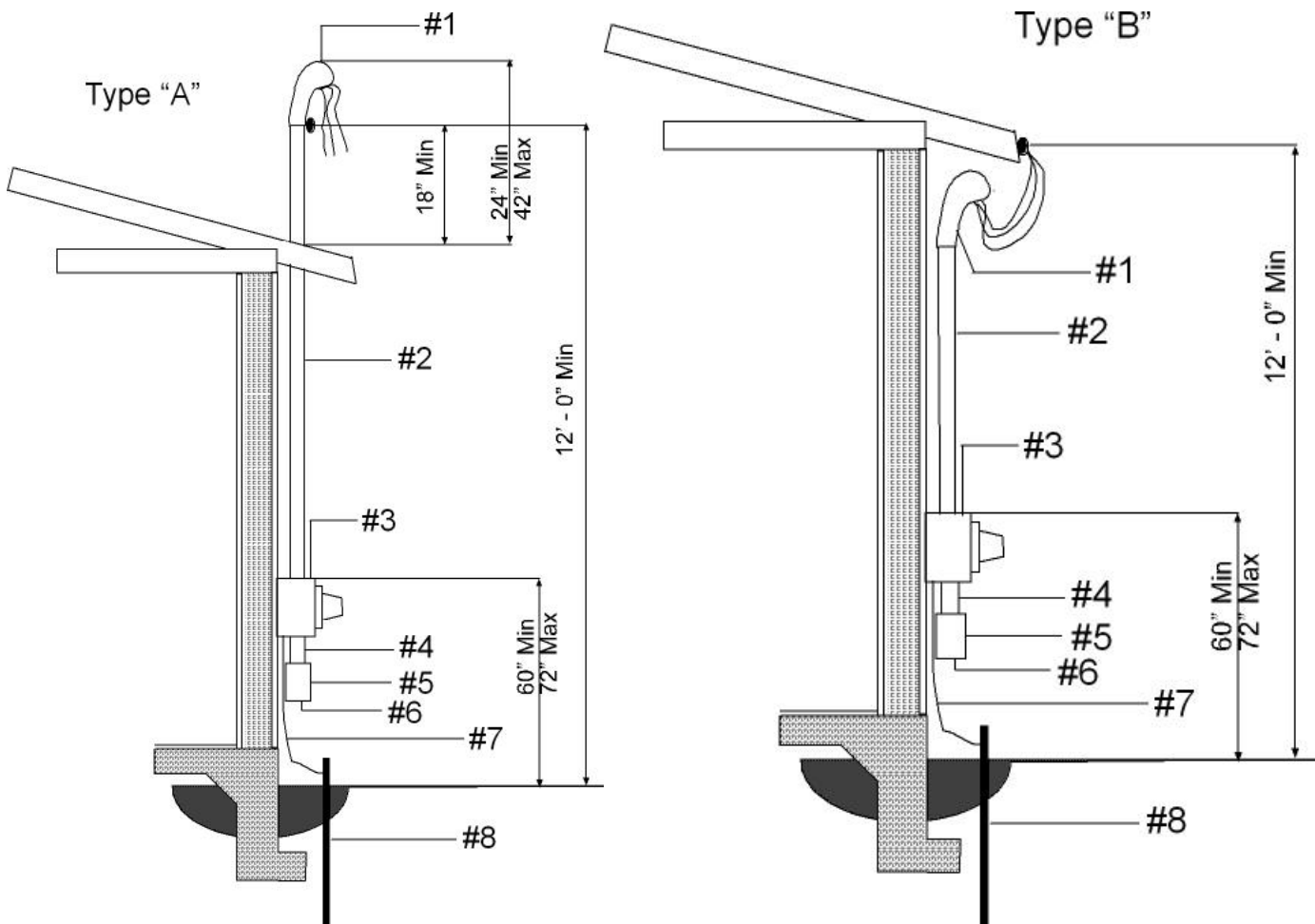


# San Patricio Electric Cooperative - 361-364-2220

## Meter Loop Diagram Mounted - On Side of House – 320 AMP Service



1. 2 ½ - 3" Weather Head
2. Rigid Metal Conduit

**TYPE "A":** Most type risers shall be a MINIMUM of 2 ½" rigid galvanized conduit, and must be sufficient to support the stress. Risers must pass through eave and extend above the roof by at least 24" but not more than 42". No joint couplings will be allowed above the roof. A MINIMUM size of 350 MCM stranded copper wire is required. Wire must extend out of weatherhead at least 24".

**TYPE "B":** Meter Loop shall be made of rigid galvanized conduit or rigid aluminum conduit. EMT is not acceptable. A MINIMUM size of 350 MCM stranded copper wire is required. Wire must extend out of weatherhead at least 24".

3. Meter Can should be placed with the top of the meter can at least 60" but no more than 72" from ground level.
4. Threaded galvanized nipple. Must be same diameter as riser conduit above meter can. Length must be minimum of 4" but not more than 6". Lock rings are required on all nipples and adapters. It is preferred that insulation bushings be used to protect the conductors.
5. Breaker Box
6. Breaker(s) inside breaker box
7. Ground Wire (min. #2 copper) must be in conduit (PVC or EMT).
8. 5/8" X 8' copper weld ground rod with a copper weld ground rod clamp – 2"-3" Exposed.
9. Minimum size #2 copper ground wire must be installed between the meter can and the breaker box.
  - A. Wire should be sized according to the load. See Chart

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- B. Conduit should be sized according to wire size. See Chart
- C. If breaker box is mounted below the meter can, a hub is required on the breaker box.
- D. On Type “B” installation, customer shall provide a point of contact sufficient to support service conductor. Attachment shall be insulated for minimum of 600 volts.
- E. Under no circumstances will a service drop be installed over the top of a house or building structure.
- F. Guidelines on clearances for service conductors as listed on back, MUST be followed.

**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. San Patricio Electric 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 3 WIRE METER LOOP

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

Top of the Meter Can must be mounted between 60” – 72” from ground level.

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 below or beside the meter. Disconnect must be breakers or fuses.

**BLADED DISCONNECT SWITCHES ARE NOT ALLOWED.**

#### \*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*

WIRE SIZE		CONDUIT SIZE
#6 Cu.	75 amps (min. size allowable) Per Wire	1”
#4 Cu.	95 amps Per Wire	1”
#2 Cu.	130 amps Per Wire	1 ¼”
1/0 Cu.	170 amps Per Wire	1 ½”
2/0 Cu.	200 amps Per Wire	2”
3/0 Cu.	225 amps Per Wire	2”
4/0 Cu.	260 amps Per Wire	2”
350 mcm	320 amps Per Wire	2 ½ - 3 ”

#### Ground Clearance

**NOTE:** For 120/240-volt service drop installations minimum clearances must be maintained according to SPEC regulations.

12’ of clearance shall be maintained where no traffic is present

15’ of clearance shall be maintained over driveways

22’ of clearance shall be maintained over roadways

The measurement for clearance is determined at the lowest point in the service wire. The clearances from the ground to the service wire will decrease as the distance between the house/building and pole increases.