

**FIRE DEPARTMENT • CITY OF NEW YORK**



**STUDY MATERIAL FOR THE EXAMINATION FOR  
CERTIFICATE OF FITNESS FOR**

**F-80 Coordinator of Fire Safety and Alarm Systems in  
Homeless Shelters (Premise Related)**

FDNY is posting this study material for public to use as “**a reference guide**”  
All applicants are required to attend the class and bring a certificate of  
completion from FDNY approved school to take FDNY F-80 certificate of Fitness  
written exam”

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## NOTICE OF EXAMINATION

**Title:**                   **Examination for Certificate of Fitness for Coordinator of Fire Safety & Alarm Systems in Homeless Shelters (F-80)**

**Date of Exam:** Written tests are administered Monday through Friday (except Legal holidays) at **2:45PM**: by **appointment only**. Starting processing time for a test is **2:45 PM**. No test will be administered to applicants who arrive after the **3:00 P.M.** To schedule an individual or group appointment please use the

link

below

[http://www.nyc.gov/html/fdny/html/c\\_of\\_f/cof\\_online\\_scheduling.shtml](http://www.nyc.gov/html/fdny/html/c_of_f/cof_online_scheduling.shtml)

### REQUIREMENTS FOR WRITTEN EXAM

Applicants who need to take the exam must apply in person and bring the following documents:

1. Applicants must be at least 18 years of age.
2. Applicants must have a reasonable understanding of the English language.
3. Applicant must provide two forms of identifications; at least one identification must be government issued photo identification, such as a State-issued Driver's License or Non Driver's License or a passport.
4. Prior to taking the computer based examination at 9 Metro Tech Center, all applicants shall satisfactorily complete an approved course for Coordinator of Fire Safety & Alarm Systems in Homeless Shelters. Additional information regarding the course and a list of approved schools is located on the FDNY website and can be found at the link below:  
[http://www.nyc.gov/html/fdny/html/units/fire\\_prevention/schools.shtml](http://www.nyc.gov/html/fdny/html/units/fire_prevention/schools.shtml)
5. Applicants that are currently employed in a shelter must also submit an F-80 Verification Letter **and** an F-80 Application completed by their employer, shelter director or the Department of Homeless Services (DHS). Both must be on official letterhead and must be notarized. Please reference pages 6-10 for sample documents.
6. If the applicant is currently employed in a shelter that does NOT have a Fire Alarm Control Panel, he/she must indicate that on the F-80 Application. For more information, please refer to the sample F-80 Application on page 8.
7. Applicants must present a completed application for certificate of fitness (A-20 Form). <http://www.nyc.gov/html/fdny/pdf/a20.pdf>
8. Applicants who are **not** currently employed may take the test without submitting the F-80 Verification Letter or F-80 Application. If the applicants pass the test, FDNY will issue a temporary letter with a picture for job seeking purposes. The C of F card will not be issued until

the applicant is employed and submits both the F-80 Verification Letter and F-80 Application.

9. The FDNY reserves the right to verify the contents of both the F-80 Verification Letter and the F-80 Application immediately after submission by performing an unannounced audit of the contents of the letter. This audit will occur at the shelter location(s) in which the F-80 applicant is employed.
10. F-80 Certificate of Fitness holders can only be certified in two homeless shelter locations at one time without applying for a variance. You must apply for a variance with the FDNY requesting permission to work at three or more locations. Both the F-80 Letter of Verification and the F-80 Application for each individual location are required.
11. Individuals who are certified for the **F-80 Certificate of Fitness** will be **exempt** from having to obtain a separate **S-95 Certificate of Fitness** for Supervision of Fire Alarm Systems and Other Related Systems. This exemption is for Coordinator of Fire Safety & Alarm Systems in Homeless Shelters who work in shelters only.

12. **APPLICATION FEE:**

Pay the **\$25** application fee in person by one of the following methods:

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

For fee waivers submit: (**Only government employees who will use their C of F**

*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

A convenience fee of 2.49% will be applied to all credit card payments.

13. **EXAM INFORMATION**

The **F-80** exam will consist of **50** multiple-choice questions, administered

on a "touch screen" computer monitor. It is a time-limit exam. 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.

Applicants have **two** opportunities to pass the F-80 Certificate of Fitness Examination. Applicants who fail the examination twice are required to re-take the approved course for Coordinator of Fire Safety & Alarm Systems in Homeless Shelters. Applicants must submit proof of course

completion to the FDNY in order to schedule an appointment to take the examination for a third time.

Please always check for the latest revised booklet at FDNY website before you take the exam.

[http://www.nyc.gov/html/fdny/pdf/cof\\_study\\_material/f\\_02\\_st\\_mat.pdf](http://www.nyc.gov/html/fdny/pdf/cof_study_material/f_02_st_mat.pdf)

14. If all the requirements are met and pass the exam a certificate will be issued the same day. Applicant who fails the exam will receive a failure report. To retake the exam applicants will need to submit a new application and payment.

## **RENEWAL REQUIREMENTS**

This Certificate of Fitness must be renewed every **THREE YEARS**. The renewal fee is **\$15**. FDNY also reserves the right to require the applicants to take a re-examination upon submission of renewal applications.

You will receive a courtesy notice of renewal 90 days before the expiration date. However, it is your responsibility to renew your Certificate. It is very important to renew your C of F before it expires. Renewals submitted 90 days (up to one year) after the expiration date will incur a \$25 penalty in addition to the renewal fee. Certificates expired over one year past expiration date will not be renewed. New exams will be required.

### **To change a mailing address:**

- Submit a letter requesting the change of mailing address and a copy of your C of F with \$5.00 fee.

### **To change a work location,**

- Submit a letter from your current employer (on company letterhead) confirming that you are an employee and stating your new work location with a copy of your C of F and a \$5.00 fee

### **To request a replacement certificate:**

- Submit a driver's license or passport, social security number, mailing address and a \$5.00 fee.

The certificate can be renewed **On-line, by Mail** or **in Person**.

### **• Renewal online**

If you are an individual, make sure you have your 12 digit Certificate of Fitness Access ID. This can be found on your Renewal Notice. If you do not have your Renewal Notice, your Access ID is your 8 digit Certificate of Fitness number and the last four digits of your social security number. If you are submitting renewals on behalf of a company's employees, the company must be approved by FDNY and have an 8 digit Company Code. To request approval, email [pubrenew@fdny.nyc.gov](mailto:pubrenew@fdny.nyc.gov).

Renewal fee can be paid by one of the following methods:

- Credit card (American Express, Discover, MasterCard, or Visa)
- Debit card (MasterCard or Visa)
- E-check

A fee exempted applicants cannot renew online only by mail or in person.

If all the requirements are met, the certificate of fitness will be mailed out within 10 days.

For online renewal go to:

<https://paydirect.link2gov.com/FDNYCOF/ItemSearch>

- **Renewal by mail**

Mail your Renewal Notice (if you did not receive a Renewal Notice, a copy of your certificate), along with your fee payment

Personal or company check or money order (made payable to the NYC Fire Department)

For fee waivers submit: ***(Only government employees who will use their C of F 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

and if applicable, supporting documents to:

**NYC Fire Department (FDNY)**

Cashier's Unit

9 MetroTech Center, 1st Floor

Brooklyn, NY 11201

If all the requirements are met, the certificate of fitness will be mailed out within four to six weeks.

- **Renewal in person**

Submit your Renewal Notice (or if you did not receive a Renewal Notice, a copy of your certificate), along with your fee payment by one of the following methods:

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

For fee waivers submit: ***(Only government employees who will use their C of F 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

and if applicable, your supporting documents to:

**NYC Fire Department (FDNY)**

Cashier's Unit

9 MetroTech Center, 1st Floor

Brooklyn, NY 11201

If all the requirements are met, the certificate of fitness will be issued the same day.

**A convenience fee of 2.49% will be applied to all credit card payments for original or renewal certificates.**

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



**How to Apply for the F-80 Examination:**

Applicants that are currently employed in a shelter



Applicants currently employed in a shelter that does NOT have a Fire Alarm Control Panel



- Submit F-80 Course Completion Certificate
- Submit F-80 Verification Letter
- Submit F-80 Application and indicate on the application that the shelter does not have a Fire Alarm Control Panel
- Include contact information & telephone number

Applicants that are NOT CURRENTLY EMPLOYED



- Submit F-80 Course Completion Certificate
- Indicate that you are not currently employed, and want to schedule an appointment to take the N-80
- Include contact information & telephone number

Instructors and other persons employed by a school certified by the FDNY to teach the F-80 training course



- Submit F-80 Verification Letter
- Submit F-80 Application
- Indicate that you are an instructor or affiliated with a school certified to teach the F-80 training course
- Include contact information & telephone number

**ALL APPLICANTS MUST SUBMIT THE ABOVE DOCUMENTATION ONE OF THE FOLLOWING WAYS:**

1. Via e-mail to [pubcert@fdny.nyc.gov](mailto:pubcert@fdny.nyc.gov) or [shulerv@fdny.nyc.gov](mailto:shulerv@fdny.nyc.gov), OR
2. Via mail to:
  - Public Certification & Education Unit, FDNY
  - 9 MetroTech Center, 1<sup>st</sup> Floor
  - Brooklyn, NY 11201
  - Attn: Vernetta Shuler, F-80 Appointment

Upon receipt of these qualifying documents, the applicant will be contacted by a representative of the FDNY to schedule an appointment to take the examination.

F-80 Verification Letter

Fire Department  
Bureau of Fire Prevention  
9 Metro Tech Center  
Brooklyn, NY 11201-3857

Date: \_\_\_\_\_

Dear Sir/Madam:

I am pleased to recommend \_\_\_\_\_ to apply for an F-80 Certificate of  
(Name of Applicant)  
Fitness for Fire Safety & Alarm Systems in Homeless Shelters. He/she has \_\_\_\_\_  
(Years/Months)  
of relevant experience. After obtaining his/her F-80 Certificate of Fitness, \_\_\_\_\_  
(Name of Applicant)  
will be employed at \_\_\_\_\_ during the following regular shifts  
(Name/Address of Shelter)  
(include days of the week and times):

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\_\_\_\_\_ is of good character and is physically able to perform the functions  
(Name of Applicant)  
required by the F-80 Certificate of Fitness. By signing below, I acknowledge that all of the  
above statements are true to the best of my personal knowledge. Any intentional falsification of  
this letter can be grounds for the denial, non-renewal, suspension or revocation of the F-80  
Certificate of Fitness as applies to both the applicant and the signee.

\_\_\_\_\_  
Printed Name of Employer/DHS Representative/Shelter Director

\_\_\_\_\_  
Job Title

\_\_\_\_\_  
Signature of Employer/DHS Representative/Shelter Director  
(Sign only before a Notary)

**F-80 Application**

**Section A**

Does the shelter in which \_\_\_\_\_ is employed have a Fire Alarm Control Panel?  
 (Name of Applicant)

- Yes (If you mark “Yes,” you must complete Sections B & D)
- No (If you mark “No,” you must complete Sections C & D)

**Section B**

<b>Function</b>	<b>Personally Witnessed (Y/N)</b> <i>All items must be marked “yes” to proceed</i>	<b>Date Witnessed</b>	<b>Initial</b>
Make a public address announcement throughout the building, in the stairway(s), and on individual floors	Yes <input type="checkbox"/> No <input type="checkbox"/>		
Acknowledge signals at the fire alarm control panel	Yes <input type="checkbox"/> No <input type="checkbox"/>		
Place the fire alarm system off line	Yes <input type="checkbox"/> No <input type="checkbox"/>		
Place the fire alarm system on line	Yes <input type="checkbox"/> No <input type="checkbox"/>		
Demonstrate communication with FEP staff utilizing the method designated for an emergency (radio, intercom, etc.)	Yes <input type="checkbox"/> No <input type="checkbox"/>		
Silence the fire tones throughout the building	Yes <input type="checkbox"/> No <input type="checkbox"/>		
Reset the fire command center	Yes <input type="checkbox"/> No <input type="checkbox"/>		
Phase I elevator operation	Yes <input type="checkbox"/> No <input type="checkbox"/>		
Phase II elevator operation	Yes <input type="checkbox"/> No <input type="checkbox"/>		

*\*if applicable, depending on the type of fire alarm system available in the shelter*

I \_\_\_\_\_, hereby swear that I have personally  
 (Name of Signee)

witnessed the applicant demonstrate and perform all of the above functions\* related to the Fire Alarm Control Panel listed in this document on \_\_\_\_/\_\_\_\_/\_\_\_\_\_.  
(Month/Date/Year)

Please indicate the type of Fire Alarm System installed on the premises:

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Please indicate the type of communication system that is installed on the premises: (one-way voice communication, IFA, other):

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**Section C**

I \_\_\_\_\_, hereby swear that I have investigated the  
(Name of Signee)

premises, and that no Fire Alarm Control Panel exists at \_\_\_\_\_.  
(Shelter Address)

Furthermore, the applicant could not perform the functions listed in Section C due to the lack of a Fire Alarm Control Panel.

