garbage must be promptly removed from the building to an approved outdoor location to

prevent it from becoming a fire hazard. Any accumulation of trash or garbage should be promptly reported to the building owner.

- **Be knowledgeable of the location of and how to use fire extinguishers and fire alarm pull stations.** All fire extinguishers and pull stations must be clearly visible. The fire guard must know how to activate the fire alarm pull station in case of a fire emergency. Fire guards should visually inspect the sprinkler and standpipe systems (if applicable). Fire guards must report any recognized defects to their supervisor. Serious defects must be reported to the Fire Department.

- **Check sleeping areas for fire hazards and typical causes of fire.** Fire guards should inspect sleeping areas in shelters for potential fire hazards. Shelter clients sometimes tamper with portable fire extinguishers, smoke detectors and carbon monoxide detectors. Sprinkler heads are often tampered with or painted over in sleeping areas as well.
- **Be on the lookout for suspicious behavior.** Fire guards should also be aware that sometimes fires in shelters are started intentionally. All shelter employees should be aware of and must pay close attention to any type of suspicious behavior. Fire guards who witness suspicious behavior should inform their supervisor immediately.

Fire guards should be aware of these hazards and the typical causes of fire in shelters (listed below) and should report them to their supervisor, if found.

4.2 Fire Guards on Duty

Fire watch patrols by an F-02 certificate of fitness holder must be conducted whenever the shelter is occupied. A sufficient number of fire guards must be provided such that each floor or area in which the fire protection system(s) are out of service is patrolled at least once an hour.

The FDNY recommends that the minimum number of certified fire guards on duty to perform fire watch is the ratio of one fire guard for every 250 occupants.

The area patrolled by each fire guard may be further limited by the Fire Department depending on the size and set up of the shelter, impediments to patrol, nature of the occupancy, fire risk, and other fire safety considerations.

4.3 Out-of-Service Conditions

When a required fire protection system in a shelter (e.g. sprinkler system, fire alarm system or standpipe system) is out of service or otherwise impaired, fire watch must be consulted by one or more persons holding an F-02 certificate of fitness. If there are no F-02 COF holders, the building should be evacuated.

The decision to evacuate or continue a fire watch is at the discretion of the Impairment Coordinator. Since fire guards are already on continuous patrol in shelters, additional fire guards are not required when a fire protection system is out of service. The fire guard who would normally be assigned to patrol the area of the out-of-service condition may continue patrolling that area while paying special attention to the fire

hazard. Fire guards should be made aware if the out-of-service system hinders the egress routes of the affected area. For more information regarding out-of-service situations, please reference Chapter 9 of the 2022 Fire Code.

In some cases, Fire Department personnel may be present and provide additional direction on the number of required fire guards or other fire protection measures required until the out-of-service fire protection system is restored to good working order.

4.4 Fire Watch Patrol Record

All parts of the premises, including sleeping areas, must be frequently patrolled by an F-02 certificate of fitness holder. A written record of the fire watch patrol required by the Fire Code and the Rules of the City of New York must be maintained on the premises or other approved location for a minimum of 3 years. Records must be made available for inspection by any department representative, and a copy of such records must be provided to the department upon request. The department additionally may require that certain records be filed with the department.

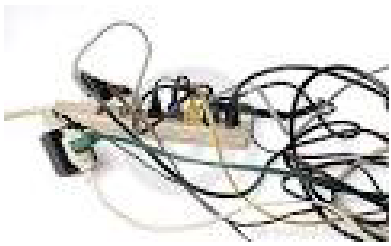
There are recommended methods of supervising the conduct of the fire watch patrol, such as a watchman's clock, key stations, or RFID scanning.

The fire watch patrol record must be signed by the fire guard. The following items should be recorded in the log:

(a) the number of patrols or fire watch inspections conducted
(b) any defects discovered
(c) violations that have been noticed
(d) the date, name, Certificate of Fitness number and signature of the fire guard who conducted the patrols or fire watch inspections

5. Typical Causes of Fire in Shelters

Fire guards should be familiar with the typical causes of fire in a homeless shelter so that they can be aware of these hazards and prevent fires. If fire guards become aware of a fire hazard, they should inform their supervisor immediately. Typical causes of fire in homeless shelters are listed below:

Overloaded extension cords 	Unattended and prohibited microwaves 	Misuse of portable heaters 	Unattended candles 
Hot plates  		Halogen lamps 	Overloaded electrical outlets and power strips 
Unattended cigarettes or smoking in prohibited areas 		Unattended or improperly used ovens and stoves 	

5.1 Common Problems in Shelters

The following is a list of common problems found in shelters that can endanger the safety of occupants and employees. Fire guards should be familiar with these problems so that they can avoid them.

