

	ENGINEERING BULLETIN	CORROSION TECHNOLOGY GROUP	EB-001
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Guidelines for Protection of Electronic Equipment in Control Rooms

1. Apply between two and five air changes per hour (ACH) from the Vapor Adsorber based on the room volume (note – older rooms may require more than 5 ACH).
2. Positively pressurize the room to a level of 0.08 – 0.25 in. w.g.
3. Locate the HVAC system, the Vapor Adsorber and all ductwork within the protected area where possible. Any components of the system that are located outside of the protected space must be completely sealed and properly maintained.
4. Locate both the HVAC system and the Vapor Adsorber to minimize the intake of corrosive gases and to provide accessibility for maintenance.
5. Maintain a room temperature of 68 – 78 °F and a relative humidity of 35 – 50%.
6. Size the HVAC system to offset both the latent and sensible load from the Vapor Adsorber makeup air.
7. Ensure proper sealing of all equipment access doors within the protected space.
8. Provide airlocks at all entrances to the room (8 ft. long where possible) and construct them such that the first door closes before the second door opens.
9. Install weatherstripping around door perimeters, provide sweeps and thresholds at the bottom of all doors and caulk all door and window frames.
10. Provide automatic door closures with sufficient force to provide a good seal.
11. Turn non-airlock doors into emergency exits and remove external hardware where possible.
12. Seal all cable entries, conduit penetrations and terminations, duct penetrations and all openings with fire rated sealant.
13. Seal all floor to wall, ceiling to wall and wall to wall joints.
14. Use glazed tile, glazed block, poured concrete or masonry block coated with low permeability paint walls.
15. Install a differential pressure gauge in each room to monitor the pressure.
16. Remove laboratories, fume hoods, sinks and testing from all protected rooms.
17. Do not access restrooms, break rooms or storage rooms from the protected area.
18. Any room exhaust must be compensated by pressurization air from the Vapor Adsorber.
19. Prohibit the use and storage of all chemicals within the protected space.
20. Do not locate backup power batteries or emergency generators in the protected area.
21. Prohibit all eating, drinking and smoking in the control room.
22. Restrict room access to authorized personnel only.
23. Place a large warning label on all entrances to remind personnel of the importance of maintaining the protection of the control room.
24. Develop and implement an inspection list for maintaining the protected space.
25. Perform periodic monitoring of the corrosion level in the control room.
26. Replace the Vapor Adsorber carbon media prior to its depletion.