

**SOUTHERN CALIFORNIA EDISON  
TRANSMISSION AND DISTRIBUTION**

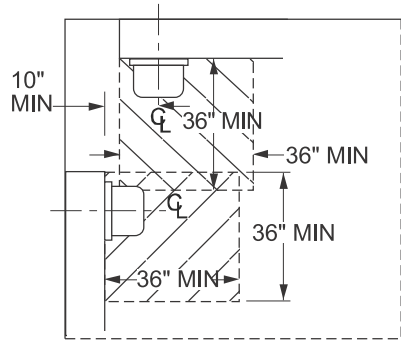
**Electrical Service  
Requirements  
(ESR)**

**2024— SECOND QUARTER ISSUE**  
**April 26, 2024**

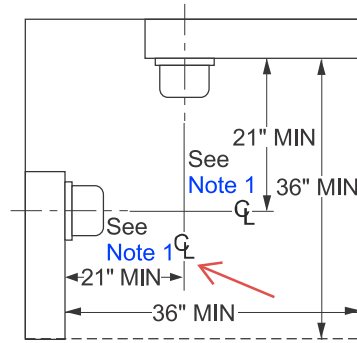
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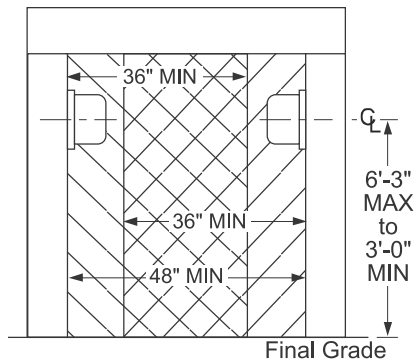
**Figure 3-1: Meter Room Clearances**



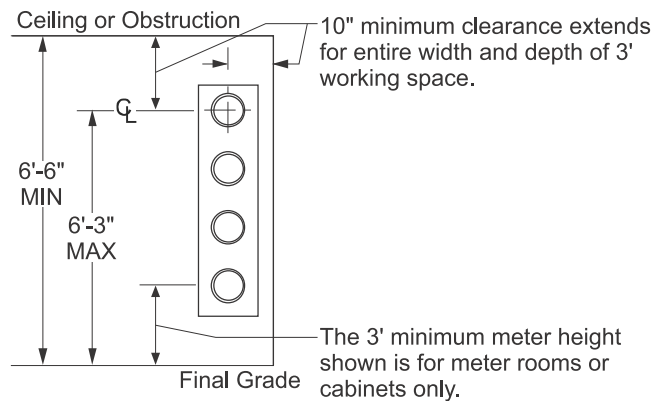
**Exhibit A  
Plan View**



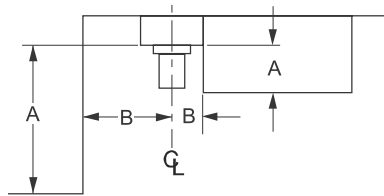
**Exhibit B  
Plan View**



**Exhibit C  
Side View**



**Exhibit D  
Front View**



**Exhibit E  
Plan View**

**Table 3-1: Meter Room — Meter Clearances**

A <sup>a/</sup>	B <sup>b/</sup>
0" to less than 2"	4-1/4"
2" to less than 11"	6-1/4"
11" or greater	10" MIN

<sup>a/</sup> A = depth of any obstruction extending beyond face of panel

<sup>b/</sup> B = clearance from CL of socket to side obstruction.

**Note(s):**

1. Dimension may be reduced to 17 inches if the socket on either side serves a residential occupancy.

For a 120/208 V, three-wire service, when the meter switch does not exceed 125 A, a 125 A maximum-rated, five-terminal socket shall be installed.

When a meter switch exceeds 125 A, but does not exceed 200 A, a 200 A continuous-duty-rated, five-terminal socket shall be installed, and a 120/208 V, three-wire service shall be supplied. Test bypass blocks will not be required for individually-metered residential occupancies.

If the meter switch exceeds 200 A, a switchboard for three-phase, four-wire service shall be installed (see [ESR-6](#)).

## 8.0 High-Rise, Multiple-Occupancy Residential Buildings

Meter and service-related equipment is typically located at one central location that provides 24-hour access. For multiple-occupancy, residential buildings having seven or more floors above grade level, SCE may establish more than one meter room location for groups of individual metering facilities. This type of building may consist of a mix of commercial (for example, small retail and/or restaurants) and residential loads.

