

271116 – COMMUNICATIONS CABINETS, RACKS, FRAMES, AND ENCLOSURE

PART 1 GENERAL

1.1 RELATED SECTIONS

- A. Section 27 11 00 - Communications Equipment Room
- B. Section 27 11 19 - Communications Termination Blocks and Patch Panels
- C. Section 27 11 26 - Communications Rack Mount Power Protection and Power Strips

1.2 REFERENCES

- A. NFPA 70 - National Electrical Code; National Fire Protection Association; 2002.

1.3 DEFINITIONS

- A. See Section 27 00 00: Communications General.

1.4 DESIGN REQUIREMENTS

- A. Prepare rack layouts showing the placement of all equipment within each rack.
- B. Smaller installations may be designed to use wall-mount cabinets or enclosures, provided the initial installation does not exceed 50% of the vertical rail space.
- C. Equipment rooms needing higher security may be designed to use Chatsworth Cabinets.
- D. Equipment cabinets require one full louver door on front and back, with minimum one fan rack unit and two 5 inch grommet holes in each side and top protected with plastic or rubber edging.
- E. Ground equipment racks as specified under Section 27 05 26 Grounding and Bonding for Communications Systems.
- F. Specify all wire management rings, ladder rack, brackets and wire management panels which, in the sole judgment of Owner shall be required for a neat and workmanlike installation.
- G. Plastic or metal cable ties shall not be used in the network rooms. Velcro cable ties shall be used.
- H. Equipment cabinets require one full louver door on front and back, a minimum one fan rack unit and two 5 inch grommet holes in each side and top protected with plastic or rubber edging.
- I. Ground equipment racks as specified under Bonding and Grounding.

PART 2 PRODUCTS

2.1 RACKS AND ACCESSORIES

A. Racks and Rack Accessories

1. CABINETS

A. Cabinets

1. Chatsworth Products

- a. TeraFrame Cabinet
- b. 36, 40 or 48" deep
- c. 19" rails
- d. Size as needed, not to exceed 50% initial capacity
- e. Black

B. Wall-mount Cabinets

1. Full-depth Cabinets

- a. Ortronics
 - 1) Mighty Mo Wall Mount Cable Management
 - 2) 12, 16, or 21 U rails
 - 3) Black
 - 4) Size as needed, not to exceed 50% initial
- b. Chatsworth Products
 - 1) M-Series 48" MegaFrame Cabinet
 - 2) 24", 30", or 36" deep
 - 3) 19" rails
 - 4) Size as needed, not to exceed 50% initial
 - 5) Black

2.2 ENCLOSURES

A. Shallow enclosures

1. Hubbell REBOX

- a. Model RE2 - 2U for switches, 2U for patch panel
- b. Model RE4 - 5U for switches, 4U for patch panels

- c. Fan kit (2 for RE4; 1 for RE2)
- d. Fitted with standard locking hasp to receive full size padlock

2. Chatsworth Wall-Mount Enclosure

- a. Part number: AAT-AWM-H
- b. Size 42"W x 24"H x 7.5"D
- 1. Space for a single 100 pair 110 style termination block, a single 6-port fiber optic adapter panel, two 19" x 2U spaces for patch panels or other panel mount termination hardware and one 19" x 3U space for active components up to 18" in depth

2.3 ACCESSORIES

- A. Specify the appropriate grommet per manufacturer and cable type and quantity requirements.

PART 3 EXECUTION

3.1 INSTALLATION

- A. The Contractor shall install open racks as shown in drawings by securely fastening the rack to the deck.
- B. The Contractor shall provide horizontal cable management above and below the housing, as needed for a single management unit above and below the housing, dependent on final placement of the housing.
- C. The Contractor shall securely fasten side-by-side racks to each other using rack manufacturer hardware.
- D. The Contractor shall provide and install rack parts as shown on drawings provided.
- E. The Contractor shall bag and leave attached to the tray any unused mounting screws or other hardware upon completion.
- F. Provide vertical and horizontal cable management sized for no more than 40 percent fill.
- G. Mount with minimum of 36 inches clear access behind and in front of rack/cabinet.
- H. Ground rack/enclosure to TMGB / TGB with Grounding Wire.

END OF SECTION 271116