

**FIRE DEPARTMENT • CITY OF NEW YORK**



**STUDY MATERIAL FOR THE  
CERTIFICATE OF FITNESS**

**EMERGENCY ONE-WAY VOICE ANNOUNCEMENT PERSONNEL**

**F-53**

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

**Note: The F-53 Certificate of Fitness is designed to supervise/operate a fire alarm system integrated with one-way voice communication system. If your occupancy has a public address system (PA system) independent from the fire alarm system, you are NOT required to obtain this C of F.**

**ALSO INCLUDED IN THIS BOOKLET YOU WILL FIND THE FOLLOWING:**

- NOTICE OF EXAMINATION (NOE)
- APPENDIX

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## Table of Contents

<b>EXAM SPECIFIC INFORMATION FOR F-53 CERTIFICATE OF FITNESS .....</b>	<b>5</b>
F- 53 Employment Verification Form .....	12
Sample Letter for Seeking Additional Work Location(s).....	14
<b>1. INTRODUCTION.....</b>	<b>18</b>
<b>2. DEFINITIONS AND TERMINOLOGY.....</b>	<b>23</b>
<b>3. EMERGENCY ONE-WAY VOICE ANNOUNCEMENT PERSONNEL TRAINING AND DUTIES .....</b>	<b>30</b>
<b>3.1. Training .....</b>	<b>30</b>
<b>3.2. General Duties of Emergency One-Way Voice Announcement Personnel.....</b>	<b>32</b>
<b>3.3. The Importance of Emergency Announcement.....</b>	<b>32</b>
<b>4. FIRE ALARM SYSTEMS .....</b>	<b>33</b>
<b>4.1. Introduction.....</b>	<b>33</b>
<b>4.2. Fire Alarm Control Panel and Communication Systems .....</b>	<b>34</b>
<b>4.2.1. Presignal systems with Event/Non-Event Mode .....</b>	<b>34</b>
<b>4.2.2. Emergency voice/alarm communication systems .....</b>	<b>36</b>
<b>4.2.3. One-way emergency communications systems (other than voice/alarm communication systems) .....</b>	<b>36</b>
<b>4.2.4. Fire Command Center.....</b>	<b>37</b>
<b>4.3. Three Fire Alarm Control Panel Signals .....</b>	<b>37</b>
<b>4.4. In the case any fire alarm signal is generated .....</b>	<b>39</b>
<b>4.4.1. Acknowledge switch or button .....</b>	<b>39</b>
<b>4.4.2. Alarm silence switch or button.....</b>	<b>39</b>
<b>4.4.3. System reset switch or button.....</b>	<b>40</b>
<b>4.5. Initiating devices.....</b>	<b>40</b>
<b>4.5.1. Smoke detectors .....</b>	<b>41</b>
<b>4.5.2. Heat detectors .....</b>	<b>41</b>
<b>4.5.3. Sprinkler waterflow alarm-initiating devices .....</b>	<b>43</b>

4.5.4.	<i>Manually actuated alarm-initiating devices</i> .....	43
4.5.5.	<i>Carbon monoxide detectors</i> .....	45
4.5.6.	<i>flammable/combustible gas detectors</i> .....	46
4.5.7.	<i>Types of devices and activations</i> .....	47
<b>4.6.</b>	<b>Power supplies for the fire alarm system</b> .....	<b>47</b>
<b>4.7.</b>	<b>Audible and visual notification devices</b> .....	<b>47</b>
<b>4.8.</b>	<b>Central Station Contact Information , Central Station Transmitter and Fire Alarm System Off-Line</b> .....	<b>48</b>
<b>4.9.</b>	<b>Periodic Inspection and Testing Requirements</b> .....	<b>49</b>
4.9.1.	<i>Inspection frequencies</i> .....	49
4.9.2.	<i>Companies and individual certifications</i> .....	50
4.9.3.	<i>Alarm log book</i> .....	51
(1)	<i>Location of the alarm log book</i> .....	51
(2)	<i>Format of the alarm log book</i> .....	51
(3)	<i>Alarm log book entries</i> .....	52
<b>4.10.</b>	<b>Unnecessary and unwarranted alarms</b> .....	<b>57</b>
<b>4.11.</b>	<b>Out-of-service fire protection systems</b> .....	<b>57</b>
<b>5.</b>	<b>RESPONSES FOR FIRE EMERGENCIES</b> .....	<b>59</b>
<b>5.1.</b>	<b>Ensure 911 is Called</b> .....	<b>59</b>
<b>5.2.</b>	<b>Report to the Fire Alarm Control Panel</b> .....	<b>59</b>
<b>5.3.</b>	<b>Gather Information from the Building Occupancy Staff</b> .....	<b>60</b>
<b>5.4.</b>	<b>Identify Stairway(s) for Evacuation/Relocation of Building Occupants</b> .....	<b>61</b>
<b>5.5.</b>	<b>Make Announcements to Building Occupants</b> .....	<b>61</b>
5.5.1.	<i>Fire Alarm Announcement Sample Scripts</i> .....	62
<b>5.6.</b>	<b>Interaction with the Fire Department during Fire Incidents</b> .....	<b>63</b>
<b>6.</b>	<b>PREPAREDNESS AND RESPONSES FOR NON-FIRE EMERGENCIES</b> .....	<b>66</b>

<b>6.1. Building preparedness</b> .....	67
<b>6.2. Four non-fire emergency actions</b> .....	68
6.2.1. <i>Non-evacuation actions: shelter-in-place and in-building relocation</i> .....	68
(1) <i>Shelter in Place</i> .....	68
(2) <i>In-building relocation</i> .....	69
6.2.2. <i>Evacuation actions: partial evacuation and full evacuation</i> .....	69
<b>6.3. A-B-C survival techniques for active shooter incident</b> .....	70
<b>6.4. General guideline for non-fire emergencies (except the active shooter and medical emergencies)</b> .....	74
6.4.1. <i>Announcement Sample Scripts for Non-Fire Emergency Actions</i> .....	76
6.4.2. <i>Non-English speaking occupants</i> .....	76
<b>6.5. Preparing responses during active shooter incidents in different occupancies</b> .....	77
<b>6.6. General guideline for active shooter incidents</b> .....	78
6.6.1. <i>Interacting with Police Officers during an active shooter emergency</i> .....	83
<b>6.7. General guideline for medical emergency</b> .....	85
<b>APPENDIX A</b> .....	<b>88</b>

## **EXAM SPECIFIC INFORMATION FOR F-53 CERTIFICATE OF FITNESS**

### **Save time and submit application online!**

*Applicants who submitted and paid online for an exam before arriving at the FDNY will not need to wait in line to enter the FDNY.*

*It can take about 30 minutes to complete. Completing application and paying online will eliminate waiting outside in the long lines.*

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

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

Create an Account and Log in to:

<https://fires.fdnyccloud.org/CitizenAccess/SAML/NYCIDLogin.aspx>

### **REQUIREMENTS FOR CERTIFICATE OF FITNESS APPLICATION**

#### **General requirements:**

Review the General Notice of Exam:

<http://www1.nyc.gov/assets/fdny/downloads/pdf/business/general-notice-of-exam-cof.pdf>

#### **Special requirements for the: F-53 Certificate of Fitness:**

1) Fire Alarm Company Verification Letter

Applicants must present an affidavit from the authorized fire alarm vendor (this vendor must have obtained the FDNY company certification number) stating that this applicant has been trained and is competent in the operation and use of the Manual/Automatic Smoke/Heat/CO detection and sprinkler alarm system with one-way voice paging. The sample of this letter is provided on the following pages. It can also be accessed via the following link:

<https://www1.nyc.gov/assets/fdny/downloads/pdf/business/fire-alarm-company-verification-letter.pdf>

2) F- 53 Employment Verification Form (must be notarized)

Applicants must present the F- 53 Employment Verification Form (provided in the following page) completed by the building owner or a qualified building representative including:

- a manager responsible for the overall security of the business or occupancy,
- a manager responsible for emergency preparedness of the business or occupancy
- a manager responsible for the overall operations of the building or occupancy

This verification form can also be accessed via the following link:

<http://www1.nyc.gov/assets/fdny/downloads/pdf/business/f53-employment-verification-form.pdf>

3) Audit requirements

The FDNY reserves the right to verify the contents of both the Fire Alarm Company Verification Letter and the F-53 Employment Verification Form immediately after submission by performing an unannounced audit of the contents of the letter. This audit will occur at the premises location(s) in which the F-53 applicant is employed.

4) Additional work location

F-53 C of F holders (or F-89/T-89/F-80 C of F holder seeking to obtain F-53 C of F) seeking to register more than one work location must present:

- a. the Fire Alarm Company Verification Letter from the new work location,
- b. the F-53 Employment Verification Form from the new work location, and
- c. a letter with company letter head from the employer for EACH work location indicating the days and specific hours worked and stating the understanding that a F-53 Certificate of Fitness holder must not be present for more than one work location for the same day and time (sample attached on the following pages) .

5) The individuals who possess one of the following documents are allowed to obtain the F-53 C of F Certificate of Fitness without taking the F-53 exam. However, the required documents (the alarm company verification letter and employment verification form, and other documents listed above.) and payment (\$25) are still required.

- A valid FLSD (F-89/T-89/F-80) C of F (must also submit the required recommendation letters addressing additional work location issues, see “additional work location” requirements listed above); or
- A valid inactive FLSD (Q-89) C of F

6) The individuals who have obtained the F-53 Certificate of Fitness will be exempt from having to obtain a separate S-95 Certificate of Fitness. The applicants who pass the F-53 Certificate of Fitness test are allowed to obtain the S-95 Certification of Fitness without taking the S-95 exam. However, employer recommendation letter (refer to the NOE of S-95) and payment (\$25) are still required.

**Application fee (Cash is NO LONGER ACCEPTED):**

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

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

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

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

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

### **REQUIREMENTS FOR ALTERNATIVE ISSUANCE PROCEDURE (AIP)**

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

### **EXAM INFORMATION**

The F-53 exam will consist of 45 multiple-choice questions, administered on a "touch screen" computer monitor. It is a time-limit exam. Based on the amount of the questions, you will have 68 minutes to complete the test. A passing score of at least 70% is required in order to secure a Certificate of Fitness.

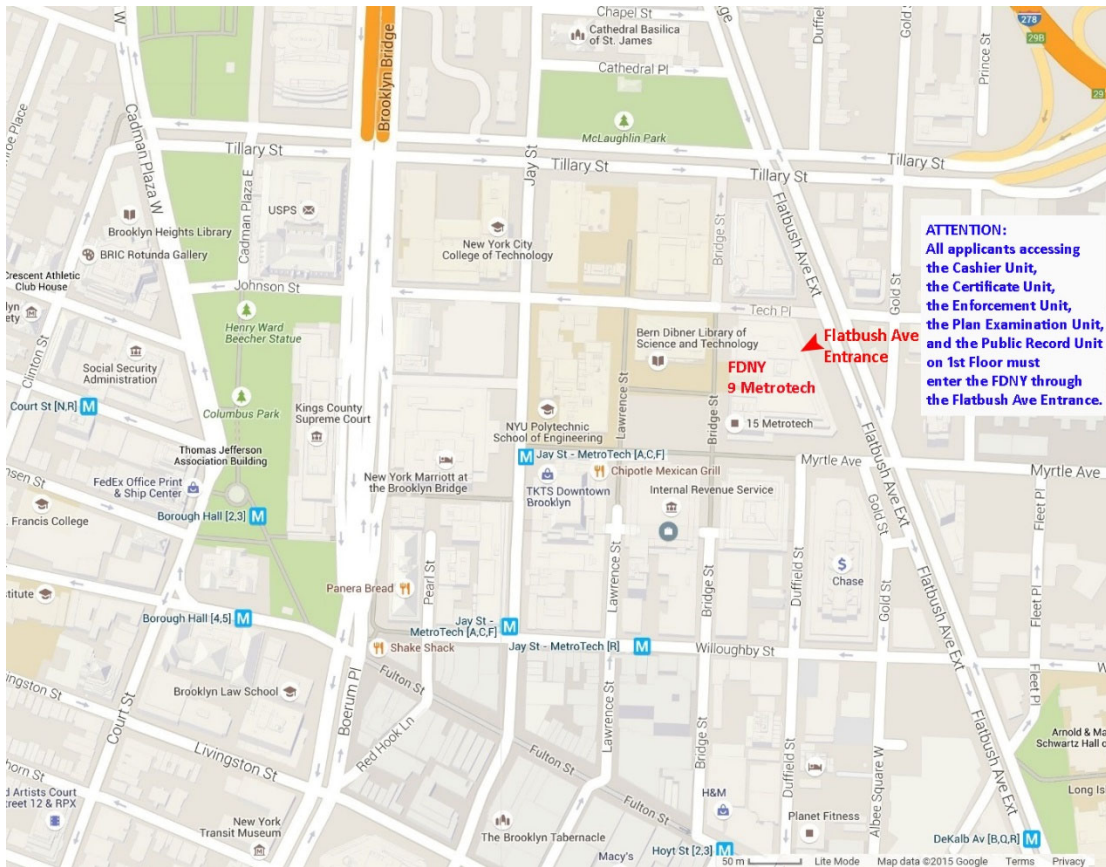
Call (718) 999-1988 for additional information and forms.

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

<http://www1.nyc.gov/assets/fdny/downloads/pdf/business/cof-f53-noe-study-materials.pdf>

**Exam site:**

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



**RENEWAL REQUIREMENTS**

**General renewal requirements:**

Review the General Notice of Exam:

<http://www1.nyc.gov/assets/fdny/downloads/pdf/business/general-notice-of-exam-cof.pdf>

**Special renewal requirements for F-53 COF: None**

**The FDNY strongly recommends the F-53 COF holders to renew the COF on-line. To learn the simplified on-line renewal:**

<http://www1.nyc.gov/assets/fdny/downloads/pdf/business/cof-simplified-renewal-short.pdf>

**QUESTIONS?**

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

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## Fire Alarm Company Verification Letter

This verification letter is to verify \_\_\_\_\_ has been trained regarding operating  
(Name of Applicant)  
the communication system related to the fire alarm system on the premises.

### **Section A - Premises Verification**

The fire alarm system located at \_\_\_\_\_  
(specific location of the alarm system, including floor and address)  
in which \_\_\_\_\_ is employed is an approved fire alarm system.  
(Name of Applicant).

This occupancy has:  fire alarm system integrated with one-way voice communication  
 separate PA system  
(Note: separate PA system is not required to be operated by a F-53 C of F holder)

The communication system serves the:  entire building  
 specific floors/areas, please specify:  
\_\_\_\_\_ (e.g. 1<sup>st</sup> fl to 3<sup>rd</sup> fl)

I am the representative of the fire alarm company \_\_\_\_\_  
(company name)

with the FDNY company certification number : \_\_\_\_\_. Our company conducts  
inspection, testing, and maintenance service for the fire alarm system listed above.

