should only be used after all other control measures have been put in place to reduce exposures as far as practically possible.

Administrative Controls:

These are the rules and regulations which control the worker rather than the hazard. It outlines procedures which all workers are to follow to ensure that they are as best protected against hazards as possible. Mandatory use of equipment, performing particularly dangerous operations on a shift with the fewest employees, scheduled medical or equipment testing are examples. Administrative controls do not control workplace hazards, they merely impose limits on who shall be exposed and for what length of time.

Chapter 6

Emergency Response Preparation

Security guards are expected to respond to emergency situations and to minimize the impact caused at a worksite. They may be required to perform a variety of duties during emergency procedures and must understand the importance of scene management.

An emergency is defined as a situation or an impending situation caused by the forces of nature, an accident, an intentional act that otherwise constitutes a danger of major proportions to life or property. Numerous events can be classified as “emergencies” some examples are:

- Fire or Explosion
- Bomb Threats
- Weapons Emergency
- Suspicious Package
- Explosive Devices.

When emergencies do occur, they are most commonly dealt with by local emergency responders such as the police, fire department and emergency medical services. It is the responsibility of the owner or manager to develop or

facilitate development of an emergency plan that can be implemented to protect the people within the building and the property.

There are five main steps in establishing an Emergency Plan, they are:

- Step 1 – Establish a Emergency Management team
- Step 2 – Analyze Risks and Response Capabilities
- Step 3 – Develop the Plan
- Step 4 – Provide Training and Exercise the Plan
- Step 5 – Test, Evaluate and Modify the Plan

Regardless of plans developed for specific occupancies, building owners / managers and occupants must clearly understand that their safety depends on knowing and understanding their roles within the plans and appropriate actions to be taken during an emergency or drill.

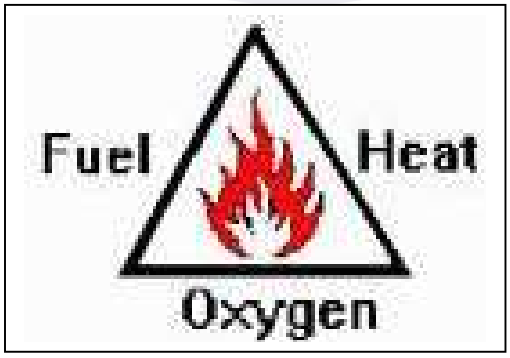
Emergency Measures Plan

An Emergency Measures Plan is a plan devised based on analyzation of threats or prioritization of threats for the purpose of preparation to eliminate or mitigate and avoid loss by emergencies such as fires, floods etc. Every plan will be designed based on the specific facility and circumstances, tenants in the building will have an awareness of the plan, occupants may have been provided with written or printed instructions which are usually posted in common areas such as lunch rooms and lounges that are readily accessible.

Emergency Situations / Responses / Security Guards role

Security guards may encounter situations at a worksite. As a security guard you will have to be able to identify the risk factors associated with fire threats, bomb threats weapon emergencies, suspicious packages, and explosive devices and learn how to respond appropriately.

Fire Prevention.



Fire needs three elements to exist, fuel oxygen and heat. To understand the relationships, think of each as separate sides of a triangle. Fire needs all three elements in the proper proportions to exist. If one side of the triangle is removed, the fire will go out. For fuel to ignite oxygen must be present; then heat must be applied until the combustion point is reached, the fuel will ignite with the oxygen, consuming both fuel and oxygen giving off heat. If the oxygen is removed the fire is smothered If the fuel is removed, there is nothing left to burn, oxygen by itself will not burn. If the heat is lowered below the combustion point, the fuel and oxygen will not unite and the fire will go out.

AIR

- Air is needed for the fire to breath. The fire will burn until all the air supply is reduced then start to die down until either out of air and out of fresh air being introduced.

- Fire needs 21% oxygen to ignite and will continue to burn until there is only 14% of air in the atmosphere.

HEAT

- Heat is used to break down the material.

- The breakdown of these materials produces vapors which could ignite.

FUEL

There are four traditional types of fuel sources that are classified as:

- Class A – Solids - Wood, paper, cloth, trash, plastics. Solid combustible materials that are not metals. (Class A fires generally leave an Ash.)

- Class B – Liquids - Flammable liquids: gasoline, oil, grease, acetone, any non-metal in a liquid state, on fire. This classification also includes flammable gases. (Class B fires generally involve materials that Boil or Bubble.)

- Class C – Electrical -Energized electrical equipment as long as it's "plugged in," it would be considered a class C fire. (Class C fires generally deal with electrical Current.)

- Class D – Metals - Metals: potassium, sodium, aluminum, magnesium. Unless you work in a laboratory or in an industry that

uses these materials, it is unlikely you'll have to deal with a Class D fire. It takes special extinguishing agents (Metal-X, foam) to fight such a fire.

Each of the fuel sources common properties. They are:

Flash Point: the lowest temperature needed for the material vapor to burn briefly.

Fire Point: The point when the heat has created enough vapor to continuously burn.

Spontaneous Combustion: the point where the material breaks down and burns without heat needed to be added.

A flame goes through four stages to become a self-contained fire. These four stages are:

- *Incipient* – *V*apors produced as materials break down. No form of smoke or noticeable heat detected.
- *Smoldering* – Heat still not detected but smoke is created.
- *Flame* – Fire exists but no heat is present.
- *Heat* – The fire is self-sustained and growing as more heat generated.

Fire Extinguishers

Portable fire extinguishers are designed to fight small incipient fires or unusual ones that are not easily put out by water. The use of portable fire extinguishers is important for two reasons. First, Security guards use them on certain unusual fires that hose lines cannot put out and second, citizens can use them to fight small fires before the fire department arrives. Security guards must know how to use them and be able to teach others how to use them. When used by untrained persons, fire extinguishers have been ineffective and dangerous, and have created deadly delays in calling the fire department. Proper instructions on the use of fire extinguishers can reduce the costly effects of fire. Fire extinguishers come in a variety of types and sizes. Security guards should know the extinguishers carried in the building in which they are assigned. Recognize any special hazards and places where an extinguisher will be a valuable tool to accomplish fire control. One part of fire prevention is having the correct extinguishers for the occupancy, whereas a part of fire fighting is using the right extinguisher for the conditions.

Fire Classification and Risk

The type or nature of the material burning, that is, its fuel, defines the fire. Fuel is the key ingredient because as it varies so does the fire. The different types of fuels class or divide the types of fires and these classes of fire are used to identify the extinguishers and extinguishing agents used to put them out. An understanding of the fire classes leads to selection of the proper unit and agent. There are four traditional fire classes and one new one; however, the first three are the most common and the ones primarily covered by this chapter. While reading about each class, identify places in the local community with these types of fuels. This will begin the process of planning for potential emergencies and creating a means to deal with them.

Class A

Class A fires involve ordinary combustibles such as wood, paper, cloth, plastics, and rubber. These fuels can be extinguished with water, water-based agents or foam, and multipurpose dry chemicals. Water is usually used by the fire department.

