

Health Requirements and standards Guideline for Collective housing for Individuals

Public Health Authority – Executive Department of Occupational Health and safety

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Guideline principles

- This guideline will present the health requirements for all types of group housing for individuals; whether inside or outside the building, there will be important information for companies and individuals on how to assess the housing quality.
- There are references to sources similar to this guideline to benefit from the design and management of workers' accommodation.
- The goal is to help all types of collective housing become healthy, safe, and free from diseases.

1-Health Housing

Refers to any housing program following health conditions approved by governmental authorities responsible for supervising or inspecting the collective housing, owner or renter, or financed by or assisted by the owner.

2-Workers' housing

It is an individual or group housing program established to accommodate workers. Collective housing for individuals should meet requirements inside and outside facilities to ensure healthy individuals.

3-Housing evaluation

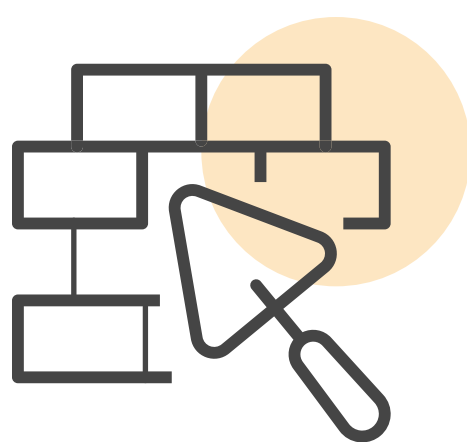
- The building must meet the requirements and conditions of the Saudi building code in the case of building collective housing for individuals.
- The condition of the Ministry of Municipal and Rural Affairs and housing must be met with obtaining the required licenses for worker's accommodation.



Assessing impacts of worker's accommodation on communities

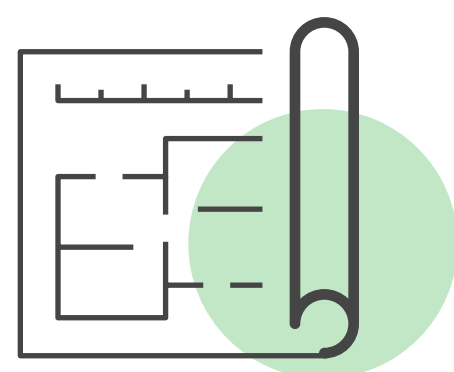
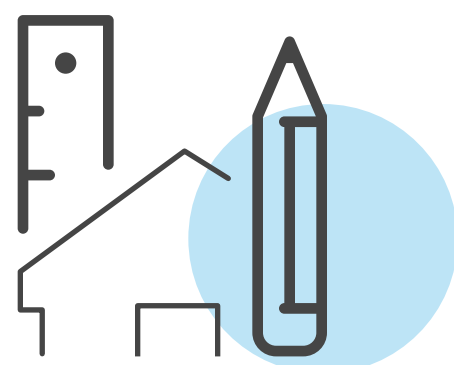
- When the need for employment accommodation is identified, it is essential to consider how this might affect the surrounding community.
- The effects on the community might be related to the stages of construction or during the operation.
- Risks related to workers' accommodation should be identified and evaluated as part of an environmental and social impact assessment. This evaluation can be used to determine the workers' and community facilities' mitigation.

1. Specific impacts during the construction phase



- The effects of the construction of these housing units should be specified, including health and safety, inconveniences caused by the construction process, congestion, dust, noise, vibration, and pollution, and the consequences of acquiring these sites.

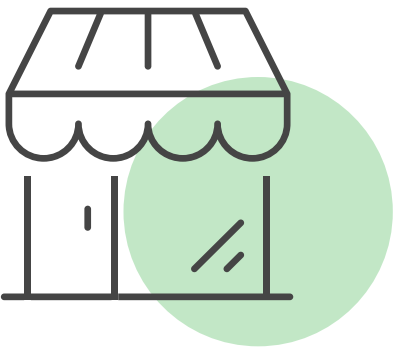
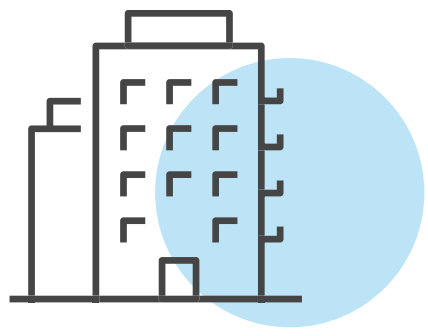
2. Communities infrastructure



- The increased number of workers and their accommodation in a community may strain the existing infrastructure of water, sewage, and electricity systems.
- The effects of workers' accommodation should be avoided, mitigated, and incorporated into the evaluation of the project.
- When constructing and allocating housing for workers near local communities, it is crucial to have an adequate transportation system to preserve workers' right to freedom of movement and not disturb the surrounding community.
- It may be appropriate to reduce workers' movement sometimes. Any restrictions must be justified, such as avoiding disturbance to local communities and transportation infrastructure and providing the highest levels of safety and security for all workers.
- The need to strike a balance protects workers' rights while minimizing community disruption.



3. Community services and facilities



- Depending on the size of the workers' housing and their social status (whether their families accompany them or not), the level of services provided should be assessed, including local medical, social, educational, and recreational services and facilities, which might be at the expense of the local communities.
- Increasing demands for services and facilities should be met in local communities, or services should be ensured in workers' sites.

4. Local businesses and local employers



- Local businesses such as shops, restaurants, or cafes are more likely to benefit from their proximity to housing sites due to increased demand, which might revitalize commercial operations.
- There may also be negative issues that need to be identified. However, there may be, assessed and managed, such as local price increases or security defects.

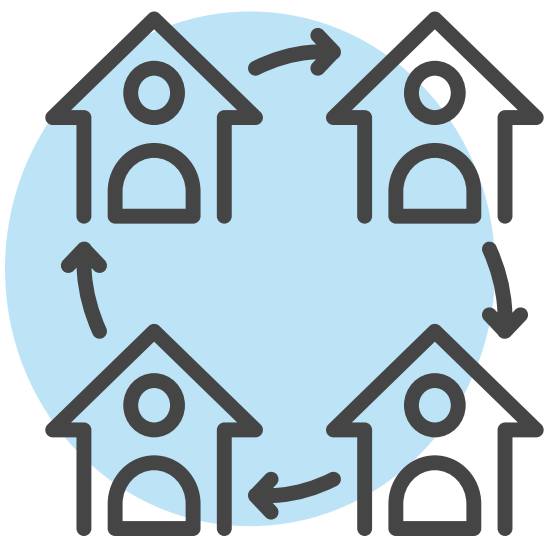
5. Community health and safety



- Having a large number of workers can increase the spread of infectious diseases.
- The negative consequences of workers' presence and accommodation in communities might increase traffic, road accidents, dust, and noise.



6. Community cohesion



- The impact of having a workforce of different nationalities and lifestyles should be evaluated. Different cultural backgrounds have on the host society and its harmony and management of that influence, especially religious and cultural taboos, local traditions, societal structuring, and the relationship between men and women.

7. Dismantling and reinstatement



- The dismantling and resume of workers' accommodation should be considered after completing the project for which the workers are located to avoid any unnecessary permanent effect on the workers' housing.
- The facilities can be handed over after completing the project to local communities to benefit from it if possible.



Types of workers' accommodation



- There is a large and diverse group of workers' accommodation facilities which can be classified in several ways.
- The main criteria for categorizing a workers' accommodation are whether the facilities are temporary or permanent, their location, their size, or their economic sector (agriculture, mining, oil and gas, construction, and manufacturing)



- Another criterion for classifying workers' accommodation is categorized based on the phase of the project. For example, temporary construction camps (often includes a large number of resident workers) or permanent (often have workers and their families)
- Depending on the project, special consideration should be given to whether the housing is for single individuals or workers with families.



- As a general rule, the more permanent the housing, the more significant consideration should enable workers to live with their families.
- The presence of workers' families will undoubtedly affect the housing facilities and their subsequent services and management.
- Providing family housing for workers should consist of bedrooms, health facilities, and a kitchen with an appropriate level of privacy, allowing families to have a normal family household.
- Providing daycares, schools, clinics, and recreational facilities for children or ensuring that these services are readily available in the surrounding communities with high levels of quality.