\_\_\_\_\_  
Signature of Employer/DHS Representative/Shelter Director

**Section D**

Any intentional falsification of this letter can be grounds for the denial, non-renewal, suspension or revocation of the F-80 Certificate of Fitness as applies to both the applicant and the signee.

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Printed Name of Employer/DHS Representative/Shelter Director

---

Job Title

---

Signature of Employer/DHS Representative/Shelter Director  
(Sign only before a Notary)

Please submit this completed letter

1. Via e-mail to [pubcert@fdny.nyc.gov](mailto:pubcert@fdny.nyc.gov) or [shulerv@fdny.nyc.gov](mailto:shulerv@fdny.nyc.gov) or
2. Via mail to:

Public Certification & Education Unit, FDNY  
9 MetroTech Center, 1<sup>st</sup> Floor  
Brooklyn, NY 11201  
Attn: Vernetta Shuler, F-80 Appointment

## **SAMPLE QUESTIONS**

**Which of the following are allowed to be used while taking a Certificate of Fitness examination at 9 Metro Tech Center?**

- I. cellular phone
- II. study material booklet
- III. reference material provided by the FDNY
- IV. mp3 player

- A. III only
- B. I, II, and III
- C. II and IV
- D. I only

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

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

- A. the person next to you
- B. the firefighters
- C. the examiner in the testing room
- D. the computer help desk

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

**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. the firefighters
  - C. the examiner in the testing room
  - 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.

## **Requirements for Certificate of Fitness Applicants:**

### **If you currently hold a Citywide F-24 Certificate of Fitness for Fire Safety Coordinator:**

- After July 31, 2014, the F-24 Certificate of Fitness will no longer be recognized. F-24 C of F holders must surrender their Certificate of Fitness for a premise related F-80 Certificate of Fitness for Coordinator of Fire Safety & Alarm Systems in Homeless Shelters prior to July 31, 2014.

The FDNY can choose to require that Coordinator of Fire Safety & Alarm Systems in Homeless Shelters complete refresher training at any time deemed appropriate by the Department. The FDNY may also require that all C of F holders take the most updated version of the F-80 C of F examination within a particular timeframe.

### **Study Material and Test Description**

This study material contains information you will need to prepare for the examination for the F-80 Certificate of Fitness for Coordinator of Fire Safety & Alarm Systems in Homeless Shelters.

**This study material will not be provided to you during the test. It is critical that you read and understand this booklet to help increase your chance of passing this examination.** The study material does not contain all of the information you need to know to perform the duties of a Coordinator of Fire Safety & Alarm Systems in Homeless Shelters. It is your responsibility to become familiar with all applicable rules and regulations of the New York City Fire Department, even if they are not covered in this study material. You need to be familiar with the *New York City Fire Code*, the *New York City Building Code*, *National Fire Protection Association Standards (NFPA) 10, 25, 72* and the *Rules of the Fire Department of the City of New York* in order to adequately prepare for the examination. **You are responsible for checking the Certificate of Fitness page on the FDNY website for the most current study materials prior to taking the examination as the study material is periodically updated.**

### **About the Test**

All questions on the Certificate of Fitness examination are of the multiple choice type with four alternative answers to each question. Only one answer is most correct for each question. If you do not answer a question or if you mark more than one alternative your answer will be scored as incorrect. Read each question carefully before marking your answer. There is no penalty for guessing. You will take the examination on a touch screen computer monitor. Applicants will receive their scores immediately at the conclusion of the test. A passing score of at least 70% is required in order to secure a Certificate of Fitness. There are **50** multiple choice questions on the examination. Call (718) 999-1988 or visit the FDNY website for additional information and forms.

## Additional Information

*For more detailed information regarding the test process, rules during testing, a downloadable version of the certificate of fitness application, certificate of fitness requirements, mail-in instructions, a schedule of fees, and any other information that may not be included in these study materials, please visit the link below.*

**Certificate of Fitness Website:** [www.nyc.gov/fdny/html/c\\_of\\_f/coff.shtml](http://www.nyc.gov/fdny/html/c_of_f/coff.shtml)

### **1. Introduction**

Persons performing the duties of the Coordinator of Fire Safety & Alarm Systems in Homeless Shelters must hold an F-80 Certificate of Fitness. Certificate of Fitness holders must maintain all qualifications and comply with all requirements applicable to such certificate holders throughout the term of their certificate. The F-80 Certificate of Fitness is premise-related. F-80 C of F holders should be trained and fully capable of operating the fire alarm control panel in the shelter in which they are employed. As part of the qualifications to take this examination, the Coordinator of Fire Safety & Alarm Systems in Homeless Shelters must provide the address of his/her place of employment to the FDNY.

Individuals who are certified for the **F-80 Certificate of Fitness** will be **exempt** from having to obtain a separate **S-95 Certificate of Fitness** for Supervision of Fire Alarm Systems and Other Related Systems. This exemption is for Coordinator of Fire Safety & Alarm Systems in Homeless Shelters who work in shelters only. The F-80 Certificate of Fitness holder will be authorized to supervise Fire Alarm Systems in homeless shelters as outlined in this study material.

F-80 Certificates of Fitness are valid for a period not to exceed three years from the date of issuance. At the end of this period, the certificate expires unless the commissioner approves its renewal. Please be advised that certificate renewals shall be 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. Coordinator of Fire Safety & Alarm Systems in Homeless Shelters must ensure that their original Certificate of Fitness card is available for inspection by the FDNY during their work shift.

The use of the word **“should”** throughout these study materials generally refers to policies, procedures and/or best practices recommended by the FDNY, and may not be a codified requirement.

The use of the word **“shall”** throughout these study materials generally refers to a requirement of the Fire Code or the FDNY.

### **1.1 In what types of buildings and occupancies are Coordinators of Fire Safety & Alarm Systems in Homeless Shelters Required?**

**Coordinators of Fire Safety & Alarm Systems in Homeless Shelters are required in homeless shelters, including 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 shall determine the number of occupants authorized to be in the shelter. If the Certificate of Occupancy establishes the lawful occupancy as being more than 15 persons, a Coordinator of Fire Safety & Alarm Systems in Homeless Shelters is required, even if there are actually less than 15 persons in the building at any particular time.

Any building that is required to or voluntarily installs a fire alarm system with two way voice communication may require that the Coordinator of Fire Safety & Alarm Systems obtain an additional Certificate of Fitness for Fire Safety Director. A Fire Safety Director will be required in the building.

### **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 shall be 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 and Terminology**

**Alarm Silence Switch-** The alarm silence switch is used to silence the building audible and visual devices **after evacuation is complete** while the source of the alarm is being investigated. Depending on the configuration of the alarm system, this function will either silence the system's notification appliances completely, or will silence only the audible alarm, with strobe lights continuing to flash. The silence switch does not prevent a signal from being transmitted to an FDNY approved central station company.

**Building Occupants** – All persons in the shelter, including employees, clients, staff and visitors.

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

**Carbon Monoxide Detector** – An automatic device that senses carbon monoxide and is connected to the fire alarm control panel.

**Central Station Company** – A facility that receives alarm signals from a protected premise and retransmits or otherwise reports such alarm signals to the FDNY.

**Coordinator of Fire Safety & Alarm Systems in Homeless Shelters** – F-80 Certificate of Fitness holders; also referred to as Coordinator of Fire Safety & Alarm Systems throughout this study material.

**Deputy Coordinator of Fire Safety & Alarm Systems in Homeless Shelters** - When the Coordinator of Fire Safety & Alarm Systems in Homeless Shelters is absent, a deputy Coordinator of Fire Safety & Alarm Systems in Homeless Shelters shall be present in the building and shall perform the duties of the Coordinator of Fire Safety & Alarm Systems in Homeless Shelters. Deputy Coordinators of Fire Safety & Alarm Systems in Homeless Shelters must possess an F-80 Coordinator of Fire Safety & Alarm Systems in Homeless Shelters Certificate of Fitness issued by the Fire Department.

**Evacuation** – the emptying of a building of all building occupants in response to a fire or other emergency.

**Emergency Preparedness Plan** – The emergency preparedness plans required 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 shall assure 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.*

**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 and Emergency Preparedness (FEP) Staff** – The individuals identified in the emergency preparedness plan (also known as the fire safety and evacuation plan or emergency action plan) as responsible for the implementation of such plan. (In a shelter, this will include the Coordinator of Fire Safety & Alarm Systems in Homeless Shelters, deputy Coordinator of Fire Safety & Alarm Systems in Homeless Shelters and fire guards)

**Fire Drill** – A training exercise by which building occupants are familiarized with and/or practice the procedures for the safe, orderly and expeditious sheltering in place, in-building relocation, partial evacuation, evacuation, or any combination thereof, in the event of a fire, in accordance with the emergency preparedness plan for the premises.

**Fire Guard** – A person holding a certificate of fitness for such purpose, who is trained in and responsible for maintaining a fire watch and performing such fire safety duties as may be prescribed by the commissioner. Fire guards are responsible for the safety of all occupants, and to reduce the threat of fires and to help in the evacuation of occupants in case of a fire emergency. Fire guards report any fire safety violations to the Coordinator of Fire Safety & Alarm Systems in Homeless Shelters.

**Fire Protection System** – Approved devices, equipment and systems or combinations of systems used to deter a fire, activate an alarm, extinguish or control a fire, control or manage smoke and products of a fire or any combination thereof, including fire extinguishing systems, fire alarm systems, sprinkler systems and standpipe systems.

**Fire Triangle** – A fire requires fuel, oxygen and heat, which are the three parts of the fire triangle, to be sustained. If one is removed, the fire will extinguish.

**Free Burning Stage of a Fire** – The fully developed stage of a fire. This is the second stage of the three stages of a fire. Generally during this stage the entire room and all of its contents are burning. The fire is still fuel regulated but is rapidly consuming the available fuel. If no efforts are made to extinguish the fire, it will continue to burn until the available fuel and/or oxygen in the area or room has been consumed.

**Incipient Stage of a Fire** – The growth stage of a fire. This is the first stage of the three stages of a fire. This stage begins at the moment of ignition. During this stage, a fire increases in size from small flames to a full fire that involves an entire room or area.

**In-Building Relocation** – the controlled movement of building occupants from an endangered area of a building to an in-building relocation area within the same building in response to a fire or non-fire emergency.

**In-Building Relocation Area (IBRA)** – a designated area in a building to which building occupants may be relocated to in accordance with the emergency preparedness plan for the premises.

**Manual Fire Alarm Box** – A manually operated device used to initiate an alarm signal.

**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.

**Non-Fire Emergency Drill** – A training exercise by which building occupants are familiarized with and/or practice the procedures for safe, orderly and expeditious sheltering in place, in-building relocation, partial evacuation or evacuation, or combination thereof, in the event of a non-fire emergency, in accordance with the emergency preparedness plan for the premises.

**Off-Line** - Those periods of time when a Central Station Company will, at the request of a building owner, not transmit fire alarm signals received from a building to the Fire Department. Fire alarm systems can be taken "off-line" only for Fire Department approved purposes associated with the prevention of unnecessary and unwarranted alarms.

**One-way Voice Communication** – enables the Coordinator of Fire Safety & Alarm Systems in Homeless Shelters, fire guards, FEP Staff or Fire Department personnel to make announcements from the lobby to building occupants in their apartments, offices, classrooms, or in building stairwells. One way voice communication is a public address system that is capable of making announcements from the fire command center to all parts of the buildings. The one-way voice communication system can be used to warn and instruct building occupants in case of a fire or non-fire emergency.

**Out of service signage:** Impairment coordinators shall notify their supervisor and put a placard (tag) over a defective device, indicating that it is out of service.

**Out of service system:** A fire protection system that is not fully functional; or whose operation is impaired or is otherwise not in good working order.

**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 mortgagee or vendee in possession, assignee of rents, receiver, 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 shall 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 pursuant to Section 27-2098 of the New York City Administrative Code.