Class B

Class B fires involve flammable and combustible liquids, gases, and greases. Common products are gasoline, oils, alcohol, propane, and cooking oils. Pressurized flammable liquids and gases are special fire hazards that should not be extinguished unless the fuel can be immediately shut off. Flammable liquids that are flowing horizontally plus dripping or overflowing their container and spilling vertically (creating a three-dimensional flow), such as an overflowing tank, are also considered special hazards. *Special hazards1* refers to situations for which fire extinguishers have not been tested and therefore may be inadequate; carefully evaluate the situation prior to attacking these types of fires. Some solids under fire conditions may melt and act like flammable liquids. Common extinguishing agents for Class B fires are carbon dioxide (CO2), regular and multipurpose dry chemical, and foam.

Class C

Class C fires involve energized electrical equipment, which eliminates the use of water-based agents to put them out. The recommended method of fighting these fires is to turn off or disconnect the electrical power and then use an appropriate extinguisher, depending on the remaining fuel source. Class C extinguishers have extinguishing agents and hoses with nozzles that will not conduct electricity. A Class C only extinguisher is not made. Class C agents include carbon dioxide (CO2) and regular and multipurpose dry chemical.

Class D

Class D fires involve combustible metals and alloys such as magnesium, sodium,

lithium, and potassium. Great care must be used when attempting to extinguish a fire in these types of fuels. Water and other extinguishing agents can react violently when applied to burning combustible metals and can endanger nearby personnel. Also, there is no universal Class D extinguishing agent that works on all Class D materials.

Security guards must use the correct and uncontaminated (clean, dry, and without other materials in it) extinguishing agent for each different Class D material. Facilities that use or store these materials should be required to maintain adequate amounts of extinguishing agent to combat any potential fire situation.

Class D agents are called dry powders and should not be confused with dry chemicals, which, although they are dry and powdery, are not the same. Some of these powders are dry sand, phosphate salts, or silica. These more specialized agents are not commonly used and will only be mentioned, but Security guards using them locally should seek additional information and training

Types of Fire Extinguishers

Many types of fire extinguishers are available for purchase and use today. Which is the best type of extinguisher depends on many factors and each should be considered prior to placing an extinguisher in use. The wrong extinguisher can be worse than no extinguisher, so make sure the right one is made available.

Factors for selecting an extinguisher are the fuel, the people using it, and the building or place where it will be used. The first factor to consider when choosing an extinguisher is the type and amounts of fuels present that reveal what kind of fire to anticipate. The amount of fuel determines size; the wrong size extinguisher will not completely extinguish the fire. The user and occupancy represent another factor; what will the people in the building do with or to the extinguisher? Will the extinguisher be tampered with, stolen, or otherwise be ineffective when needed?

Another factor is the construction of the building and its occupancy that identifies the hazards and conditions to protect. These hazards set the fire code requirements for selecting and placing the extinguishers. The environmental conditions such as temperature, corrosive atmosphere, wind, or a confined area must be examined for effects on the fire and extinguishing agent. Temperature may eliminate water-based agents that could freeze, corrosive atmospheres may require special protection, and the wind may make an agent blow away without effect while a confined space may create an unsafe atmosphere for the user.

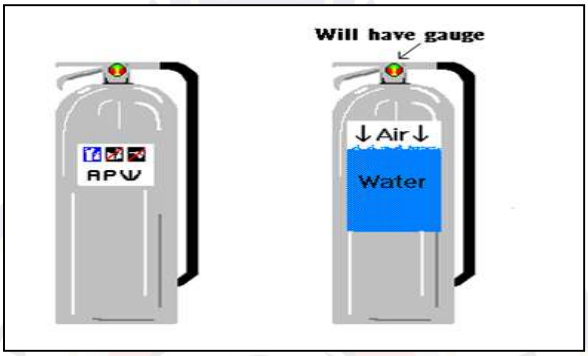
A final factor would be the type of equipment protected and its ability to be cleaned without excessive damage. Often this last factor is given too much consideration. Delicate equipment and high-value items may require special considerations, but the main factor is the ability to extinguish the fire effectively. Most extinguishing agents can be cleaned off equipment, whereas the damage

from the fire will permanently destroy that equipment. Some extinguishing agents are corrosive and this should be considered when picking the extinguisher for the occupancy.

The three most common types of fire extinguishers are:

- Water (APW)
- Carbon Dioxide (CO2)
- Dry Chemical (ABC, or BC)

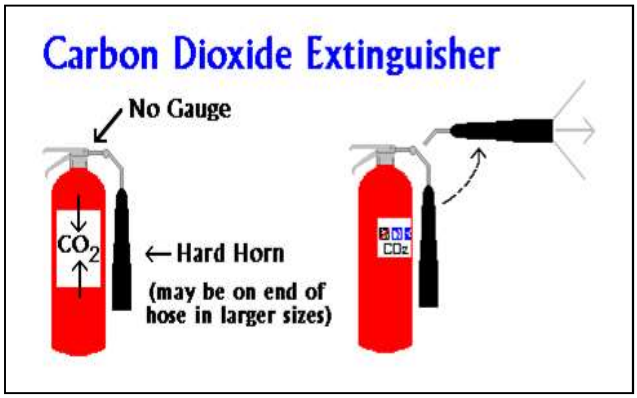
Water (APW) Extinguisher



APW stands for "air-pressurized water." APWs are large, silver extinguishers that are filled about two-thirds of the way with ordinary tap water, then pressurized with normal air. In essence, an APW is just a giant squirt gun.

- APWs stand about 2 feet tall and weigh approximately 25 pounds when full.
- APWs are designed for Class A (wood, paper, cloth) fires only.

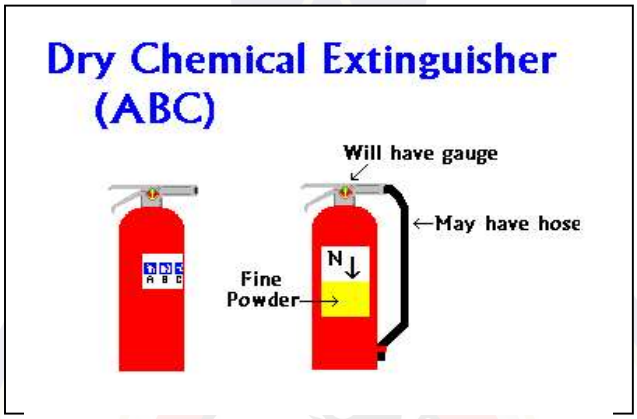
Carbon Dioxide (CO2) Extinguishers



Carbon Dioxide extinguishers are filled with non-flammable carbon dioxide gas under extreme pressure. You can recognize a CO2 extinguisher by its hard horn and lack of pressure gauge. The pressure in the cylinder is so great that when you use one of these extinguishers, bits of dry ice may shoot out the horn.

- CO2 cylinders are red and range in size from 5 lbs to 100 lbs or larger. In the larger sizes, the hard horn will be located on the end of a long, flexible hose.
- CO2s are designed for Class B and C (flammable liquid and electrical) fires only.

Dry Chemical (ABC, BC) Extinguishers



Dry Chemical (DC) Extinguishers come in a variety of types. You may see them labeled:

- "**ABC**" indicating that they are designed to extinguish class A, B, and C fires, or
- "**BC**" indicating that they are designed to extinguish class B and C fires.

If you decide to fight a small fire, ALWAYS keep yourself between the fire and your exit!