**Section B - Fire Alarm System Communication System Operation Verification**

I, \_\_\_\_\_, hereby swear that on \_\_\_\_\_ I have personally  
 (Name of S-97/S-98 C of F holder) (MM/DD/YY)

**witnessed** the applicant demonstrated and performed the following communication functions related to the fire alarm system listed above:

Function	<b>Personally witnessed</b> <i>All items must be marked "yes" or "N/A" to proceed</i>
Make a public address announcement throughout the building/occupancy/applicable areas	<input type="checkbox"/> Yes
Place the fire alarm system off line	<input type="checkbox"/> Yes <input type="checkbox"/> N/A, because: <input type="radio"/> the system is NOT monitored by a central station.
Place the fire alarm system on line	<input type="checkbox"/> Yes <input type="checkbox"/> N/A, because: <input type="radio"/> the system is NOT monitored by a central station.
Acknowledge signals at the Fire Alarm Control Panel	<input type="checkbox"/> Yes <input type="checkbox"/> N/A, because: <input type="radio"/> no indicator designed to be shown on the panel.
Manual activation of alarm tones	<input type="checkbox"/> Yes <input type="checkbox"/> N/A, because: <input type="radio"/> the alarm tones are designed to be activated automatically only.
Manual activation of alert tones (non-fire related)	<input type="checkbox"/> Yes <input type="checkbox"/> N/A, because: <input type="radio"/> the system is not designed to have alert tones.
Perform fail-safe door release	<input type="checkbox"/> Yes <input type="checkbox"/> N/A, because: <input type="radio"/> no fail-safe device installed.
Silence the fire tones throughout the building	<input type="checkbox"/> Yes <input type="checkbox"/> N/A, because: <input type="radio"/> the system cannot be silenced.
Reset the Fire Alarm Control Panel	<input type="checkbox"/> Yes

I have verified that the applicant has the been trained regarding operating the communication system related to the fire alarm system on the premises during a fire or non-fire emergency incident.

On this \_\_\_\_\_ day of \_\_\_\_\_, in the year \_\_\_\_\_, I have hereunto affixed my signature and I affirm that all statements made on this application (including any attached papers) are true under the penalties of perjury. I understand that:

- any intentional falsification of this letter can be grounds for the denial, non-renewal, suspension or revocation of the Certificate of Fitness as applies to both the applicant and the signee;
- all statements made in connection with the application are subject to investigation and verification;
- the FDNY representative may ask the F-53 Certificate of Fitness holder without prior notice to demonstrate the required skills listed in this verification letter to verify his/her proficiency in operating the fire alarm communication system upon inspection.

\_\_\_\_\_  
Printed Name of Representative of the Fire Alarm Company

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

\_\_\_\_\_  
COF number

\_\_\_\_\_  
Signature of the Fire Alarm Company Representative

\_\_\_\_\_  
Date

**This section must be filled and signed by the F-53 C of F applicant**

I have been trained by the fire alarm company representative listed above. I am familiar and capable in operating the key functions of the fire alarm system and the communication system related to the fire alarm system on the premises. I understand that

- all statements made in connection with the application are subject to investigation and verification;
- the FDNY may ask me, without prior notice, to demonstrate the required skills listed in this letter to verify my proficiency in operating the fire alarm communication system upon inspection;
- any intentional falsification of this letter can be grounds for the denial, non-renewal, suspension or revocation of the Certificate of Fitness as applies to both the applicant and the fire alarm company representative.

\_\_\_\_\_  
Printed Name of the F-53 C of F Applicant

\_\_\_\_\_  
Signature of the F-53 C of F Applicant



**FIRE DEPARTMENT – CITY OF NEW YORK**

**BUREAU OF FIRE PREVENTION, PUBLIC CERTIFICATION AND EDUCATION UNIT**

**F- 53 Employment Verification Form**

Please **print** or **type** the information below. **This form must be NOTARIZED.**

*This form must be completed by the **building owner or the authorized building owner representative of the premises who is familiar with the premises.***

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

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

Dear Sir/Madam:

owner of \_\_\_\_\_  
(name of the occupancy or building)

I, \_\_\_\_\_, am the  authorized building owner representative of  
(Name of owner or authorized representative) \_\_\_\_\_  
(name of the occupancy or building)

I am pleased to recommend \_\_\_\_\_ to apply for an F-53 Certificate of Fitness  
(Name of Applicant)  
for Emergency One-Way Voice Announcement. He/she has \_\_\_\_\_ (Years/Months) of relevant experience and has obtained the Fire Alarm Control Panel Verification Letter from the fire alarm company servicing our fire alarm system. This candidate is trained and capable in operating the key function of the fire alarm system and the communication system related to the fire alarm system on the premises during a fire or non-fire emergency incident. This applicant is of good character and is physically able to perform the functions required by the F-53 Certificate of Fitness. After obtaining his/her F-53 Certificate of Fitness, this applicant will be employed at :

\_\_\_\_\_  
(Street Address) (City) (State) (Zip Code)

The applicant, \_\_\_\_\_, is fully familiar with the building fire safety and evacuation plan, if  
(Name of the applicant)  
applicable, and has been trained and has the knowledge of the following occupancy/building information listed on the following page.

This F-53 study material is provided to the public for free by the FDNY

<b><i>The candidate knows:</i></b>	<b><i>(All items must be marked "yes" or "N/A")</i></b>
The premises/business location. (e.g. the floor coverage of this premises in the building)	<input type="checkbox"/> Yes
The business hours of the premises.	<input type="checkbox"/> Yes
The location(s) of all building entrances/exits.	<input type="checkbox"/> Yes
The location(s) of all stairway(s) that can be accessed on the premises and the service floors of each stairway.	<input type="checkbox"/> Yes
Which floor(s) are stairwell re-entry floor(s) and which floor(s) are installed fail-safe device.	<input type="checkbox"/> Yes
The location(s) of all elevator(s) that can be accessed on the premises and the service floors of each elevator.	<input type="checkbox"/> Yes <input type="checkbox"/> N/A, because there is no elevator on premises.
The location(s) of all escalator(s)/access stairs that can be accessed on the premises and the service floors of each escalator/access stairs.	<input type="checkbox"/> Yes <input type="checkbox"/> N/A, because there is no escalator/access stairs on premises.
The names of the critical premises staff who must be contacted during a fire or non-fire emergency.	<input type="checkbox"/> Yes
The communication method for contacting all the critical premises staff during a fire or non-fire emergency.	<input type="checkbox"/> Yes
The premises designated in-building relocation areas for non-fire emergencies.	<input type="checkbox"/> Yes

I, \_\_\_\_\_, hereby swear that on \_\_\_\_\_ I have personally confirmed  
 (Name of Signee) (MM/DD/YY)

that the applicant has been trained and is familiar with all the critical building information listed above.

On this \_\_\_\_\_ day of \_\_\_\_\_, in the year \_\_\_\_\_, I have hereunto affixed my signature and I affirm that all statements made on this form are true under the penalties of perjury.

I understand that

- all statements made in connection with the application are subject to investigation and verification
- any intentional falsification of this letter can be grounds for the denial, non-renewal, suspension or revocation of the F-53 Certificate of Fitness as applies to the applicant
- FDNY representative may question the F-53 Certificate of Fitness holder as to the required building information listed above to verify their knowledge during inspection.

Printed name of building owner authorized person	Job Title	Contact Phone number
_____ Signature of building owner authorized person (Sign only before a Notary)	_____ Signature of Notary  _____ Printed name of Notary	NOTARY PUBLIC: [Notary Seal]    My commission expires: ___/___/___

## ***Sample Letter for Seeking Additional Work Location(s)***

Note:

- *This letter must be on company letter head*
- *This letter is ONLY required when the C of F applicant seeks to work more than one location. This letter must be **on official company letterhead** of the work location that the C of F applicant would be employed.*
- *The C of F applicant must submit one letter for EACH work location.*

***Firm or Company Letter Head***

**Dear Sir/Madam,**

The applicant, \_\_\_\_\_, will be appointed to supervise the fire alarm system located at

\_\_\_\_\_ (specific location of the alarm system, including floor and address)

during the following days of the week: \_\_\_\_\_. The applicant will work from \_\_\_\_ am/pm to \_\_\_\_ am/pm of the days.

I understand that the fire alarm system must be supervised by at least an F-53/F-89/T-89/F-80 Certificate of Fitness holder during regular business hours of the work location.

Applicant is of GOOD CHARACTER and is PHYSICALLY ABLE to perform the functions required by the holder of the Certificate of Fitness.

\_\_\_\_\_  
(Printed name of Employer)

\_\_\_\_\_  
(Employer's title)

\_\_\_\_\_  
(Signature of Employer)

**NOTE: The letter must be on employer's letterhead. If not on employer's letterhead, signature must be notarized.**

## SAMPLE EXAM QUESTIONS

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

**1. 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.*

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

- A. the person next to you
- B. 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.*

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

- A. the person next to you
- B. 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.*

### **Study Material**

This study material contains information you will need to prepare for the examination for the F-53 Certificate of Fitness for Emergency One-Way Voice Announcement Personnel.

**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 an Emergency One-Way Announcement Personnel. 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, National Fire Protection Association Standards (NFPA) 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.**



## 2022 FIRE CODE ENACTED

The amended New York City Fire Code, to be known as the 2022 Fire Code, takes effect on April 15, 2022. **It may not have been updated in this study material. However, as the Certificate of Fitness holder, it is your responsibility to become familiar with the applicable sections of the new 2022 Fire Code.**

### Design and installation provisions.

The design and installation provisions of the 2022 Fire Code shall apply to:

- Facilities established and conditions arising on or after 04/15/2022.
- Facilities and conditions not lawfully existing prior to 04/15/2022.

The facilities and conditions lawfully existing prior to the 04/15/2022 can be continued in compliance with the requirements of the former Fire Code/Fire Rule except as otherwise provided in the New Fire Code 102.5.

### Operational and maintenance provisions.

The operational and maintenance provisions of the 2022 Fire Code, including permit and certification requirements, shall apply to all facilities, operations, conditions, uses and occupancies, regardless of when they were established or arose.

Whenever this code is amended or a rule is promulgated to require a permit or certificate for a facility, operation, condition, use or occupancy, and no permit or certificate was previously required therefor pursuant to this code or the rules, such facility, operation, condition, use or occupancy may be continued without such permit or certificate until 04/15/2023, except as may otherwise be provided by such amendment or rule.

The 2022 Fire Code can be obtained via the following website:

<http://www1.nyc.gov/site/fdny/codes/fire-code/fire-code.page>

The 2014/2022 New York City Fire Code Cross-Reference Table can be referred to the following website:

<http://www1.nyc.gov/assets/fdny/downloads/pdf/codes/fire-code-cross-reference.pdf>

## 1. INTRODUCTION

This study material outlines the Fire Code and Fire Department policies regarding individuals that are responsible to make emergency announcement in an occupancy installing approved fire alarm systems with one-way communication system during a fire or non-fire emergency.

An approved fire alarm system might typically be found in assembly occupancies (e.g. theaters, school auditoriums), business occupancies, education occupancies, factories, malls, hotels, etc. Any approved fire alarm system must be supervised by a Certificate of Fitness holder depending upon the nature of the occupancy and/or the type of fire alarm system. See the table below for various examples.

Fire alarm system and/or building occupancy	C of F requirement
Fire alarm system has two-way voice communication system with warden phone	FLSD
Fire alarm system installed in a commercial/mixed high rise building	FLSD
Fire alarm system with one and/or two way communication, installed in a hotel building contains 50 or more sleeping rooms above ground floor.	FLSD
Fire alarm system in a homeless shelter not requiring a FLSD	F-80
Fire alarm system with one way communication system (public announcement system), not requiring an FLSD/F-80	F-53
Fire alarm system without voice communication system and not requiring an FLSD/F-80/F-53	S-95

F-80: Coordinator of Fire Safety and Alarm System in Homeless Shelters

F-89/T-89: FLSD

S-95: Supervision of Fire Alarm Systems

As the table mentioned above, if there is no FLS Director or F-80 C of F holder required on the premises, any approved fire alarm system with **one-way communication system must be under supervision of an F-53 Certificate of Fitness holder**. The announcements during a fire or non-fire emergency must be made by an F-53 Certificate of Fitness holder.

While this F-53 Certificate of Fitness authorizes the individual to perform important responsibilities, obtaining this C of F does not indicate that the fire alarm system is approved by the NYC Fire Department. The approval of any new or existing fire alarm system(s) is a separate review process that requires engineers, technicians and other professionals.

Emergency One-Way Voice Announcement Personnel, F-53 Certificate of Fitness holders, are needed primarily to “communicate the required information to the occupants on the premises” in the event of a fire or non-fire emergency. The goal is primarily involved with informing and guiding the safe actions of the occupants.

Most premises installing an approved fire alarm and voice communication system has their own building fire safety and evacuation plan for the safety of building occupants in the event of fire or other emergency. The plan normally describes the number of building occupants; the occupancy type; the location and arrangement of building exits; the emergency escape procedures and route assignments, such as floor plans, workplace maps and safe or refuge areas (e.g. in-building relocation areas). This plan also covers designated actions that employers and employees must take to ensure safety during fire and/or non-fire emergencies. The F-53 C of F holder must be familiar with their building fire safety and evacuation plan in order to take the required action or make the appropriate announcement during an emergency.

## **Requirements**

### *I. When and where are the Emergency One-Way Voice Announcement Personnel (F-53) required?*

The Emergency One-Way Voice Announcement Personnel, F-53 will be required for any premises with an installed, approved fire alarm system with one-way voice communication system.

F-53 Certificate of Fitness is not authorized to fulfill the FLSD or F-80 Certificate of Fitness requirements. The F-53 C of F requirements depend upon the nature of the occupancy and/or the type of fire alarm system. However, if FLSD or F-80 C of F is required at that occupancy, then an F-53 C of F will not be required.

Based on the building code requirements, the one-way emergency voice communications service, where provided in, must be for use only by the FDNY or by building personnel authorized to use such service who have obtained a Certificate of Fitness from the FDNY.

Initially, this Certificate of Fitness requirements only applied to Group R-2 buildings in the 1-RCNY 907-01 (August, 2008), but it was repealed per 1 RCNY 3616-04 effective 12/31/2014. The 1 RCNY 3616-04 establishes the C of F requirement as an operational requirement which applies to all occupancies with an approved fire alarm system with one-way voice communication system. The requirement specifically targets the Place of Assembly occupancies installed with a fire alarm system having Event/Non-Event capability.

An F-53 Certificate of Fitness may be required in the following occupancies with an installed, approved fire alarm with one-way voice communication system including, but not limited to:

- Hotels and other transient occupancies complying with the 1968 Building Code but not subject to the hotels requiring an FLSD.
- Public assembly occupancies.

