MINIMUM REFITTING REQUIREMENTSRESERVE BUILDING TO COVID-19 TREATMENT CENTER

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In any locality, one or another reserve of free areas is always kept for their use in foreseen emergency situations.

Based on our practical experience, the existing building can be converted into a center for the treatment of patients with COVID-19 or severe acute respiratory infections (SARI);

- minimum rate of air exchange 60 liters per second per patient in wards with mild and moderate disease;
- the minimum rate of air exchange is 160 liters per second per patient in wards with a severe course of the disease or in intensive care units;
- air flow from clean areas to contaminated areas;
- clearly defined flow of patients and staff, keeping distance;
- the possibility of effective cleaning and disinfection of all furnishings, furniture and medical equipment using disinfectants suitable for the center.

Recommended characteristics when choosing finishes and furniture for the infectious diseases treatment center COVID-19 and SARI

Characteristic	***Selection recommendations***
Possibility easy cleaning	➢ Do not use objects with hard-to-clean surfaces ➢ for example, where cracks can form. ➢ Do not use carpets or carpets in patient care areas. ➢ Give preference to materials that can withstand repeated cleaning.
Simplicity service and repair	➢ Do not use materials that are prone to cracks, scratches or chips, but if they do, make appropriate repairs. ➢ Give preference to materials that are durable and easy to maintain.
Sustainability to growth microflora	➢ Avoid the use of materials that retain moisture, such as wood and fabric, as they promote the growth of microorganisms. ➢ Give preference to metal and plastic materials.
Non-porous materials	➢ Do not use porous materials such as cotton, wood or nylon. ➢ Avoid the use of cellular plastics such as polypropylene in patient care areas.
Lack of seams	➢ Do not use materials with seams. ➢ Do not use upholstered furniture in patient care areas.

The staff entrance is the first administrative oversight point for infection prevention and control (IPC) as it allows temperature screening of staff. The administrator needs to ensure good visibility to avoid the entry of unauthorized persons. In addition, he must supervise the washing of hands of all incoming persons. All areas should have hygiene points for hand washing with soap / running water or antiseptic treatment. The entrance must be large

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enough to avoid potential overcrowding at certain times (for example, during shift changes). Provide natural ventilation through wide open windows. Consideration should be given to installing shelves for personal belongings of staff.

Changing rooms for men and women should be large enough to avoid overcrowding during shift changes and be equipped with shelves for medical gowns, cleaning shoes, and personal clothing. Adequate natural ventilation must be provided or use of exhaust fans and a wind turbine. Staff are not required to wear masks at the center unless they are in contact with patients.

When converting these premises for infectious hospitals, it is necessary to provide for a system for their zoning, in particular, such as:

Patient triage area. The triage area is divided into two different areas: a personnel area and a high risk area for patients. A distance of 1 m must be maintained between personnel and patients. A double fence or a Plexiglas barrier can be used for separation. Separate hand washing areas (with soap and water) should be provided for patients and staff. An inclined board or slide can be placed between the staff area and the patient area to transfer items (such as thermometers) from the personnel area to the patient area.

The emergency room is a key area as the administrator ensures that the patient is directed to the appropriate waiting room (empty, clean and disinfected). To ensure proper patient flow, reliable communication between the administrator and patient triage staff is essential.

The reception area consists of separate cubicles, open on both sides to allow adequate natural ventilation. Each booth must be clearly identified and labeled to avoid mistakes and to ensure proper patient flow. After each patient in the booth, it is necessary to carry out sanitization and disinfection in order to prevent the spread of nosocomial infections.

Sampling room. Here, samples are taken from patients with mild to moderate disease. Separate booths with natural ventilation / general exchange supply or hybrid ventilation and a HEPA filter for extract air must be used. Each booth must be clearly identified and labeled to avoid mistakes and to ensure proper patient flow. After each patient in the booth, it is necessary to carry out sanitization and disinfection in order to prevent the spread of nosocomial infections.

It should be noted that sampling from a patient is based on a decision on the management of each individual patient.

Statement cabinet. This room is for patients who do not fit the definition of an infection or for patients with mild to moderate illness who are sent to converted communal facilities or home. To ensure proper natural ventilation, the cabinet should have a wide window on both sides. Handwashing areas should be provided at the entrance and exit. A health worker must always be present to control movement.

Short-stay wards for mild to moderate patients, wards for severe and critically ill patients, and the intensive care unit should have a patient-side partition to ensure adequate airflow. Note that the windows are open to the outside, but covered with transparent material such as Plexiglas on the side of the work area.

The use of transparent surfaces or windows between patient rooms and the working area or nurse's station allows:

• have eye contact with patients, foster relationships between patients and caregivers, apply an anthropological approach and involve communities;

• monitor and monitor, improve the quality of patient care through continuous observation and monitoring, and ensure a quick response;

• install oxygen concentrators and ventilators, oximeters and pulse oximeters in the work area, and not in the patient's room, which reduces the risk of nosocomial infections;

• reduce the use of PPE, as many medical activities can be performed directly from the work area.

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From all of the above, it follows that infectious medical centers and their main functional premises with a full set of medical and auxiliary equipment differ significantly from routine clinical departments of the somatic profile, because directly contribute to the prevention of the spread of infectious agents among patients and medical personnel.

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