Standards and legislation issues by relevant legislature governmental entities

- The primary national standards that must be considered are those in the adopted legislation and regulations. Although there is usually no legislation that generally covers all existing collective housing, this section might help protect most.

These criteria include the following.



1. General health, safety, and security

Requirements on health and safety are often an essential part of building standards and might include provisions on occupational density, minimal air volumes, ventilation, the quality of floors (slip-resistant), or security against intrusion.



2. Fire safety

Requirements in fire safety are standard and are likely to apply to housing facilities of any type. This can include provisions on fire extinguishers, fire alarms, the number and size of staircases and emergency exits, and restrictions on the use of certain building materials.

The height of each degree of which ladders are laid is 15 cm, and each step of the ladder should be at least 10 x 200 cm.



3. Electricity, plumbing, water, and sanitation

National design and construction standards often include detailed provisions on electricity or plumbing fixtures/fittings and water and sanitation connection/equipment.

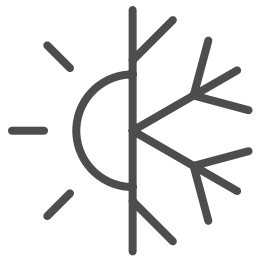


General health and safety requirements for collective housing for individuals

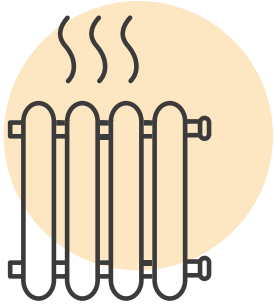
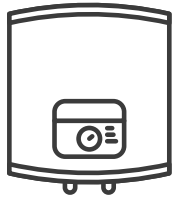
◇ location

- Presence of door banner showing the facility's name, contact number of supervisors, capacity limit, and if the property is fully leased to a single facility.
- Presence of a license indicating the name of the property owner and the contact number of the supervisors if the property is leased to several tenants.
- Maintaining good standards in living facilities and surrounding facilities is vital to avoid safety risks and protect workers from diseases resulting from humidity, stagnant water or water shortage, cold weather, fungi, insects, or rodents, and maintain good practices for those who live in those facilities.
- It is crucial to consider the locations of the residential facilities to avoid exposure to wind, fires and floods, and other natural hazards.
- Avoid nature reserves, agricultural areas, etc., for no less than 1000 meters.
- Transportation from residential facilities to worksites must be safe and free.
- Residential facilities for workers must be built with a floor height of (20 cm) or more to protect against flooding, matching the Saudi Building Code and following standards and requirements. Moreover, the floors should always be kept in excellent and clean condition.

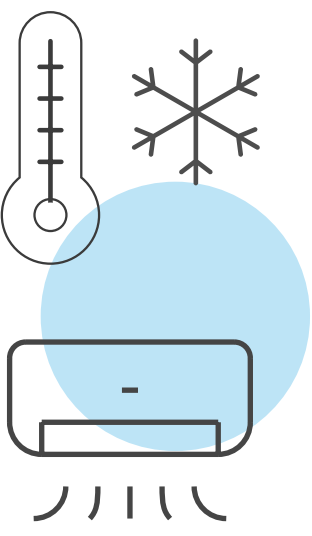




◇ Heating

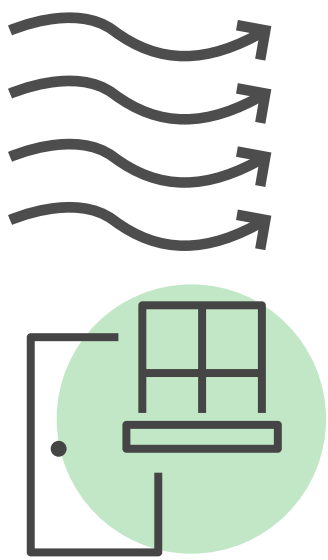


The employer should provide safe heating methods for resident workers within the housing without assigning additional expenses. Also, heating methods should be secure and inflammable and considered appropriate for the room space and the number of workers it is used for. Moreover, consider heating methods that depend on separate energy sources, such as spatial heating and air conditioners, and avoid using heating methods that rely directly on electric outlets, gas, or electric kerosene.



◇ Cooling

The employer must provide safe cooling methods, and it must be safe from transferring microbes and dust and should contain additional filters to purify the air. The cooling temperature should not exceed 22 degrees and not more than 24 degrees.



◇ Ventilation

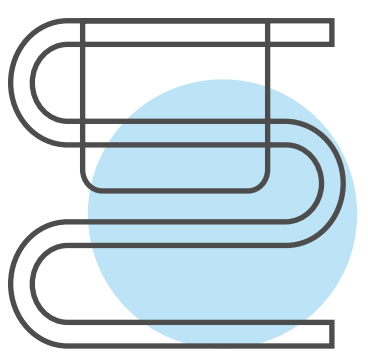
Industrial ventilation methods, such as exhaust fans, are used to renew the air continuously or use air-conditioning devices. Good ventilation in workers' housing works to withdraw carbon dioxide and water. It creates a refreshing atmosphere. In addition, good ventilation helps with not allowing fungi and the rest of the microbes to grow in these housings quickly. In general, crowded and narrow spaces increase the microbial load in the air. Therefore, you must provide good ventilation and replace corrupt indoor air with enough windows and doors to allow airflow. It must also be ensured that there is no moisture or mold inside these dwellings.





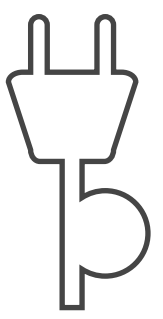
◇ **Lightning**

It should be considered that the lighting should be as natural as possible, and lights should be fixed and not in contact with any materials stored on a high shelf, and the lights outlets such as switches, sockets, and plugs are not exposed and kept well. Also, the owner should provide a backup electrical energy source to continuously illuminate the exit signals and escape routes, the type that operates automatically when the main power supply is cut off.



◇ **Electrical Wiring**

The necessary ground for all devices, fixtures, and electrical circuits by the approved technical specifications, considering the installation of all electrical wiring, installations, and equipment by a specialized technical authority, and not allowing the workers to work with them inside. The business owner must ensure that all electrical installations are inside the walls and not visible, whether inside or outside the property, that the electrical connections and sockets inside the housing are safe, and that the electrical ceilings are on top. Thus, all electrical installations, fittings, and services are isolated and protected against damage or high current. The equipment and electrical appliances such as heaters, cooking stoves, furnaces, refrigerators, air conditioners, and others are also safe as the provision of connections. It should also be ensured to provide appropriate and secure voltage breakers against the dangers of the electrical seam for all sections and fittings, as well as a general cutter installation allows for the disconnection in case it is necessary to be installed in a safe place inside and close to the exit and can be easily accessible in emergencies.



◇ **Window Sieves**

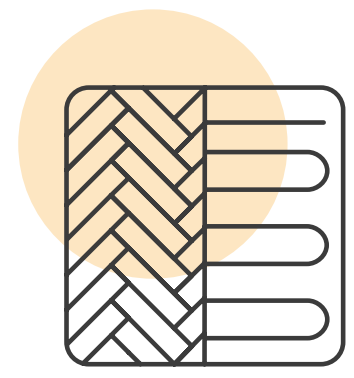
Mesh screens must be provided on the windows of the residential unit and all its facilities, as such screens prevent insects and stray animals such as birds, bees, and others from causing pests and other pollutants.





◇ **Raw materials**

Raw materials or work-related material storage is prohibited in residential areas, and an independent warehouse should be provided to store materials related to worksites. Only needed necessities such as sheets, bedding, and food should be stored in residential areas.



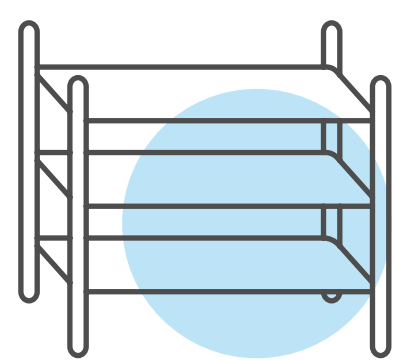
◇ **Flooring**

The residential unit floor should have flat surfaces, and it should be free from cracks and pits that appear in the layer below the floor. Floors should be paved, and installing an appropriate draining system is required.