Based on the 1-RCNY 3616-04 requirement, in the group A occupancies, the Fire Alarm Panel with voice communication must be staffed by an F-53 C of F holder during all times when the pre-signal fire alarm system is in Event Mode.

- Education occupancy (e.g. PreK-12 and colleges).
- Hospitals and other Group I-2 buildings.
- Large area mercantile occupancies and covered malls.
- Apartment buildings.

Note: If the system is ONLY used by Fire Department personnel with activation of city wide standard key (#2642), the system is not required to be supervised by an F-53 C of F holder. However, if the system may be used by a building personnel for making emergency announcements, the building personnel must obtain the F-53 C of F.

II. How many Emergency One-Way Voice Announcement Personnel will be required?

If the F-53 C of F is required for the occupancy, there must be at least one Emergency Announcement One-Way Voice Personnel **present continuously on premises** during the **regular business hours of the occupancy** for EACH fire alarm system with one-way voice communication system.

The Certificate of Fitness holder must keep the Certificates of Fitness upon his or her person, or otherwise readily available for inspection by any representative of the Fire Department.

III. What are the Certificates of Fitness POSSIBLY required in a public assembly occupancy?

What are their duties?

C of F type	Description	Primary duties
F-03/F-04	Place of Assembly Safety Personnel	Manage the occupants in the event of a fire or other emergency.
F-07	Fire and Non-Fire Emergency Drill Conductor	Conduct staff training and conduct drills in the occupancy
F-53	Emergency One-Way Voice Announcement Personnel	Supervise the Fire Alarm Control Panel and communicate the required information to the occupants on the premises
F-01	Fire Guard for Impairment	Perform fire watch if any required fire protection system is out of service for more than 4 hours or the size of the area affected by the out-of-service fire protection system is more than 50,000 sqft.

IV. What are the differences between PA system without connected to the fire alarm system and the voice communication system connected to the fire alarm system? What system is the F-53 C of F holder required to use to make an emergency announcement?

The FDNY approved voice communication system connected to the fire alarm system is designed and installed to comply with the Fire Code and Building Code requirements. It also requires periodic maintenance and testing by an authorized technician with a valid Certificate of Fitness employed by an FDNY approved fire alarm company. Different from the live event announcer (aka “voice of god” announcer system in a public of assembly occupancy) or other PA system, the fire alarm voice communication system is designed to ensure the announcement can be delivered clearly to the occupants in ever-changing conditions of an emergency situation. The integration between the one-way voice communication system and the fire alarm system also provides a better coordination of the system’s functions, which is vital in minimizing confusion and panic during emergency conditions. The live event announcer or other PA systems that are not approved by the FDNY may be easily affected in the event of a catastrophic situation. The disasters may cause power loss or physical damage to the device. However, the FDNY approved fire alarm communication system will be more resistant to these damages.

As a result, during a fire or non-fire emergency, the F-53 C of F holder will be required to make announcement through the one-way voice communication system connected to the fire alarm system.

IV. 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 must 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 NOTIFICATION APPLIANCE.** A fire alarm system component, such as a bell, horn, speaker, light, text display or vibration device that issues an audible, tactile, and/or visual alert.

**ALARM SIGNAL.** A signal indicating an emergency requiring immediate action, such as a signal indicative of fire.

**ANNUNCIATOR.** A unit containing one or more indicator lamps, alphanumeric displays, or other equivalent means in which each indication provides status information about a circuit, condition or location.

**ASSEMBLY AREA.** A designated area outside of a building to which building occupants are directed to report upon implementation of a partial or full evacuation in

accordance with a comprehensive fire safety and emergency action plan or a fire and emergency preparedness plan.

**AUTOMATIC.** As applied to fire protection devices, any device, equipment or system that initiates system function as a result of a predetermined temperature rise, rate of temperature rise, or combustion products, without the necessity for human intervention.

**BUILDING OCCUPANTS.** All persons in the building, including employees, building staff and visitors.

**CENTRAL STATION.** A facility that receives alarm signals from a protected premises and retransmits or otherwise reports such alarm signals to the Fire Department.

**CERTIFICATE OF OPERATION.** A written statement issued by the Fire Commissioner approving the operation of a central station, for which such certificate is required by this code or the rules, or the construction codes.

**COVERED MALL.** A Group M building housing separate mercantile tenant spaces and/or other similar occupancies and a common pedestrian area (which may include atrium spaces) that provides access to the main public entrances to such tenant spaces and/or occupancies. A covered mall does not include an exterior perimeter building or tenant space (commonly referred to as an anchor store or anchor building) with direct pedestrian access to the covered mall, provided that such building or tenant space has a lawful means of egress independent of the covered mall.

**EMERGENCY ALARM SYSTEM.** A system to provide indication and warning of an emergency condition involving a release of hazardous materials or other hazardous material incident.

**EVACUATION.** The emptying of a building or part thereof of building occupants in response to a fire or non-fire emergency.

**FIRE ALARM BOX, MANUAL.** A manually operated device used to initiate an alarm signal.

**FIRE ALARM SIGNAL.** A signal initiated by a fire alarm-initiating device such as a manual fire alarm box, automatic fire detector, water-flow switch, or other device whose activation is indicative of the presence of a fire or fire signature.



**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 DETECTOR, AUTOMATIC.** A device designed to detect the presence of a fire signature and to initiate action.

**FIRE EXTINGUISHING SYSTEM.** An approved system of devices and equipment which detects a fire and discharges an approved fire extinguishing agent onto or in the area of a fire. Such term includes automatic systems and, where such systems are authorized by this code or the Building Code, manually activated systems.

**FIRE GUARD.** A person holding a certificate of fitness for such purpose, who is trained in and responsible for maintaining a fire watch.

**PLACE OF ASSEMBLY SAFETY PERSONNEL.** A person holding a certificate of fitness for place of assembly safety personnel. These personnel are needed in certain indoor and outdoor places of assembly and public gathering places primarily to “manage the occupants” in the event of a fire or other emergency. The role of these safety personnel is to help direct occupants to the nearest exit, assuming that the exit is safe to use.

**FIRE PROTECTION SYSTEM.** Approved devices, equipment and systems or combinations of systems used to detect a fire, activate an alarm, extinguish or control a fire, control or manage smoke and products of a fire or any combination thereof, including fire extinguishing systems, fire alarm systems, sprinkler systems and standpipe systems.

**FIRE SAFETY AND EVACUATION PLAN.** A written plan which sets forth the circumstances and procedures for the in-building relocation, partial evacuation or full evacuation of building occupants, required or as appropriate for such occupancy or building type, in response to a fire.

**FSP STAFF.** The individuals identified in a fire safety and evacuation plan as responsible for the implementation of such plan.

**HIGH-RISE BUILDING.** Any building designed or constructed in accordance with the 1968 Building Code, any prior Building Code, or other applicable laws, rules and regulations, that is more than six stories or 75 feet (22 860 mm) in height, and any building designed or constructed in accordance with the Building Code that has one or more occupied floors more than 75 feet (22 860 mm) above the lowest level of fire department vehicle apparatus access.

**IMPAIRMENT COORDINATOR.** The person responsible for ensuring that proper safety precautions are taken when a fire protection system is out of service.

**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.** A designated area in a building to which building occupants may be relocated in accordance with the emergency preparedness plan for the premises.

**INITIATING DEVICE.** A system component that originates transmission of a change-of-state condition, such as in a smoke detector, manual fire alarm box, or supervisory switch.

**LARGE-AREA BUILDING.** A building that is not a high-rise building, but is either a Group B office building within the meaning of Section 907.2.2.2 of the Building Code that has a total gross area of more than 100,000 square feet (9290 m<sup>2</sup>) or a building of an occupancy type other than Group R-2 or Group R-3 that has a total gross area of more than 100,000 square feet (9290 m<sup>2</sup>).

**MULTIPLE-STATION ALARM DEVICE.** Two or more single-station alarm devices that can be interconnected such that actuation of one causes all integral or separate audible alarms to operate. It also can consist of one single-station alarm device having connections to other detectors or to a manual fire alarm box.

**MIXED-OCCUPANCY BUILDING.** A building or structure housing more than one occupancy or type of occupancy required by this chapter to prepare an emergency preparedness plan.

**NON-FIRE EMERGENCY.** A biological, chemical, radiological 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.

**OFFICE BUILDING.** A Group B occupancy designed and arranged to provide offices and other areas for the conduct of business ordinarily conducted in offices.

**ONE-WAY EMERGENCY COMMUNICATIONS SYSTEM.** One-way emergency communications systems are intended to broadcast information, in an emergency, to people in one or more specified indoor or outdoor areas. It is intended that emergency messages be conveyed either by audible, visible, or textual means, or any combination thereof.

**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 fee owner or lessee of the building, or other person or entity having charge thereof.

**PRE-SIGNAL SYSTEM.** A fire alarm system having a feature that allows initial fire alarm signals to sound in a constantly attended central location and for which a human action is subsequently required to achieve a general alarm, or a feature that allows the control equipment to delay the general alarm by more than one minute (but not more than 3 minutes) after the start of the alarm processing.

**PROTECTED PREMISES.** A building, occupancy or structure located in the city that is equipped with a fire alarm system that transmits an alarm signal to the Fire Department or a central station that monitors such system for the purposes of reporting fire alarms to the Fire Department, whether or not the installation of such system on the premises is required by law.

**PUBLIC ADDRESS SYSTEM.** An electronic amplification system with a mixer, amplifier, and loudspeakers, used to reinforce a given sound and distributing the “sound” to the general public around a building.

**REGULAR BUSINESS HOURS.** Times of day and days of the week during which a building or occupancy is normally occupied and business is conducted. This includes

extended business hours during which building occupancy is occupied and business is conducted.

**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.

**SHOULD.** 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.

**SINGLE-STATION SMOKE ALARM.** An assembly incorporating the detector, the control equipment, and the alarm-sounding device in one unit, operated from a power supply either in the unit or obtained at the point of installation.

**SMOKE ALARM.** A single- or multiple-station alarm responsive to smoke and not connected to a system.

**SMOKE DETECTOR.** A listed device that senses visible or invisible particles of combustion.

**SMOKE DETECTOR MAINTENANCE COMPANY CERTIFICATE.** A certificate issued by the Fire Commissioner to a person engaged in the business of performing smoke detector cleaning and testing, which authorizes such person to engage in such business and supervise the performance of such cleaning and testing by certificate of fitness holders.

**SPRINKLER SYSTEM.** A fire extinguishing system, other than a mist fire extinguishing system, that utilizes water as the extinguishing agent.

**STANDPIPE SYSTEM.** Piping installed in a building or structure that serves to transfer water from a water supply to hose connections at one or more locations in a building or structure used for firefighting purposes.

**SUPERVISORY SIGNAL.** A signal indicating the need for action in connection with the supervision of guard tours, fire extinguishing systems or equipment, fire alarm systems or the maintenance features of related systems.

**SUPERVISORY SIGNAL-INITIATING DEVICE.** An initiating device, such as a valve supervisory switch, water level indicator, or low-air pressure switch on a dry-pipe sprinkler system, that triggers a supervisory signal.

**TROUBLE SIGNAL.** A signal initiated by the fire alarm system or device indicative of a fault in a monitored circuit or component.

**TWO-WAY EMERGENCY COMMUNICATIONS SYSTEM.** Two-way emergency communications systems are divided into two categories, those systems that are anticipated to be used by building occupants and those systems that are to be used by fire fighters, police, and other emergency services personnel. Two-way emergency communications systems are used to both exchange information and to communicate information such as, but not limited to, instructions, acknowledgement of receipt of messages, condition of local environment, and condition of persons, and to give assurance that help is on the way.

**UNNECESSARY ALARM.** An alarm signal transmitted by a fire alarm system which functioned as designed, but for which a Fire 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 by means of a fire alarm system with one-way or two-way voice

### **3. EMERGENCY ONE-WAY VOICE ANNOUNCEMENT PERSONNEL TRAINING AND DUTIES**

For each fire alarm system with one-way voice communication system, at least one F-53 C of F holder must be present on the premises **at all times during regular business hours**.

#### **3.1. Training**

Prior to obtaining the F-53 Certificate of Fitness, all Emergency One-Way Voice Announcement Personnel candidates must receive initial training from two parties: the fire alarm company and the building owner/facility owner representative.

##### **(1) The Fire Alarm Company providing the service to the fire alarm system.**

All F-53 C of F holders must be fully capable of operating the communicating system of the Fire Alarm Control Panel. Since each fire alarm system is different, the candidate must be trained by the fire alarm manufacturer, installer and/or maintenance company of the fire alarm system that the candidate will operate.

The candidate must be trained and be familiar with the following skills:

- Operate the key functions of the fire alarm panel

The candidate should know how to operate the key functions of the fire alarm panels including but not limited to:

- Placing the system off-line and on-line
- Acknowledging the signal at the fire alarm panel
- Silencing the fire tones
- Activating alert tone or alarm tone manually
- Performing fail-safe door release
- Resetting the Fire Alarm Control Panel/Fire Command Center

- Performs all appropriate announcements

Candidates should know how to make an all call announcement throughout the building/occupancy, including the stairways and elevators.

The candidate must obtain a verification letter from the fire alarm company after the training and submit it prior to taking the F-53 C of F exam.

The FDNY representative may ask the F-53 Certificate of Fitness holders to demonstrate the required skills listed above to verify their proficiency in operating the fire alarm communication system upon inspection.

**(2) The building/occupancy owner or the owner's representative who is familiar with the premises.**

All F-53 C of F holders must be familiar with the essential occupancy features, such as exits, stairways, elevators, and those listed in the employment verification letter. Since each occupancy structure is different, the candidate must be trained by the building/occupancy owner or the owner's representative who is familiar with the occupancy (e.g. security manager, facilities manager, emergency preparedness manager, etc.) where the candidate will be employed.

In order to provide the proper information and/or directions to the premises' occupants during an emergency, the candidate must be familiar with the building fire safety and evacuation plan including the following occupancy features/knowledge:

- The premises/business location in the building
- Business hours of the premises
- Number of occupants allowed
- Building entrances/exits
- Stairways used on the premises
- Elevator and/or Escalator used on the premises
- Fire Alarm Communication System Location
- Critical Building and/or Premises Staff Contact Information

The candidate must know how to communicate with the critical building and/or premises staff during an emergency.

- Premises designated in-building relocation areas for non-fire emergencies, if applicable.

The candidate must obtain and submit the notarized form filled by the building owner/manager stating he/she has been trained and learned the required knowledge prior to taking the F-53 C of F exam.

The FDNY representative may question the F-53 Certificate of Fitness holder on the building information listed above to verify their knowledge during the inspection.

