

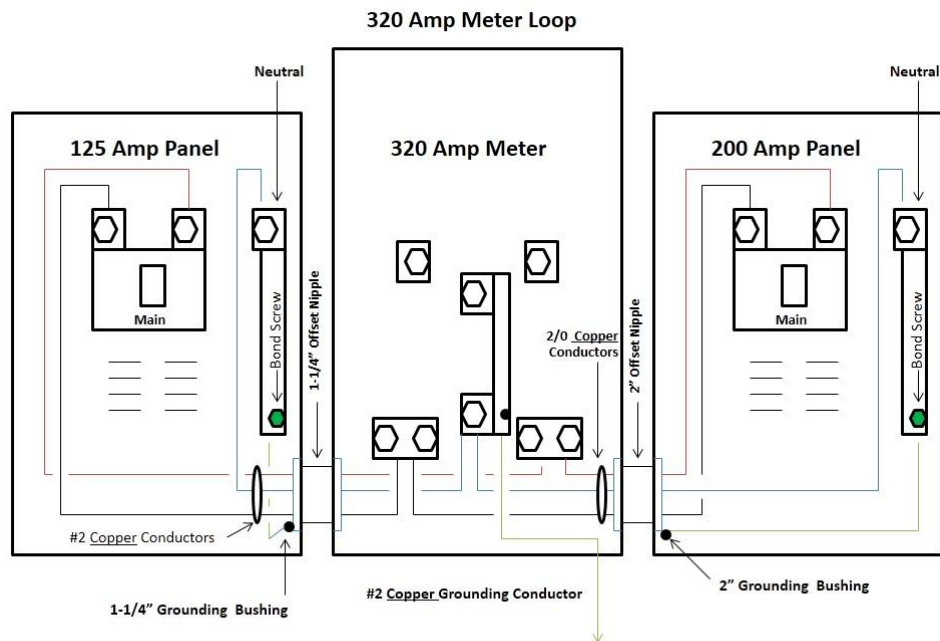
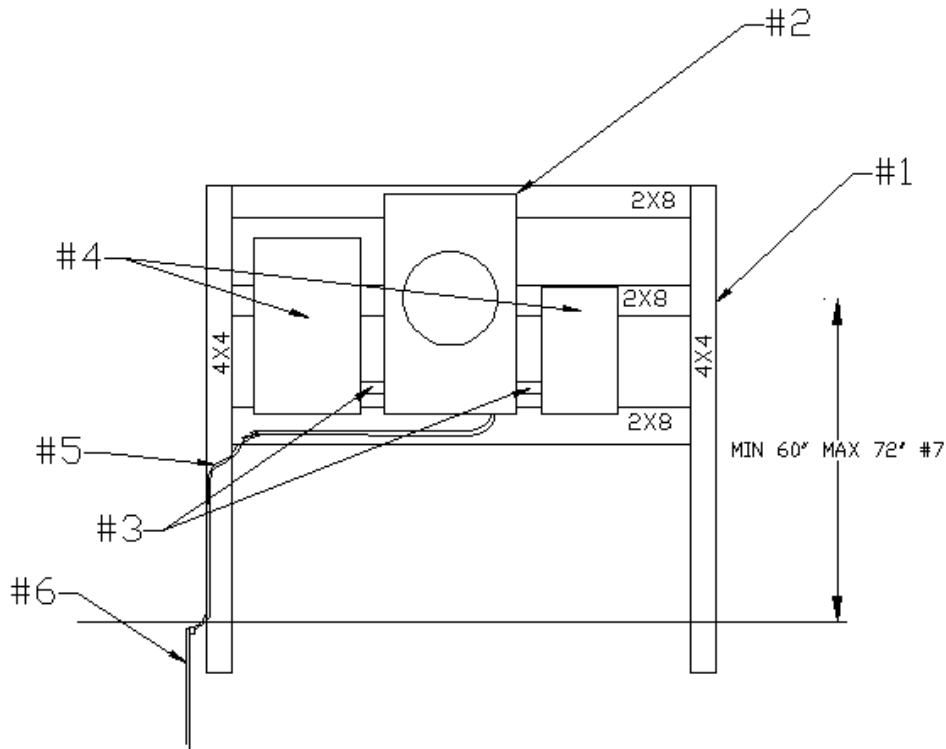
San Patricio Electric Cooperative – (361) 364-2220

Underground, Rack Mounted Meter Loop Construction Requirements

All installations must comply with the latest applicable National Electrical Code (NEC), local regulations, and Cooperative requirements.

