

FIRE DEPARTMENT • CITY OF NEW YORK



**STUDY MATERIAL FOR
WATCHPERSON AT CONSTRUCTION SITES (Citywide) (S-60)**

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

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

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

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

Create an Account and Log in to:

<http://fires.fdnyccloud.org/CitizenAccess>

Note 1: Starting from 03/01/2016, all watchperson at construction site will be required to possess the S-60 Certificate of Fitness card.

Note2: S-60 Certificate of Fitness is only valid provided the C of F holder maintains a current New York State security license.

The S-60 Certificate of Fitness holder must keep the Certificates of Fitness and the NYS security license upon his or her person, or otherwise readily available for inspection by any representative of the Department, at all times while performing the duty of a watchperson.

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NOTICE OF EXAMINATION

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<http://fires.fdnyccloud.org/CitizenAccess>

REQUIREMENTS FOR WRITTEN EXAM

Applicants must be at least 18 years of age and must have a reasonable understanding of the English language. Applicants must apply the exam in person and bring the following materials and required fee:

1. **Identification.** Applicant must provide two forms of identifications; at least one form of identification must be government issued photo identification, such as a State-issued Drivers' License or Non Driver's License or a passport.
2. **Letter of Recommendation.** Applicants must present a letter of recommendation from his/her employer. The letter must be on official letterhead, and must state the applicant's full name, experience and the address where the applicant will work. If the applicants are self-employed or the principal of the company, they must submit a notarized letter attesting to their qualifications. For more info:
 - Sample of recommendation letter:
<http://www1.nyc.gov/assets/fdny/downloads/pdf/business/cof-samplerec-letter.pdf>
 - Sample of self-employed letter:
<http://www1.nyc.gov/assets/fdny/downloads/pdf/business/cof-sample-selfrec-letter.pdf>
3. **A-20.** Applicants must present a completed application for certificate of fitness (A-20 Form).
<http://www1.nyc.gov/assets/fdny/downloads/pdf/business/cof-application-form.pdf>
4. **Without Required Documentation.** Applicants not currently employed may take the exam without the required documentation. If the applicants pass the exam, FDNY will issue a temporary letter with picture for the job seeking purpose. The C of F card will not be issued unless the applicants are employed and provide all of the required documentation. *(Exception: If COF has a school requirement, applicant will not be allowed to take COF exam until school is completed.)*
5. **Special requirements for the: S-60 Certificate of Fitness:**
 - (1) The applicant must possess and present a valid New York State security guard license. **Without showing a valid NYS security guard license, the applicant will not be permitted to take the S-60 exam.**

(2) The experience of being an S-60 watchperson at construction site will generally not qualify you to take the S-56 Certificate of Fitness exam.

6. APPLICATION FEE:

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

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

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

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

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

EXAM INFORMATION

The **S-60** exam will consist of **20** multiple-choice questions, administered on a "touch screen" computer monitor. It is a time-limit exam. Based on the amount of the questions, you will have 30 minutes to complete the test. A passing score of at least 70% is required in order to secure a Certificate of Fitness.

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

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

<http://www1.nyc.gov/assets/fdny/downloads/pdf/business/cof-s60-noe-study-materials.pdf>

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

OTHER RELATED FEES

To change a mailing address:

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

To change a work location,

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

To request a replacement certificate:

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

RENEWAL REQUIREMENTS

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

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

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

- **Renewal online**

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

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

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

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

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

For online renewal go to: <https://a836-citypay.nyc.gov/citypay/FDNYCOF>

- **Renewal by mail**

Mail your Renewal Notice (or if you did not receive a Renewal Notice, a copy of your certificate), along with your fee payment, Personal or company check or money order (made payable to the New York City Fire Department)

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

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

NYC Fire Department (FDNY)
Cashier's Unit
9 MetroTech Center, 1st Floor
Brooklyn, NY 11201

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

• **Renewal in person**

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

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

For fee waivers submit: ***(Only government employees who will use their C of F for his or her work-related responsibilities are eligible for fee waivers.)***

