PART 1 - GENERAL

1.1 SUMMARY

A. Includes But Not Limited To:
   1. Furnish and install control-voltage electrical cables as described in Contract Documents.

B. Related Sections:
   1. Section 01 1000: Owner will terminate building telephone cables at terminal board.
   2. Section 23 0933: Cables for Temperature Control System.
   3. Section 26 0501: Common Electrical Requirements.

1.2 DEFINITIONS

A. Control Voltage: 70 Volts and under.

PART 2 - PRODUCTS

2.1 COMPONENTS

A. Building Telephone / Data System Cables.
   1. CAT 5E, 24 AWG, solid bare copper, four pair, UTP.
   2. Sheath Colors:
      a. Telephone: Yellow.
      b. Data: Blue.

B. Building Telephone System Cables:
   1. CAT 5e, 24 AWG, solid copper, four pair, UTP, yellow cable jacket.
   2. Meet requirements of TIA / EIA 568 Standard.

C. Category Four Approved Manufacturers. See Section 01 6000 for definitions of Categories.

PART 3 - EXECUTION

3.1 INSTALLATION

A. General:
   1. Cables shall be continuous and without splices from terminal board to outlet.
   2. In inaccessible, concealed spaces, run cables in raceway. In accessible, unfinished areas, cables may be run exposed without raceway.
   3. Run exposed cables parallel to or at right angles to building structure lines. Do not run exposed cables on floors or in such a way that they obstruct access to, operation of, or servicing of equipment. Keep cables 6 inches minimum from hot water pipes.
a. Support cables every 3 feet with permanent clips, straps, staples, or tie wraps approved for application and which will not cause cables to be pinched or deformed.
b. Securely attach clips and straps with nails or screws. Do not use wire or tape to support cables.
4. Bundle only cables of same systems together.
5. Pulling Conductors:
   a. Do not pull conductors into conduit until raceway system is complete and cabinets and outlet boxes are free of foreign matter and moisture.
   b. Do not use heavy mechanical means for pulling conductors.
   c. Use only listed wire pulling lubricants.

B. Telephone / Data System Cables:
1. Install cable from terminal board to each telephone and data outlet unless indicated otherwise on Drawings.
2. Leave adequate slack cable at terminal board and outlets for termination of each cable run.

C. Sound And Video Systems Cables:
1. Label cables at each end with cable markers for use of sound system and video system installers.
2. Run separate insulated No. 6 grounding conductor from each equipment cabinet to electrical panel. Do not use intermediate connections or splices.
3. Protrude cables 18 inches 450 mm from wall or ceiling at all outlets and speaker locations. Extend cables and grounding conductors to twice vertical length of cabinet at each cabinet location.
4. For cables not installed in metallic raceway, do not run cables within 10 inches of line voltage conductors / raceways. Also, maintain 10 inches minimum between following exposed cable groups:
   a. Microphone cables.
   b. CAT-5, sound system control, telephone, video, or ATC cables.
   c. Loudspeaker cables.

END OF SECTION