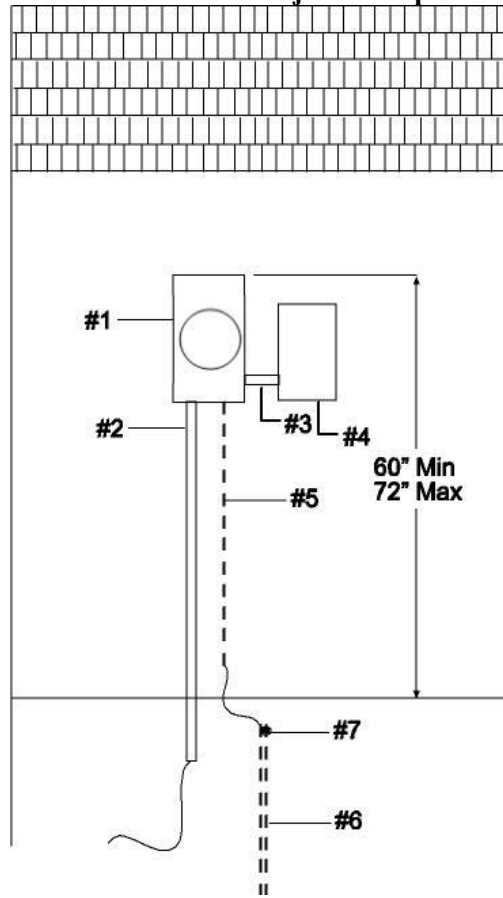


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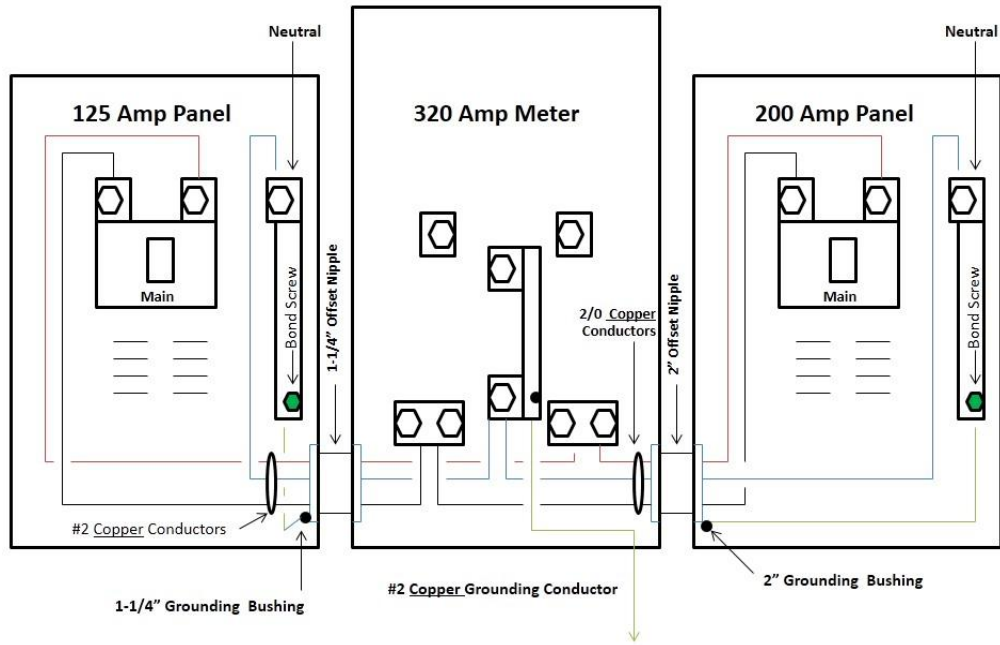
Underground 320 Amp House Mounted Meter Loop Construction Diagram

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.



320 Amp Meter Loop



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

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Underground 320 Amp House Mounted Meter Loop Construction Diagram

1. Underground Ringless Meter Can
2. Schedule 80 electrical grade PVC (supplied by SPEC if requested)
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. Copper-Clad ground rod clamp.
 - A. Minimum size #2 copper ground wire must be installed between the meter can and the breaker box.
 - B. 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.
 - C. Wire should be sized according to load. See chart on back.
 - D. Conduit should be sized according to wire size. See chart on back.
 - E. If meter pole is used: offset galvanized nipples, LB's and metal flex conduit may be used.
Note: Cooperative will provide conduit from transformer to bottom of meter can. If you wish to install your own conduit use one 3" Schedule 80 for 200amps and below, and two 3" Schedule 80 for 400amps to 200amps. Above 400amps contact San Patricio Electric Cooperative for sizing.

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. SPEC has a licensed electrician that builds meter loops and offers other services as well. For a price quote please call the Cooperative at 361-364-2220.

CONSTRUCTION of a 3 WIRE METER LOOP

Meter loop must be assembled and installed by the member or an electrician. The Cooperative shall determine the acceptability of the meter loop before the connection is made.

Meter Can must be mounted a MINIMUM of 60" from the ground up and a MAXIMUM of 72" from the ground up.

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 shall be made of Schedule 80 electrical grade PVC. EMT is not acceptable

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

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Underground 320 Amp House Mounted Meter Loop Construction Diagram

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 Cooperative 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. Cable is 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.**