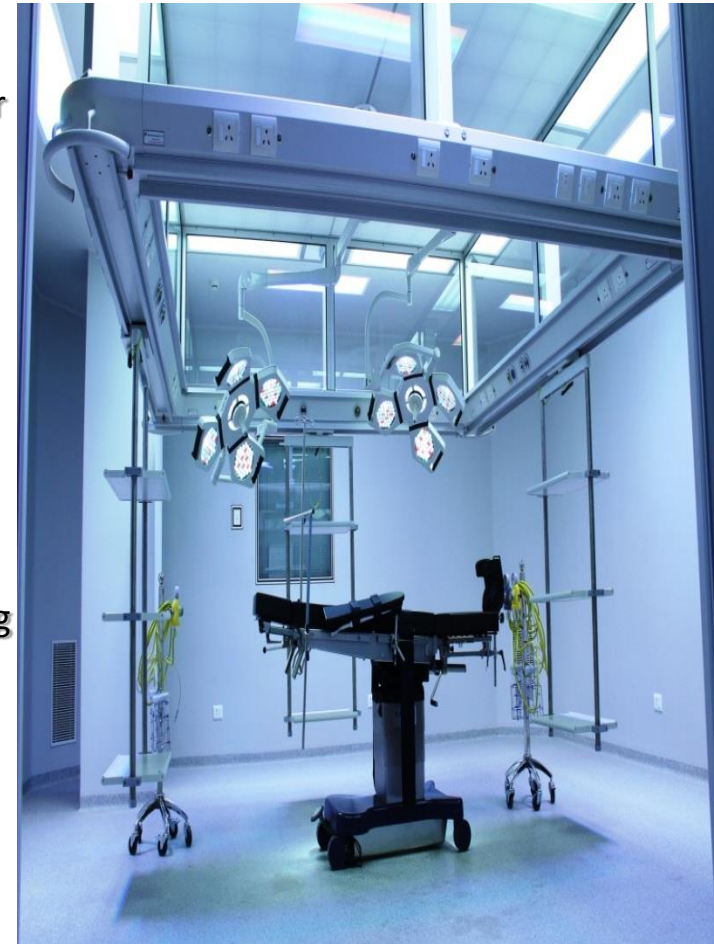


Modular OT & Sterile Cubicles

- ❖ To have sterile and stable zone to operate patients with constant unidirectional air distribution through low turbulence homogenous laminar air flow system. The low turbulence sterile zone, prevents particles and germs from being drawn into the operating zone/sterile field.
- ❖ To abide by the norms of NABH that a M-OT should have laminar air flow system (min 2.4mtrs *2.4mtrs size) which is an important component of Modular OT in min 20*20*10 size of clear floor.
- ❖ To eliminate nosocomial infections (hospital stay and acquired infections) which is recorded as >25% through surgical wound infection. The prime sources of arising such infection are micro organisms in the hospital environment, the compromised status/arrangement of host and chain of transmission.
- ❖ To get access to all important junctions like laboratory, nurse station and doctor's chamber for external expert help and teaching on live cases through audio visual integration by OR Navigator system.
- ❖ More over the operation theater is made of such an important wall panels and components which helps to get a maintenance free on long run and cost effective unit for hospital, which is covered in following slides;

