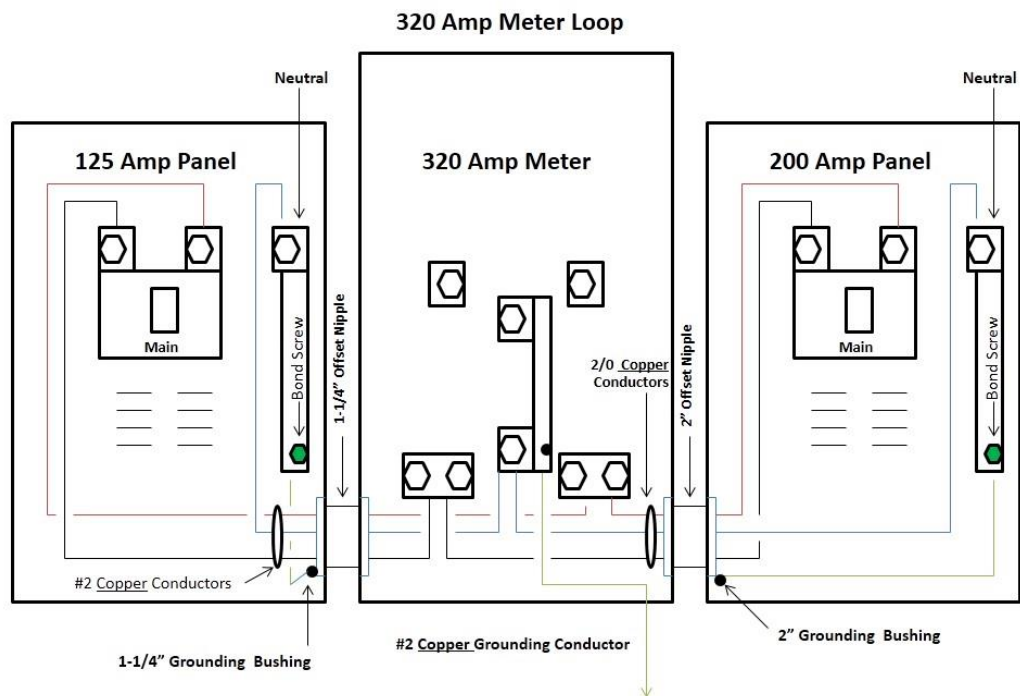
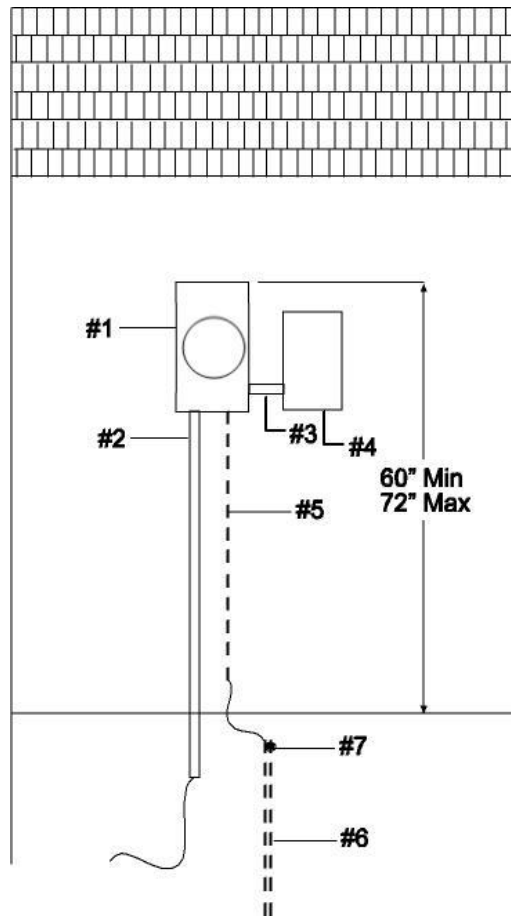


San Patricio Electric Cooperative - 361-364-2220  
Meter Loop Diagram – Underground on Side of House – **320 AMP Service**



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

**San Patricio Electric Cooperative - 361-364-2220**  
**Meter Loop Diagram – Underground on Side of House – 320 AMP Service**

1. Underground Ringless Meter Can
2. Schedule 80 electrical grade PVC (supplied by SPEC if requested)
3. PVC TA's (Treaded Adapters) with lock rings and plastic bushing from Meter enclosure to panel. If threaded galvanized offset nipple is used, there must be a bonding bushing installed on the panel side with the ground wire passing through the lug. Chase 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**). If panel has (4) spaces or less Main breaker is not required. Maximum 325 amps on Breaker Panel / Disconnect combination allowed on Service. **Main Breaker(s) size cannot exceed amp rating of service.**
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' Cooper Weld Ground Rod & Clamp shall be fully driven into earth with the top of the rod just below the surface of the ground.
7. Copper weld 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. Item #3: If meter pole is used: offset galvanized nipples, LB's and metal flex conduit may be used.

METER LOOPS MUST BE COMPLETELY ASSEMBLED BY THE MEMBER OR BY AN ELECTRICIAN IN ORDER TO BE CONNECTED. Co-op employees will not help in the assembling of a meter loop 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. This applies to House & Meter Pole installation. Meter Poles must be a minimum of 9' in length and must be set 3' deep in the ground.

Meter and main disconnect must be located on the outside area of any structure and must be accessible to the Cooperative. Disconnect must be located directly beside the meter can. Disconnect must be breakers or fuses. **BLADED DISCONNECT SWITCHES ARE NOT ALLOWED.**

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.

**Reduced neutral not allowed.**

**San Patricio Electric Cooperative - 361-364-2220**  
**Meter Loop Diagram – Underground on Side of House – 320 AMP Service**

**\*ALLOWABLE AMPERAGE OF AN INSULATED CONDUCTOR**

**Taken from National Electric Code Manual Table 310-15B**

Copper wire, type THHN maximum temp. 90° centigrade, 600 Volt insulation minimum.

**WIRE SIZE**

<b>#6 Cu.</b>	<b>75 amps (min. size allowable)</b>	<b>Per Wire</b>
<b>#4 Cu.</b>	<b>95 amps</b>	<b>Per Wire</b>
<b>#2 Cu.</b>	<b>130 amps</b>	<b>Per Wire</b>
<b>1/0 Cu.</b>	<b>170 amps</b>	<b>Per Wire</b>
<b>2/0 Cu.</b>	<b>200 amps</b>	<b>Per Wire</b>
<b>3/0 Cu.</b>	<b>225 amps</b>	<b>Per Wire</b>
<b>4/0 Cu.</b>	<b>260 amps</b>	<b>Per Wire</b>
<b>350 mcm</b>	<b>320 amps</b>	<b>Per Wire</b>

**\*\*CONDUIT SIZE**

<b>1"</b>
<b>1"</b>
<b>1 ¼"</b>
<b>1 ½"</b>
<b>2"</b>
<b>2"</b>
<b>2"</b>
<b>2 ½ - 3"</b>

**Aluminum Wire Not Allowed**

Consumers 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.

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