Limitations of Portable Extinguishers

Fire extinguishers have limited capabilities, and trying to exceed those capabilities can increase the damage done and cause injuries. They are designed for specific purposes and are usually a first-aid method for fire extinguishment. Fire extinguishers are designed and rated with certain types and sizes of fires in mind; using the wrong class extinguisher or the wrong size may cause problems. When thinking of size, it is usually best to pick the larger size, but remember that picking the largest fire extinguisher available to put out a small fire can make it an expensive fire. The wrong class extinguisher will not do the job, will waste the agent, and can cause a reaction or electrical shock. The wrong

class extinguisher will not do the job, will waste the agent, and can cause a reaction or electrical shock**. Pick the right extinguisher for the job.**

Portable Extinguisher Operations

Using the Fire Extinguisher – P.A.S.S. System

P – Pull the pin – this will allow you to discharge the extinguisher

A – Aim the nozzle – at the base of the fire (fuel source) – aiming at the flames will NOT put out the fire

S – Squeeze the trigger – this depresses a button that releases the pressurized extinguishing agent

S – Sweep – use a side to side sweeping motion to put out the fire – start from a safe distance away then move forward

Sprinkler Systems

Sprinkler systems are designed to automatically distribute water through sprinklers that are placed at set intervals on a system of piping, usually in the ceiling area, to extinguish or control the spread of fires. Most sprinkler heads detect the heat of a fire and begin to apply water directly over the source of the heat. Sprinkler heads, unless deluge-type heads, are heat-sensitive devices that react to a fixed temperature and disperse water in a specific pattern and quantity over a set area. Sprinkler systems are highly effective. In fact, some people describe the benefit of sprinklers as similar to having a firefighter constantly on-duty in the protected building.

Sprinkler systems were originally designed in the late 1800s to protect property, especially businesses and factories, from total loss from fires. They are almost 100 percent effective. The times when they do not work properly usually involve human action such as improper maintenance or turning off of the water supply. In the early 1900s, the idea that sprinklers might be able to save lives was beginning to take shape.

Types of Sprinkler Systems

The four major types of sprinkler systems are discussed in the following sub-sections. Specialty sprinkler systems include some combination-type sprinkler systems and systems that cannot meet the standards for some reasons. They may have an inadequate water source or supply or may be a partial or outside

system. Even if a system does not completely meet a standard, it provides a higher measure of protection than if no protection were available.

Wet Pipe Systems

A wet pipe sprinkler system has automatic sprinklers attached to pipes with water under pressure all the time. This allows the quickest response when the head is opened. The wet pipe system is the simplest sprinkler system in design and operation. The main or alarm valve is a one-way check or clapper valve that prevents water from reentering the water supply and when closed shuts off the water flow to the alarm line. Both sides of the alarm valve have pressure gauges that register the water pressure of the supply and the system. The system side gauge should read a slightly higher pressure, because the re-closing of the clapper valve would trap any pressure surges. The alarm line piping usually has a retard chamber that acts to prevent false alarms from a sudden pressure surge in the water supply. The chamber collects a small volume of water before allowing a continued flow to the alarm device. The water from a surge is drained from a small hole in the bottom of the collection chamber. A water-flow indicator, a vane or paddle in the waterway, detects the water flow and activates an alarm signaling system.

A wet pipe system has three more valves. The first is the control valve, which is used to shut off the supply of water to the system and is usually an outside stem and yoke (OS&Y) valve. The second valve is the main drain, which allows the system to be drained for maintenance or to be restored from a fire, and the last valve is an inspector test valve. The test valve is at the farthest end of system and is used to simulate the flow of a single head and to measure the response time of the system.

The operation of a wet pipe system starts with the fusing or bursting of a sprinkler head, which causes it to begin applying water to the fire. As the water pressure in the system begins to fall, the main check valve opens and water flows into the system and the alarm line, filling the retard chamber, and then activating the automatic alarm and water motor gong. The alarm signal may be used to notify the fire department or an alarm company. *After ensuring the fire is out or completely under control,* the control valve is closed. Sprinkler maintenance personnel replace the head and restore the system. When the system is shut down, a firefighter with a radio should be posted at the control valve and be ready to reopen the valve.

Note Some wet pipe systems are located in or have parts of the system located in areas subject to freezing temperatures. To protect these systems, an antifreeze solution can be added to the water in the system. These systems require special attention to restore and maintain.

Tip One of the reasons that sprinklers have not been *100* percent effective is that building personnel shut off the control valve prior to the complete extinguishment of the fire. The fire returns and, before the system is turned back on, it gains enough headway to cause additional loss. Building personnel are often overly afraid of water damage to property. Most water damaged materials can be salvaged but fire damaged materials are usually destroyed. Do not *close down any sprinkler* system until mak*ing* sure the *fire is* out or *completely under* con*trol.*

Dry Pipe Systems

In dry pipe systems, air under pressure replaces the water in the system to protect against freezing temperatures. The system uses a dry pipe valve to keep pressurized air maintained above with the supply water under pressure below the valve. A small amount of water at the seat of the valve, called the priming water, maintains the seal at the valve and is filled to the priming level. The clapper valve has a locking mechanism that keeps the clapper open until it is manually reset to prevent water columning.

Dry pipe valves use an air differential system having a smaller air pressure maintained over the larger head surface of the clapper valve, which keeps back the higher water pressure exerted on the smaller water side of the clapper valve. If water were allowed to fill the riser above the clapper, the water column's weight would never allow the clapper to be forced open and make the system inoperative. When a sprinkler head is fused by heat, air is first discharged. As the air pressure drops below the pressure of the supply water, the clapper valve is opened and locked. Because air is in the system rather than water, dry pipe systems are slightly slower to activate than wet pipe systems. Most systems either have an exhauster or accelerator to speed up the operation of the dry pipe valve. The exhauster detects the decrease in air pressure and helps bleed off air. The accelerator detects the decrease in air pressure and pipes air pressure below the clapper valve, speeding its opening. Drain and alarm valves are similar to wet pipe systems. Dry pipe systems are used in unheated buildings, buildings that refrigerate or freeze materials, and in outdoor applications where freezing temperatures occur, but the valve room must be heated.

The dry pipe system is more complex in design than a wet pipe system and also harder to restore because it requires the dry pipe valve cover to be opened after draining the system and resetting the lock on the valve. The valve is primed, air pressure charged in the lines, and the control valve opened carefully to prevent re-tripping and creation of a water column.

Deluge Systems

Deluge systems are designed to protect areas that may have a fast spreading fire engulfing the entire area. All of its sprinkler heads are already open, without any fusible elements in the heads, and when the system operates water flows to all heads, allowing total coverage. The system uses a deluge valve that opens when a separate fire detection system senses the fire and sends a signal to trip

the valve open. Some deluge systems apply foam instead of water. The valve trips open and water or foam flows through the piping and out all of the open sprinkler heads simultaneously. Because deluge systems are designed so that all of the heads flow, the piping requirements are much larger than for other systems. Most deluge systems are of such a size as to require a fire pump to supply the system with adequate volume and pressure. A foam system would also require a foam generation device. Deluge systems are found in aircraft hangers, manufacturing facilities, petroleum handling facilities, and other highly hazardous locations.