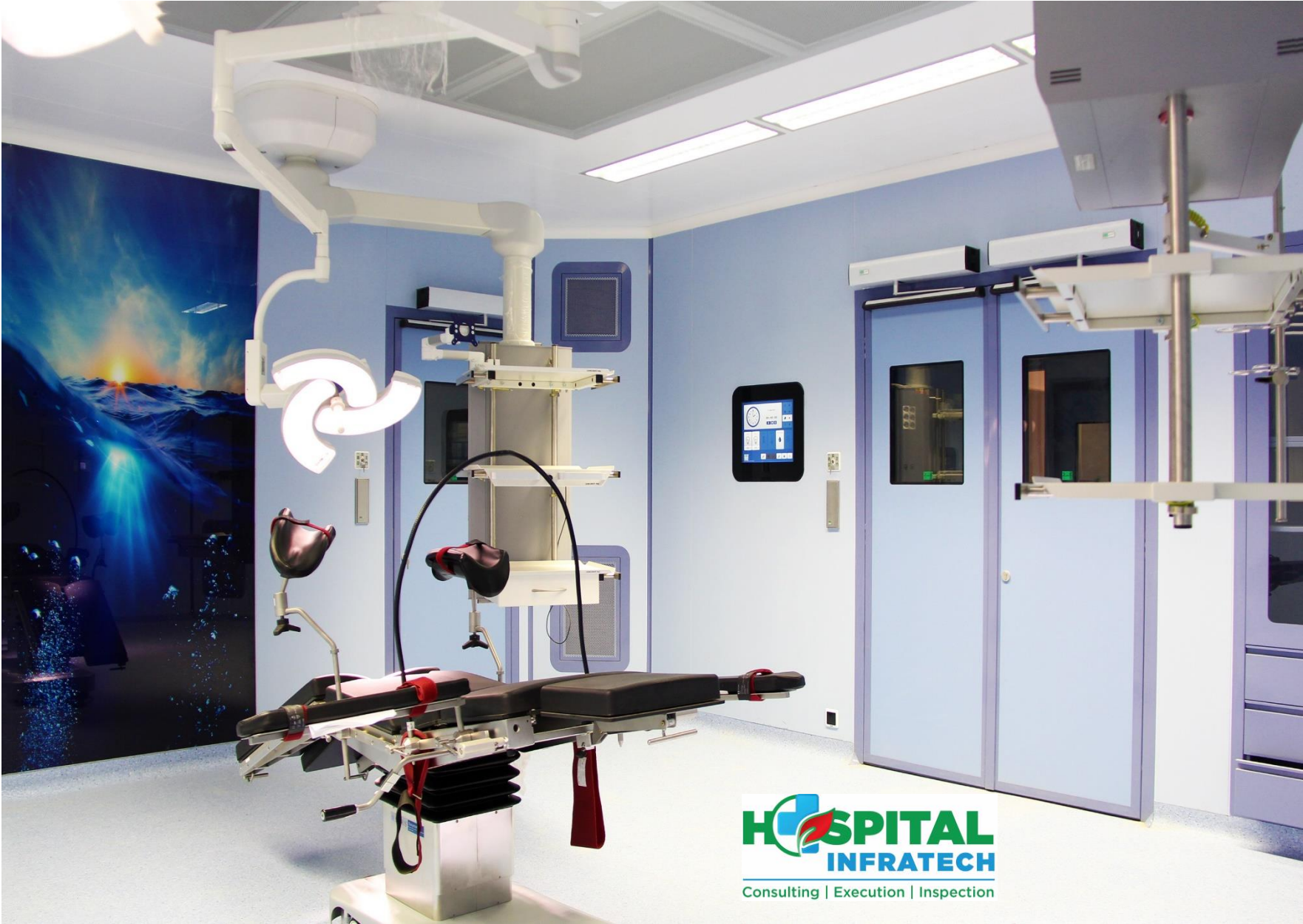


Modular Treatment Zone of OT and ICU

Material to be used:

- Monoblock Panel
- SMS “Solid Mineral Surface Panel”
- Painted Steel Panel
- Glass Panel
- Stainless Steel 304
- PUF Panel

