

SECTION 271123 - COMMUNICATIONS CABLE MANAGEMENT & LADDER RACK

PART 1 - GENERAL

1.1 GENERAL REQUIREMENTS

- A. Applicable requirements of Division 27 - Communications shall be considered a part of this section and shall have the same force as if printed here in full.
- B. This document describes the products and execution requirements relating to Communications Cable Management and Ladder Rack.
- C. Product specifications, general design considerations, and installation guidelines are provided in this document. The successful vendor shall meet or exceed all requirements described in this document and on the drawings.

1.2 SUBMITTALS

- A. Provide product data from the manufacturer's specifications.

1.3 WORK INCLUDED

- A. The work included under this specification consists of furnishing all labor, equipment, materials, and supplies and performing all operations necessary to complete the installation. The Contractor will provide and install all of the required material whether specifically addressed in the Specification or not.

PART 2 - PRODUCTS

2.1 APPROVED PRODUCTS

- A. Approved Horizontal Cable Management Manufacturer(s)
 - 1. Chatsworth Products, Inc. (CPI)
 - 2. CommScope -
 - 3. Or Design Engineer Approved Equal
- B. Approved C-Ring/D-ring Manufacturer(s)
 - 1. Chatsworth Products, Inc. (CPI)
 - 2. Or Design Engineer Approved Equal

2.2 CABLE MANAGEMENT - HORIZONTAL

- A. Horizontal Cable Management
 - 1. The horizontal wire manager shall be compatible with 19-inch equipment racks, cabinets or wall mount brackets.
 - 2. The horizontal cable manager shall provide support for patch cords at the front of the panel.

3. The horizontal cable manager shall be 2 rack-units in height when matched with a 2 rack-unit patch panel or switch.
4. The horizontal cable manager shall be 1 rack-unit in height when matched with a 1 rack-unit patch panel or switch.
5. See Drawings for Requirements.

2.3 VELCRO STRAPS

A. Velcro Straps

1. Backbone cables shall be fastened to support structures with Velcro straps.
2. Horizontal cables shall be fastened to support structures with Velcro straps.
 - a. Velcro Strap color shall be black (or red in plenum spaces).
3. Tie Wraps shall not be permitted.

2.4 C-RINGS/D-Rings

A. C-Rings/D-rings

1. C-rings/D-rings shall be used on backboards to support cables, patch cords and cross-connect wire.
2. C-rings/D-rings shall be made of high-strength, fire-retardant material with rounded edges to prevent damage to cable and wire insulation.

PART 3 - EXECUTION

3.1 CABLE MANAGEMENT - HORIZONTAL

- A. Horizontal cable managers shall be installed as indicated on Drawings.

3.2 VELCRO STRAPS

- A. Velcro straps shall be installed around cables at intervals of 12" minimum.
- B. Velcro straps shall secure cables to ladder racks using an "X" pattern.
- C. Do not over-cinch cables.

3.3 C-RINGS/D-RINGS

- A. C-ring/D-rings shall be installed on 3/4" backboard, straight and level.

3.4 IDENTIFICATION

- A. Refer to Section 27 05 53 - Identification for Communications Systems for labeling details.

END OF SECTION