

Section 27 11 00

COMMUNICATION EQUIPMENT ROOM FITTINGS

Section 27 11 16

Communications Cabinets, Racks, Frames and Enclosures

PART 1 – GENERAL

1.1 WORK INCLUDED

- A. Provide all labor, materials, and equipment for the complete installation of work called for in the Contract Documents.

1.2 SCOPE OF WORK

- A. This section includes the minimum requirements for wall-mounted racks for use in communications equipment rooms.
- B. Included in this section are the minimum composition requirements and installation methods for the following:
  - 1. Racks, wall-mounted.

1.3 QUALITY ASSURANCE

- A. All cable and equipment shall be installed in a neat and workmanlike manner. All methods of construction that are not specifically described or indicated in the contract documents shall be subject to the control and approval of the Owner or Owner Representative. Equipment and materials shall be of the quality and manufacture indicated. The equipment specified is based upon the acceptable manufacturers listed. Where “approved equal” is stated, equipment shall be equivalent in every way to that of the equipment specified and subject to approval.
- B. Strictly adhere to all Building Industry Consulting Service International (BICSI), Electronic Industries Alliance (EIA) and Telecommunications Industry Association (TIA) recommended installation practices when installing communications/data cabling.
- C. Material and work specified herein shall comply with the applicable requirements of:
  - 1. ANSI/TIA/EIA – 568-B *Commercial Building Telecommunications Cabling Standard*, 2000-2004
  - 2. TIA – 569-B *Commercial Building Standard for Telecommunications Pathways and Spaces*, 2004
  - 3. ANSI/TIA/EIA – 606-A *Administration Standard for the Telecommunications Infrastructure of Commercial Buildings*, 2002
  - 4. ANSI-J-STD – 607-A *Joint Standard for Commercial Building Grounding (Earthing) and Bonding Requirements for Telecommunications*, 2002

5. NFPA 70 – *National Electric Code*, 2005
6. BICSI – *Telecommunications Distribution Methods Manual*, 10<sup>th</sup> Edition, 2003

#### 1.4 SUBMITTALS

- A. Provide product data for the following:
  1. Manufacturers data sheets/cut sheets, specifications and installation instructions for all products (submit with bid).

### PART 2 – PRODUCTS

#### 1.0 Racks, Wall-Mounted

##### A. Wall-Mounted Equipment Rack (Heavy-Duty Wall-Mount Equipment Rack)

1. Wall-mounted racks shall be manufactured from sheet aluminum and aluminum extrusion.
2. The rack will support 19" EIA or 23" wide equipment, as specified below.
3. The rack will be EIA-310-D compliant. Rack-mount spaces/units (RMU) will be 1-3/4" high. The rack will have a single pair of C-shaped equipment mounting rails. The front and back of the mounting rails will be punched with the Universal hole pattern. Mounting holes will be spaced vertically on alternating 5/8"-5/8"-1/2" centers and will be roll-formed with #12-24 threads. Mounting rails will provide 20 or 40 rack-mount spaces (RMU) for equipment as specified below.
4. The rack will be 18" or 24" deep as specified below.
5. The rack will be rated to support 350 pounds of equipment. Load bearing capacity will be stated in the manufacturer's product literature.
6. Finish shall be clear (brushed/grained aluminum) or epoxy-polyester hybrid powder coat (paint) in the color(s) specified below.
7. Each rack will include 50 each #12-24 equipment mounting screws and installation hardware (1/4" x 2" hex lag screws for wood stud walls).
8. Design Make:  
Chatsworth Products, Inc. (CPI),  
Heavy-Duty Wall-Mount Equipment Rack

Part Number **15320-118**, Heavy-Duty Wall-Mount Equipment Rack, 19" EIA x 38.5" High x 18" Deep, 20 RMU, Gray.

Part Number **15320-218**, Heavy-Duty Wall-Mount Equipment Rack, 19" EIA x 38.5" High x 18" Deep, 20 RMU, Computer White.

Part Number **15320-518**, Heavy-Duty Wall-Mount Equipment Rack, 19" EIA x 38.5" High x 18" Deep, 20 RMU, Clear (Brushed Aluminum).

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Part Number **15320-718**, Heavy-Duty Wall-Mount Equipment Rack, 19" EIA x 38.5" High x 18" Deep, 20 RMU, Black.

Part Number **15320-124**, Heavy-Duty Wall-Mount Equipment Rack, 19" EIA x 38.5" High x 24" Deep, 20 RMU, Gray.

Part Number **15320-224**, Heavy-Duty Wall-Mount Equipment Rack, 19" EIA x 38.5" High x 24" Deep, 20 RMU, Computer White.

Part Number **15320-524**, Heavy-Duty Wall-Mount Equipment Rack, 19" EIA x 38.5" High x 24" Deep, 20 RMU, Clear (Brushed Aluminum).

Part Number **15320-724**, Heavy-Duty Wall-Mount Equipment Rack, 19" EIA x 38.5" High x 24" Deep, 20 RMU, Black.

Part Number **15321-118**, Heavy-Duty Wall-Mount Equipment Rack, 19" EIA x 73.5" High x 18" Deep, 40 RMU, Gray.