Pre-action Systems

Pre-action systems are similar to the dry pipe and deluge system. The system has closed piping and heads with air under no or little pressure, but the water does not flow until signaled open from a separate fire detection system. The pre--action valve then opens and allows water to flow through the system to the closed heads. When an individual head is heat activated, it opens and water attacks the fire. Pre-action systems are used in areas where the materials protected are of high value and water damage would be expensive, such as com-puter rooms and archival or historical items.

Responsibilities & Duties of a Security Guard

As mentioned various times already in this manual all buildings may/will have different procedures that will outline the areas or responsibility and the duties of a security guard.

Here are some general tips to keep in mind:

- Upon observation of a fire, the security guard must activate the fire alarm, pulling a manual pull station is required. The fire department should be notified as well as your central monitoring station if applicable. Always follow your site standing orders/post orders for instruction on who is to be notified and on the procedures to be followed in the event of a fire.

- As required by the building Life Safety plan, the security guard may have to make an announcement to the occupants of the building. Building announcements may be automated or done manually to direct people on leaving the property. In the event that an evacuation is necessary, it is important for the guard to know who the floor wardens are and ensure they are all out and that their people are accounted for.

- When notifying the fire department, ensure that they are directed to the closest entrance to the fire. Have a list of known hazards available to provide the chief or captain when they arrive. Have a building engineer present if possible to assist the fire department's questions on hazards.

- Ensure that the fire route is clear before the fire department arrives, vehicles still in the fire route at the time of the fire departments arrival may be damaged if they are left in a manner that obstructs the fire fighters from executing on their job. Ensure that people are moved at least fifty meters from the entrance and moved along. Do not allow people to impede the movement of the fire department.

- If any evidence is found that arson might be the cause of the fire, the evidence should be left where it is until the fire chief has cleared the area.

- In conclusion it is very important that a security guard, when assigned to a site, understand that every site will have a life safety plan. It is imperative that each guard working at that site read through the life safety plan and understand their requirements. Any questions should be directed to your immediate supervisor immediately, do not wait until an emergency has occurred to seek advise or clarification.

Bomb Threats

Although only a small percentage of bomb threats are real, that is, they involve a real explosive device, the bomb threat is probably the most serious call a security guard might take. The potential from bomb threats is always very serious, and should never be discounted. The threat should never be treated as a joke. – **All bomb threats are serious.** In our ever increasingly dangerous and violent world, the potential for a **real** bomb is increasing. Every Security Guard should have knowledge of what constitutes an explosive device, what to do when receiving a bomb threat, and **what not to do.**

As an alert and efficient Security Guard you should already be aware of the tenants in your building. If any of those tenants is a foreign legation, tourist office, travel agency, etc..., they could be especially vulnerable to bombing. You should be alert to any newspaper, radio or T.V. stories of special trouble in the country which has its office in your building. Access Control must be particularly carefully imposed in buildings where there is a particular danger. Packages and people must be rigidly screened, and unusual occurrences should be reported conscientiously.

Why are bomb threats serious?

Bomb threats are serious for three fundamental reasons:

- **Danger of human injury/death** due to bomb explosion and/or possible reaction from fear/panic of bomb threat (stampede to exit).

- **Damage to structure** (includes physical damage and economic loss due to closure).

- **Total costs** involved include: Idle work time / Lost wages / Reduced productivity / Uneasiness and anxiety.

Delivery and Placement of Bombs:

Bombs can be delivered to premises through four primary means:

- Person - Worker, visitor, service person, delivery person, solicitor, etc.
- Object - Purse, handbag, briefcase, or anything that can be carried in by a person
- Mail
- Vehicle or Conveyance - Largest and most dangerous explosions are from vehicles, as a larger bomb can be delivered.

Placement of the device depends on the attacker's nerve and local site knowledge. Any of the following areas are potential areas where a bomb could be placed:

- Washroom /Janitor's closet
- Stairwell
- Telephone room/Electrical closet
- Garbage room
- Shipping/receiving area
- Tenant- or owner-occupied interior space
- Lobby area and hallway
- Elevator
- Internal mail conveyance system
- Ventilator or A/C duct.

Responsibilities & Duties of a Security Guard

Bomb threat questionnaire sheets should be kept near all phones and should contain information regarding the names and contact numbers for the people the recipient will need to notify after the call is over. Recipients should not interrupt the caller, they should attempt to obtain as much information as possible. For example;

- When will the bomb go off?
- Where is the bomb right now?
- What kind of bomb is it?
- What does the bomb look like?
- Why did you plant the bomb?

- Take every bomb threat seriously.
- Do not panic.
- Attempt to remain calm, but show fear to encourage the caller to talk.
- Ask open ended questions that cannot be answered with “yes” or “no”.
- Listen carefully.
- Keep the conversation going, extend the time on the line - Ask for explanation and clarifications.
- Do not place the call on hold or hang up, let them hang up.
- Do not argue or laugh at the caller.

- Make notes right away while the call is in progress, do not wait until you get the form.

What not to do

As the trained professional security guard on site you must maintain a professional approach and demeanor and ensure that order is maintained while the situation is being dealt with.

Do not:

- PANIC
- ABANDON YOUR SITE OR FORGET GOOD ACCESS CONTROL PROCEDURES
- TELL, TENANTS, PATRONS OR THE MEDIA WHAT IS GOING ON
- ORDER AN EVACUATION OR MAKE A P.A. ANNOUNCEMENT – ONLY THE CLIENT OR POLICE CAN AUTHORIZE THIS.(Check your building procedures.)

Bomb Threat Reactive Procedures

Once the call has concluded, the following steps should be taken immediately;

- Call Emergency Services. (911)
- Refer to your site Standing Orders/Post Orders and follow the bomb threat procedures – Have them ready when the police arrive.
- When the police are on site give them all the information.

The evaluation of the threat, whether delivered by phone, via a written note, or other means, will occur in the control point. The Chief Searcher, Security Director, Property Manager, and other persons required for the evaluation of the threat, will meet here to analyze the threat and review the basic options:

a. Take no action.
b. Search without evacuation.
c. Evacuate part of the building and search the remainder.
d. Simultaneously search and evacuate the entire building.
e. Immediately evacuate the entire building.

Factors that will impact this decision:

a. History of the building and building occupants.
b. Building and occupant profile.
c. The world geo-political situation and any relationships between same and the building occupants.

d. The day-to-day operating level of security and access control measures currently in place.

e. Specific information in the threat, which could indicate if the person making same had intimate building knowledge, indicating that they had been there before. A non-specific threat is usually less serious.

f. Is the building symbolic of anything?

g. Threat/risk assessment and the likelihood of the building being targeted.

h. Size, design, and construction of the threatened building.

i. Time to detonation, size of the suspicious package, and the presence of other explosive/flammable substances on-site.

j. Voice description of the caller (e.g., adult male, very serious, reading from a text versus a young child with other children laughing in the background, etc.).

k. Threats previously-received from this caller or note sender.

Once the person(s) in charge have reached a decision on how to proceed, the security staff should assist as required. In the event that the building is to be evacuated, it should be done in a manner that does not spread panic and fear. Large buildings or facilities usually have a lot of employees working at any given time. Security usually assists with crowd control while the tenants are exiting the building.