### **3.2. General Duties of Emergency One-Way Voice Announcement Personnel**

During regular business hours without any emergency, the F-53 C of F holder is expected to perform the following duties unless another qualified and certified personnel is designated by the building/occupancy owner:

- Visually inspect the fire alarm system and the communication system to ensure it is functional.
- Maintain the fire alarm log book.
- Be familiar with the emergency procedures established by occupancy owner.

In the event of a fire, a medical emergency or other non-fire emergency in the building The F-53 C of F holder must

- report to the Fire Alarm Control Panel/Fire Command Center on the premises;
- ensure that 911 has been notified for such emergency.
- communicate the information and directions to building/premises occupants ; and
- comply with the directions of the emergency response personnel and/or other lawful authority.

### **3.3. The Importance of Emergency Announcement**

Many studies show that **information is the key to a successful building evacuation during a fire or catastrophic event. Withholding information or using coded**



information among staff to prevent the occupants knowing that there is an emergency can be very harmful. Providing the occupants with the information that they need to make the right decisions without delay will lead to more positive outcomes. Providing the timely information will help occupants' decision-making.

#### 4. FIRE ALARM SYSTEMS

##### 4.1. Introduction

Fire alarm systems monitor the status of fire alarm or supervisory signal initiating devices, and ensure the appropriate responses. Fire alarm systems are required in many premises as part of a fire protection system. The 2008 Building Code has expanded the requirements for fire alarm systems which include but are not limited to the following occupancies:

- office buildings
- shelters
- places of public assembly
- hospitals
- mercantile (e.g. retail outlets, malls)
- residential (e.g. hotels, motels, dormitories, apartment buildings )
- schools

It is UNLAWFUL to install or maintain any fire protection system or device that has the physical appearance of fire protection equipment but that does not perform a fire protection function. The law prevents those devices from being confused with actual fire protection equipment. Examples are shown below:



Dummy Smoke Detector  
Hidden Video Camera



A CCTV camera that is installed inside  
a shell that resembles a sprinkler head

## **4.2. Fire Alarm Control Panel and Communication Systems**

Fire Alarm Control Panel (FACP) is a system component that monitors inputs and control outputs through various circuits. The primary purpose of the FACP is to process signals received from initiating devices and to activate appropriate signals and outputs. **Only persons holding an FLS Director/F-80/F-53 C of F are allowed to operate and address alarms/signals at the FACP during regular business hours.**

### ***4.2.1. Presignal systems with Event/Non-Event Mode***

In assembly occupancies (e.g. theaters, etc.), the fire alarm system will be operated in Event/Non-Event Mode. These two mode statuses can be interchanged by a citywide standard key (#2642) at the FACP.

The F-53 Certificate of Fitness holder must be aware of this feature and must perform the required actions to notify the occupants. The FACP must be staffed by an F-53 Certificate of Fitness holder during all times when the fire alarm system is in Event Mode.

<b>Mode</b>	<b>Description</b>	<b>The activation of this mode</b>
Non-Event Mode	All speakers, horns and visual appliances must activate alarm notification signals throughout the entire premises for public notification purposes.	<ol style="list-style-type: none"> <li>1. Conditions for automatic activation:               <ol style="list-style-type: none"> <li>a. Up to 12 hours of Event Mode, the system must automatically revert to Non-Event Mode at the expiration of the time period.</li> <li>b. After 3 minutes of a fire alarm signal activated in Event Mode, the system must be reverted to Non-Event Mode</li> </ol> </li> <li>2. This mode can be activated manually by the switch.</li> </ol>
Event Mode	<ul style="list-style-type: none"> <li>• No automatic alarm audible or visual notification will be transmitted to the public (signals only go to the FACP and central station).</li> <li>• The manual live voice announcements must be made by the F-53 C of F holder for direction and implementation of emergency procedures including evacuation.</li> <li>• Prerecorded voice messages are prohibited.</li> </ul>	When the assembly space occupied by the general public.

#### 4.2.2. Emergency voice/alarm communication systems

Many Fire Alarm Control Panels (FACP) have also been installed with emergency communication systems based upon Building Code and Fire Code requirements. Emergency communications systems are used to indicate emergency situation(s) and to communicate information necessary to facilitate appropriate responses and actions.

The current NYC Building Code requires that the operation of any automatic fire detector, sprinkler waterflow device, or manual fire alarm box must automatically sound an alert tone to be followed by voice instructions to facilitate an evacuation.

The emergency voice/alarm communication system may have multi-channel capability. It may be designed to broadcast live voice messages by paging zones on a selective and all-call basis.



#### 4.2.3. One-way emergency communications systems (other than voice/alarm communication systems)

One-way emergency communications systems are intended to broadcast information, in an emergency, to people in one or more specified indoor or outdoor areas. It is intended that emergency messages (e.g. evacuation instructions) be carried either by audible, visible, or textual means, or any combination thereof.

The one-way emergency communication system connecting to the fire alarm system must be only operated by the FLSD/F-80/F-53 Certificate of Fitness holder or FDNY personnel. The qualified personnel use this system to make announcements from the Fire Alarm Control Panel to building occupants in selected parts of the building including rooms, offices, classrooms, or stairwells. The personnel give information via this system to warn/instruct occupants to take appropriate actions during an emergency.

#### **4.2.4. Fire Command Center**

In many high-rise buildings, the Fire Alarm Control Panel will be required to be located at the Fire Command Center. Fire Command Center is the principal attended or unattended location where the status of the detection, alarm communications and control systems is displayed, and from which the system(s) can be manually controlled.



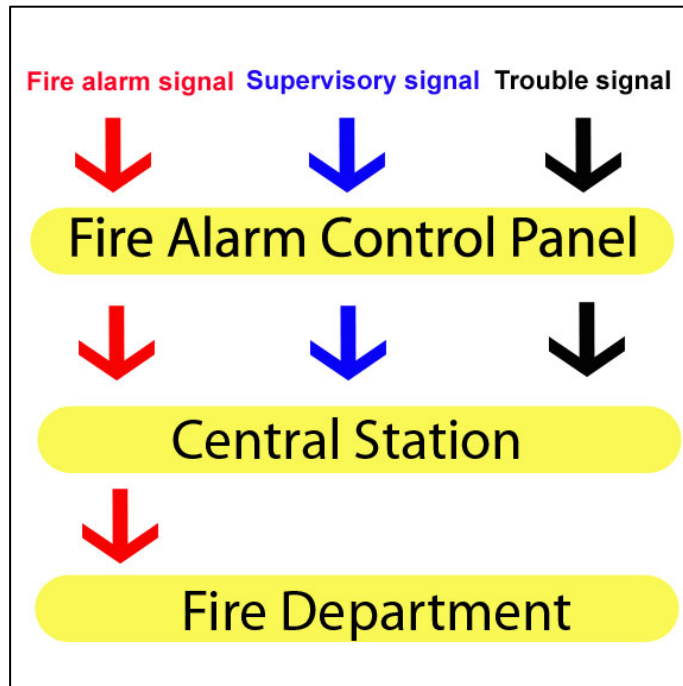
The Fire Command Center location must be in the lobby of the building on the main entrance floor near the Fire Department designated response point or other location approved by the FDNY. The Fire Command Center may be located in the lobby of the building on the entrance floor as part of elevator control panel or immediately adjacent to it. It can be as simple as a Fire Alarm Control Panel used to monitor different signals related to fire alarm systems and to make announcements through the communication system. It may also include elevator recall, ventilation shutdown, activation of the release of all fail-safe (electro-magnetic door release) devices (if applicable), activation of stair pressurization and smoke ventilation systems, etc.

#### **4.3. Three Fire Alarm Control Panel Signals**

The F-53 C of F holder must know the components of the Fire Alarm Control Panel, how to use it, and how to interpret different signals. There are three different signals shown on the Fire Alarm Control Panel: fire alarm signals, supervisory signals and trouble signals.

<b>Signal types</b>	<b>Description</b>	<b>Fire Alarm Control Panel</b>	<b>F-53 C of F holder's actions</b>
Fire alarm signal	It is initiated by a fire alarm initiating device (e.g. manual fire alarm pull station, smoke detector, water-flow switch, etc.). This signal is an indicator of a fire or smoke condition.	It displays at the FACP. The FACP will activate the building audible and visual devices connected to the fire alarm (i.e. horn/strobes) and may trigger the control of certain building functions. (Exception: the fire alarm systems in Event Mode)	Must treat it as a fire/smoke emergency and perform the required duties & responsibilities
Supervisory signal	It is initiated by a supervisory device to indicate abnormal conditions that could affect the proper operation of the fire protection system(s) including, but not limited to, control valves, pressure levels, pump power, etc.	It displays at the FACP to indicate the supervisory condition.  Some FACPs indicate the exact location of the problem. Other FACPs only display a general supervisory signal.	Must investigate and contact the contractor to fix the problem(s).
Trouble signal	It is initiated by a system or device indicative of a fault in a monitored circuit, system, or component.	It displays at the FACP to indicate the trouble condition.	Must investigate and contact the contractor to fix the problem(s).

All three signals will be shown on the Fire Alarm Control Panel and be transmitted to the central station (if this alarm system is monitored). However, only the fire alarm signal will be re-transmitted to the Fire Department through the central station. The FDNY is not dispatched to respond to supervisory/trouble signals.



#### **4.4. In the case any fire alarm signal is generated**

##### **4.4.1. Acknowledge switch or button**

An acknowledge button, also abbreviated as ACK, is used to acknowledge alarm, trouble, or supervisory conditions. Whenever the alarm is activated, the F-53 C of F holder must report to the FACP location. The F-53 C of F holder should press the ACK while reviewing events/signals. This action means the F-53 C of F holder is aware of the condition(s) and is going to investigate. Pressing acknowledge will silence the tones at the FACP only but not silence the building notification devices.

##### **4.4.2. Alarm silence switch or button**

The alarm silence switch is used to silence the building audible and visual devices (such as sirens, bells or gongs) after an evacuation is complete while the source of alarm is being investigated. **Never silence the building alarm tones or reset the fire alarm system until instructed by the FDNY Firefighting personnel.** The alarm silence

switch/button will either silence the system's notification appliances completely or will silence only the audible alarm, with strobe lights continuing to flash. The FDNY firefighting personnel may ask the C of F holder to silence the building alarm tones, because silencing the alarm allows for easier communication for emergency responders while responding to an alarm. However, if the system is monitored by an FDNY approved central station, the silence switch does not prevent a signal from being transmitted to the central station.

#### **4.4.3. 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 is still in an activated position, another alarm will be generated. Most trouble and supervisory conditions will clear automatically when conditions are returned to normal. After a fire alarm is reset, the fan usually requires restarting from a separate "fan restart" button or key switch.

An FACP indicating an alarm signal cannot be reset to "normal" if the device or devices signaling the alarm to the FACP have not returned to "normal" from "alarm".

**DO NOT SILENCE BUILDING AUDIBLE VISUAL DEVICE OR RESET THE  
FIRE ALARM PANEL UNTIL INSTRUCTED BY  
THE FDNY FIREFIGHTING PERSONNEL.**

#### **4.5. Initiating devices**

An automatic fire alarm system is a system which sounds a signal automatically when a fire detection device indicates that there is a fire.

An automatic fire detector is an initiating device which detects the presence of a fire condition and initiates action. This includes the detection of the presence of smoke and or heat. Initiating devices will activate the fire alarm system.

As stated in the NYC Fire Code, the term "initiating" device covers not only fire detection devices such as heat detectors and smoke detectors, but also other devices,



such as flammable/combustible gas detectors (e.g. Carbon monoxide detector, natural gas detector, etc.), that monitor conditions related to fire safety.

**Proper preventative measures must be taken to protect all fire alarm initiating devices i.e. smoke, heat, and duct detectors especially during construction.**

#### 4.5.1. Smoke detectors

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 detect most fires much more rapidly than heat detectors. They automatically detect a fire by sensing smoke particles. The smoke particles may be visible or invisible to the human eye.

Smoke detectors are fragile devices. Where smoke detectors are subject to mechanical damage, they must be protected. A protective guard used to protect a smoke detector must be listed for use with that detector (example pictured on the right) (NFPA 72). When a smoke detector reports the need for maintenance to the Fire Alarm Control Panel, it must be cleaned as soon as possible but not exceeding 1 week.



**Smoke detectors are helpful in two very important ways:**

1. Smoke detectors can provide an early warning of a fire.
2. The early warning allows fire safety staff and occupants to immediately implement the proper emergency procedures.

#### 4.5.2. Heat detectors

A heat detector is a device that detects abnormally high temperatures or rate of temperature rise. Heat detectors have been shown to be very effective in reducing fire damage.

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. If the C of F holder notices any heat detector is not functional, he/she must notify fire alarm maintenance companies to make all necessary repairs.

a. **Rate-of-rise heat detectors** activate the alarm when the room temperature increases at a rapid rate. 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 activated the fire alarm.



**Rate-of-rise heat detectors**

b. **Fixed-temperature heat detectors** activate the alarm when the detector components melt at a preset temperature level. The fixed-temperature heat detectors are most commonly used. The fixed-temperature heat detectors normally require replacement after they have sounded an alarm. However, intelligent heat detectors will usually reset themselves. For further information, contact your fire alarm service provider.



**Fixed-temperature heat detectors**

Where subject to mechanical damage, a heat detector must be protected by an approved UL/FM mechanical guard as shown in the picture below.



**Heat detector with protective mechanical guard**

#### 4.5.3. Sprinkler waterflow alarm-initiating devices



The waterflow alarm initiating devices are used to detect the flow of water in a fire sprinkler system and to send an alarm signal. If the water starts to flow in the system, the vane or paddle triggers a switch sending a signal to the Fire Alarm Control Panel and activate bell. This device does not turn on or off the water. The activation of these

devices will cause the fire alarm system to sound, recall the elevators and will send the fire alarm signal to the central station if the fire alarm system is monitored.

#### 4.5.4. Manually actuated alarm-initiating devices

Fire alarm systems that are manually activated use fire alarm pull stations. Manual fire alarm boxes (also referred to as pull stations) must be located near the exits throughout the protected area so that they are conspicuous, unobstructed, and accessible.

They must be located on each floor of a building, except apartment buildings.



The manual pull stations may not directly transmit a signal to the FDNY. A phone call must always be made to 911. DO NOT assume that the FDNY has been called if you hear a fire alarm or smoke detector sound.



The F-53 Certificate of Fitness holder must know how to manually operate any type of manual pull station on the premises. Once activated, the fire alarm system cannot be re-set at the pull station. The alarm must be re-set at a main FACP after the pull station is reset to its normal condition; a key may be required to reset the pull station. Once a manual pull station is activated, that device must be reset prior to resetting at the main Fire Alarm Control Panel (FACP). **The FACP must only be reset at the direction of a Fire Department** firefighting personnel.

