



One time activity- District Hospital Pictorial view







Disable friendly building and Construction of Ramps and railings





Disable Friendly Toilet



Special pathways for blind

Ramps for Wheel Chair



Maintenance and upkeep of the building













Seismic safe building

Based on the seismic safety requirement, this health facility has divided its infrastructure settings in to 2 components:

•"Structural elements" – load bearing elements that carry the weight of the building itself. Includes foundation, columns, slabs, beams, and "load-bearing" walls.

•"Non-structural elements" - do not carry the weight of the building. Includes windows, doors, chimney, stairs, infill partition walls, pipes and ducts furniture, coolers, water tanks, etc. and very importantly the various types of hospital equipment.





Non-structural elements to be considered in the vulnerability assessment

Architectural	Equipments & Furnishings	Basic Installations and Services
Divisions and partitions	Medical equipment	Medical gases
Interiors	Industrial equipment	Electricity
Facades	Office Equipment	Telecommunications
False Ceilings	Furnishings	Drinking water
Covering elements	Supplies	Air conditioning
Cornices	Clinical Files	Piping
Terraces	Pharmacy shelving	Waste disposal
Chimneys		
Surfacing		
Glass		
Attachments (Signs, etc.)		
False Ceilings		
Antennas		

Fixtures and furniture , heavy equipment's , hanging objects are properly fastened and secured

Earthquake Hazard Identification in the Hospital











in free

Tall or narrow furniture can fall!

Items on wheels or smooth surfaces can roll or slide

Large or small things can knock into each other!

Hanging objects can fall!



Blocking exit

Items can fall harming people and blocking exits



Unanchored storage cabinets in the corridor can cause obstruction during evacuation.

Picture frames resting on furniture fall down







Mitigation Measures (Non-structural components)



Heavy objects: Anchor the feet of machine in concrete floor



Tall & narrow objects (Cupboards, fridge and racks storing medical equipments, books, documents, medicines and chemicals pose life safety hazards: Bolting the base or wall to prevent overturning of object



Equipments and accessories needed for treatment placed near the bed (iv stand, Oxygen cylinder etc) should be secured with chains and anchor hooks on each bed

Chaining





Equipments and accessories like ECG monitors, suction apparatus, incubators, instrument trolleys, radiant warmers, resuscitation equipments kept on rollers should be secured with chains and hooks on the wall

Anchorage

Hooking

Structural Components been made earthquake proof



Place Heavy Items Down Low: Heavy and breakable items that cannot be secured should be kept at lower level. Lighter objects can be placed higher up



Extra Support through additional wire and heavy duty hook and eye to be given for hanging items

Extra support

Rearrangement



Removal and strapping: unnecessary items to be removed and strapping of the shelves

Removal & relocation



Strapping the shelves by nylon rope for protection of supplies contents of laboratories, medical store, CSSD and OT store





Shattering of glass: Simple plastic lamination can protect from glass splinters

X

Modifications



Heavy furniture should be kept away from the places where people sit



Firefighting facility readiness



Hazardous material storage (include diesel/fuel storage)

Fire exit signage's

Fire Exit

Fire Extinguisher and automatic fire alarms are installed



Water main valves and hydrants



Fire Alarms

Utility, water, gas, and electrical shutoffs



Fire extinguishers and fire suppression systems and their operation

Fire Equipment and Shutoffs



Labour room has sufficient fire exit to permit safe escape to its occupant at time of fire

Check the fire exits are clearly visible and routes to reach exit are clearly marked.

Electrical safety of the building

A. Securing of any loose hanging wires

B. Electrical panels are covered

Instructions

Report, tag, and do not use equipment with:

- Frayed wires or cracked insulation
- Damaged plugs or missing ground prongs



Inspections of Equipment: Check of Strain-Relief



Report, tag, and do not use receptacles with:

- Only two slots
- Missing cover plates
- Loose mountings
- Weak gripping force



Avoid:

- Using cheaters (three-prong adapters)
- Using extension cords
- Placing liquids on electrical equipment
- Pulling plugs out of receptacles by the cord
- Rolling equipment over power cords
- Using defective equipment or receptacles
- Using equipment that sparks, smokes, or shocks





ig. 6.4. EXTENSION CORD DAMAGED BY MACHINE

Display of danger sign at High voltage electrical installation







Out of order equipment



Earthling pit

Annual inspection of electrical installations

Voltage stabilizer

Hand washing facilities





Implementation of BMW Waste rules 2019



Storage and mapping and Bar coding















Separate BMW Storage with Handwashing Facility







Shaded Waiting area







TV for health promotion







Potable water and Temperature control and ventilation



RO with water cooler





AC and Exhaust Fans for ventilation for Normal area



Pest, rodent and animal Control



Pest and Rodent Control

High Boundary wall



Animal control



Separate mechanized laundry system





Disinfection of liquid waste before disposal







Construction of parking area for staff parking, ambulance parking, patient parking









Separate medical record department esp. for Patients clinical Records



Storage, inventory and dispensing of drugs



THANK YOU