MODULAR OT WITH INTEGRATION AND PICTURE WALL



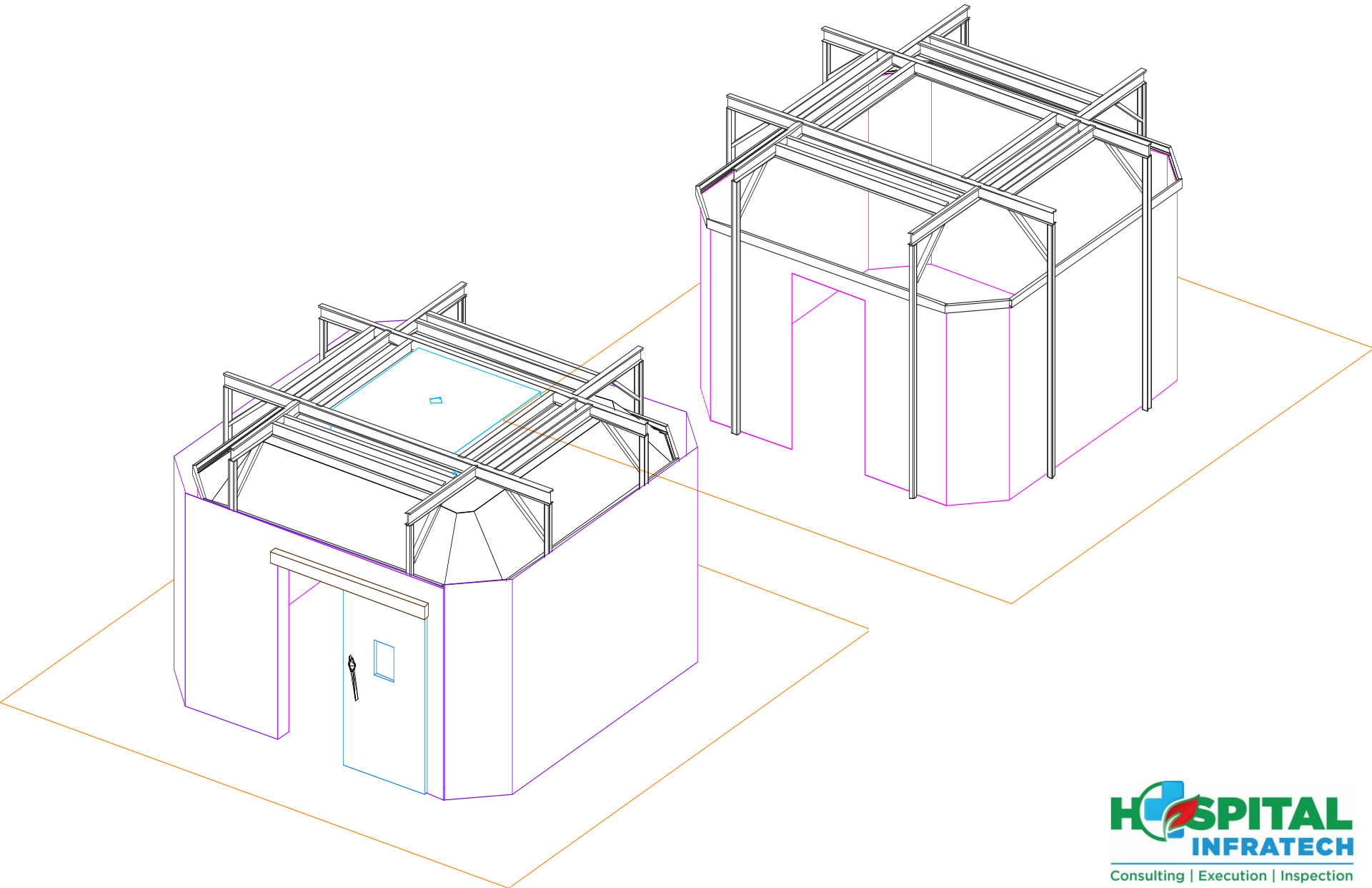
Components of Modular OT

2. Ceiling Supply Pendants

- It is configured in twin/solo base which can be flexibly expanded with variable height adjustment.
- Safe positioning via electromagnetic brakes and adjustment thread. Also pneumatech brakes available.
- Variable load with height-adjustable shelves.
- Accessories can be adapted via rail system.
- Quick & easy cleaning of the OR due to floor clearance.
- Less accidents because of intelligent cable and tubing management.

