













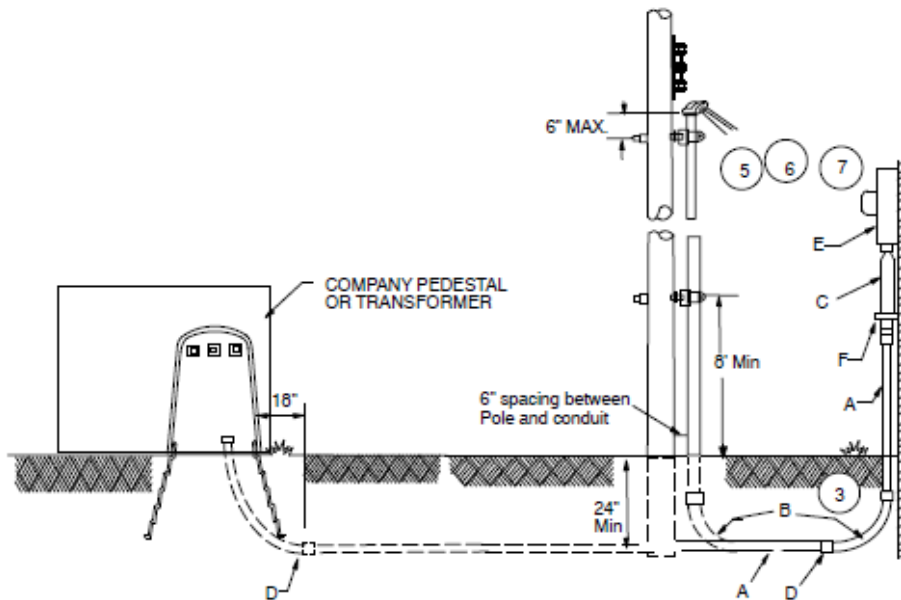
# INSTALLATION DETAIL AT PEDESTAL, TRANSFORMER OR POLE

(Service Manual Figure 700-5)

## CONTINUOUS SERVICE CONDUIT INSTALLATION CONNECTION TO PEDESTAL, TRANSFORMER, OR POLE AMEREN SERVICE CABLE (Illinois Residential Customer Only)

Figure 700-5

Note	Description
	A Conduit - Electrical Grade Sch. 40 PVC, 2-1/2 in. or 3 in.
	B Bend-Conduit 2-1/2 in. or 3 in. for 24 in. Min, 90° Radius, Electrical Grade Sch. 40, PVC
9	C Expansion Coupling-2-1/2 in. or 3 in. (allow 8 in. fall) Electrical Grade Sch. 40, PVC
	D Coupling-Conduit, 2-1/2 in. or 3 in., Electrical Grade Sch. 40, PVC
	F Hanger-Conduit
	E Meter Socket, Clamp Jaw Lever Bypass



### NOTES (Service Manual Figure 700-5):

- Customer installed conduit shall be installed along the shortest route, and the number of bends shall be kept to a minimum. There shall be a maximum of 3-90 degree, 24 in. min radius bends for 2-1/2 in. or 3 in. conduit installations. All sections shall be securely fastened together using standard grade cement. Minimum burial depth in trench-able earth is 24 in. In rock or untrenchable soil, depth may be reduced to 12 in. Depths less than 12 in. are not permitted.
- The trench bottom shall be undisturbed, firm and uniform for its entire length. If it is impossible to achieve uniformity in the trench bottom it must be over-excavated 4 in. to 6 in. and the bottom refilled with good quality properly compacted bedding material. Approved materials: Sand, limestone screening, concrete slurry or concrete.
- Minimum bend radius is 24 in. min for 2-1/2 in. or 3 in. conduit.
- Conduit seals on customer service conduit are the customer responsibility and should be installed at the building wall.
- See Figure 700-1 for required meter socket and riser attachment.
- See Section 200 for meter socket mounting height.
- Approved ground as required by local inspection authority or latest version of NEC.
- If equipment is not in place, the location where it will be installed shall be obtained from company representative before conduit installation. The customer shall seal and mark the conduit end.
- When an expansion coupling is required, install the outer sleeve into the meter socket with the inner sleeve positioned at the manufacturer's midway mark.

