



Kingdom of Saudi Arabia
Ministry of Interior
General Directorate of Civil Defense

Regulation of Safety and Firefighting Requirements Must Be Available in Hotels, Hostels and The Like

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Chapter 1

General Provisions

1st Definitions:

The terms mentioned in this regulation mean the following:

1. **Hotels, hostels, and the like:** Mean all types of facilities designed and prepared to receive guests for the purpose of residence or overnight lodging in return for an amount paid by the guest. The definition includes all types and levels of services of hotels, hostels, motels, guest houses, social care homes, shelter homes, college dormitories, institutes, schools, roadhouses, vacation homes, chalets, cabins, furnished apartments, or other facilities designed for the same purpose.
2. **The Law:** Civil Defense Law issued by the Royal Decree No. 10 and dated 10/5/1406 H and all other relevant regulations.
3. **Regulation of Inspection, forfeiture, investigation, and penalties:** The Regulation issued by HRH, the Minister of Interior, and the President of the Civil Defense Council to determine the procedures of inspection, forfeiture, and investigation of violations and misuses related to Civil Defense works and the penalties imposed on them.
4. **Civil Defense Representative :** The authorized person or persons by the General Directorate of Civil Defense, or one of its centres to carry out inspection, forfeiture, and investigation of violations as per the rules and procedures specified in the relevant Regulation, to ensure the safety of the building, safety equipment, and tools, and to impose the penalty stipulated.
5. **The Relevant Authority:** The Ministry of Interior, the General Directorate of Civil Defense, and other public authorities involved in the facility's license and activity.



6. The safety officer: A person responsible for ensuring safety and security of the establishment. However, the licensee is responsible for safety in all circumstances.

7. Specifications:

- a) Saudi Standards, issued by the Saudi Standards, Metrology, and Quality Organization, SASO.
- b) International Standards: in the absence of Saudi Standards, the United States of America Standards, or the Standards of the European Common Market Countries, are to be considered. If the equipment or material is manufactured in other countries (other than US or EU countries), In that case, the specifications must be based on the manufactured countries' relevant authorities. A document must be submitted to prove the availability of all safety rules in equipment or material used in all cases.

2nd

The applicant will not be granted a license to any of the new establishments or renewing it to renovate or expand the existence establishments subjected to this Regulation before submitting a technical report. This report is prepared by one of the technical offices specialized in safety works and firefighting and approved by the General Directorate of Civil Defense to highlight the extent of compliance with the specifications, requirements, and rules mentioned in this Regulation. The existing establishments at the time of the issuance of this Regulation will be allowed one year and can be extended for another year to apply the requirements and instructions included in this Regulation. The municipalities' relevant authority must consider granting a license or re-issuing it as per this Regulation.

3rd

The technical office that prepared the report mentioned above is responsible for implementing other safety and firefighting requirements.



The office will undertake to provide a final certificate confirming the building's compliance with the terms and conditions included in this Regulation. These offices shall be considered responsible in solidarity with the building owner for any default or fraud in this regard.

4th

Civil Defense representative, after reviewing the application and visiting the site to ensure suitability for the activity, prepares a report of the appropriate fire and safety requirements in accordance with this regulation. Factors affect fire and safety requirements such as, establishment or size of the site, type of activity to be licensed and the extent of devices, machines and materials used in the activity shall be taking into consideration. The municipalities' relevant authority must consider not issuing a license or renewing an existence one until receiving the approval of Civil Defense to ensure the availability of safety requirements and firefighting means.

5th

The safety officer is responsible for conducting monthly inspections and periodic tests (every 3 months) of the shop or the establishment, all equipment and tools used in it, mechanical and electrical installations, all safety means, fire, monitoring and alarming equipment, and promptly carrying out all repairs and defects. Failure to do this shall be considered gross negligence.

6th

In the event of any malfunction or defect that may pose a threat to the safety of life, the safety officer is obligated to stop using these tools and equipment until they are repaired by the competent technical department. In case of danger, safety officer must vacate the place and inform competent Civil Defense center to take the necessary precautions.



7th

The safety officer shall assign a register called (safety and firefighting record) according to the application form prepared by Civil Defense. All pages are stamped with the seal of the relevant Civil Defense center. All periodic tests and inspections, and maintenance works of the buildings and the establishments, electrical and mechanical installations, plus all safety means, control, and firefighting, are recorded in this register. The record is kept in the facility or the shop management office to be at the disposal of Civil Defense representative at all times to view and write notes in it.

