

DIVISION 26 - ELECTRICAL

SECTION 26 24 16 – PANEL BOARDS

PART 1: GENERAL

1.01 Scope of Standard

- A. This standard provides general guidance concerning the specific preferences of Texas State University for Panel Boards.
- B. Texas State University recognizes that project conditions and requirements vary, thus precluding the absolute adherence to the items identified herein in all cases. However, unless there is adequate written justification, it is expected that these guidelines will govern the design and specifications for Texas State University projects.

1.02 Scope of Work

- A. This section includes enclosed fusible switch and circuit breaker panelboards for feeders, and circuit breaker type lighting and appliance branch circuit panelboards.
- B. This is a design standard and is not intended to be used as a guideline or construction specification.

PART 2: PRODUCTS

- A. Panel board bus shall be 98% conductivity copper. Bus shall be installed completely throughout panel to permit addition of new bolt-on breakers in available space in future without modifying bus.
- B. All panel boards shall have door locks. The front cover shall be a door in door arrangement with the inner door hinged to allow breaker handles.
- C. Panels
 - 1. Distribution Panels, Square D preferred, shall be of the “Panel Board” type series with a 20” minimum width.
 - 2. Shall have separate neutral and ground bars.
 - 3. Panels for computer labs shall comply with NEC as a minimum. These panels will have 200% rated neutral busses and served from K rated transformers.

PART 3: EXECUTION

3.01 Design/Drawing Requirements

- A. Branch circuit panel boards shall not serve loads on more than one level of a building.
- B. Molded case circuit breakers shall be bolt-on type only.
- C. Do not mount panel boards in hallways or other public spaces. Where an obsolete panel is being replaced in an existing public space, the new panel shall be flush mounted.
- D. Provide a separate panel board for labs or other high density electrical utilization equipment spaces where the power requirements exceed 12 poles, and locate the panel board near the entrance to and within the space. Provide door locks on all panel boards.
- E. Lighting panel boards shall serve only lighting loads and should contain 15% spare capacity.
- F. Receptacle panel boards, power distribution panel boards, main switchboards and motor control centers should contain 30% minimum spare capacity.
- G. Panel boards should be designed in the electrical room detail layout such that feeder piping is minimized and installed efficiently. Provide a minimum of two 1" empty conduits from each flush mounted panel to an accessible point above the ceiling.
- H. Panel boards shown on single line diagram shall indicate required short circuit amps interrupting capacity (AIC) rating. (may be shown in panel schedules if single-line diagram not appropriate).
- I. Provide panel locations drawn to scale in electric room detail plans.
- J. Panel boards shall be labeled with a descriptor indicating location, reference voltage level, and primary loads served.
- K. Panel schedules shall be provided indicating panel size, AIC rating, whether main circuit breaker or main lug only style, main breaker size. Panel schedules shall indicate load information in kVA per phase.
- L. Panel schedules need room number(s).
- M. Distribution panel boards (400A & up) shall have a minimum of 10" of gutter space on both sides.

END OF SECTION 26 24 16