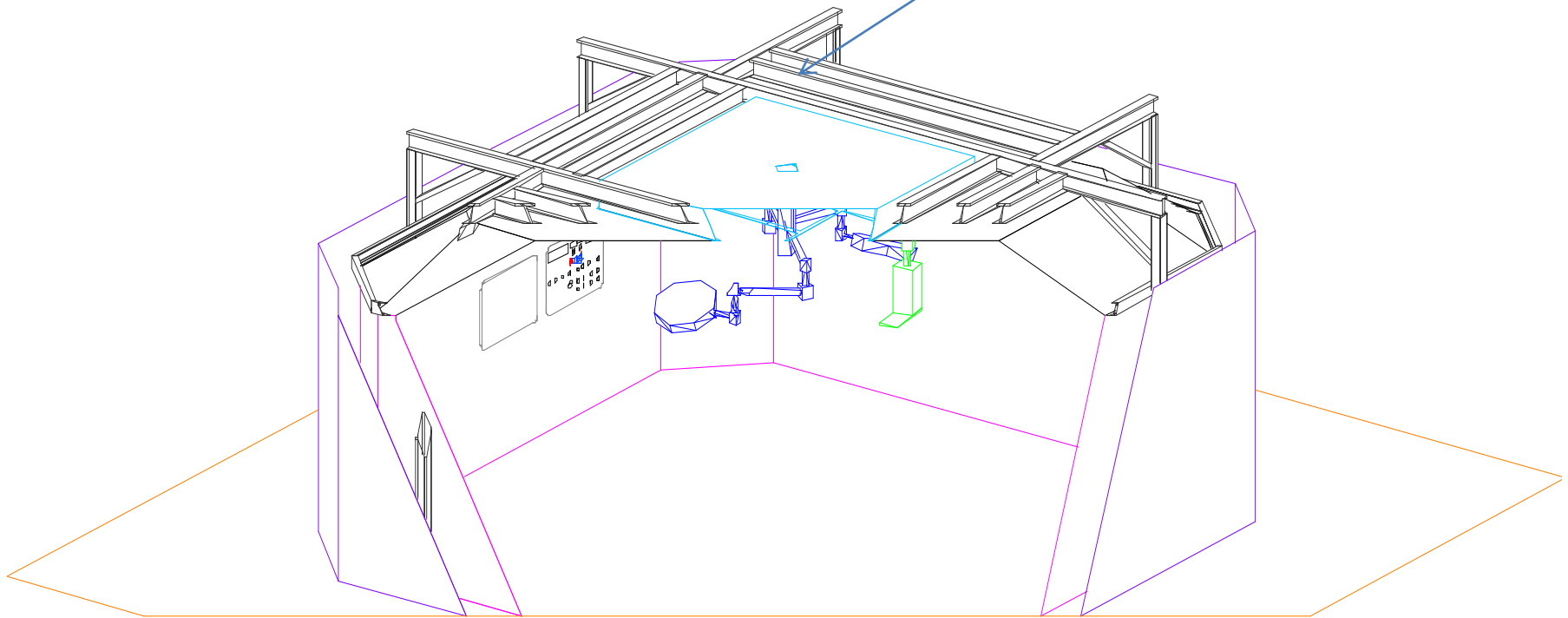


3D view of the OT cube



Side View to inside and LAF on OT

Laminar Air Flow System



Important components of Modular OT

- **Air Management by Laminar Air Flow System**

The conditioned air from the AHU is blown into a pressure chamber, which gets pressured through HEPA mini pleat Filters removing 99.99% of germs and particles. Then the filtered air is directed evenly through the CG-Diffuser in order to build a homogeneous low-turbulence air flow.



