

## SECTION 27 10 00 - CABLE PLANT OVERVIEW

### PART 1 - GENERAL

#### 1.1 SCOPE

- A. Unless noted otherwise the Cabling Contract or the combined Electrical /Cabling contract includes the following work, called for in the 270000 series specification sections and shown on the "E" series plans:
1. Exterior Pathways
  2. Interior Horizontal Pathways above accessible ceilings (Cable hangers)
  3. Interior Backbone Pathways above accessible ceilings with the exception of Multicell conduit from the building entrance to the communication equipment room.
  4. Data and telephone Devices, Faceplates, and Connecting Hardware
  5. Backboards and punch down blocks
  6. Firestopping of all sleeves after cable installation is complete.
  7. Data Cable Plant
  8. Voice Cable Plant
  9. Video Cable Plant, video amplifiers head end equipment and video bulletin board hardware and software.
  10. Equipment Racks, Ladder Racks, cabinets and Cable Management
  11. Grounding for all communication equipment racks
  12. Testing, labeling and Documentation of all voice, video and data cables.
  13. Coordination of CATV and telephone service cable.

#### 1.2 QUALITY ASSURANCE

- A. All work shall be performed in a neat and workmanlike manner. All methods of construction details of workmanship that are not specifically described or indicated shall be subject to the approval of the Engineer.
- B. Work that is deemed unacceptable by the owners representative shall be replaced at no additional cost to the Owner.
- C. The installer shall comply with all "Quality Assurance" requirements of all 26000 sections.

- D. The prime contractor is responsible for employing qualified sub-contractors to complete 270000 Series work where the quality assurance requirements cannot be met by the prime contractor's full-time employees.
- E. Materials and work specified herein shall comply with the applicable requirements of:
  - 1. ANSI/TIA/EIA-568-A.
  - 2. ANSI/TIA/EIA-569.
  - 3. ANSI/TIA/EIA-606.
  - 4. TIA/EIA-607.
  - 5. Underwriters Laboratory.
  - 6. Federal Communications Commission.
  - 7. ISO/IEC 11801
  - 8. NESC – National Electrical Safety Code
  - 9. BICSI "Customer Owned Outside Plant Manual"
  - 10. BICSI "Telecommunications Distribution Methods Manual"

### **1.3 SUBMITTALS**

- A. Contractor's qualifications and references
- B. Signed Warranty

## **PART 2 - PRODUCTS**

### **2.1 REQUIREMENTS**

- A. All products must meet the minimum requirements described in the specific 260000 Series.
- B. Refer to Section 260100 for submittal and substitution requirements.

## **PART 3 - EXECUTION**

### **3.1 WARRANTY**

- A. Provide a 15 year warranty guaranteeing the specified performance of the optical fiber and Category 6a Cable plants. The optical fiber cable plant shall be warranted for performance up to Gigabit Ethernet speeds with the terminations installed in this contract. The copper cable shall be warranted for up to 1000 Mbps speeds with cable and jacks used in this contract. The warranty shall cover end to end performance including connectors and patch cables. The contractor and all component manufacturers shall back the warranty. The warranty shall include all parts and labor to replace the existing cable, termination and re-testing if the performance is required is not achieved.

### **3.2 INSTALLATION**

- A. The cable plant shall be subject to all the applicable requirements and practices of EIA/TIA, BICSI, U.L., NEMA, F.C.C. and the manufacturers published recommended installation procedures even if they are not specifically described in the 271000 Series sections.

**END OF SECTION**

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