

Wiring & Meter Base Assembly Specifications

For Upgraded and New Services

Any specifications or clearances not stated in this pamphlet must be in accordance with the National Electric Safety Code & the National Electric Code.

Temporary Overhead Meter Pole (60 amp or larger)

The pole must be 18' long and 6" in diameter at the top and be set 4' deep. The pole must be braced against pull and be set not more than 30' from the overhead electrical source.

Poles can either be cedar, locust or treated.

An insulated clevis will be furnished by the member and installed near the top of the pole.

Wires must be extended 18" from the weatherhead and the neutral must be marked.

Straps must be installed every 2' with entrance cable or conduit.

The meter base (installed by the member) may be purchased from the REMC.

A weather-tight breaker box of not less than 60 Amp capacity must be installed by the member.

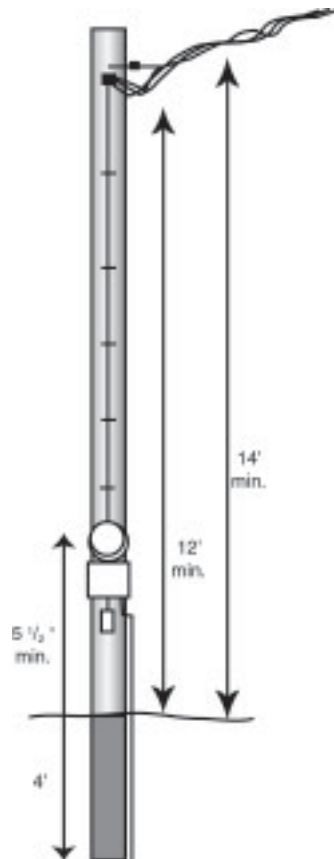
Metallic conduit must be installed using four (4) lock-nuts between the base and the breaker box with a 2" minimum separation. Nylon bushings must be used at the ends of all metallic conduit.

The member must install or have installed a 3-wire, 120-volt receptical w/GFI protection either on the receptical or in the breaker box. Wires from the breaker box to the receptical should be protected with PVC or metallic conduit.

Install an insulated ground wire from the ground rod to the breaker box only. Use a 5/8" x 5' ground rod.

***ALL MATERIALS MUST BE RATED AS WEATHER-PROOF.**

****USE WIRING CHART ON REVERSE SIDE FOR WIRE SIZES.**



Temporary Underground Meter Pole (60 amp or larger)

The meter post must be at least 4" square or 4" in diameter and 8' long (minimum) and set 3' deep. The post can be either cedar, locust or treated.

The member must install a 3-wire, 120-volt receptical w/GFI protection either on the receptical or in the breaker box. Wires should be protected from the breaker box to the receptical using PVC or metallic conduit.

A weather-tight breaker box of not less than 60 Amp capacity must be installed by member.

The meter base (installed by the member) may be purchased from the REMC.

Wires from the underground electrical source are to be connected to the top lugs in the meter base.

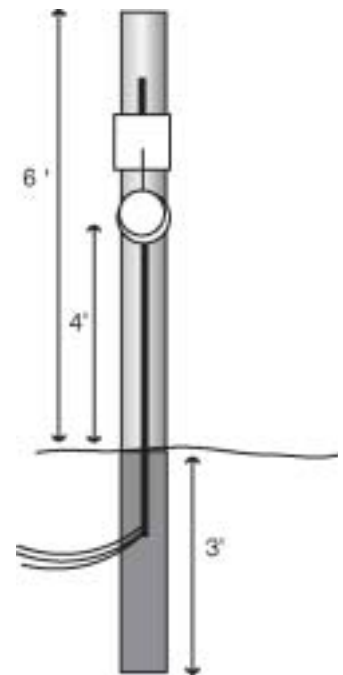
Wires from the breaker box are to be connected to the bottom lugs in the meter base.

Metallic conduit must be installed using four (4) lock-nuts between the base and the breaker box with a 2" minimum separation. Nylon bushings must be used at the ends of all metallic conduit.

Wires should be extended 4' to 5' from the pedestal for use by the REMC to connect to the underground electrical source.

