

- 2.9 Conduit/Cores: each closet must be constructed with a minimum of 2"-4" cores equipped with sleeves extending a minimum of 1" above finished floor. Two additional 4" cores are required for each additional 10,000 square feet per floor.
- 2.10 Environment: temperature ranges 60°F to 80°F; humidity ranges 20% to 60% relative; heat dissipation 750 to 5,000 BTU's per hour per cabinet
- 3 Telephone and Data Equipment Rooms
  - 3.1 Telephone and data equipment rooms are special purpose rooms that serve space and environmental needs of large pieces of telecommunications and data equipment and may not be required in all buildings. The need for these rooms should be determined by Campus Telecommunications and Campus Computing. Equipment rooms are connected to all building distribution media and are required to have exacting environmental standards due to the nature of the equipment housed in the room. These rooms will meet the following requirements:
  - 3.2 Telecom room construction requirements:
    - 3.2.1. Room construction, fire protection, and fire-resistant penetrations and openings protection shall be per NFPA 75.
    - 3.2.2. The room shall be constructed as a fire-resistant rated enclosure w.25 -1.2s and data4 uebe 2 (r)3 and daie4 (3) T[be)4J8 (ve)4 ( (:) TJ7.55 ( pr

- 3.3.2. Floor finish: install vinyl composition tile or use a concrete sealer.
- 3.3.3. Floor loading: minimum 100 lbs/sf equipment load.
- 3.4 Environment: temperature ranges 60°F to 80°F; humidity ranges 20% to 60% relative; heat dissipation 750 to 5,000 BTU's per hour per cabinet. assume a 12,000 BTU heat load per rack for calculations unless another value is confirmed by the Project Manager.
- 3.5 Electrical: each manufacturer's equipment is different. The following are requirements generic to all systems' requirements:
  - 3.5.1.1 Dedicated branch circuits (unique, non-shared phase conductor, neutral conductor, equipment grounding conductor)
  - 3.5.1.2 Sharing or daisy-chaining of any conductors is prohibited
  - 3.5.1.3 Isolated grounding
  - 3.5.1.4 Dedicated feeder
  - 3.5.2 Lighting: minimum equivalent of 538 lux measured at 4' above finished floor.
  - 3.5.3 Power: each closet must have a minimum of two 110V AC duplex outlets. Outlets must be separately fused, 20 amp, 3-wire grounding and on a non-switched circuit. Outlets should be located below the termination board location, if known.
- 4 Telecommunications Service Entrances
  - 4.2 Telecommunication facilities must enter and terminate in an area providing optimum utilization for end user requirements. All entrances will be underground, in conduit.
  - 4.3 Sizing of underground entrance facilities fluctuates with many variables but minimum conduits required for a building entrance will be as follows:
    - 4.3.1 Two.3

CONSULTANT PROCEDURES & DESIGN GUIDELINES 270000 Telephone and Data Rooms (UMKC)	University of Misso 2021 Q4
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