- Security should have an understanding and awareness of the evacuation plan.
- Have a designated area where people should be once outside the building.
- Designate exit routes to be used for the purpose of the evacuation.
- Coordinate with the safety representative on each floor. (Usually one person is designated per floor. This person should have an accurate head count on how many people are working on the floor and be able to coordinate the evacuation of the floor to ensure everyone is out).
- Ensure people walk and not run while exiting the building.
- Do not comment to people on the situation as they are exiting.
- Do not make statements that are likely to cause panic.

The security guards main duties are to keep evacuees moving quickly, and to prevent anyone from entering the building. If disorder is occurring, evacuation should be in small groups via doors staffed by Security Guards. Security Guards in the building should then re-direct evacuees to other routes. It is important to remember that people might be afraid and panicked as word does spread quickly and fear is a common reaction to potentially dangerous situations. Maintain control and avoid yelling at people or raising your tone of voice as this will generally elevate the rate of fear and produce a negative reaction. Be firm but polite when attempting to have people follow the required directions.

Conducting a Search

Do not be surprised if the authorities ask you for assistance when comes to the search of the device.

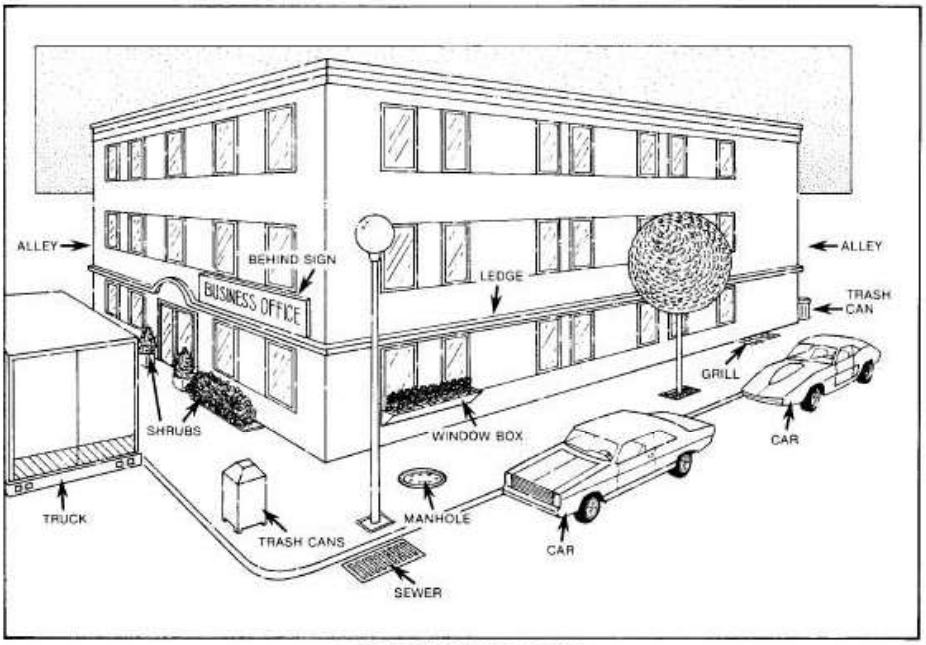
Searching must be carried out in a methodical manner and in accordance with the BOMB THREAT PROCEDURE in the site Post/Standing Orders. These search procedures have been written by experts who know the building and explosive devices, and must not be changed or overridden without the authority of your supervisor or the Client.

Although each buildings search pattern will vary, some basic principles apply:

- Radios should be switched off while searching rooms/confined areas. Radio communications kept to a minimum - USE TELEPHONES
- Search operations begin on the outside and work inward.
- Public or public accessible areas should be searched first. This is a good task to give to the Police Officers, or new Security Guards (who do not know the building well).
- Once the perimeter and public areas has been searched, start from the lowest level and work up.

When searching, the searchers should look for the following:

- Any objects inconsistent with its surroundings or otherwise out of place.
- Anything that cannot be accounted for.
- Anything that fits the description of item(s) described in the threat.
- Anything that resembles flares or explosives.
- Anything with a timer or watch and wiring attached to item(s) that resembles flares, explosives or flammable liquids.
- Any leaking packages or a package emitting an unusual noise or odor.
- Anything resembling a pipe or bottle bomb – (They are the most frequently found devices).
- Be suspicious of ‘fancies’, objects that entice you to pick them up.