8th

The safety officer of the establishment may inform the competent Civil Defense center of the periodic tests dates and entities will be going to conduct the tests. This is to agree on date that suits Civil Defense representative to attend the test and sign the record to prove his presence

9th

All employees or a number of them determined by the Civil Defense according to the location and capacity of the facility must be trained in safety, fire, rescue and ambulance tasks in one of the specialized national institutes that are approved by the General Directorate of Civil Defense or through an agreement with Civil Defense in regions where there are no such institutes, to conduct training courses for this purpose, provided that the training requesting party bears the costs of such or its share of the course costs based on the cost of one trainee. However, it must be proven that employees have obtained the required training.

10th

The facility safety officer shall coordinate with the competent Civil Defense center in order to prepare a detailed plan for evacuation and firefighting operations in emergency situations, and he shall be responsible for educating workers to implement this plan and clarify the measures to be taken until the arrival of Civil Defense teams.

11th

The Regional Civil Defense Committee, within the scope of its regional jurisdiction, has the right to exclude small establishments located on the highway and far from residential areas from one or more of the requirements mentioned in this regulation and after reviewing each case separately. However, this exception is not given if the capacity exceeds (15) people and if the minimum safety requirements are not met.

Chapter 2

Safety and escape means requirements

1st site:

1. The site must meet the requirements of the municipalities and other relevant authorities. As the body responsible for issuing the permit, municipality must, before issuing the permit, ensure that all requirements are met.
2. The site must not be linked to a dangerous facility in a manner that violates safety principles and rules. Seeking advice from the CD after visiting the site and reviewing the layouts should be taking into consideration.
3. This regulation relates to the requirements of safety and escape means within the scope of Civil Defense without considering the remaining permit requirements of other authorities.

2nd Buildings :

1. All structures and buildings must be in accordance with Saudi Standards and the requirements of the Municipality, and Ministry of Public Works & Housing, to be designed from non- flammable materials.
2. Layouts that include the safety elements and system must be submitted to the relevant authority at the Ministry of Municipal and Rural Affairs to review in the light of the requirements contained in this regulation and shall coordinate with Civil Defense in the region in this regard. Moreover, these layouts must be approved by a licensed engineering office.

3. The layout submitted to obtain a permit must include a definition of the building materials and their fire resistance. The degrees of fire resistance must be in accordance with international rates and approved standards, taking into account the followings:
 - a) Structure, pillars and columns: designed to bear heavy weight, fire-resistant for at least two hours.
 - b) Walls, ceilings and floors: designed to bear heavy weight, be fire-resistant for at least two hours.
 - c) Fire sector barriers are Firestopping and fire-resistant for at least two hours.
 - d) Doors and windows of fire sectors must be fire-resistant for at least half an hour.

The authorities supervising the construction works must ensure that these requirements are met.

4. Provision of appropriate entrances and routes to the building to allow fire and rescue teams to access with their vehicles and equipment to balconies, windows and firefighting water resources. These windows and balconies are designed as part of the escape routes to facilitate fire and rescue works. However, if the building's width and length exceeds 50 meters, an entrance must be provided on each side.
5. If the building contains business and technical shops, then the relevant safety regulation should be applied. Shopping centers must be located in the first or ground floor of the building.
6. It is strictly forbidden to use the underground floors for sleeping and housing purposes, whether for hotel residents or workers.
7. No more than one underground floor is allowed to be used by residents and visitors.
8. In the event that other facilities are linked to the building such as wedding halls, the relevant safety Regulation will be applied for each facility.
9. The parking area shall be in the ground floor and basement. It must apply all safety requirements. However, It is not permitted to construct multi-story car parks as part of the building.

10. It is not allowed to run the facility before being inspected by a Civil Defense committee, municipalities and other relevant authorities to ensure that all requirements are met and prepare a minute in this regard.

3rd Safety of the building's structure and the protection from the external spread of fire:

1. The building structure and exterior walls are designed from non-flammable materials in accordance to the engineering standards approved by competent authorities such as the Municipality and Saudi Standards, Metrology, and Quality Organization.
2. The building walls and open balconies' exterior cladding must not be less than grade "A" (non-combustible materials as per the international standard 1182/1979) for buildings with more than two stories. The building walls and open balconies' exterior cladding must not be less than grade "B" (low flammable materials as per the American Society for Testing and Materials, ASTM International specification No. 84) for one or two-story buildings.

4th Fire sectors:

1. The building can be divided into sectors separated by fire-resistance walls to reduce the risk of fire and stop its spread. This will also facilitate extinguishing and evacuating operations.
2. The division of building is conducted in accordance with SASO, taking into account the followings:
 - a) Each floor of not more than (400) square meters represents an independent fire sector. If it exceeds that, it shall be divided into sectors (400) square meter for each.
 - b) The areas of escape stairs and protected halls represent independent fire sectors.