◇ **Gas**

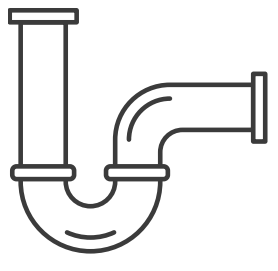
The gas cylinders should be securely stored in case of use so that they are not directly vulnerable to sunlight or heat sources, and a knowledgeable specialized technician should carry out continuous maintenance. If there are gas tanks inside the housing, the approved and pre-installed option must be taken. Moreover, the gas tanks must be securely outside residential areas and not under the building infrastructure. Saudi Civil Defense must approve the location of tanks or cylinders.



◇ **Shoe cabinets and shelves**

The employer shall provide shoe storage or shelves in the corridors on each floor in a sufficient number and proportion to the number of workers residing in the accommodation, as it must Maintain cleanliness and general arrangement inside the housing to preserve the health of workers.

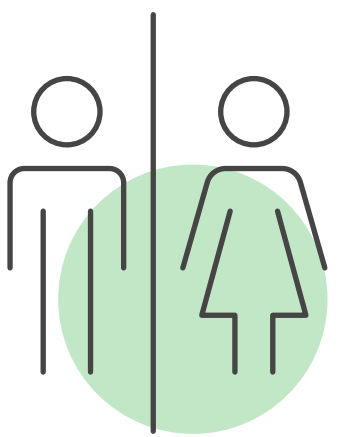




◇ Water Drainage and Waste



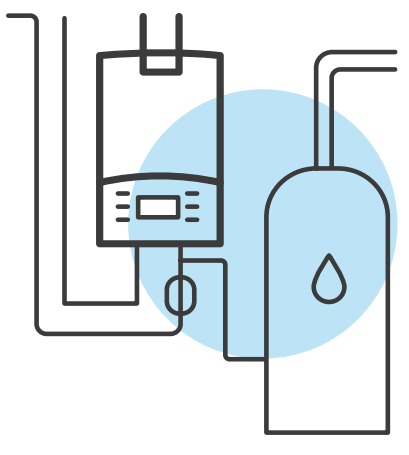
- Each floor of the housing unit should be provided with containers for waste. At least, with a volume of 3 liters/worker, emptied daily.
- There should be proper drainage and disposal of liquid waste, including sewage.
- Sanitary waste, solid waste, and food waste should comply with relevant national standards, legislation, and international standards and be appropriately designed to prevent environmental pollution, ensure cleanliness, and avoid infections and diseases, flies, rodents, and other pest vectors, water, and food waste.
- There shall be sealed containers with certain specifications for collecting and emptying the garbage regularly and providing a sufficient number of garbage containers that are leak-proof, non-absorbent, resistant to rust, corrosion, and pests, and protected from insects.
- Locate garbage containers 30 meters away from the building on a wooden, metal, or concrete holder. These bins must also be emptied at regular intervals.
- Foul odors associated with the decomposition of organic matter should be inspected by pest control and disinfected immediately.



◇ Privacy

The business owner must provide the necessary privacy for workers in this housing, where female workers' accommodation must be separated from the housing of male workers.

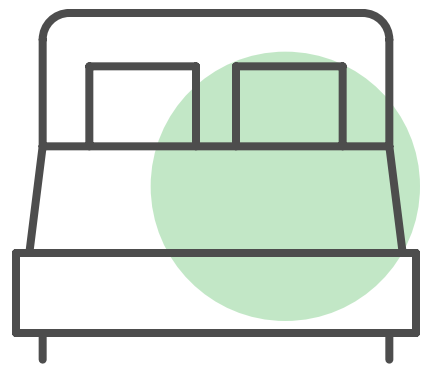
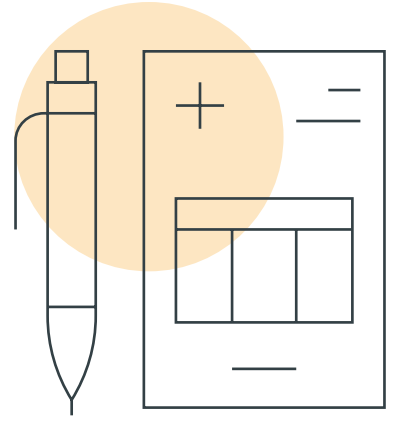




◇ Drinking-Water and Daily use

- It is necessary to pay attention to the quality and quantity of water to prevent dehydration and poisoning.
- Workers should always have easy access to a source of clean water.
- According to the World Health Organization, it should be ensured that water meets the individual's basic needs, with approximately 50 to 100 liters per person per day, so that workers can reach the total quantity.
- An adequate drinking water supply should be provided in workers' accommodation free of charge.
- Drinking water should meet national drinking water standards and WHO standards, and the quality of drinking water should be monitored regularly.
- Water should be suitable for human consumption and conform to the Saudi Standard Specification No. 701/2000 for drinking water.
- Depending on the local situation, water can be saved through potable water distribution facilities or by using existing municipal facilities (the groundwater distribution network) if it is of sufficient quality.
- All tanks used for storing potable water should be built and covered to prevent contamination of the water stored in them, are not subject to rusting or interacting, and are closed tightly on a stretchable wall.
- from it or to it. • Underground and overhead tanks should be cleaned and disinfected at least once.
- Conduct a laboratory analysis of the water at least once a year. To ensure its safety for human use, a record shows the water analysis results from accredited laboratories.

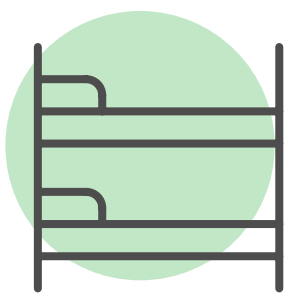




◇ Standards and requirements for rooms and sleep areas

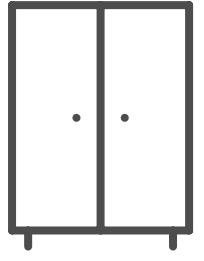
- Standards of rooms and dormitories are essential to ensuring workers' comfort in their housing, directly affecting workers' productivity and reducing work accidents caused by fatigue and lack of concentration.
- Rooms and dormitories should be kept clean, in good condition, and under constant maintenance.
- Noise exposure should be limited and maintained to a maximum rate of 20-25 dB in sleeping areas.
- The design and equipment of the rooms and shared sleeping places should consider the respect for workers' privacy.
- Rooms should not be crowded, and it is preferable to avoid shared bedrooms and large numbers in bedrooms as much as possible and prefer single or double rooms.
- Rooms and common sleeping areas are frequently and regularly ventilated and cleaned.
- The rooms and shared sleeping areas must be built with floor materials that can be cleaned easily.
- Health facilities are located within the same residential buildings for workers and are provided separately for men and women.
- The minimum internal dimensions of the sleeping area should not be less than 198 cm x 80 cm.
- The ceiling height of the bedrooms should be 3 meters, without decoration, nor less than 2.2 meters with decoration.
- All doors and windows should be lockable, with windows equipped with barriers to protect from insects when opened.
- Allocate an area of 4 square meters for each worker in the rooms and sleeping places.
- There should be movable partitions or blinds to ensure privacy.
- Each resident is provided with suitable furniture such as a table, chair, mirror, and bedside light.
- Separate sleeping areas are provided for men and women, except for family accommodations.
- The room should contain a suitable bed and wardrobe for each worker.
- If housing is shared and on an average level of social distancing, One room should not accommodate more than 12 workers in it.
- Ensure that workers do not cook inside the rooms and that there are no gas cylinders inside the bedrooms.
- Ensure that there are no food leftovers inside the room.
- Providing mesh screens on the windows of the rooms.
- The room should be free of insects and animals, such as cockroaches, mice, and bedbugs inside the mattress.





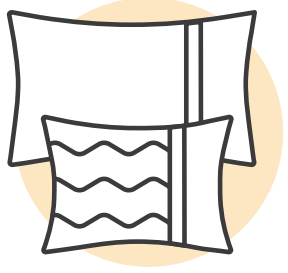
Beds and storage facilities

- Providing a sufficient number of beds of an appropriate size is necessary to supply workers with Decent, safe, and healthy conditions for rest and sleep, with respect for privacy.



- A separate bed is provided for each worker.

- The distance between the end of the bed and the other side of the adjacent bed shall not be less than 80 cm.