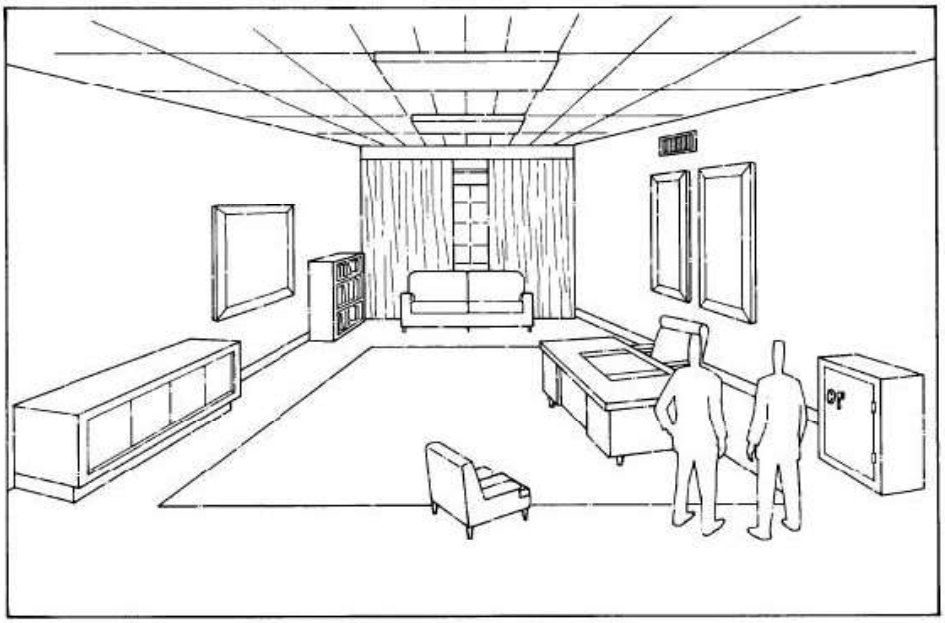


#5 SEARCH OUTSIDE AREAS

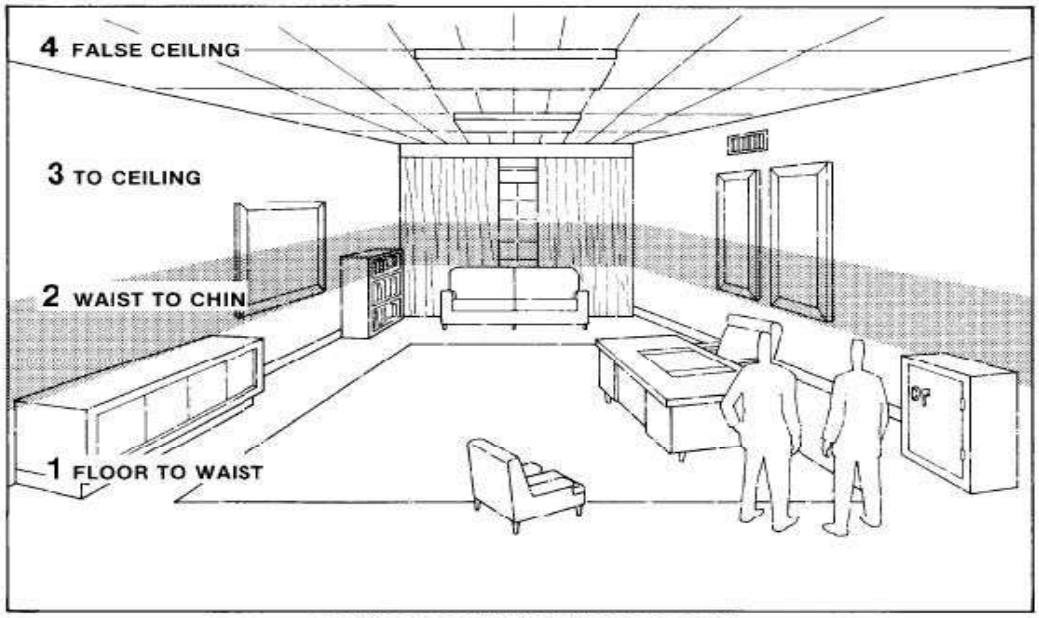
External Searches

- Vehicles left unattended
- Mail Boxes
- Shrubbery
- Newspaper Boxes
- Ledges
- Freshly Disturbed Soil
- Piles of Leaves
- Delivery Area
- Storm Drains
- Manholes
- Trash Cans
- Sewers/Drainage Ditches
- Fences
- Window Boxes
- Culverts
- Displays

Searching a room:



#1 ROOM SEARCH-STOP, LISTEN



#2 DIVIDE ROOM BY HEIGHT FOR SEARCH

Two-Person Search Technique

You should divide the room into virtually two equal parts. This equal division should be based on the number and type of objects in the room to be searched, and not on the size of the room. An imaginary line would then be drawn between two objects in the room (e.g., the edge of the window on the north wall, to the floor lamp on the south wall).

Enter the room and stand still so that you can listen, closing your eyes will enhance your hearing. Look at the furniture or objects in the room. Determine the average height of the majority of items resting on the floor. In an average room, this height usually includes table/desk tops and chair backs. The first searching height usually covers the items in the room up to hip height.

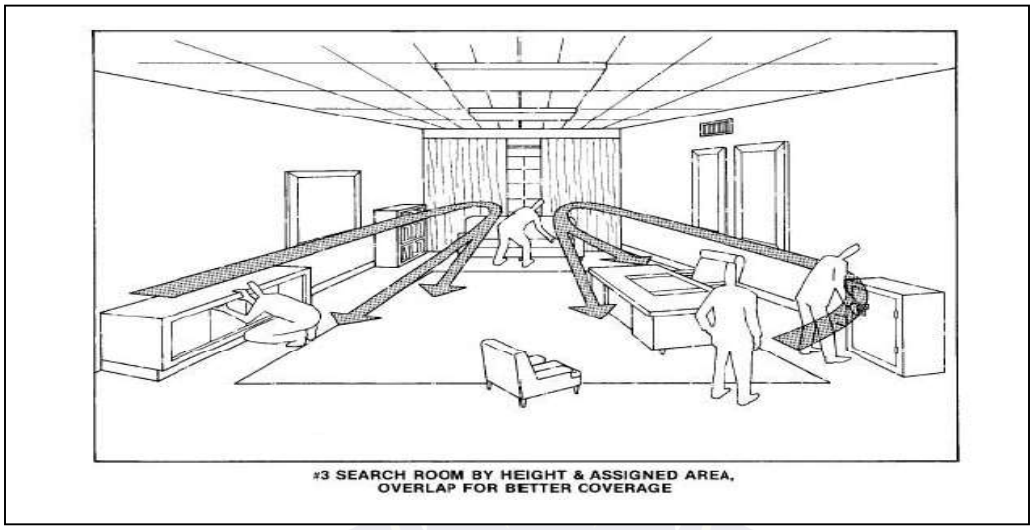
After the room has been divided, and a searching height has been selected, both individuals should go to one end of the room's division line and start from a back-to-back position. This will be the starting point, and the same point will be used on each successive searching sweep. Each person now starts searching his/her way around the room, working toward the other person, checking all items resting on the floor around the wall area of the room. When the two individuals meet, they will have completed a 'wall sweep'. They should then work together checking all items in the middle of the room right up to the selected hip height, including the floor under the rugs. This first searching sweep should also include those items that may be mounted on or in the walls, such as air conditioning ducts, baseboard heaters, and built-in wall cupboards (if these fixtures are below hip height).

Again, the individual in charge looks at the furniture or objects in the room and determines the height of the second searching sweep. This height is usually from the hip to the chin or top of the head. The two persons return to the starting point and repeat the searching technique at the second selected searching height. This sweep usually covers the pictures hanging on the walls, built-in bookcases, tall table lamps, etc.

When the second searching sweep has been completed, the person in charge again determines the next searching height, usually from the chin or the top of the head right up to the ceiling. The third sweep is then conducted. This sweep usually covers high-mounted air conditioning ducts, hanging light fixtures, etc.

If the room has a false or suspended ceiling, the fourth sweep involves the investigation of this area. Flush or ceiling-mounted light fixtures, air conditioning or ventilation ducts, sound or speaker systems, electrical wiring, and structural frame members should all be thoroughly checked. Generally, this fourth search is only done if the ceiling tiles have been disturbed, if there are signs of climbing, or if the room in question was identified in the threat.

Have a sign or note indicating 'Search Completed' conspicuously mounted on the door to the area. If there is no door, position the sign or note in a highly-visible location. If the use of a sign or note is not possible/practical, a piece of coloured tape should be placed across the door and door jam, approximately two feet above floor level.



#3 SEARCH ROOM BY HEIGHT & ASSIGNED AREA, OVERLAP FOR BETTER COVERAGE

In conclusion, the same basic technique can be applied to search any enclosed area. Always use common sense and logic when searching. Do not rely on random or spot checking of only logical target areas. The following techniques or steps should be taken in order to search a room.

- Divide the area and select a search height
- Start from the bottom and work up.
- Start back to back and work towards each other.
- Go around the walls and proceed towards the centre of the room.
- Each searcher should switch roles and redo the complete room search checking over each others area to ensure maximum thoroughness.

Explosive Devices

Explosive Devices

An explosive device is one that bursts with sudden violence from internal energy. There are three basic types of explosions:

- Mechanical - Heat and pressure gradually build up inside a closed container until the increased pressure shatters the container and there is a rapid escape of gas. An example would be an exploding pressure cooker.

- Chemical - This type results from the rapid conversion of a solid or a liquid into gases with much greater volume, this type is accompanied by extremely high temperature and pressure, it creates smoke and noise.

- Nuclear - It results from the fission or fusion of nuclei under pressure.

Primary Effects of Explosions

There are three primary effects of an explosion: blast, fragmentation, and incendiary/ thermal.

