**SECTION 27 11 16 – Communications Cabinets, Racks, Frames, and Enclosures**

GENERAL

SUBMITTALS

Action Submittals:

Product Data: Manufacturer’s descriptive and dimensional data and product attributes.

Closeout Submittals:

Operation and Maintenance Data.

A minimum of 2 identified keys for the keyed alike lockable front and backbox.

QUALITY ASSURANCE

Regulatory Requirements:

UL 2416, Audio/Visual Information and Communications Technology Equipment Cabinets, Enclosures and Rack Systems

EIA/ECA-310-E, Cabinets, Racks, Panels and Associated Equipment

ANSI/TIA 607-D, Generic Telecommunication Bonding and Grounding (Earthing) for Customer Premises

PRODUCTS

EQUIPMENT RACKS

Contract documents are based on Lowell Manufacturing Company. Phone (636) 257-3400. Website [www.lowellmfg.com](http://www.lowellmfg.com). E-mail sales@lowellmfg.com

Substitutions: [Refer to Division 01.] [Not permitted.]

GENERAL RE: RACK CONSTRUCTION

Racks are to be UL listed, constructed from certified U.S. steel with a factory applied black wrinkle powder epoxy finish and sized to suit the equipment to be installed plus 20% spare capacity. Additional requirements are as follows:

Wall-mount racks are to be welded #16 gauge steel backbox and front mounting section that swings open.

Front corner edges are to be beveled.

WALL-MOUNT RACK

Lowell Manufacturing Co. “LWR” Series wall racks, each complete with

Mounting Section: attaches to backbox with 2 heavy-duty, spring-loaded and self-seating L-pins which can be attached on either side to alter swing orientation. Side vents.

Backbox: 5.8-inch deep with keyhole mounting slots on 16-inch centers. 10-in. x 10-in. rear opening to accommodate a pull box. Ground connection stud. Embossed dimples and lacing points on back plane for installation of board mounted accessories. Top and bottom laser-cut knock-out panels. Knock-outs for wireless antennae. Keyed side locks to secure front mounting section which can swing open for access when not locked.

Adjustable rack rails: #11 gauge black finish steel 10-32 threaded rails on E.I.A. spacing with bi-directional numbered RU increments. 1-pr.

Hardware: Black pilot point screws with captive washers

Rack Model Number:

* + - * 1. Model LWR-719: Height 7U [18.38in./467mm], Depth 19.05in.[484mm], Width 23.06in.[586mm], Load Capacity 125 lbs.[56.6kg].
        2. Model LWR-1019: Height 10U [23.63in./600mm], Depth 19.05in.[484mm], Width 23.06in.[586mm], Load Capacity 150 lbs.[68kg].
        3. Model LWR-1219: Height 12U [27.13in./689mm], Depth 19.05in.[484mm], Width 23.06in.[586mm], Load Capacity 150 lbs.[90.7kg].
        4. Model LWR-1619: Height 16U [34.13in./867mm], Depth 19.05in.[484mm], Width 23.06in.[586mm], Load Capacity 200 lbs.[90.7kg].
        5. Model LWR-1819: Height 18U [37.50in./953mm], Depth 19.05in.[484mm], Width 23.06in.[586mm], Load Capacity 250 lbs.[113.3kg].
        6. Model LWR-2119: Height 21U [42.88in./1089mm], Depth 19.05in.[484mm], Width 23.06in.[586mm], Load Capacity 250 lbs.[113.3kg].
        7. Model LWR-2419: Height 24U [48.13in./1223mm], Depth 19.05in.[484mm], Width 23.06in.[586mm], Load Capacity 300 lbs.[136kg].]
        8. Model LWR-3519: Height 35U [67.38in./1711mm], Depth 19.05in.[484mm], Width 23.06in.[586mm], Load Capacity 300 lbs.[136kg].]
        9. Model LWR-723: Height 7U [18.38in./467mm], Depth 23.05in.[585mm], Width 23.06in.[586mm], Load Capacity 125 lbs.[56.6kg].]
        10. Model LWR-1023: Height 10U [23.63in./600mm], Depth 23.05in.[585mm], Width 23.06in.[586mm], Load Capacity 150 lbs.[68kg].]
        11. Model LWR-1223: Height 12U [27.13in./689mm], Depth 23.05in.[585mm], Width 23.06in.[586mm], Load Capacity 150 lbs.[90.7kg].]
        12. Model LWR-1623: Height 16U [34.13in./867mm], Depth 23.05in.[585mm], Width 23.06in.[586mm], Load Capacity 200 lbs.[90.7kg].]
        13. Model LWR-1823: Height 18U [37.50in./953mm], Depth 23.05in.[585mm], Width 23.06in.[586mm], Load Capacity 250 lbs.[113.3kg].]
        14. Model LWR-2123: Height 21U [42.88in./1089mm], Depth 23.05in.[585mm], Width 23.06in.[586mm], Load Capacity 250 lbs.[113.3kg]. ]
        15. Model LWR-2423: Height 24U [48.13in./1223mm], Depth 23.05in.[585mm], Width 23.06in.[586mm], Load Capacity 300 lbs.[136kg]. ]
        16. Model LWR-3523: Height 35U [67.38in./1711mm], Depth 23.05in.[585mm], Width 23.06in.[586mm], Load Capacity 300 lbs.[136kg].]

Optional Accessories:

Solid steel surface-mount front door with key lock Model [LFD-7] [LFD-10] [LFD-12] [LFD-16] [LFD-18] [LFD-21] [LFD-24] [LFD-35]

Smoked plexiglass surface-mount front door with key lock Model [LFD-7P] [LFD-10P] [LFD-12P] [LFD-16P] [LFD-18P] [LFD-21P] [LFD-24P] [LFD-35P]

Fully-vented surface-mount front door with key lock Model [LFD-7FV] [LFD-10FV] [LFD-12FV] [LFD-16FV] [LFD-18FV] [LFD-21FV] [LFD-24FV] [LFD-35FV]

Additional pair of mounting rails Model [RRD-7] [RRD-10] [RRD-12] [RRD-16] [RRD-18] [RRD-21] [RRD-24] [RRD-35]

EXECUTION

INSTALLATION OF EQUIPMENT RACKS

Provide equipment racks as shown/required with exact quantity and sizes to suit system equipment and the required spare capacity. Confirm exact locations prior to roughing-in.

Install in accordance with the manufacturer’s published instructions.

Ensure that rack locations permit full opening of doors.

Ground and bond all racks in accordance with requirements of [Section 27 05 26], Grounding and Bonding for Communications Systems.

END OF SECTION