- **Single action stations** require only one step to activate the alarm. For example, the alarm might be activated by pulling down on a lever. This kind of alarm station is often found indoors (e.g. in office buildings). The cover on these alarm stations serves as a lever. When the cover is pulled down, it allows a switch inside to close. This action sends the alarm signal.



- **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.



**Double action station**

The FDNY may require the approved protective covers to be installed over single or double action stations to prevent malicious false alarms or provide the manual fire alarm box with protection from physical damage.



#### 4.5.5. Carbon monoxide detectors

**Carbon monoxide detector**



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

A carbon monoxide detector is a device indicating a concentration of carbon monoxide at or above the alarm threshold that could pose a risk to the life safety of the occupants and that requires immediate action. Carbon monoxide detectors must be installed,

tested, and maintained by qualified personnel in accordance with the manufacturer's published instructions.

If the carbon monoxide detectors are installed in public areas and connected to the fire alarm system, the signals are programmed as a fire alarm signal and will be transmitted to the Fire Department.

#### 4.5.6. flammable/combustible gas detectors

Although it is not required by the FDNY, some flammable/combustible gas detectors (e.g. natural gas detector) may be connected to the Fire Alarm Control Panel. As an F-53 C of F holder, you must know if the flammable/combustible gas detectors on your premises are connected to a stand-alone monitor panel or the Fire Alarm Control Panel. If the detectors are connected to the Fire Alarm Control Panel, the activation will generate a supervisory signal on the Fire Alarm Control Panel and also be transmitted to the Central Station. Since it is not programmed as a fire alarm signal, there is no alarm tone sounded on the premises to notify the public. However, the Central Station will still notify the premises owner and the Fire Department for flammable/combustible gas detectors' activation since flammable/combustible gas leakage may cause a fire, explosion or life-threatening condition. Flammable/combustible gas leak may be considered as a non-fire emergency incident, as an F-53 Certificate of Fitness holder, if you are aware of this incident, you will need to follow your building/occupancy specific non-fire emergency plans to perform the required actions before the FDNY arrives (see chapter 6 of this booklet for further information regarding non-fire emergencies). Once the FDNY firefighting personnel is dispatched to the premises to investigate the situation, the building staff and occupants must comply with the orders of FDNY firefighting personnel.



Example of a flammable/combustible gas detector

4.5.7.Types of devices and activations

TYPE OF DEVICE	ACTIVATED BY	ACTION NORMALLY REQUIRED TO RETURN DEVICE TO “NORMAL” CONDITION
Manual pull station	Manually pulling handle	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 *see note below	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)	After activation most <b>fixed temperature</b> heat detectors will not self-restore and will require replacement by a qualified service technician. <b>Rate-of- rise</b> detectors will normally self-restore after activation.
Water-flow device	Flow of water in a sprinkler system	Device should return to normal when water ceases to flow.
<p><b>NOTE:</b> Care must be taken at all times to protect all smoke detectors from the entrance of foreign particles which may be airborne. Dust from cutting wood, sheet rock or sanding may trigger a false alarm. Steam is also a common cause for smoke detector activations and steam is also a concern because it often saturates the smoke detector with moisture rendering it out of service. Smoke detectors which have not been properly cleaned and maintained will also create false alarms.</p>		

**4.6. Power supplies for the fire alarm system**

Most buildings with fire alarm systems are required to have primary and secondary power supplies. The F-53 C of F holder must know the power supply source of the building fire alarm system. All fire alarm systems with voice communication system are provided with emergency power.

**4.7. Audible and visual notification devices**

Notification appliances are used to alert persons of the need to take action, usually to evacuate. The appliances include bells, horns, speakers, strobes, text displays or a combination of these devices. The audible and/or visual notification alerts the occupants of a fire or other emergency condition requiring action.

#### **HORNS, HORN/STROBES**



**Speaker**



**Speaker strobe**



**Horn Strobe**



**Strobe**



**Gongs Bells**

The audible or visual notification may be activated by different methods to notify the occupants of a building in case of a fire. Some systems are designed to activate all audible/visual devices throughout the building when a fire is detected. However, some systems are designed to activate the audible/visual devices only on the floor of alarm, the floor immediately above, and/or the floor below (if applicable).

**As an Emergency One-Way Voice Announcement Personnel, you must know whether your fire alarm system is designed to ring only on the fire floor, floor above and/or floor below, or throughout the building.**

After the fire alarm system has been activated it must be reset manually. The fire alarm system must be reset at the Fire Alarm Control Panel under the direction of FDNY representatives. The fire alarm must remain in operating condition at all times.

#### **4.8. Central Station Contact Information , Central Station Transmitter and Fire Alarm System Off-Line**

If the fire alarm system is monitored by an FDNY approved central station, the telephone number of the central station should be readily available to the F-53 Certificate of Fitness holder. The telephone number and the account number associated with the fire alarm system are required to be located on the FACP and 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 an FDNY approved central station. If the fire alarm system is monitored by a central station, the F-53 C of F holder should be familiar with the location of the central station transmitter box, if it is separated from the FACP.

The Certificate of Fitness holder must make sure that the central station transmitter is operable at all times. When transmitter malfunctions are discovered, the Certificate of Fitness holder must report the malfunctions to the central station company and record it in the log book. The central station company must arrange for any and all repairs as soon as possible.

F-53 Certificate of Fitness holders are **prohibited** from performing any repairs on the fire alarm system.

#### **4.9. Periodic Inspection and Testing Requirements**

Fire alarm systems are required to be maintained in good working order. To ensure that fire alarm systems are maintained in such condition, the Fire Code and Rules provide minimum requirements for the periodic inspection, testing, and other maintenance of such systems.

Any time a fire alarm system is to be activated during a test, inspection, or fire drill, it is mandatory to take the system "off line" by notifying the FDNY approved central station company monitoring the fire alarm beforehand to prevent the unnecessary dispatching of the Fire Department. It is not necessary to take the system offline when the speaker audibility tests are being conducted.

##### **4.9.1. Inspection frequencies**

**Mandatory visual inspection** frequency requirements for common equipment:

- (1) **Control equipment:** fire alarm system UNMONITORED for alarm, supervisory, and trouble signals: weekly.
- (2) **Control equipment:** fire alarm system MONITORED for alarm, supervisory, and trouble signals: annually.
- (3) **Manual fire alarm boxes, heat detectors, smoke detectors:** semiannually.

(4) In-building fire emergency voice/alarm **communications equipment:**  
semiannually

**\*\*Daily visual inspection of the Fire Alarm Control Panel has been the industrial practice and highly recommended by the Fire Department.** A F-53 C of F holder or other qualified C of F holder (listed on the following page) is recommended to visually inspect the Fire Alarm Control Panel and fire alarm devices (such as interfaced equipment, lamps and LEDs, and Primary (main) power supply, etc.) for indicated abnormal conditions. The purpose of the visual inspection is to detect defective components or abnormalities. The visual inspection must be made to ensure that there are no changes that affect equipment performance.

**4.9.2. Companies and individual certifications**

NFPA Standard 72 sets forth detailed requirements for the periodic inspection, testing and other maintenance of fire alarm systems. Different Certificate of Fitness holders are permitted to carry different levels of responsibilities in inspecting, testing and maintaining the fire alarm systems:

Duties and responsibilities		May be performed by		
		S-95/F-89/T-89 /F-80/F-53	S-78/F-78	S-97/S-98
1.	Visual inspections of fire alarm system or smoke detectors	Yes	Yes	Yes
2.	Smoke detector inspection, maintenance testing & cleaning	No	Yes	Yes
3.	Program, service, clean, test, repair and/or replace fire alarm components	No	No	Yes

F-80: Coordinator of Fire Safety and Alarm System in Homeless Shelters  
 F-89/T-89: FLSD  
 S-78/F-78: Inspection, Cleaning & Testing of Smoke Detectors  
 S-95: Supervision of Fire Alarm Systems  
 S-98: Fire Alarm Systems Inspection, Testing and Service Technician

- The approved smoke detector maintenance company list is updated on a monthly basis and can be accessed through the following link:

<http://www1.nyc.gov/assets/fdny/downloads/pdf/business/approved-companies-smoke-detectors.pdf>

- The approved central station list is updated on a monthly basis and can be accessed through the following link:

<http://www1.nyc.gov/assets/fdny/downloads/pdf/business/approved-companies-central-station.pdf>

#### ***4.9.3. Alarm log book***

A person designated by the owner (such as an F-53 C of F holder) must be responsible to make all log book entries required by the Fire Rule 907-01. Although an S-97/S-98/F-78/S-78 C of F holder may be allowed to make the entry when he/she services the fire alarm system or smoke detectors; however, the F-53 C of F holder is responsible to supervise the entries and the maintenance of the alarm log book. Any programming, servicing, testing, repairing and/or replacing the fire alarm system components must be conducted only by an S-97/S-98 Certificate of Fitness holder.

##### *(1) Location of the alarm log book*

An alarm log book must be maintained on the premises. In the absence of a secure location at the main Fire Alarm Control Panel, the alarm log book may be secured during non-business hours in another area provided it is made available for inspection by any FDNY representatives responding to an alarm on the premises.

##### *(2) Format of the alarm log book*

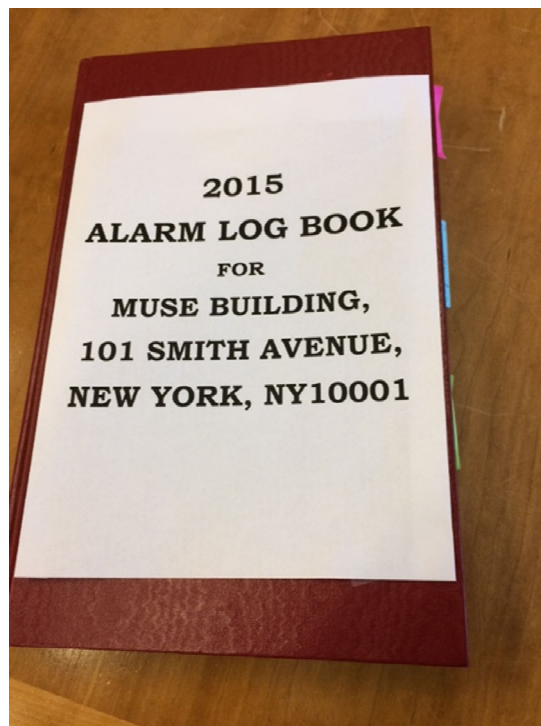
#### **Information to be found at the beginning of the log book:**

- Premise's address
- Fire alarm system FDNY approval date – type of system/manufacturer
- FDNY approved central station information:
  1. account number
  2. company name
  3. telephone number
  4. supervisor's name

- Fire alarm maintenance contractor:
  1. company name
  2. telephone number
  3. supervisor's name

The alarm log book must be a **bound book** (other than spiral bound) with consecutively numbered and lined pages. The cover of the log book must be labeled "ALARM LOG BOOK" together with the name and address of the building. All entries must be made in ink and dated. A separate log book must be kept for each calendar year. Log books must be retained for a period of three (3) years from the date of the last entry.

The FSP (fire safety and evacuation plan) log book is different from the alarm log book. It could be bounded with the fire alarm log book but must be properly labeled and divided.



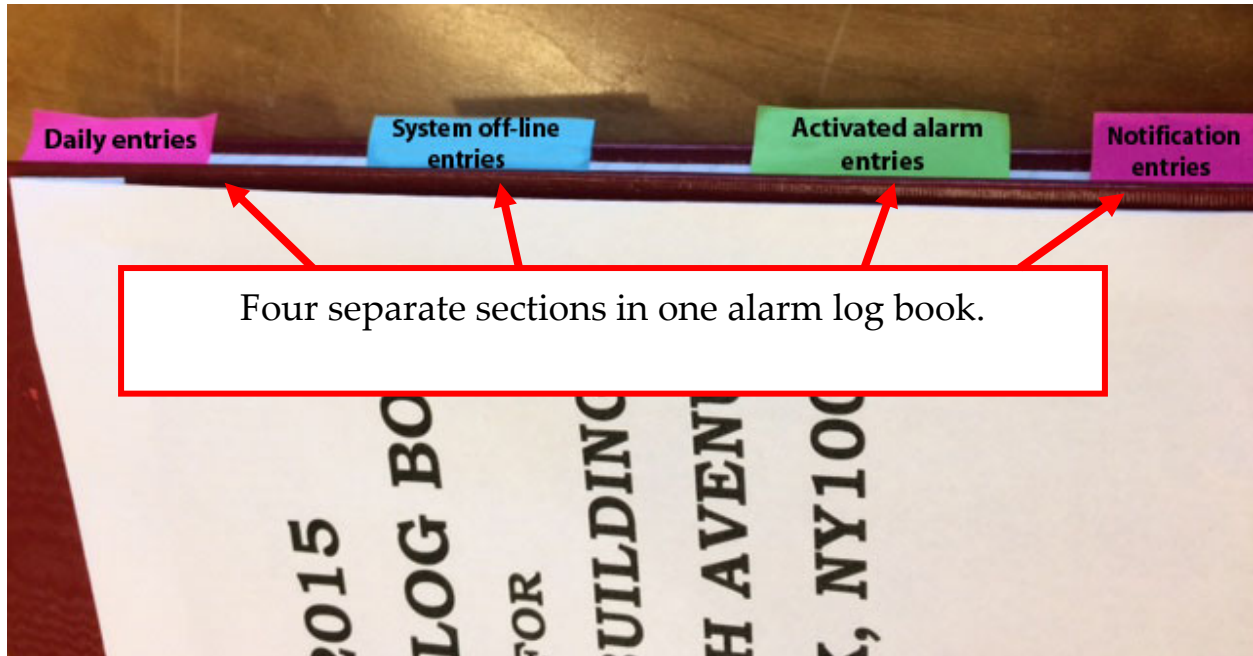
(Example of an alarm log book)

### (3) Alarm log book entries

Alarm log book entries must be made in chronological order, recording the location and causes of all alarm signals transmitted by such fire alarm system.

The alarm log book must be divided into 4 separate sections as set for below. Each section must have a sufficient number of pages to allow for entries for at least one year.

The following log book entries are required and must be made in each instance:



(A) Daily entries.

The name of the person who made the entry, the certificate of fitness number of the F-53 C of F holder on duty, if applicable, and the time each tour of duty began and ended, must be entered in the alarm log book on a daily basis. These entries must be set forth in columns in the log book as follows:

- (1) Certificate Fitness holder's name
- (2) Certificate of Fitness number
- (3) time started
- (4) time relieved

It should also include the actions taken if defective equipment or abnormal conditions witnessed

(B) System off-line entries.