A. Failure to maintain proper recordkeeping.
The fire guard must ensure that all required records of fire guard patrols and fire watch are updated and kept on the premises in accordance with the 2022 New York City Fire Code.

B. Failure to assist in making sure the Fire Alarm Systems is inspected, tested and maintained.
Fire guards who notice that a fire alarm system is in need of inspection, maintenance or testing during their patrols must notify their supervisors immediately.

C. Lack of Knowledge Regarding Proper Actions to take when a Fire Protection System is Out-of-Service.
Fire guards must ensure that they are following the procedures outlined in Chapter 9 of the New York City Fire Code and their supervisor's instructions upon the discovery of an out-of-service situation within a shelter.

D. Improper Storage
Recycle bins and trash containers are often stored within the shelter corridors and stairwells which can obstruct means of egress and can be a fire hazard.

Additionally, client's personal items are often found in the hallways, blocking means of egress. Items are often improperly stored in hallways, under stairwells, inside mechanical rooms, within stairwells and electrical rooms. Extra storage can obstruct sprinkler heads.

Hallway obstructions

Mattresses improperly stored in the passageway leading to the stairwell

E. Required Fire-rated doors.

Required fire-rated doors in stairwells, boiler rooms, and electrical rooms are often "propped" open when they should not be. In some shelters, door hardware such as knobs and latching mechanisms are broken or disabled. Improper hardware is sometimes used on the doors. Fire guards must ensure that Fire-rated doors remain closed, any improper hardware is removed, and damaged hardware is repaired or replaced.

Fire doors propped open using a portable fire extinguisher **(illegal)**

Fire doors tied open **(illegal)**

Fire door propped open with a doorstop, which is **illegal**

F. Open flames, unauthorized use of portable heating appliances and smoking

Fire guards must ensure that unlawful activities are not taking place in shelters.

G. Emergency Lighting

Fire guards should immediately notify their supervisors if they discover that battery operated emergency light fixtures are not functioning.

6. Non-fire Emergencies in Shelters

6.1 Medical Emergencies in Shelters

If a fire guard becomes aware of an injury or other medical emergency at the shelter premises, they should call 911 and provide as much of the following information as possible. The fire guard is NOT required to have specific medical knowledge or training, however when communicating with medical responders the ability to provide this information is helpful.

- Caller location and the location of the injured (if different from your location), including the business name, street address, cross street, floor and room number (if applicable)
- Caller name and telephone number for a return call
- The number of person(s) injured
- The injured's chief complaint or present condition (e.g. bleeding, breathing erratically, conscious/unconscious, etc)
- Any hazards involved

The caller should follow the exact instructions of the 911 operator and emergency personnel.

Fire guards should assist their supervisor with:

- alerting trained employees who are CPR qualified, as noted in the emergency preparedness plan. Only trained employees should provide first aid assistance. If there are no trained employees on the premises, designate a responsible person to stay with the injured.

- arranging an elevator to be placed on standby (if the shelter has elevators).

- controlling access to the scene.

- assigning a designated person to meet the ambulance at the nearest entrance or emergency access point and direct them to victim(s)

The injured should not be moved unless their location is deemed unsafe.

6.2 Bomb or other explosion threats in Shelters

- Call 911 and provide the following information:
    - Your location and the location of the suspicious package (if different from your location), including the business name, street address, cross street, floor and room number (if applicable)
    - Name and telephone number for return call
- Do not touch/move/open the article.

If a person receives a suspicious package and is unable to verify its contents, they should follow the emergency reporting protocol below:

6.3 Chemical incident or release in Shelters

- In case of a major spill, the Fire Department must be notified by calling 911 immediately. After calling 911, the caller's supervisor should be notified.
- The caller should wait for and follow instructions from the first responders.

7. Emergency Reporting

Any owner, occupant or other person who becomes aware of a fire or explosion or any other emergency must immediately report such emergency to the department. No owner or other person can issue any directive or take any action to prevent or delay the reporting of a fire or other emergency to the department.

A durable, easy to read sign that has the following information for reporting a fire or other emergency (including the text to be inserted based on the building's location) must be posted in a noticeable location in the lobby by the main front entrance of a Group A, B, E, F, I M and R-1 building:

Fire alarm box at _____ and _____
(Name of street) (Name of street)

or

Always use "911" to report a fire. Non-emergency notification required by FDNY should be made the number below depending upon the borough in which the property is located.

