



STATE OF KUWAIT
MINISTRY OF INTERIOR
GENERAL CIVIL DEFENCE DEPT.



Evacuation of Industrial Buildings

General Civil Defence Dept.
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Preface

Every building should have an emergency exit plan, and every person in a building should be aware of it. In work places, there should be an emergency evacuation plan, and employees of this building should be familiar with it, which is why evacuation drills are carried out to ensure every employee's safety in the workplace.

For example, regardless of the reason, when a fire breaks out the smoke may fill up the building, which poses a real threat to the people inside; people's vision will be distorted because of the fogginess, and inhaling toxic fumes may cause delusion and imbalance. In this state of terror and panic, people may easily get lost, or get trapped somewhere in the building. It has been proven that the execution of evacuation drills regularly diminishes the probability of any panic attacks or injuries during a fire, or destruction of one part of a building. Trained personnel and those who have an idea about the evacuation procedure have an excellent chance of survival when an emergency occurs.

Setting up an evacuation plan is one of the priorities of ensuring safety and security of everyone in a building. It is the responsibility of the Civil Defence Committee to set up this plan carefully and accurately to ensure it succeeds in what it was set out to do, God willing. Therefore, the steps for setting up a successful evacuation plan in this leaflet are designed to help the Civil Defence Committees in buildings set up customized evacuation plans easily and without any difficulties.

General Civil Defence Dept.

Evacuation

Evacuation is the organized movement of persons partly or completely away from a danger zone, to a safe haven. in the Shortest time span possible. Evacuation is regarded as one of the most important responsibilities of the Civil Defense. In addition, it is a difficult decision to make in an emergency, and its purpose is to save lives.

Types of Evacuation

Different kinds of evacuation are classified into three types based on the size of the area, the time, and choice.

1) Evacuation based on area:

- Complete evacuation: the shifting of all persons occupying the hazardous region to a safe place.
- Partial evacuation: the shifting of specified persons occupying the hazardous region to a safe place; this is only necessary when only part of a building has been damaged.

2) Evacuation based on time:

- Early evacuation: This type of evacuation is reserved for women, children, handicapped, and elderly people. They are moved away from the danger zone and taken to a safe haven before an actual emergency occurs (when there is only a threat. This procedure begets the best results in very crowded areas and extremely risky places) .
- Temporary evacuation: This type of evacuation is where persons in the danger zone are moved to a safe place temporarily, until the danger has receded. This procedure is used when there is a toxic leak or the destruction of a building.

- **Permanent evacuation:** This type of evacuation is used when there are huge disasters such as those resulting from war, natural disasters, or industrial accidents. The area is completely vacated during wars, for fear of an invasion, or complete destruction of the area, which makes it very difficult for people to move back in before a long period of reconstruction.



3) Evacuation based on choice:

- **Optional evacuation:** This type of evacuation gives a person the freedom of choice, they may or may not leave the danger zone based on their decision.
- **Obligatory evacuation:** During this type of evacuation, people are forced to leave the danger zone; the evacuation here could be either partial or complete, depending on the situation.



Evacuation of Industrial Buildings

One of the most difficult evacuation operations is of industrial buildings, especially ones with specific purposes such as hospitals, old people's homes, and prisons. People in these buildings are not easily shifted because of their nature, and their freedom restriction. Usually, in places like these, there are specified emergency exits and tunnels.

Mandatory conditions for emergency exits:

- 1) Industrial buildings must have more than one emergency exit.
- 2) Exits should be clearly visible and employees inhabiting the building at any given time should be familiar with these exits.
- 3) At any given time, exits should never be obstructed by anything such as garbage bins etc.
- 4) There should be an exit sign on every way out.
- 5) Every exit should be clearly lit at all times. In the case of a black out, there should be automatic generators to light the exits.

Mandatory facilities that must be provided in every industrial building

- 1) Form a Civil Defence committee as per the ministry decree number (618) for the year (1987).
- 2) Provide a complete alarm system.
- 3) Provide a complete fire fighting system.
- 4) Emergency exits and entrances:
 - Identify and label emergency exits and entrances, and

put up signs and arrows that lead to them.

- Remove any obstructions from the entrance of the building and the emergency exits.
- Determine where the safe havens / meeting points are, inside and outside the building, and ensure that they can shelter all employees.

5) Employees:-

- Keep records of the number of employees, their qualifications, and their ages (male and female).
- Train a group of employees on how to perform first aid and extinguish fires in case of an emergency, until the specialized rescue operations team arrives. This group of employees must be distinguished by special clothing (for example, a vest).

6) Control rooms must be provided (operations related to the industry):-

- Provide an internal intercom system inside the building, ensuring that the announcements are made in both English and Arabic, and making sure that bullhorns are also provided.

7) Raising employee awareness about the building's safety and security procedures, using seminars, posters, and leaflets.

8) Saving telephone numbers of those in charge in the building.



Assigning duties to the committee members

- 1 - Contacting the central operations unit (122), and reporting the incident accurately.
- 2 - Managing the control room, if available, regarding (alarm bells + internal intercom + internal and external surveillance cameras...)
- 3 - Recognizing special cases through prerecorded statistics.
- 4 - People in charge of bullhorns and controlling the safe havens / meeting points.
- 5 - The person in charge of the safety equipment, such as water hoses, smoke detectors, water sprinklers, etc.
- 6 - The person in charge of making the directional signs and arrows inside and outside the building.
- 7 - The person in charge of printing safety brochures and leaflets.
- 8 - The person in charge of making sure all floors are evacuated.
- 9 - The person in charge of meeting the emergency team when they arrive to the scene.



Mandatory conditions and provisions that must be provided before executing the evacuation plan

- 1 - The Civil Defence committee must be distinguished by wearing a phosphoric vest.
- 2 - A number of bullhorns must be provided.
- 3 - Directional signs must be constructed and placed in the appropriate locations (three types):-

a - A green floor sign sized 20 x 40, with a white arrow across it.



b - A green floor sign sized 40 x 60 with a white arrow across it.



c - A round sign sized 90 x 90 (the Civil Defence logo).



- 4 - Print out brochures or leaflets to raise awareness on safety procedures in the workplace.

What to do when an emergency siren is heard (evacuation)

When you hear an alarm, and during emergencies (evacuation), please take the following steps:-

- 1- Do not panic and remain calm.
- 2- Stop smoking immediately.
- 3- Hide important papers and documents in a safe place.
- 4- Completely shut off all electrical devices, and all gas sources from the main generators .
- 5- Refrain from eating or giving food to anyone.
- 6- Close all windows, and the door, and leave the location.
- 7- Do not use electrical elevators.
- 8- Follow the directional signs and head to the nearest emergency exit.
- 9- Help colleagues who are sick or disabled.
- 10- Do not crowd during the evacuation.
- 11- Go to the ground floor and avoid heading down to the basement.
- 12- In case of aerial attacks, head to the lower floors, or the basement if available; for your safety, it is best to head to the meeting points and wait there for instructions.