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

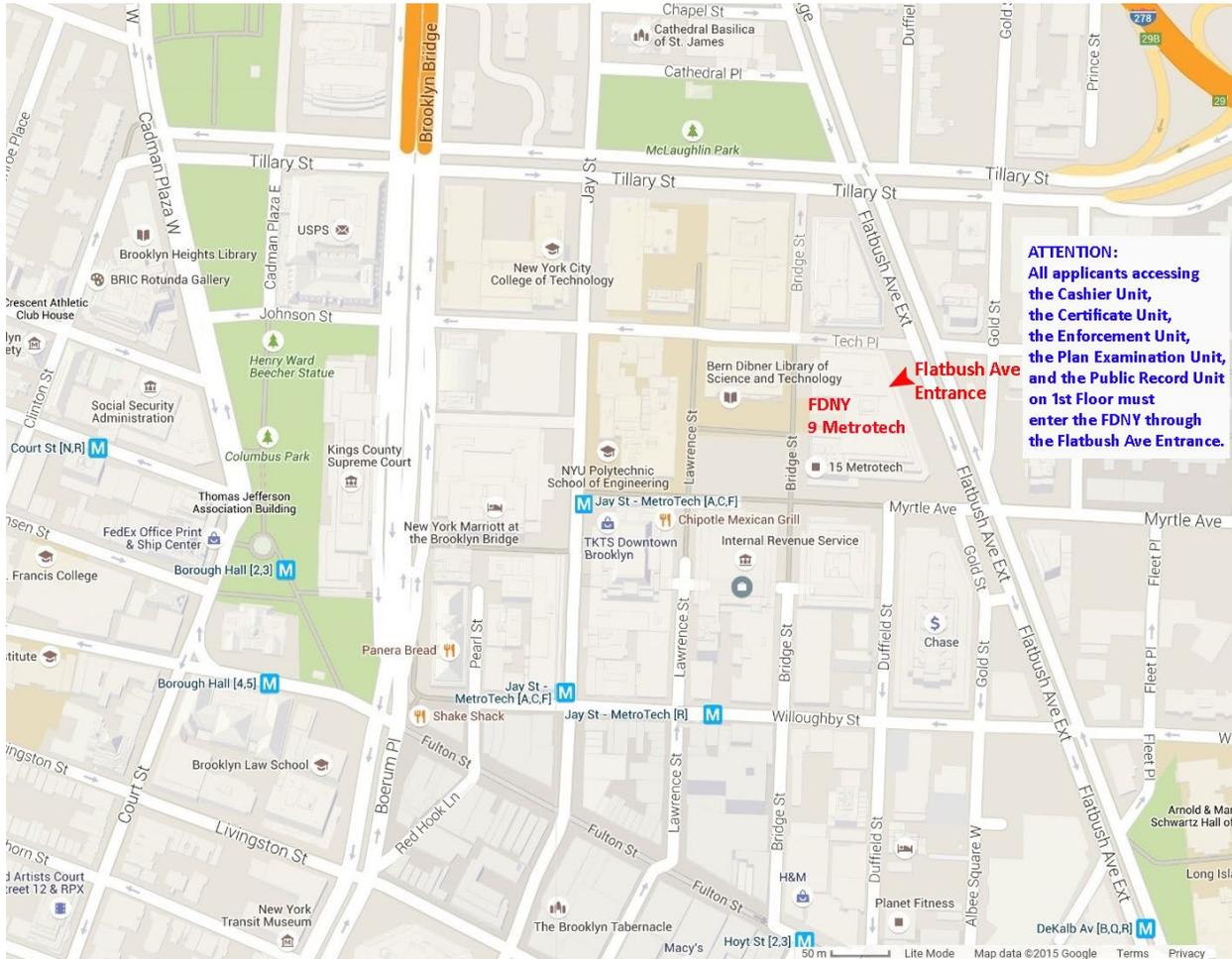
NYC Fire Department (FDNY)
Cashier's Unit
9 MetroTech Center, 1st Floor
Brooklyn, NY 11201

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

A convenience fee of 2 % will be applied to all credit card payments for original or renewal certificates.

EXAM SITE:

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



STUDY MATERIAL AND TEST DESCRIPTION

About the Study Material

This study material will help you prepare for the examination for the Certificate of Fitness for watchperson at construction sites. The study material includes information taken from the Fire Prevention Code of the Bureau of Fire Prevention. The exam covers the entire booklet and any table. **It 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 exam.** The study material does not contain all of the information you need to know to work as a watchperson. It is your responsibility to become familiar with all applicable rules and regulations of the City of New York, even if they are not covered in this study material. You need to be familiar with the 2014 Building Code Section 3303, 3310 and Fire Code Chapter 14, which regulate the duties of watchperson at construction sites in order to adequately prepare for the exam.

About the Test

20 questions on the S-60 Certificate of Fitness examination are of the multiple choice type with four alternative answers to each question. Only one answer is most correct for each question. If you do not answer a question, or if you mark more than one alternative your answer will be scored as incorrect. A score of 70% is required on the examination in order to qualify for the Certificate of Fitness. Read each question carefully before marking your answer. There is no penalty for guessing.

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/displayed 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 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.

3. 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. You would touch "C" on the computer terminal screen.

INTRODUCTION

Certificate of Fitness

There are certain Certificates of Fitness required on construction site to perform specific duties, to supervise specific facilities, or to supervise the storage, handling and use of hazardous materials:

Category	Description
G-60	torch use of flammable gases for hot work operations
E-21	storage and use of powder actuated tools
F-01	fire guard for impairment (including construction site)
F-60	fire guard for torch operation
P-54	supervision of crane aerial fueling operations at construction site
S-56	construction site fire safety manager
S-60	watchperson at construction sites
S-92	supervision of portable fueled space heaters at construction sites
S-93	supervise temporary storage and dispensing flammable/combustible liquids at construction sites
S-94	supervise the handling and dispensing flammable/combustible liquids in portable containers

The S-60 Certificate of Fitness is only designed for certifying watchpersons at construction site. A S-60 Certificate of Fitness holder is not authorized to perform the duties of other Certificates of Fitness.



At least one S-60 Watchperson is required at any construction site having a footprint of between 5,000 square feet and 40,000 square feet.

This competent watchperson must be on duty at the site during all hours when operations are not in progress. The requirement starts from the time when the foundation is poured to when all work has concluded and the certificate of occupancy or temporary certificate of occupancy has been issued.

Where the building has a footprint of more than 40,000 square feet, at least one additional S-60 watchperson must be on duty for each additional 40,000 square feet of building footprint, or fraction thereof.