Bronx properties	(718) 430-0200
Brooklyn properties	(718) 965-8300
Manhattan properties	(212) 570-4300
Queens properties	(718) 476-6200
Staten Island properties	(718) 494-4296

The fire guard must be provided with at least one approved way to notify the FDNY and any staff on the premises responsible for the implementation of the emergency preparedness plan. Fire guards can use cell phones to make immediate notifications. Fire guards should also ensure that there is enough power in their phones to cover their shift. Notifying by phone is the most direct and effective way to notify the Fire Department.

When a fire is discovered the fire guard must also use the fire alarm pull station, if available. The fire guard must notify the Fire Department and their supervisor. The fire guard's supervisor will also issue instructions to the fire guard that must be followed. For example, the supervisor may instruct the fire guard how to take the safest evacuation route from the building.

In case of a fire emergency, building occupants may have to be evacuated. Occupants on the fire floor and the floor above are most seriously threatened by the spread of the fire and must be evacuated first. If the fire guard is responsible for assisting in the evacuation, the fire guard should remain composed and in control of the situation.

The fireguard must speak in a clear and concise manner when assisting with the evacuation. The fire guard's instructions and actions play an important role in reducing panic during an emergency. Occupants should be instructed to stay calm and move quickly to the nearest exit in an orderly manner.

The fire guard should guide the occupants not to use the elevators and should identify the stairwells or other ways out of the building for occupants.

In summary, the notification procedures should be:

- Call 911 or the Fire Department Dispatcher number in the borough where the building is located.
- Notify the building occupants using the fire alarm pull station, if available.
- Notify the designated building personnel (e.g. F-80 or F-589/T-89 Certificate of Fitness holder or building owner).

8. Fire Alarm Systems

Fire alarm systems are classified as automatic, manually activated, or both. If a fire condition occurs, the alarm system warns the building occupants and employees by activating loud sirens, bells, speakers, horns and flashing lights. The flashing lights are otherwise known as strobes.

Building owners must ensure that their shelters have fire alarm systems approved by the New York City Fire Department. Fire guards must be trained on and familiar with the fire alarm system in their shelter. If they become aware that there is an issue

with any part of the fire alarm system, they must notify the impairment coordinator immediately. Please keep in mind that fire guards are not allowed to install or modify any components of the fire alarm system.

8.1 Types of Fire Alarm Initiating Devices

Automatic Detection Devices - Automatic detection devices have sensors which detect heat, smoke or the flow of water in a fire alarm system. The different types of automatic detection devices are described below:

Area Smoke Detector - A smoke detector is a device that detects visible or invisible particles of combustion. Smoke detectors have been shown to be very effective in reducing fire damage and loss of life. Smoke detectors should be cleaned and maintained every six months only by an S-97 or S-98 Certificate of Fitness holder.

Smoke detector

Elevator lobby smoke detectors - Smoke detectors that when activated will recall elevators automatically to the designated landing.

Beam detectors are used to protect large areas where area smoke detectors are not practical. This detector consists of a light beam that when broken by any combustible particle the detector will be triggered.

Duct smoke detectors are designed to sample air flow in the HVAC air duct and to detect the presence of particles of combustion. These smoke detectors will upon activation, shutdown the system's fan.

Duct smoke detector

Heat Detector - A sensor that detects abnormally high temperatures or rate of temperature rise. Heat detectors have been shown to be very effective in reducing fire damage.

Heat Detector

Heat detectors are available in two general types: **rate-of-rise and fixed temperature.** Heat detectors can only be tested by an authorized fire alarm technician. Fire guards should notify their supervisor if they encounter a detector that is not working.

a. The rate-of-rise heat detectors activate the alarm when the room temperature increases at a rapid rate of 12°-15° Fahrenheit (F) per minute. This type of detector is more sensitive than the fixed temperature detector. The rate-of-rise heat detector does not have to be replaced after it has been activated.

Rate-of- rise heat detector

b. Fixed-temperature heat detectors trigger the alarm when the detector components melt at a preset temperature level. The fixed-temperature heat detectors normally require replacement after they have activated an alarm. Intelligent heat detectors will usually reset themselves.

The fixed-temperature heat detectors consist of two electrical contacts housed in a protective unit. The contacts are separated by a fusible element. The element melts when the temperature in the room reaches a preset level. This allows the contacts to touch. When the contacts meet the detector activates the fire alarm.

Fixed-temperature heat detectors

Heat detector with protective mechanical guard

Where subject to mechanical damage, a heat detector must be protected by an approved UL/FM mechanical guard as shown in the picture above. This guard will also make it more difficult for building occupants to tamper with the detectors. Proper preventative measures must always be taken to protect all fire alarm initiating devices, especially when construction is occurring in the shelter.