The date and time the alarm system was taken off-line, the reason for such action, the name and Certificate of Fitness number of the person notified at the central station (or

other evidence of notification satisfactory to the Fire Department), and the date and time the system was restored to service, must be entered in the alarm log book in each such circumstance. These entries should be set forth in columns in the log book as follows:

- (1) time off line
- (2) reason off line
- (3) central station name and telephone number
- (4) central station operator's name and C of F number
- (5) time restored
- (6) name and C of F number of the C of F holder who made the entry

(C) Activated alarm entries.

The date and time the alarm activated, the type and location of the device (e.g., smoke detector, 27th floor, elevator lobby), the probable cause of the alarm, and the Fire Department unit and officer responding must be entered in the alarm log book in each such circumstance. These entries should be set forth in columns in the log book as follows:

- (1) date and time activated
- (2) location and detector type
- (3) probable cause
- (4) responding FDNY unit and officer
- (5) name and C of F number of the C of F holder who made the entry

It should also include the testing of manual station conducted by an S-97/S-98 Certificate of Fitness holder.

(D) Notification entries.

The date and time of any notification to the occupants of the premises regarding a non-functioning or improperly functioning alarm system. These entries should be set forth in columns in the log book as follows:

- (1) date and time of notification made
- (2) reason of notification
- (3) action description
- (4) name and C of F number of the C of F holder who made the entry

(5) memo for the follow up actions

## SUGGESTED FORMAT FOR LOG BOOK ENTRY

### (A) Daily Entries

Date	Time Started	Time Relieved	Name of COF holder	COF holder's COF number and type	Duty Description	Alarm Condition Description
1/06/15	1:00PM	1:30 PM	Joe Doe	89924922 (F-53)	Daily visual inspection	System is normal
1/07/15	2:00PM	2:45 PM	Jane Doe	89353423 (F-53)	Daily visual inspection	Discovered defective horn/strobe on 6 <sup>th</sup> floor and notified ABC Fire alarm Co. for service call.

### (B) System Off-line Entries

Date & Time Off Line	Reason Off Line	Central Station Name & Phone Num.	Central Station Operator's Name	Central Station Operator's COF Num.	Date & Time Restored	COF holder for Record Entry	COF Number and Type
1/07/15 3:30pm	ABC Fire alarm Co. came to fix the defective horn/strobe on 6 <sup>th</sup> floor.	OKK, 718-999-9999	Steve Doe	89924900	1/07/15 7:00pm	Jane Doe	89353423(F-53)
1/21/15 7:30 am	testing of all pull stations on 5 <sup>th</sup> floor	OKK, 718-999-9999	Jane Smith	99991111	1/21/15 7:45 am	Tom Doe	99346550 (F-53)
1/22/15 8:20 am	ABC Fire Alarm Co. fix the defective pull station on 5 <sup>th</sup> floor	OKK, 718-999-9999	Jim Harris	22221234	1/22/15 10:00am	Tom Doe	99346550 (F-53)

### (C) Activated alarm entries.

Date & time activated	Location & detector type	Probable cause	Responding FDNY Unit	Responding FDNY Officer	COF holder for Record Entry	COF Number and Type
1/17/15 3:15 pm	Smoke detector of pantry room on 3 <sup>rd</sup> floor	Smoke came from a microwave activated the smoke detector	Engine 23	Chief Ronald	David Doe	89345678 (F-53)
1/21/15 7:30 am	All pull stations on 5 <sup>th</sup> Floor	testing of post station	NA	NA	Tom Doe	99346550 (F-53)

### (D) Notification entries.

Date & Time	Reason	Action	COF holder for Record Entry	COF Number and Type	Follow Up Memo
1/21/15 8:30 am	A pull station in elevator lobby on 5 <sup>th</sup> Floor found to be defective.	Place "out of service" sign over the pull station	Tom Doe	99346550 (F-53)	Repair made and sign removed. 1/22/15



#### **4.10. Unnecessary and unwarranted alarms**

Unnecessary and unwarranted alarms divert essential services from emergencies. These alarms may also cause business disruptions and create public's negative views of fire alarm systems. The owner of any premises whose fire alarm system is monitored by a central station must prevent unnecessary and unwarranted alarms. **It is unlawful to transmit 2 or more unnecessary or unwarranted alarms in any three-month period** and will be subject to issuance of a Fire Department Summons (previously known as Notice of Violation).

#### **4.11. Out-of-service fire protection systems**

When the F-53 C of F holder observes any minor defect on the fire alarm system, he or she must also report the defect or condition to the owner. The building/occupancy owner must designate an impairment coordinator to take the actions required by the Fire Code when the required fire alarm system is out of service.

One of the required actions is to ensure the building/occupancy maintain a fire watch when any required fire protection system is out of service.

The fire watch required for an out-of-service fire alarm system, standpipe system, or sprinkler system must be maintained by one or more fire guards (qualified fire guards include F-01 C of F holder: Fire Guard for Impairment).

For the initial 4 hours of an unplanned and planned out-of-service condition 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.

In summary, the impairment coordinator or a trained and knowledgeable person designated by the building owner should immediately begin conducting a fire watch in the area where the fire protection systems are out of service. **However, an on-duty F-53 C of F holder is not allowed to perform fire watch since the fire watch personnel must have no other duties during the fire watch patrol.** After 4 hours of an out of service condition, such patrols must only be conducted by fire guards holding the F-01 Certificate of Fitness.

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. (How big is 50,000 square feet: A playing portion (without end zones) of a football field is roughly 57,000 square feet.) To meet this standard, it may be necessary that more than one fire guard be designated.

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

Area	Planned or Unplanned	
	The initial 4 hours	> 4 hours
≤ 50,000 ft <sup>2</sup>	An F-01 C of F holder or an impairment coordinator or a trained and knowledgeable person	One F-01 C of F holder
> 50,000 ft <sup>2</sup>	One F-01 C of F holder for each 50,000 square feet	

The fire guard must 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.

## **5. RESPONSES FOR FIRE EMERGENCIES**

### **5.1. Ensure 911 is Called**

In the event of a fire or smoke condition, the F-53 C of F holder must ensure that 911 is called immediately.

### **5.2. Report to the Fire Alarm Control Panel**

In the event of fire/smoke condition or the activation of a fire alarm, the F-53 C of F holder must

- immediately report to the Fire Alarm Control Panel (FACP)
  - Note: In assembly occupancies (e.g. theaters, etc.), the FACP must be staffed by an F-53 Certificate of Fitness holder during all times when the fire alarm system is in Event Mode.
- acknowledge the alarm (if applicable)
- address the alarm panel to verify the location and which initiating device(s) is/are activated:
  - manual pull station
  - smoke, beam, duct detectors
  - heat detectors
  - water-flow device

Note: The LCD display on the FACP will list a number next to any active Fire alarms, supervisory and trouble Signals on the fire alarm system. Many fire alarm systems have a scroll/history button feature or a hard copy print out of all alarms transmitted on the system. The LCD screen or last entry on a printout is the last initiating device to be activated. The F-53 C of F holder should scroll through the alarm history or look on the print out page for the first device to be activated. This first initiating device could be on a lower floor or a different part of the building. This is especially important in hi-rise occupancies where building staff could unknowingly go above a fire condition without realizing it. The information of multiple active fire alarm initiating devices and their locations (especially the active device on the lowest reported floor) should be relayed by the F-53 C of F holder to FDNY firefighting personnel upon arrival.

These factors must be expeditiously determined and considered in implementing the fire safety and evacuation procedures in the event of a fire in the building.

### **5.3. Gather Information from the Building Occupancy Staff**

In the event of fire/smoke condition or the activation of a fire alarm, the F-53 C of F holder needs to maintain communication with the building/occupancy staff in order to gain valuable information. The primary communication must be made verbally. Text or email should not be used as the primary method of communication for fire emergencies.

The name and contact information of these staffs should be listed on the building fire safety and evacuation plan, these staffs are the trained personnel that the owner deems necessary for the initiation of emergency procedures. The Fire Department recommends that these building/occupancy personnel should equip with personal communication technology devices for them to maintain effective communication between them and the F-53 C of F holder. These communication devices should be tested daily to ensure that they are in proper working order at or before the regular business hours.

The staffs should obtain the following information to the F-53 C of F holder:

- (1) Location of the fire (floors and areas on floors)
- (2) Severity of the fire/smoke condition
- (3) Floors affected by smoke conditions
- (4) Stairways affected by smoke conditions
- (5) Floors occupied at the time of the fire and the number of building occupants in such areas
- (6) Elevator status

During a smoke/fire emergency, the staffs are expected to perform some required duties to ensure the building occupancy safety. The detail can be referred to the Appendix A of this booklet.

The F-53 C of F holder must monitor the progress of the fire and smoke conditions by monitoring the Fire Alarm Control Panel and maintaining regular communication with building/occupancy staff using the designated communication devices.

#### **5.4. Identify Stairway(s) for Evacuation/Relocation of Building Occupants**

The F-53 C of F holder must identify stairway(s) for evacuation/relocation of building occupants. If any stairway door is locked, the F-53 C of F holder must ensure every door is openable during the fire emergency. For example, ensure all the fail-safe devices have been released from the FACP.

#### **5.5. Make Announcements to Building Occupants**

The F-53 C of F holder must make announcements to building occupants. The announcement must include:

- The information regarding fire condition and its location.
- The stairways(s) or other routes of egress that are safe for them to use and direct them to use only those stairways(s) or routes of egress.
- Not to use elevators unless directed to do so by firefighting personnel.
- Close doors behind them, if possible.
  - Fire doors must be closed during a fire to compartmentalize the building and prevent the spread of smoke and flames. Closed (but not locked) fire doors can protect the means of egress and allow building occupants time to evacuate safely. If fire doors are blocked or wedged open, they will not be able to protect the building and its occupants. FDNY released a video to educate the public regarding the importance of closing the door. <https://youtu.be/0afYpUxq3Eg>

Each building has its own fire alarm sequence of operation. Some fire alarm systems may activate the alarm tone on the affected floors only (e.g. the fire floor, the floor immediately above, and/or the floor below), but some fire alarm systems may activate the alarm tone throughout the building. Some fire alarm systems may be set in the

event mode (e.g. public assembly occupancy) which allows a predetermined amount of time for building/occupancy staff to investigate the source of a fire alarm signal prior to evacuation. The F-53 C of F holder must be familiar with the fire alarm sequence of operation that he/she supervise and follow the fire alarm evacuation/relocation policy.

In general, the F-53 C of F holder must instruct building occupants on the floors with fire alarm activations to immediately leave these floors and must direct the occupants to use the stairway(s) or other routes of egress which is/are deemed safe for use. Instruct building occupants to close stairway doors behind them.

If the fire alarm only activates on the effected floors, the F-53 C of F holder must instruct the occupants on the effected floors to evacuate the building or relocate to another safe location within the building at least three (3) floors below their present location.

If the fire alarm activates throughout the building, the F-53 C of F holder must instruct the entire building occupants to evacuate the building.

#### ***5.5.1. Fire Alarm Announcement Sample Scripts***

##### ***1. Situation 1 (fire evacuation announcement):***

- NOT a public assembly occupancy.
- Fire alarm activates throughout the building/occupancy.
- No other staff available to investigate/verify the situation.

##### **Sample script:**

*“May I have your attention. May I have your attention. This is the Fire and Emergency Staff. This is not a drill. There is a fire alarm activation on \_\_\_ floor. For your safety, all persons must go to the exit nearest your location and evacuate. DO NOT USE ELEVATORS. Persons on the 2nd floor or above must proceed to the stairwell and evacuate to safe areas outside the building. Close the doors behind you. Please follow instructions from the first responders. Thank you.”*

##### ***2. Situation 2 (fire evacuation announcement):***

- In a public assembly occupancy when a fire/smoke condition is confirmed during an event mode or the fire alarm system was in the event mode, but is reverted to the non-event mode after 3 minutes of fire alarm signal activation.
- Fire alarm activates throughout the occupancy/building.

### **Sample script:**

*“May I have your attention. May I have your attention. This is the Fire and Emergency Staff. This is not a drill. There is a fire alarm activation on \_\_\_ floor. For your safety, we must evacuate the theater. Please leave the building using the exits indicated by our staff. DO NOT USE ELEVATORS. Close the doors behind you. Thank you.”*

### **3. Situation 3 (Relocation and evacuation announcement)**

- NOT a public assembly occupancy.
- Fire alarm only activates on affected floors of the occupancy/building. (e.g. fire floor(s) and the floor immediately above and/or floor below)
- No other staff can investigate/verify the situation.

### **Sample script (only to the affected floors):**

*“May I have your attention. May I have your attention. This is the Fire and Emergency Staff. This is not a drill. There is a fire alarm activation on the 4th floor. For your safety, all persons on 3th floor must proceed to the stairwell and evacuate to safe areas outside the building. All persons on 4th and 5th floor must proceed to the stairwell and walk down three floors. DO NOT USE ELEVATORS. Close the doors behind you. We will keep you informed of the situation.”*

### **Sample script (only to the rest of the building/occupancy):**

*“May I have your attention. May I have your attention. This is the Fire and Emergency Staff. This is not a drill. There is a fire alarm activation on 4th floor. The alarm is being addressed and investigated. Please remain at your work locations and wait for further instructions.”*

## **5.6. Interaction with the Fire Department during Fire Incidents**

The F-53 C of F holder should ensure that the building/occupancy entrance is kept clear for the FDNY access. In a public assembly occupancy, the FDNY firefighting personnel may need to access the backstage area too. When the Fire Department arrives, the F-53 C of F holder must remain on the Fire Alarm Control Panel and available to FDNY firefighting personnel until the conclusion of the operation or until released by the

FDNY. If possible, a vest or another means of identifying the F-53 C of F holder may be considered to assist FDNY firefighting personnel with identifying key building staff.

The F-53 C of F holder should silence the fire alarm system when authorized by the FDNY personnel.

The F-53 C of F holder should notify arriving FDNY firefighting personnel and other first responders of the nature of the emergency and the actions already taken. When the FDNY responds to the fire emergency, they may request the following materials:

- Floor plans
- Building Information Card (BIC), if applicable
- The building fire safety and evacuation plan, if applicable
- Elevator and stair diagrams, if applicable
- Elevator keys, if applicable
- Any other master keys/access cards that may be required
- Premises security radios/walkie-talkies
- Tool or key to open manual pull stations so they can be reset

The F-53 C of F holder may need to quickly provide the FDNY firefighting personnel with the following information, if known:

- Location of the fire or alarm
- The nature of the alarm (what caused the alarm)
- The conditions on the fire floor and floor above (including smoke condition)
- The status of the stairways (stairway being used by occupants)
- Evacuation/relocation status
- Status of elevators and HVAC system, if applicable
- The location of the evacuated/relocated people
- Any problems with the evacuation/relocation
- Number of potential victims at the location
- Any people unaccounted for
- Any problems reported to you
- Any impairment of the fire protection system, if known



The F-53 C of F holder may use building security cameras/elevator status monitors to view current conditions in hallways, stairs, floors and inside elevator cars. These camera/monitor views would also be made available to FDNY firefighting personnel to aid in gaining situational awareness.