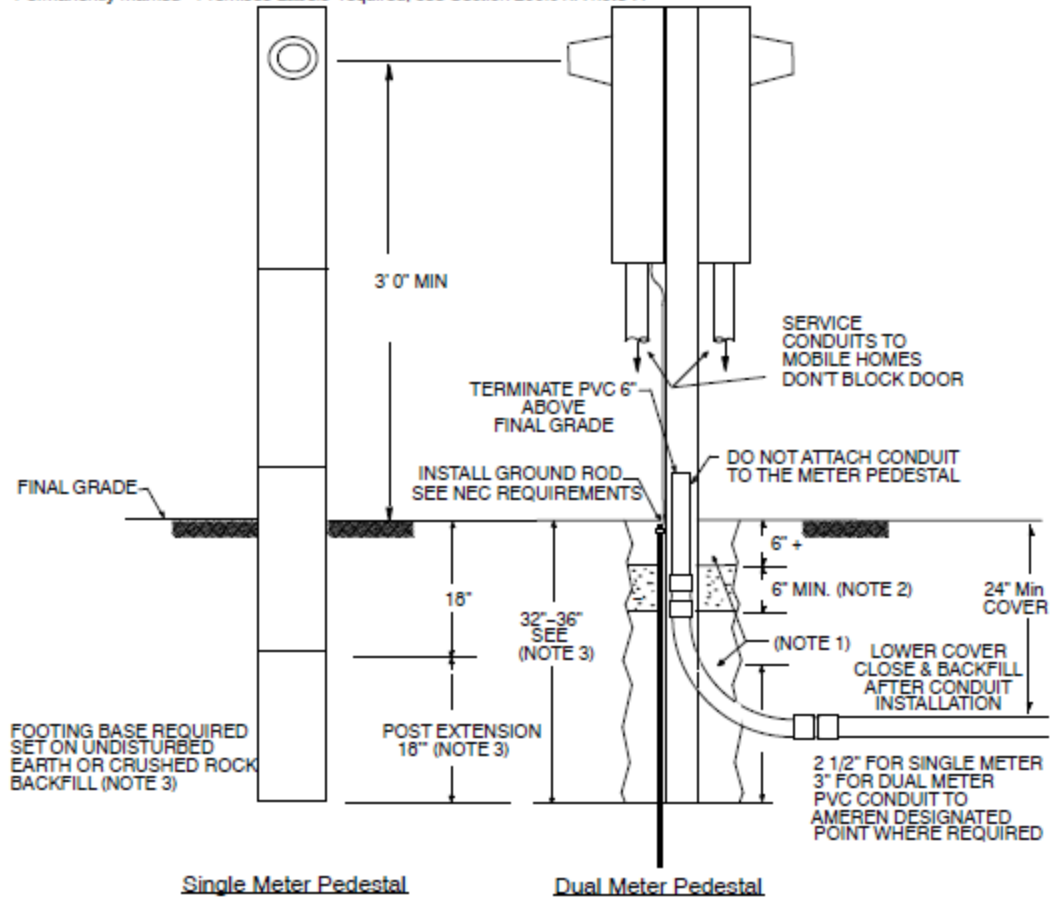


## Meter Pedestal Installation Single or Dual Meter (Ameren Service Manual Figure 700-14)

### METER PEDESTAL INSTALLATION SINGLE OR DUAL METER Figure 700-14

**EQUIPMENT NOTES:**

- (a) All materials shall be furnished and installed by customer.
- (b) Pedestals shall be labeled for service equipment by U.L. and approved by Ameren.
- (c) Install ground rod for each service per NEC requirements.
- (d) Install weather proof disconnect on each service
- (e) Permanently marked "Premises Labels" required, see Section 200.01.A note 7.



