# STUDY MATERIAL FOR THE CERTIFICATE OF FITNESS EXAM FOR

# F-33 FIRE DRILL CONDUCTOR/PA

# F-34 FIRE DRILL CONDUCTOR/ INSTITUTION

# F-35 FIRE DRILL CONDUCTOR/ FACTORIES LL

INSIDE THIS BOOKLET YOU WILL FIND THE FOLLOWING:

## NOTICE OF EXAMINATION (NOE)

**Please note: This booklet covers all three tests listed above. It is recommended that you read the entire booklet.**

REVISED 04/04/00

# NOTICE OF EXAMINATION FOR

**Title:** **Examination for the Certificate of Fitness for Fire Drill Conductor-PA (F-33), Fire Drill Conductor - Institutions (F-34), Fire Drill Conductor-Factories LL-(F-35)**

**Date of Test:** Written tests are conducted Monday to Friday (except legal holidays) 9:00 AM to 2:30 PM.

## QUALIFICATION REQUIREMENTS

1. Applicants must be at least 18 years of age.
2. Applicants must have a reasonable understanding of the English language.
3. 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, character, physical condition, experience, and address of premises where applicant will be employed.
4. Applicants must present two (2) forms of satisfactory identification i.e., driver's license and passport picture ID.

## APPLICATION INFORMATION

Application Fees: $25.00 for originals and $5.00 for renewals. The fee may be paid in cash, money order, or personal check payable to New York City Fire Department. The $25.00 fee must be payable by all applicants prior to taking the Certificate of Fitness test. Application forms are available at the Public Certification Unit, 1st floor, 9 MetroTech Center, Brooklyn, NY 11201.

## TEST INFORMATION

**Test:** The test will be of the written, multiple choice type. A passing score of at least 70% is required in order to secure a Certificate of Fitness.

This study material will help you prepare for the examination for the Certificate of Fitness for Fire Drill Conductor. The study material includes information taken from the Fire Prevention Code and the Fire Prevention Directives of the Bureau of Fire Prevention, NYFD. The study material does not contain all of the information you need to know in order to perform the job of Fire Drill Conductor. 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 material.

All questions on the Certificate of Fitness examination are multiple choice, with four alternative answers to each question. Only one answer is correct for each question. If you do not answer a question or mark more than one alternative your answer will be scored as incorrect. A score of 70% correct 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 Questions

**1. Who was the first President of the United States?**

(A) Bill Clinton.
(B) Malcolm X.
(C) Bill Cosby.
(D) George Washington.

The correct answer is "**D**". You would touch "**D**" on your touch screen monitor.

**2. What sports team plays at Shea Stadium in New York?**

(A) Giants.
(B) Mets.
(C) Cardinals.
(D) Jets.

The correct answer is "**B**". You would touch "**B**" on your touch screen monitor.

## FIRE DRILL CONDUCTOR

Fire drill conductors are required in many locations. For example, fire drill conductors are required in hospitals, factories, and places of public assembly. The main purpose of a fire drill is to allow employees and occupants of a location to practice emergency evacuation procedures. The correct evacuation procedures for a location are outlined in the fire safety plan for the building. Practicing the procedures teaches employees and occupants what to do in case of a real fire emergency. The fire drills should be unscheduled. Employees and occupants of a location should not know ahead of time the date and time that a fire drill will be conducted. This will help ensure that the fire drill is taken seriously. The fire drill conductor must make sure that the fire drills are conducted in a safe and orderly manner.

## FIRE DRILLS

The local Fire Department company and central monitoring stations must be notified before fire drills are conducted. Notification will reduce the number of responses by the Fire Department to false alarms. During the fire drill the phone lines to the Fire Department must be tested. The phone lines are tested by calling the Fire Department directly. The fire drill conductor must then tell the Fire Department that the telephone communication system is being tested. Many communications systems have a direct line to the Fire Department. The Fire Department is contacted as soon as the receiver is lifted from the cradle. Some communication systems require the fire drill conductor to dial a telephone number. The Fire Department may be contacted by dialing 911. The Fire Department borough offices may also be contacted by dialing the numbers listed below. These phone numbers should be posted next to the phones most likely to be used in case of an emergency.

| | |
|---|---|
| MANHATTAN | 212-999-2222 |
| QUEENS | 718-999-5555 |
| BRONX | 212-999-3333 |
| STATEN ISLAND | 718-999-6666 |
| BROOKLYN | 718-999-4444 |

Internal communications systems must also be tested during a fire drill. For example, radios, bull horns, and public address systems must be tested during the fire drills.

