### **SECTION 27 15 00**

## **VOICE AND DATA COMMUNICATIONS HORIZONTAL CABLING**

### PART 1 - GENERAL

# 1.1 SECTION INCLUDES

A. The Voice/Data System shall include interior wire, outlets and boxes.

# 1.2 RELATED WORK

- A. Section 26 05 33 Boxes.
- B. Section 27 00 00 Utility Service Entrance.

### 1.3 SUBMITTALS

- A. Submit documents under provision of Division 1 and Section 27 00 00.
- B. Product Data: Submit physical and operating characteristics of interior cable and outlet jacks.

## 1.4 REFERENCES

A. ANSI/NEMA FB 1 - Telephone conduit fittings.

## 1.5 PROJECT RECORD DOCUMENTS

- A. Submit record documents under provision of Division 1 and Section 27 00 00.
- B. Accurately record location of outlet boxes.

## 1.6 WORK BY OWNER

A. Telephone instruments will be supplied by the Owner.

### PART 2 - PRODUCTS

# 2.1 VOICE/DATA WIRE

A. Description: Category 5e unshielded twisted 4-pair wiring (UTP), 24 AWG. Category 5e cable shall meet the physical requirements of ANSI/ICEA publication S-80-576 (ref. B1.6). Exterior jacket color shall be green.

### B. Characteristics:

1. Nominal Impedance:  $100-\frac{1}{2} \pm 15\%$  from 1 MHz to 100 MHz)

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- 2. Maximum DC Resistance: 9.38 ½ / 100 m.
- 3. Mutual Capacitance (max.): 5.25 nF/100m
- C. Manufacturers:
  - 1. *AMP*.
  - Mohawk.
  - 3. Substitutions: Or Approved Equal.

### 2.2 OUTLET JACKS

- A. Manufacturers:
  - 1. Panduit
  - 2. NORDX
  - 3. *AMP*
  - 4. Leviton
  - 5. Substitutions: Approved Equal.
- B. Recessed Wall Type: RJ45, Category 5e, 4-pair for modular type (quick connect terminals) suitable for back wiring and mounting in a standard electrical box. Jack shall include a plastic ivory faceplate and mounting lugs.

### 2.3 TELEPHONE SERVICE WIRING CONNECTION ENCLOSURES

A. Description: Provide a service enclosure box with lockable hinged front doors to enclose the telephone service wiring termination 110 blocks for each building. Locate the enclosure box on the telephone service board within the corresponding electrical rooms. Size the enclosure box as necessary to accommodate wiring terminations.

## **PART 3 - EXECUTION**

# 3.1 EXAMINATION

- A. Verify that surfaces are ready to receive work.
- B. Verify that field measurements are as shown on Drawings.
- C. Beginning of installation means installer accepts existing conditions.

# 3.2 OUTLETS, WIRING, BOXES AND CONDUIT

- A. Arrange with Division 26 to provide outlet boxes as shown on Drawings. Provide recessed (flush) mounted outlet boxes in all finished areas. Provide surface mounted outlet boxes only in unfinished areas or where installed on existing exposed masonry walls.
- B. Conceal wire within partitions or above ceilings in finished spaces. Provide straps as required to properly support cables.

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C. Do not make splices in wiring. Provide wiring continuous from outlet jacks to 110 termination blocks to be located at the main telephone service board in the basement electrical room. Make all necessary wiring terminations.

**END OF SECTION**