**Owner/occupant responsibility** – The owner shall be 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 shall be 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 shall also be responsible for the abatement of such hazardous conditions.

**Partial Evacuation** – the emptying of a building of some but not all building occupants in response to a fire or an emergency.

**Phase I Emergency Elevator Recall (Phase I)** – involves using a keyed switch to bring the elevators back to the lobby or sky lobby. This will cause the elevator car to return non-stop and without opening the doors to the lobby or sky lobby. The Coordinator of Fire Safety & Alarm Systems in Homeless Shelters must be able to perform phase I emergency recall.

**Phase II Emergency In-Service Elevator Operation (Phase II)** – involves turning the elevator car switch to the “Firemen Service” position. This results in manual operation of the elevators and overrides any other keyed switch controls and elevator landing call buttons. Elevators on “Firemen Service” will only be operable by a person inside of the elevator car. The doors will only operate when the “door open” button is pressed. The Coordinator of Fire Safety & Alarm Systems in Homeless Shelters must be able to perform phase II emergency in-service operation.

**Public Address System** – an electronic sound amplification and distribution system with a microphone, amplifier and loudspeakers, used to allow a person to address a large public. Public address systems enable voice communications from a central location, usually in the building lobby.

**Shelter Clients** – the population that lives in homeless shelters

**Shelter in Place** – the precaution of directing building occupants to remain indoors, at their present location, in response to a fire or non-fire emergency.

**Smoke Alarm** – A single or multiple-station alarm responsive to smoke, containing a built-in initiation sensor, audible sounder (notification device), and power supply (battery or electric with battery backup) and is not connected to a system.

**Smoke Detector** -An automatic device that senses smoke and is connected to the fire alarm control panel.

**Smoldering Stage of a Fire** – The decay stage of a fire. This is the third stage in the three stages of a fire. This occurs when the fire has an unlimited supply of fuel but limited oxygen. Visible flames will have diminished and the fire will smolder and continue to produce smoke and toxic gases, particularly carbon monoxide.

**S-97/S-98** – Certificate of Fitness for Fire Alarm Systems Inspection, Testing and Service Technician issued by the FDNY

**Two-way Voice Communication** – a form of transmission in which both parties involved have the ability to transmit information. This enables the F-80 C of F holder, staff, or Fire Department personnel to communicate with building occupants or each other throughout the building. 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 FEDC 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.

**Unnecessary Alarm** – An alarm signal transmitted by a fire alarm system which functioned as designed, but for which a department response proved unnecessary. An example of an unnecessary alarm is an alarm triggered by smoke from a lit cigarette in a non-smoking area, when the presence of such smoke does not implicate fire safety concerns.

**Unwarranted Alarm** – An alarm signal transmitted by a fire alarm system which failed to function as designed as a result of improper installation, improper maintenance, malfunction, or other factor. Examples of unwarranted alarms are alarms resulting from improper smoke detector placement, improper detector setting for installed location, lack of system maintenance, and control panel malfunction.

**Voice Communication Capability** – The ability to communicate to the occupants of a building or occupancy, whether by means of a fire alarm system with one-way or two-way voice communication or other approved means of communication.

### **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 2013, it was estimated that over 45,000 people spent the night in a New York City homeless shelter and approximately 19,000 of those people were children. In 2012, just 35% of families with children who applied to stay in city shelters were accepted, down from 52% in 2007. The number of people seeking housing in shelters in the city is increasing significantly, and with it comes new fire safety concerns. It is imperative that Coordinator of Fire Safety & Alarm Systems in Homeless Shelter 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 any fire safety violations that arise, to be familiar with all aspects of the emergency preparedness plan, and to stay informed of current fire safety laws, rules and regulations.

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: Homeless shelter in Paris, Texas****Date: 2009**

A 42 bed shelter housing 28 men caught fire due to ignition of a table inside the shelter that was piled high with donated clothing. More than 20 residents evacuated the shelter as a result of smoke and flames after several men attempted to extinguish the flames with pans of water. There was a heavy smoke condition in the shelter, making it difficult to see and even more difficult to evacuate. Five men who lived on the second floor were killed in the blaze. An investigation of the fire determined that the building had no sprinkler system, fire alarms or smoke detectors. Records indicated that the shelter hadn't been inspected for at least five years, even though inspections were required on an annual basis. The shelter was used as a drop-off point for paper products, rags, clothing, furniture and other material.



A firefighter outside of the shelter after the Paris, Texas fire

**Lessons Learned:**

- Periodic Fire Department inspections should be conducted as required
- Excess debris and improper storage is a fire hazard
- 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. Coordinator of Fire Safety & Alarm Systems in Homeless Shelters 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. If any violations are issued by the Fire Department that cannot be immediately corrected, Coordinators of Fire Safety & Alarm Systems in Homeless Shelters should bring them to the attention of the shelter director.

#### **4. Coordinator of Fire Safety & Alarm Systems Responsibilities**

The fire safety responsibilities delegated to the Coordinator of Fire Safety & Alarm Systems in Homeless Shelters C of F holders makes them imperative to help ensure the safety of homeless shelter residents and employees. They are responsible for keeping everyone safe in the case of a fire or non-fire emergency. Coordinators of Fire Safety & Alarm Systems in Homeless Shelters are also often the point of contact for shelter occupants, employees and first responders during an emergency.

The Coordinator of Fire Safety & Alarm Systems in Homeless Shelters is responsible for the following:

1. They must be present at the shelter at **all times**. When the Coordinator of Fire Safety & Alarm Systems in Homeless Shelters is absent, a deputy Coordinator of Fire Safety & Alarm Systems in Homeless Shelters shall be present at the shelter and shall perform the duties of the Coordinator of Fire Safety & Alarm Systems in Homeless Shelters.

2. Familiarity with the content of the emergency preparedness plan and ability to implement the plan in case of a fire or non-fire emergency

3. Report to and be fully competent in the operation of the fire alarm control panel. The Coordinator of Fire Safety & Alarm Systems in Homeless Shelters shall be capable of demonstrating all of the following tasks. Tasks shall include but not be limited to the following, if applicable, depending on the type of fire alarm system\*:

- making a public address announcement throughout the building, in the stairway(s), and individual floors
- acknowledging signals at the fire alarm control panel
- placing the fire alarm system on and off line
- communicating with FEP staff using the primary and secondary means of communication designated in the emergency preparedness plan for the building
- silencing the fire tones throughout the building after authorization by the FDNY
- resetting the fire command center

\*Every system may be different and therefore the Coordinator of Fire Safety & Alarm Systems in Homeless Shelters must evaluate what system exists and what features and components are available in their shelter.

4. The Coordinator of Fire Safety & Alarm Systems in Homeless Shelter must notify arriving emergency response personnel of the nature of the emergency and the response so far, and comply with the directions of the emergency response personnel and/or other lawful authority

5. Know the location of and how to personally operate all fire alarm systems in the shelter

6. Awareness of the inspection, maintenance, and testing schedule for fire alarm systems in the shelter and ensure that the schedules are adhered to

7. Conduct drills to familiarize building occupants with the fire safety features of the shelter, the exits available, and the proper procedures to follow in case of a fire or non-fire emergency

8. Conduct staff training and fire and non-fire emergency drills as required by the Fire Code

9. Coordinators of Fire Safety & Alarm Systems in Homeless Shelters supervise and direct the performance of the duties and responsibilities of the deputy Coordinator of Fire Safety & Alarm Systems in Homeless Shelters, fire guards and other FEP staff in the shelter.

It is the responsibility of the owner of the shelter to designate a competent person to be certified by the Fire Department to act as the Coordinator of Fire Safety & Alarm Systems in Homeless Shelters Certificate of Fitness holder. The Coordinator of Fire Safety & Alarm Systems in Homeless Shelters and staff must possess the

qualifications and/or hold certificates of fitness as required by the Fire Code. The shelter owner shall ensure that adequate staff is present on the premises at other times when the shelter is occupied, to perform the duties and responsibilities set forth in the emergency preparedness plan.

#### **4.1 Fire Guards**

Buildings or portions of buildings occupied or operated to be occupied by homeless persons shall be continuously patrolled by a person holding a certificate of fitness as fire guard. Every area of the building shall be patrolled at least once every hour.

Fire guards are responsible for the safety of all building occupants and employees by eliminating fire hazards and assisting in the evacuation of clients in case of a fire emergency. Generally, fire guards are responsible for making sure that fire safety regulations are being complied with in the shelter. They should be knowledgeable of the location and operation of all fire alarm systems in the shelter and should check their condition during their patrols. Fire guards must maintain records of their patrols.

Fire guards must patrol the entire homeless shelter at least once an hour. Some shelters assign a fire guard to patrol each floor. 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 on the alert for any fire safety violations and upon discovery, report them immediately to the Coordinator of Fire Safety & Alarm Systems in Homeless Shelters. In many cases, the fire guard will be capable of correcting the fire safety violation during the course of conducting his/her fire guard duties. Ultimately, the Coordinator of Fire Safety & Alarm Systems in Homeless Shelters must ensure that the violation is corrected.

#### **5. Emergency Preparedness Plan**

The Fire Code requires that homeless shelters have an updated emergency preparedness plan (also known as a Fire Safety and Evacuation Plan). Emergency preparedness plans serve to assure that, in the event of a fire or emergency there are procedures in place that can be implemented to provide the information, guidance, direction and assistance needed to protect the safety of building occupants, including effecting their evacuation, relocation or sheltering in place, if necessary. The plan is a tool intended to ensure that knowledgeable staff have been identified and designated, and that there is a plan in place for responding to a fire or other emergency at the premises.

The owner of any building required to have an emergency preparedness plan shall initiate the preparation of the plan for the premises in a form prescribed by the commissioner, and oversee its periodic review and amendment, in accordance with the requirements set forth in the Fire Code and the Fire Department Rules.

The procedures to follow in the event of an emergency will be set forth in the emergency preparedness plan and will vary depending on the type of occupancy, the height of the building and other requirements as may be set forth in the Fire Code or

the rules. It is important that building owners refer to the most recent editions of the Fire Code and rules when creating or amending the emergency preparedness plan and determining the response to emergencies and the level of staffing that is required for their particular building or occupancy.

Coordinators of Fire Safety & Alarm Systems in Homeless Shelters must be knowledgeable about the emergency preparedness plan for the shelter. They should be provided with an orientation from the building owner or other on-site personnel familiar with and responsible for the emergency preparedness plan before starting to perform their duties.

A copy of the emergency preparedness plan must be maintained on the premises in an approved location and it shall be made available at all times to Fire Department representatives immediately upon request.

Emergency preparedness plans must be reviewed and updated as necessitated by changes in staff assignments, use or occupancy of the building or its spaces, or the design and arrangement of the premises, but at a minimum, once a year. An entry must be made in the required log book documenting the review of the plan and indicating the general nature of any updates that are required.

Regardless of the person responsible for making the changes in the emergency preparedness plan, the Coordinator of Fire Safety & Alarm Systems in Homeless Shelters must be aware of when the changes are made and what they entail. The shelter owner and employees should cooperate in the development and coordination of the emergency preparedness plan.

Shelters must have an emergency preparedness plan that is maintained on the premises. Shelters are required to submit the plan for acceptance as required by the Fire Code, Rules, and Fire Department policy. An emergency preparedness plan shall be prepared and accepted prior to occupancy of the building.