The fire drill conductor must keep a log of all fire drills. The fire drill conductor's name and certificate of fitness number must be recorded in the log. The date of the drill, the type of alarm sounded and the results of the fire drill must be recorded . The logs must be kept by the fire drill conductor for a period of at least three years. The logs must be made available to any representative of the Fire Department upon request.

### Number of Fire Drills Required

The number of fire drills required over a period of time differs according to the location. The fire drill conductor must make sure that the correct number of drills are conducted as required. The required fire drills for each location are summarized below.

**Places of Public Assembly**. Fire drill conductors are required in places of public assembly when such places are licensed by the Department of Consumer Affairs. Places of public assembly include cabarets and discos, live theaters and motion pictures (if non-fireproof), etc. Monthly fire drills must be conducted at places of public assembly. The drills are for the employees and not for the patrons. The drills must be unscheduled and conducted at varying times during the day.

**Hospitals**. Unscheduled fire drills must be conducted at hospitals and similar institutions. At least twelve fire drills must be conducted per year in these institutions. Six of the fire drills must be conducted during the evening shift. Three of the fire drills must be conducted during the day shift. Three of the fire drills must be conducted during the night shift.

**Factories**. It is the responsibility of the owner of the building or the tenant with factories to conduct monthly fire drills at least once a month at varied hours of the day and all occupants shall participate. Fire drills are required to be held at various times monthly, at various days of the week, and at different hours of the day. Factories with weekend schedules must make arrangements for fire drills for these employees. All fire drills must be unscheduled.

All occupants of the building at the time of the fire drill including visitors, management and building staff must participate in Fire Drills.

Fires in factories become very important in New York City after the 1911 Triangle Shirt Company that resulted in the death of over 140 people. Locked and obstructed exits and unfamiliarity by employees with the exit locations attributed to their deaths. Fire Drill Conductors should be aware that these conditions may still exist in their buildings today and inspect their buildings regularly for conditions that might cause a delay in a building evacuation.

A record of all fire drills must be kept at the factory. The record must show the date of the fire drill and the amount of time it took for the occupants to reach the street or the safety area. The record of the monthly fire drill must be available for inspection by the Fire Department.

**Fire Emergency Team**. Several people may help the fire drill conductor during the fire drills. For example, fire wardens, searchers, and fire brigade members may assist the fire drill conductor. The fire drill conductor must make sure that all members of the fire emergency team are dependable. Every member of the team must be well trained in their fire safety duties by the fire drill conductor.

**Fire Brigade/Fire Squad Members**. A fire brigade is required in many buildings. The fire brigade may be known by different names in various locations. For example, the fire brigade may be called the fire squad in some factories. When a fire occurs on the ground floor the fire brigade members must respond to the location where the alarm was sounded. When the fire is located above the ground floor the fire brigade must respond to the floor below the fire. When the fire brigade members arrive they must start the evacuation procedures. They must also close all fire doors and windows to prevent the spread of the fire. One member of the fire brigade must remain on the floor below the fire during an emergency. This person must describe the fire conditions to the Fire Department personnel when they arrive. Members of the fire brigade should also be trained in how to use the fire extinguishing devices correctly.

**Fire Wardens**. The fire wardens must assist in the evacuation of the building. They must direct the occupants toward the emergency exits. The fire wardens must make sure that occupants use the stairs during the evacuation. The elevators should not be used without the permission of the Fire Department. They are reserved for the use of the Fire Department during a fire emergency.

**Searchers**. Searchers are required in many buildings. They are responsible for checking all rooms in the building. By checking the rooms they make sure that everyone has been safely evacuated. Both male and female searchers are usually required in order to check bathrooms and dressing rooms. The searchers will also assist the fire wardens in helping any persons who need assistance.(test f35 q 4 and other tests).