8.2 Manual or pull station alarm-initiating devices:

All building occupants and employees must be knowledgeable and trained how to manually activate the alarm initiating devices. Generally, these pull stations are

installed at several locations on the premises and are usually located near the exits of a building. **Activating the pull station is the most effective way to notify building occupants and employees in case of an emergency.**

All fire alarm pull stations installed or relocated after April 1, 1984 should be installed so that the handle is approximately four feet from the floor and it is located within 5 feet of the exit doorway opening. Manual stations should never be blocked or obstructed.

There are two types of manual alarm initiating devices. They are called **single action** and **double action** stations.

Single action pull stations: Single action stations require only one step to activate the alarm. The cover on these alarm stations serves as a lever. An example of a single action station is shown below. This kind of alarm station is often found indoors, e.g., in office buildings. When the cover is pulled down, it allows a switch inside to close. This sends the alarm signal.

Single action station

Activating a single action station

Double action pull stations: Double action stations require two steps in order to activate the alarm. The user must first break a glass, open a door or lift a cover. The user can then gain access to a switch or lever which must then be operated to initiate an alarm. To activate this type of alarm station the cover must be lifted before the lever is pulled. This kind of double action station is often found indoors. Another kind of double action break glass station requires someone to break a small pane of glass with a small metal mallet.

At least one extra glass plate is required for each fire alarm box. Extra glass plates must be stored on the premises.

Double action stations

Activating a double action station

Fire guards must know how to manually operate each alarm station on the premises in case of a fire emergency. Once activated, the fire alarm system can not be re-set at the fire alarm manual pull station only. The alarm must be re-set at a main Fire Alarm Control Panel (FACP) after the pull station is reset to its normal condition. The alarm may be re-set by building personnel only after being instructed to do so by a Fire Department representative. Once activated, a key may be required to reset manual pull station.

Fire guards should be aware that in some buildings, Fire Alarm pull stations may exist that have a white stripe across them. Prior to 2008 a manual pull station must have a white stripe across it which shows that station sends a signal to the central monitoring company. Any fire alarm system which was designed under the 2008 building code in any occupancy must send a signal to the central monitoring company, the white stripe is no longer required.

Although buildings constructed after 2008 may not have pull boxes with white stripes, it is still important that fire guards are knowledgeable about which manual fire alarm pull stations send a signal to the Central Station Company and which pull stations do not.

8.3 Carbon Monoxide Devices

Carbon Monoxide Alarm
A single or multiple-station alarm responsive to carbon monoxide, containing a build-in initiation sensor, notification device, and power supply (battery or electric with battery backup) and is not connected to a system. Most homeless shelters require carbon monoxide alarms.

Carbon Monoxide Detectors
A device that is responsive to carbon monoxide and is connected to the fire alarm control panel.

Carbon monoxide detectors are required in any building that has fossil (gas and oil) fuel burning equipments.

Carbon monoxide detector

A carbon monoxide detector is a device indicating a concentration of carbon monoxide at or above the alarm threshold that could pose a risk to the life safety of the occupants and that requires immediate action. Carbon monoxide detectors must be installed, tested, and maintained by qualified personnel in accordance with the manufacturers instructions.

If a carbon monoxide detector is in alarm condition and cannot be reset, this could indicate that carbon monoxide is still present. Until carbon monoxide can be excluded as the source of the alarm, the assumption should be that carbon monoxide is present and appropriate life safety precautions have to be followed.

8.4 Sprinkler Water Flow Detector

A sprinkler water flow detector is a device which initiates an alarm indicating a flow of water in a sprinkler system. It is designed to signal when water flows through the fire protection system.

Water flow detector

8.5 Audio and Visual Notification Devices

Audio and visual notification devices are fire alarm system components such as bells, horns, speakers, lights or text displays that provide audible, tactile or visible out puts or any combination.

Horns, Horn/Strobes

Horns

Strobes

Horn Strobes

Combination speaker / strobe appliances

Speaker

Speaker strobe

Gongs/Bells

Gongs/Bells

8.6 Communication System

A functioning communication system is required as a part of most fire alarm systems. One way-voice communication systems are generally found in homeless shelters.

One-way voice communication entails the use of a public address system. Some buildings also have a public address system installed which is not part of the approved fire alarm system. Although not approved, the public address system may be used to warn and instruct building occupants in case of a fire emergency. Communication systems that are part of the fire alarm system should only be used for fire and drill related purposes.

Two-way voice communication is a form of transmission in which both parties involved have the ability to transmit information. This is useful during an emergency and allows staff members to report the conditions of a fire emergency from the fire floor back to the Fire Safety Director or Coordinator of Fire Safety & Alarm Systems in Homeless Shelters or Fire and Emergency Drill Conductor in the lobby at the fire command center. Two-way voice communication uses warden phones that are placed at several locations throughout the building, usually near the exit stairways in the building.

