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26 24 13_SWITCHBOARDS AND PANELBOARDS

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Low- (600 V and less) switchboards and associated accessories for service and voltage distribution applications.
- B. Overcurrent protective devices for switchboards.
- C. Panelboards

1.2 SUMMARY

- A. This standard includes Low Voltage Switchboards, and Panelboards used for electrical distribution.
- B. The intent of these standards is to provide input to the design team on the University's preference of manufacturers, design, equipment options, and quality assurance to maintain the longevity of its assets.

1.3 REFERENCE STANDARDS

- A. NFPA 70 - National Electrical Code; National Fire Protection Association; Most Recent Edition Adopted by Authority Having Jurisdiction, Including All Applicable Amendments and Supplements.

1.4 DESIGN REQUIREMENTS

- A. Basis of Design: Square D
- B. All secondary main switchboard is to include metering at the MDP. See Section 25 05 00. Building sub-metering of individual circuits when required will be determined by Maintenance & Operations.
 - 1. Contact the University of Delaware SEE prior to specifying and installing.
 - 2. Meter shall be connected by Ethernet Cable.
- C. All main secondary switchboard shall be supplied from the switchboard manufacturer with instrument class CT's installed and wired to a CT shorting block.

- D. All switchboard equipment, panelboards, and meters shall be correctly labeled.
 - 1. Switchboard equipment needs to specify the location of equipment served.
 - 2. Panelboards labels to specify where they are fed from.
 - 3. Panel labeling to include areas served by each circuit.
- E. All circuit breakers shall be the Bolt-In type only.
 - 1. Plug-In type circuit breakers **shall not** be specified or approved.
- F. Specify University standard "Best Lock" on all panel doors unless panel is in a locked Electrical Room or Mechanical Room.
- G. Provide surge protective devices on main switchboard or panelboard.
- H. Provide minimum spare capacity of 80%.

1.5 SUBMITTALS

- A. Product Data: Provide electrical characteristics including voltage, frame size and trip ratings, fault current withstand ratings, and time- current curves of all equipment and components.
- B. Manufacturer's Installation Instructions: Indicate application conditions and limitations of use stipulated by product testing agency. Include instructions for storage, handling, protection, examination, preparation, and installation of product.
- C. Maintenance Data: Include information on replacement parts and recommended maintenance procedures and intervals.

PART 2 PRODUCTS

2.01 MANUFACTURERS

- A. Schneider Electric; Square D Products: www.schneider-electric.us.
- B. ABB: www.abb.com
- C. Siemens: www.usa.siemens.com

2.02 OVERCURRENT PROTECTIVE DEVICES

- A. Provide main circuit breakers 600 Ampere and above shall be electronic type with trip units with LSIG type.

PART 3 END OF SECTION