Exceptions:

1. Where the construction site requires two or more watchpersons, the number of watchpersons may be reduced, subject to the approval of the commissioner, where:

1.1 An alarm or video monitoring system is in place, or where the layout of the building allows a continuous line of sight across the entire building; and

1.2 At least one watchperson is provided.

2. The building is being actively monitored in accordance with a fire safety and evacuation plan approved by the Fire Department in accordance with the New York City Fire Code.

S-60 Certificate of Fitness is only valid provided the C of F holder maintains a current New York State security license.

The S-60 Certificate of Fitness holder must keep the Certificates of Fitness and the NYS security license upon his or her person, or otherwise readily available for inspection by any representative of the Department, at all times while performing the duty of a watchperson.

The S-60 Certificate of Fitness holder is required to have knowledge of the following Fire Code and Building Code sections:

- FC Chapter 14, Fire Safety During Construction, Alteration and Demolition.
- 2014 Building Code Section 3303 and 3310

DEFINITIONS

ALTERATION. Any construction, addition, change of use or occupancy, or renovation to a building or structure in existence.

CONSTRUCTION. The excavation, erection, alteration, and repair of buildings or any component parts, including all operations incidental thereto.

COMPETENT PERSON. One who is capable of identifying existing predictable hazards in the surroundings or conditions that are unsanitary, hazardous or dangerous, and who has authorization to take prompt corrective measures to eliminate such hazards.

DEBRIS. Rubbish, waste, discarded material, or the remains of something broken down, demolished, or destroyed.

DEMOLITION.

Full demolition. The dismantling, razing, or removal of all of a building or structure, including all operations incidental thereto.

Partial demolition. The dismantling, razing, or removal of structural members, floors, interior bearing walls, and/or exterior walls or portions thereof, including all operations incidental thereto.

ERECTION. The assembly and placement of crane sections and components into place, including all operations incidental thereto. Erection shall include climbing and jumping.

EXCAVATION. The removal of earth from its natural position; except for any incidental removal that occurs during the course of auguring, drilling, vibrating, or driving.

FASTENING. The combination of fastener, fastened material and base material (after the fastener has been driven).

POWDER ACTUATED TOOL. A tool that utilizes expanding gases from a powder load to drive a fastener.

SMALL ARMS AMMUNITION. A shotgun, rifle or pistol cartridge, and any cartridge for propellant-actuated devices, excluding ammunition containing bursting charges or incendiary, trace, spotting or pyrotechnic projectiles.

1. Emergency Notification

If a watchperson becomes aware of a fire or other emergency at a construction site he/she must immediately telephone 911 and report the emergency. There should be no delays in making such notification. The watchperson should also immediately notify the Construction Site Fire Safety Manager of the emergency, but **only after telephoning 911**.

The watchperson must be familiar with emergency notification procedures. All construction sites must have an emergency telephone that does not require a coin to operate. The construction site street address must be posted next to the phone or the approved device. The watchperson must know the location of this phone and must have immediate access to it. The watchperson can also use a wireless phone to make emergency notifications. If a wireless phone is used, it is important to be sure that the battery has enough power to last the entire shift. Notifying the FDNY by phone is the most direct and effective way to make notification of an emergency.

When notifying 911 of a fire or other emergency, the call-taker will need to obtain certain information about the emergency. Obviously the nature of the emergency and address are the most critical pieces of information. They operator may also ask what the nearest cross-street is, and if anyone is in need of medical attention and if so, what are their symptoms. Additionally, if you are responsible for a very large construction site, it is likely that there will be more than one means of entry. Providing information about which entrance would provide the most direct access to the emergency area would be helpful in getting the emergency response personnel to the area of the emergency as quickly as possible. If certain construction site entrances are obstructed with construction equipment or construction materials and are not easily accessible by emergency responders this information should be communicated to the 911 operator. The more information you have available to communicate to the 911 operator, the more efficient they can get the right kind of help to you quickly.

When you call 911, in addition to the information mentioned above, you should be prepared to answer other 911 operator questions, which may include:

- The phone number you are calling from
- The nature of the emergency
- Details about the emergency, such as a physical description of a person who may have committed a crime, a description of any fire that may be burning, or a description of injuries or symptoms being experienced by a person having a medical emergency

Be prepared to follow any instructions the operator gives you. Many 911 operators can tell you exactly what to do to help in an emergency until help arrives.

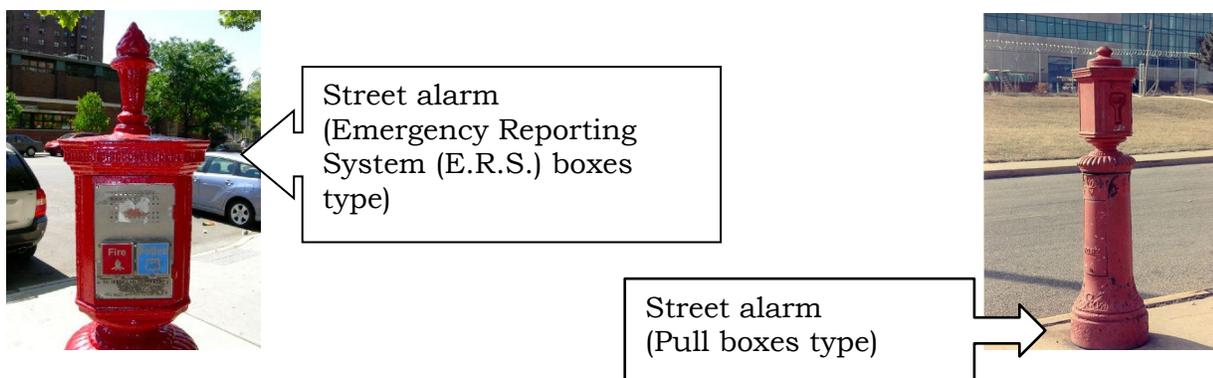
Finally, do not hang up until the operator instructs you to.