- c) Areas such as machine and mechanical rooms, power switch rooms represent independent fire sectors.
- d) Walls of fire sectors shall be sealed, both vertically and horizontally, to ensure that all areas, openings including the invisible ones between the main ceiling and the suspended one are closed.
- e) Doors installed on the walls of fire sectors must be fire resistant (at least an hour). They open outward and are of the sliding and self-closing type and in accordance to SASO.
- f) Rooms and suits shall be separated from services areas.

5th Escape Routes :

A. Definitions:

1. **Escape Routes:** Fast and safe paths of travel from any point in a building to a safe outside area in the event of emergency. This includes entrances, stairways, corridors and other means that must lead to the indoor and outdoor assembly points. The width of such must not be less than (1) meter and its travel distance not less than (130) cm.
2. **Exit/Floor Exit:** A door or opening connected with a corridor or stair that leads to an exit. The Exits of the upper floors must lead to a protected staircase as part of the exit to the outside of the building.
3. **Exit Discharge:** A door at the end of any means of egress leads directly to an outside safe area (as amply point). Exits discharge of the upper floors must be separated by construction from other areas of the building to ease movement.
4. **Emergency Exit:** Exit used only in the event of an emergency to provide quick escape and aid in carrying out evacuation plan.
5. **Emergency Stairwell:** It is only used in the event of an emergency with other major stairs to implement the evacuation plan in a timely manner. These stairs must be designed according to Saudi standards and meet he following safety conditions:



- These stairs and walls surrounding them, and handrails are of fire resistant materials.
- Doors of exits and corridors leading to them must be fire & smoke resistant door.
- Their locations must be suitable for the occupants of the building.
- They must lead to predefined assembly point.
- They must be equipped with the necessary handrails and barriers for protection purpose.
- Tread width must be a minimum of 100mm, tread height not more than 20cm, landing length not less than 130 cm, number of steps must be a maximum of (15 steps) and a minimum of (3 steps) between each two landings.

6. Assembly points:

A designated place inside and outside the building for people to gather after being evacuated from fire sectors in emergency. They are two types:

6/1– Indoor Assembly Points:

They are allocated inside the building, usually in the large halls, and can be accessed by a number of exits and escape paths. These points must be connected to a minimum of two escape routes that lead directly to the outdoor assembly points. They must be secure and have adequate ventilation so that they can be used to collect evacuees from adjacent sectors. Clearly illuminated guide signs must be provided.

These points are temporary until the situation is all clear.

However, if the situation lasts longer, then people should be evacuated to the outdoor assembly points (outside the building).

6/2– Outdoor Assembly Points:

It is allocated outside the building, where the size is determined by the number of occupants of the building. It must be accessed via direct escape routes. It should be safe, provide natural ventilation, and can be easily accessed by public utility vehicles.



B. Safety Requirements of Escape Routes:

1. Sufficient escape routes in every building included in this regulation must be provided to allow the evacuation process within a maximum of 3 minutes in cases of emergency.
2. The exits and escape routes must be as far from each other as possible, and the exits in each floor must be at least two, leading to at least two separated escape routes.
3. The escape routes must lead to the exits discharge. Indoor and outdoor assembly points must be pre-allocated, according to the aforementioned, to collect and account the evacuees, and to provide them with the necessary aids.
4. Emergency exits and stairwells are designated for emergency use to evacuate the occupants in a timely manner.
5. Exits doors must be one sided –push to open and be fire resistant for a period not less than an hour. They must be free from any materials such as curtains and mirrors that may cause confusion when defining escape routes.
6. The travel distance from any point inside the premises to the nearest escape route must be a maximum of 30 M.
7. There must be two exits for each room, one is the room door and the other may be additional door, a window or a balcony that fire and rescue teams can use to access the room.
8. Balconies and windows that serve as evacuation route must be designated. Fire & rescue vehicles can easily reach these means in case of emergency. Windows and balconies must be barrier-free and suitable for rescue and fire purposes.
9. Provide a minimum of two exits, one of which is the main door and the other is the emergency exit in halls and large rooms that cannot accommodate more than 50 people.
10. The number of external emergency exits and emergency exits for halls that can accommodate more than 50 people is determined according to the following internationally recognized equations:

- The width of the exit unit, the distance required for one person, must be at least 21 inches.
- The flow rate of people from the exit which means the number of people who can exit within one minute, 25 persons.
- The flow rate of people from the exit which means the number of people who can exit within one minute, 25 persons.
- The estimated required time to evacuate is three minutes.
- The expansion of the required exit units is calculated according to the following equation:

$$\text{Units} = \frac{\text{Number of occupants (building capacity)}}{\text{Flow rate of people from the exit (25) } \times \text{time required to evacuate}}$$