PVC conduit should be used to protect wires from the meter base to 18" below final grade. Straps should be used every 2' to secure the conduit.

Install an insulated ground wire from the ground rod to the breaker box only. Use a 5/8" x 5' ground rod.

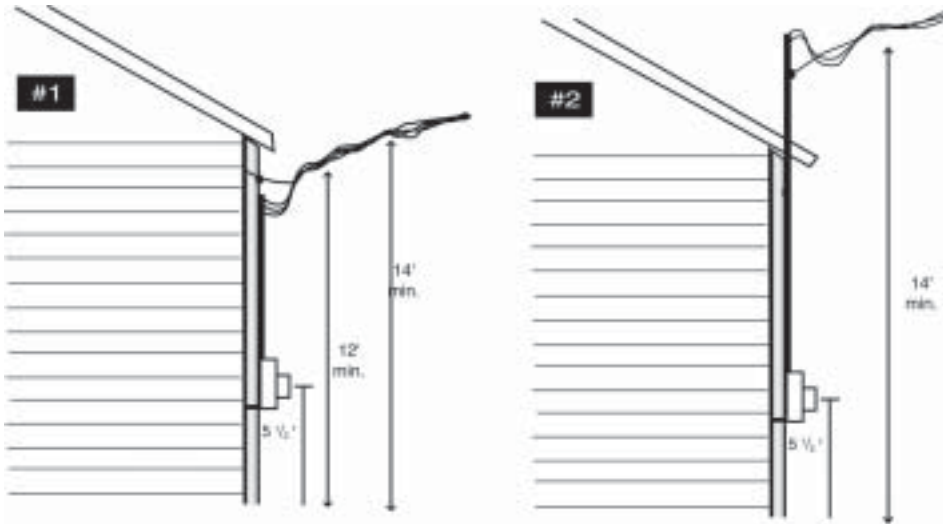


***ALL MATERIALS MUST BE RATED AS WEATHER-PROOF**
****USE WIRING CHART ON REVERSE SIDE FOR WIRE SIZES.**

NOTE: For conversion of an overhead meter pole for use at an underground source, strap the necessary amount of 1" PVC conduit on the side of the pole from the weatherhead to 18" below grade to protect new wires. Make proper connections at the weatherhead and extend 4' to 5' from the base of the pole.

Permanent Overhead Service on a Building

(100 OR 200 amp)



#1) If a minimum height of 14' can be obtained below the overhang, an eyebolt (furnished by the REMC) can be installed by the member to a solid support to eliminate the need for a riser through the roof line.

The eye bolt must be installed no closer than 12" below the overhang and 12" to 16" from the weatherhead.

Install straps every 2' above the meter on entrance cable and every 4' on conduit.

Conduit can be 1 1/4" for 100A and 2" for 200A. It can be either metallic or non-metallic.

#2) If adequate overhead clearance cannot be obtained below the roof line, a rigid metal riser (2" minimum) must be installed through the overhang. The riser must extend 3' above the roof unless otherwise advised.

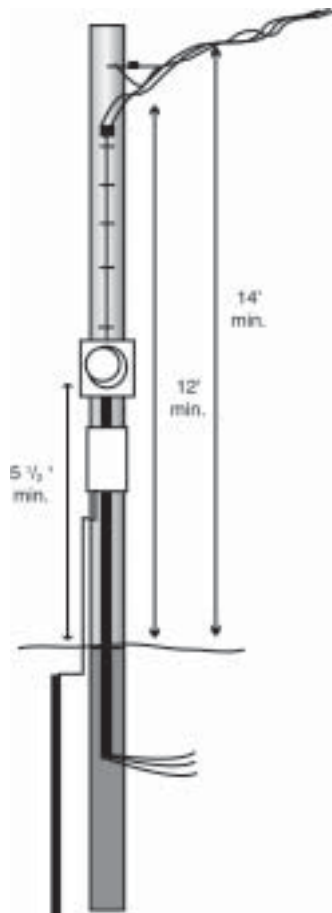
The riser clamp is furnished and installed by the REMC. Install heavy-duty riser straps every 2' apart.