- It is not recommended to use bunk beds for fire safety reasons. It is also advised to reduce its use as much as possible, and when using it, there must be sufficient space between the lower bed and the upper bed, not less than a meter.

- Three bunk beds are prohibited in all circumstances.

- Each worker is provided with a comfortable mattress, pillow, cover, and clean bedding.

- Bed linen is washed and sterilized with disinfectants regularly and frequently.

- Places are provided to store the personal belongings of the workers. • Standards vary to provide an individual locker for each year to provide a large storage capacity of 475-liter rack units with a width of 1 meter per worker.

- Separate lockers for shoes and personal protective equipment may be required and places for drying and ventilation according to conditions.



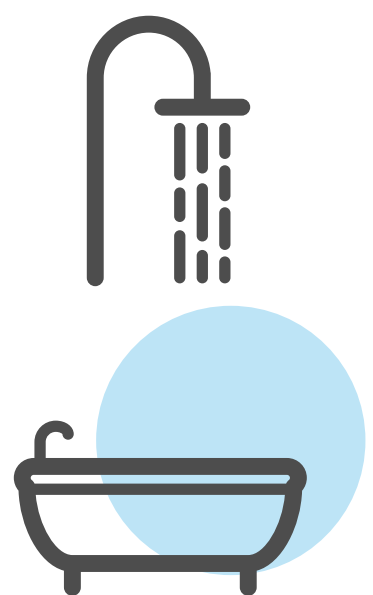
Standards and requirements for bathrooms and sanitary facilities

- It is necessary to allow workers to maintain a good standard of personal hygiene; this is also necessary to prevent pollution and the spread of diseases that result from inadequate health facilities.

- Bathrooms and sanitary facilities should always include toilets, washbasins, and shower areas.

- Toilets and sanitary facilities should be constructed from materials that can be cleaned easily.

- Cleaning and sterilizing the residential units and facilities.



◇ W.C and Toilets



- The toilet must be completely isolated from the other sections of the living areas and is no less than 1.5 square meters.
- an Adequate number of toilets is provided in workers' accommodations So that the proportion of toilets for residents is not less than one toilet for every five people, with a flushing box (siphon) for each bathroom separately.
- The toilets should be in an appropriate and easily accessible place so that the distance is from 30 to 60 meters from the rooms and the communal sleeping places for individuals.
- The room should be in an accessible location without an individual's view through any bedroom to prevent disturbance.
- All toilets should be well lit, have external windows, have adequate washbasins, be in a suitable location, and have a high level of ventilation.
- Toilets and other sanitary facilities should be in the same building as the rooms and dormitories.
- There should be basins for washing hands and places for bathing side by side with the rooms and the familiar sleeping places. one shower room is not less than 80 x 120 cm, and it shall be provided with a faucet, a shower, a sink, and a bathtub.
- These facilities should be kept in good condition and cleaned regularly.
- Adequate space should be provided to hang, dry, and ventilate clothes. • Adequate lighting, ventilation, and the soap should be provided.
- The floors of showers and toilets should be made of solid, washable, anti-slip, and moisture-resistant materials, and there should be drainage systems.
- Hand-washing facilities should consist of a faucet, basin, soap, and sanitary means for drying hands, and should be available in sufficient numbers so that there is a handwashing station for every five persons.
- a Sufficient number of bathroom facilities are provided so that there is a place for showering and a basin for washing hands, one for every five people.
- The location of the toilets should be separate from the dining areas, and awareness posters should be placed in the bathrooms and kitchens on the correct way of washing hands.
- Toilets and showers are in a convenient and easily accessible location.
- The showers and handwashing stations are provided with adequate supplies from hot and cold running water.



◇ **Standards and requirements for dining halls, cooking facilities, and laundry facilities**



- Good hygiene standards in the kitchen, dining halls, and cooking facilities are fundamental, and adequate facilities and equipment must be provided for cooking and serving.

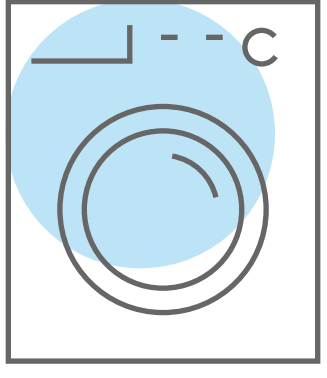


- When contracting with a caterer to manage the kitchens and the buffet,

Ensure that these contractors consider and implement the standards mentioned below and that adequate reporting and monitoring mechanisms are in place.

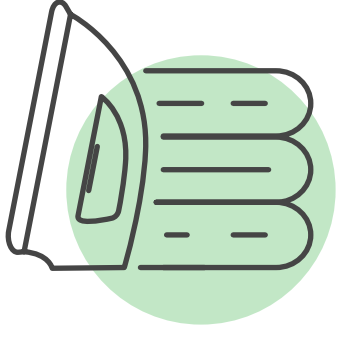
- When workers can cook their meals individually, they should be provided with a cooking area separate from the sleeping areas.
 - Cooking, dining, and laundry facilities should be clean and sanitary.
 - The dining hall should accommodate the residents by allocating 2 square meters for each worker, and the kitchen area should not be less than 1.5 * 1 meter.
 - Floors, ceilings, and walls of the kitchen, catering halls, and eating and washing areas must be made of materials that are easy to clean.
 - The kitchen floor should be tiled.
 - The kitchen walls should be smooth and capable of being cleaned.
 - When you provide workers with escorts that allow them to wash their clothes or cook properly individually, each worker must take responsibility for maintaining the facilities clean and sanitary.
- However, it is the responsibility of the superintendent and the housing manager to ensure that the standards are respected and that cleaning, disinfection, and pest control service is provided.
- When an employer provides housing for workers with their families, it is best to give them their kitchen and the necessary cooking equipment to allow the family to cook on their own.



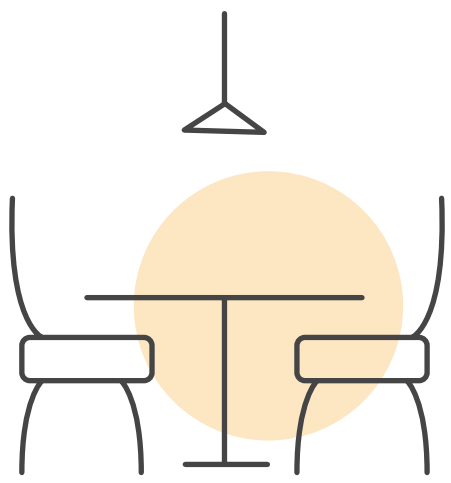


◇ Laundry facilities

- Prepare washing facilities for work and non-work clothes is necessary for personal hygiene, or the employer may provide free laundry service.



- Providing adequate facilities for washing and drying clothes, from basins supplied with hot and cold water, soap, and drying lines to automatic washers and dryers.
- When using clothes contaminated with dangerous substances, such as insecticides, there should be a special section in the laundry for these clothes, applying all precautionary measures.



◇ Cooking facilities, Buffet, and Dining Halls

- You have enough space for dining halls for each worker, not less than 2 meters Square.
- The buffet and dining halls should be adequately furnished with tables, chairs, individual drinking cups, plates, and drinking water coolers.
- Food preparation areas are designed to ensure good food hygiene practices, including protection from contamination between and during food preparation.
- Kitchens and dining halls shall be provided with facilities to maintain adequate personal hygiene, including many washbasins designated for cleaning hands with clean running water and soap.
- The distance between one table and another should be within one meter.
- The kitchen should be provided with (stainless) sinks for washing utensils.
- The surfaces of the walls adjacent to the cooking areas should be made of fire-resistant materials, and food preparation tables should also be equipped with smooth and washable surfaces.