- Unit fraction is calculated as a whole unit.
- The emergency exit should not be less than two units (42 inches) and a minimum of 100 cm.
- To determine the number of emergency doors required, the number of units needed should be divided into four and then add one to the total. In general, the number of emergency doors required for a building must be in accordance with the following rates:
 - a) Buildings with a capacity of 1,000 people or more require a minimum of 5 exits to be remote from each other. The number of exit might increase by one for every 200 people.
 - b) Buildings with a capacity of 600 to less than 1000 people require a minimum of 4 exits to be separated and remote from each other.
 - c) Buildings with a capacity of 300 to less than 600 people require a minimum of 3 exits to be separated and remote from each other.
 - d) Buildings with a capacity of less than 300 people require a minimum of 2 exits in different directions.
- 11. Exits, escape routes, and stairs leading to them are provided with visible guiding signs and arrows. Signs of emergency safety instructions must be allocated in visible places throughout the building and according to the designs approved by the Civil Defense.



12. At least half of the exits must lead directly to the outside of the building, and the other half is connected to protected corridors and stairs leading to the outside of the building. In most cases, a building must have at least two exits in different directions.
13. Exit discharge doors must be open to the outside street or walkway and far from gas and ventilation systems.
14. Dead-end corridors must be closed with doors that open inward and marked with visible signs (Closet). However, it is not permitted to install rooms in these corridors.
15. Elevators and escalators are not considered as means of exits and are only used under the supervision of rescuers and emergency services in case of emergency.
16. Exit routes shall never be blocked by materials such as furniture and food carts, and they shall not have sharp turns or dead ends.
17. The height of the escape routes must not be less than two meters and free of any structural barriers.
18. Safety requirements of escape routes:
 - a) The escape routes must be protected according to Saudi building standards, and the walls, ceilings and floors of escape routes and stairs that lead to them are fire-resistant. The exterior cladding must not be less than grade "A" (non-combustible materials as per the international standard 1182/1979).
 - b) Signs, posts and arrows of exits and escape routes shall be permanently illuminated from a double power, a primary and a backup one (emergency light). The emergency light is automatically switched on when there is a power outage to ensure light is on in all circumstances.

6th Mechanical and electrical installation and extensions, and lighting:

Electrical and mechanical installations and services are installed and designed per Saudi Standards and by a specialized technical authority, taking into account the followings:



1. All extensions and wires must be of appropriate types and diameters, well insulated and protected against wear & tear or high current.
2. Electrical equipment and appliances such as heater, stoves, ovens, refrigerators, air conditioners and others should be of the approved types in KSA and safe to use.
3. The necessary ground extensions are provided for all devices, installations and electrical circuits as per Saudi Standard
4. Appropriate and secure power breakers must be provided against short circuits and arc circuits risks, plus installing a main breaker to cut out the entire building's electricity if necessary to be placed in a safe area of the building that can be accessed from the inside and outside. People are not allowed to be in such place.
5. Heating devices with a capacity of 1,000 kilowatts are installed on a containment dyke made of non-flammable material.
6. Sufficient lighting in the building, the lamps are of a non-explosive type and placed inside bottle glasses. The use of hanging lamps is not allowed. Lamps and electrical connectors such as switches, sockets, plugs and other connectors are of approved types in KSA.
7. An uninterruptible backup power shall be provided to illuminate the signs of exits and escape paths when the main power supply is cut off. It must be equipped with signs and arrows for the exits, escape routes and other places defined under the supervision of the building management to facilitate evacuation process, emergency services and urgent work. The emergency lighting system shall be equipped to be turn on automatically when the main power is cut off.
8. All rooms of electronic installation, services, generators, transformers and other devices must be separated from other parts of the building and exits, and considered as independent fire sectors marked with guidance and warning signs on all doors to prevent unauthorized access.



9. All electrical installations and equipment are installed by a specialized technical entity. Regular tests shall be performed to verify that the safety and efficiency of such installations are per the manufacturer technical specifications and instructions. An official certificate signed by the appointed technical entity must be submitted.
10. Carry out periodic maintenance (every 3 months) to all electrical installations and services by specialized technicians to check their validity and fix any defects.
11. The electrical rooms are equipped with fire extinguishing system (carbon dioxide or Halloween) connected to the alarm system in building, plus providing such rooms with dry chemical powder and carbon dioxide extinguishers.