Generally, the fire wardens and searchers are employees of tenants in the building. They may also be occupants of the building. Members of the fire brigade usually work for the owner of the building in another capacity as well. For example, they might work on the maintenance crew.

The fire drill conductor must communicate with members of the fire emergency team during the fire drills. Radios, bullhorns and telephones may be used as communication devices. The fire drill conductor will usually issue evacuation instructions from the fire command station during the fire drills. The fire emergency team must follow these instructions carefully.

All persons at a location are required to participate in the fire drills. Employees of tenants of a building are not required to leave the building. If someone refuses to participate in a fire drill the person should be reported to the building supervisor. The building supervisor will take action to correct the situation.

The fire drill conductor and his assistants must remain composed and in control of the situation during the fire drills. The fire drill exercise must be taken seriously. This will help the fire drill conductor and assisting personnel behave properly during an actual fire emergency. Instructions must be given in a clear and simple manner.

The behavior of trained fire emergency personnel has a major influence on the behavior of others during a real fire emergency. Patrons and employees are less likely to panic when they see that the fire emergency team is in control. Controlling panic by those who are being evacuated is the most important thing the fire emergency team can do in case of a fire.

**General Inspection Checklist for Fire Drills**

Inspections may be conducted as part of the fire drill. The inspections will vary depending on the layout of the specific location. The following general guidelines may be used for all locations.

(a) All exits, stairways, hallways must be kept free of obstructions. Obstructions may prevent occupants from exiting the building in case of an emergency. An exit aisle at least 3 feet wide must be maintained at all times.

(b) Commonly self-closing doors are installed in the buildings. These doors are designed to prevent the spread of a fire in case of an emergency. The fire drill conductor must make sure that these doors are never propped open.

(c) Locks, bolts, or chains must not be installed on exits while there are people in the building. If locks are discovered they must be removed immediately. These doors may be secured with panic bars only.

(d) The entire premises must be checked daily for potential fire ignition sources. Any potential ignition sources that are discovered must be corrected or removed immediately. For example, frayed electrical wires and defective electronic components must be either repaired or removed.

(e) Trash or garbage must not to be allowed to accumulate anywhere inside the building. Accumulated trash is a fire hazard. It may be easily ignited by a stray spark. All trash or garbage must be removed from the premises.

(g) All required Fire Department permits and certificates must be current. The results of all tests and inspections must be recorded in the inspection log. The log, permits and certificates must be made available to Fire Department representatives upon request.

(h) When sprinkler and/or standpipe systems are installed they must be visually inspected monthly. Defects must be corrected and recorded in the inspection log. Serious defects must be reported to the Fire Department. For example, a defective water control valve must be reported to the Fire Department. This will allow the Fire Department to modify it's fire fighting strategies for the building.

(i) All fire extinguishers must be clearly visible. Signs must be posted indicating the location of the extinguishers. Signs indicating how to use the fire extinguishing devices must be posted also. The fire drill conductor must make sure that the extinguishers are recharged annually and after each time they are used.

(j) The fireman's service elevator test must be conducted monthly. This test must be recorded in the inspection log.

(k) The risers and control valves must be kept free of obstruction at all times. This will allow the Fire Department to quickly access the risers and control valves in case of an emergency.

**Defects in the Fire Protection System**

Sometimes defects in the fire protection system are discovered while conducting the fire drills. If a sprinkler or standpipe system is used any leak or break - no matter how small - must be reported to the local Fire Department immediately. Any complete or partial shut down (e.g., for repairs) should also be reported to the local Fire Department immediately. This will allow the Fire Department to modify its fire fighting strategies for the building. Arrangements must be made to have the defects repaired as soon as possible.

## Fire Safety Plan

A fire safety plan must be developed by the owner of the building. The fire safety plan outlines in detail the procedures that must be followed during a fire emergency. The fire safety plan must be submitted for approval to the Fire Department. Each employee must familiar with the fire safety plan.