After the FDNY arrives, the watchperson should be sure to meet the emergency responders to provide them with information regarding the nature of the emergency, its location on the construction site and to provide the information that the emergency responders request.

2. General Knowledge and Precautions

A watchperson should also be familiar with the following:

- (1) the location of the nearest fire alarm box and how to use it;
- (2) all available means of making notifications to emergency responders of a fire or other emergency;
- (3) the location and use of fire extinguishers
- (4) the location of building and construction site entrances and exits;
- (5) the availability and location of firefighting equipment required to be on site.



In general, the watchperson should be aware of any activity happening at or around the construction site. The watchperson should remain alert to watch for abnormal activity or hear any unusual sounds. Moreover, the watchperson should be concerned about any activity that looks suspicious.

The watchperson must work in a responsible manner and should not be under the influence of intoxicating beverages, narcotics, controlled substances, and prescription or nonprescription drugs that can impair judgment.

The watchperson must immediately report to the foreman, supervisor or designated Safety and Security Manager if any one or more of the following are not being complied with:

2.1. Fire safety

2.1.1. Smoking prohibition

Smoking is strictly prohibited on all construction sites. All construction sites are required to be enclosed with a fence. Smoking is prohibited within the area enclosed by such fence, including in construction trailers and other indoor or outdoor areas. In buildings undergoing alteration, where no fenced enclosure is required, smoking is prohibited in all areas of the building in which alteration work is or will be conducted. Smoking, including the carrying of a lighted pipe, cigar, cigarette or any other type of smoking material is prohibited at all construction sites.

An example of the “No Smoking” signs



Durable “No Smoking” signs must be in approved locations that is easily seen and understood throughout the construction site. The signs must provide notice to persons entering or working on the site about the non-smoking policy. For outdoor locations, or indoor locations where the signs may be exposed to conditions that will accelerate deterioration, metal or other approved durable material that is water-resistant.

“No Smoking” signs must be posted

- (1) at all sliding and swinging gate openings,
- (2) any other openings allowing for access to the site by persons or vehicles.
- (3) one or more locations on each floor of such buildings,
- (4) any indoor or outdoor areas on the construction site at which persons congregate,
- (5) any storage area of hazardous materials (gas cylinders, explosives, etc.)

2.1.2. FDNY Connections

When the construction of a new building the working deck reaches a height of 75 feet (e.g. 6 stories) or greater above the ground in a building, a standpipe system will be required.



Standpipe systems are installed in buildings to help firefighting personnel deploy attack hose lines quickly and with adequate water pressure and volume to attack a fire. Standpipe systems consist of a network of fixed piping and hose valve connections. Water is supplied either through an automatic water supply or manually through a FDNY connection. Standpipe systems provide a reliable water source to extinguish or control an interior fire in the building. The standpipe systems must be kept in “ready” mode at all times for FDNY use. The FDNY connections must be free from obstruction and must be marked by a sign that reads, “**Standpipe FDNY Connections**”, so that a fire engine can quickly supply water to the system for fire emergency by connecting to the FDNY connections. If the watchperson observes anyone may park or obstruct the FDNY connections, the watchperson should direct the person to keep the area clear. The sign and the connections must be illuminated by a red light

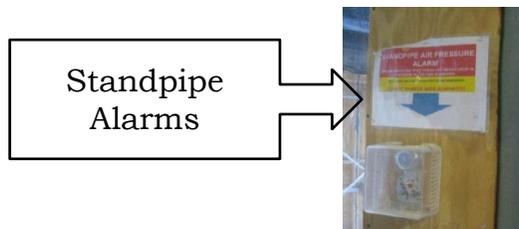
at night. If the sign or the red light is defective, the watchperson should report to the supervisor or the Construction Site Fire Safety Manager.