9. Sprinkler System

Sprinkler systems are required by law in buildings occupied as homeless shelters. Sprinklers are devices for automatically distributing water on a fire. Sprinkler systems are intended to control the spread of fire. Activation of the sprinkler system will cause an alarm to be transmitted to an approved central station and will also sound an alarm throughout the shelter.

The two different types of sprinklers are Automatic Sprinkler systems and Non-Automatic sprinkler systems. In most shelters, the sprinkler system is automatic since shelters are heated.

Automatic Sprinkler System – consists of a series of pipes at or near the ceiling of each story of a building. The pipes are filled with water or compressed air and equipped with automatic devices to release water for fire fighting. These devices are called sprinkler heads. Automatic sprinkler systems require water-flow devices.

Non-automatic Sprinkler System - under normal conditions the pipes in the non-automatic sprinkler systems are dry. Water is supplied when necessary, by pumping water into the system through the Fire Department connection.

Sprinkler heads must never be painted over and must not accumulate dust and debris. Sprinkler heads that have been painted over or have accumulated debris or

foreign material must be replaced immediately with a new sprinkler head. If they are not replaced, they will not open at the desired temperature, and this will prevent the sprinkler head from functioning properly in a fire emergency. The pictures below show examples of sprinkler heads that have been painted.

The Coordinator of Fire Safety & Alarm Systems or the Fire and Life Safety Director are responsible for ensuring that the inspection, testing and maintenance of the sprinkler system takes place as required and on schedule. Depending on the type of sprinkler system in the shelter, inspections, testing and maintenance could occur on a variety of different frequencies. The F-80 or F-89/T-89 holder is responsible for verifying that the person who is inspecting, testing, or maintaining the system has the proper C of F and/or license and that a written record of their work is kept on the premises. Annually and once every five years sprinkler systems must be tested and maintained by either a master fire suppression piping contractor with an S-12 C of F, or a person who possesses a master plumber license in addition to an S-12 C of F. For the full inspection, testing, and maintenance schedule for sprinkler systems, fire guards should reference NFPA 25. It is also highly recommended that fire guards familiarize themselves with the S-12 Certificate of Fitness for Citywide Sprinkler Systems, which can be found on the FDNY website at the web address below:

http://www.nyc.gov/html/fdny/pdf/cof_study_material/s_12_citywide_sprinkler_systems.pdf

10. Standpipe Systems

Standpipe systems provide water that firefighters can manually discharge through hoses onto a fire. Water is fed into a piping system. The piping runs vertically and horizontally throughout the building. The pipes running vertically are usually called risers. The risers are usually located in the stairwell enclosures or in the hallways in the building. The piping system supplies water to every floor in the building.

Standpipe systems are used in buildings where it may be difficult for the Fire Department to pump water on the fire. For example, standpipe systems are required in buildings that are over 75 feet in height. The top of the standpipe riser extends up onto the roof.

The Coordinator of Fire Safety & Alarm Systems or Fire and Life Safety Director is also responsible for ensuring that the inspection, testing and maintenance of the standpipe system will take place on schedule. Automatic and non-automatic standpipe systems must be inspected, tested and maintained by a competent person holding a C of F, employed by the owner, to see that all parts of the system are in good working order, and that the Fire Department connection or connections, if any, are ready for immediate use by the Fire Department. A detailed record must be kept of each inspection for examination by any representative of the Fire Department.

The Coordinator of Fire Safety & Alarm Systems or Fire and Life Safety Director is responsible for verifying that the person who is inspecting, testing, or maintaining the system has the proper C of F and/or license and that a written record of their work is kept on the premises. Annually and once every five years standpipe systems must be tested and maintained by either a master fire suppression piping contractor with an S-13 C of F, or a person who possesses a master plumber license in addition to an S-13 C of F. For the full inspection, testing, and maintenance schedule for standpipe systems, fire guards should reference NFPA 25. It is also highly recommended that Coordinators fire guards familiarize themselves with the S-13 Certificate of Fitness for Citywide Standpipe Systems, which can be found on the FDNY website at the web address below:

http://www.nyc.gov/html/fdny/pdf/cof_study_material/s_13_citywide_standpipe_system.pdf

11. Portable Fire Extinguishers

Fire guards must be familiar with the different types of portable fire extinguishers. They should know how to operate the extinguishers in a safe and efficient manner. They must know the difference between the various types of extinguishers and when they should be used. Portable fire extinguishers weighing 40 lbs. or less must be installed so that the top of the extinguisher is not more than 5 ft above the floor. Hand-held portable fire extinguishers weighing more than 40 lbs. must be installed so that the top of the extinguisher is not more than 3.5 feet above the floor. The clearance between the bottom of the extinguisher and the floor must not be less than 4 inches. In other words, **no fire extinguisher is allowed to be on the floor.**

Fire extinguishers must be located in conspicuous locations where they will be readily accessible and immediately available for use. These locations must be along normal paths of travel.