Sections of the fire safety plan must be included in an Emergency Instruction Chart. The emergency instruction chart must be posted at several locations in the building. The emergency instruction chart summarizes the duties that must be performed during fire emergencies. An example of an emergency instruction chart is shown below.

**KEEP POSTED AT FRONT DESK**

**IN THE EVENT OF FIRE OR OTHER INCIDENT REQUIRING THE SERVICES OF THE FIRE DEPARTMENT**

1. **WITHOUT DELAY call the Fire Department at _____**
2. **Ascertain, if possible, information about the fire:**

   LOCATION – FLOOR – ROOM NUMBER – IS ROOM OCCUPIED – NUMBER OF OCCUPANTS
3. **Return elevators to the lobby and hold them for Fire Department use. NOTE: Elevators are not to be used by shelter occupants when there is a fire in the building unless their use is deemed to be safe by Fire Department officials.**
4. **Post a simple diagram at the front desk detailing the general layout of the Building. Indicate elevators and stairways. Indicate which stairways go to the roof and which stairways have standpipe risers.**
5. **Keep the telephone switchboard manned. Give priority to calls from the fire floor and the floor above. Prepare a list for the Fire Department of rooms in which persons report they are trapped by fire or smoke. If possible, provide an interpreter for non-English speaking occupants.**
6. **If smoke conditions are causing people to leave their rooms, direct them to two Floors below the fire, VIA STAIRWAYS.**
7. **Request police assistance to clear the lobby so Fire Department operations Will not be delayed.**
8. **Keep a supply of each typical floor plan at the fire command station for Fire Department use.**
9. **Keep a supply of master keys (minimum one set per floor) at the fire command Station for Fire Department use.**
10. **Have the Fire Safety Coordinator or other knowledgeable person meet the Fire Department when they arrive. Give them all available information, including Master keys and building floor plans.**

**TO REPORT A FIRE, DIAL 911 OR THE APPROPRIATE BOROUGH COMMUNICATION OFFICE** (Insert appropriate telephone number in item No.1 above)

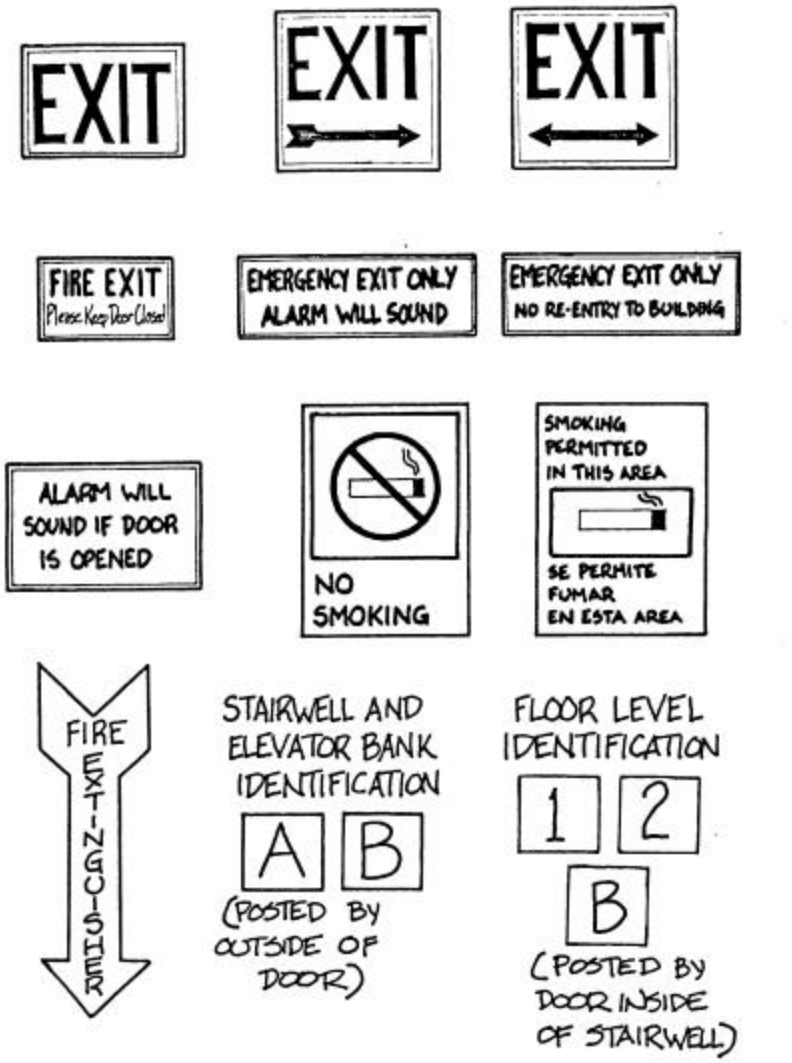
| | |
|---|---|
| **Manhattan** | **(212) 999-2222** |
| **Queens** | **(718) 999-3333** |
| **Bronx** | **(718) 999-4444** |
| **Staten Island** | **(718) 999-5555** |
| **Brooklyn** | **(718) 999-6666** |