2.1.3. Standpipe system and alarm system

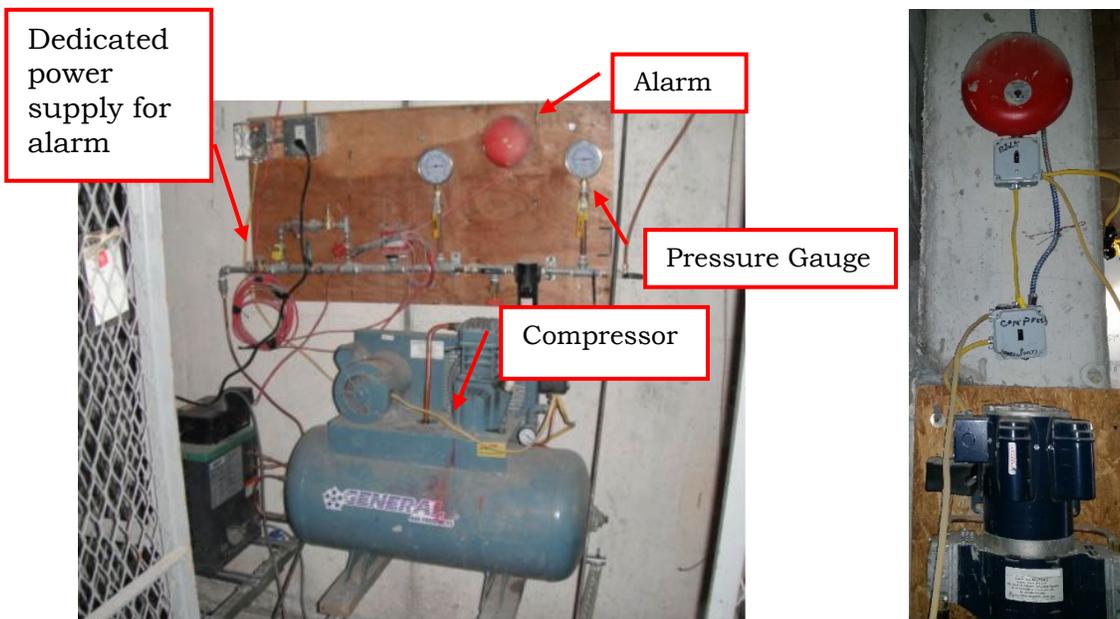
Where a dry standpipe system is used during a new construction, the dry standpipe system is filled with pressurized air. No water is available in the system until the FDNY charges the FDNY connection. Such standpipe system must be provided with an air pressurized alarm system to ensure that the standpipe system has no leaks to meet the pressure requirements. The alarm will be activated if the pressure cannot meet the requirements.

The watchperson should know the location of the alarm and perform a visual inspection of the alarm. The watchperson should verify if everything is in place and the system is connected to an active, dedicated power supply at all times.

If the alarm sounds, there may be problem in the standpipe system. Once the alarm sounds, the watchperson must immediately contact the Construction Site Fire Safety Manager and/or superintendent to investigate the alarm. If the system is found impaired, the FDNY must be notified.



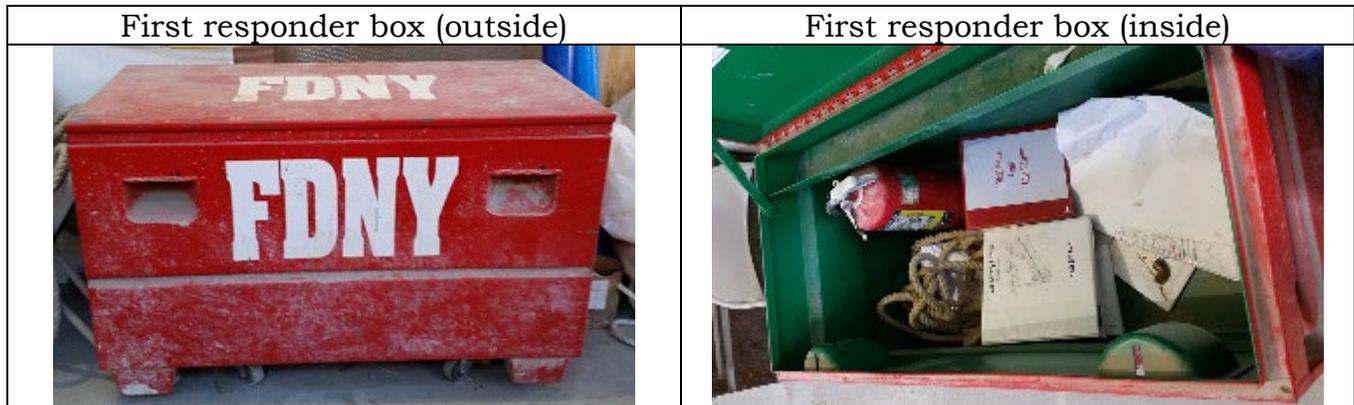
Two examples of a Standpipe System Air Pressure Alarm System:



2.1.4. First Responder Box

The FDNY may require that a First Responder Box be provided at a construction site for first responder use. The First Responder Box should contain building access keys, the pre-fire plan, and other documents required by the Fire Code. Such box must be in an approved location and, if locked, must be open able by authorized personnel.

The watchperson should know the location of the first responder box. The watchperson should also ensure the box is located on a solid surface with clean surroundings and it is easily accessible 24/7.



2.1.5. Hazardous materials

All hazardous materials must be properly stored in safe, locked and designated locations. The watchperson should know the location of hazardous materials that are stored. Examples of hazardous materials: compressed gas cylinders (propane containers, oxygen or acetylene containers, etc.), flammable/combustible liquid (gasoline, diesel or oil based paint, etc.), or powder-actuated tools, etc.

(1) Compressed gas cylinders

Compressed gases are gases under pressure in cylinders. At construction sites, compressed flammable gas and oxygen gas cylinders are commonly found. Compressed flammable gases, such as propane and acetylene, are normally used as fuel gases in curing and drying operations, hot work operations or roofing operations. Flammable gas vapor is combustible and can ignite explosively.



Flammable gas cylinder explosion

Oxygen is not a flammable gas. However, it supports burning. It is used with acetylene in hot work operations to produce very high temperature flame.

20 pound propane cylinder (commonly seen in BBQ grills)	100 pound propane cylinder (cylinder height 3-4 feet)	Oxygen and acetylene cylinders on a cart.
		

General fire safety guidance of compressed gas cylinders: When not in use, keep the gas cylinder valves closed. Only store the gas cylinders in approved storage locations. The compressed gas cylinders must be stored upright.