Part Number **15321-218**, Heavy-Duty Wall-Mount Equipment Rack, 19" EIA x 73.5" High x 18" Deep, 40 RMU, Computer White.

Part Number **15321-518**, Heavy-Duty Wall-Mount Equipment Rack, 19" EIA x 73.5" High x 18" Deep, 40 RMU, Clear (Brushed Aluminum).

Part Number **15321-718**, Heavy-Duty Wall-Mount Equipment Rack, 19" EIA x 73.5" High x 18" Deep, 40 RMU, Black.

Part Number **15321-124**, Heavy-Duty Wall-Mount Equipment Rack, 19" EIA x 73.5" High x 24" Deep, 40 RMU, Gray.

Part Number **15321-224**, Heavy-Duty Wall-Mount Equipment Rack, 19" EIA x 73.5" High x 24" Deep, 40 RMU, Computer White.

Part Number **15321-524**, Heavy-Duty Wall-Mount Equipment Rack, 19" EIA x 73.5" High x 24" Deep, 40 RMU, Clear (Brushed Aluminum).

Part Number **15321-724**, Heavy-Duty Wall-Mount Equipment Rack, 19" EIA x 73.5" High x 24" Deep, 40 RMU, Black.

Part Number **15322-118**, Heavy-Duty Wall-Mount Equipment Rack, 23" Wide x 38.5" High x 18" Deep, 20 RMU, Gray.

Part Number **15322-218**, Heavy-Duty Wall-Mount Equipment Rack, 23" Wide x 38.5" High x 18" Deep, 20 RMU, Computer White.

Part Number **15322-518**, Heavy-Duty Wall-Mount Equipment Rack, 23" Wide x 38.5" High x 18" Deep, 20 RMU, Clear (Brushed Aluminum).

Part Number **15322-718**, Heavy-Duty Wall-Mount Equipment Rack, 23" Wide x 38.5" High x 18" Deep, 20 RMU, Black.

Part Number **15322-124**, Heavy-Duty Wall-Mount Equipment Rack, 23" Wide x 38.5" High x 24" Deep, 20 RMU, Gray.

Part Number **15322-224**, Heavy-Duty Wall-Mount Equipment Rack, 23" Wide x 38.5" High x 24" Deep, 20 RMU, Computer White.

Part Number **15322-524**, Heavy-Duty Wall-Mount Equipment Rack, 23" Wide x 38.5" High x 24" Deep, 20 RMU, Clear (Brushed Aluminum).

Part Number **15322-724**, Heavy-Duty Wall-Mount Equipment Rack, 23" Wide x 38.5" High x 24" Deep, 20 RMU, Black.

Part Number **15323-118**, Heavy-Duty Wall-Mount Equipment Rack, 23" Wide x 73.5" High x 18" Deep, 40 RMU, Gray.

Part Number **15323-218**, Heavy-Duty Wall-Mount Equipment Rack, 23" Wide x 73.5" High x 18" Deep, 40 RMU, Computer White.

Part Number **15323-518**, Heavy-Duty Wall-Mount Equipment Rack, 23" Wide x 73.5" High x 18" Deep, 40 RMU, Clear (Brushed Aluminum).

Part Number **15323-718**, Heavy-Duty Wall-Mount Equipment Rack, 23" Wide x 73.5" High x 18" Deep, 40 RMU, Black.

Part Number **15323-124**, Heavy-Duty Wall-Mount Equipment Rack, 23" Wide x 73.5" High x 24" Deep, 40 RMU, Gray.

Part Number **15323-224**, Heavy-Duty Wall-Mount Equipment Rack, 23" Wide x 73.5" High x 24" Deep, 40 RMU, Computer White.

Part Number **15323-524**, Heavy-Duty Wall-Mount Equipment Rack, 23" Wide x 73.5" High x 24" Deep, 40 RMU, Clear (Brushed Aluminum).

Part Number **15323-724**, Heavy-Duty Wall-Mount Equipment Rack, 23" Wide x 73.5" High x 24" Deep, 40 RMU, Black.

B. Equipment-Mounting Hardware for Fixed Wall-Mount Equipment Rack:

1. Provide additional equipment-mounting hardware if required to attach equipment to the rack.
2. Equipment mounting hardware will be combination pan head, pilot point mounting screws, threaded #12-24 and 5/8" long.
3. Design Make:

Chatsworth Products, Inc. (CPI),  
Equipment Mounting Hardware

Part Number **40605-001**, Hardware Kit For Threaded Mounting Rails, 12-24 Screws, Package Of 50, Zinc.

Part Number **40605-005**, Hardware Kit For Threaded Mounting Rails, 12-24 Screws, Package Of 50, Black.

## PART 3 – EXECUTION

### 3.1 INSTALLATION

A. Wall-Mounted Equipment Rack (Heavy-Duty Wall-Mount Equipment Rack)

1. Follow the manufacturer's assembly and installation instructions when securing the rack to the wall. The rack should be installed on a plywood backboard or attached to a masonry wall. The rack should not be attached to sheet rock (gypsum wall board).