### **5.1 Emergency Preparedness Plan Content**

The Coordinator of Fire Safety & Alarm Systems in Homeless Shelters should be aware of the information included in the emergency preparedness plan. The content of the emergency preparedness plan for a homeless shelter should include, but is not necessarily limited to, the following:

1. The designation of the Coordinator of Fire Safety & Alarm Systems in Homeless Shelters, by name, certificate number and position at the premises, and other FEP staff, by name and/or position at the premises, and their certificate of fitness numbers
2. The name and address of the shelter, the floors that are normally occupied, the approximate number of employees, and the hours of operation
3. A site plan, floor plan, and riser diagram of the shelter
4. A building information card for high-rise buildings and occupancies

5. The location of all entrances and exits (including emergency exits and fire escapes) and where they exit to (which street or other location)
6. The procedure by which the building will be evacuated or an in-building relocation of occupants will be conducted during an emergency
7. Details regarding the voice communication capability and fire protection systems in the building and that servicing of these systems will be completed by a licensed company
8. The procedure by which a fire or other emergency is reported to the FDNY and the staff member(s) responsible for the reporting
9. The procedure for notifying building occupants of a fire or other emergency, and the staff member(s) responsible for the notification
10. The procedure for coordinating with firefighting, emergency medical service and other emergency response personnel, including notifying those personnel upon their arrival of the location of the emergency, and the staff member(s) responsible for the coordination
11. The means for receiving and the procedure for monitoring a public emergency notification system
12. The identity and location of CPR-Qualified staff (if CPR-Qualified Staff are available) on the premises, and how to contact them in case of an emergency
13. Procedures for identifying and assisting shelter occupants who require assistance because of an infirmity, disability or other special need and the staff member(s) responsible for assisting them during a drill or emergency
14. Since conditions regularly change in shelters and hazards may rapidly develop, the plan should include the procedure for the periodic inspection of the shelter to verify the following conditions, and the staff member(s) responsible for such inspection:
  - a. access to means of egress is unobstructed and unimpeded
  - b. combustible materials and combustible waste have been properly stored or removed from the premises
  - c. decorative vegetation is regularly watered or otherwise maintained
  - d. "no smoking" signs required by the Fire Code or Rules are posted
15. The procedure for the ongoing monitoring of the shelter to verify compliance of the following requirements, and the staff member(s) responsible for monitoring:
  - a. that the premises do not become overcrowded
  - b. that the allowable use of open flames and open flame devices is being conducted properly and safely

- c. that the prohibition against smoking, where required by the Fire Code or the FDNY rules, is being observed

## **5.2 Periodic Inspection**

Shelters shall be subject to periodic fire safety inspections by the Fire Department, including inspections to ensure that the emergency preparedness plan has been prepared and/or implemented in compliance with the requirements of the Fire Code. Coordinators of Fire Safety & Alarm Systems in Homeless Shelters will be responsible for making the emergency preparedness plan immediately available for inspection upon request of any Department representative.

## **6. Fire and Emergency Preparedness (FEP) Staff Training**

The Coordinator of Fire Safety & Alarm Systems in Homeless Shelters and other FEP staff must be trained in the performance of their duties in accordance with the emergency preparedness plan.

FEP staff must receive **initial training** in the content of the emergency preparedness plan upon commencement of their authority and duties in the building. FEP staff must participate in **refresher training sessions designed to familiarize them with their duties pursuant to the plan at least for 1 hour quarterly on each work shift.**

A written record of such FEP staff training shall be maintained in a bound log book, which is referred to as the Fire Safety Plan log book, with consecutive numbered pages, or other form of approved recordkeeping, and maintained on the premises for a period of 3 years from the last entry. This record of training should be made immediately available for inspection by a Department representative upon request. Each training session must be noted in the log book. For more detailed information regarding Recordkeeping please reference page 62.

### **6.1 Staff Training Content**

Coordinators of Fire Safety & Alarm Systems in Homeless Shelters should ensure that other FEP staff (which may include deputy Coordinator of Fire Safety & Alarm Systems in Homeless Shelters and fire guards) are fully trained on what their responsibilities and duties are during a fire or non-fire emergency and during a fire drill.

Coordinators of Fire Safety & Alarm Systems in Homeless Shelters should cover the following content with their staff:

- The appropriate actions to take in response to a fire or fire conditions
- The appropriate actions to take in response to a non-fire emergency
- The appropriate actions to take if a fire or non-fire emergency occurs **DURING** a drill
- The shelter's fire-related features such as, but not limited to, sprinklers, exits, manual pull stations and fire alarm fail-safe devices

- How to activate the fire alarm throughout the building (if applicable)
- The procedure to follow upon the sounding of the fire alarm tone (if applicable)
- Locations of assembly areas and the evacuation procedures for building occupants to reach such areas
- Location of all exits and escape routes, especially those not in use on a regular basis
- The importance of keeping fire doors closed and latched to prevent the spread of fire, heat and smoke
- Fire prevention measures appropriate for the occupancy, including daily housekeeping within the shelter
- The three components that make up the fire triangle, (oxygen, heat and fuel)



- The three stages of a fire (See Definitions and Terminology for more information)
  - Incipient stage
  - Free burning stage
  - Smoldering stage
- The location of portable fire extinguishers and how they work
- The typical types of fires that start in homeless shelters and fire safety measures that can be implemented to prevent them
- The locations of all egress stairs and their designation (i.e. Stair A, Stair B, Stair C)
- Location where each stair terminates (interior lobby, exterior of building, etc.)
- Operation of the fire alarm panel (activate, acknowledge, on/off line procedures)
- If the fire alarm system has voice communication capabilities, Coordinators of Fire Safety & Alarm Systems in Homeless Shelters should demonstrate how to provide clear direction to building occupants

Training may be modified based on a homeless shelter's available fire protection systems.

## **7. Emergency Drills**

Drills and other forms of emergency preparedness education are required to be conducted in homeless shelters to enhance the fire and non-fire emergency preparedness of all building occupants, including clients and staff. Drills are intended to familiarize building occupants as to the proper actions to take in the event of a fire or other emergency and the primary and secondary evacuation and in-building relocation routes. Drills must be conducted in accordance with the standards, procedures and requirements of the Fire Code and the rules of the FDNY, and the emergency preparedness plan approved by the FDNY for the shelter. Drills should be in the form of live instruction, except as otherwise authorized by the FDNY.

Procedures should be established to ensure that all persons in the building at the time the drill is conducted participate in the drill. Ideally, drills should be unscheduled, and shelter employees and clients should not know the time of day they are taking place. **Drills shall be conducted at varying times of day.** They shall be held with enough frequency to familiarize all building occupants with the drill procedure. If drills are continuously held in the same manner at the same time, participants may lose interest in the drills and be less prepared to respond safely to a variety of different emergencies.

Actual fires and emergencies are always unexpected. Any fire alarm activation within a building that is not planned, or preceded by an announcement indicating that it is not an emergency, must be treated as an actual fire condition. Coordinators of Fire Safety & Alarm Systems in Homeless Shelters should be aware that if drills are allowed to be considered a routine exercise, there is the potential risk that in an actual emergency, an evacuation or relocation will not be successful. If drills are always held in the same way at the same time, they lose their credibility. Shelter employees and clients may panic if, in an actual emergency, it becomes dangerous to follow the exact circumstances presented by the routine drill. Coordinators of Fire Safety & Alarm Systems in Homeless Shelters should also have a plan in place for the rare situation in which an actual fire or non-fire emergency occurs during a drill.

Drills should include a discussion of a variety of possible emergency situations. Coordinators of Fire Safety & Alarm Systems in Homeless Shelters are encouraged to use fire and non-fire emergency scenarios since practicing these scenarios will help the FEP coordinator and FEP staff to apply important drill concepts.

Coordinators of Fire Safety & Alarm Systems in Homeless Shelters should ensure that drills familiarize building occupants with the location and use of all building stairways and means of egress. Depending on the location of the fire within a building, certain stairwells may contain fire and/or smoke, thereby preventing their use when evacuating or relocating building occupants. Coordinators of Fire Safety & Alarm Systems in Homeless Shelters should also ensure that non-fire emergency drills are conducted. Discussions between the FEP staff should include procedures to follow during medical emergencies, bomb threats, and natural disasters. Drills should be

designed to familiarize the occupants with all available means of egress, particularly exits that are not normally used during regular occupancy of the building.

Prior to conducting a drill in a homeless shelter, Coordinators of Fire Safety & Alarm Systems should ensure that they and FEP staff are familiar with all aspects of the building, and certain things that have recently occurred, or are currently ongoing, in a building that impact fire safety and the emergency preparedness plan. As part of their preparation for conducting a drill, they should be aware of the following\*:

1. Vacant floors in the building, as vacant floors are often found to have improper storage and obstructed means of egress
2. Any modifications to the fire alarm system
3. The location and functionality of emergency lighting throughout the building
4. Complete familiarity and understanding of the emergency preparedness plan for the shelter
5. Hot work or any construction going on in the shelter

\*Coordinators of Fire Safety & Alarm Systems in Homeless Shelters should always be aware of those things, but especially knowledgeable about those situations prior to conducting a drill.

### **7.1 Drill Procedure**

The purpose of conducting fire drills is to provide training exercises by which building occupants are familiarized with and/or practice the procedures to be followed in the event of fire.

If the shelter's emergency preparedness plan requires that the building be partially evacuated or fully evacuated in the event of a fire alarm, fire drills conducted to meet the requirements of the FDNY do not require that drill participants partially evacuate or fully evacuate the building. This is the case provided the drill conducted familiarizes the building occupants with the procedures to follow in the event of a fire. However, nothing precludes a building owner from conducting such partial evacuation or full evacuation as a component of the drill.

The specific procedure Coordinators of Fire Safety & Alarm Systems in Homeless Shelters should follow when conducting a fire drill will differ depending on the size of the homeless shelter and its specific emergency preparedness plan. It is the responsibility of the Coordinator of Fire Safety & Alarm Systems in Homeless Shelters and the FEP staff to know the specific requirements for the shelter in which they are conducting the drill. Coordinators of Fire Safety & Alarm Systems in Homeless Shelters should, at a minimum, follow the steps below when conducting a drill in which the emergency preparedness plan calls for the total evacuation of building occupants in the event of a fire. The specific sequence and procedures to follow may differ depending on the fire alarm system in the shelter; however it is important for the

Coordinator of Fire Safety & Alarm Systems in Homeless Shelters to report to the FACP location whenever the alarm is activated.

It is important to note that steps 3-8 are similar steps to what a Coordinator of Fire Safety & Alarm Systems in Homeless Shelters should do in an actual fire or non-fire emergency. Coordinators of Fire Safety & Alarm Systems in Homeless Shelters should treat each drill as if it were an actual emergency.

1. Call Central Station Company and take the fire alarm system **OFF-LINE** to avoid an unnecessary alarm.
2. Upon **confirmation** of off-line status from the Central Station Company, a system off-line entry should be made in the log book. The entry must include all of the following information in the format shown below:
  - a. time the system was taken off-line
  - b. reason the system was taken off-line
  - c. central station company name and telephone number
  - d. time the system was restored

**Logbook Format**

Time Off-Line	Reason Off-Line	Central Station Name & Telephone number	Time Restored On-Line
11:00 AM	Fire Drill	Fire Protection Services, 999-999-9999	12:30 PM

3. Report to the fire alarm control panel.
4. Activate the fire alarm and make an announcement from the fire alarm control panel (or otherwise notify building occupants and employees as outlined in the emergency preparedness plan) that an alarm has been activated and that everyone in the building should evacuate.
5. Communicate with the FEP staff as building occupants evacuate. Communication should be via the primary and secondary means of communication designated in the emergency preparedness plan for the shelter. Although two way radios are the most efficient way for the F-80 Certificate of Fitness holder and FEP staff to communicate back and forth with each other during a drill, they may not be available in all shelters.
6. Designated FEP staff should instruct and guide building occupants to evacuate via the stairwell designated in the emergency preparedness plan on each floor. FEP staff should ensure that everyone on the floor is participating in the drill. After evacuating everyone on the floor, FEP staff should search the floor (dormitories, restrooms, recreation rooms, etc.) and confirm with the Coordinator of Fire Safety & Alarm Systems in Homeless Shelters that all building occupants are off the floor. Any difficulties encountered during this

process should also be reported to the Coordinator of Fire Safety & Alarm Systems in Homeless Shelters.

7. Building occupants should either leave the shelter and gather at an outdoor assembly area as designated in the emergency preparedness plan, or relocate to an area within the shelter. Some shelters choose to use the cafeteria, recreation room, or auditorium if available and located on the first floor.

8. Determine if all building occupants have been successfully evacuated and accounted for at the assembly point. Each shelter may have a different way of accounting for such occupants. Some shelters use a daily updated list of who is authorized to be in their shelter for that day to track attendance. Other shelters use a “sign-in sheet” to determine who should be accounted for during the drill. If a person has signed themselves out during the time frame when the drill is conducted, FEP staff can assume that they are not in the building. It is important to account for building occupants after a full evacuation to ensure that there is not anyone who is still in the building.

9. Restore the fire alarm system to normal operation condition if altered for drill purposes.

10. Call Central Station Company and request that the Fire Alarm System be placed back “on-line.” Upon confirmation, document in the alarm log book the time that the fire alarm system is placed back on-line.

11. Allow building occupants back into the building. Shelters should use a procedure specific to their client population to ensure that only those clients that are authorized to be living in the shelter enter the building.

12. Make an entry in the Fire Safety Plan logbook detailing the drill. The “Recordkeeping” section on page 62 details exactly what should be included in the entry.