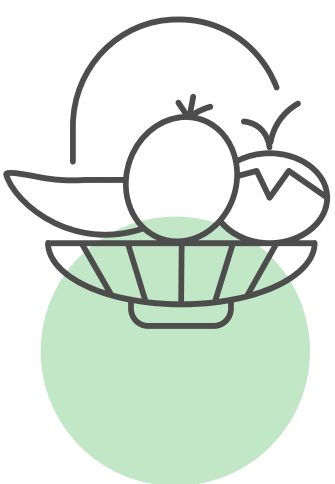
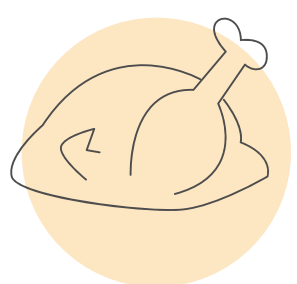


- To facilitate cleaning, it is better not to have kitchen stoves attached and close by the walls, that the seats and dining tables are not permanently fixed to the ground, and that all cupboards and other fixtures and ceilings have a smooth, solid, and washable surface.
- All floors, ceilings, and wall surfaces of the food preparation and cooking areas and the surrounding areas should be constructed using durable, non-absorbent, easy-to-clean, non-magnetic, anti-rust materials.
- The food preparation tables have a smooth, durable, easy-to-clean, and non-corrosive surface made of non-toxic materials.
- Provide adequate facilities for cleaning, sterilizing, and storing cooking utensils and equipment.
- Food and other wastes should be placed correctly in tightly closed containers and removed from the kitchen frequently to avoid accumulation and contamination resulting from the decomposition of waste materials, such as organic waste, through an appropriate sewage system.



◇ **Standards and requirements for nutrition and food safety**

- When cooking for several workers, hygiene and food safety is crucial.
- Providing safe food providing nutritious food is essential because It directly affects workers' productivity and well-being.
- Good nutrition for workers leads to gains in productivity and workers' morale, preventing accidents and premature deaths and lowering health care costs.
- Food provided to workers should contain an appropriate nutritional value level and consider religious and cultural backgrounds; options should be offered.
- Trained chefs should prepare food, and an experienced dietitian can meal plan.
- The staff of the central kitchens is required to have valid health certificates.
- apply the World Health Organization's five most essential food guidelines.

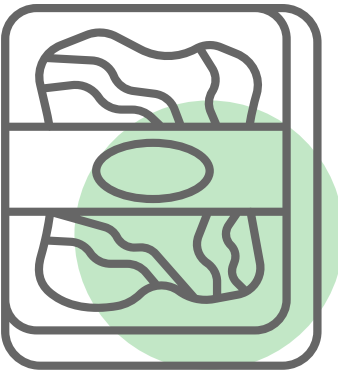


◇ Hygiene

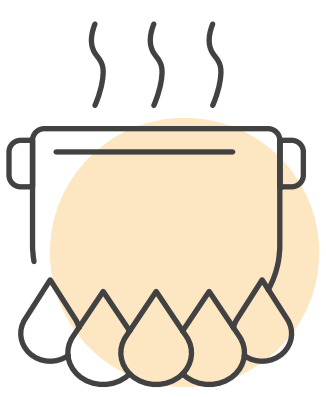


- The significance of washing hands before and after eating, as well as during food preparation, and educational posters on how to wash hands.
- While most microorganisms do not cause disease, there are serious microorganisms widely in soil, water, and animals and through humans, where hands carry these microorganisms, and through the fabrics and pots significantly cutting panels, and can be transferred to food.
- The importance of washing hands after going to the toilet.
- The necessity of washing and sterilizing all surfaces and equipment used in preparing food.
- Kitchen and food areas should be protected from insects, pests, and other animals. The windows of the kitchen and serving places should be closed with wire mesh with narrow openings to prevent the entry of rodents and insects.
- To prevent insects from entering the kitchen, the outside door (if there is one) should be equipped with a wire mesh with narrow openings and an air curtain

◇ The separation between Raw and Cooked foods



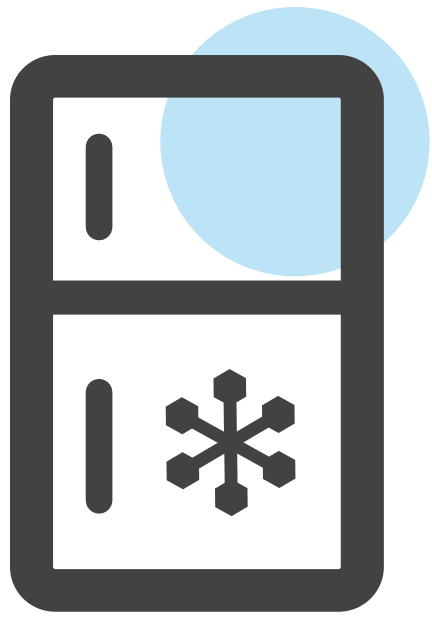
- Separate raw meat, poultry, and seafood from other foods. Natural foods, especially meat, poultry, and seafood, can contain microbes that may be transferred to other foods during food preparation and storage.
- Use different equipment and tools such as knives and cutters for handling raw foods.
- Ensure that food is stored in containers to avoid contact between raw and processed foods.



◇ Cooking

- Cook food well, especially meat, poultry, eggs, and seafood. Since proper cooking kills almost all dangerous microorganisms.
- Studies have shown that cooking the food listed at a temperature of 70 degrees Celsius can help ensure that they are safe to consume.
- Well-cooked food should be reheated.

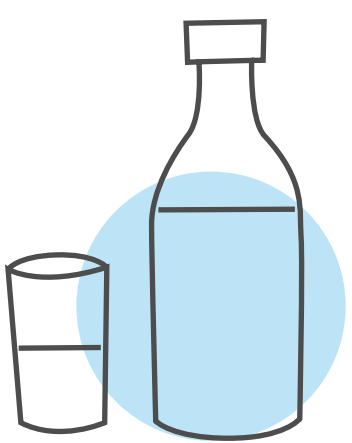




◇ Keeping food at safe temperatures

- Keep food at a safe temperature and do not leave cooked food at room temperature for more than two hours.
- Food at a temperature of fewer than 5 degrees Celsius or above 60 degrees Celsius, the growth of most microorganisms slows down or stops, and some dangerous microorganisms still grow below 5 degrees Celsius.
- The presence of proper refrigerators and refrigeration equipment to preserve foods
- Refrigerate all cooked and raw foods (<math><5^{\circ}\text{C}</math>).
- Keep cooked food containers and hot containers at more than - Do not store food for a long time, even in the refrigerator.
- Do not thaw frozen foods at average room temperature.

◇ Use water, fruits, vegetables and raw materials safely:

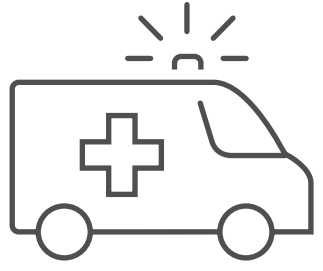


- Use drinkable water and ensure raw materials are healthy and safe.
- Carefully choose healthy raw materials and implement regular washing to ensure cleanliness.
- Choose fresh and healthy foods.
- Choose foods that are safely processed, such as pasteurized milk.
- Wash fruits and vegetables well, especially if eaten raw.
- Do not use food after its expiration day.





◇ **Medical services**



- Easy access to appropriate medical facilities is essential to maintain the health of workers and to provide the right first aid in cases of health emergencies.
- The availability of medical services in the workplace depends on the number of workers (especially if more than 200 workers live in the accommodation site).
- First aid should always be available on-site in all circumstances.
- Providing first aid kits and training for those first aides to save lives and prevent minor injuries from turning into serious ones.
- Other non-essential medical means, such as their availability in the housing, depends on the number of workers living on the site and the medical services provided in the surrounding communities and neighborhoods, and it is essential to ensure that workers have access to medical services such as dental and eye care.
- Several first aid kits should be provided and adequately stored.
- Training a sufficient number of employees in the housing or resident workers to provide first aid.
- Other medical services are provided in the housing (nursing rooms, dental care, Minor surgery, isolation rooms), where possible and dependent on existing medical infrastructures in the adjacent community.

◇ **Leisure, Social, and telecommunication services**



- Basic recreational and social facilities are essential to workers for rest and socializing during their spare time, and this is more necessary when the workers' residences are located in remote areas far from any communities.
- It is appropriate in all circumstances to provide social and recreational spaces on the site, which will increase the welfare of workers and reduce the impact of the presence of workers in the surrounding communities.
- It is also essential to provide workers in their accommodation with appropriate methods of communicating with the outside world, mainly when workers are residing remotely or where workers live off-site.
- It is necessary to provide social spaces or a group rest for workers in their homes, and the standards range from providing multi-purpose halls for workers to providing recreational facilities such as sports equipment, a swimming pool, educational facilities, and others.



Once the living facilities are built and operational, effective ongoing management of the live facilities is critical. This includes issues such as building maintenance, security, and consultation with residents and neighboring communities to ensure the long-term implementation of housing standards.