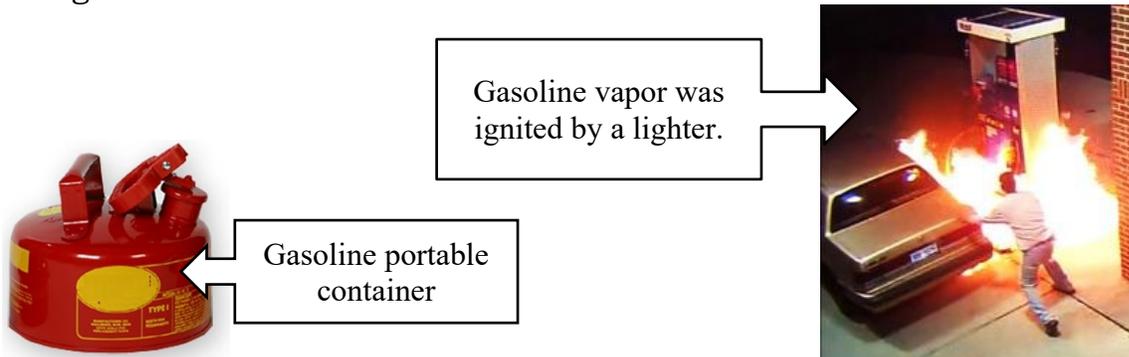
The propane cylinders must be stored in a well-ventilated outdoor enclosure secured by a lock. They must not be stored in any below grade area.

(2) Flammable and combustible liquids

Flammable and combustible liquids are commonly found in most construction sites. Fuels and many common products like solvents, thinners, cleaners, adhesives, oil based paints, waxes and polishes may be flammable or combustible liquids. They are liquids that can burn. Generally speaking, flammable liquids (e.g. gasoline) will ignite (catch on fire) and burn easily at normal working temperatures. Combustible

liquids (e.g. diesels) have the ability to burn at temperatures that are usually above working temperatures.

General fire safety guidance of flammable/combustible liquids: Keep the liquids away from any sources of ignition (smoking, open flame, hot work operations, electrical and mechanical sparks, etc.) or combustible materials (e.g. papers, woods, etc.). The containers should be tightly closed and stored in storage cabinets or other approved storage locations.



(3) Powder-actuated tools

A powder (or ammunition) actuated fastening system is an acceptable method of making instantaneous forced entry fastenings into various construction materials. The tools are used to make fastenings to very hard materials such as concrete or steel.

The illustration below shows a commonly used tool for drive pin and threaded stud fastenings. Although there are many different models, in all cases a fastener is forced rapidly down the barrel of the tool by an explosive charge.



The power load (ammunition) is a unique, portable, self contained energy source used in powder actuated tools. The power loads may come in cartridges in throw away magazines, as shown in the illustration below. Other power loads are provided only in single cartridges.



Ten Cartridge Magazine

General fire safety guidance of powder actuated tools: The power loads (ammunitions) are classified as an explosive. The main supply of ammunition shall be kept in a locked metal box. Storage of powder-actuated tools must be under the general supervision of an E-21 Certificate of Fitness holder. They must keep the key to the storage box in their possession.



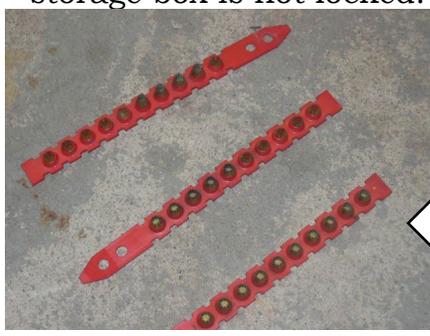
The ammunition storage box must be locked and properly labeled.

The ammunition storage box must be kept away from heat and must not be stored in the same compartment or shanty in which compressed gases, or flammable liquids are kept.

(4) Situations that need to be reported

The watchperson must report to the Construction Site Fire Safety Manager if he observes any of the following situations:

- The powder-actuated tool loads are not in a locked metal box. The ammunition storage box is not locked.



The power loads must not be left unattended. They must be stored and locked in a metal box.

- Any gas cylinders (including empty ones) stored outside of the FDNY permitted storage locations.



Gas cylinders must not be left outside.

- Any propane or CNG gas cylinder stored in any below grade area.



No propane allowed in below grade area.

- Any vegetation and/or combustible waste in the flammable and combustible liquid storage areas.

No combustible waste is allowed in the flammable/combustible liquid storage area.

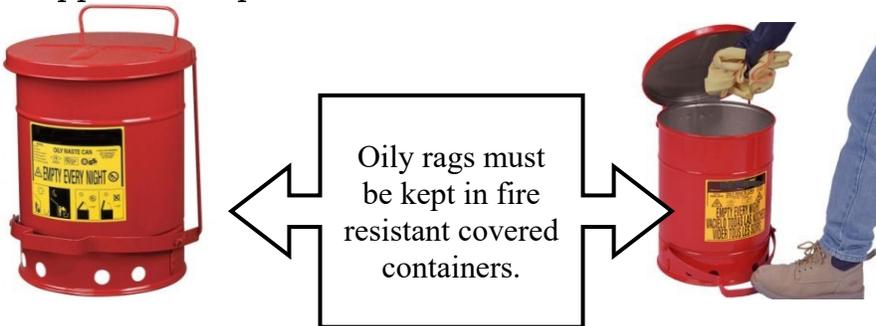


When FDNY personnel show up, the watchperson should inform them the locations of all hazardous materials.