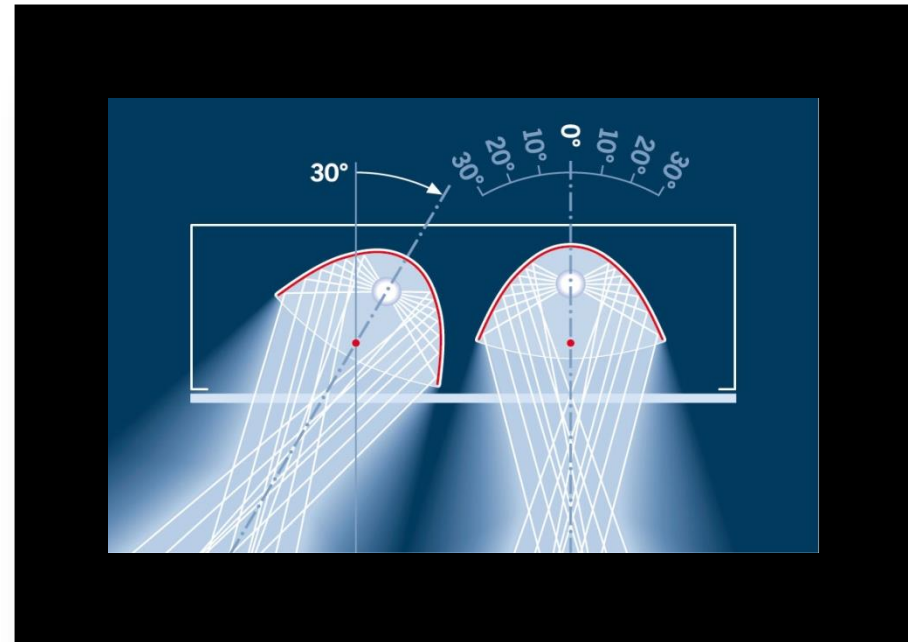
- **Clean Room Luminaries**

- Directing light beams of luminaries into the operating area where you need them.

No interference between lighting electronics and infrared controls

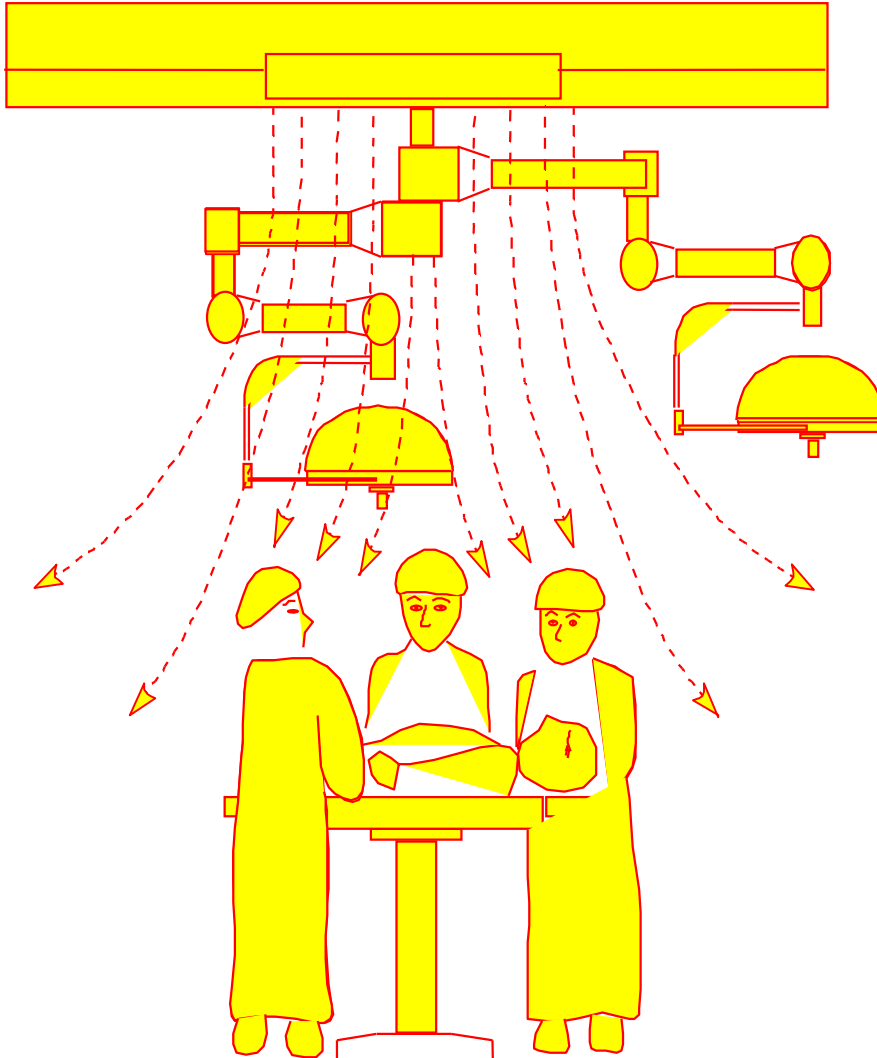
100 % protection against glass fragments

