

ELECTRICAL CONVERSION

Underground Districts

City of Palo Alto (CPA)
Building Inspection Division
285 Hamilton Ave.

Inspection Request: 650 329-2496

Rev. Date: 06/13/11

General Requirements/Checklist for:

Residential and Commercial

Codes Enforced:

2010 CEC

Palo Alto Municipal Code (PAMC)

The information provided in this document is general and intended as a guide only. Each project is unique and additional requirements may be enforced as deemed appropriate.

PRE-SITE INSPECTION

• A pre-site inspection is required prior to commencing work to verify work will meet CEC and CPA Electric Utilities standards.

A CPA UTILITY ELECTRIC APPLICATION MUST BE COMPLETED FOR EACH CONVERSION.

PERMIT IS NOT REQUIRED (For underground districts only)

- 1. When existing service is un-tampered and has all required city release tags and seals.
- 2. When using existing equipment, it must have provisions for underground feeds.
- 3. Where new underground feed is within 10' of the existing equipment and requires no more than one LB for connections there to.
- Underground utilities will verify torque and duct seal is installed at underground conduit. Meter will be set and returned to service.
- Bollards shall be installed when electric equipment is subject to physical damage. See CPA Electric Utilities DWG NO. DT-SS-C-1005.
- Working clearances, according to CEC 110.26, must be maintained.

PERMIT IS REQUIRED

- When the service entrance location exceeds 10' from the existing service location. Meter main shall be installed.
- When tampered or unsealed meters or new equipment without permit is discovered.
- If un-permitted equipment is encountered, the property owner shall hire a licensed and qualified electrician to verify all work complies with the current California Electrical Code and local utilities standards SR-CN-D-1009.

SEE RESIDENTIAL & COMMERCIAL INSPECTIONS GUIDELINES HANDBOOK FOR REGULATIONS CONCERNING ELECTRIC SERVICE REQUIREMENTS.

When the main electrical service is relocated and the old panel is converted to a subpanel:

- 1. The old panel shall be listed for such use. If the existing panel is not listed for use as a subpanel, a new panel shall be installed.
- 2. The equipment grounds and the grounded conductors are required to be separated and require a separate bus bar.
- 3. The water ground and grounding electrode conductor shall be removed from the old panel and installed at the new main electrical service.
- 4. When the feeders are run in non metallic conduit, an equipment grounding conductor shall be installed per CEC 250-122.

At time of inspection:

- 1. CPA underground electrical inspector shall have approved and placed a green sticker on the panel
- 2. The equipment shall be secured.
- 3. All bonding and grounding shall be complete.
- 4. Service entrance conductors shall be landed and torqued.
- 5. Where conductors terminate at a mechanical lug, conductors shall be wire brushed and coated with an approved anti oxidation compound.

COMMERCIAL INSTALLATIONS:

- 1. Where the voltage is being changed, verify with electric utilities that the meter base complies with their standards.
- 2. Obtain short circuit current (fault condition) from CPA electric engineering. The equipment must be listed at or above this value.
- 3. Bollards shall be installed when electric equipment is subject to physical damage. See CPA Electric Utilities DWG NO. DT-SS-C-1005.
- 4. Switchgear located outside shall have a phenolic label (red background with white lettering) with the address.
- 5. Label service equipment with short circuit current available (i.e.) "SCCA, 42,000 amps" CEC 90.4. Mount phenolic plaque on face of equipment