In the event that a fire extinguisher has been discharged, it must be fully recharged or replaced prior to being used again. Portable fire extinguishers are important in preventing a small fire from growing into a catastrophic fire; however, they are not intended to fight large or spreading fires. Portable fire extinguishers should only be used when there is an available means of egress that is clear of fire. By the time the fire has spread, fire extinguishers, even if used properly, will not be adequate to extinguish the fire. Such fires should be extinguished by the building fire extinguishing systems or trained firefighters only.

In case of any fire, 911 must be called. Fire extinguishers must be used in accordance with the instructions painted on the side of the extinguisher. They clearly describe how to use the extinguisher in case of an emergency. Fire guards should be familiar with the use of portable fire extinguishers. When operating a fire-extinguisher, fire guards should remember the acronym **P.A.S.S.** to make sure it is used properly. **P.A.S.S.** stands for **P**ull, **A**im, **S**queeze, **S**weep. Specifically, fire guards should ensure that they do the following:

Pull the pin from the handle
Aim the nozzle at the base of the fire
Squeeze the lever
Sweep the nozzle from side to side until the fire extinguisher is emptied.

11.1 Different Types of Portable Fire Extinguishers

Fire extinguishers are classified by the type of fire that they will extinguish. Some fire extinguishers can only be used on certain types of fires, while other fire extinguishers are made to extinguish more than one type of fire. The portable fire extinguisher classification is indicated on the right side of the extinguisher. For more detailed information regarding the different portable fire extinguisher classifications and the types of fires they extinguish, reference the chart below.

A **Class A** fire extinguisher is used for ordinary combustibles, such as wood, paper, some plastics and textiles. This class of fire requires the heat-absorbing effects of water or the coating effects of certain dry chemicals. Extinguishers that are suitable for **Class A** fires should be identified by a triangle containing the letter "A." If in color, the triangle should be green.

A **Class B** fire extinguisher is used for flammable liquid and gas fires such as oil, gasoline, etc. These fire extinguishers deprive the fire of oxygen and interrupt the fire chain by inhibiting the release of combustible vapors. Extinguishers that are suitable for **Class B** fires should be identified by a square containing the letter "B." If in color, the square should be red.

A **Class C** fire extinguisher is used on fires that involve live electrical equipment which require the use of electrically nonconductive extinguishing agents. (Once the electrical equipment is de-energized, extinguishers for Class A or B fires may be used.) Extinguishers that are suitable for **Class C** fires should be identified by a circle containing the letter "C." If in color, the circle should be blue.

A **Class D** fire extinguisher is used on combustible metals such as magnesium, titanium, sodium, etc., which require an extinguishing medium that does not react with the burning metal. Extinguishers that are suitable for **Class D** fires should be identified by a five-point painted star containing the letter "D." If in color, the star should be yellow.

K

A **Class K** fire extinguisher is used on fires involving cooking media (fats, grease and oils) in commercial cooking such as restaurants. These fire extinguishers work on the principal of saponification. Saponification takes place when alkaline mixtures such as potassium acetate, potassium citrate or potassium carbonate are applied to burning cooking oil or fat. The alkaline mixture combined with the fatty acid creates soapy foam on the surface which holds in the vapors and steam and extinguishes the fire. These extinguishers are identified by the letter **K**.

The most commonly sold portable fire extinguishers (PFEs) are labeled ABC extinguishers. Class ABC extinguishers are often the primary PFE in shelters. Class ABC extinguishers are dry chemical extinguishers that can be used to extinguish regular combustible fires, flammable liquid fires, and fires involving electrical equipment. ABC extinguishers are usually red in color and range in size from 5-20 lbs. The pictures below show an example of a Class ABC portable fire extinguisher.

Class A portable fire extinguishers are available but are not as prevalent as Class ABC extinguishers. Class A PFEs are also known as Air Pressurized Water (APW) fire extinguishers. Water is an extinguishing agent for regular combustibles.

These extinguishers are usually silver in color and approximately 3 feet in height and weigh approximately 25 lbs. Class A portable fire extinguishers are useful in buildings and occupancies that primarily contain Type A combustible materials. These PFEs should ONLY be used on ordinary combustible fires. The picture to the right shows an example of a typical Class A portable fire extinguisher.