A- Management and staff

- There should be administrative plans and policies in health and safety (with response to emergencies), security, labor rights, and relationships with communities.
- to ensure that managers are competent and other workers are adequately skilled.
- Contractors must provide a service in the workplace that is within their responsibilities.

Clear contractual obligations, monitoring requirements, and the preparation of periodic reports depend on the size of the place, residence, and the number of guests; there will be a sufficient number of employees.

Assigning employees responsible for cleaning, cooking, and general maintenance.

- Training of staff in workers' housing on the basics in the field of health and safety.
- The staff responsible for the kitchen are trained in food safety and supervision.



B- Health and safety on site

- The entity responsible for managing workers' accommodation should be accountable for ensuring employees' physical well-being and safety. This includes ensuring that your staffing facilities are kept in good condition and that plans and standards are in place.

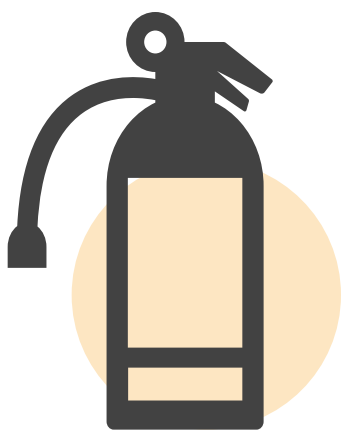
Appropriate health and safety have been prepared and implemented.

- Design health and safety management plans, including carefully applied electrical, mechanical, structural, and food safety.
- The person responsible for managing the place of residence has a specific duty to report to the health authorities about cases of outbreaks of any infectious diseases or food poisoning cases and other cases concerned with public health.
- Training a sufficient number of employees in the labor accommodation and workers from the labor force to provide first aid.
- A specific fire safety plan that includes periodic inspection of fire extinguishers and other equipment used for fire safety and virtual training of evacuation plans is prepared.
- There should be educational and awareness campaigns for the occupants of employment about the harmful effects of many practices and how to prevent them.
- Providing the workers with the necessary protection for any health symptoms (masks, hand sanitizer, soap).
- availability of health services and easy access to them when needed by workers from the workforce.
- Preparing emergency plans for health and safety, and depending on the local situation, additional contingency plans are prepared as needed to deal with specific events (earthquakes, floods, and hurricanes) According to the residence's location.
- Business continuity plans should be available in disasters, mass poisoning, or the spread of epidemics and others.



The National Committee of the Saudi building code and the General Directorate of Civil Defense paid much attention to preserving human safety and lives living in those buildings, and based on that principle, they provide housing requirements and issue licenses. The facility owner should familiarize himself with all the requirements issued by the Directorate. The General Civil Defense and the requirements issued by the Saudi building code related to fire protection. Among the most important of these requirements are, for example, the following:

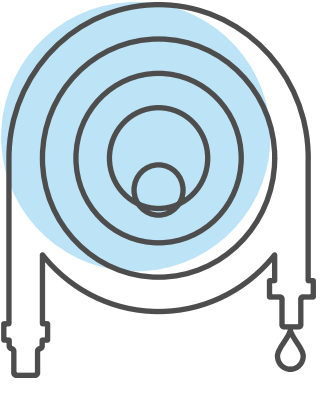
◇ Manual Fire Extinguisher



- The housing should be equipped so that the occupants can carry out the initial procedures to fight fire by using manual fire extinguishers with the knowledge of dealing with the types of manual fire extinguishers that must fit the kind of furniture and materials used in the facilities, with great emphasis on them. Conforming to the General Directorate of Civil Defense specifications and the Saudi Building Code.
- Extinguishers should be maintained so that they are usable permanently, and they should be checked according to the manufacturer's instructions and for no less than six months, tested, and re-packed with a specialist. The date of testing and filling is indicated on a label affixed to the body of each extinguisher.
- It should also be taken into account how to deal with the occurrence of risks appropriately to the area of the site, and the number of workers inside the housing, according to the following:
 - * A dry chemical powder extinguisher or carbon dioxide is allocated to each, taking into account the focus on providing these extinguishers in kitchens, near cooking stoves, stores, living areas, and gas cylinders.
 - *Distributing manual fire extinguishers throughout the housing according to the Civil Defense Standards and the Saudi Construction Code of Fire Protection with easily accessible locations. It is necessary with the presence of guiding plates showing Places of extinguishers reflective of light by modern international standards.



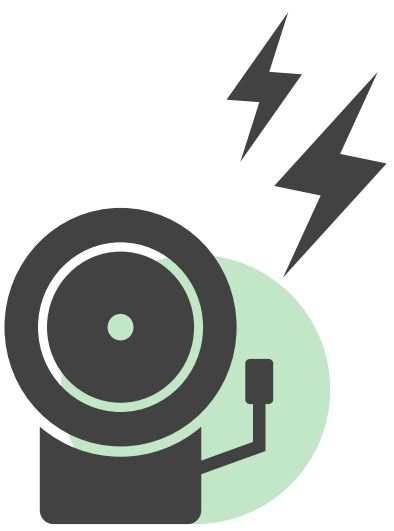
◇ Fire Hoses



- They are fixed fixtures permanently connected to the pressurized water supply and designed so that the workers inside the housing can carry out the process of primary firefighting through the hoses. Taking into account the following requirements:

- * To provide a safety valve by the approved standard specifications so that the reels and hoses are easy to use for operation and closing, and a multi-purpose metal ejector is installed at the end of the hose.
- * Hose reels are installed in the appropriate places on roads and corridors and near stairs to make them easily accessible and used when necessary and by the General Directorate of Civil Defense and Civil Defense and Saudi Fire Protection Agency standards.
- * Guidance boards that clearly show the hose reel fittings should also be placed, and instructions for its use.
- * These formulations should be tested periodically to check their suitability through tours with the experience of one of these rollers to ensure that it is working well and properly.

◇ Fire alarm systems



- Automatic fire extinguishing systems must be linked to the automatic alarm system and be under the supervision of the General Directorate of Civil Defense and developed systems, as they are authorized to determine the proper methods after reviewing the collective housing for individuals. Specialists and officials at the site and the nearest civil defense center

When an emergency occurs, indicate the following:

- * That all the automatic warning and extinguishing systems have been installed by the specialized technical authorities or companies after conducting the necessary technical studies to identify and match the appropriate types.
- * The system is tested by the site safety supervisor periodically and effectively, ensuring no apparent errors in the control panel.
- * The sound of the alarm bell is distinctive and has lighting in prominent places to enable watching the workers with hearing disabilities and the battery validity and making sure that it works in the event of a power outage.





◇ First aid box

- Ensure the availability of the first aid box in the housing unit in a clear and known place to all residents of the housing unit.
- The kit is open and not closed, and the business owner may close the equipment with a lock or key and provide the key to the housing supervisor in this case.

The following materials must be in the first aid kit:

- * Burn ointment, bandages, Vaseline, wound gauze of various sizes, medical gauze, medical cotton, medical wrap, hydrogen, adhesive tape, medical gloves, and other basic first aid kits.
- * The presence of first aid beds or clinics within the facilities with equipped amenities following the committee.



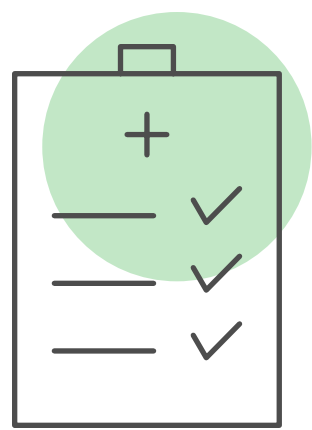
◇ Emergency plan

The business owner must install an emergency plan at the entrance to each floor. Emergency exits are illustrated when determining the method to be precise.

Accurate building planning, including emergency exits, ambulance entrances, water hoses, and fire extenuations, will be updated whenever restoration or change happens, and it must be to the Directorate General of Civil Defense requirements. In addition, each floor must be provided with guiding boards, arrows, luminous explanatory boards, and acoustic and luminous alarm devices, making sure that this plan has been prepared and in the simple language of the workers.



◇ Emergency Contacts and Evacuation plan



- The employer should install a plate in each housing unit with the emergency numbers.

The civil defense and the instructions for dealing with accidents are in the language of the housing users.



