



**Warren Electric
Cooperative, Inc**

**120/240 Single Phase Service Mast
100 or 200 Ampere Rated Specifications and Checklist**

All items furnished by member

Manufactured housing units shall refer to NEC 550 for additional requirements

LOCATION

A WEC Staking Engineer will determine the location and any additional requirements during an on-site meeting with the member during the design process.

All services must be at least 30ft away from any WEC poles and primary wires.

SERVICE MAST

If WEC service wires must cross **more** than 6 feet of roof and/or attachment is **more** than 4 feet from edge of roof, service mast must extend a minimum of **60** inches above roof.

If WEC service wires must cross **less** than 6 feet of roof and attachment is **less** than 4 feet from edge of roof, service mast must extend a minimum of **42** inches above roof.

Only WEC attachments are allowed on mast.

Structural reinforcement and flashing (mast roof kit) at roof line is highly recommended.

WEATHER HEAD

3 wire rain-tight weather head properly sized and rated will be installed on top of conduit

CONDUIT

2 inch minimum galvanized or gray electrical PVC schedule 80 shall extend from weather head to meter base.

3 inch galvanized conduit required if mast extends more than 42 inches above roof. Guying required if over 72 inches.

When pipe riser is 10 feet or less, no coupling is permitted.

When pipe riser is longer than 10 feet, coupling shall be installed at joint closest to meter socket.

Pipe straps (3 minimum) shall be installed at uniform intervals to secure conduit to structure.

Pipe strap lag bolts shall go into wall studs and/or sound structural members

SERVICE AND GROUND WIRE (NEC 310)

Customer/Contractor shall extend wires 24" through weather head for WEC connections

| SERVICE SIZE | "HOT LEGS" & "NEUTRAL" | "GROUNDING" |
|--------------|------------------------|---------------|
| 200 ALUMINUM | 4/0 AWG ALUMINUM | #4 AWG COPPER |
| 200 COPPER | 2/0 AWG COPPER | #4 AWG COPPER |
| 100 ALUMINUM | #2 AWG ALUMINUM | #6 AWG COPPER |
| 100 COPPER | #4 AWG COPPER | #6 AWG COPPER |

METER BASE

Meter base shall be located between 5ft and 6ft from ground level.

Meter base shall be a single position, four terminal, and ring-less with a horn or other approved type bypass.

Meter bases equipped with grounding lugs shall be grounded in accordance to NEC or local inspection authority

DISCONNECT OPTIONS AND OTHER SERVICE EQUIPMENT REQUIREMENTS (NEC 230)

All sites served by WEC shall have a service disconnecting means (Mains in panel box). Although not required at this time, an outside disconnect switch is also recommended.

Disconnect main (inside or outside) shall be appropriately sized (breaker or K1 fuses rated for 10,000 Amperes)

Weather-Tight connectors and fittings shall be used between outside equipment and components.

All equipment (meter base, disconnect, etc) shall have all knock-outs, doors, and covers in place to limit access to energized parts and shall be in good physical and working condition..

GROUNDING RODS, WIRE, AND CONNECTORS (NEC 250)

Meter socket shall be grounded in accordance to NEC and local inspection authority requirements

Any service connected to WEC shall have two (2) 5/8 in. x 8ft. copper ground rods located 6ft. apart

Ground rod clamps shall be suitable for direct burial and/or exothermic welding.

Ground wires shall extend unbroken or uncut from grounding lug of meter base (if equipped) or disconnect to each rod.

Ground wires shall be secured to pole and/or protected from damage.

DIAGRAM

A diagram is included on the back of this specification sheet.

EFFECTIVE DATE

FOR ALL UPGRADES AND NEW CONSTRUCTION **AFTER JUNE 7, 2010**