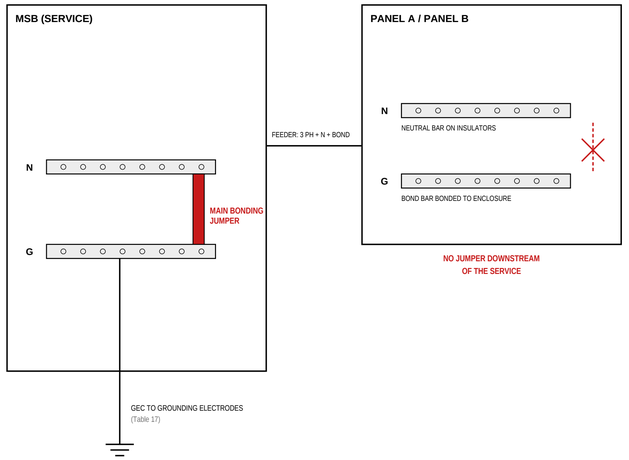
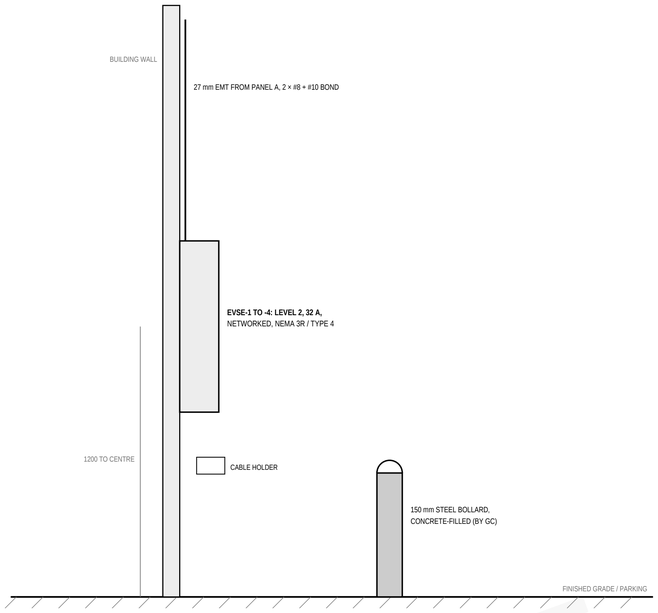


Neutral and ground are bonded in one place only: the main bonding jumper in the MSB. In Panels A and B the neutral bar stays isolated and the bond conductor lands on the bond bar. The pre-inspection photo check looks for exactly this (checklist items 1 and 8).

1 / E-501 — SERVICE BONDING, ISOLATED NEUTRALS

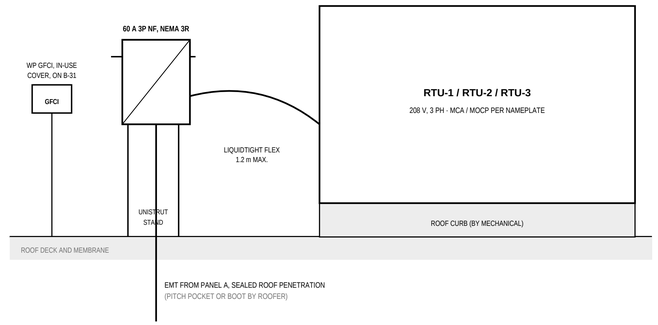
NTS



Mount to the manufacturer's instructions; keep the cable off the ground. Breaker 40 A 2P on Panel A. Label each charger with its panel and circuit. EVSE-5 and -6: 27 mm EMT stub, pull string, capped and labelled FUTURE EVSE.

2 / E-501 — EV CHARGER, WALL MOUNTED

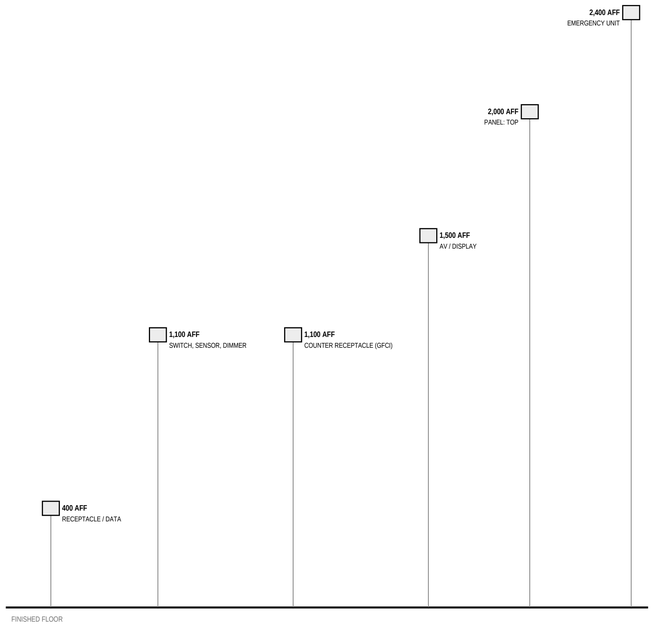
1:25



Disconnect within sight of the unit and readily accessible. Service receptacle within reach of the unit for maintenance. Seal every penetration to the roofer's detail.