Light cover made of high-strength laminated safety glass

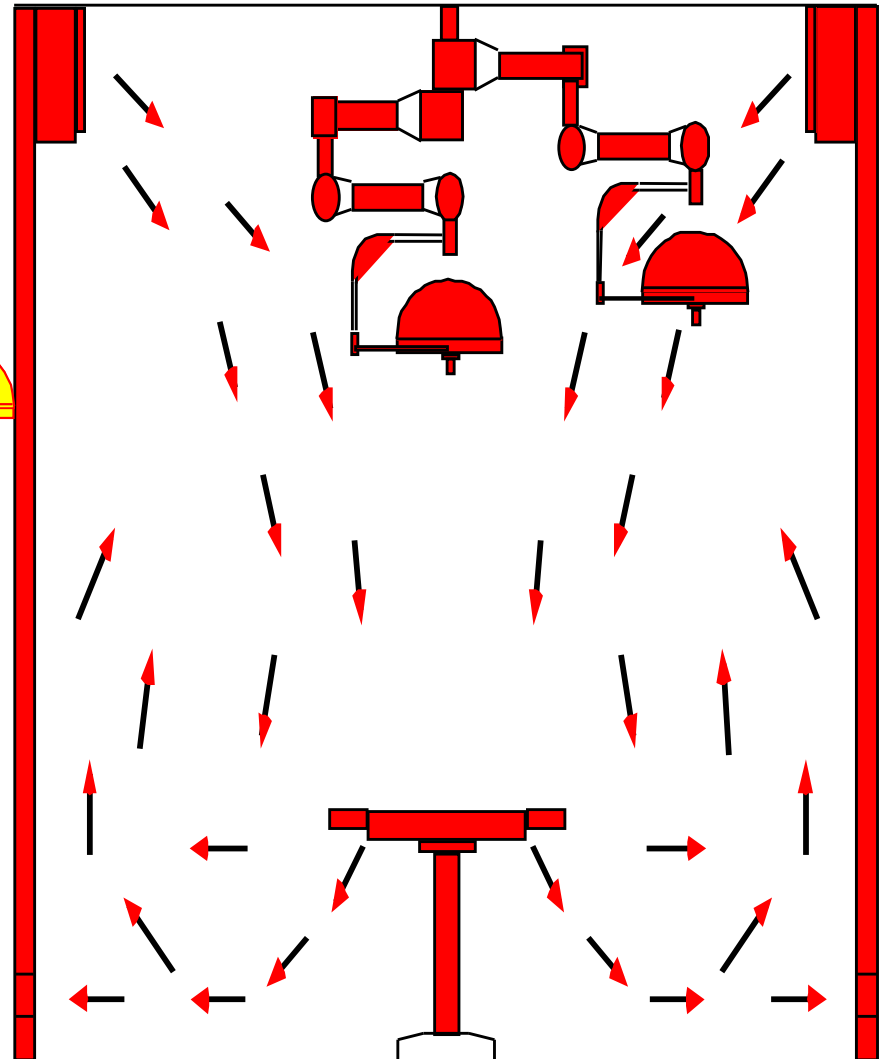


Laminar Air Flow Vs Conventional Air Flow

Stabile Air by Unidirectional Air Mgmt through LAF



Traditional and Turbulant Airflow



HERMETICALLY SEALED DOOR




- **Rubber gaskets embedded in the door leaves.**
- **HPL-laminate on MDF-board as carrier material, depending on the chosen material.**
- **Integrated window, mounted flush with the adjacent area of the door leaf in several optional designs for radiation protection, laser protection, sound protection; also available with aluminum fringe and / or integrated blind.**
- **Deadbolt lock, prepared for Euronorm-profile cylinder; restroom lock with one-way locking handle and display**
- **Bilateral (inside/outside) stainless steel lever arm handle with integrated return spring to neutral position**