Class A PFE

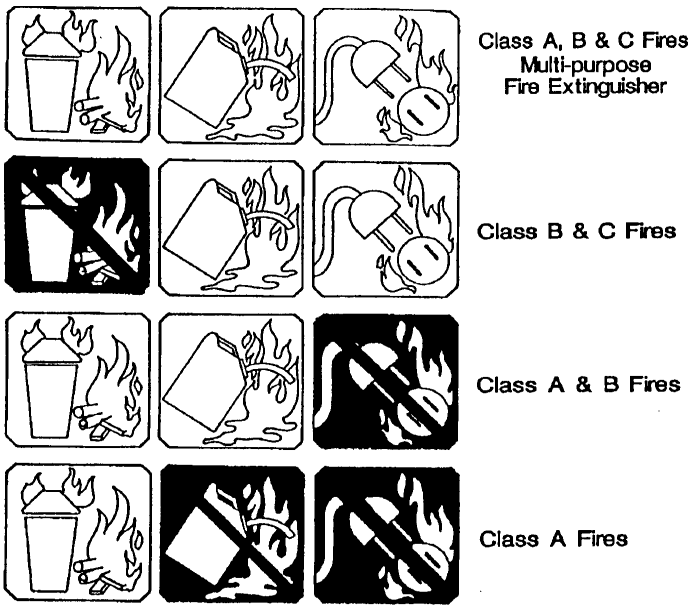
Portable fire extinguishers with a classification of "BC" are used to extinguish flammable liquid fires and electrical equipment fires. Portable fire extinguishers with a classification of just "B" or a classification of just "C" do not exist. "BC" portable fire extinguishers are red in color and range in size from five 5-100 lbs. or larger. Class BC portable fire extinguishers are filled with sodium bicarbonate or potassium bicarbonate. An example of a BC portable fire extinguisher is shown below:

As mentioned above, a portable fire extinguisher with just a "C" classification does not exist. The "C" classification indicates ONLY that the extinguishing agent is a nonconductor and is safe to use on live electrical fires. "C" fires will have either an "A" component, such as ordinary combustibles around the electrical item, or a "B" component such as an oil filled transformer or some electrical device involving flammable liquids. This is the reason "C" classifications are only attached to either a "B" or "AB" fire extinguisher. This classification specifies the fire extinguisher that is most appropriate for extinguishing the fire.

Class K portable fire extinguishers are often found in kitchens and are used to extinguish combustible cooking fluids such as oils and fats. There are different extinguishing agents found in fire extinguishers labeled Class K. Some of these extinguishing agents are dry and some are wet. Potassium bicarbonate is used in some dry chemical fire extinguishers and a chemical mist is used in some wet chemical fire extinguishers. The extinguishing agents in a Class K fire extinguisher are sometimes electrically conductive and should only be used AFTER the power has been turned off in the electrical appliance. An example of a Class K fire extinguisher is shown in the pictures below:

11.2 Labeling

Portable fire extinguishers are labeled so users can quickly identify the classes of fire on which the extinguisher will be effective. The marking system combines pictures of both recommended and unacceptable extinguisher types on a single identification label. The following is an example of typical labels.



11.3 Portable Fire Extinguisher Tags

Installed portable fire extinguishers must have an FDNY standard PFE tag affixed. This tag will have important information about the extinguisher. By November 15, 2019, all portable fire extinguishers must have the new PFE tags. The FDNY will only recognize new PFE tags and will be issuing violations to business that have PFE installed without a proper tag.

The color of the fire extinguishers may be changed by the FDNY every few years. The FDNY recommends two ways to verify the tag's legitimacy:

1. Hologram:

A real hologram strip shown on the tag 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.

2. QR code

IF you scan the QR code, it should direct you to the updated FDNY approved fire extinguisher company list. You can use the company list to verify if the company printed on the list is currently approved by the FDNY.

If your PFE tags cannot be verified via these two methods, contact your supervisor. If you suspect your PFE is a counterfeit, contact FDNY immediately by e-mail: Tags.Decal@fdny.nyc.gov

PFE tag (This tag is released for 2021-2023)

11.4 Portable Fire Extinguisher Monthly Inspection

MONTHLY

The portable fire extinguishers are required to be checked monthly. The owner of the business is responsible to select a person to do a monthly inspection. This monthly inspection is called a "quick check".

The **QUICK CHECK** should check if:
(1) the fire extinguisher is fully charged;
(2) it is in its designated place;
(3) it has not been actuated or tampered with;
(4) there is no obvious or physical damage or condition to prevent its operation.