Make sure that this panel is hung at the entrance to each unit, with routes of escaping or evacuating from housing, according to the following directives:

- * The safe methods of escape used by workers who occupied the building with reaching a safe place at the appropriate speed in the event of a fire outbreak or exposure to any emergency dangers threatening the lives of people, such as stairs, corridors, and hallways, is one of the most critical methods of protection, as

These methods lead to safe indoor and outdoor gathering areas.

- * All emergency exits should contain dedicated doors, clear and unlocked doors (, the employer should provide two emergency directors for each two-way housing floors

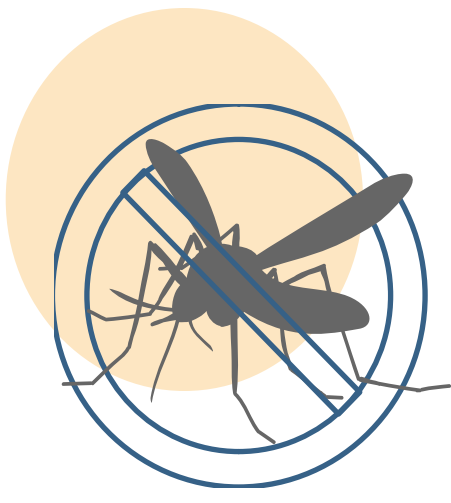
- * The doors of emergency exits should be easy to open from the inside, the exit ways are clear and planned, and the direction of opening these doors be to the outside based on the design of the building.

- * Easy access to the main staircases in the residence so that the evacuation plan can be implemented at the required speed. These stairs must be provided with the necessary handrails and barriers for the safety of their users. Usually, an external emergency staircase connects it to emergency exits on each floor inside the residence.

- * Putting signs for exits and survival methods of corridors, ladders to feed on the primary source of electricity, as well as a double-saving power source (emergency lighting), in case of a power outage, taking into account the automatic emergency lighting system Operation immediately after the main power cut to ensure that these places continue to be lit under all conditions.



Preventing mosquitoes



• As it is known, some types of mosquitoes live in populated areas, and they can be a source of some diseases that threaten public health. Among those diseases is dengue fever, which is found in the west and south of the kingdom, especially in Jeddah, Mecca And Jazan.

- The densely populated is a fertile environment for mosquitos to inhabit.
- the female *Aedes aegypti* bites humans to get food from human blood, from which she transmits viruses if it is infected.
- *Aedes aegypti* is known to lay its eggs in damp and dark places.
- neglected containers, tanks, planting beds, and flowers are the largest source the mosquito lays its eggs.

Therefore, the housing owner should take the following preventive measures into account:

- Ensure that water is connected to the national water network throughout the housing to prevent residents from storing water in barrels, containers, or open tanks.
- Ensure that all underground and upper tanks are tightly closed and do not leave room for mosquitoes to enter them.
- Ensure that all gaps are closed with covers used for storing water or in containers or tanks that contain water.
- Dispose of all waste and neglected containers continuously and prevent their accumulation in the places close to the workers' accommodation.
- Change, remove or recycle unnecessary containers that provide a breeding environment for mosquitoes.
- Frequent empty and clean containers that cannot be disposed of, such as water storage containers, vases, water coolers, etc.
- Making sure that the living swimming pools are not stagnant and working on cleaning the water continuously.
- Ensure that the containers are covered with a cover that prevents mosquitoes from accessing the water.
- Backfill all places where pools of water are observed, especially after rain.
- Use protective nets in windows and ensure their safety and maintenance periodically.
- Recycle and dispose of daily waste and trash and communicate with the secretariats if there was an accumulation of residence.
- Ensure that the residential buildings are designed for the workers to reduce the availability of breeding potential.



Checklist for evaluating the standards and requirements for collective housing for individuals

General regulatory framework

	Yes	No	Not applicable	Comments
Have international and domestic regulatory frameworks and legislation been reviewed?				
Have the mandatory provisions for workers' housing been recognized?				

Assessment of the need for workers' accommodation

Availability of the workforce

Was there an assessment of the availability of manpower in the surrounding communities?				
Were local skills and competencies assessed, and do they match the project?				
Was there an assessment of the extent to which the local workforce could be trained to meet the project's needs?				

Availability of workers' accommodation

Was there a comprehensive assessment of the types of housing available for workers in neighboring communities before constructing new workers' housing?				
Was the impact of using existing buildings to house workers on local communities evaluated?				
Have the necessary measures been studied and determined to mitigate the negative effects of workers' housing on real estate and the local housing market?				



Assessing the impacts of workers' accommodation on communities

	Yes	No	Not applicable	Comments
Has a community impact assessment been undertaken as part of the environmental and social assessment of the public project to mitigate the negative impacts of workers' housing on surrounding communities and enhance its positive points?				
Did the assessment include potential impacts on health and safety, land tenure outcomes, and the settlement of foreign residents during the construction phase of workers' housing?				
Were the effects of workers' housing on community infrastructure, services, and facilities included in the assessment?				
Has the impact of workers' housing on jobs and businesses in the local community been evaluated?				
Were the assessment's general effects of worker housing on community health (particularly increased risks of road accidents and communicable diseases) and social cohesion included?				
Does the assessment include appropriate mitigation measures to address any identified adverse impacts of the presence of workers' housing?				



Types of workers' housing

	Yes	No	Not applicable	Comments
Has the provision of housing for the families of the workers been considered?				
As part of the workers' housing for their families, were there independent bedrooms, sanitary facilities, and kitchens?				
Were there sufficient nursery and school facilities available close to the housing of the workers' families?				
Is there special attention to providing adequate safety for children in family worker's housing?				

standards for collective housing for individuals

local/national standards

Has national legislation been identified and implemented for workers' housing?				
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General living facilities

Was the location of the worker's housing facilities chosen to avoid flooding or other natural hazards?				
Are the workers housing facilities located a reasonable distance from the work site?				
Is transportation from the residence to the workplace available and free?				
Are the workers housing facilities built using appropriate materials? Are they in good condition, maintained and kept clean, and free of litter and other waste?				



Drainage

	Yes	No	Not applicable	Comments
Is there sufficient drainage for the worker's housing?				

Heating, cooling, ventilation, and lighting

Depending on the weather, are workers housing facilities provided with heating, ventilation, air conditioning, and lighting systems, including emergency lighting?				
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drinking water

Do workers have easy access to a clean and adequate supply of potable water in the worker's housing?				
Does the water quality comply with local, national requirements, or WHO standards?				
Are the tanks used to store drinking water of high quality and covered to prevent contamination of the water stored in them?				
Is the quality of drinking water regularly monitored?				

Sewage and waste

Is sewage, food waste, and any other waste adequately discharged per local or World Bank standards without causing any significant impacts on the residential area occupants, the environment, or surrounding communities?				
There are specific garbage collection containers provided and emptied regularly?				
Are pests and vectors controlled and disinfected throughout the housing?				



Standards and requirements for rooms and dormitories

	Yes	No	Not applicable	Comments
Do the rooms and sleeping quarters appear to be in good condition?				
Do the rooms and sleeping areas receive regular ventilation and cleaning?				
Does the window area represent 5 to 10 percent of the floor area of the place?				
Are the rooms and sleeping quarters built with easy-to-clean flooring materials?				
Are the rooms, sleeping quarters, and sanitary facilities located in the same buildings?				
Is sufficient space provided for residents (at least 4 square meters per worker)?				
Is the ceiling height high enough (at least 3m)?				
Was the number of workers sharing the same room or sleeping area reduced (maximum 6 workers per room)?				
Does the building have lockable doors and windows, and do they have mosquito and insect screens when necessary?				
Are partitions or moving blinds provided?				
Is adequate furniture such as a table, chair, mirror, and bedside lighting provided for each worker?				
Are separate sleeping areas provided for men and women?				



Bed arrangements and storage facilities

	Yes	No	Not applicable	Comments
Is there a separate bed for each worker?				
Is there a minimum distance of 80 cm between beds?				
Has the use of bunk beds been reduced?				
Is there enough space between the lower and upper floors for the bed when using bunk beds?				
Is it forbidden to use triple bunk beds?				
Are comfortable mattresses, pillows, and bed linen provided for workers?				
Are bed linens washed frequently and adequately supplied with insect repellents and disinfectants (where conditions call for them)?				
Are adequate facilities provided for storing workers' personal belongings?				
Is there a separate store for work clothes, PPE, etc? Is there an area for drying and ventilation?				