- Blast - The term brisance refers to the shattering power of an explosion. When an explosion detonates, the expanding, hot gases form a shock wave. A blast has two phases. Phase 1 is the positive phase when gases are expanding outward. Phase 2 is the negative phase (or implosion) when gases return to fill the partial vacuum created by the expansion. This phase is less powerful than the positive phase but lasts three times as long.

- Fragmentation - This effect is the breakup of the original container. Fragments are expelled outward at speeds up to 2700 ft./sec. (823 m/sec.).

- Incendiary/Thermal - This effect depends on the type of explosion. High explosives have a velocity greater than 3000 ft./sec. (914 m/sec.) and produce a higher temperature than low explosives.

Recognition of Explosives

In our line of work we may encounter some type of explosive device. The device encountered may range in appearance from the obvious (e.g. pipe bomb) to the devious (e.g. ashtray). The appearance and lethality of the explosive device is only limited by the imagination and resources of the bomber.

Types of Explosives

Explosives are generally classified as either High Explosives (HE) or Low Explosives (LE). The distinction between the two of them is:

- Deflagrate: burn away with sudden flame, blaze
- Detonate: explode with loud report

Solid type low explosives - (black powder)

Tend to absorb moisture (hygroscopic), which means that their performance may be degraded to the point where there will be no explosion. They do not generally require the use of a blasting cap for their initiation, usually a flame is all that is required to set them off. The practical effect of this is that they are not as susceptible to discovery by metal detector as is High Explosive but are sensitive to heat and flame

Just because they are hygroscopic, do not immerse low explosives in water, it may set off an electrical firing system.

High Explosive

An example would be: "plastic explosive or plastique" C3 and C4 are designations of different kinds of Composition C, C4 being the newer version.

C4 has a very high rate of detonation. In fact it has a shattering effect.

For example: liquid binary explosive (except nuclear munitions) the newest type of explosive.

This type of explosive comes as two bottles of liquid, each -on its own- being relatively harmless, but when mixed, quite explosive.

Although we typically think of explosives as solids, they can also be found in the form of gases (methane, propane) and liquids (nitroglycerine). Each type of explosive has its own distinctive characteristics and hazards.

It must be remembered that explosives come in all colors, in different shapes, in different wraps, and sizes.

Sources of Explosives

A potential bomber obtains explosives:

- Through purchase of civilian manufactured explosives
- Through theft
- Through "home" manufacture
- Through supply by various terrorist organizations.

Throughout the world, the open purchase of explosives usually involves the filling out of forms, the provision of documents of identify and the obtaining of permission from local security authorities.

For these reasons, terrorists and criminals seldom seek to openly purchase their explosives. They usually resort to stealing them or stripping the explosives out of war souvenirs or stolen munitions.

Firing Trains

Firing train is a preplanned sequence of events which results in an explosion. From the point of view of the person who desires the explosion, the result should be dictated by the happening of a specific event which initiates a further sequence of events. These events end up causing the "main charge" of the explosive to detonate. The elements of the firing train are:

- An initiator
- A booster charge
- A main charge

Initiators

Commercially, these come in one of two forms, either electric or non electric blasting caps. These devices, about the thickness of a pencil, are slim copper or aluminum tubes which contain small amounts of relatively unstable explosive - usually mercury fulminate, lead azide, etc. - Electric blasting caps have embedded in them a small electric circuit which requires .9 volts to initiate the explosion. - Non electric blasting caps are crimped onto either a piece of time fuse of detonating cord. In both cases, some initiating event is required to ignite the fuse or detonator cord. Blast caps are inserted into the next element of the firing train.

Booster

An explosive which is slightly more stable than the initiator, but is less stable than the main charge and is smaller in quantity than the main charge.(The blasting cap may be plugged directly into the main charge)

Main Charge

This is the bulk of the explosive. In munitions it is usually a fairly stable compound; manufactured to be relatively immune to shock, heat and the normal wear and tear of being moved around. It does respond to the explosive shock emitted by the blasting cap. (Improvised munitions and explosives are frequently very unstable and must be approached with extreme caution).

Firing Systems

Electrical Systems

The distinguishing characteristic of electrical initiation is that it offers the capability of very fine discrimination and exact timing in the initiation of an explosion.

Electrical systems are extremely sensitive. One of the very real hazards of the electrical system is its vulnerability to static electricity and RF energy (radio transmissions, radar, etc.)

Non Electric Systems

Non electric systems usually consist of a blasting cap to which has been crimped time fuse or detonator cord.

Methods of Initiation

A firing system will be initiated by one of two categories of initiators - **remote initiation or event driven.**

The remote initiation may be as uncomplicated as a person sitting with something that generates a small amount of voltage (a battery) connected to a couple hundred feet of wire hooked to an explosive device. Or it could be as complex as a radio controlled explosive device with the actuator sitting a couple of miles from the scene.

Event driven systems take advantage of some aspects of the target's activity to trigger the explosion. This kind of device requires a sensor to detect the chosen initiating activity. For example, if the target is thought to want to pick up and read a specific book, the book can be hollowed out and filled with explosive.

The initiating could be a vibration switch which senses movement, a mercury switch which senses change of position, a trip wire which will be activated when the book is picked up, a "mouse trap" which is activated when the book is opened or a pressure release device which is activated when the book is picked up.

The methods of initiation are limited only by the imagination and the expertise of the bomber. The following is a short list of possible methods of initiation:

- Electrical
- Fire
- Friction
- Pressure
- Mechanical
- Chemical
- Vibrations/tilt
- Clock delay
- Photoelectric
- Magnetic
- Acoustic, etc.

Remember, any device which acts as a switch in a circuit with an electric source can be used to set off a bomb. **This may well mean that any device which is used to detect an intruder - any kind of sensor -can be used in an improvised explosive device.**

Here are some of the more common types of packaged bombs:

- Pipe Bomb
- Cigarette Package
- Parcel Bomb
- Cigar Box

Responsibilities & Duties of a Security Guard

As already discussed, in this chapter, security guards responsibilities will be dictated by the client or owner of the premise that they are protecting. A security guard must remember to remain calm as they will be the one responsible for maintaining order. For the most part the protocol would be very similar to dealing with a bomb threat. There is however, some key elements when it comes to dealing with explosive devices here is a list of a few of them:

Access Control – the rules of access control would be enforced in this situation. Restricting access to the device is important to say the least and the security guard must ensure that only the right authorities deal and or touch with the device.

Do not try to deactivate it – you would be surprised as to how many people would try to defuse the device themselves. Contrary to popular belief it is not as simple as disconnecting one wire. If that does not help, think about this; there is a reason why the authorities send in a robot.

Take direction from the authorities – this is self explanatory, should the authorities advise you to clear the area; do so. Do not 'hang around' and see what happens.

Suspicious Packages

Suspicious packages present a very unique problem for security guards. The problem is you do not know what is in it. It can be anything from a bomb to a box of pens left behind by a vendor. This can be a very stressful time for a security guard as they will fear the unknown factor in this case.