Scrub Area Outside OR



ANTISTATIC CONDUCTIVE FLOORING

- 
- **AVAILABLE IN 15 SHADES OF COLOUR.**
 - **THICKNESS EITHER 2mm OR 3mm, TILE SIZE 610 * 610mm.**
 - **ELECTRICAL RESISTANCE, POINT TO GROUND – 2.5 * 100000 TO 5 * 10000000 OHMS.**

Pressure Relief Damper & Hatch/Pass Box



- **Pressure Relief Damper or Pressure Stabilizers:**
This Multi-bladed units specifically designed to control room air pressures in critical areas, such as Operating Theatres, Aseptic Suites, Clean Rooms and similar areas. They are accurate to a range of 1 Pascal over their working range of 5-35 Pa.



Hatch Box

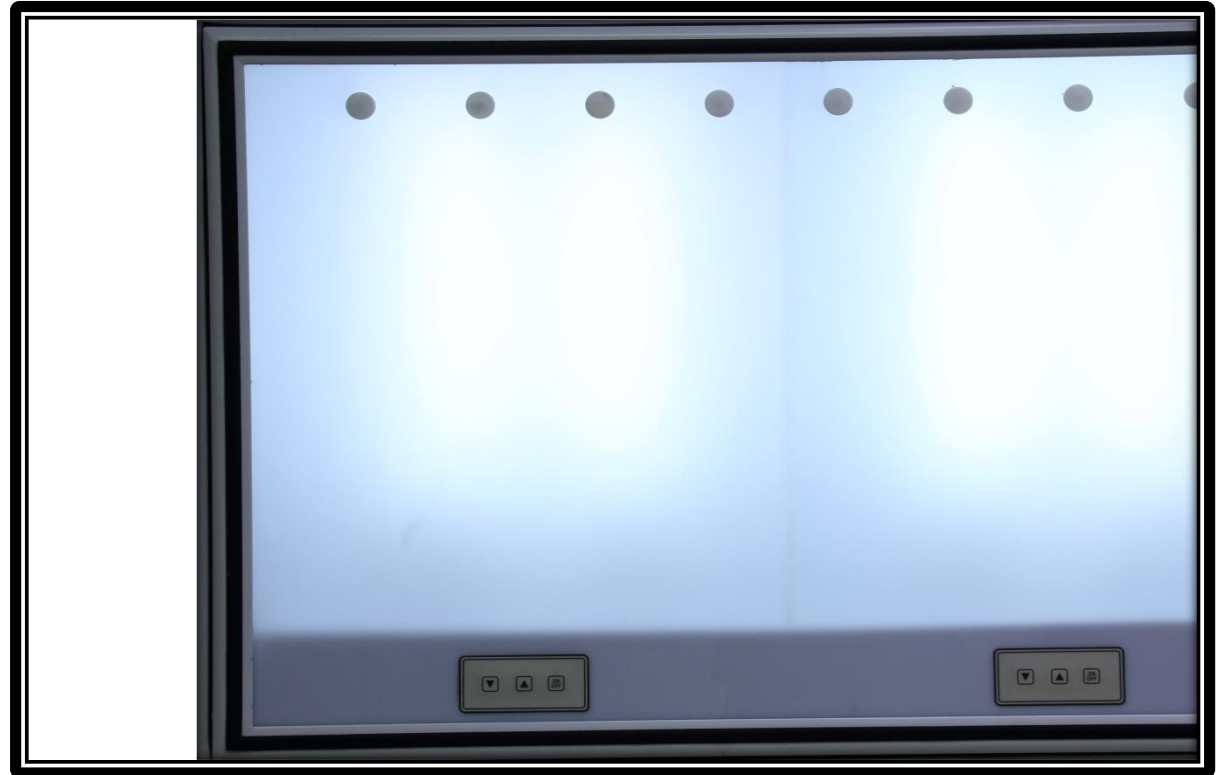
Should be provided in Operation Theatre for removal of OT waste or dirty linen

Each box should be equipped with two doors and the door should be operated electronically.

The box should be designed in such a way that only one door should be opened one time.

