PANELBOARDS – BREAKER TYPE

1. GENERAL

1.1 Shop Drawings

- .1 Submit Shop Drawings in accordance with Section 16010 Electrical General Requirements.
- .2 Drawings to include electrical detail of panel, branch breaker type, quantity, ampacity and enclosure dimension.

2. **PRODUCTS**

2.1 Panelboards

- .1 Panelboards: 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 10 kA (symmetrical) interrupting capacity or as indicated.
- .3 600 V panelboards: bus and breakers rated for 14 kA (symmetrical) interrupting capacity or as indicated.
- .4 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.
- .5 Panelboards: mains, number of circuits, and number and size of branch circuit breakers as indicated.
- .6 Two (2) keys for each panelboard and key panelboards alike.
- .7 Copper bus with neutral of same ampere rating as mains.
- .8 Mains: suitable for bolt-on breakers.
- .9 Trim with concealed front bolts and hinges.
- .10 Trim and door finish: baked grey enamel.
- .11 Integral TVSS as per Section 16480.

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2.2 Breakers

- .1 Breakers: to Section 16477 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.
- .4 Lock-on devices for 10% of 15 A breakers installed as indicated. Turn over unused lock-on devices to City.

2.3 Equipment Identification

- .1 Provide equipment identification in accordance with Section 16010 Electrical General Requirements.
- .2 Nameplate for each panelboard size 4 engraved as indicated.
- .3 Complete circuit directory with typewritten legend showing location and load of each circuit.

3. EXECUTION

3.1 Installation

- .1 Locate panelboards as indicated and mount securely, plumb, true and square, to adjoining surfaces.
- .2 Install surface mounted panelboards on 40mm galvanized U channel. Where practical, group panelboards.
- .3 Mount panelboards to height specified in Section 16010 Electrical General Requirements or as indicated.
- .4 Connect loads to circuits.
- .5 Connect neutral conductors to common neutral bus with respective neutral identified.

END OF SECTION