The fire alarm system must be activated each time a fire drill is conducted to initiate the drill and familiarize building occupants with the alarm tones. However, if the fire alarm system in the building is connected to a central station, it is the responsibility of the Coordinator of Fire Safety & Alarm Systems in Homeless Shelters to notify the Central Station Company that a drill is being conducted and that on behalf of the building owner, they would like to request to take the fire alarm system off line. If the Coordinator of Fire Safety & Alarm Systems in Homeless Shelters fails to do this, and the Fire Department responds to the premises unnecessarily, the building owner will be subject to violations and possible fines for unnecessary and unwarranted alarms.

## **7.2 Participation in Drills**

Procedures for drills should mimic as closely as possible the procedures that a Coordinator of Fire Safety & Alarm Systems in Homeless Shelters would follow during an actual emergency. **All building occupants, including shelter residents and employees,** shall participate in fire and non-fire emergency drills. A single drill should address both fire and non-fire emergency preparedness. The Coordinator of

Fire Safety & Alarm Systems in Homeless Shelters should inform participants that different instructions may be given depending upon whether there is a fire or other emergency, and the nature of the non-fire emergency.

Coordinators of Fire Safety & Alarm Systems in Homeless Shelters should ask for feedback from building occupants and FEP staff to identify issues that may have been encountered during the drill and the need to make changes in the implementation of the emergency preparedness plan. They should answer all drill related questions from building occupants to ensure that any confusion or necessary clarification is addressed. Throughout the drill, the Coordinator of Fire Safety & Alarm Systems in Homeless Shelters and FEP staff should pay particular attention to and address the following:

- Difficulties experienced in determining that all building occupants are accounted for
- Difficulties experienced by people with disabilities or other special needs
- Unnecessary delays or unsafe actions in implementing the emergency preparedness plan, such as building occupants stopping to collect personal items, attempting to hide in their rooms or attempting to use the elevators
- Ensuring that drills are conducted in a safe and orderly manner
- Identifying any problems with the fire alarm system
- Determining the amount of time it takes to implement the evacuation of the building (when evacuation is a part of the drill)
- Visually inspecting the building for any exit, stairway or hallway obstructions
- Ensuring that self-closing doors close on their own and are not propped open
- Ensuring that there are no locks, bolts or chains installed on exits



Picture shows a chained exit door, which is unacceptable.

Coordinators of Fire Safety & Alarm Systems in Homeless Shelters are responsible for ensuring that all those required to participate in a drill do so. Shelters may have different ways of handling building occupants who refuse to participate in a drill. Some shelters may experience more resistance to participation than others. It is expected that the Coordinator of Fire Safety & Alarm Systems in Homeless Shelters may experience difficulties with client participation, especially when conducting fire drills on the overnight shift. Shelter residents may be sleeping, or taking medication which can make participation difficult. In these situations, the Coordinator of Fire Safety & Alarm Systems in Homeless Shelters and FEP staff should emphasize that the drill is meant to replicate an actual emergency, and that emergencies can happen at any time. If lack of participation becomes a perpetual issue, the Coordinator of Fire Safety & Alarm Systems in Homeless Shelters should inform the shelter director.

### **7.3 Frequency of Drills**

Drills in homeless shelters should be conducted **monthly on each shift**. All building occupants must participate. Drills must be held with sufficient frequency to familiarize occupants with the drill procedures and to establish the drill as a matter of routine. Nothing precludes a Coordinator of Fire Safety & Alarm Systems in Homeless Shelters from conducting drills more frequently than monthly on each shift. It is the responsibility of the Coordinator of Fire Safety & Alarm Systems in Homeless Shelters to understand and adhere to the specific fire drill requirements for homeless shelters.

## **8. People in Shelters Who Require Assistance**

### **8.1 Special Needs Occupants**

In all shelters there may be building occupants who have special needs during a drill or an emergency. Coordinators of Fire Safety & Alarm Systems in Homeless Shelters must follow the procedures in the emergency preparedness plan for identifying in advance building occupants and employees who require assistance to participate in the plan because of an infirmity or disability or other special need, and the approved procedures for providing such assistance. All procedures should be in compliance with the Americans with Disabilities Act. It is the responsibility of the Coordinator of Fire Safety & Alarm Systems in Homeless Shelters to be aware of any building occupant who may have special needs.

### **8.2 English as Second Language (ESL) Occupants**

Coordinators of Fire Safety & Alarm Systems may have ESL (English as a second language) residents in their homeless shelter. ESL occupants may have difficulty understanding what Public Address (PA) announcements mean and the proper actions to take when an alarm sounds.

Clarifying the announcements and drill procedures with ESL occupants during drills can help alleviate any confusion. For example, if there is a large portion of ESL occupants in the building, Coordinators of Fire Safety & Alarm Systems in Homeless Shelters can use the fire alarm system's voice communication system to make announcements during a drill in both English and other languages. If shelter occupants inform the Coordinator of Fire Safety & Alarm Systems in Homeless

Shelters that it is difficult for them to understand English, the Coordinator of Fire Safety & Alarm Systems in Homeless Shelters may use a translator or provide other non-verbal cues and forms of written communication to ensure that the person understands. Resources will vary depending on the shelter.

## **9. Emergency Procedures**

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

A durable, legible sign setting forth the following information for reporting a fire or other emergency (including the text to be inserted based on the building's location) shall be posted in a conspicuous location in the lobby of the main front entrance:

Fire alarm box at \_\_\_\_\_ (name of street) and \_\_\_\_\_ (name of street)

**OR**

To report a fire by telephone dial "911" or, depending upon the borough in which the property is located, insert one of the following telephone numbers:

<b>Bronx properties</b>	<b>718-999-3333</b>
<b>Brooklyn properties</b>	<b>718-999-4444</b>
<b>Manhattan properties</b>	<b>212-999-2222</b>
<b>Queens properties</b>	<b>718-999-5555</b>
<b>Staten Island properties</b>	<b>718-999-6666</b>

### **9.1 Emergency Preparation**

The Coordinator of Fire Safety & Alarm Systems in Homeless Shelters must always be knowledgeable about the location on the premises of the following:

1. Emergency preparedness plan for the shelter
2. Floor plans
3. Firemen's Service Elevator Keys for the elevator car doors must be kept at the fire command station for immediate use by the department. These keys are also known as #2642 keys, and six keys are required.
4. List of building occupants who require assistance during an evacuation

## **10. Fire Alarm Systems**

Building owners must ensure that their shelters have fire alarm systems approved by the New York City Fire Department. Coordinators of Fire Safety & Alarm Systems in Homeless Shelter should receive training on and be familiar with the fire alarm system in their shelter. If they become aware of any aspect of the fire alarm system that is impaired or out of service, they must notify the impairment coordinator immediately.

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.

Coordinators of Fire Safety & Alarm Systems in Homeless Shelters are responsible for ensuring that the inspection, testing and maintenance schedule for fire alarm systems is followed. For the full inspection, testing, and maintenance schedule for fire alarm systems, Coordinators of Fire Safety & Alarm Systems in Homeless Shelters should reference NFPA 72 for more detailed information. Defective equipment must be repaired or replaced immediately by an authorized service technician. Coordinators of Fire Safety & Alarm Systems in Homeless Shelters should be familiar with the entire fire alarm system in their shelter, and should receive training from the building owner or other authorized personnel prior to the start of their duties. However, Coordinators of Fire Safety & Alarm Systems in Homeless Shelters are prohibited from installing or modifying components of the fire alarm system.

### **10.1 Components of the Fire Alarm System**

**Fire Alarm Control Panel (FACP)** – Monitors inputs and controls output through various types of circuits. The FACP processes all abnormal conditions (alarm, trouble & supervisory signals) and indicates appropriately based on the action programmed for the device.

**There are three types of signals:**

**A. Alarm Signal** – A signal initiated by a fire alarm initiating device such as a manual fire alarm pull station, automatic fire detector, water flow switch, or other device in which activation indicates the presence of a fire. When a fire signal is generated, the FACP activates the building audible and visual devices connected to the fire alarm (i.e. horn/strobes), sends a signal to an FDNY approved central station, and triggers certain building functions

**B. Supervisory Signal** – Indicates that a system or device being monitored has been compromised or is in an abnormal state. A supervisory signal will audibly and visually annunciate at the FACP to indicate the supervisory condition needs to be investigated and corrected. The FACP will also send a supervisory signal to an FDNY approved central station

**C. Trouble Signal** – A signal initiated by the fire alarm system or device that indicates a fault in a monitored circuit or component. A trouble signal will audibly and visually annunciate at the FACP to indicate that the trouble condition needs to be investigated and corrected. For example, trouble signals will be initiated by a low battery, AC failure, phone line failure, or internal component failure.

### **Acknowledge switch or button**

The acknowledge button, also abbreviated as (ACK) is used to acknowledge alarm, trouble or supervisory signals and silence the panel.

### **Alarm silence switch or button**

The alarm silence switch is used to silence the building audible and visual devices after evacuation is complete while the source of the alarm is being investigated. Depending on the configuration of the alarm system, this function will either silence the system's notification appliances completely, or will silence only the audible alarm, with strobe lights continuing to flash. However, the silence switch does not prevent a signal from being transmitted to an FDNY approved central station company. Audible silence allows for easier communication for emergency responders while responding to an alarm. The Coordinator of Fire Safety & Alarm Systems in Homeless Shelters must have FDNY authorization to silence the fire alarm control panel.

### **Fire Alarm System reset switch or button**

This switch is used to reset the fire alarm system after an alarm condition has been cleared. All initiating devices should return to normal condition after manually resetting.

If an initiating device is still in alarm after the system is reset, such as smoke detectors continuing to sense smoke, or a manual pull station still in an activated position, another alarm will be generated.

A system reset is often required to clear supervisory conditions. A system reset does not clear trouble conditions. Most trouble conditions will clear automatically when conditions are returned to normal.

Never reset the fire alarm system until the condition is verified by FDNY personnel.

<b>TYPE OF DEVICE</b>	<b>ACTIVATED BY</b>	<b>TYPE OF SIGNAL</b>	<b>ACTION NORMALLY REQUIRED TO RETURN DEVICE TO “NORMAL” CONDITION</b>
Manual pull station	Manually pulling handle	Alarm	Return handle to normal position. A key or other method may be required to reset the station to a normal condition.
Smoke, beam, and duct detectors	Detection of particles of combustion ( <b>see note below</b> )	Alarm	Smoke detectors will normally reset when the reset button is pressed at the FACP if the condition activating the detector has been cleared.
Heat detectors	Abnormally high temperature ( fixed temperature detector) or rapid temperature rise ( rate of rise detector)	Alarm	After activation most <b>Fixed temperature</b> heat detectors will not self restore and will require replacement by an S-97 or S-98 Certificate of Fitness holder. <b>Rate of rise</b> detectors will normally self-restore after activation.
Water flow device	Flow of water in a sprinkler system	Alarm	Device should return to normal when water ceases to flow.
<b>NOTE:</b> There are other circumstances which will cause a smoke detector to signal an alarm condition when there is none, creating false alarms and causing unnecessary Fire Department response. Common examples would be the entrance of sheet rock dust or dust created by the cutting of wood or sanding of floors during construction or renovations. Care must be taken at all times to protect all smoke detectors from the entrance of foreign particles which may be airborne. Smoke detectors which have not been properly cleaned and maintained will also create false alarms.			

**Lamp test:** This function is used to check the condition of the Light Emitting Diodes (LEDs) on the FACP. All of the lights on the panel must work. This test should be conducted by the Coordinator of Fire Safety & Alarm Systems in Homeless Shelters **daily**.

**Remote Annunciator panel:** A remote annunciator panel when installed shall function for visual notification of alarm, supervisory or trouble conditions only.

## **10.2 Fire Alarm System Power Supplies**

**A. Primary Power Supply** - The main power supply for a fire alarm system shall be provided with a dedicated circuit from a local utility company.

**B. Secondary Power Supply** - The fire alarm system shall have a secondary power supply which provides power to the alarm system within 10 seconds of failure of the primary power supply. Storage batteries dedicated to the fire alarm system or engine driven generators are acceptable as secondary power sources for the system.

### 10.3 Types of Fire Alarm Initiating Devices

**A. 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:

**B. 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 by an S-97 or S-98 Certificate of Fitness holder.



**Smoke detector**

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

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

**E. 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**

**F. 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 authorized fire alarm technicians. Coordinators of Fire Safety & Alarm Systems in Homeless Shelter are responsible for ensuring that operational heat detectors are in place. They must notify the fire alarm maintenance companies if the detector becomes defective or inoperable.