2.1.6. Waste disposal

Garbage must not be allowed to accumulate within buildings and must be removed from a building at least once a day.

Any waste susceptible to spontaneous ignition, such as oily rags, must be stored in an approved disposal container.



2.1.7. Portable fueled heating devices.

It is not allowed at a construction site to store, handle or use portable fueled heating devices or equipment:

- (1) for purposes of human comfort or any other purpose other than construction-related curing and drying,
- (2) using a flammable liquid as a fuel.

Portable fueled space heaters may be used or handled at construction site overnight for construction-related curing and drying. The heaters must be personally supervised by a S-92 Certificate of Fitness holder. The Certificate of Fitness holder must inspect the heaters periodically to ensure the safe operation. The frequency of the inspection must not less than once every four hours. The watchperson should be aware of the drying and curing activities and watch for any accidental incident.



Kerosene Forced Air
Portable heater



Radiant Portable Heater



Natural Gas Salamander



empty coke salamander



Salamander with coke burning

2.1.8. Elevator in readiness

All construction or demolition sites 75 feet and higher must have one elevator or hoist in “ready” mode at all times. The watchperson needs to have basic understanding of the purpose of the construction elevator operation and also needs to have the 24-hour contact number of responsible persons that could help the arriving FDNY field unit to operate the construction elevator.

2.2. Site security and general housekeeping

2.2.1. Secure the openings

The watchperson should ensure all entries and exits on the ground level to the construction site are properly secured. It can reduce the chance of entry by unauthorized persons and the chance of arson or accidental fires.

It is recommended that the ground level of the construction site should be patrolled periodically when construction, alteration and demolition operations are not in progress. It is to ensure that there is no suspicious activity.

2.2.2. Lighting

Building Code requires adequate lighting (daylight or electric light) to provide a safe and secure working environment for employees and first responders.

2.3. Logbook

The FDNY recommends that the watchperson document any incidents and conditions he/she noticed during the shift. The sample form is provided on the following page.

WATCHPERSON RECORD FORM (example)

<p style="text-align: center;">Construction Site Address/ Location</p> <hr style="border: 0; border-top: 1px solid black; margin: 5px 0;"/> <hr style="border: 0; border-top: 1px solid black; margin: 5px 0;"/>
--

Directions:

- As the Fire Guard, you are required to make hourly inspections, and to record the result of your inspections on this log.
- Write “Yes” for items that are satisfactory. If not, explain.
- Provide a description of unsatisfactory items in the comments section and bring them to the attention of the responsible person.

Date						
Watchperson’s name						
Watchperson’s COF #						
Shift start time	__:__:	__:__:	__:__:	__:__:	__:__:	__:__:
Shift end time	__:__:	__:__:	__:__:	__:__:	__:__:	__:__:
Fire extinguisher availability: Is any fire extinguisher accessible to the watchperson?						
Secured opening: Is every opening on street level secured?						
Fire Department Connection: The connection is visible, sign is placed correctly, the red light is functional						
Air pressurized alarm system: Everything is in place and functional. No alarm went off.						
First responder box: The box is in place.						
Note for any incident						

3. Fire Extinguishers

The watchperson should be aware of the locations of the fire extinguishers that he can access. The Certificate of Fitness holder should know how to operate the extinguishers in a safe and efficient manner.



Portable fire extinguishers are important in preventing a small fire from growing into a catastrophic fire. However, they are not intended to fight large or spreading fires. The watchperson should only consider extinguishing fires when they are limited in size and spread such that they can readily be extinguished using a portable fire extinguisher. By the time the fire has spread, fire extinguishers, even if used properly, will not be adequate to extinguish the fire. Such fires should be extinguished by the building fire extinguishing systems or trained firefighters only. In case of any fire, FDNY must be notified.

Fire extinguishers must be used in accordance with the instructions painted on the side of the extinguisher. They clearly describe how to use the extinguisher in case of an emergency. The Certificate of Fitness holder should be familiar with the use of portable fire extinguishers. When it comes to using a fire-extinguisher just remember the acronym P.A.S.S. to help make sure you use it properly. P.A.S.S. stands for Pull, Aim, Squeeze, Sweep.

All fire extinguishers must be installed so that the top of the extinguisher is not more than 5 ft above the floor and the clearance between the bottom of the extinguisher and the floor is not less than 4 in. In other words, **no fire extinguisher is allowed to put on floor.**



Fire extinguisher in a construction site.



Improper floor placement of Fire Extinguisher.

3.1 Fire extinguishers types

The Certificate of Fitness holder must know the difference between the various types of extinguishers and when they may be used. A description of the classes of fires and the appropriate extinguishers are described below.

Class A fires are caused by ordinary combustible materials (such as wood, paper, and cloth). To extinguish a Class A fire, these extinguishers utilize either the heat-absorbing effects of water or the coating effects of certain dry chemicals.

Class B fires are caused by flammable or combustible liquids and gases such as oil, gasoline, etc. To extinguish a Class B fire, the blanketing-smothering effect of oxygen-excluding media such as CO₂, dry chemical or foam is most effective.