**A Typical Emergency Instruction Chart**

**General Safety Requirements**

The fire drill conductor must make sure that the required fire safety signs are posted on the premises. The signs are designed to ensure the safety of occupants. For example these signs may indicate:

(a) The general fire safety procedures to be followed during a fire emergency.
(b) The location of fire extinguishers and emergency exits. The signs above the exit must be illuminated at all times.
(c) How to use the fire extinguishers and related fire fighting equipment.
(d) How to sound the fire alarm in case of an emergency.
(e) That elevators must not be used in case of a fire unless otherwise instructed by the Fire Department.




**Typical Fire Safety Signs**

**Recommendations Concerning the Fire Safety Plan**

The fire safety plan is designed to ensure the safety of the building's occupants. The fire safety plan should be reviewed regularly to improve fire emergency procedures. The fire drill conductor may offer suggestions to improve the fire safety plan. These suggestions should be submitted to the Fire Department for review.

**Fire Drills in Health Care Institutions**

Special fire emergency procedures are required in hospitals and other health care institutions. Health care occupants will often be physically disabled. Many of the patients may not be able to move easily from the building. The patients will require assistance from the staff. Movement of these patients may not be practical except as a last resort. Beds in most hospitals are designed to be movable in cases of emergency. However, the normal practice in most hospitals is to move patients on narrow carts or in wheelchairs. As a result hospitals often have little practice in moving patients in large beds. Furniture in a patient's room also makes it difficult for the bed to be moved. In cases of a real emergency this takes extra time that adds to the danger.

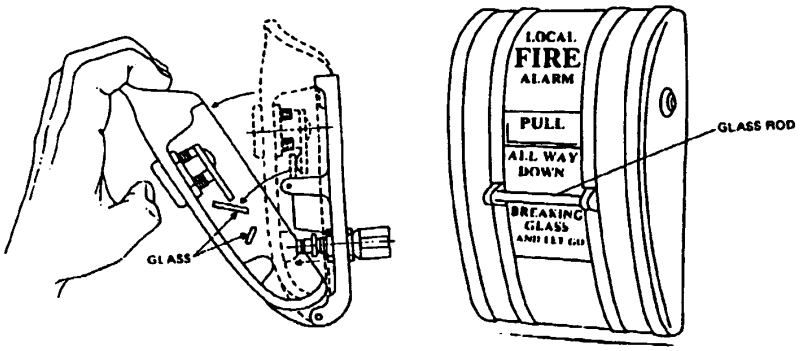
It is often not practical or possible to evacuate all of the patients. The emphasis in evacuating patients in hospitals is on those who are in greatest danger. Patients in the room where the fire is located are moved away from the fire horizontally. This means the patients stay on the same floor, but are moved to a safer area. Other patients who may be in danger of exposure to the fire are also moved. Patients who are not immediately threatened during the fire are confined to their rooms.

Fire drills in hospitals are usually conducted without disturbing the patients. Doors to the patients rooms or wards are closed before the drill is started.

## FIRE ALARMS

All employees must be trained how to manually activate the fire alarm pull boxes. Generally, these pull boxes are installed at several locations on the premises. The fire alarm boxes are usually located near the natural exits from a building. There must be at least one fire alarm box on every floor of a building. There are two types of fire alarm boxes. They are called single action and double action stations.

