

## **SECTION 27 13 43 – COMMUNICATIONS SERVICES CABLING**

### **PART 1 GENERAL**

#### **1.01 SUMMARY**

- A. Section includes arrangement with Telecommunications Utility Company for telecommunication service, payment of Utility Company charges for service installation; and backboards, cabinets, termination devices, outlets, and premises wiring.
- B. Related Sections:
  - 1. Section 26 05 27 - Wiring Devices: Wall plates.
  - 2. Section 26 05 33 - Raceway Systems.
  - 3. Section 26 05 53 - Identification for Electrical Systems.

#### **1.02 REFERENCES**

- A. International Electrical Testing Association:
  - 1. NETA ATS - Acceptance Testing Specifications for Electrical Power Distribution Equipment and Systems.
- B. Telecommunications Industry Association/Electronic Industries Alliance:
  - 1. TIA/EIA 568B - Commercial Building Telecommunications Cabling Standard.
  - 2. TIA/EIA 569 - Commercial Building Standard for Telecommunications Pathways and Spaces.

#### **1.03 SYSTEM DESCRIPTION**

- A. Contractor shall provide patch distribution cabling to new outlets as shown on the Drawings from existing building backbone hardware.
- B. Horizontal Pathway: Conform to TIA/EIA 569, using raceway, backboards, and cabinets.
- C. Horizontal Wiring: Complete from telecommunications closet to each outlet using horizontal cables.

#### **1.04 SUBMITTALS**

- A. Section 01 33 00 - Submittal Procedures: Submittal procedures.
- B. Product Data: Submit catalog data for each system component with proof of certification of all cables.
- C. Test Reports: Indicate procedures and results for specified field testing and inspection.

#### **1.05 CLOSEOUT SUBMITTALS**

- A. Section 01 70 00 - Execution and Closeout Requirements: Closeout procedures.
- B. Project Record Documents: Record actual locations and sizes of equipment, pullboxes, pathways and outlets.

#### 1.06 QUALIFICATIONS

- A. Manufacturer: Company specializing in manufacturing products specified in this section with minimum three years experience.
- B. Installer: Company specializing in installing products specified in this section with minimum three years experience and with service facilities within 100 miles of project.
- C. Testing Agency: Company member of International Electrical Testing Association and specializing in testing products specified in this section with minimum three years experience.

### **PART 2 PRODUCTS**

#### 2.01 PATCH CABLES

- A. Monoprice Flexboot Cat6 Ethernet Patch Cable
  - 1. Product description: snagless RI45, stranded, 550Mhz, UTP, Pure Bare Copper Wire, 24AWG, 0.5ft, Blue.
  - 2. Quantity – 1 Patch Cord for each terminated port (1:1) ratio.

#### 2.02 CONNECTOR JACKS

- A. Category 6
  - 1. Color shall match existing building standards.

#### 2.03 EQUIPMENT SUPPORT

- A. Support all cabling with J-hooks, or better, support system. Match existing building standard where applicable.

### **PART 3 EXECUTION**

#### 3.01 EXISTING WORK

- A. Remove exposed abandoned telecommunications cables and pathways, including abandoned cables and pathways above accessible ceiling finishes. Cut flush with walls and floors, and patch surfaces.
- B. Disconnect and remove abandoned telecommunications equipment.
- C. Maintain access to existing telecommunications equipment, cabling, and terminations and other installations remaining active and requiring access. Modify installation or provide access panel.

- D. Extend existing telecommunications installations using materials and methods as specified.
- E. Clean and repair existing telecommunications equipment remaining or is to be reinstalled.

### 3.02 INSTALLATION

- A. Install pathways in accordance with TIA/EIA 569.
- B. Install wire and cable in accordance with TIA/EIA 568B.
- C. Finish paint termination backboards with durable white enamel in accordance with Section 09 90 00 prior to installation of telephone equipment.
- D. Install termination backboards and cabinets plumb, and attach securely to building wall at each corner. Install cabinet trim plumb.
- E. Install recessed cabinets flush with wall finishes, and stub 5 empty 1 inch conduits to accessible location above ceiling, below floor at each location.
- F. Install engraved plastic nameplates in accordance with Section 27 05 53. Mark backboards and cabinets with legend "TELEPHONE."
- G. Ground and bond pathways, cable shields, and equipment in accordance with Section 27 05 26.

### 3.03 FIELD QUALITY CONTROL

- A. Section 01 70 00 - Execution and Closeout Requirements: Field inspecting, testing, adjusting, and balancing.
- B. Inspect and test optical fiber cables in accordance with NETA ATS, except Section 4. Perform inspections and tests listed in NETA ATS, Section 7.25.
- C. Inspect and test copper cables and terminations in accordance with TIA/EIA 568.

**END OF SECTION**