

PANELBOARDS

DESIGN GUIDELINES

1. Summary:
 - a. This section provides guidelines and standards for UL 67 Panelboards.
2. Design
 - a. All panels shall be fully rated for their associated available short circuit.
 - b. Lighting and receptacle panels shall have Main Circuit Breakers.
 - c. Panels shall have bolt-on branch circuit breakers.
 - d. Panels shall have copper bus.
 - e. Panels shall have a ground bus.
 - f. Isolated ground bus shall be provided if needed to meet project specific requirements.
 - g. Minimum lighting and receptacle panel amperage rating is 100 amps. 225 amp, 42 circuit is preferred.
 - h. Up to 84 circuit, single section panels shall be allowed.
 - i. Provide panels with feed thru lugs for a second section, where required. Multi-section boards to have the same size enclosure.
 - j. Panels shall be flush or surface mounted, depending upon location. Typically, flush-mounted in finished spaces; surface-mounted in mechanical or electrical rooms.
 - k. Panel covers shall be “door-in-door” construction.
 - l. Load Centers are not allowed.
 - m. Spare conduits shall be provided from flush-mounted panels to above the accessible ceiling for future use.
 - n. Lighting panels shall be 480Y/277 Volt, 3 phase, 4 wire, and ground.
 - o. Receptacle panels shall be 208Y/120 Volt, 3 phase, 4 wire, and ground
 - p. Distribution panels may be fusible or circuit breaker type, 400, 600, or 800 amp bus, and 3 phase, 4 wire and ground, 480Y/277 Volt or 208Y/120 Volt, as required.
 - q. Distribution panelboard, all sections, will have copper bussing the full height of the panelboard to allow maximum space for future breakers. Provide 42” wide minimum interior width. Panel height/breaker mounting space, as determined by electrical engineer.
3. Related Sections
 - a. Identification of Electrical Systems
 - b. Service and Distribution
 - c. Circuit Breakers
 - d. Grounding and Bonding

EQUIPMENT and PRODUCT REQUIREMENTS

1. Panelboards:
 - a. Approved Manufacturers:
 - Square D
 - Eaton Cutler-Hammer

END OF SECTION