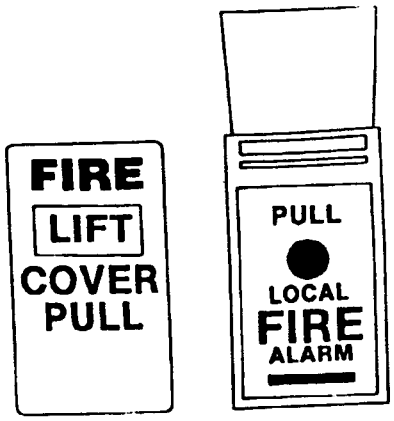
**Single Action Pull Stations**. Single action stations require only one step to activate the alarm. For example, the alarm might be activated by pulling down on a lever. Two examples of a single action station are shown below. These two kinds of alarm stations are often found indoors, e.g., in hospitals. The cover on these alarm stations serves as a lever. When the cover is pulled down, it allows a switch inside to close. This sends the alarm signal. The alarm station on the right is often called a "breakglass station." Another kind of single action breakglass station requires someone to break a small pane of glass with a small metal mallet.




**Single Action Pull Station**

**Double Action Pull Stations**. Double action stations require two steps in order to activate the alarm. The user must first break a glass, open a door or lift a cover. The user can then gain access to a switch or lever which must then be operated to initiate an alarm. Two kinds of double action stations are shown below. To activate the fire alarm station on the left the cover must be lifted before the lever is pulled. This kind of double action station is often found indoors.

The double action station shown at the right is often found out of doors. The station is specially enclosed to protect the alarm from bad weather. A guard must be lifted before the handle is pulled to sound the alarm.




**Double Action Pull Station**

**Type of Alarm Methods**. There are three methods used to notify the occupants of a building in case of a fire. The first is the general alarm method. This method activates all signalling devices throughout the building when a fire is discovered. The second is the selective method. The selective method activates the signaling devices only in areas close to the fire. The third is the pre-signal method. The pre-signal method sends a signal to a control panel or a manned station. When the signal is detected the Certificate of Fitness holder must investigate the cause of the alarm. When a fire is discovered the Certificate of Fitness must manually activate the general fire alarm. The alarm is activated by inserting a key into the manual fire alarm station. The alarm method used depends of the type of fire protection system installed in the building.

**Testing the Interior Fire Alarm System**

The interior fire alarm system must be tested daily. The test must be conducted within one half hour after the morning shift begins. Some fire alarm systems may be tested by operating a test switch on the central control panel. Other systems must be tested by activating a fire alarm station. Each station must be tested at least once per month. Most stations are activated by pulling on a lever. Breakglass stations must be activated using a special key. They should not be activated by breaking the glass during the test.

Generally, the fire alarm system may only be used to signal when there is a fire on the premises. However, the Fire Department may give permission to use the alarm system for other purposes. For example, the alarm system might be used to sound the end of the work shift signal.

The fire drill conductor must be familiar with the fire alarm control panel for the building. He must know how to activate all of the equipment on the panel. For example, the fire drill conductor must know how to use the emergency public address system.