It is critical for all building/occupancy staff to follow orders of the FDNY firefighting personnel. The FDNY firefighting personnel may request assistance of the building/occupancy staff to operate and control the building/ occupancy systems.

The F-53 C of F holder is required to reset the fire alarm system when the condition has been cleared and authorized by the Fire Department.

The “all clear” can only be given when it is announced by the authorities that the threat has passed. Once the “all clear” is given, an appropriate announcement should be made to the building occupants by the authorities that the threat has passed.

All Clear announcement script

*“May I have your attention. May I have your attention. This is the Fire and Emergency Staff. The \_\_\_\_\_ (incident) located \_\_\_\_\_(location) has been resolved. You may return to your original locations. Thank you.”*

## 6. PREPAREDNESS AND RESPONSES FOR NON-FIRE EMERGENCIES

Although non-fire emergency planning may not be legally required by many occupancies, the FDNY highly recommends that each building/occupancy owner develop building/occupancy specific non-fire emergency plans in addition to the required fire safety plans.

The building/occupancy should establish a means of notifying the F-53 COF holder of any non-fire emergency in the building. The occupants should be given a contact number to report non-fire emergency after calling 911.

Non-fire emergency incidents may include, but are not limited to, hazardous material incidents, bomb, bomb threats, suspicious packages, natural hazards, failure of building utilities, civil unrest and disturbance, or active shooter and medical emergency, etc.

Most of the time, emergency officials will be on the scene to assume responsibility for making the emergency action decisions; however, there may be situations that cause response of emergency personnel to be delayed or prevented. In that case, the responsibility and authority to choose the proper responses rests with the building/occupancy emergency staff, e.g. F-53 Certificate of Fitness holder.

The decision of the action(s) must be based on an analysis of circumstances (i.e. consulting with the building/occupancy staff and gathering information from the building occupants, media or local authorities) as to which such action would best ensure the safety of the building/occupancy and its occupants.

**The most important consideration is whether there was an event that already compromised or will compromise the building structure or occupants' safety.**

During a non-fire emergency incident, the F-53 C of F holder has to assess the magnitude of the incident in order to make the announcement and recommend proper actions to the occupants. Communicate with the occupancy staff members to get information of conditions at different locations and their possible impact on the occupancy. Once the F-53 C of F holder has sufficient information, he or she has to decide on which of the following actions must take place: shelter in place, in-building relocation, partial evacuation or full evacuation, whenever such action is deemed necessary to ensure the safety of occupants.

## **6.1. Building preparedness**

In order to prepare for different non-fire emergency incidents, the FDNY recommends that the F-53 Certificate of Fitness holder should know the following building/occupancy related information:

- Building/occupancy specific emergency preparedness plan, if applicable.
- The location of the “First Responder Kits”, if applicable.
  - The kit should contain building floor plans, Building Information Card (if available), fully charged premises security radios/walkie-talkies (if available), access cards and keys for first responders use. It should also be easily carried away.
- If the building/occupancy has mass notification channels.  
For example, some hotels may have installed emergency alert system that the emergency notification can be broadcasted on every television in guest rooms.
- Any pre-designated relocation area (e.g. in-building relocation area) that provides appropriate protection against the perceived threat or danger and/or any barricade locations where occupants can hide during an active shooter incident.
  - The FDNY recommends the employer or building/occupancy owner to designate in-building relocation areas or barricade locations within occupancy spaces.
  - The barricade locations should provide an area with ballistic cover, not just visual concealment.

In addition, **the F-53 Certificate of Fitness holder and the premises employees should be trained that the Manual Fire Alarm System are NOT to be used during an active shooter emergency or to notify others of any other non-fire emergency**, as doing so may cause building occupants to enter the stairwells and/or evacuate the building when

they should be sheltering in place. **The manual pull stations should only be activated during fire or smoke conditions.**

## **6.2. Four non-fire emergency actions**

### **6.2.1. Non-evacuation actions: shelter-in-place and in-building relocation**

Sometimes the best way to stay safe in an emergency is to stay indoors to avoid any uncertainty outside. There are circumstances, such as an incident occurring outdoors (e.g. tornado, etc.) when the occupants should stay indoors as a matter of survival. The F-53 C of F holder should understand the different threats and plan for all possibilities. Shelter-in-place and in-building relocation are protective actions taken inside the building, with doors and windows closed, to minimize occupants' chance of injury.

The F-53 C of F holder may decide to implement shelter-in-place or in-building relocation if the emergency is determined that:

- It is safer to remain inside the facility when:
  - Severe weather (tornado, hail, etc.)
  - Civil disturbances close to the premises
  - Bomb or active shooter threat outside building
  - presence of an outside airborne substance that has not yet been identified
  - Chemical, biological or radiological contaminants released outside
- Releasing a large number of occupants onto the roads and public transportation will only add to the confusion and panic.
- Releasing employees will spread the hazard to others.

#### *(1) Shelter in Place*

**Shelter in place:** The precaution of directing building/occupancy occupants to remain inside the building, at their present location, in response to a fire or an emergency. In

other words, “shelter in place” means stay where you are. The decision is made because the F-53 C of F holder has determined that this action can best ensure safety of occupants and be best implemented in the building.

(2) *In-building relocation*

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

**In-building relocation area (IBRA):** A designated area within a building to which building occupants may be relocated. The FDNY recommends that each occupancy should have designated at least one relocation area (e.g. in-building relocation area) for each floor that provides appropriate protection against the perceived threat or danger.

During certain emergencies, occupants will require actual physical protection from an external threat. For example, during a civil disturbance, the occupants should be alerted to stay away from the windows. In such cases, occupants will be directed to a pre-designated, relocation area(s) that provides appropriate protection against the perceived threat or danger.

The decision of in-building relocation must be based on an analysis of the circumstances in which such action would best ensure the safety of building/occupancy occupants, and the manner in which it could best be implemented in the building.

**6.2.2. *Evacuation actions: partial evacuation and full evacuation***

The decision on whether to evacuate the building, either completely or certain portions, will involve the consideration of several factors. Deciding whether and how to evacuate depends on the type of threat, the circumstances of the threat, and where the danger is or is suspected to be.

**Partial evacuation.** The emptying of a building/occupancy of some but NOT ALL the occupants in response to a non-fire emergency.

**Evacuation (Full evacuation).** The emptying of a building/occupancy of all the occupants in response to a non-fire emergency.

Evacuation of an entire building or a particular area may not always be necessary, especially if the incident may only affect a specific area and pose no threat to other parts of the building. **It is determined based on whether there was an event that already compromised or will compromise the building structure or occupants' safety.** The difference between considering an evacuation as opposed to an in-building relocation would be the impact of the emergency to the building.

An evacuation is necessary to remove people from a specific area of danger within the building or from the entire building. In many cases, partial evacuation may be sufficient. Partial evacuation provides for immediate, general evacuation of the areas of the building nearest the incident. A partial evacuation may be appropriate when the building features assure that occupants away from the evacuation zone will be protected from the effects of the incident for a reasonable time. If an incident expands and threatens occupants in other parts of the building, further partial or full evacuation may be required.

### **6.3. A-B-C survival techniques for active shooter incident**

In addition to the four non-fire emergency actions, the F-53 Certificate of Fitness and the premises employees should also be familiar with the ABC survival techniques used in any active shooter incident. The survival techniques can be fluid based on the threat and may not have to be followed **in any specific order**. Individual decisions should be made based on the active shooter's location(s).

## 1. **Avoid** (run/evacuate)



If there is an accessible escape path, attempt to evacuate the premises.

The F-53 C of F holder should inform the occupants which doors in the occupancy are still locked during an active shooter incident. Once the occupants enter the stairway, they may need to walk down to the street level and may not be able to re-enter any floor above ground level.

When any occupant decides to use the avoid technique, if possible, the occupant should:

- Have an escape plan and route in mind.
- Visualize the entire escape route before beginning to move, and avoid using elevators or escalators.
- Evacuate regardless of whether others agree to follow.
- Leave your belongings behind, **DO NOT CARRY ANY PACKAGES OR ITEMS THAT COULD BE CONFUSED AS A WEAPON OR EXPLOSIVE DEVICE.**
- Help others escape, if possible.
- Prevent individuals from entering an area where the active shooter may be.
- Call 911 when it is safe to do so. Provide the pertinent information (discussed in detail below).

## 2. Barricade (hide)



If it is not possible to evacuate, find a place to barricade yourself where the active shooter is least likely to find you.

### (1) Where to barricade:

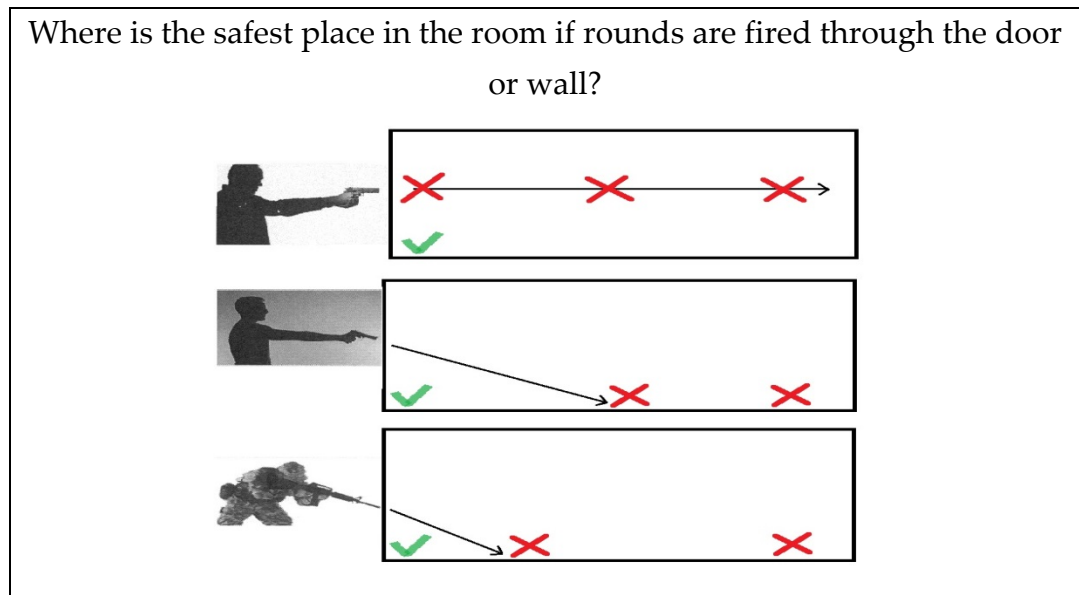
- Ideal barricade place should be out of the active shooter's view, but not just visual concealment. Soft wall cubicles and desks may conceal but provide no substantial ballistic protection.
- Ideal barricade place should be an area with both visual concealment and ballistic cover that can provide protection if shots are fired in your direction. Cover should be something of substantial thickness and weight that will stop a bullet. Office furniture and equipment such as vending machines, copy machines, and file cabinets can stop many types of bullets.
- An ideal barricade place should not trap or restrict your options for movement.

### (2) What to do when barricading:

- Lock the door, if applicable.
- Blockade the entrance with heavy furniture, if applicable. **DO NOT** use your body to barricade.



- Silence, not vibrate, your cell phone, pager and/or any other electronic devices.
- Turn off any source of noise (i.e., radios, televisions).
- Hide behind large items (i.e., file cabinets, copy machines, vending machines).
- Remain quiet.
- Stay low (see the example below).



### 3. Confront ( fight/take action)



If it is not possible to avoid and/or barricade, as a last resort, and only when your life is in imminent danger, attempt to disrupt and/or incapacitate the active shooter:

- Collaborate and act as a group, if possible.
- Act aggressively.
- Throw items and improvise weapons.
- Yell.
- Commit to your actions.



#### **6.4. General guideline for non-fire emergencies (except the active shooter and medical emergencies)**

The Fire Department recognizes that not all actions are suitable for every situation. Some improper actions may cause more injuries or damages. As a result, this booklet is designed to provide general guidance for the F-53 Certificate of Fitness to select the immediate actions based on different emergencies BEFORE the emergency personnel arrive at the scene or provide instructions. The study guide's purpose is to provide a framework for acceptable courses of action in non-fire emergency situations.

It is NOT the purpose to provide strict rules for situations in which there are a great many variables.

The following is the general guideline for implementing non-fire emergency actions:

4. If the threat happens outside the building

The F-53 C of F holder should advise the occupants on the premises to stay inside the building and away from outside doors and windows.

5. If the threat occurs inside the building

The F-53 C of F holder should:

- advise the occupants who are close to the threat should stay away from the threat (e.g. in-building relocation or evacuation)
- advise the occupants who will not be affected by the threat to stay where they are (i.e. shelter in place).

The F-53 Certificate of Fitness holder must be familiar with 4W's about making announcements during a non-fire emergency.

**The 4W's announcement** must include.

- What has occurred
- Where it has occurred
- What non-fire emergency action(s) should be taken
- Why they are being instructed to follow the non-fire emergency action(s) (explain why the actions are necessary)

In the event of a non-fire emergency, the F-53 Certificate of Fitness holder is expected to perform the following actions:

- Report to the Fire Alarm Control Panel and ensure 911 is called.
- Consult with building staff and gather information from them (if available).
- Identify stairway(s) for building occupants to use.
- Make announcements to building occupants using the 4W rules.
- Notify arriving first responders of the emergency and the building's response.

#### **6.4.1. Announcement Sample Scripts for Non-Fire Emergency Actions**

The following scripts are examples not the mandatory format. The script may vary based on each building or occupancy's own emergency action plan.

##### ***1. Shelter in place***

*“May I have your attention.(repeat) This is the Fire and Emergency Staff. There has been a/an \_\_\_\_\_(incident) located at \_\_\_\_\_ (location). We are implementing a Shelter-in-place to keep you safe from the incident. Please remain at your current locations. We will keep you informed of the situation. Thank you.”*

##### ***2. In-building relocation***

*“May I have your attention. (repeat) This is the Fire and Emergency Staff. There has been a/an \_\_\_\_\_(incident) located at \_\_\_\_\_ (location). We are implementing an in-building relocation to keep you safe from the incident. Please move to the \_\_\_\_\_(specify in-building relocation area) (repeat). Please ensure all stairwells doors remain closed. We will keep you informed of the situation. Thank you.”*

##### ***3. Full/partial evacuation***

*“May I have your attention. (repeat) This is the Fire and Emergency Staff. There has been a/an \_\_\_\_\_(incident) located at \_\_\_\_\_ (location). For your safety, all persons on \_\_\_\_\_ (floors) must evacuate to outside (repeat). Please move to the \_\_\_\_\_stairwell and proceed carefully down the stairs (repeat). We will keep you informed of the situation. Thank you.”*

#### **6.4.2. Non-English speaking occupants**

There may be non-English speaking occupants who may have difficulty understanding what Public Address (PA) announcements mean and the proper actions to take when an alarm sounds.