7th Installation of gas, liquid fuels and stoves:

a. Gas installation:

1. Gas tanks and connections must comply with Saudi Standards and must be installed with the Saudi Gas Company follow-up and provided with the necessary safety methods and safety valves, including a quick shutoff valve next to gas-powered appliances. The installation of gas tanks must be outside the building as per the regulations and conditions regulating it.
2. The use and handling of LPG cylinders and industrial gases should be per the special Regulation and Civil Defense instructions issued in this regard.
3. Gas tanks, connections and cylinders must comply with Standards and must be approved by SASO.
4. Feeding connectors from tank to stoves must be via metal tubes fitting and provided with the necessary valves and cocks. The use of hoses is not allowed.
5. Regular maintenance of gas tanks, cylinders and pipelines is carried out by a professional technician.
6. Valves and shut-off valves of gas connections must be installed inside pipes near exits and provided with necessary guide signs.

7. Metal caps shall be fixed to cylinder valves after they are closed tightly when not in use.
8. Empty cylinders are marked and isolated from filled ones in order to transport them.
9. Empty cylinders are replaced by a technical worker.
10. Defective cylinders are isolated and immediately return back to the gas company to check and take the necessary action.

b. Installation and use of liquid fuel:

The quantity allowed for use in portable containers should not exceed 10 liters or in a suitable tank placed on containment dyke made of non-flammable materials with a capacity of 50 liters maximum. If the quantity required for storage exceeds these numbers, the following safety requirements should be applied:

1. It must be stored in tanks completely separate from the building or it can be stored underground with a capacity of no more than 5000 liters. These tanks must be equipped with an explosion and combustible proof pump to feed the connected devices. In the event that these tanks are not installed underground, then an external (outside the building) fire-resistant room (at least 2 hour) must be provided to store no more than 1500 Liters.
2. Gas tanks and connections must comply with SASO. Pipelines shall be out of public reach and provided with warning signs.

c. Stoves, cooking ovens, and heating devices:

1. All these appliances driven by gas or liquid fuel must be approved and comply with SASO. The connections of these appliances must comply with the Regulation issued in this regard.
2. The layouts for kitchens, their locations, equipment, their heating devices, air conditioning and ventilation system must be submitted to Civil Defense. These layouts should clarify fire and safety equipment and measures to seek Civil Defense advice before starting the implementation process.

3. It is prohibited to install any combustible equipment, shelve directly above the stoves.
4. All stoves must be installed inside the kitchen and not be used outside. Kitchens must be equipped with ventilation and appropriate air purification filters.
5. Solid fuel stoves must be installed in designated areas in the kitchen to prevent movement and overturn/ upside.
6. Kitchens should be equipped with the appropriate firefighting equipment as what will be mentioned in the section of firefighting equipment and means.

8th Exhaust Ducts and Chimneys:

- a) Gas and chimney ducts must be made of non-combustible materials such as bricks, cement, and steel and must comply with Saudi Standards.
- b) It must be well ventilated and not connected to flammable materials.
- c) The exhaust vents should be at the top of the building and away from other buildings to ensure that they are not affected by smoke and rising fumes.

9th Ventilation and Air Conditioning Systems:

1. Natural and mechanical ventilation is provided to ensure the air is replenished and fumes and gases do not accumulate in the building.
2. All ventilation and air conditioning systems must be designed, installed, and maintained as per SASO specifications to not cause any spread of smoke and hot gases from one part to another.
3. Emergency ladders and halls must not be used as returning methods for ventilation systems. In case the ceiling area used as a return method, it must not exceed vertical fire barriers limits, unless such area is equipped with a smoke detection system linked to an automatic fire system to release early warning and shutdown the air intake system.



4. Emergency ladder should have independent mechanical ventilation system.
5. Air conditioning attached units installed on building exterior walls must be provided with an outer frame made of steel plate to prevent falling in the event of a fire.

10th First Aid

1. The building should be equipped with first aid equipment (bandages, medicine for wounds and burns, and others) appropriate to the potential risks. A percentage of personnel must be qualified and trained in first aid work.
2. A resident physician is assigned or can be easily summoned in a short time to treat visitors with potential injury or illness or to oversee health safety.

11th Firefighting Equipment and Means:

Hotels, youth hostels and similar establishments must be equipped with Fire fighting equipment and means as follows:

1. Manual Fire Extinguishers:

The building should be prepared so its occupants could take initial steps in extinguishing the fire by using manual fire extinguishers. This should be sufficient in terms of types and numbers for the area intended to protect, potential hazards, site size and number of occupants as follows:

- a) A dry chemical powder extinguisher (12 kg) or Co² extinguisher is allocated per 100 M² of space on each floor. Fire extinguishers are distributed in mechanical rooms, kitchen, stoves, place where gas cylinders are stored and used, corridors and halls.