## FIRE EXTINGUISHING DEVICES

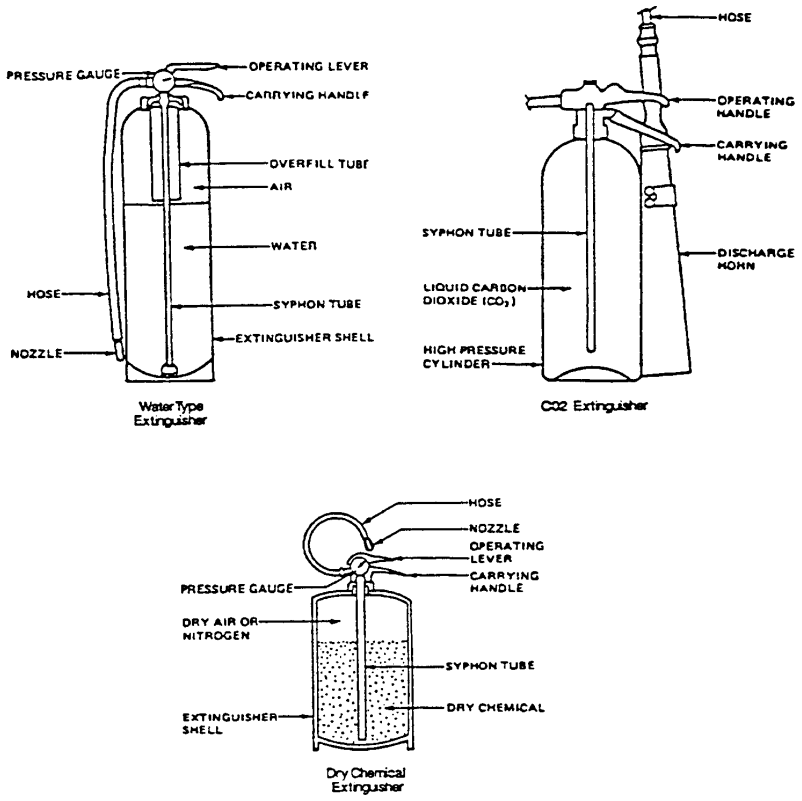
The fire drill conductor must make sure that employees are familiar with the different types of fire extinguishers in the building. They must know how to operate the extinguishers in a safe and efficient manner. They must know the difference between the various types of extinguishers and when they are may be used. A description of the three classes of fires and the appropriate extinguishers are described below.

**Class A fires** occur when ordinary combustible materials are ignited. For example, wood and paper fires are classified as Class A fires. Water type extinguishers should be used to extinguish these fires. The water type extinguishers cool the fire while quenching the flame.

**Class B fires** occur when flammable liquids or greases are ignited. These fires must be extinguished by smothering the flame. The flame may be smothered using CO2, dry chemical or foam extinguishers. Water type extinguishers are not effective for Class B fires.

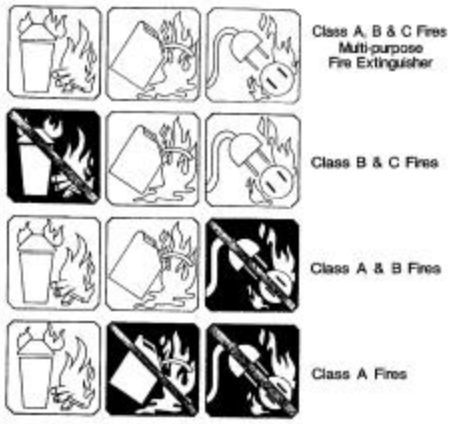
**Class C fires** occur when electrical equipment catches fire. These fires must be fought with fire extinguishers that do not conduct electricity. CO2 and dry chemical extinguishers must be used to extinguish electrical fires. Foam and water type extinguishers should not be used to extinguish electrical fires.

**A Multi-purpose dry ch**emical fire extinguisher may be used to extinguisher either Class A, B, or C fires. Examples of Water type, CO2 and Dry Chemical extinguishers are shown below.




**Typical Fire Extinguishers**

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




**Typical Symbols Painted on Fire Extinguishers**

The symbol with the shaded background and the slash indicates when the extinguisher must not be used. The fire drill conductor must make sure that all employees understand these symbols.

Usually operating instructions are clearly painted on the side of the fire extinguisher. They clearly describe how to use the extinguisher in case of an emergency. An example of these instructions is shown below.


**Typical Instructions for Using the Fire Extinguisher**

The fire drill conductor must make sure that the fire extinguishers are kept in good working order at all times. Care must be taken to make sure that they are kept fully charged at all times. They must be recharged by a qualified technician. The schedule for testing and recharging depends on the type of extinguisher. All extinguishers must be tested at least once every six months to make sure that they are fully charged. The extinguishers must also be hydrostatically tested at least once every five years. After a fire extinguisher has been operated the fire drill conductor must have it promptly recharged. Testing and recharging dates, and the name of the technician must be recorded on a tag attached to the extinguisher. They must be recorded in the inspection log also.