

CLIENT: IPR, BHAT
 PROJECT & PLACE: NEUTRONICS LAB
BASES OF DESIGN FOR AIR CONDITIONING SYSTEM:
 * Ambient Temperatures (Summer) DB:112 DegF (44.44 DegC) WB:80DegF(26.67 DegC)
 * Ambient Temperatures (Monsoon) DB: 90 DegF (32.22 DegC) WB:85DegF(29.44DegC)
 * Construction (Refer Archi. Drgs.): (1) RCC Slab with Waterproofing; (2) Brick Walls with Plaster & Paint

* Areawise Data:

System No.	Room No. and Room Name	Area SqM	Height M	Volume CuM	Temperature +/-2 DegF(C)	RH NMT %	Eqpt. Heat Dissipation KW	Occu. Persns	Lights W/SqFt W/SqMt	Final Filter Micron	Fresh Air CFM	Summer Load TR	Summer Calculated CFM	Monsoon Load TR	Reheat KW	Selected SA CFM	RA CFM
System-1	GF:Generator Hall	251	7.80	1956	74.30 23.50	60	9.00	6	1.00 10.00	20.00	575	14.40	6218	12.79	12.10	7500	7500
SYSTEM TOTAL	System-1	251		1956			9.00	6			575	14.40	6218	12.79	12.10	7500	7500
GRAND TOTAL		251		1956			9.00				575	14.40	6218	12.79	12.10	7500	7500

NOTES:

***Tonnage capacity specified is "Nominal".**

*Temperature for control purpose is sensed at a single location, viz. in RA duct just before the AHU. Hence Temperature in the above column is the "weighted" average return air temperature of all Rooms served by the respective AHU.

*RH for control purpose is sensed at a single location, viz. in RA duct just before the AHU. Hence RH in the above column is the "weighted" average return air RH of all Rooms served by the respective AHU. If no RH is mentioned in the table, it indicates that RH is not a directly controlled parameter.

*Pressure is to be monitored with all doors & hatches closed, and under equilibrium conditions. Room Pressures are with respect to a common datum (atmosphere). Gap between door frame & door shutter should not be more than 1.5-2.0mm on all four sides.

*Where automatic control of Pressure is provided; Pressure of one room per AHU is sensed by room pressure sensor. Other room pressures are to be adjusted manually during air-balancing.

*Range of parameters, unless otherwise specified: Temperature +/-2 DegC; RH: NMT; Pressure: +/-3 Pa