- b) Places where liquid fuel is stored are equipped with foam extinguishers (2-10 gallons), as well as dry chemical powder extinguishers.
- c) Manual fire extinguishers must be approved in accordance with SASO, along with proof of this.
- d) Fire extinguishers are placed or hung near the exits and doors in clearly visible places so that they are easily accessible and used when needed.
- e) Fire extinguishers should be maintained to be ready to use and checked periodically according to the manufacturer's instructions. A specialized technical authority must carry out this procedure. The inspection and refilling date must be clearly stated on the fire extinguisher tag.

2. Fire Hose Reels:

Fixed hose systems permanently connected to a water supply to use by occupants to carry out the initial steps to extinguish the fire in a timely manner. The following points should be considered:

- a) A fire hose reel must be installed for each (200 m²) of each floor, and the distance between any point in the building and the nearest hose reel must not be more than (25) meters.
- b) Hoses and reels are SASO standards and equipped with easy on / off valve. A multi-purpose metal nozzle is attached to the end of the hose.
- c) The diameter of the hose shall not be less than (20) mm.
- d) Hose reels should be installed in appropriate places of the building such as corridors, passageways, near stairs). The mounting of hoses are not more than 1,5 m high from ground level so that they can be reached when needed.
- e) Instruction signs are installed to highlight all fire hose installations and the use manual.



- f) The fire hose must be pressure tested periodically.

3. Wet & Dry Rising Mains

Vertical metal pipes (3 diameters) installed along the length of the building, provided with an outlet (wheeled valve) at each floor level.

They are two types:

a. Dry Risers:

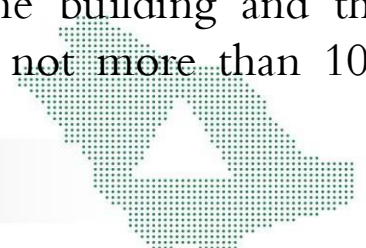
1. They are Installed in any building more than (12m) high, and less than (60m).
2. The pipes in dry risers are empty and are only filled with water by fire appliance pump. They are equipped with inlet at ground level on an outside face of the building and can be reached by freighting large vehicles.

b. Wet Risers:

The wet pipes are directly connected with pressurized water source and are full of water at all times. When a building is (60m) and over, wet pipes must be installed.

1. Cabinets are fitted near the landing valve on each floor and are equipped with a fire hose, on / off valve, multi-purpose nozzle of the type used In Civil Defense center.
2. A main vertical pipe is allocated for each (600 M²) of the space. The space between each floor level and landing valve shall not be more than (50m).
3. Wet and dry rising mains are installed and designed in accordance with SASO.
4. Fire fighting water sources:

There must be a suitable pressurized water source for fire fighting purposes in the building. In case the water pressure is insufficient, then water tanks are provided according to the requirements of the Civil Defense. The distance between any point in the building and the nearest fire hydrant or a similar water source is not more than 100 meters.



5. Manual and automatic fire alarm systems:

A manual and automatic fire alarm system shall be installed in hotels and buildings subject of this regulation as follows:

- a) Manual fire alarm: this must be installed in all buildings subject of this regulation. A system operates by a conventional manual call points installed throughout all areas of the building. By breaking the call point glass, this then triggers the alarm to warn people in the building. This system is connected with automatic fire detector system, so that all alarms operate at the same time and can be heard clearly.
 - b) Automatic alarm system: It must be installed in a building that can accommodate more than (50) People. Fire detection sensors must be installed throughout the building. High temperature and smoke can trigger this system to turn on audible and visual alarms in the control room. The panel control system will identify the section or location at risk.
6. Automatic fire suppression systems: are installed in buildings that accommodate more than (250) people as follows:
- a) All rooms, sectors, halls and kitchen shall be equipped with automatic fire sprinkler system.
 - b) Mechanical, generator and transformer rooms shall be equipped with automatic CO₂ fire suppression system.
 - c) Computer and Hardware rooms shall be equipped with automatic halon fire suppression system to avoid damaging equipment and threatening public health and environment.
 - d) Automatic fire suppression systems must be connected to automatic fire alarm systems to trigger audio and visual alarms in the control room.
7. Considerations must be considered when installing automatic alarm and fire suppression systems:
- a) The opinion of Civil Defense must be taken to find out whether the proposed fire suppression systems are suitable for the site before they are installed.

