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Office Hours: M-F 7:30am -4:00pm

Single-Phase Meter Socket Installation and Selection Specification

Meter Socket Requirements:

- 1. All meter sockets must be UL approved and stamped/labeled as such.
- 2. Enclosure shall be constructed in accordance with ANSI/UL50 standards and shall be rated Type 3R, allowing weather tight outdoor installations.
- 3. Ringless style cover plate/door shall be installed with provision for lock or meter seal such that the cover plate/door cannot be removed without cutting of seal or damaging enclosure.
- 4. Line and load side conductor terminations must be designed for either aluminum or copper conductor to be utilized. Termination connectors shall be corrosion resistant and capable of carrying full continuous current of the meter base. All connectors (lugs) must be supplied by the member with the meter socket.
- 5. All meter sockets must include a lever bypass that includes clamping jaw style terminals capable of carrying full continuous current of the meter base.
- 6. In counties with no county electrical inspector, exterior mounted main disconnecting means will be required. Those counties include Kosciusko, Wells and Wabash Counties. The preferred method of disconnect is a meter socket with integrated main disconnect, however separate outdoor rated disconnects or manual/automatic transfer switches installed directly adjacent to the meter socket will be acceptable so long as the entire service is disconnected within the disconnect(s).
- 7. Contact Heartland REMC engineering department if a multi-position socket is desired. Lever bypass requirements must be met for multi-position sockets.
- "100 amp" meter sockets may be permissible in specific, non-residential overhead applications only. All underground services must be a minimum of "200 amp". Contact Heartland REMC's Engineering Department for details.
- For single phase installations needing over 400 amps of capacity, Current Transformer (CT) metering installations may be required by REMC engineering. These installations require specific installation requirements that will be outlined by Heartland REMC's Engineering Department.
- 10. Meter sockets can be purchased from any retail electrical supply company. *Heartland REMC does not supply or sell any meter bases.*

Examples of accepted meter sockets:

"200 Amp" rated @ 160A w/o disconnect - Milbank U9551-RRL



"200 Amp" rated @ 160A w/ 200 Amp disconnect – Milbank U5871-XL-200



"400 Amp" rated @ 320A w/o disconnect – Milbank U4911-X-BL



<u>"400 Amp" rated @ 320A w/ 2-200 Amp disc. - Milbank U5890-X-2/200-BL</u>



Meter Socket Installation Guide:

These guidelines are designed as minimum requirements; any additional national or county requirements must also be met. Discuss meter socket installation location with REMC Engineering Department before installation to verify the location is acceptable. Inaccessible or meter sockets installed inside buildings will not be permitted and service will be withheld until an appropriate installation location is selected.

- 1. Height to middle of meter socket hole must be 5'6" + or 1' from final grade. Final grade includes porches or decks or sidewalks that are installed under the socket.
- Heartland REMC requires a minimum of one 5/8" solid copper or copper clad ground rod and it must be installed such that 8' of rod is below finished grade. *Members must check county requirements; additional grounding requirements may exist.
- 3. A length of #4 copper ground wire must be bonded to the ground rod using approved grounding method as well as connected to the ground lug inside the meter base. In underground service installations, route ground wire such that it is not in the proposed trench path.
- 4. Conduit requirements:
 - a. Underground Installations:
 - 1. 200-amp services may require a 2", 2 ½", conduit while 400-amp services may require 3" or 3 ½" conduit.
 - 2. Conduit must be schedule 80 PVC or Schedule 40 galvanized steel.
 - 3. Conduit must extend from the bottom of the meter base to a minimum of 12" below final grade.
 - 4. A proper fitting between the conduit and the meter base must be supplied by the member. This fitting should be connected to the conduit using approved method for the specific type of conduit supplied.
 - 5. In instances where there will be close proximity to an obstruction such as a sidewalk, deck, porch, driveway, or any immobile object, in addition to the standard requirements listed above, the member must supply a sweeping elbow (including all required fittings to attach said elbow) with a minimum radius of 18" to be installed at the bottom of the conduit exiting the meter base as well as a length of solid conduit extending from the elbow to no less than 5' beyond the obstruction. This conduit and sweep can be either schedule 40 or 80 PVC or galvanized steel.

b. Overhead Installations:

- 1. A rigid PVC or galvanized conduit, known as a riser, must extend from the top of the meter base to the point of demarcation. A proper conduit fitting must be used to connect the top of the meter base and a weather head must be used at the top of the riser to inhibit the penetration of water into the meter base.
- 2. The riser, fitting, and weather head are provided by the member.
- 3. The riser must be adequately attached to a structure as to not allow the riser to move and to support the REMC service conductor.
- 4. The size of the riser is to be determined by the member and their electrician and is determined by the size and type of wire installed inside the riser. Heartland REMC requires a minimum of a 2" riser for overhead services.
- 5. The member is responsible for service entrance conductor that shall be installed from the top side of the meter socket terminals and extend 24" outside the weather head such that a sufficient drip loop can be created where the utility conductor meets the member conductor.
- 6. The riser must also include a suitable utility attachment point/clamp that is installed at a location that allows 12' or more clearance from the bottom of the conductor drip loop to finished grade while also allowing greater than 18" of clearance to the roof. If the attachment point is greater than 3' above the roof, guyed support is required.
- 7. "House knobs" are not a recommended method of utility attachment; however, they will be allowed in certain situations if no other connection means is possible, direct connection to the riser is preferred. Check with the Engineering Department for details.
- 8. Regardless of the requirement outlined in this section, the installation must meet all National Electric Code (NEC) minimum standards.

For any other specific questions regarding the installation of the meter socket contact Heartland REMC engineering department. It is the responsibility of the members to adhere to all requirements. *If any requirements are not met, service will be denied until proper corrections have been made.*