Division 27 Communication
Racks

27.05
Equipment Racks & Wire Managers

Materials - Equipment Racks
- The BDF shall be equipped with 7’ high, 19” wide, deep 2-post rack, unless otherwise noted.
- The equipment racks shall be heavy-duty steel construction and shall meet ANSI/EIA-310D standards for equipment support frames.
- The equipment racks shall have a self-supporting base designed to be anchored to a concrete or wooden floor.
- The equipment racks shall have a factory provided powder coat finish.

Materials - Wire Managers
- All equipment racks shall be equipped with vertical and horizontal wire managers, as outlined in the design documents.
- All wire managers shall be designed specifically to connect to 7’ X 19” equipment racks.
- All wire managers shall be secured to the equipment racks and shall provide a clear and unobstructed pathway in which to route the cables/optics.
- Vertical wire managers shall be double-sided vertical panels designed to maintain jumper, patch, or cross-connect cables/optics in place.
- Each equipment rack shall be equipped with a minimum of two (2) double-sided vertical wire managers. One (1) on each side of the equipment rack, unless otherwise noted.
- The vertical wire managers shall be designed to allow placement of equipment in any position within the equipment rack. When mounted between equipment racks, they shall be designed to direct cables into either rack and shall be securely mounted to both units.
- Vertical wire manager openings shall match exactly with angled patch panels.
- Vertical wire managers shall be sized to accommodate the number of patch cables required to connect each data jack to a data switch mounted in the same rack.
- The horizontal wire managers shall range from one to two rack units in size and designed for installation in a 7’ X 19” equipment rack. These units shall be equipped with a minimum of four (4) horizontal supporting rings.
- Each equipment rack shall be equipped with one (1) horizontal wire manager for each 24 data jacks or fraction thereof. Minimum three (3).
Ladder Racking

Materials

- Cable support ladder racking shall be installed as defined in the Contract Documents and in any location where additional pathways are required to support large numbers of station cables that are otherwise not supported.
- The ladder racks shall be twelve inches wide, unless otherwise noted.
- In some locations the ladder rack shall be equipped with a four-to-six inch fence on both sides to support bundles of patch or jumper cables. This fence shall mechanically attach to the side or bottom of the ladder rack, not the surface over which the cable will be placed.
- The ladder racks shall be classified by Underwriters Laboratories (UL) as suitable for equipment grounding.
- The Contractor shall provide the manufacturer’s standard clamps, hangers, brackets, splice plates, reducer plates, blind ends, barrier strips, connectors, and grounding straps.
- BDF shall have UL listed black steel tubular style ladder racking.

Manufacturers: CPI, B-Line, Newton