Customer-Owned Meter Socket Specifications

Customer-owned meter sockets used in AEP's service territories shall meet the requirements listed below and shall be produced by one of the approved Manufacturers on the approved Manufacturers List at the end of this document. It shall be the Customer's responsibility to maintain Customer-provided/owned meter enclosures.

Enclosure Construction

- Steel enclosures shall be a *minimum* of G-90 galvanized steel.
- All edges shall be smooth after forming. Enclosure shall be painted after fabrication. Finish coat shall be a minimum of 2 mils thickness and provide a tough, non-chalking weather resistant finish.
- Construction shall be in accordance with ANSI/UL50.
- Outdoor enclosures shall be rated Type 3R. Mounting bosses shall provide 0.125-inch minimum air space between back of the socket and the mounting surface.
- Meter socket sealing shall be provided by *minimum* 304 stainless steel latch and rivet with provision for 3/8-inch padlock and/or ribbon seal.

Protection

- Enclosure shall:
    - Be of a design to protect personnel against accidental contact with the electrical devices.
    - Guard against unauthorized use of electric service
    - Not be openable without either breaking the seal or visibly damaging the enclosure.

Socket Jaws

- Block assemblies shall be replaceable from the front.
- Current carrying socket jaws shall be reinforced and have meter blade guides.
- Socket jaws shall be tin\zinc plated, capable of carrying full rated (continuous) current and withstand the mechanical and heat rise requirements of ANSI/UL 414.

Terminal Connectors

- Terminal connectors shall be suitable for use with aluminum and copper conductors.
- Connectors shall be tin\zinc plated and capable of carrying full rated (continuous) current and withstand the mechanical and heat rise requirements of ANSI/UL 486B.

Labeling/Listing

- **All meter sockets shall be UL or ETL Listed and Labeled.**
  UL: Underwriters Laboratories Listed and Labeled or
  ETL: Electrical Testing Laboratories Listed and Labeled.

Meter Sockets/Terminals

- All meter sockets, multi-gang sockets, and meter pedestals shall be ringless style.
- All sockets shall have a double lay-in for the neutral connection.
- Meter sockets must have some type of bypass:
    - Bypass horns for utilities use for manual bypass using jumper cables.
    - Manually operated jaw release bypass. These shall be rated for 100% of the meter socket current rating.
- 200-amp underground sockets shall have one set of concentric knockouts in bottom left for 3-inch conduit and be of the side wire/bused design for straight in wiring.
- The left side will be for the line side and the right load side.

Customer-Owned Meter Socket Specifications

- 100–125-amp meter sockets are prohibited for use on underground service in AEP East.
- 100–125-amp meter sockets are prohibited for use in AEP West.
- Socket/breaker combinations or multi-gang polyphase sockets shall be approved by local supervision.
- For *4-terminal meter sockets*:
    - 100- amp, 200-amp 4-terminal meter sockets shall have provisions for a 5th terminal.
    - When a 5th terminal is required, it shall be installed in the 9 o'clock position and securely tied to the neutral.
    - 200-amp 4-terminal **Commercial Meter sockets** shall have a good quality jaw release manual operated bypass which is rated for 100% of the meter socket current rating.
- *5-terminal meter sockets* shall have the fifth terminal factory installed in the 6 o'clock position.
- 200-amp 5- and 7- terminal and *all* 320-amp meter sockets shall have a good quality jaw release manual operated bypass rated for 100% of the meter socket current rating.

Meter Site link:

https://www.aepnationalcustomers.com/business/builders/
https://www.aepnationalcustomers.com/business/builders/new-home
https://www.aepnationalcustomers.com/business/builders/requirements
https://www.aepnationalcustomers.com/account/service/modify/business
https://www.aepnationalcustomers.com/account/service/modify/home

Corrosive Environments

Corrosive areas are installations within 30 miles of the Texas Gulf of Mexico coast and any other area where high moisture or chemical exposure may exist such as chemical plants or water treatment plants.

- Enclosures in corrosive areas shall:
    - Be of aluminum construction,
    - Have bottom front lip to be continuous fold up with slot cut for stainless steel hasp,
    - Have latch, rivet, hasp, and exposed hardware of minimum 316 series stainless steel, and
    - Have a minimum of five welds on the back and three welds on the side, top, and bottom.

Additional Notes:

- AEP does not support the use of K-base meter bases.
- AEP does not support the use of anti-inversion feature on 320-amp meter sockets.

AEP accepted and approved Meter sockets and Meter/Main combinations that meet the above requirements are only accepted from the following manufacturers.

Approved Manufacturers:

ABB US
Brooks Utility Company
Durham Company
Eaton Corporation
Leviton
Milbank Electrical Products
Midwest
Ronk
Schneider Electric US
Square D
Siemens
Talon