- b) A control room must be installed at each site and linked to alarm and fire systems, and equipped with connections, panel indicators, and necessary communication means. The site is divided into fire sectors shown in the control panel. Human follow-up must be available 24 hours a day by a person well trained and qualified in this type of work. He/she must be aware of the instruction necessary to immediately notify the specialists in the site and the nearest Civil defense center about any emergency.
- c) The sound of the alarm bell should be distinguished from the sounds of bells used for other purposes.
- d) All automatic fire alarm and suppression systems must comply with SASO.
- e) The installation and design of these systems must be done by the specialized technical companies or entities after conducting the necessary technical studies to determine the appropriate types.
- f) Periodic maintenance and necessary tests must be carried out on these systems to ensure that they are operating properly at all times as per the manufacturer's instructions.

12th Fire Mask:

Fire masks must be supplied in quantities that are not less than the number of hotel residents, in order to use them in their way out. Signs and illustrations of how they are used should be available throughout the building. These masks shall be kept in accessible places and used under the supervision of the safety officer and his assistants. These tools are periodically tested to make sure they are suitable for use.

13th Maintenance of Safety Means:

Maintenance work for all safety means and fire suppression systems must be carried out by an approved and specialized company in the field. Maintenance contracts must include statements defining and identifying the technical terms & conditions, and dates of the periodic tests and maintenance performed by technicians specialized in this field.

14th Safety Officer:

A safety officer must be appointed for buildings subject to this Regulation. He must be assisted by a number of qualified and trained persons in the field of safety and fire fighting, their numbers are determined based on the building location, size, importance and capacity in order to provide safety for the entire building and occupants during emergency or risks.

The duties of the safety officer in these premises are determined in accordance to the Regulations of the safety officer in the ministries and government bodies as follows:

1. Conduct training courses on safety works in emergency and to define the duties of each individual.
2. Conduct training courses of how to report any accident, and how to operate alarm and extinguishers, and to familiarize them with the danger areas in the building.
3. Prepare instruction signs according to the design adopted by the Civil Defense, and placed them in the appropriate places.
4. Raise safety awareness among staff and visitors.
5. Prepare an organized and comprehensive evacuation plan approved by Civil Defense in order to train workers on it and introduce them to escape routes, and coordinate with officials at the site to achieve this goal.
6. Ensure that power, gas and mechanical installations are turned off in emergency.
7. Oversee regularly safety methods and firefighting equipment to ensure that all inspections and periodic maintenances are carried out. In addition to take immediate action to repair defects and to ensure the convenience and suitability of safety and firefighting methods for the site and that safety workers are aware of their duties and know how to perform them.



8. Test the site safety plans and coordinate with Civil Defense in this regard, assess the situation and propose necessary amendments to achieve the safety of the building and its occupants.
9. Reception of Civil Defense men and emergency services and provide them with data that facilitate their tasks.
10. The safety officer should divide the building into areas according on its nature. Each area should have a supervisor. However, a supervisor is often assigned to each floor to oversee occupants and implement preventative requirements. In the event of fire accident, he must perform the followings:
 - a) Shut off the energy and gas supply to the area.
 - b) Turn on the manual alarm system if necessary and report the accident immediately.
 - c) Extinguish the fire by using fire extinguishers and hose reels after making sure that there are no detainees, and providing rescue and ambulance services until the arrival of the specialist teams.
 - d) Instructing the residents to the nearest exits and supervising the evacuation of the designated area.

15th Storage:

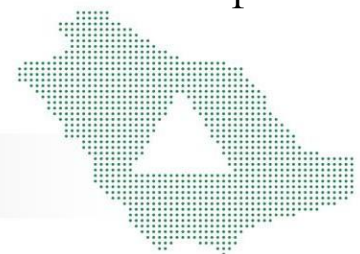
Storing in the buildings subject to this Regulation is prohibited except for the amount required according to the nature of the building, such as furniture, blankets, and provisions necessary for residents and visitors. In such a situation, separated warehouses made of non-flammable materials must be installed and act as independent fire sectors to be isolated from guest rooms and ganger places such as kitchen and mechanical rooms. Fire safety requirements shall be applied and defined according to the following:

1. Only one warehouse for food and another for furnishings and linens must be prepared and separated by fire-resistant walls. Redundant furniture is not allowed to be stored inside the building and if required a separate warehouse outside the building shall be allocated for this.