The information of the monthly inspection record must include the date of the inspection, the name/initials of the person who did the inspection. This monthly quick check record must be kept on the back of the PFE tag or by an approved electronic method that provides a permanent record.

ANNUALLY

At least annually all Portable Fire Extinguishers must be checked by a W-96 Certificate of Fitness holder from FDNY approved company. After each annual inspection W-96 COF holder will replace the PFE tag. The information of the annual inspection record must be indicated on the new PFE tag.

12. Tents

There are a few shelter locations using tent type structures for shelter. These sites may be use LPG or diesel fueled trailers to provide hot water and heat. The use of LPG and/or fuel for human comfort requires a Letter of No Objection (LNO) from the FDNY. All requirements for fire safety including fire extinguishers, exit signs, no smoking, etc… remain the same for tents as they do for permanent shelter structures.

You must check with your supervisor on if lithium batteries are allowed on the premises. The use and/or charging of lithium batteries can have devasting consequences.

13. Lithium-Ion Battery Safety

Lithium-ion safety

Lithium-ion batteries are rechargeable batteries found in electric bikes, scooters, cars, laptops, tablets, phones, and many other common household devices.

Lithium-ion battery fires have caused deaths, serious injuries, and devastating damage to property around the city. It's important to follow rules for safe storage, charging, and disposal for these types of batteries.

If you own a lithium-ion powered device or plan to buy one, the FDNY has important safety tips that you should follow. These tips apply to all devices powered by lithium-ion batteries, including phones, tablets, laptops, e-cigarettes, toys, high-tech luggage, and even robotic vacuum cleaners.

Immediately stop using or charging battery and call 911 if you notice:

- **Fire or Smoke**
- **Overheating**
- **Change in color or shape**
- **Odd noises**
- **Leaking**
- **Strange smell**

ALWAYS:

- purchase and use devices certified by a Nationally Recognized Testing Laboratory (NRTL).
- follow the manufacturer's instructions for:
  - charging and storage.
  - correct battery, cord, and power adapter
- keep exit path clear at all times.
- plug directly into a wall electrical outlet for charging.
- keep batteries and devices at room temperature.
- store and/or charge batteries away from anything flammable.
- keep away from heat sources.
- bring batteries to a **NYC Battery Recycling Center.** Visit nyc.gov/batteries for more information.

NEVER:

- use aftermarket batteries or chargers.
- use damaged or altered batteries
- plug into a power strip or overload an outlet.
- overcharge or leave battery charging overnight.
- charge a battery or device under your pillow, on your bed, or near a couch.
- leave e-bikes or e-scooters unattended while charging.
- block your primary way in or out of a room/space with e-bikes, e-scooters, wheelchairs, etc.
- place batteries in Trash or Recycling bin. **It is ILLEGAL.** Visit nyc.gov/batteries for disposal locations and information.

In the event of a Fire, Leave and CLOSE the door. Call 911 once you are in a safe location.

Charging Lithium Ion

Lithium-ion batteries do not have to be fully charged; partial charge is the most suitable.

When **charging more than five (5)** personal mobility devices or their removable batteries, it must be in a **dedicated room with ventilation** and a self-closing door.

For a total battery capacity of 20 kilowatt-hours (kWh), a 2-foot separation between charging batteries is required. For a total battery capacity up to 50 kWh, a 3-foot separation is needed.

Chargers must only be used with a compatible battery pack. The original equipment manufacturer (OEM) charger interplays with the battery pack using the battery management system (BMS). The wrong battery/charger combination may not work safely. For example, the 100% cutoff to prevent overcharging, which damages batteries, may not work which can easily create hazardous conditions such as fires, explosions and/or injuries.

Always check with the manufacturer or retailer of the personal mobility device, an authorized repair shop or a testing laboratory such as Underwrites Laboratories (UL) to see if replacement is recommended or listed and safe for use with that device. Using unauthorized parts, including batteries and/or chargers, may cause damage, fire and possibly void your warranty.

Extinguishing Lithium-ion

Water may not prevent a battery from burning and spreading. Battery cells are known to explode and quickly spread to another battery. It can spread to another devices.

Fire Extinguishers
do not work
on lithium-ion batteries fires.

Unexpected Re-ignition.

Reignition is common. Lithium-Ion Batteries are known to unexpectedly re-ignite (without warning) minutes, hours and even days after all visible fire has been put out.

Lithium-ion batteries can enter an uncontrollable, self-heating state. This can result in the release of gas, cause fire and possible explosion.

These batteries may continue to generate heat even when there is no visible sign of fire. Once heat reaches a certain level fire may reignite on the battery and surrounding area.