Sanitary facilities and toilets

Are sanitary facilities and toilets constructed of materials that are easy to clean?				
Are sanitary facilities and toilets cleaned regularly and frequently and maintained in working condition?				
Are toilets, restrooms, and other sanitary facilities such as showers designed to provide workers with adequate privacy, including ceiling-to-floor partitions and lockable doors?				
Are there separate sanitary facilities and toilets for men and women?				



Toilets

	Yes	No	Not applicable	Comments
Are there enough toilets (at least one for every five workers)?				
Are restroom and toilet facilities conveniently located and easily accessible?				

Bathing places and other sanitary facilities

Is the shower floor made of rugged, non-slip materials that can be cleaned?				
Are there enough handwashing facilities, showers, and toilets (at least one for every five workers)				
Are health facilities located in an appropriate location?				
Are shower facilities with an adequate supply of hot and cold running water?				

The dining hall, cooking facilities, and laundry

Are the dining hall, cooking, and laundry facilities built with appropriate, easy-to-clean materials?				
Are the dining hall, cooking, and laundry facilities always kept clean and sanitary?				
If workers cook their meals, is the kitchen space provided separately from the sleeping areas?				

Laundry facilities

Are adequate facilities for washing and drying clothes provided?				
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Cooking facilities, buffet, and dining hall

	Yes	No	Not applicable	Comments
Is sufficient space provided for workers in the dining hall (no less than 2 square meters per worker)?				
Are the dining and buffet rooms adequately furnished?				
Are the kitchens equipped with the materials necessary to maintain adequate personal hygiene?				
Are the food preparation areas well-ventilated and equipped?				
Are the floor, ceiling, and wall surfaces adjacent to the kitchen, food preparation, and cooking areas constructed of non-absorbent, durable, non-toxic, and easy-to-clean materials?				
Do the walls of the cooking areas and the food preparation tables have smooth, durable, non-corrosive, non-toxic, and washable surfaces?				
Are the materials needed for cleaning, sterilizing, and storing kitchen utensils and equipment available and sufficient?				
Is there a suitable container for depositing food waste and other waste? Is garbage taken out of the kitchen regularly and frequently to avoid accumulation?				



Nutrition standards and requirements and food safety

	Yes	No	Not applicable	Comments
Is there a special health process such as the WHO's "Five to Safer Food" recommendations concerning food safety?				
Does the food service contain good nutritional value?				
Does the food service take into account the religious/cultural backgrounds of the workers?				

Health services and facilities

Is the first aid kit available and in sufficient numbers?				
Is there enough staff in the housing or trained workers to provide first aid?				
Are there any other medical facilities or services available on site? If not, then why?				

Entertainment facilities, social services, and telecommunication services

Are the places of social gatherings and recreational areas available?				
Are there places designated for workers to practice religious rites?				
Can workers have access to a public phone at an affordable price?				
Are workers provided with access to internet facilities?				



Workers Housing Management

Administration and housing workers

	Yes	No	Not applicable	Comments
Are there carefully designed worker housing management plans and policies in health and safety (including emergency responses), security, workers' rights, and relationships with communities?				
When hiring contractors, are their administrative duties and responsibilities and the duty to report the event of some accidents clarified?				
Does the person appointed to manage the housing have the necessary background, competence, and experience to carry out his task, and is the given sufficient responsibility and authority?				
Is there a sufficient number of staff in the accommodation to ensure proper implementation of housing standards (cleaning, cooking, and security in particular)?				
Are the staff in the housing department recruited from the surrounding communities?				
Do employees receive essential health and safety training?				
Are the people in charge of the kitchen specially trained in nutrition and food safety, and is there sufficient supervision and control over them?				



Housing and service fees

	Yes	No	Not applicable	Comments
Are rental arrangements fair and transparent for workers?				
Are workers provided with sufficient information about their housing and services payments?				
Are rental arrangements and housing regulations included in workers' employment contracts?				
Are food and other services free or affordable, not more than the local market price?				

Health and safety on site

Have health and safety management plans been designed and implemented, including electrical, structural, and food safety?				
Is it the duty of the residence director to inform the authorities and concerned authorities in the event of the occurrence of certain diseases, food poisoning cases, or injuries?				
Are there enough housing staff or guest workers trained to provide first aid?				
Has a specific and adequate fire safety management plan been designed and implemented?				
Are there guidelines about alcohol, drugs, and hazardous health-related activities provided to staff in housing and guest workers?				
Was the mosquito net provided when workers needed it?				
Do workers have easy access to medical facilities and medical staff?				
Have fire health and safety emergency plans been prepared?				
Are specific contingency plans (earthquakes, floods, hurricanes) prepared depending on the circumstances?				



Security on site

	Yes	No	Not applicable	Comments
Is there a security plan that includes clear measures to protect workers against theft and attack designed and implemented?				
Has a security plan been designed and implemented that includes clear provisions on the use of force and violence?				
Has the residence security personnel's history been checked for past crimes or abuses?				
Has security personnel of both sexes been considered at the site in anticipation of the possibility of male and female workers in the housing?				
Have security personnel received clear instructions about their duties and responsibilities?				
Our security personnel adequately trained in dealing with violence and force?				
Are body searches performed only in exceptional circumstances by specifically trained security personnel of either sex?				
Do security personnel understand the importance of respecting workers' rights and the rights of surrounding communities and adopting appropriate behavior accordingly?				
Do workers have specific means to raise concerns and complaints about security arrangements and personnel?				



Workers' rights and workers' housing legislation

	Yes	No	Not applicable	Comments
Are restrictions on the freedom of movement of workers limited and justified?				
Is there a system and means of transportation for workers suitable for the surrounding communities?				
Is the practice of seizing workers' identity papers prohibited?				
Is freedom of association respected?				
Are the religious, cultural, and social backgrounds of workers respected?				
Are workers informed of their rights and obligations and provided a copy of the housing facilities' internal rules, procedures, and sanction mechanisms in a language or media that they understand?				
Are housing regulations non-discriminatory, fair, and reasonable?				
Are regulations on alcohol, tobacco, and visitor entry into workers' housing clear and communicated to workers?				
Is the procedure fair and non-discriminatory for implementing disciplinary measures against workers, including the right of workers to defend themselves?				



Grievance mechanisms and counseling for employees

	Yes	No	Not applicable	Comments
Have mechanisms been designed and implemented to provide counseling to workers?				
Are workers provided with processes and mechanisms for expressing their grievances?				
Are workers subject to disciplinary action for their housing behavior subject to a fair and transparent hearing with the possibility of appealing the decision?				
Are there fair mechanisms for resolving disputes?				
Are there mechanisms to ensure full cooperation with the relevant security authorities in cases where serious crimes occur?				



	Yes	No	Not applicable	Comments
Have surrounding community relations management plans been designed and implemented that address issues related to community development, community needs, community health and safety, and social and cultural cohesion?				
Do the surrounding community relations management plans include establishing communication mechanisms to allow for an ongoing exchange of information and consultation with the surrounding communities?				
Is there an experienced manager responsible for implementing the community relations management plan?				
Is there an experienced manager responsible for liaising with surrounding communities?				
Are the impacts of worker housing regularly reviewed and then mitigated or improved?				
Were community representatives provided with easy means to express their opinions and file complaints?				
Is there a transparent and effective process for dealing with community grievances?				



There is a lot of information outlining detailing, which indicates detailed stages of the outlines

Guidelines and Regulations	Entity	Source link	Publishing date
The health, technical and safety conditions that must be met in collective housing for individuals	Ministry of Municipal Rural Affairs and Housing	Link	24/6/2020
List of safety requirements and protection methods to be provided in residential and administrative buildings	The General Director of Saudi Civil Defense	Link	16/3/1987
Preventative requirements for fire protection in residential buildings	The General Director of Saudi Civil Defense	Link	21/1/1986
Combating the novel COVID-19 virus in workers housing	Public Health Authority	Link	25/12/2020



References

- “Workers’ housing: processes and standards”
is a joint publication of the EBRD and IFC
- WHO Housing and health guidelines, ISBN 978-92-4-155037



وقاية

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PUBLIC HEALTH AUTHORITY

   SaudiCDC
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