

**PART 1**      **GENERAL**

**1.1**            **SECTION INCLUDES**

- .1      Materials and installation for standard and custom breaker type panelboards.

**1.2**            **RELATED SECTIONS**

- .1      Section 01 33 00 - Submittal Procedures.
- .2      Section 26 05 00 – Common Work Requirements - Electrical.
- .3      Section 26 28 16.02 - Moulded Case Circuit Breakers.

**1.3**            **REFERENCES**

- .1      Canadian Standards Association (CSA)
  - .1      CSA C22.2 No.29, Panelboards and enclosed Panelboards.

**1.4**            **SUBMITTALS**

- .1      Drawings to include electrical detail of panel, branch breaker type, quantity, ampacity and enclosure dimension.

**PART 2**      **PRODUCTS**

**2.1**            **PANELBOARDS**

- .1      Panelboards: to CSA C22.2 No.29 and product of one manufacturer.
  - .1      Install circuit breakers in panelboards before shipment.
  - .2      In addition to CSA requirements manufacturer's nameplate must show fault current that panel including breakers has been built to withstand.
- .2      250 V panelboards: bus and breakers rated for 18,000 A (symmetrical) minimum interrupting capacity or as indicated on electrical drawings.
- .3      Sequence phase bussing with odd numbered breakers on left and even on right, with each breaker identified by permanent number identification as to circuit number and phase.
- .4      Panelboards: mains, number of circuits, and number and size of branch circuit breakers as indicated.
- .5      Two keys for each panelboard and key panelboards alike.
- .6      Tin plated aluminum bus with neutral of same ampere rating as mains.

- .7 Mains: suitable for bolt-on breakers.
- .8 Trim with concealed front bolts and hinges.
- .9 Trim and door finish: baked grey enamel.
- .10 Panel to be complete with main breaker as indicated.
- .11 Panel to be Service Entrance rated.

## **2.2 BREAKERS**

- .1 Breakers: to Section 26 28 16.02 - Moulded Case Circuit Breakers.
- .2 Breakers with thermal and magnetic tripping in panelboards except as indicated otherwise.
- .3 Main breaker: separately mounted on top or bottom of panel to suit cable entry. When mounted vertically, down position should open breaker.

## **2.3 EQUIPMENT IDENTIFICATION**

- .1 Provide equipment identification in accordance with Section 26 05 00 – Common Work Requirements - Electrical.
- .2 Nameplate for each panelboard size 4 engraved as indicated.
- .3 Nameplate for each circuit in distribution panelboards size 2 engraved as indicated.
- .4 Complete circuit directory with typewritten legend showing location and load of each circuit.

## **PART 3 EXECUTION**

### **3.1 INSTALLATION**

- .1 Locate panelboards as indicated and mount securely, plumb, true and square, to adjoining surfaces.
- .2 Mount panelboards to height specified in Section 26 05 00 – Common Work Requirements - Electrical or as indicated.
- .3 Connect loads to circuits.
- .4 Connect neutral conductors to common neutral bus with respective neutral identified.

**END OF SECTION**