

DESIGN CRITERIA

1. Related Sections: Division 01 and Division 26 Section 26 05 00 apply.
2. O&M Manuals: O&M Manuals shall include complete published data and shop drawings of each switchboard.
3. Fault Ratings: The integrated equipment fault ratings and selection of individual overcurrent protective device ratings shall be determined on the basis of the Fault Current and Overcurrent Protection Coordination Study (see 26 05 00, paragraph 22A).
4. Switchboard: The switchboard shall consist of a fusible bolted contact or high pressure contact main switch or circuit breaker; a number of feeder overcurrent-protective devices – fused quick-make, quick-break feeder switches or circuit breakers; a meter section consisting of a voltmeter and ammeter with selector switches, a kilowatt-hour meter, and associated current- and potential-transformers. Verify specific metering requirements with installation and edit specification accordingly. Include provisions for continuous monitoring of power and phase currents by the Refrigeration Monitoring and Control System (RMCS). Coordinate with the RMCS supplier.
5. The main switchboard shall have SPD protection.
6. Bussing: Bussing shall be silver plated copper. Provide full height bussing in each switchboard section.
7. Housekeeping Pad: Provide housekeeping pad for the switchboard sized to permit expanding one additional future section of switchboard.
8. Alteration / Remodeling Projects: When it is necessary to revise an existing switchboard on an alteration project, consult with the switchboard manufacturer to ensure that switchboard ratings and approvals are maintained in the revised state of the switchboard, and that the materials and equipment specified for the revision are appropriate for the application. Be especially cognizant of possible series-rated interrupting combinations used in the switchboard design, and maintain these ratings in the revised condition.
9. Arc Flash: Site specific arc flash labels shall be provided on all new switchboards 800 amps or larger on any project. On New Facility projects, major renovations, electrical replacement/upgrades, and refrigeration replacement/upgrades an arc flash study is required(see 26 05 00, paragraph 22A).

END OF SECTION