2. Mechanical and natural ventilation must be provided.
3. Escape routes and exits must be provided.
4. Electrical installations must be as technical standards.
5. Sufficient and adequate fire suppression equipment such as, fire extinguishers, hose reels and others.
6. Storing process must be in stacks of an appropriate size according to the materials stored and the warehouse space.
7. Maintain passageways between stacks for easy handling of materials and to move easily emergency.
8. Leave a space of not less than (80CM) between the top of the stacks and the ceiling.
9. Maintain the principle of type storing.
10. Smoking, igniting any fire, or using heating appliances are strictly prohibited. Warning signs are placed throughout the warehouse to highlight this.
11. Shop owners in the building shall not establish any warehouse or store in their shops. In addition, the quantities of goods should be limited to display cupboards and cabinets only. Dealing and trading with hazardous materials such as paints, flammable liquids, gases, and chemicals are not permitted.

16th Elevators and Escalators:

1. All elevator equipment & escalators must comply with the International Standards that are approved by SASO and must be provided with the necessary safety methods, especially the alarm bell, which provides an audible alarm sound throughout the building. Also, providing the elevator with a telephone connection connected to the supervisor, manager and control room or the reception so that the elevator users can call for help in case the elevator malfunction.
2. Adequate mechanical ventilation must be provided in the elevator passenger cabin, and it must be equipped with a manual drop-off device from the engine compartment.



3. A specialized technical company should handle the maintenance and repair works. The company shall quickly send its technical staff as soon as it is notified of malfunctions, plus regular maintenance schedules.
4. The maintenance worker and his assistants shall constantly monitor the conditions of escalators and elevators, stop using means that may not work, and follow up the performance of the technicians.
5. The provision of adequate ventilation in the engine compartment and not to store any movables in it, noting that elevator shafts are clean and free of trash or waste.
6. The elevators doors should open and close automatically and made of fire –resistant materials.
7. All components and materials of the shaft walls shall be of fire– resistant materials.
8. In the event of an elevator malfunction with people inside it, the following measures must be carried out immediately:
 - a) The person assigned to monitor the elevator shall move immediately to the broken elevator and shall notify the technician about this. The safety officer shall also move the scene.
 - b) Safety officer should calmed down the people confined inside the elevator and assured them that the technicians are on their way while trying to identify their numbers and health conditions until the arrival of Civil Defense personnel or repair technicians to the scene.
 - c) The elevator is dropped down and opened by technical means, safety workers should provide the people inside with the necessary assistance.
 - d) Notify the nearest Civil Defense center in anticipation of any risks.
 - e) After the elevator door is opened, people inside is rescued and provided with the necessary assists until their natural state of wealth is restored.
 - f) The malfunctioning elevator shall be closed until it is fixed and repaired by the contract maintenance company. In addition, a report regarding this is submitted.
 - g) All Civil Defense safety requirements and instructions in such mechanical devices must be implemented.



- h) Fire elevator: one of the elevator will be selected and equipped with the necessary means and tools to be used by firefighters in emergency. It operates by primary and secondary source of power supplies to be able to use the elevator for operations such as (firefighting, rescuing, and evacuation) in the upper floors.

17th Precaution Measures:

1. The distribution of furniture and moving objects in the rooms and halls should be organized in a way that enables easy movements or evacuation operations in emergency. Furniture quantities should be as per the needs of the hotels only.
2. Decorating and its accessories, cladding elements of walls and floor are made of hard to ignite materials, or are coated with materials that slow the ignition process.
3. Corridors and escape routes leading to the exits must be permanently clear of any obstacles.
4. Site management and safety personnel must provide the necessary assistance to persons with disabilities.
5. Safety personnel must monitor implementation of safety requirements, record any violations, and notify responsible persons to take necessary action.
6. Building sanitary must be maintained in the building. Waste and garbage should be placed in designated containers and disposed of permanently.
7. Guests shall be warned against smoking at night as this might cause fire accident. Warning signs regarding this matter must be place inside guests' rooms.
8. Safety instructions signs must be place in rooms and halls. This includes the steps must be taken by the guests during risks or fire accident inside and outside rooms as follows:
 - a. In the event of a fire inside the guest room:
 1. Keep calm.
 2. Notify the reception and room services in the floor.



3. If the fire is small, be careful when using a fire extinguisher.
 4. Leave your room and lock the door with key.
 5. Immediately move to the ground floor using the stairs.
- b. In the event of a fire outside the guest room, when hearing the alarm bell or being warned by the hotel staff:
1. Keep calm.
 2. Leave your room quietly after closing the window.
 3. Lock the door with using the key.
 4. Immediately move to the nearest assembly point and following the instruction signs placed on the corridors and halls using the stairs but not the elevator.
 5. If the halls and stairs are filled with dense smoke and gas in a way that prevents breathing and vision, stay in your room and try to cool the door with water. Hurry to the window to be seen and rescued by the fire brigade.
 6. The hotel management must place signs on every floor and arrows indicate escape routes and exits must be taken in emergency to reach the assembly points.