X-Ray view screen

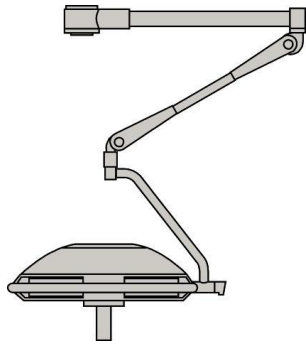
- **TWIN PLATE X-RAY VIEWING SCREEN.**
- **HIGH FREQUENCY FLUORESCENT LAMPS CONTROLLED BY DIMMING BALASTS.**
- **CONTROL LUMINANCE WITHOUT FLICKER.**
- **UNIFORM LEVEL OF ILLUMINATION ACROSS THE ENTIRE FRONT PANEL.**
- **SEALED FLUSH WITH THE INSIDE FACE OF THE OPERATING THEATRE WALL.**
- **SPRING LOADED CLIPS TO SECURE THE X-RAY WHEN IN USE.**



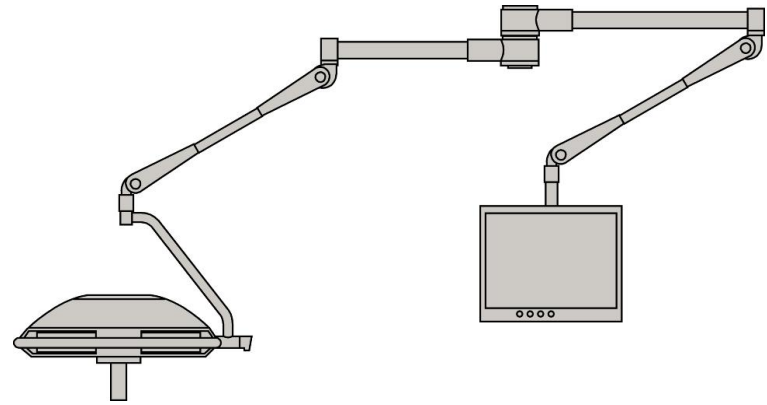
LED OT LIGHTS



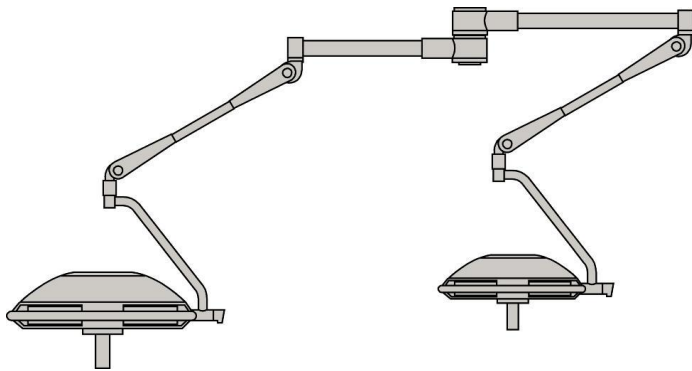
LED OPERATING LIGHTS



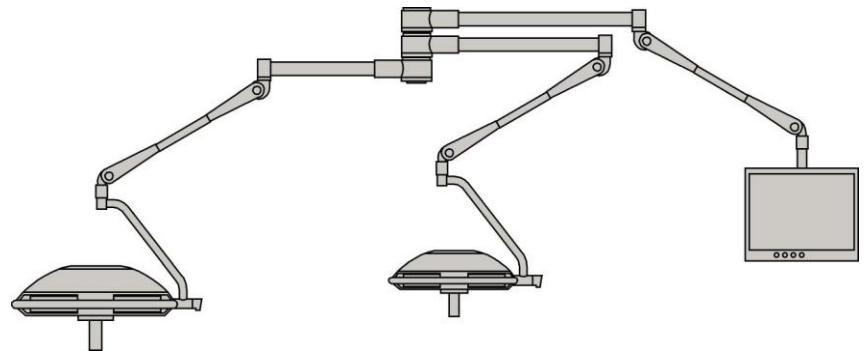
Individual light.
Minimum ceiling height 288 cm.



Individual light with monitor.
Minimum ceiling height 288 cm.



Double Dome light.
Minimum ceiling height 299 cm.



Double light with monitor
Minimum ceiling height 299 cm.