Class C fires involve electrical equipment. These fires must be fought with fire extinguishers that do not conduct electricity. Foam and water type extinguishers must not be used to extinguish electrical fires. After shutting off the electrical equipment, extinguishers for Class A or B fires may be used.

A multi-purpose dry chemical fire extinguisher may be used to extinguish more than 2 Classes fires. Examples of some fire extinguishers are shown below.

Examples of fire extinguishers

10-B:C (10BC)	3-A:40-B:C(3A40BC)	3-A:40-B:C(3A40BC), wheeled
		

3.2 Typical fire extinguishers

Symbols may also be painted on the extinguisher. The symbols indicate what kind of fires the extinguisher may be used on. Examples of these symbols are shown below.

CLASSES OF FIRES	TYPES OF FIRES	PICTURE SYMBOL
A	Wood, paper, cloth, trash & other ordinary materials.	
B	Gasoline, oil, paint and other flammable liquids.	
C	May be used on fires involving live electrical equipment without danger to the operator.	
D	Combustible metals and combustible metal alloys.	
K	Cooking media (Vegetable or Animal Oils and Fats)	

	Class A, B & C Fires Multi-purpose Fire Extinguisher
	Class B & C Fires
	Class A & B Fires
	Class A Fires

Fire Extinguisher Identification Symbols

The symbol with the shaded background and the slash indicates when the extinguisher must not be used. The Certificate of Fitness holder must understand these symbols. All fire extinguishers should be kept in good working order at all times.

3.3 Fire extinguisher inspections

MONTHLY

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

The **QUICK CHECK** should check if:

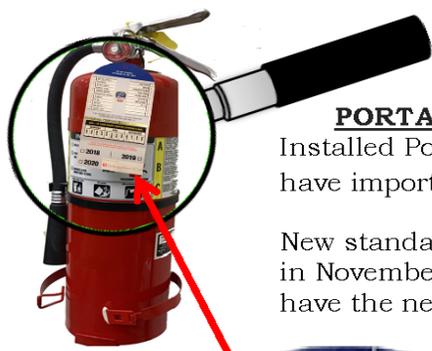
- (1) the fire extinguisher is fully charged;
- (2) it is in its designated place;
- (3) it has not been actuated or tampered with;
- (4) there is no obvious or physical damage or condition to prevent its operation.

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

ANNUALLY

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

3.4 Portable Fire Extinguisher (PFE) Tags (NEW)



PORTABLE FIRE EXTINGUISHER (PFE) TAGS (NEW)

Installed Portable Fire Extinguishers must have a PFE tag affixed. This tag will have important information about the extinguisher.

New standardized PFE tags (see below) will begin appearing at premises starting in November 2018. By November of 2019, all portable fire extinguishers must have the new PFE tags.

DO NOT REMOVE BY ORDER OF THE

<input type="checkbox"/> ABC (Dry Chem)
<input type="checkbox"/> AFFF/FFFP
<input type="checkbox"/> BC (Dry Chem)
<input type="checkbox"/> PURPLE K (PK)
<input type="checkbox"/> CARBON DIOXIDE
<input type="checkbox"/> CLASS D (Dry Powder)
<input type="checkbox"/> CLASS K
<input type="checkbox"/> FE-36
<input type="checkbox"/> FM 200
<input type="checkbox"/> HALON 1211
<input type="checkbox"/> HALON 1301

FIRE DEPARTMENT CITY OF NEW YORK

THIS PORTABLE FIRE EXTINGUISHER HAS BEEN SERVICED AS REQUIRED BY NYC FIRE CODE 906.2.1.2

2018 | **2019** | **2020**

VOID 1 YR. FROM MONTH PUNCHED

SERVICED		NEW		RECHARGED							
JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC

DO NOT REMOVE BY ORDER OF THE FDNY

COF STAMP:
Stamped information of Certificate of Fitness holder who performed the work.

Name: **John Smith** Extinguisher Equipment Guru Inc.
C of F: **12345678** 999
Company: Extinguisher Equipment Guru, Inc.

HOLOGRAM:
Real PFE tags will have high quality silver hologram measuring 3 inches long by ¼ inch high.

999
12 Oliver Street,
Bronx, NY
Number **999-999-9999**

MONTHLY INSPECTION RECORD

DATE	BY	DATE	BY
12/1/2018	I.L.		
1/1/2019	I.L.		

QR CODE:
Scan this QR Code to view FDNY approved company PFE list.

SERIAL # **WU-387294**
PREMISES ADDRESS **123 Flatbush Ave, Brooklyn**

UNAUTHORIZED POSTING IS A CRIME PUNISHABLE BY FINE AND/OR IMPRISONMENT

TIPS

A real hologram strip is 3 inches long by ¼ inch wide.

Counterfeit tags will NOT have a high quality silver hologram.

The hologram on a counterfeit tag will NOT change color as it is moved against the light.

If your PFE tags look different than the one pictured above, contact your supervisor.

If you suspect your PFE is a counterfeit, contact FDNY immediately by e-mail:

Tags.Decal@fdny.nyc.gov

4. LITHIUM-ION BATTERY SAFETY

Lithium-ion safety

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

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

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

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

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

ALWAYS:

- purchase and use devices certified by a Nationally Recognized Testing

Laboratory (NRTL). 

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

NEVER:

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

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



Charging Lithium Ion

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

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

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

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

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

Extinguishing Lithium-ion

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



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

Unexpected Re-ignition.

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

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

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

