SECTION 27 15 00 - HORIZONTAL CABLING REQUIREMENTS

PART 1 - GENERAL

1.1 DESCRIPTION

A. Horizontal cabling will consist of Category 5e for voice and RG-6 for CATV.

B. The cabling within the unity will terminate on 110 blocks, labeled with room it terminates in. Provide all jumper management, D-Rings, J-hooks, voice blocks and accessories needed for a complete and professional installation.

C. All equipment needed for a complete install whether specified directly or not to properly route, terminate, and test the Horizontal Cabling is to be part of the bid.

D. Tag coaxial cable in the electrical room and terminate with an ‘F’ connector for the utilities use.

1.2 QUALITY ASSURANCE

A. The vendor shall comply with the following standards and codes:

1. National Electrical Code.
2. UL Listed.

B. Additional requirements listed in 27 01 00.

C. System Installers

1. Shall have no less than 3 years of documented work experience on projects of equivalent size and technical difficulty. If you are using a Subcontractor their installers must meet the requirements, this is a requirement of the installer not the bidder.
2. “Experience” is defined as the completion of an operational system, with the system being successfully operated by the customer for its intended purpose for at least one year.
3. Must have current certification, from the Manufacturer, on the system to be installed.

PART 2 - PRODUCTS

2.1 ACCEPTABLE MANUFACTURERS

A. Panduit, Leviton, Hubbel or approved equal.

B. Cable manufacturer must comply with termination hardware, cabling submitted must provide and end-to-end solution.

2.2 MATERIALS

A. Cable

1. Phone
   a. Category 5e
   b. Part of the Structured Cabling
   c. Jacket color does not matter as long as all cable is the same color (no red, yellow, or orange)
   d. Jacket type will be by ceiling space as required by code.
2. Coaxial
   a. RG-6
   b. Quad sheilded

B. Faceplates/Wall box

1. Single gang faceplate
2. 4-pin RJ-11 with screw terminals and ‘F’ connector.
3. Color will be set by Architect.

C. Coax Connector

1. F- Connector
2. Snap-n-seal type, not crimp

D. Smart Panel

1. 30”h x 14” w
2. Nonmetallic, RF transparent
3. Primex, Hubbell, Levition or approved equal

PART 3 - INSTALLATION

3.1 CABLES

A. All Cables within the Equipment room shall be routed to avoid any electrical interference. Cable that route from wall-mount equipment shall utilize D-rings to get to the closest cable tray. All cables within Data/IT/Equipment Room shall be dressed and neatly bundled utilizing velcro cable ties

B. If D-Rings are used be sure to size them leaving room for growth.

C. Cables in ceiling space will be supported every 5’ minimum and secured in a professional manner. If cable tray is available cables utilizing the tray will be separated by system and loosely bundled with velcro cable ties.

D. The interior communications pathways shall be in the most direct and efficient path possible. Cables are to be bundled and share a common path whenever possible. Size J-hooks for appropriate load and follow manufacturer recommendation for fill. Cables shall not be laying on ceiling tiles or using other systems i.e. electrical conduit, plumbing pipe, HVAC duct for support.

E. Approx. 12” to 16” of slack left supported above ceiling before entering the conduit at the station end.

F. Small slack loop left at the Equipment Room/IT/Data Room.

G. Follow manufacturer recommendation for pulling tension and bend radius.

3.2 TERMINATION

A. Termination in IDF/MDF will be based on type of cable and system utilizing the cable. The termination equipment type and location shall be indicated on the plans. Verify proper pin-out with onsite IT staff, whether 568A or 568B, prior to termination.

B. Station side will be verify pin-out prior to termination. Termination of cables will be sequential as numbered for ease of outlet identification. Verify labeling style with plans or onsite Owner Representative.

END OF SECTION 27 15 00