

PART 1 - GENERAL

1.1 SECTION INCLUDES

- .1 Materials and installation for service entrance board.

1.2 RELATED SECTIONS

- .1 Section 01 33 00 - Submittal Procedures.
- .2 Section 01 78 00 - Closeout Submittals.
- .3 Section 26 05 01 - Common Work Results - Electrical.

1.3 REFERENCES

- .1 Canadian Standards Association (CSA)
 - .1 CAN/CSA-C22.2 No.31, Switchgear Assemblies.

1.4 SUBMITTALS

- .1 Indicate on shop drawings.
 - .1 Floor anchoring method and foundation template.
 - .2 Dimensioned cable entry and exit locations.
 - .3 Dimensioned position and size of bus.
 - .4 Overall length, height and depth.
 - .5 Dimensioned layout of internal and front panel mounted components.
- .2 Include time-current characteristic curves for circuit breakers and fuses.

1.5 QUALITY ASSURANCE

- .1 Submit 3 copies of certified test results.

1.6 CLOSEOUT SUBMITTALS

- .1 Provide maintenance data for service entrance board for incorporation into manual specified in Section 01 78 00 - Closeout Submittals.

1.7 MAINTENANCE MATERIALS

- .1 Submit 3 copies maintenance data for

complete assembly including components.

- .2 Provide maintenance materials in accordance with Section 01 78 00 - Closeout Submittals.
- .3 Include:
 - .1 3 fuses for each type above 600A.
 - .2 6 fuses for each type up to and including 600A.

PART 2 - PRODUCTS

2.1 SERVICE ENTRANCE BOARD

- .1 Service Entrance Board: to CAN/CSA-C22.2 No.31.
- .2 Rating: 208 V, 3 phase, 4 wire, 400 A, short circuit current 25 kA (rms symmetrical). Cubicles: free standing, dead front, size as indicated.
- .3 Barrier metering section from adjoining sections.
- .4 Provision for installation of power supply authority metering in barriered section.
- .5 Distribution section.
- .6 Hinged access panels with captive knurled thumb screws.
- .7 Bus bars and main connections: tin plated aluminum.
- .8 Bus from load terminals of main breaker via metering section to main lugs of distribution section.
- .9 Bus from load terminals of main breaker to metering section and from metering section to lugs of

distribution section.

- .10 Identify phases with colour coding.

2.2 MOULDED CASE CIRCUIT BREAKERS

- .1 Refer to Section 26 28 16.02 - Moulded Case Circuit Breakers.

2.3 GROUNDING

- .1 Copper ground bus extending full width of cubicles and located at bottom.
- .2 Lugs at each end for size 3/0 grounding cable.

2.4 POWER SUPPLY AUTHORITY METERING

- .1 Separate compartment and metal raceway for exclusive use of power supply authority metering.
- .2 Provide mounting accessories and wiring for metering as follows and as indicated:
 - .1 3 current transformers.
 - .2 Demand meter with kWh register as required.
- .3 Coordinate supply and installation of current transformers for utility metering with utility representative. Carry all associated costs.

2.5 FINISHES

- .1 Apply finishes in accordance with Section 26 05 01 - Common Work Results -Electrical.

2.6 EQUIPMENT IDENTIFICATION

- .1 Service entrance board exterior: gray.

- .2 Provide equipment identification in accordance with Section 26 05 01 - Common Work Results - Electrical.

.3 Nameplates:

- .2 White plate, black letters, size 7.
- .3 Complete board labelled: 120/208 or 120/208 V, 3 phase, 4 wire Amps as indicated.
- .4 Main disconnect labelled: "Main Breaker".
- .4 Branch disconnects labelled: as indicated.

PART 3 - EXECUTION

3.1 INSTALLATION

- .1 Locate service entrance board and fasten to wall and floor as indicated.
- .2 Coordinate the supply and installation of current transformers for utility metering with utility representative.
- .3 Connect main secondary service to line terminals of main breaker.
- .4 Connect load terminals of distribution breaker's or switches to feeders.
- .5 Run one grounding conductor 2/0 AWG bare copper in 27 mm conduit from ground bus to building ground.

3.2 FIELD QUALITY
CONTROL

- .1 Check factory made connections for mechanical security and electrical continuity.
- .2 Check trip unit settings and fuse sizes against co-ordination study to ensure proper working and protection of components.