### 8.1 Point-of-Delivery

The SCE service point-of-delivery shall terminate at grade-level or first-level basement/parking to an underground terminating pull section and main service disconnect.

#### A. Grade Level

The underground terminating pull section and main service disconnect shall be located on the exterior building wall or inside the building within an approved meter room. This meter room and location must be approved by SCE in advance of construction. The customer shall provide an access door on the building exterior that allows access directly into the meter room. An SCE-provided lock-box will be provided to allow company access directly into the meter room at grade level.


#### B. First Level Basement/Parking

The underground terminating pull section and metering facilities shall be located within an approved meter room. This meter room and location must be approved by SCE prior to construction. The interior meter room shall be located against the exterior wall of the building adjacent to where the SCE-owned transformer serving this site is located.

Where the underground terminating pull section is installed at a level lower than that of the service conduits, a Drip Loop pull section shall be installed as an addition to the underground termination section. This additional section will be used for a cable drip loop to mitigate potential water intrusion into the terminating section. Both ends of all conduits shall be sealed to prevent moisture from entering the termination enclosure/section. At no time may service-lateral conduit(s) terminate above the service entrance bus. Adequate drainage in the meter room shall be provided and maintained by the customer to eliminate pooling of water within the 3 feet of working/clearance space in front of switchboards. See [ESR-3, Figure 3-2](#) for working space requirements.

The bus duct, or conduits and feeders beyond SCE point-of-delivery within the building shall be the customer's responsibility to install, own and maintain. The bus duct tap access shall be sealable with sealing screws or when cable in conduit is used, cable shall be pulled straight through without intermediate pull sections. The customer's ownership of the system must meet the requirements of the local code enforcement agency having jurisdiction.

Southern California Edison shall calculate the voltage drop up to the point-of-delivery and will be responsible for maintaining customer service voltage consistent with Rule 2 at the underground terminating pull section.

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### 9.3 Meter Switch Larger than 125 A on a 100 A Safety Socket Box

For motor-starting currents only, a meter switch larger than 125 A may be installed on a 100 A continuous-duty-rated safety socket box. The maximum wire size or current-carrying capacity of conductors installed in the customer's raceway shall not exceed #1 AWG and the conduit size shall not exceed 1-1/2 inches. Whenever the actual continuous operating load current exceeds 100 A, a 200 A continuous-duty-rated safety socket box shall be installed.

For motor-starting currents only, a meter switch larger than 200 A may be installed on a 200 A continuous-duty-rated safety socket box, where the maximum wire size or current-carrying capacity of conductors installed in the customer's service raceway does not exceed 250 kcmil, and the conduit size of such raceway does not exceed 2-1/2 inches. Whenever the actual continuous operating load current exceeds 200 A, a switchboard shall be installed (see [ESR-6](#)).

### 9.4 Meter Sockets — Self-Contained — Non-Residential

- A safety socket box with factory-installed test-bypass blocks, as detailed in [Section 10.0](#) through [Section 12.0](#), and [Figure 5-8](#) through [Figure 5-18](#), will be required for the following types of installations:
- Commercial and industrial — including all public buildings
- Multi-family, not separately metered, considered commercial per [Section 7.0](#).
- All three-phase installations (including customer-owned permanent and temporary service meter poles
- Metered streetlights; domestic water pumps; or other domestic agricultural installations served by 240/480 V, three-wire sources, or 480 V, two-wire sources.
- Traffic signal enclosures<sup>2/</sup>

On underground traffic-signal enclosure installations exceeding 120 V, the customer shall provide the auxiliary relay. The relay shall be placed in the customer's section and shall be located ahead (line side) of the customer's unmetered streetlight breaker bus.

A safety socket box will be required for a house-lighting service in a multi-family residential occupancy. House-lighting services include miscellaneous services for laundry rooms, garages, halls, exit lighting, fire alarms, recreation rooms, swimming pools, spas, and similar non-commercial uses on the premises.

<sup>2/</sup> The test block perch shall be provided with mounting holes in the center or right-side position for mounting an auxiliary relay (see [Figure 5-12](#)). The Company will only provide and install 120 V relays.

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