



**Marion County Public Works
Building Inspection Division
Inspection Checklist**

Residential Electrical Service

November 2006

This checklist is intended for our external customers to prepare for an inspection. It is also intended for internal use for our inspectors to improve consistency and overall service delivery.

Please verify the following before calling for the Inspection:

Permits and Plans

- Job address is posted in a visible location.**
- Permit and approved plans are on site and accessible to the inspector
- Permit information is correct (address, permit number, description of work, etc.).

Meter Base

- Mast Construction
- Mast height over roof
- Mast height over ground including drip loop
- Mast flashing/roof jack
- Mast support from meter base/metered main up including guy kit requirements
- Meter base location above ground level
- Meter base fastening to surface
- Service entrance cable or conductor between meter base and service panel including weatherproofing
- Mast installation to meter base per listing requirements (Hub, etcetera)

Service Panel

- Service entrance conductor size
- Service entrance conductor connections (tightness/antioxidant as necessary)
- Service entrance conductor size distance (back to back, 1st useable adjacent stud space)
- Grounding electrode conductor proper size
- Utility bond size
- Main bounding jumper
- Water bond (as necessary) and size
- Gas bond and size appropriate to bond clamp requirements size
- Branch circuit wire appropriate to over current protective device size
- Only one neutral for buss connection (manufacture requirements)
- White conductor marked to another color if used as phase conductor
- Multi-wire branch circuits to same yoke on 2 pole breaker
- Proper phasing of multi-wire branch circuits when split as 2 circuits with common or shared neutral

- Proper application of 2-pole or double 2-pole breakers (manufacture requirements)
- Breakers applicable to service panel (listed as compatible)

Metered Main Meter Base

- Mast Construction
- Mast height over roof
- Mast height over ground including drip loop
- Mast flashing/roof jack
- Mast support from meter base/metered main up including guy kit requirements
- Meter base location above ground level per PGE
- Meter base fastening to surface

Conductor Between Service and Sub Panel

- Service cable or 4 conductors adequate for appropriate raceway and over current device
- Feeder proper size and protected between service and sub-panel
- Main bonding jumper in service (Meter Main Meter Base) only
- All bonding/grounding at Meter Main Meter Base only
- Grounding electrode conductor proper size
- Utility bond proper size
- Main bounding jumper in place
- Water bond (as necessary) and size
- Gas bond and size appropriate to bond clamp requirements
- Water bond and Gas bond shall be accessible

Sub Panel

- Conductor size, material, installation appropriate for use
- No bonding jumper between grounded conductor and equipment ground
- All neutrals isolated from ground

Metered Main with Provision for Additional Circuits

- Follow manufacturer requirements for breaker size in main protected buss
- Follow manufacturer requirements for breaker size for free standing breaker

Underground feed

- Meter base to be Underground Listed only (PGE Requirement)
- Load side connections to be bottom jaws
- Service entrance conductor sized to main breaker of service
- Service entrance conductor size connection (tightness/antioxidant as necessary)
- Service entrance conductor size distance (back to back, 1st useable adjacent stud space)

Meter Main Meter Base-Underground Feed

- Proper location of lugs (Relocated to bottom buss attachment)
- Proper cap installed over hub installation hole
- Meter base location above ground level per PGE
- Meter base fastening to surface
- Service entrance cable or conductor between meter base and service panel including weatherproofing
- Service entrance conductor size
- Service entrance conductor size connection (tightness/antioxidant as necessary)
- Service entrance conductor size distance (back to back, 1st useable adjacent stud space)
- Grounding electrode conductor proper size
- Utility bond size
- Main bounding jumper
- Water bond (as necessary) and size
- Gas bond and size appropriate to bond clamp requirements
- Water bond and Gas bond shall be accessible
- Branch circuit wire appropriate to over current protective device size
- White conductor marked to another color if used as phase conductor
- Multi-wire branch circuits to same yoke on 2-pole breaker
- Proper phasing of multi-wire branch circuits when split as 2 circuits with common or shared neutral
- Proper application of 2-pole or double 2-pole breakers (manufacture requirements)
- Breakers applicable to service panel (listed as compatible)

Note: These are general requirements only and do not reflect all conditions. For additional information please contact the Building Inspection Division.

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