

University Contact: Electrical Services, Maintenance &  
Operations  
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## SECTION 26 00 00 \_ELECTRICAL DESIGN REQUIREMENTS

### PART 1 GENERAL

#### 1.1 REFERENCE STANDARDS – USE LATEST ADOPTED EDITION

- A. IECC – International Energy Conservation Code
- B. NFPA 70 – National Electrical Code
- C. NFPA 70E – Standard for Electrical Safety in the Workplace
- D. NFPA 72 – National Fire Alarm and Signaling Code
- E. NFPA 101 – Life Safety Code
- F. NFPA 110 – Standard for Emergency and Standby Power Systems
- G. All required Codes by Authority Having Jurisdiction

#### 1.2 DESIGN REQUIREMENTS

- A. Lighting Timing Devices:
  - 1. All devices should have eight (8) hour carry-over capabilities.
- B. Receptacles:
  - 1. Provide provisions for controlled 120-volt receptacles in the design for energy savings. The controlled receptacles must be automatically switched off when the space is not occupied. An automatic time switch with manual override may also be used for meeting the requirement.
- C. System Furniture:
  - 1. When power panels are specified, coordinate, and identify the location of basefeeds according to furniture drawings. The furniture installer will provide basefeeds. Electrical contractor is responsible for terminating basefeed at wall or partition.
- D. Telecommunication:
  - 1. Refer to CSI Division 27 for telecommunication requirements and specification. The

accepted scope of telecomm work provided by electrical contractor includes furnish and install wall boxes, conduits (branch and main) with pull line and/or other type raceway such as cable tray.

E. Underground Wiring:

1. All underground conduits and ductbanks shall be install at a minimum of 24" to 30" below finished grade to the top of the conduit or ductbank.

F. Torque Spec Documentation:

1. Provide final torque documentation for all lugs and equipment connections.

G. Building Electrical Service:

1. All new electrical services to buildings shall be 277/480 volt, 3-phase, 4-wire unless written exception by the University is granted.

H. Motor Voltage:

1. The branch circuit to motors 1hp or greater shall be 480 volt, 3-phase.

1.3 APPROVED MANUFACTURERS:

A. N/A

1.4 DO'S AND DON'TS

A. DO'S:

1. Use UNIVERSITY STANDARD COLOR CODE:
  - a. 120/240 VAC Delta Systems:
    - 1) A-Black
    - 2) B-Center Phase Orange
    - 3) C-Red
    - 4) Neutral-White
  - b. 120/208 VAC WYE Systems:
    - 1) A-Black
    - 2) B-Red
    - 3) C-Blue
    - 4) Neutral-White
  - c. 277/480 VAC Systems:
    - 1) A-Brown
    - 2) B-Orange
    - 3) C-Yellow
    - 4) Neutral-Gray (Including all 277 VAC branch circuits)

B. DON'TS:

1. Use ungrounded Delta systems.
2. Use shared branch circuit Neutrals.
3. Use multi-wire branch circuits for single phase loads.

PART 2 END OF SECTION