**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. However, 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 shall 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 shall always be taken to protect all fire alarm initiating devices, especially during construction work within the shelter.

#### **10.4 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.**

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

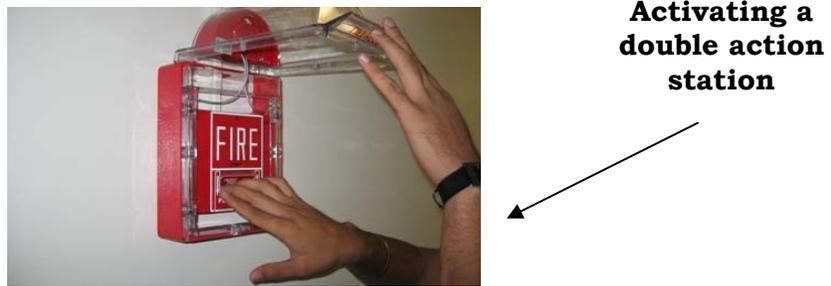
**A. Single action pull stations:** Single action stations require only one step to activate the alarm. The cover on these alarm stations serves as a lever. An example of a single action station is shown below. This kind of alarm station is often found indoors, e.g., in office buildings. When the cover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



**Activating a single action station**

**B. 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.

Coordinators of Fire Safety & Alarm Systems in shelters that have double action break glass stations should ensure that an extra supply of glass plates are readily available. At least one extra glass plate is required for each fire alarm box. Extra glass plates must be stored on the premises.



The Coordinator of Fire Safety & Alarm Systems in Homeless Shelters and FEP staff must know how to manually operate each alarm station on the premises. 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 the manual pull station.

Coordinators of Fire Safety & Alarm Systems in Homeless Shelter 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 shall have a white stripe across it which would indicate that such station will send a signal to the central monitoring company. However, since 2008, the requirement of such stripe no longer exists. Any fire alarm system which was designed under the 2008 building code in any occupancy shall transmit a signal to the central monitoring company.

Although buildings constructed after 2008 may not have pull boxes with white stripes, it is still important that Coordinators of Fire Safety & Alarm Systems in Homeless Shelters are knowledgeable about which manual fire alarm pull stations send a signal to the Central Station Company and which pull stations do not. 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.

## 10.5 Carbon Monoxide Alarms

**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.

Local Law 7 of 2004 and 1RCNY 28-02 should be referenced to determine if carbon monoxide alarms are required in individual buildings. Most homeless shelters require carbon monoxide alarms.

## 10.6 Carbon Monoxide Detectors

**Carbon Monoxide Detector** – A device that senses 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 shall be installed, tested, and maintained by qualified personnel in accordance with the manufacturers published instructions.

If a carbon monoxide detector is in alarm condition and cannot be reset, this could indicate that carbon monoxide is still in the premises. Until such time that 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 should be followed.

## 10.7 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**

### **10.8 Supervisory Devices:**

Supervisory devices are commonly installed as part of a fire protection system. The supervisory devices monitor important parts of the system. A supervisory alarm such as a bell will be sounded when there is an abnormal condition with a system or device being monitored. For example, a signal will be sounded when a control valve is closed or in the wrong position. This kind of signal is commonly called a supervisory signal. The signal is always transmitted to the main control panel. When a supervisory condition is indicated the Coordinator of Fire Safety & Alarm Systems in Homeless Shelters should check the system in order to identify the part of the fire alarm system that caused the signal. Once that part of the system is identified, it must be resolved immediately. All signals, including fire, supervisory and trouble are transmitted to the central monitoring supervising station.

Some control panels indicate the exact location of the trouble. Other panels only display a general supervisory signal. For example, a lighted panel might indicate only that there is a problem somewhere in the fire protection system. Each supervised device must then be inspected to determine which part is causing the signal.

#### **Common supervised conditions include:**

1. Control valves on sprinkler systems are supervised to ensure that they remain open. Tamper switches indicate if the main or sectional control valves are closed instead of open.
2. The pressure supervisory switch controls the pressure level in pressure tanks and dry pipe valves.
3. Gravity tanks are supervised for high or low water level and high or low temperatures.
4. Electric fire pumps are supervised for pump running, pump failure, and phase reversal.



**Tamper switch on a sprinkler valve**



**Pressure Supervisory Switch**



**Tank Water Level Switch**



**Temperature Supervisory Switch**

### **10.9 Sub-System**

The sub-system is a required system installed in a specific area or floor for a specific purpose in a building that has a required base building fire alarm system. Sub-systems include any fire alarm system with a panel, pre-action systems, deluge sprinkler systems and smoke control systems with a separate panel that is connected to the main fire alarm control panel of the building.

All sub-systems shall be maintained in proper working order, and the Coordinator of Fire Safety & Alarm Systems in Homeless Shelters is responsible for supervising the maintenance of the system. A detailed record of the maintenance for such system must be kept available for examination by the Fire Department.

All sub-systems shall be interconnected to the base building fire alarm system for alarm and trouble supervision and shall annunciate the specific type and location of such sub-systems. Activation of the sub-system shall activate the base building audible and visual appliances and notify the Fire Department via the base building Central Station Company.

## 10.10 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 outputs or any combination thereof.

### A. Horns, Horn/Strobes



**Horns**



**Strobes**



**Horn Strobes**

### B. Combination speaker / strobe appliances



**Speaker**



**Speaker strobe**

## C. Gongs/Bells



**Gongs/Bells**

### **Activation of Audio /Visual Notification Devices**

There are two methods used to notify building occupants and employees of a fire emergency at the fire alarm control panel.

**A. General Alarm Method** - This method activates all audio/visual devices throughout the building when a fire is detected. In certain locations this may be the only method of notifying building occupants available.

**B. Selective Alarm Method** - The selective method activates the audio/visual devices only on the floor of alarm as well as the floor immediately above and below the alarm.

### **10.11 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. The Coordinator of Fire Safety & Alarm Systems must ensure that the communication system is working correctly at all times.

**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. If the Coordinator of Fire Safety & Alarm Systems needs to make a shelter-wide announcement to all building occupants, the public address system is the best tool to use.

### **10.12 Central Station Transmitter**

A central station transmitter is a device that receives alarm signals from protected premises and retransmits those signals to the Fire Department's Bureau of Fire Communication through FDNY approved central stations.

The Coordinator of Fire Safety & Alarm Systems in Homeless Shelters must make sure that the central station transmitter is operable at all times. When transmitter malfunctions are discovered, the Coordinator of Fire Safety & Alarm Systems in Homeless Shelters must report the malfunctions to the FDNY approved central station company and record them in the alarm log book. Authorized central station companies must be approved by the FDNY. The link below sourced from the FDNY website links to an approved list of central station companies:

[http://www.nyc.gov/html/fdny/pdf/fire\\_prevention/central\\_station\\_approved\\_companies.pdf](http://www.nyc.gov/html/fdny/pdf/fire_prevention/central_station_approved_companies.pdf)

The central station company must arrange and facilitate any repairs as soon as possible. Coordinators of Fire Safety & Alarm are prohibited from performing any repairs on the central station transmitter.

## **11. Sprinkler Systems**

Sprinkler systems are required by law in 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 shall cause an alarm to be transmitted to an approved central station and will also sound an alarm throughout the shelter. The Coordinator of Fire Safety & Alarm Systems in Homeless Shelters should be aware of the location of the shut-off valves for the sprinkler system components in case the sprinklers discharge accidentally.

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.

Coordinators of Fire Safety & Alarm Systems in Homeless Shelter are responsible for ensuring that sprinkler heads are never painted over and do not accumulate dust and debris. If a Coordinator of Fire Safety & Alarm Systems becomes aware of a sprinkler head that has been painted over or has accumulated debris or foreign material, it must be replaced immediately with a new sprinkler head. Sprinkler heads that have accumulated debris or have been painted 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.



Coordinators of Fire Safety & Alarm Systems in Homeless Shelters are also 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 Coordinator of Fire Safety & Alarm Systems in Homeless Shelters 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, Coordinators of Fire Safety & Alarm Systems in Homeless Shelters should reference NFPA 25. It is also highly recommended that Coordinators of Fire Safety & Alarm Systems in Homeless Shelters 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\\_sys\\_ems.pdf](http://www.nyc.gov/html/fdny/pdf/cof_study_material/s_12_citywide_sprinkler_sys_ems.pdf)

In addition to the responsibilities above, Coordinators of Fire Safety & Alarm Systems must ensure that sprinkler systems are functioning after shutoff required for maintenance. A report published by the National Fire Protection Association indicates that, “When sprinklers fail to operate, the reason most often given (63% of failures) was shutoff of the system before the fire began, as may occur in the course of routine inspection or maintenance.”

## **12. 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.

Coordinators of Fire Safety & Alarm Systems are 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 shall 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 shall be kept of each inspection for examination by any representative of the Fire Department.

The Coordinator of Fire Safety & Alarm Systems in Homeless Shelters 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, Coordinator of Fire Safety & Alarm Systems in Homeless Shelter should reference NFPA 25. It is also highly recommended that Coordinators of Fire Safety & Alarm Systems in Homeless Shelters 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](http://www.nyc.gov/html/fdny/pdf/cof_study_material/s_13_citywide_standpipe_system.pdf)

### **13. Test, Inspection and Repair Procedures for Fire Alarm Systems**

Coordinators of Fire Safety & Alarm Systems in Homeless Shelters must be aware of the test, inspection and repair procedures and schedule for the fire alarm systems within the shelter. A record of all tests, inspections, and other operations of the fire alarm system must be noted in the log book.

**It is important to note that a third party company may be hired to come to a shelter on a set schedule and perform inspections, testing and maintenance of fire alarm systems. If that is the case, the Coordinator of Fire Safety & Alarm Systems in Homeless Shelters must ensure that the service people are performing the job they were hired for, and that they are performing inspections, testing, and maintenance on the schedule required.**

### **13.1 Building Fire Protection Features Normally Activated By Fire Alarm Systems**

**HVAC Systems:** The supply and movement of air is a primary determinant of the severity of a fire event in a building. When a fire is well supplied with fresh air and its component, oxygen, the fire will be able to grow and spread more rapidly. Similarly, when an air handling system is carrying superheated air or smoke through fire walls and between compartments, the spread of the fire will be greatly enhanced.

It is imperative that air movement be shut down in the event of a fire. Fire alarm systems are therefore interfaced to HVAC systems so that an alarm signal from the fire alarm system will cause the air handling systems in the area of the alarm to shut down.

When the fire alarm is reset, the fans usually will require resetting from a separate "Fan Restart" button or switch. The fan restart key switch, switch, or button is usually located at the FACP.

**Smoke Dampers:** Smoke dampers open and close when required to provide fresh air or to stop smoke passage.

**Fire Dampers:** Fire dampers close when a rise in temperature occurs and stay shut to stop fire from passing through a barrier.

**Elevator Recall:** The fire alarm system integrates with elevator controls to recall elevator cars to the designated landing floor in the event of an alarm.

**Hold open device:** When fire doors are equipped with hold open devices interconnected to a building's fire alarm system, such device will release, allowing the door to close automatically upon activation of the building's fire alarm system

### **14. Out of Service Situations**

Where a required fire protection system is out of service, the department shall be notified immediately and unless otherwise directed by the commissioner, either the building shall be evacuated or a fire watch shall be maintained by one or more persons holding a certificate of fitness for fire guard. Any other actions as the commissioner may direct in addition to or in lieu of such measures shall also be undertaken, until the fire protection system has been returned to service. Where utilized, fire guards shall be provided with at least one approved means for notification of the department and their only duty shall be to perform constant patrols of the protected premises and keep watch for fires. Any impairment to a fire protection or related system could poses safety risks to a building and its occupants and should be taken seriously.

In most homeless shelters, Coordinators of Fire Safety & Alarm Systems will be assigned the role of impairment coordinator, so it is imperative that they are familiar with their responsibilities in that role. If otherwise stated, the building owner shall designate an impairment coordinator to comply with the requirements of this section.

However, in the absence of a specific designee, the owner shall be considered the impairment coordinator.

A tag shall be used to indicate that a system, or portion thereof, is out of service. The tag shall be posted at each fire department connection, system control valve, fire alarm control unit, fire alarm annunciator and fire command center, indicating which system, or part thereof, is out of service. The commissioner shall specify where the tag is to be placed.

