

SPECIFICATIONS

X-ray machine –pre-installation Requirements.

1. Civil

- Room Area -18.00 sq m (4m x 4.5m) No single dimension must be less than 4 m.
- Wall Thickness – 23 cms (9”) thick brick or stone wall with cement plastering. Walls behind chest stand should be 35 cms thick if there is any likelihood of occupancy on the other side of the wall or alternately give lead backing of 1mm lead sheet of size 2 x 1.5 meter on 23 cms thick wall.
- Ceiling should be minimum of 15 cms of concrete or equivalent.
- Door to the room – Preferably one. The door must be Lead lined with 2mm Lead equivalent, including door frame.
- Windows/exhaust/AC: At a height of 2m from the ground level outside.
- Dark room –Preferably 3m x 4m with dark room accessories like developer, fixer and water tank, red light/automatic film processor/Computerized Radiography.

2. Electrical

- 3 Phase 440 Volt Connection
- Power of **20 KVA** terminated in the proposed room into a TPN with main circuit breaker for 15KW X-ray machine, **40 KVA** power for 30 KW and **100 KVA** for 80 KW X-ray machine.

3. Statutory Requirements

- Site Approval Certificate from Directorate of Radiation Safety, Thrissur.
- Electrical Inspectorate Approval from concerned District Electrical Inspectorate office.

II. **CT Scanner – Pre-installation Requirements**

1. Civil

- The user institution must provide an built-up area of 550 Sq feet without reception, patient waiting area.
- The size of the Gantry room should be 25 sq.mts. and no single dimension of the room should be less than 4 mts.
- The Gantry room wall should be a 9” brick wall and the Ceiling should be 6” concrete.
- Windows/any unnecessary opening in the gantry & console room should be closed with 9” brick work.
- No water connection /taps or any water seepage should be there in the gantry or console room.
- Gantry room floor should be capable of withstanding the load of gantry and couch (Approx.2.2 ton)

2. Electrical

- Power supply capacity of **75 KVA**(2 slice)/**100 KVA** (16 slice), 3 phases should be terminated in the equipment room of CT scanner in a TPN with suitable capacity MCCB.

3. Statutory Requirements

- Site Approval Certificate from Directorate of Radiation Safety, Thrissur must be obtained before installation of the equipment.
- Electrical Inspectorate Approval from concerned District Electrical Inspectorate Office after completion of turnkey works by the supplier.
- Registration certificate must be obtained from AERB after installation of the equipment.

III Power laundry – Pre-installation Requirements

1. Civil

- The user institution should provide built up area of 600 Sq feet for equipment.
- The site should be preferably ground floor and should be accessible for truck.
- The room should have a entrance door of width 8 feet and height 7 feet.
- Water supply at least 1200 litre per cycle. Adequate over head tank shall be provided.

2. Electrical

- Power supply capacity of **96 KVA** 415 V, 3 phases should be terminated in the equipment room in a TPN with suitable capacity MCCB.
- Suitable earthing shall be provided.

IV. Autoclave Horizontal Rectangular 300 litres- Pre-installation Requirements

1. Civil

- The user institution should provide builtup area of 300 Sq feet for equipment.

2. Electrical

- Power supply capacity of **25 KVA**, 415 V, 3 phases should be terminated in the equipment room in a TPN with suitable capacity MCCB.
- Suitable earthing shall be provided.

V. Autoclave Horizontal Rectangular 400 litres- Pre-installation Requirements

1. Civil

- The user institution should provide builtup area of 300 Sq. feet for equipment.

2. Electrical

- Power supply capacity of **50 KVA**, 415 V, 3 phases should be terminated in the equipment room in a TPN with suitable capacity MCCB.
- Suitable earthing shall be provided.

Sd/-

For Director of Health Services