

MODIFICATION OF EXISTING CULTURE ROOM

TECHNICAL SPECIFICATIONS

Now the Lab is a single hall with cubicles for entry into the Lab from the Outer Corridor. The proposed modifications are listed below.

1. The existing cubicles and false ceiling have to dismantled.
2. Modular Wall panels have to be erected along the periphery of the room and partitions have to be made to create the rooms as shown in the drawing. False Ceiling has to be erected using Modular Ceiling Panels. The Modular Panels are pre-engineered panels with 0.5mm Pre-coated GI sheet on both the sides with PUF insulation sandwiched in between. Both Wall & Ceiling Panels will be 50mm thick. Clean Room Doors, Extruded Aluminium Covings, Clean Room Lighting, Epoxy flooring etc. have to be provided.
3. There are 8 Nos. of Class I Biosafety Cabinets in the Lab and each of these units exhaust around 300cfm of air which works out to 2400cfm for 8 units. To compensate this air is being drawn from the corridor, which is available at 35°C, this additional heat has to be cooled. Total AC load works out to 22TR, to maintain the room at 24±2°C. At present AC tonnage available is 7.5TR. An additional 14 TR AC is required to cool the room. Quote for wall mounted split ACs of total tonnage of 14TR which maybe 5 nos of 3TR Multi split or 7 Nos. of 2TR installation may be done away from the Class I Cabinets, preferably on the on the opposite wall. Installation with Stabilizer to be considered.
4. All the Bidders are requested to visit the site and inspect, to know the exact quantum of work, before quoting. Vague and ambiguous offers are liable to be rejected.
5. **Specifications for Modular Wall & Ceiling Panels:** Modular Wall & Ceiling panels have to be Pre-engineered and Pre-fabricated sandwich panels with 0.5mm thick Pre-coated GI sheets on both sides and Poly Urethane Foam (PUF) insulation sandwich in between these sheets. The PUF density should be 40±2 Kg/m³, and **MUST BE CFC & HCFC free**. The Blowing agent has to be Pentane/Eq., with **Zero Ozone Depleting Potential**. Relevant Test certificate from Central Govt. Lab for important parameters has be produced with the Bid. To ensure this the entire production has to take place in a Continuous line which is automated with minimum human intervention to ensure minimum errors and impeccable finish. For proper and perfect adhesion of PUF to the GI sheet, Corona treatment has to be done to remove all dirt and dust from the surface. Width of each panel has to be 1000mm. For Ceiling panels, the length of the panel should be equal to the width of the room (smaller side) i.e. there should be joints only along the length of the room. Joints should be minimum. A guard film has to be provided which has to peeled off after completion of Installation. To establish the superiority of the Panels, we might also visit the factory.

1.	Modular Ceiling – 50mm thick, Double Skin panels made of Pre-coated GI sheets with PUF insulation, supported from the roof RCC including all cutouts for light and Grilles All joints are sealed with silicone sealant after fitment.		1200SqFt	
2.	Modular Wall Panels –50mm thick, Double Skin panels made of Pre-coated GI sheets with PUF insulation with provisions for embedded conduits etc.		2020 SqFt.	
3.	Wall to ceiling / Wall to wall / Wall to floor Aluminium Extruded Coving (2” radius)		270 rM	
4.	Clean Room Light Fittings with Flourescent lamps Size 24” X 24” Size 24” X 12”		10 Nos. 6 Nos.	
5.	Flooring - Supply and applying the Epoxy Flooring – 2mm thick		1200 Sq.ft.	
6.	Clean Room Doors without any crevices. Metallic, painted with Double glazed view glass, door closer, SS handles, lock etc. Size 1000mm X 2100mm 1450mm X 2100mm		8 Nos 2 Nos.	
7.a	Split ACs 2 TR		7 Nos	
7.b	Split ACs 3TR (option)		5 Nos	
8.	Digital Room Pressure Gauge		2 Nos.	