#### **14.1 Planned Removal from Service**

The certificate of fitness holder and the impairment coordinator shall be made aware of and authorize the placing of systems out of service. Before authorizing such action the impairment coordinator shall:

1. Determine the extent and expected duration of the out of service condition
2. Inspect the areas or buildings involved and assess the increased risks
3. Make appropriate recommendations to the owner
4. Notify the Fire Department and the responsible person designated by the owner to issue hot work authorizations in accordance with Chapter 26 of the New York City Fire Code
5. Notify the central station company and insurance carrier
6. Notify the building occupants in the affected areas
7. Place out of service tags at all required and appropriate locations
8. Maintain system in service until work is ready to begin

#### **14.2 Unplanned Out of Service Condition**

The certificate of fitness holder, impairment coordinator, and/or other person responsible for inspecting, maintaining or supervising the operation of a fire protection system who observes a serious defect such as an empty tank, break or major leak in system water piping, inoperative or shut water supply valves, defective Siamese connections, or complete or partial shut down of sprinkler and/or standpipe systems, other than a shutdown for scheduled inspection, testing or maintenance, shall immediately report such condition to the owner of the building, and to the Fire department. When a system fails or otherwise goes out of service, the certificate of fitness holder or the impairment coordinator shall take the same actions set forth in the “**Planned Removal from Service**” section and such other actions necessary or appropriate to protect the occupants of the building and minimize property damage.

When the certificate of fitness holder or other such person observes a minor defect or other condition not presenting a serious safety hazard, he or she shall report the defect or condition to the owner, and if the defect or condition is not corrected within 30 days, shall report it in writing to the department.

**14.3 Fire Watch**

In a shelter where a required fire protection system is out of service, a fire watch shall be maintained by one or more persons holding a certificate of fitness as fire guard. The fire guard(s) is/are required to be immediately available when the system is out-of-service with the following exception:

- When the affected area does not exceed 50,000 square feet, the impairment coordinator (or a trained and knowledgeable person who is capable of performing fire watch duties and is designated by the building owner) may perform the duties of the fire watch for the initial 4 hours of an unplanned or planned out of service condition.

The number of fire guards generally depends on the location and the size of the area affected by the out of service fire protection system. A fire guard should be available to patrol all areas in which the fire protection system is out of service at least once every hour. No individual fire guard should patrol more than 50,000 square feet of building floor area. It may be necessary that more than one fire guard be designated to meet this standard.

The recommended coverage for performing fire watch in affected area(s) is summarized in the table below.

Area	Planned or Unplanned	
	The initial 4 hours	> 4 hours
≤ 50,000 ft <sup>2</sup>	A C of F as fire guard holder or an Impairment coordinator or a trained and knowledgeable person	One C of F as fire guard holder
> 50,000 ft <sup>2</sup>	One C of F as fire guard holder per 50,000 square feet	

The fire guard should be maintained continuously, 24 hours a day, until such systems are restored to good working order. In some cases, Fire Department personnel may be on scene and provide additional direction on the number of required fire guards or other fire protection measures that may be required until such time as the fire protection system is restored to good working order.

**14.4 Restoring systems to service**

When an out of service device, equipment or system is restored to normal working order, the impairment coordinator shall:

1. Conduct necessary inspections and tests to verify that the affected systems are operational.
2. Notify the Fire Department.
3. Notify the owner, central station, insurance carrier and occupants in the affected areas.
4. Remove the out of service tags.

## 15. Portable Fire Extinguishers

Coordinator of Fire Safety & Alarm Systems in Homeless Shelter must be familiar with the different types of portable fire extinguishers. Coordinator of Fire Safety & Alarm Systems in Homeless Shelter 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. The Coordinator of Fire Safety & Alarm Systems in Homeless Shelters should be familiar with the use of portable fire extinguishers. When it comes to using a fire-extinguisher, remember the acronym **P.A.S.S.** to help make sure it is used properly. **P.A.S.S.** stands for **P**ull, **A**im, **S**queeze, **S**weep.

### 15.1 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.

ELECTRICAL



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.

COMBUSTIBLE



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.



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 offices, hotels, theaters and classrooms. 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:



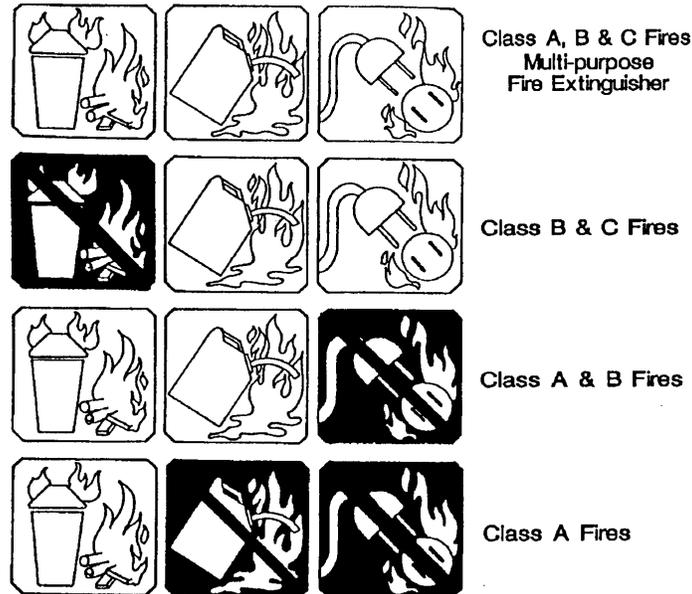
As mentioned above, a portable fire extinguisher with just a “C” classification does not exist. The “C” classification indicates ONLY that the extinguishing agent is a non conductor and is safe to use on live electrical fires. “C” fires will have either an “A” component, such as ordinary combustibles 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:



## 15.2 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.



## 15.3 Portable Fire Extinguisher Monthly Inspection

Portable fire extinguishers are required to be **inspected monthly**. Coordinators of Fire Safety & Alarm Systems in Homeless Shelters are responsible for ensuring that this monthly inspection takes place. The building owner is responsible for designating a person to perform a monthly visual inspection. This inspection is a “quick check” that a fire extinguisher is available and will operate. It is intended to give reasonable assurance that the fire extinguisher is fully charged and operable. This is done by verifying that it is in its designated place, that it has not been actuated or tampered with, and that there is no obvious or physical damage or condition to prevent its operation. The information on the monthly inspection record must include the date the inspection was performed, the person performing the inspection, and those portable fire extinguishers found to require corrective action. Such recordkeeping must be attached to the extinguisher. Labels or markings indicating fire extinguisher use, or classification, or both shall be placed on the front of the fire extinguisher.

Monthly inspection record located on the front of a portable fire extinguisher



#### **15.4 Portable Fire Extinguisher Annual Servicing**

Servicing is a thorough examination of the Portable Fire Extinguisher (PFE). It is intended to give maximum assurance that the PFE will operate effectively and safely. It also includes any necessary repair or replacement. Servicing the PFE will reveal if hydrostatic testing or internal maintenance is needed. **A separate certificate of fitness is required to service, maintain and/or recharge a PFE.** A Servicing Company certificate is also required for a company providing such service. Coordinators of Fire Safety & Alarm Systems in Homeless Shelter are responsible for making arrangements to have all the extinguishers serviced at least once a year by a qualified technician holding a Certificate of Fitness for the servicing of portable fire extinguishers. PFEs must be serviced **at least annually or** at the time of hydrostatic testing, or when physical damage to the cylinder is visible during a monthly inspection. PFEs removed for servicing must be replaced by a similar PFE and must be of at least equal rating.

#### **16. Recordkeeping**

Recordkeeping is imperative to ensure that there is a written record of certain procedures and required inspections, testing and maintenance within the shelter. Log books should be maintained on the premises for a period of 3 years from the last entry. Records must always be made available upon request of any Fire Department representative. Coordinators of Fire Safety & Alarm Systems in Homeless Shelters should know the location of all log books and the information they contain.

The following information must be recorded at the beginning of the log book:

1. Shelter address
2. The date FDNY approved the shelter's fire alarm system and the manufacturer of the system
3. FDNY approved central station information, such as:
  - a. account number
  - b. company name
  - c. telephone number
  - d. supervisors name

A log book entry must be made for all of the following, including but not limited to:

1. Fire watch patrols
2. Fire Drills, specifically:
  - a. the Coordinator of Fire Safety & Alarm Systems in Homeless Shelters conducting the drill and his/her certificate of fitness number
  - b. date and time of the drill

- c. name and title of the FEP staff assisting in the conduct of the drill
  - d. number of occupants participating in the drill
  - e. evaluation of effectiveness of the drill, including any delays and deficiencies
  - f. if evacuation was conducted, time required to accomplish evacuation
3. Standpipe/sprinkler system inspection, testing and servicing
  4. Fire alarm system inspection, testing and servicing
  5. Fire department connection testing
  6. Smoke detector inspection, testing and servicing;
  7. Portable fire extinguisher testing and servicing;
  8. Conduct of FEP staff training;
  9. Proof of flame-resistant decorations; and
  10. When the emergency preparedness plan is reviewed
  11. When the emergency preparedness plan is implemented

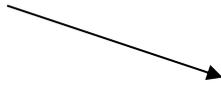
## **17. Safety in Shelters**

Coordinators of Fire Safety & Alarm Systems in Homeless Shelters 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 FEP staff members become aware of a fire hazard they should inform the Coordinator of Fire Safety & Alarm Systems in Homeless Shelters immediately. Typical causes of fire in homeless shelters are listed below:

- Overloaded extension cords



- Unattended and prohibited microwaves



- Portable heaters



- Candles and hot plates



- Halogen lamps



- Overloaded electrical outlets and power strips



- Unattended cigarettes



- Unattended or improperly used ovens and stoves



Coordinators of Fire Safety & Alarm Systems in Homeless Shelters and fire guards should also be aware that sometimes fires in shelters are started intentionally. All employees should be aware of and must pay close attention to any type of suspicious behavior. Anyone witnessing suspicious behavior should inform the Coordinator of Fire Safety & Alarm Systems in Homeless Shelters immediately.

## 17.1 Buildings Temporarily Occupied as Emergency Shelters

The following are standards, requirements and procedures for premises or parts of premises that are operated, on a **temporary basis**, to provide emergency shelter for more than 15 persons.

### General Requirements:

- The requirements shall apply to premises, or parts thereof, including but not limited to armories, auditoriums, community centers, gymnasiums, houses of worship and schools, that are not designed to be occupied as emergency shelter, but that are operated and/or occupied for such purposes for more than 15 persons more than 30 days in any year
- Notification shall be made to the Department of Buildings and the Public Buildings Unit of the Bureau of Fire Prevention of the intent to operate as an emergency shelter for more than 15 persons, before starting such use or occupancy
- The Emergency shelter must comply with the Building Code. The Fire Department and the Department of Buildings will resolve any issues arising from the application of these requirements to a particular premise

### Design and Installation Requirements:

- The premises shall be protected throughout by a sprinkler system designed and installed in accordance with the Building Code. Activation of the sprinkler system shall cause an alarm to be transmitted to an approved central station and sound an alarm throughout the premises
- The premises shall be equipped with a fire alarm system designed and installed in accordance with the Building Code and provided with:
  - an approved fire command center at an approved location;
  - an approved system of smoke detectors that, upon activation, will cause an alarm to be transmitted to an approved central station and sound an alarm throughout the premises; and
  - an approved one-way voice communication system capable of making announcements from the fire command center to all parts of the premises
- The shelter must be equipped with emergency lighting in accordance with the Building Code
- Shelters must not become overcrowded and must maintain adequate means of egress, including:
  - a. providing a livable area of not less than 80 square feet per shelter occupant, or as otherwise approved by the NYC Department of Buildings.

b. adequate aisle space shall be maintained throughout the emergency shelter. Aisles shall not be less than 36 inches (3 feet) in width, except that cross aisles (aisle space in the main hallways) shall not be less than 48 inches (4 feet) in width

This aisle space is necessary to permit occupants to quickly exit the premises in case of an emergency

- Means of egress shall be provided that are:
  - a. sufficient in number
  - b. remote from one another
  - c. arranged to open in the direction of exit travel
  - d. equipped with panic hardware
  - e. equipped with doors that have hold open devices
  - f. unobstructed and unimpeded, and unlocked in the direction of egress at all times
- The Department may require that the fire protection and life safety systems specified in this section be extended to other parts of the premises if the use and occupancy of the premises as an emergency shelter presents an increased fire safety risk to other parts of the premises.

