

Physical Security Controls Administrative

- ❖ *DigitalSherlock.com | SafeHack.com*
- ❖ *Date: 2005/05/27*
- ❖ *Document Name: physical_security_controls_administrative.pdf*
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- ❖ *Version 1.00, 2005-05-27*
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❖ Facility Requirements Planning

➤ Choosing a secure site

- **Visibility**
 - Any Visible Ads ?
 - Low visibility is better
- **Local Considerations**
 - Near to waste dump ?
 - Local crime rate ?
 - Any Near burglary ?
- **Natural Disasters**
 - Is it a natural disasters area?
 - Wind / Snow / Flooding
- **Transportation (NOISE)**
 - Excessive Air Traffic ?
 - Excessive road Traffic ?
- **Joint tenancy**
 - Easy access to HVAC in emergency ?
- **External services**
 - Any proximity Police services ?
 - Any proximity Fire services ?
 - Any proximity Health services ?

➤ Designing a Secure Site

- **Walls**
 - True Floor to Ceiling
 - Fire Rating (at least 1 hour 2 H for sensitive area)
 - Closets must have HIGH fire rating
 - Penetrations
 - Adjacent Areas
- **Ceilings**
 - Same fire rating as the walls
 - Waterproof
 - Prevent water leakage
 - Appropriate live load rate
- **Floor**
 - Slab
 - Raised
- **Windows**
 - Glass must be fixed in place (window cannot open)
 - Must be shatterproof

- Must be translucent
- Data center should have NO windows
- **Doors**
 - Must resist forcible entry
 - Fire rating must be equal to the walls
 - Frame must prevent forced entry
 - Open out to facilitate easy escape
 - Protect the door hardware (door hinges)
 - Have emergency egress hardware (panic bars)
 - Lock must fail open in emergency
 - Door should have an Alarms and monitored
- **Water, steam, and gas**
 - IS staff must know location of shutoff valves.
 - Falling Water
 - Rising Water
 - Water Drains should be positive
 - Protective Coverings
 - Moisture Detection Systems
- **Air Conditioning**
 - Units should have dedicated power circuits.
 - Should have outward positive air pressure
 - Have protected intake vents
 - Emergency Shut Off Controls
 - Controllable
- **Electrical Requirements**
 - Should have established backup sources.
- **Humidity Controls**
 - Ideal Operating Range is between 40 to 60 %
 - Above 60% can cause condensation & corrosion
 - Less than 40% increase static electricity
 - Static Charge Volts
 - Hygrometer - device used to measure humidity
 - How to reduce static ?
 - ◆ Use anti-static sprays where possible
 - ◆ Use anti-static flooring
 - ◆ Proper grounding of building and outlets
 - ◆ Use Anti-static table or mats
 - ◆ HVAC should maintain proper humidity level
 - ◆ Anti-static bands
 - ◆ No carpeting

❖ Facility Security Management

➤ Audit Trails

- **Is a record of events**
- **A computer may have several audit trails**
- **Logs are Detective not preventative**
- **Help reconstruct an intrusion**
- **Logs should record**
 - Data time of the attempt

- Attempt successful yes or no ?
- Access was granted ? what door ?
- Who attempted the access ?
- Who modified access privileges (admins) ?

➤ **Emergency Procedures**

- **Should be clearly documented**
- **Should be accessible**
- **Should have off-site copy**
- **Should be updated periodically**
- **Should include**
 - Emergency system shutdown procedures
 - Evacuation Procedures
 - Employee training
 - Awareness programs
 - Periodic Drills

❖ **Administrative Personnel Controls**

➤ **Pre-employment**

- **Focus on the process of hiring/firing employee**
- **An employment history (provided by applicant)**
- **An education history (provided by applicant)**
- **Reference Checks**

➤ **On-going Checks**

- **Background investigation**
- **Credit checks**
- **Security clearances**
- **Employee ratings/reviews**

➤ **Post-Employment Checks**

- **Exit Interview**
- **Removal of network access**
- **Return of computer inventory**

➤ **Employee Maintenance**

- **Periodic reviews**
- **Job rotation**
- **Separation of duties**
- **Administrative Personal Controls**