

PART 4: NETWORKING, TELECOMMUNICATIONS & AUDIO VISUAL SYSTEMS DESIGN

Amended 09-19-2022, See underlined text

1. SCOPE:

1.1. This part outlines the minimum requirements for the design procedures for networking, telecommunications, and audio visual systems for new buildings, and repair and alteration projects for existing buildings on the UMB campus.

2. TELECOMMUNICATIONS:

2.1. **General:** The telecommunications system design shall be coordinated with UMB and the UMB Center for Information and Technology Services (CITS).

2.2. Telecommunications requirements at the University of Maryland, Baltimore continue to increase in variety and complexity. It is unlikely that this situation will change in the future. Voice, data and video requirements will vary over time, and will be different for each department and function of the University, but the trend will be towards more and faster communications capabilities.

2.3. This telecommunications wiring is designed to meet the specific current needs of the University, and to permit growth and flexibility in the future. Data requirements include the need for different levels of Ethernet from 100BASE-T to 100GBASE-FX over unshielded twisted copper pairs, and Fiber.

2.4. **Drawing Requirements:** The following information shall be included in the construction documents:

- a. Incorporate University's (CITS) Standards and details into project contract documents.
- b. During the schematic design phase, consult with UMB and UMB CITS as to what type of system will be required.
- c. The telecommunications rooms shall be stacked. Include a 1/4 inch scale plan indicating device/equipment and cable tray locations to ensure adequate mounting space and floor area including service access. Refer to the mechanical requirements for redundant cooling system requirements.
- d. Refer to main telecommunications specifications for details on equipment rack, cable tray, grounding, and room design.

3. AUDIO/VISUAL:

3.1. **General:** The audio/video system design shall be coordinated with UMB, UMB Center for Information and Technology Services (CITS), and School or Department specific A/V personnel based on the project.

3.2. Audio/Video requirements at the University of Maryland, Baltimore continue to increase in variety and complexity. It is unlikely that this situation will change in the future. Audio/Video requirements will vary over time, and will be different for each department and function of the University.

3.3. **Drawing Requirements:** The following information shall be included in the construction documents:

CHAPTER 3 ED – ELECTRICAL DESIGN STANDARDS

- a. Incorporate University's (CITS) and School or Department standard specifications and requirements and details into project contract documents.
- b. During the schematic design phase, consult with UMB and UMB CITS as to what type of system and equipment will be required.
- c. The audio/visual rooms shall be of adequate size for the system components. Include a one quarter (1/4) inch scale plan indicating device/equipment location to ensure adequate mounting space and floor area including service access.

END OF CHAPTER 3 - ED - PART 4

END OF ELECTRICAL DESIGN STANDARDS