Definition – Suspicious Packages

Suspicious mail and packages includes letters and packages found or received, by mail, courier or delivered in person, that arouses the suspicion of the receiver because of one or more of the following indicators:

- unfamiliar return address, e.g., international
- strange odour or noise
- loud ticking sounds
- protruding wires
- excessive postage
- addressed to a business title, e.g., superintendent
- restrictive markings, e.g., do not x-ray
- lopsided or uneven
- excessive wrapping, tape or string

- oily stains, discolouration or crystallization on wrapping
- leaking
- powdery substance observed on the exterior
- contains a threatening note
- contains an object you cannot identify

Suspicious Package Recognition Points

Procedures for successfully dealing with suspicious packages are different due to the type of package it is. However here are some general points to remember:

- **DO NOT** open the item.
- **DO NOT** place the item in water or any other liquid.
- **DO NOT** touch the item unnecessarily, especially after it has been moved to an isolated area.
- **DO NOT** put the item in a filing cabinet or other confined space.

- **DO** place the item in a pre-selected isolation container.
- **DO** leave the item on a table with no other mail on it.
- **DO** turn off air handling equipment in the area of the item and possibly the building.
- **DO** Cordon off the area.

Responsibilities & Duties of a Security Guard

Always refer to your Post/Standing Orders to see how exactly the client of the property want to handle this situation. In the event that there is no process in place, here is what could be expected of a security guard:

- Under no circumstances touch, move, pick up or otherwise disturb any suspicious object. Even a slight jar might set it off.

- Do not pour water, sand or any other material on or over the object. Water may cause a detonation if the object is electrically triggered, or contains such incendiary material as calcium phosphate.

- Only get as close to the suspicious object as is absolutely necessary to identify it as a potentially dangerous object. Jarring from footsteps may set it off.

- Go to the nearest telephone and notify the search coordinator so that the bomb squad/police can investigate.

- Do not use a two way radio or a cell phone at any time near the object as the radio or cell phone frequency generated may trigger the detonator of an explosive device.

- Move back to a safe vantage point where you can prevent others from approaching the object. Stop other people from passing by or entering the area containing the suspicious object.

- Immediately evacuate all nearby persons. This includes persons on the floor in question, the floor directly above and below the suspicious package. Leave doors (and if possible, windows) in the area open.

If you are worried about a package or letter you have received:

- Do not handle, shake, smell or taste it.
- Leave the letter or package where it is.
- Get everyone out of the room and close the door.
- Call 9-1-1 (or the emergency response number in your area, if applicable)
- Wash your hands with soap and water.
- If applicable, alert building security or the superintendent.
- Wait in a safe place until the police or fire response teams arrive.

If you have opened a suspicious package:

- Leave the package where it is.
- Remove any clothing that has powder or liquid on it and seal it in a plastic bag.
- Get everyone out of the room and close the door.
- Wash your hands or shower with soap and water.
- Call 9-1-1 (or the emergency response number in your area, if applicable)
- If applicable, alert building security or the superintendent.
- Wait in a safe place until the police or firefighters arrive.

The police, other emergency workers and public health authorities will give advice about what to do next.

Weapon Emergencies

A **weapon** is a tool used to apply force for the purpose of causing harm or damage to persons, animals or structures. Weapons are used in hunting, attack, self-defense, or defense in combat and range from simple, prehistoric weapons like clubs and spears to complicated modern weapons such as intercontinental ballistic missiles.

A weapon emergency would be a situation in where a weapon being used, for example; the use of hand gun during a bank robbery. Remember one of the primary objectives in security is to protect people – this also includes you also. Weapon emergencies are one of the incidents in where the security guard should side with caution and get the appropriate authorities there as soon as possible.

Security guards are discouraged from engaging with persons who have weapons. Understand that there is a great safety risk that comes with dealing

with weapons. One must remember to always look at the bigger picture by understanding that their interjection into the situation may cause more harm then good.

The most common types of weapons that can be used in a weapons emergency:

Knife

Swords

Bats/Clubs

Rifle

Handgun

Shotgun

Assault Rifle

Hand Grenade

Duty of Care

A security guard must be familiar with the concept of duty of care and be capable of securing and protecting a crime scene.

Duty of care is defined as: a requirement that a person act toward others and the public with the watchfulness, attention, caution and prudence that a reasonable person in the circumstances would use. If a person's actions do not meet this standard of care, then the acts are considered negligent, and any damages resulting may be claimed in a lawsuit for negligence.

Crime Scene Preservation

A security guard must be ready to potentially deal with a crime scene while working in the security industry. As the term states security guards preserve the crime scene and not investigate it, as it takes years of training to be able to do this.

When dealing with any crime scene remember to follow these **4 simple rules**:

1. **DO NOT TOUCH ANYTHING.**
2. **SECURE AREA. CALL THE POLICE.**
3. **LET NO ONE IN.**
4. **DOCUMENT EVERYTHING YOU SAW / TOUCHED / HEARD.**

P. A. S. S. P. O. R. T

There will be times when you will have to forget the 4 rules and proceed into the scene. With that said, this acronym – **P.A.S.S.P.O.R.T** – will help you organize your actions. With practice it will become second nature.

P – Proceed to the scene – personal safety

A – Assistance to victims

S – Secure and isolate suspect (s)

S - Secure and isolate witnesses

P – Preserve the scene

O – Organize personnel

R – Relay facts to appropriate authority

T – Take the report and record relevant information

As you will appreciate, no two crime scenes are the same. Each scene must be evaluated individually. There is no single **"RIGHT WAY"** to process a crime scene. However, the following are some steps you can take which are **COMMON TO ALL** scenes.

As a Security Guard, you will often be the first on the scene, and will have many responsibilities. As first on the scene, you must:

1. **Deal with the offence.**
2. **Deal with the victim.**
3. **Deal with the alleged perpetrator.**
4. **Deal with witnesses.**
5. **Deal with sightseers. (including your own staff)**
6. **Deal with supervisors. (senior guards)**
7. **Deal with the media.**
8. **Deal with the weather.**

As you can see from the list, you will have a lot on your plate. However, at the same time, you have to maintain control, remain calm and preserve the scene.

All this can be overwhelming unless you are able to organize your actions logically and establish a clear priority of action.

Items Used For Evidence and Crime Scene Preservation

1. Boxes
2. Sheets, cloths, tarpaulins, etc...
3. Sheets of plastic
4. Newspapers if the scene is dry (recycled ink runs off newsprint)
5. Caution tape
6. Stanchions and rope
7. Access control barriers or public works barriers, etc...

RULE: **Wear gloves (latex or vinyl) when you need to touch evidence.**

Things not to do at a Crime Scene

1. **DON'T SMOKE**
2. **DON'T** open cupboards, drawers, bags etc., except to get medication.
3. **DON'T** move furniture, except to gain access or assist the victim.
4. **DON'T** flush toilets or sinks. Evidence may be in the pipes.
5. **DON'T** eat or drink at the scene, spills and crumbs may confuse.
6. **DON'T** turn on/off radios, televisions or change channels.

7. **DON'T** touch weapons, unless they are in a hazardous position.

8. **DON'T** open windows, odors are important clues.

9. **DON'T** sit on furniture or straighten it out.

10. **DON'T** touch anything unless absolutely necessary and then note the original position and the fact that you touched it in your memo book.

DON'T BECOME A SUSPECT – MAKE NOTES – TELL ALL TO THE INVESTIGATOR.

DON'T LET ANYONE CLEAN UP UNTIL THE INVESTIGATOR SAYS IT IS OKAY.