3 / E-501 — ROOFTOP UNIT CONNECTION

NTS



Heights to the centre of the box unless noted; panel to the top of the enclosure. Check the architectural elevations and accessibility requirements (NBC (AE) 2023, Section 3.8) before rough-in.

4 / E-501 — TYPICAL MOUNTING HEIGHTS

1:25

PANEL B

120/208 V · 3 PH · 4 W · 225 A BUS · 22 kA IR

FED FROM: MSB, BREAKER F2 (225 A)

AVAILABLE FAULT CURRENT: 12.0 kA · CALCULATED 2026-10-23

LOCATION: 104 CORRIDOR

Engraved phenolic, white on black, riveted. Same format for MSB and Panel A. Marking to Rule 2-100.

WARNING

SHOCK AND ARC FLASH HAZARD

Appropriate PPE required. De-energize before servicing.

Nominal 208 V · Available fault current 12.0 kA

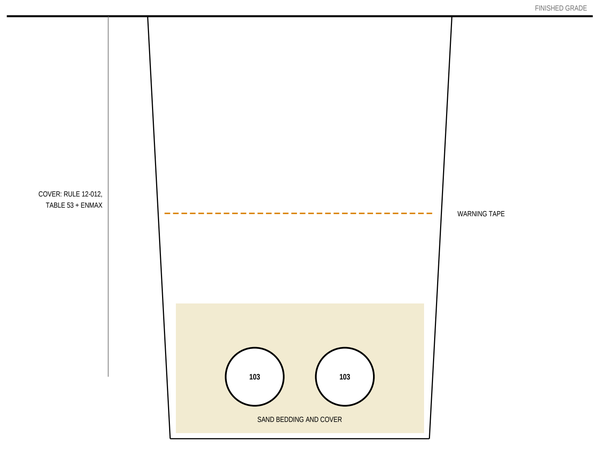
Equipment: PANEL B · Date: (field)

Field-applied warning on the MSB and each panelboard (Rule 2-306). Fill in values from the arc flash assessment where one is done.

Directories typed and placed inside each panel door, listing every circuit in the words used on E-301, including B-37 added by CO-07.

5 / E-501 — PANEL LABELS AND WARNING MARKING

NTS



2 × 103 mm PVC, EACH 4 × 350 kcmil Cu RW90 XLPE 1000 V

Trench, bedding and backfill by the general contractor. Supply-side work, transformer pad and metering to ENMAX standards. State the Appendix D ampacity table and configuration on the PL 1219 submission.

6 / E-501 — UNDERGROUND SERVICE TRENCH

1:20

YOUR LOGO

YOUR COMPANY ELECTRIC LTD.

ELECTRICAL CONTRACTOR

Calgary, Alberta

Your address, phone, email

Master Electrician: your name, No.

REVIEW AND SIGNATURE

MASTER ELECTRICIAN SIGNATURE

P.ENG. SEAL (WHERE REQUIRED)

SAMPLE: NOT REVIEWED, NOT SIGNED, NOT SEALED

PROJECT

OFFICE / SHOWROOM / WAREHOUSE FIT-OUT AND 600 A SERVICE

CALGARY, ALBERTA · FICTIONAL SITE. NO REAL ADDRESS.

OWNER: EXAMPLE OWNER LTD. (FICTIONAL)

PROJECT NO. AS-24-0247

REVISIONS

NO.	DATE	DESCRIPTION
0	2026-09-04	ISSUED FOR PERMIT
1	2026-10-23	CO-07: TWO RECEPTACLES ADDED IN OFFICE 110, NEW CIRCUIT B-37

DRAWN	AI DRAFT (ALPHA SEED)
CHECKED	ESTIMATOR / DESIGNER
REVIEWED	MASTER ELECTRICIAN
SCALE	NTS
DATE	2026-10-23

SHEET TITLE

DETAILS

Bonding, EV charger, rooftop unit, mounting heights, labels, trench

SHEET

E-501

PROJECT NO. AS-24-0247

SAMPLE

SAMPLE DRAFTED BY ALPHA SEED AI FOR YOUR TEAM TO CHECK · ALPHASEED.CA