	<b>Ministry of Labour and Citizen's Services</b>	<b>Government Chief Information Office</b>	<b>Information Security Branch</b>
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## Physical Security Technical Standards for Secure Zones WTS Network Centre/Server Room

### 1 Network Centre / Server Room Classification

- 1.1 All Network Centres and Server Rooms are to be deemed a "Security Zone" as per Government's Core Policy Manual.

### 2 Location

- 2.1 If no separate exterior entrance, then the Room is to be located away from exterior walls.

### 3 Walls/Floors


- 3.1 Full height, slab-to-slab construction, with no openings.
- 3.2 Walls to be insulated.
- 3.3 Interior walls to be of the following composite construction:
  - 3.3.1 3.5mm (10 gauge) expanded metal mesh
  - 3.3.2 19mm Plywood or OSB
  - 3.3.3 16mm (5/8") gypsum wall board
- 3.4 If ceiling space above t-bar must be open, then the area must be completely enclosed with 3.5 mm (10 gauge) expanded metal mesh.
- 3.5 Floor finish should be sealed concrete or anti-static sheet vinyl. If the floor is not enclosed (i.e. slab-to-slab) then the floor area must be completely enclosed with 10 gauge expanded metal mesh.

### 4 Doors/Windows

- 4.1 All doors are to be of solid core (heavy duty 1.6mm (16ga.)) steel with steel cladding and steel frames.
- 4.2 All entry doors to be fitted with a full length steel astragal.
- 4.3 All doors to be equipped with NRP (non-removable pin) hinges.
- 4.4 All perimeter doors to be equipped with a door-closer.
- 4.5 No elephant foot installed.
- 4.6 Exterior windows within 3 meters (10ft.) of the Server Room shall be protected with laminated glass or protective film. All protective films shall be factory installed as per the manufacturer's specifications or be field installed "edge to edge" under the window stops. Standard of Acceptance: Glass-gard GGL 800 or Ace Security Films SF9.

### 5 Signage

- 5.1 Room number only. **No signage** to identify the room as a "Server or Computer" room.

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### 6 Locksets and Keyways

- 6.1 Locksets shall be heavy duty security hardware with steel dead-bolts into steel inserts, with ULC approval at the highest level. Locksets to be "Storeroom lock" type (outside knob fixed, entrance by key only. Inside knob always unlocked).
- 6.2 Keyways shall be restricted to approved types such as Schlage D, G or T series or Falcon G series.
- 6.3 All keys to be marked "DO NOT COPY".
- 6.4 ARES/WSI to maintain a list of all keys distributed.

### 7 Lighting


- 7.1 At least one light fixture to be left on at all times (not switched).
- 7.2 Emergency lighting unit(s) as required for the size of the room.
- 7.3 Light switch to be located within the server room.

### 8 Vents

- 8.1 All vents to be of steel construction.
- 8.2 Individual vent openings shall be a maximum size of 4" x 16".
- 8.3 All vents to be securely fastened from within the server room (no bolts or screws protruding on the outside of the room).

### 9 Intrusion Alarm System

- 9.1 Intrusion Alarm System to be a separate standalone system, monitored by ARES/WSI and installed as per ARES/WSI intrusion alarm system specifications. The server room requires separate keypad codes.
- 9.2 The intrusion alarm system shall be a DSC Power 864 (PC5020) – no substitutions.
- 9.3 The intrusion alarm system panel to be equipped with a DSC TLINK TCP/IP Communicator Module.
- 9.4 Keypads to be LCD type - model # DSC PC5500. Keypad to be mounted inside the room.
- 9.5 Every system to include the following equipment:
  - 9.5.1 All doors to be equipped with door contacts.
  - 9.5.2 Allow for one motion detector to be installed in each room or one motion detector/1,000 sq. ft. (which ever is greater).
  - 9.5.3 A digital High-Low temp alarm (WINUTA- 1 - DIG HI/LO MIC TEMP-ALERT #1201). Alarm point set at 28° C. Low set @ 5°C.
  - 9.5.4 A water sensor module (WINWB-200 - WATERBUG #1043 / #1044).
  - 9.5.5 A photoelectric smoke detector (DSCMN-140C).
  - 9.5.6 All equipment listed in 9.5.1 – 9.5.5 shall be installed, connected, calibrated and tested as per the manufacturer's specifications.
- 9.6 Intrusion alarm system not to be interfaced with the card access system.
- 9.7 The intrusion alarm system shall use a telephone line as an alternate means of communication. This telephone line jack shall be installed as per ARES/WSI intrusion alarm system specifications.

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- 9.8 Each user or user group to have an individual user code.
- 9.9 All environmental alarms to be 24-hour zones.
- 9.10 All intrusion alarm systems set to auto-arm at 23:00.

### 10 Card Access System if required

- 10.1 Card access system to be determined (possibly Kantech).
- 10.2 The Card Access System is not to be interfaced with the intrusion alarm system.
- 10.3 All entry doors to be equipped with:
  - 10.3.1 card reader
  - 10.3.2 request to exit button
  - 10.3.3 door contact
  - 10.3.4 electric strike

### 11 Environmental/Mechanical Systems

- 11.1 Environmental conditions shall be maintained 24 hours/day, seven days/week, independent of the building system.
- 11.2 Maintain room dry bulb temperature within a range of 18°- 26°.
- 11.3 Relative humidity to be maximum 60%.
- 11.4 Provide high temperature alarms that will be active 24 hours per day. These alarms shall be integrated into the tenant intrusion alarm system.
- 11.5 For cooling loads of less than 5000 BTU, provide cooling for the server room from the building conditioning system. For unoccupied hours, provide a thermostatically controlled exhaust fan drawing air in through a door grille and discharging into the ceiling space to cool the room.  
For cooling loads in excess of 5000 BTU, provide an independent cooling unit for the server room that can operate 24 hours per day independently of the building systems.

### 12 Electrical Power

- 12.1 Minimum of three duplex receptacles. Two (2) receptacles shall be a dedicated Nema 5/20 RA alternate, 120V circuits with neutral.

### 13 Lockboxes

- 13.1 All lockboxes to be installed as per ARES/WSI lockbox guidelines.

### 14 General

- 14.1 Only equipment associate with data and voice services shall be located in a server room. No pipes or ducts shall pass through the server room.
- 14.2 Size of Server Room:
  - 14.2.1 Minimum 1 per floor: 1219 x 1524mm (4.0' x 5.0')
  - 14.2.2 One per building: 2134 x 1219mm (7.0' x 4.0')
- 14.3 Install a complete grounding system and bond all equipment
- 14.4 Server Room must contain a fire extinguisher