

*(NOTE TO DESIGNER: These Specifications are basic minimum criteria to be met in preparing the final specifications for this section, which is the responsibility of the Designer.)*

SECTION 27 16 19  
PATCH CORDS, STATION CORDS AND CROSS-CONNECT WIRE

PART 1 – GENERAL

1.1 SECTION INCLUDES

- A. Copper and fiber optic patch cables.

1.2 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.
- B. Related Division 27 Sections include:
  - 1. 27 05 00 Common Work Results for Communications
- C. University of Houston Information Technology Telecommunication Infrastructure Standards

1.3 SUMMARY

- A. This Section specifies the requirements for the Patch Cords, Station Cords, and Cross-Connect Wire for the University of Houston [Project Name]. [Insert Project description.]

PART 2 - PRODUCTS

2.1 APPROVED MANUFACTURERS

- A. Panduit
- B. CommScope

2.2 COPPER PATCH CABLES

- A. Two (2) Category 6 copper patch cables shall be furnished and installed for each horizontal cable installed as follows:
  - 1. 50% - 5 feet in length;
  - 2. 50% - 15 feet in length.
- B. Field terminated patch cables are strictly prohibited.
- C. At minimum, every horizontal cabling permanent link in the installation shall meet or exceed performance characteristics of the field test specifications defined in ANSI/TIA/EIA-568-B.2-1 "Transmission Performance Specifications for 4-pair 100 ohm Category 6 Cabling".
- D. Copper patch cables shall be labeled with the switch and port number on the patch panel end, and the patch panel and port number on the switch end.
- E. Patch cables color corresponds to the following:
  - 1. Red for Data;
  - 2. Yellow for Wireless Access Points;
  - 3. Purple for Security Applications;
  - 4. Green for Building Energy Management and Environmental Controls Systems.

### 2.3 FIBER OPTIC PATCH CABLES

- A. Furnish and install one duplex LC Fiber optic patch cable for each fiber optic termination. Length to be determined and included in submittal documents.
- B. Fiber optic patch cables types shall coincide with terminated fiber optic type (ie. Singlemode or 50  $\mu$ m Multimode)
- C. Fiber Optic Patch Cable Color:
  - 1. Single-mode - Yellow
  - 2. Multi-mode - Orange
- D. Field terminated patch cords are strictly prohibited
- E. Patch cord shall be labeled on each end specifying the source and destination of the cable.

### PART 3 - EXECUTION

#### 3.1 PATCH CABLES

- A. Cable Contractor shall fully cooperate and coordinate with Owner's Voice and Data Communications Equipment providers as required to ensure proper integration and connectivity between systems.
- B. Care shall be taken to protect the minimum bend radius of 4 times the cable diameter on all copper patch cables.
- C. Cable Contractor shall furnish labeled floor plan and Microsoft Excel run sheet to Owner's Voice and Data Communications Equipment providers two weeks prior to occupancy.
- D. Cable Contractor shall furnish and install all patch cords in conjunction with Owner's Voice and Data Communications Equipment providers.
- E. Cable Contractor shall provide adequate technician support when Owner's Voice and Data Communications Equipment providers are planning and installing new voice and data equipment installation and connectivity.

END OF SECTION