If there is a large portion of non-English speaking occupants in the building, F-53 C of F holder can use the fire alarm system's voice communication system to make announcements during an emergency in both English and other languages.

### **6.5. Preparing responses during active shooter incidents in different occupancies**

Compared to office high-rise building occupancies, hotels and public assembly occupancies (e.g. shopping malls, theaters, etc.) present different challenges during active shooter incidents:

1. **Occupants' familiarity with the building structure:** Most occupants in office buildings are employees who are familiar with their building emergency procedures based on the Fire Code requirements. However, hotels and public assembly areas have very transient populations, which results in less (if any) occupant familiarity with the building's safety features, exit routes, stairways, etc.
2. **Occupants' familiarity with the building staff:** In commercial office buildings, tenants are familiar with the security personnel and fire safety staff because they interact with them frequently. Occupants in hotels and public assembly areas have little, if any, pre-existing relationships with the building staff, which make it difficult to find help.
3. **Language challenges:** In office buildings, the pre-incident relationships tend to foster an understanding of the building's various tenants and their languages. Language challenges are more likely to occur in hotels and public assembly areas.
4. **Different daily occupancy rates:** Most office buildings have "office hours," where the building's population is significantly greater than at other times (nights and weekends). However, hotels and public assembly areas may have peak occupancy during the nights and on weekends, increasing the risk with lower staffing levels during nights, weekends, or holidays.

FDNY recommends that guests of hotels and theaters should be informed of at least two exits or the exit sign(s) of their floor. The visitors should know where to exit during any

type of emergency. Knowledge of evacuation routes will help the visitors to exit the facility or get away from the area under attack.

## **6.6. General guideline for active shooter incidents**

Because active shooter attacks are dynamic events, the FDNY cannot put forth a set of required actions during such incidents. However, the FDNY has compiled a list of best practice recommendations based on materials developed by the New York City Police Department, U.S. Department of Homeland Security, and U.S. Department of Justice for building staff to best prepare if active shooter attack occurs. The following recommendations are general guidelines. They are considered as best practice and may be useful in a real life emergency. It is NOT the purpose of this training material to provide strict rules for situations in which there are many variables. The most appropriate emergency actions may vary depending on the specific active shooter situation which occurs within the context of the event, the building's design and components.

In general, the F-53 Certificate of Fitness holder should advise the occupants on premises to stay inside the building and away from outside doors and windows if there is an active shooter incident occurring outside the building.

If an active shooter event is occurring inside the occupancy/building, as an Emergency One-way Voice Communication Personnel, you may also become a victim. You should react quickly when gunshots are heard or when a shooting is witnessed by following one of the three tactics: **Avoid, Barricade, Confront** (refer to the previous section of this booklet). As a civilian, you are not expected to stop an active shooter. The FDNY does not recommend that you leave the post to personally respond to incident on affected floors. However, you should try to implement the actions that could minimize injuries to the occupants.

For example, if an active shooter starts shooting in close proximity of the Fire Alarm Control Panel, you should protect yourself based on the A-B-C tactics. You may leave the location, or you may hide in a safe barricaded location for that moment. Grab the “First Responder Kits” if possible. The arriving first responders may need the First Responder Kit to access the building. All of these are a personal choice to be decided on by you at that moment.

Call 911 as soon as possible, safety permitting. If safe to do so, return to the Fire Alarm Control Panel or designated alternative location to carry out your suggested responsibilities.

The following actions are recommended by the FDNY upon active shooter events, IF IT IS SAFE TO DO SO:

Immediately call 911. The call(s) should report: (1) the emergency situation and (2) emergency actions implemented. The following information, if known, should also be provided to the 911 operator:

- a. Building address, location of the active shooter or his/her last known location.
- b. Number of shooters, if more than one.
- c. Physical description of shooter(s).
- d. Name/identity of the shooter(s) (e.g. employee).
- e. Number and type of weapons held by the shooter(s).
- f. Number of potential victims at the location.
- g. If explosions were heard.

\*Note: If you cannot speak, leave the line open and allow the dispatcher to listen.

As an F-53 C of F holder, if safe to do so, immediately report to the Fire Alarm Control Panel. The Fire Alarm Control Panel should be used for command, communication and control of the emergency. If the Fire Alarm Control Panel is compromised, try to reach the designated alternative location that could allow you to carry out the following responsibilities:

- **Notify the occupants**

The occupants need to know that there is an active shooter in the building. Depending on the premises communication systems, the alert should be delivered via as many different methods as possible (e.g. public announcement system, mass notification system, text, email, etc.).

The notification should provide information, not an issuance of a command. The alert must indicate that **there is an active shooter** event taking place inside the building and, if possible, tell the occupants **where the shooter was last seen**.

**Immediate notification is critical.** Delaying the notification may leave all occupants vulnerable, confused and in panic. A clear notification can help people quickly avoid a dangerous event. Many people think the notification may cause panic in the event of life threatening emergency. However, research has shown that **clear information about the incident and what actions to take will decrease the risk of panic.**

**The Fire Code prohibits the use of pre-recorded voice messages for any emergency.** But the FDNY recommends that the F-53 C of F holder prepare or practice the message template in case an active shooter emergency occurs. F-53 C of F holders also need to think in advance what notification system can best be used to notify occupants. F-53 C of F holders should prepare themselves and run the practice. F-53 C of F holders should find what kind of notification system can be deployed quickly and will most effectively reach all occupants. **Shorten and simplify the alerts, keep it brief and concise.** The message should be ready for the F-53 C of F holders to deploy at a moment's notice.

F-53 C of F holders also need to practice the announcement; **the announcement should be made in a clear, calm voice. A strong and confident voice can help the occupants to follow direction. Repeat the announcement as many times as necessary.**

All announcements must be made in English. However, the FDNY recommends that the announcements may be repeated in foreign languages if the majority of the occupants of the premises speak another language.

There's no single active shooter awareness message that will suffice for all building types, situations, and occupancies. You need to consider the building



type and occupancies to prepare the notification scripts. The FDNY recommends the following sample scripts for several occupancies. All the scripts follow the same basic principle: Occupants always need to have a clear understanding that **there is a significant threat and where the threat is (or where the threat was last seen)**.

Sample scripts for active shooter emergency notification in different occupancies:

- For office buildings with trained occupants:  
*“Attention! Emergency! An active shooter was last seen on the 3rd floor of the building. Avoid danger. Implement the Avoid-Barricade-Confront strategy based on your location.”*
- For hotel occupants: (considering there might be foreigner visitors who are not familiar with “active shooter” terminology, we suggest to use “gun shots” instead of “active shooter”.)  
*“Attention! Emergency! Gun shots are fired on the 3rd floor. Avoid danger. Move to a safe area now. Stay in your room, lock the door and get down.”*
- For hospital occupants:  
*“Attention! Emergency! An active shooter was last seen on the 3rd floor of the building. Implement the Avoid-Barricade-Confront strategy based on your location.”*
- For theater/stadium occupants:  
*“Attention! Emergency! Gun shots fired in theater 5 on the 3rd floor. Avoid danger. Move to a safe area or barricade if possible.”*
- For other public assembly (e.g. shopping mall) occupants:  
*“Attention! Emergency! Gun shots fired on the 2nd floor on the 5th Ave side. Avoid danger. Move to a safe area or barricade if possible.”*

Federal agencies (e.g. U.S. Department of Health and Human Services, U.S. Department of Homeland Security, U.S. Department of Justice, Federal Bureau of Investigation, and Federal Emergency Management Agency) highly recommend

the use of plain language/clear text (not code words) to communicate information effectively. Sending the alert through as many delivery channels as possible is the best way to ensure awareness. The goal is to empower as many individuals as possible with the ability to make an informed decision as to their best option to maximize chances of survival.

Proper notification will allow all occupants to choose one of the survival techniques (Avoid, Barricade or Confront) based on their own condition, location, and environment.

- Consult with building staff and gather information from them (if available).
- Stairways and routes of egress

Evaluate the stairway(s) or other routes of egress for use. Some routes of egress or stairways may be denied or limited based on the active shooter(s) location if known. The F-53 C of F holder should provide the information, if known, to arriving first responding personnel about the status, availability and the condition of all stairways. It will be useful for the police officers to know which stairways are clear for use.

- Interior doors, including fire doors

Manual activation of the fail-safe door release system will facilitate evacuation by unlocking stairway and elevator vestibule doors but keeping them in the closed position. Active shooter attacks are dynamic events; so, unlike the required responses in other non-fire emergencies, the F-53 C of F holder will not be required to activate the fail-safe door release system. The last known location of an active shooter must always be considered prior to the manual activation of the fail-safe door release system.

The operation of the fail safe system may be different from building to building. Buildings built in different years may comply with different applicable Building Codes. The F-53 C of F holder must include the status of the stairway (e.g. the fail-safe devices have or have not been activated) and elevator vestibule doors in the information exchange upon NYPD arrival.

- If a fire alarm is activated, if safe to do so, the F-53 C of F holder should follow standard protocol and procedures of a fire emergency but proceed with extreme

caution and keep the NYPD survival techniques (Avoid-Barricade-Confront) in mind.

- Communications
  - Continue to monitor the emergency.
  - Maintain appropriate communication with the occupancy staff and occupants.
  - Maintain appropriate communication with 911 operators or emergency responders.
  - If a fire alarm is activated, the F-53 C of F holder should follow standard protocol and procedures of a fire emergency, if safe to do so, but proceed with extreme caution and keep the survival techniques (Avoid-Barricade-Confront) in mind.

#### **6.6.1. Interacting with Police Officers during an active shooter emergency**

During an active shooter emergency, the FDNY normally will not be in the building to direct the required actions. The police officers will be the first responders and will proceed directly to the last known location of the active shooter.

The F-53 C of F holders and occupancy staff should expect:

- Police officers may wear regular patrol uniforms or external bulletproof vests, Kevlar helmets, and other tactical equipment.
- Police officers may be armed with rifles and shotguns in addition to their handguns.
- Police officers may shout commands, and may order individuals to the ground for their safety.

The proper interaction with police officers during an active shooter emergency:

- Follow all official instructions.
- Do not attempt to run towards or grab onto police officers.
- Resist the urge to turn quickly or make any sudden movements.
- DO NOT CARRY ANY PACKAGES OR ITEMS THAT COULD BE CONFUSED AS A WEAPON OR EXPLOSIVE DEVICE.
- Avoid pointing, screaming and/or yelling.

- Keep your hands out, open, and above your head, fingers spread apart, and most importantly, EMPTY.



- Do not interfere with responding officers: Do not stop to ask officers for help or direction when evacuating. Just proceed in the direction from which officers are entering the premises.
- Remember that the first police officers to arrive to the scene may not stop to help injured persons. Expect teams comprised of additional officers and emergency medical personnel to follow the initial responding officers. These teams will treat and remove any injured persons from the areas that have been cleared by the first responding police officers. They may also call upon able-bodied occupants to assist in removing the wounded from the premises.
- Remain calm.
- Be prepared to assist and follow instructions of police officers.

The F-53 C of F C of F holder or other responsible person is required to notify arriving NYPD, FDNY personnel and other first responders of the nature of the emergency and the actions taken up to the current time. The first responders may ask for the following items:

- Floor Plans
- Building Information Card (BIC) (if applicable).
- Keys/Access cards.
- Premises security radios/walkie-talkies (if applicable) (keep fully charged).

The police officers may request the following information:

- Location of the active shooter or his/her last known location.
- Number of shooters, if more than one.

- Physical description of shooter(s).
- Name/identity of the shooter(s) (e.g. employee).
- Number and type of weapons held by the shooter(s).
- Number of potential victims at the location.
- The layout/design of the building/occupancy (open space, interior partition, etc.)
- Unique tenants (high profile occupants, political officials, armed security, or disabled person, etc.)
- If explosions were heard.

The police officers may request qualified building personnel to operate and control the building systems to assist in isolating the shooter. It is critical for the F-53 C of F holder and occupancy staff members to follow orders of the police officers.

### **6.7. General guideline for medical emergency**

The FDNY recommends that the building/occupancy owner develop the medical emergency procedures. The procedures should include but not limited to:

#### (1) Training of building occupants

The building occupants should be trained to:

- **Call 911.** When notifying New York City 911 of a medical emergency requiring emergency medical care and transport to a hospital, include the following information:
  - The name of the building or occupancy.
  - The address of the appropriate building entrance or other location at which emergency responders will be met by FEP staff, and the nearest cross-street location.
  - The number of patients and their exact location inside or outside of the building.
  - The patient's chief complaint and/or present condition (e.g. bleeding, breathing/not breathing, conscious/unconscious, etc.)
- **Call building emergency notification number.** After calling 911, notify the emergency preparedness staff of the building or occupancy (using a warden phone if convenient), or the building office designated to receive notification

of emergencies on the premises. This will alert them to assist emergency responders upon their arrival. The emergency preparedness staff should meet the emergency responders, hold an elevator for their use, escort them to the patient, and facilitate removal of the patient.

- **Know location of defibrillator.** Building occupants should be familiarized with the location of defibrillators or other medical equipment that may be needed in the event of a medical emergency.



AED (Automatic External Defibrillator)

(2) Designate emergency preparedness staff in the event of medical emergency.

Building staff are neither expected nor required to personally provide patient care. However, there should be designated different building staff to

- meet emergency responders
- respond to victim/patient location to control the access to the scene (The victim/patient should not be moved by untrained personnel, unless the victim/patient's location is unsafe.)
- decide which elevator(s) can fit the stretcher and provide easy access to the victim/patient and recall the elevator to be held for emergency responder use only, if the victim/patient is not on street level

If the F-53 C of F holder is aware of a medical emergency, he/she should:

1. Go to fire alarm control panel and ensure 911 has been called;

2. Notify CPR-trained volunteers on the premises and request to render assistance (when appropriate);
3. Make an announcement to the occupants for the recall of elevator, if any elevator is recalled for medical emergency.

Sample script of the announcement:

*“Attention! Elevator bank A is currently not available due to medical emergency.”*

## **APPENDIX A.**

In order to ensure the building occupancy safety during a fire emergency, the trained staffs are expected to:

- control small fires by fire extinguishers or close doors (if safe to do so);
- check the environment in the staircase prior to entry for evacuation
- assist in the evacuation/relocation of the floors with fire alarm activities (i.e. the affected floors) to at least 3 floors below from their current floor or consistent with the building fire safety and evacuation plan;
- have at least one staff to report to the floor below the fire to meet the firefighters (if safe to do so).