**NOTES:**

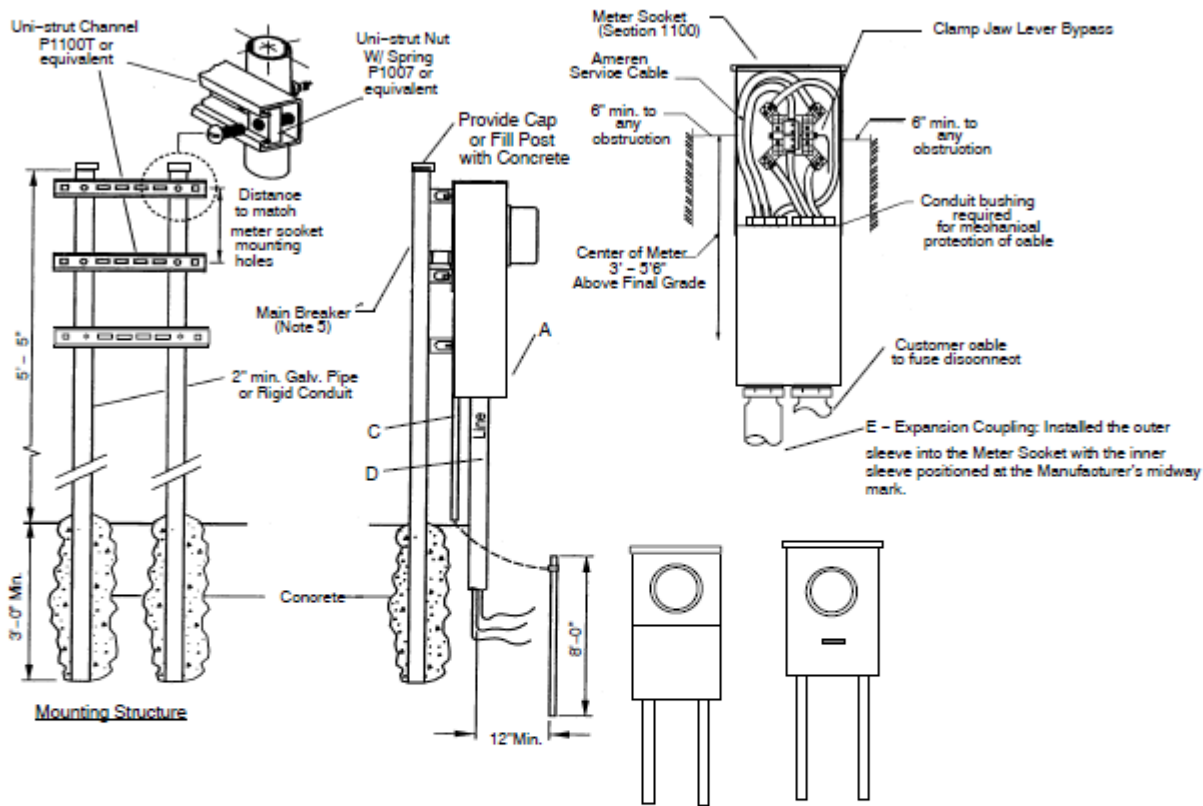
1. Backfill with tamped crushed rock screening including entire conduit elbow.
2. Place concrete collar 6 in. thick, min., 6 in. below grade to firm earth as shown.
3. 32 in. to 36 in. pedestal embedment required. Order post extension and footing base with meter post as shown.
4. Owner shall be responsible to see that pedestal is firmly embedded in ground, and plumb to within 1" in 12" vertical.
5. Conduit shown shall be installed with a minimum of 30" of cover to the 24" radius bend into channel. Direct buried cable can be installed with 24" of cover.
6. Service conduit should not block supply cable access door.





# Meter Support for UG Meter Service (Ameren Service Manual Figure 700-9)

## METER MOUNTING SUPPORT FOR UG METER SERVICE – Meter Socket, Meter/Breaker Combo or Instrument Rated Meter Socket Figure 700-9



Notes		Description
5, 6	A	Meter Socket, Clamp Jaw Lever Bypass
	C	½ in. PVC Conduit
	D	Conduit—Electrical Grade Sch 40 PVC or Sch 80 PVC if subject to physical damage
8	E	Expansion Coupling, Sch 40 PVC, 8 in. fall

### NOTES:

1. The installation of all entrance equipment, conductors and conduit shall conform to local codes or the latest NEC. Requirements.
2. All material shall be furnished and installed by customer.
3. NEC approved ground required.
4. Different arrangements of the service equipment (fuse/breaker box) may be used side-by-side or below meter.
5. Refer to Section 1100 for meter sockets or combo units requirement.
6. Instrument rated meter sockets **In MO:** stock #40 04 246-8 Terminal and stock #40 04 245 - 13 Terminal; **In IL:** stock #40 54 378 - 8 Terminal and stock #40 54 353 - 13 Terminal
7. Refer to Section 200 for meter mounting height.
8. When an expansion coupling is required, it should be installed so that the outer sleeve into the meter socket with the inner sleeve positioned at the manufacturer's midway mark.