GENERAL INFORMATION: Extend wires 18" from the weatherhead and mark the neutral wire. The meter base (installed by the member) may be purchased from the REMC. The breaker box must be within 10' of meter base with wires enclosed in 2" metallic or non-metallic conduit. Use nylon bushings on the ends of the metallic conduit. Install an insulated ground wire between the ground rod and the breaker box only. Drive the ground rod 18" from the foundation and 12" below final grade.

****USE WIRING CHART ON FOLLOWING PAGE FOR WIRE SIZES.**

Permanent Overhead Meter Pole

(100 or 200 amp)



The pole must be round, at least 25' long, class 7 or larger, pressure treated and unused (new). The pole must be set by the REMC.

An insulated clevis will be furnished and installed by the REMC.

Wires should be extended 18" from the weatherhead and neutral must be clearly marked. Straps should be installed every 2' with entrance cable and every 4' with conduit.

The meter base (installed by the member) may be purchased from the REMC.

Metallic conduit must be installed using four (4) lock-nuts between the base and the breaker box with a 2" minimum separation. Nylon bushings must be used at the ends of the metallic conduit.

A weather-tight 100 or 200 amp breaker box is to be mounted on the pole by the member.

Install insulated ground-wire from the ground rod to the breaker box only.

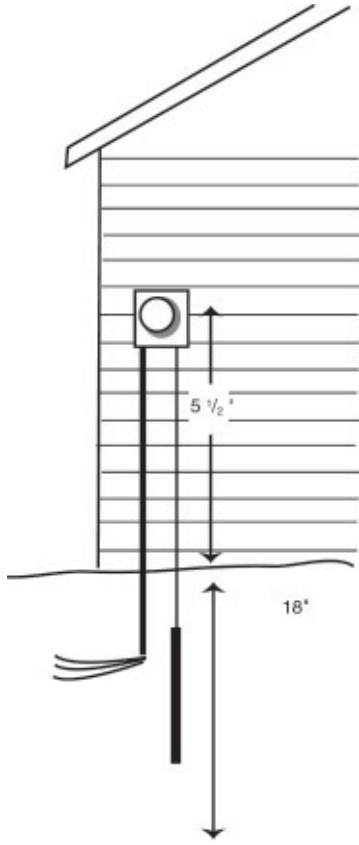
The ground rod with type "G" clamp should be driven to 12" below final grade.

Metallic or non-metallic conduit must be installed by the member from the bottom of the breaker box extending to 18" below final grade.

A minimum of 1 1/4" conduit is to be used for 100 amp service and a minimum of 2" for 200 amp services.

****USE THE WIRING CHART ON THE REVERSE SIDE FOR WIRE SIZES.**

Underground Meter Base on Building (200 amp)



The meter base (installed by the member) may be purchased from the REMC.

The breaker box must be installed within 10' of the meter base with wires enclosed in 2" metallic or non-metallic conduit using lock-nuts. Nylon bushings must be used on ends of all metallic conduit.

The member is to provide 2" electrical grade Schedule 80 PVC or metallic conduit that will be used from the meter base extending to a point 18" below final grade. The REMC will install the conduit when the service is connected.

The REMC will bring the service cable up to the meter through a knockout on the bottom of the meter base and will connect the cable to the top lugs inside the base.

A ground wire must be installed by the member from the ground rod to the breaker box only.

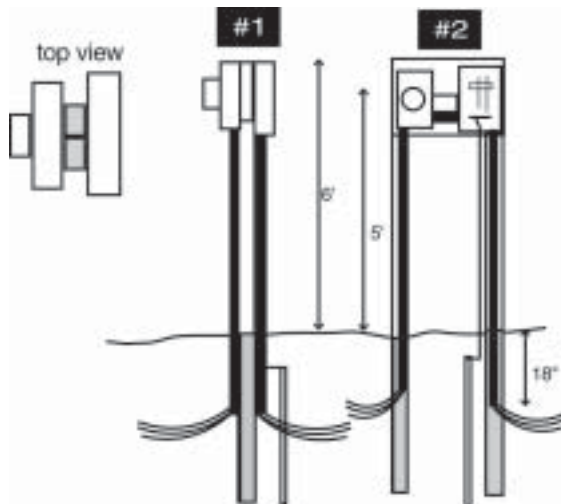
The ground rod is to be driven 18" from the foundation and 12" below final grade.