Final approval and service connection are subject to inspection by the Cooperative.

320AMP UNDERGROUND



■ Minimum 5/8" Ground Rod Shall be Below Ground Level

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1. Build rack to accommodate Meter can and Panel(s).
2. 320 amp Ringless Meter Can
3. PVC TA's (Threaded Adapters) with lock rings and plastic bushing from Meter can to panel. If threaded galvanized or aluminum nipple is used, there must be a bonding bushing installed on the meter can side with the ground wire passing through the lug. Panel side must be connected to hub if located below meter can. Conduit must be same diameter as riser conduit above meter can. Length must be a minimum of 4" but not more than 6". Lock rings and plastic bushing are required on all nipples and adapters.
4. Breaker panels must have main breaker/fuses. Service disconnects must only add up to 325 amps or below. Above 325 amps see Current Transformer (C.T.) meter loop diagram.
5. Ground Wire #6 green stranded/solid up to 150 amp, #4 green up to 225 amp, #2 green up to 320 amp. Ground wire starts in meter enclosure and passes out to ground rod. From the panel the wire must be in PVC conduit
6. 5/8" x 8' Copper-Clad Ground Rod & Clamp shall be fully driven into earth with the top of the rod just below the surface of the ground.
7. Center of Meter must fall between 48" to 72"
 - A. SERVICE CONDUCTOR FEEDERS are connected to the TOPSIDE lugs in the meter can. LOAD SIDE CONDUCTORS to the breaker box are connected to the BOTTOM lugs in the meter can.
 - B. Wire should be sized according to load. See chart on back.
 - C. Conduit should be sized according to wire size. See chart on back.

CONSTRUCTION of a 3 WIRE METER LOOP

METER LOOPS MUST BE COMPLETELY ASSEMBLED BY THE MEMBER OR BY AN ELECTRICIAN IN ORDER TO BE CONNECTED. Cooperative employees will not help in the assembling of a meter loops on the job site. The Coop shall determine the acceptability of the meter loop before the connection is made.

Meter Can must be mounted a MINIMUM of 48" from the ground up and a MAXIMUM of 72" from the ground up. This applies to House & Meter Pole installations.

Mobile Home/Manufactured Home Service Equipment. The mobile/manufactured home service equipment shall be located adjacent to the mobile/manufactured home and NOT mounted in or on the mobile home. The service equipment shall be located in sight from and not more than 30 ft from the exterior wall of the home it serves.

Meter and main disconnect must be located on the outside area of any structure and must be accessible to the Cooperative and/or fire department. First point of disconnect must be breakers or fuses and not blade disconnects.

Meter loop must be wired with copper wire from the load side of the meter can to the breaker box.

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ALLOWABLE AMPERAGE OF AN INSULATED CONDUCTOR

Taken from National Electric Code Manual Table 310-16

Copper wire, type THHN max. Temp. 90° centigrade, 600 volt insulation minimum

<u>Wire Size</u>	<u>Meter Loop Size</u>	<u>Conduit Size</u>
#2 cu	125 amp service	1-1/4"
#1 cu	150 amp service	1-1/2"
#2/0 cu	200 amp service	2"
#3/0 cu	225 amp service	2"
#350	320 amp service	3"

Aluminum Wire Not Allowed

Reduced Neutral Not Allowed

Members may dig their own trench. Charges are still involved. San Patricio Electric Co-op. MUST be contacted BEFORE work is done. Call for information on prices, specifications, contractor insurance requirements, scheduling, etc.

Caution must be taken in selecting the service entrance location to the meter. Dig Tess (800) 344-8377 should be notified 2 days prior to digging trench. Service wires are buried in conduit, sharp turns and angles can not be made.

Members must expose all underground Customer owned lines.

Water, Sewer, Sprinkler, Phone and Gas lines should be exposed before underground work can begin. If lines are not exposed, San Patricio Electric is not responsible for any damages caused to unexposed pipe.

**San Patricio Electric has an electrician that builds meter loops.
For price quotes call the Cooperative at 361-364-2220**