## MATERIALS TO BE FURNISHED & INSTALLED BY CUSTOMER

Meter Socket – 200 or 320 amp\*, UL listed, Ringless, clamp jaw lever bypass type, 5-terminal, 600 Volt AC with lay-in lugs for up to 350 AL wire, designed for UG service

To get the latest catalog number information for the devices, please use the website as indicated below. (Note: **Ameren Illinois only accepts meter mounting devices from the list, and if failure to comply the requirements may delay service until requirement is met.**)

<http://www.ameren.com/service manual>

## IF CONDUIT SYSTEM

**Conduit** – Schedule 40 or greater, PVC, Rigid, Electrical Grade, Gray, Size: 2 ½” for 200 amp (under 200’ length), 3” if over 200’ and for all 320-400 amp installations.

**Solvent type conduit cement, couplings, hangers, fittings, bushings, etc.** – As needed.

**Expansion Coupling** – Same size as Conduit.

**Conduit Bends** – Schedule 40, PVC, Rigid, 24” radius bend for 2 ½ ” conduit or 36” radius bends for 3” conduit, same size as conduit (maximum of 3 bends permitted).

## CUSTOMER CHECKLIST

- Correct type & size meter socket installed? (see material list for details) Meter socket properly installed? (securely fastened to wall, 3’ to 5’6” above finished grade, and proper located (see Location for Point of Delivery on Buildings)
- Permanent unobstructed work space left in front of meter socket? (minimum 3 1/2’ of clear working space in front of meter and 6” above, below, and to each side of the meter equipment, 6’6” standing headroom)
- Expansion coupling installed in the left bottom meter socket knockout is for complete conduit system only and **is not** required in direct buried applications.
- Customer wiring completed and inspected as necessary?
- Correct conduit for size and length of service installed? (see material list for details)
- All conduit that is subject to traffic damage is required to be Schedule 80 PVC or greater.
- Conduit installed (see Installation detail at Pedestal or Transformer or Pole) for complete conduit system only.
- Grade over conduit to within 6” of final grade over entire length of conduit? Customer installed conduit shall be a depth that will result in a minimum depth of 24” after final grading.
- Final grade will be required prior to the Ameren Illinois installation of a direct buried service.
- Clear work area required around meter and Ameren Illinois transformer, pedestal, or pole.
- Cost arrangements made and easements provided? (as required)

Ameren Illinois Work Request No. \_\_\_\_\_

Engineering Contact: \_\_\_\_\_

Phone: \_\_\_\_\_

Construction Contact: \_\_\_\_\_

Phone: \_\_\_\_\_

***Thank you for letting Ameren Illinois serve your energy needs.***



**Construction and Engineering Services**  
**Contact Us Via Email: [IllinoisConstruction@Ameren.com](mailto:IllinoisConstruction@Ameren.com)**  
**Phone: 888-659-4540**  
**Monday – Friday 7:30-5:00**  
**Visit us at: <http://www.BuildWithAmerenIllinois.com>**

At Ameren Illinois, we strive to meet our customer's expectations on every job. We measure our customer satisfaction by conducting phone surveys with a sampling of our customers after we complete our work. **Our goal is for customers to be fully satisfied with every aspect of their interaction with Ameren Illinois.** If for any reason you feel the quality of service you have received throughout this process would not deserve a rating of a 9 or 10, please let us know so we can address your concern at 1.888.659.4540 or via e-mail at [IllinoisConstruction@ameren.com](mailto:IllinoisConstruction@ameren.com).

***Dig Safely: Call JULIE First***

Digging responsibly is the only way to dig -- the alternative could lead to personal injury or damage to underground lines, property or the environment. Regardless of the depth of the project, Illinois law requires anyone planning to dig to call **JULIE at 1-800-892-0123 or 811** at least 48 hours (two working days) prior to the start of excavation and to begin that excavation project within 28 calendar days after calling JULIE. Make the call before you dig and protect yourself and those around you.

