

## **SECTION 16742 TELEPHONE SYSTEM**

### **PART 1 - GENERAL**

#### **1.1. SECTION INCLUDES**

- A. Provide new interior telephone wiring, wiring termination blocks, backboards, and outlet jacks.

#### **1.2. RELATED WORK**

- A. Section 16111 - Conduit.
- B. Section 16130 - Boxes.
- C. Section 16421 – Utility Service Entrance.

#### **1.3. SUBMITTALS**

- A. Product Data: Submit physical and operating characteristics of interior cable and outlet jacks.

#### **1.4. REFERENCES**

- A. UL- CM Communication Cable: Telephone wire.
- B. ANSI/NEMA FB 1 - Telephone conduit fittings.

#### **1.5. PROJECT RECORD DOCUMENTS**

- A. Accurately record location of telephone outlets.

#### **1.6. TELEPHONE SERVICE**

- A. Telephone service shall be provided as specified in Section 16421.

### **PART 2 - PRODUCTS**

#### **2.1 TELEPHONE BOXES**

- A. Outlet Boxes: Sheet metal or non-metallic, as specified in Section 16130.

## 2.2 INTERIOR TELEPHONE WIRE

- A. Manufacturers:
  - 1. Mohawk
  - 2. General Cable
  - 3. ATT-Lucent
  - 4. Substitutions: Approved equal.
- B. Description: Multi-conductor UTP, 4 pair, category 5e cable.
- C. Conductor: Solid Copper, 24 AWG.
- D. Insulation: Semi-rigid PVC, 150 volt, 80 degrees C.

## 2.3 TELEPHONE JACKS

- A. Manufacturers:
  - 1. Panduit
  - 2. NORDX
  - 3. AMP
  - 4. Leviton
  - 5. Substitutions: Approved Equal.
- B. Recessed Wall Type: RJ11, Category 3, 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.

## 2.4 TELEPHONE WIRING TERMINATION BLOCKS

- A. Description: 110-style wiring blocks in sizes as required.

## 2.5 TELEPHONE WIRING BACKBOARDS

- A. Service Backboard: ¾" by 4-ft. by 8-ft. plywood backboard, painted black. Mount on wall with 2x4 wood stud frame.
- B. Local Backboards at Service Closets: ¾" by 4-ft. sq. plywood backboard, painted black. Mount on wall secured to partition studs.

## 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 TELEPHONE OUTLETS

- A. Provide telephone outlet boxes and jacks as shown on Drawings.
- B. Provide recessed (flush) mounted telephone outlet boxes in all finished areas.
- C. Do not install recessed telephone boxes back-to-back in walls; provide minimum 6-inch separation. Provide minimum 24 inches separation in acoustic rated and fire-rated walls.
- D. Secure recessed telephone boxes to interior wall and partition studs. Accurately position to allow for surface finish thickness.
- E. Coordinate mounting heights and locations of outlets mounted above counters, benches, and backsplashes.
- F. Install telephone outlet jacks 18 inches above finished floor.
- G. Adjust telephone outlet jacks and wall plates to be flush and level.

### 3.3 TELEPHONE WIRING

- A. Route interior cable concealed in partitions or above ceilings. Exposed wiring in conduit may be used in areas where concealed wiring is not possible; however, prior approval from the Architect must be obtained for any exposed work prior to installation.
- B. Minimum conduit size shall be  $\frac{3}{4}$  inch.
- C. Support telephone wiring above ceilings, using spring metallic clips or cable ties to support cables from structure. Do not rest cable on lay-in ceiling panels.
- D. Do not make splices of telephone wiring.
- E. Provide telephone wiring continuous from outlet jacks to telephone terminal blocks and to service point. Provide all necessary terminations at both ends of wiring.

END OF SECTION