#### Operational and Maintenance Requirements:

- Shelter staff shall be readily identifiable at all times while on duty by means of an approved identification (such as a uniform, cap, nameplate, or armband). This helps to avoid confusion in the case of an emergency.
- All parts of occupancies in use as shelters, including sleeping areas, shall be continuously patrolled by a person holding a certificate of fitness. An approved method of supervising the conduct of the fire watch, such as a watchman's clock and key stations, shall be provided
- Below grade areas such as basements shall not be used for sleeping purposes. Below grade areas that are not protected throughout by a sprinkler system shall not be used for lounges, recreation rooms, or other gathering places
- Certain drapes, curtains, and other decorations in public areas in shelters must be inherently flame resistant or undergo a flame retardant treatment. The Coordinator of Fire Safety & Alarm Systems in Homeless Shelters should be familiar with the most recent regulations in the Fire Code and the Rules of the City of New York, in addition to the C-15 Flame Retardant Treatment Certificate of Fitness, available below:

[http://www.nyc.gov/html/fdny/html/c\\_of\\_f/cof\\_study\\_materials.shtml](http://www.nyc.gov/html/fdny/html/c_of_f/cof_study_materials.shtml)

- Smoking is prohibited inside of shelters
- Shelters must be provided with noncombustible waste containers with tight fitting lids. At least one container must be provided for each 50 persons in each occupied area of the shelter, but not less than 2 containers shall be provided in each sleeping area, dining area and other gathering place. Combustible waste containers must be regularly emptied and must not be allowed to overflow. Combustible waste awaiting collection must be stored outdoors in accordance with the Fire Code, or indoors in a separate locked room on the ground floor that is protected by a sprinkler system.
- The following signs shall be securely and conspicuously posted in accordance with the New York City Building Code:
  - a. Exit signs
  - b. Stairwell floor number and stairwell identification signs
  - c. Elevator identification and emergency signs.
  - d. Sleeping room signs
  - e. Fire emergency reporting signs

## **17.2 Elevators**

In an actual emergency, elevators (if the shelter has them) should be returned to the designated lobby or sky lobby. There must be a sign over the elevator call button indicating that elevators must not be used during a fire unless otherwise instructed by the Fire Department. This sign must be not more than 6 feet above the floor. This sign is known as an elevator lobby or landing sign.

All elevators equipped with Phase I emergency elevator recall and Phase II emergency in-service elevator operation shall be maintained in proper working order such that the emergency elevator operations are operable at all times. All elevators shall be subjected, at least **monthly**, to a Phase I recall test. All elevators shall also be subjected, at least **monthly**, to a minimum of a Phase II one-floor operation test. A written record of the operational status of the elevator shall be made and kept on the premises and made available for inspection at the request of any Fire Department representative.

## **17.3 Medical Emergency**

If a Coordinator of Fire Safety & Alarm Systems in Homeless Shelters becomes aware of an injury or other medical emergency at the premises, they should call 911 and provide as much of the following information as possible. The Coordinator of Fire Safety & Alarm Systems in Homeless Shelters 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 victim(s) (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 victim(s)
- The victim(s)'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.

- Coordinators of Fire Safety & Alarm Systems in Homeless Shelters should alert 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 victim(s).
- Coordinators of Fire Safety & Alarm Systems in Homeless Shelter should arrange for an elevator to be placed on stand by (if the shelter has elevators).
- The victim should not be moved unless the victim(s)'s location is unsafe.
- The Coordinator of Fire Safety & Alarm Systems in Homeless Shelters should control access to the scene.
- The Coordinator of Fire Safety & Alarm Systems in Homeless Shelters should arrange a designated person to meet the ambulance at the nearest entrance or emergency access point; direct them to victim(s)

#### **17.4 Bomb or other explosion threats**

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

- Do not touch/move/open the article
- 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

## **17.5 Chemical incident or release**

- 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 respondent.

## **18. Common Problems in Shelters**

The following is a list of common problems found in shelters that can endanger the safety of building occupants and employees. Coordinators of Fire Safety & Alarm Systems in Homeless Shelters should be familiar with these problems so that they can avoid their occurrence.

### **1. Failure of the Coordinator of Fire Safety & Alarm Systems in Homeless Shelters to maintain proper recordkeeping**

The Coordinator of Fire Safety & Alarm Systems in Homeless Shelters must ensure that all required log books are updated and kept on the premises in accordance with the New York City Fire Code.

### **2. Lack of knowledge regarding Phase I and Phase II Elevator Service**

The Coordinator of Fire Safety & Alarm Systems in Homeless Shelters should be able to operate the elevators in the shelter in Phase I and Phase II elevator service in accordance with the New York City Fire Code.

### **3. Lack of Knowledge regarding Fire Alarm Panel**

Coordinators of Fire Safety & Alarm Systems in Homeless Shelters often do not understand the actions they should take when the Fire Alarm Control Panel is activated (for example, if a trouble or supervisory signal exists). Coordinators of Fire Safety & Alarm Systems in Homeless Shelters must receive training and be highly proficient on the Fire Alarm Panel in their shelter.

### **4. Failure to Facilitate the Inspection and Maintenance and Testing of Fire Alarm Systems**

Coordinator of Fire Safety & Alarm Systems in Homeless Shelters must be familiar with the inspection, maintenance and testing schedule for Fire Alarm Systems. Even if the Coordinator of Fire Safety & Alarm Systems in Homeless Shelters is not qualified to perform inspection, maintenance or testing, he or she must know when it needs to take place and ensure that it does.

### **5. Lack of Knowledge Regarding Proper Actions to take when there are Fire Protection System Impairments**

There are particular steps that must be followed when there are impairments to the fire protection system in a shelter. Impairments may include a malfunctioning sprinkler system, a manual pull station that is not working, or

an out of service fire alarm control panel. Coordinators of Fire Safety & Alarm Systems in Homeless Shelters must ensure that the proper steps to take upon the discovery of an impairment are followed in accordance with the New York City Fire Code.

**6. Lack of Knowledge regarding when a Permit is required for Hazardous Materials and Hazardous Operations**

Coordinators of Fire Safety & Alarm Systems in Homeless Shelters should be aware if the shelter they are working in is using or storing hazardous materials in quantities that require permits. These requirements can be obtained by reviewing Section 105.2 of the New York City Fire Code.

**7. Improper Storage**

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

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. Sometimes this extra storage obstructs sprinkler heads.



Hallway obstructions



Mattresses improperly stored in the passageway leading to the stairwell

**8. Required Fire-rated doors**

Required fire-rated doors in stairwells, boiler rooms, and electrical rooms are often open when they should be closed. Sometimes they are propped open with door stoppers when they must be closed. In some shelters, door hardware such as knobs and latching mechanisms are broken or disabled. Improper hardware

is sometimes used on the doors. Coordinators of Fire Safety & Alarm Systems in Homeless Shelters must ensure that Fire-rated doors remain closed and that any improper hardware is removed.



Fire doors illegally propped open with a portable fire extinguisher



Fire doors illegally suspended open



Fire door propped open with a doorstop, which is illegal



### **9. Open flames, unauthorized use of portable heating appliances and smoking**

Coordinator of Fire Safety & Alarm Systems in Homeless Shelter and fire guards must ensure that unlawful activities are not taking place in shelters.

### **10. Lack of Emergency Planning and Preparedness**

Shelters are required to submit the plan for acceptance as required by the Fire Code, Rules and Fire Department policy.

## **11. Emergency Lighting**

Coordinator of Fire Safety & Alarm Systems in Homeless Shelter should ensure that battery operated emergency light fixtures are functioning.

Please reference **Appendix A** for a “Coordinator of Fire Safety & Alarm Systems in Homeless Shelters Checklist” which can be used as an additional resource.

## **Appendix A**

### **Coordinator of Fire Safety & Alarm Systems in Homeless Shelters Checklist\***

**Coordinators of Fire Safety & Alarm Systems in Homeless Shelters should have the following materials available upon request:**

- Demographic information about the shelter (i.e. name of the shelter, address, zip code, borough, number of stories, height, floors that are occupied as a shelter)
- Certificate of Occupancy
- Operating Certificate
- A diagram of the means of egress throughout the shelter
- Emergency Preparedness Plan accepted by the FDNY
- Coordinator of Fire Safety & Alarm Systems in Homeless Shelters' name
- Coordinator of Fire Safety & Alarm Systems in Homeless Shelters' Certificate of Fitness number and expiration date
- Deputy Coordinator of Fire Safety & Alarm Systems in Homeless Shelters' name
- Deputy Coordinator of Fire Safety & Alarm Systems in Homeless Shelters' Certificate of Fitness number and expiration date
- Fire Drill Records (a record of at the minimum, a monthly drill on each work shift)
- Number of Fire Guards on the premises
- Fire Guards' Certificate of Fitness numbers and expiration dates
- Record of Fire Alarm System inspection and testing
- Record of annual Portable Fire Extinguisher servicing
- Sprinkler system inspection record
- S-12 Citywide Sprinkler System Certificate of Fitness holder name and expiration date
- Standpipe system inspection record (if applicable)
- S-13 Citywide Standpipe System Certificate of Fitness holder name and expiration date
- Record of Suppression System's five year flow and hydrostatic testing
- Record of fire pump maintenance and testing
- Affidavits of flame retardant treatment or inherently flame retardant material (if applicable)
- Permits for storage and handling of hazardous materials (if applicable)

**Coordinators of Fire Safety & Alarm Systems in Homeless Shelters must be knowledgeable about the following:**

- The functionality of the Fire Alarm Control Panel, such as:
  - placing the fire alarm system on and off line
  - making a public address announcement throughout the building, in the stairway(s), and on individual floors
  - acknowledging signals at the fire alarm control panel
  - communicating with FEP staff using the primary and secondary means of communication designated in the emergency preparedness plan for the building
  - silencing the fire tones throughout the building after FDNY authorization
  - resetting the fire command center
- The number of exits in the shelter and their location (including fire escapes)
- The number and type of stairways
- The stairways that extend to the roof
- Any recent alterations or renovations made to the shelter
- Any recent additions or changes to the fire alarm system
- The name of the Central Station monitoring company
- The location and types of detectors within the shelter

- The type of suppression system in the shelter
- Location of the main shutoff and section valves
- The condition, maintenance, and switches for the electrical system
- The type of fire pump and its location
- The type of heat source in the shelter
- If there is an emergency generator, it's location and testing record
- Gas or fuel oil in the shelter
- The number of levels below grade and means of egress
- The use of areas below grade (used for storage, manufacturing, etc.)
- The layout of areas and levels below grade
- The location of the boiler room
- The configuration of the roof and its support system

**Coordinators of Fire Safety & Alarm Systems in Homeless Shelters should be aware of all of the following:**

- Exits, doors, aisles, hallways and stairs should not be blocked or obstructed
- The Fire Command Post has appropriate signage
- The Emergency Preparedness plan is on the premises and updated as often as necessary
- The Fire Alarm Control panel is in good physical condition
- The Fire Alarm Control panel has the power light on
- Fire Alarm boxes are unobstructed and have appropriate signage
- Fire Department connections are unobstructed and have appropriate signage
- Control valves are unobstructed
- Control valves are sealed open
- Control valves have tamper switches
- Extra sprinkler heads are available and on the premises
- Sprinkler heads throughout the shelter are clear of obstructions (not loaded)
- Elevator emergency signs are posted
- Elevator diagram is posted
- Elevator banks are labeled with the appropriate letter designation
- The door to the roof is unlocked
- Access to the roof is unobstructed
- There is no combustible waste on the roof
- Portable fire extinguishers are inspected monthly and the inspection is recorded on the tag
- Emergency lighting is operational and maintained
- Exits and stairs are accurately marked and illuminated
- Fire escapes are in good condition
- Windows are properly secured
- Fire doors are closed
- Doors to sleeping rooms possess self-closing devices
- Sleeping rooms are properly identified
- No smoking signs are posted
- Combustible waste is removed from the premises
- Check that ventilation ducts are operating properly and are well maintained
- General good housekeeping throughout the shelter
- Ceilings are well maintained
- Kitchens have an appropriate extinguishing system and all equipment is well maintained (if applicable)

*\*This is not meant to be an all-inclusive check-list. Coordinators of Fire Safety & Alarm Systems in Homeless Shelters must be familiar with the New York City Fire Code, the Rules of the City of New York and NFPA standards at all times.*