The member must mark all underground obstacles within the trenching area. The REMC will attempt to install its underground conductor 12" below previously installed underground equipment.

The REMC will not be responsible for damage to unmarked underground equipment.

****USE WIRING CHART ON NEXT PAGE FOR WIRE SIZES.**

Permanent Underground Meter Pedestal (200 amp)



#1) A 10', 4"x6" treated post should be set 4' deep. Bore a 2 1/2" hole through the post approximately 1' from the top. Install the meter base on one side and a 100 or 200 amp weather-tight breaker box on the opposite side.

Insert a 2" metallic conduit through hole and attach to meter base and breaker box with four (4) lock-nuts. Nylon bushings must be used on the ends.

#2) Install (2) 10', 4"x4" treated posts 4' deep and 3' apart. Secure (2) 3', 2"x8" treated boards between the posts on one side near the top.

Install the meter base and a 100 or 200 amp weather-tight breaker box on the boards. Connect the meter base and breaker box with a section of metallic conduit and 4 lock-nuts. Nylon bushings must be used at the ends of all metallic conduit.

GENERAL INFO: The member is to provide 2" electrical grade Schedule 80 PVC or metallic conduit from the bottom of each of the boxes to a point 18" below the final grade. **The REMC will install the conduit that is supplied for the meter base through an outside knockout on the bottom of the meter base and will connect the service cable in the base to the top lugs.**

Install an ground wire from the ground rod to the breaker box only.

Drive the ground rod 12" from the post and 12" below final grade.

The member must mark all underground obstacles within the trenching area. The REMC will attempt to install its underground conductor 12" below previously installed underground equipment.

The REMC will not be responsible for damage to unmarked underground equipment.

****USE WIRING CHART ON NEXT PAGE FOR WIRE SIZE.**

Copper Entrance Conductor

AMP SIZE	WIRE SIZE	NEUTRAL	INSULATED CONDUIT	COPPER-CLAD COPPER GROUND WIRE	GROUND ROD
60	# 6	# 6	1"	# 6	5/8" x 8'
100	# 4	#6	1 1/4"	# 6	5/8" x 8'
200	# 2/0	# 1/0	2"	# 4	5/8" x 8'
320	# 350 MCM	# 250 MCM	2 1/2"	# 2	5/8" x 8'
or	or		or		
# 2/0 to (2) 200A panels	# 1/0 to (2) 200A panels	2 1/2"	(2) # 4 to single rod	5/8" x 8'	

Aluminum Entrance Conductor

AMP SIZE	WIRE SIZE	NEUTRAL	CONDUIT	INSULATED COPPER GROUND WIRE	COPPER-CLAD GROUND ROD
60	# 4	# 4	1 1/4"	# 6	5/8" x 8'
100	# 2	# 4	1 1/4"	# 6	5/8" x 8'
200	# 4/0	# 2/0	2 "	# 4	5/8" x 8'
320	# 500 MCM	# 350 MCM	3"	# 2	5/8" x 8'
	or	or		or	
	# 4/0 to (2) 200A panels	# 2/0 to (2) 200A panels	3"	(2) # 4 to single rod	5/8" x 8'

WIRE TO BREAKER SPECIFICATIONS

(Copper Only)

BREAKER SIZE	WIRE SIZE
15 A	# 14 ga.
20 A	#12 ga.
30 A	#10 ga.
40 A	# 8 ga.
60 A	# 6 ga.

BREAKER BOX

The breaker box, in any application, shall not be less than 100 amp except on temporary assemblies.

The main breaker is needed for control if more than (6) individual circuit breakers are installed.

Multiple electric meters on a single structure must be at a central location.

Meter on House or Building

The meter base may be purchased and picked up by the member at the REMC. The typical size for most residential applications is 100 or 200 amp. Larger sizes are also available if needed.

The meter base must be mounted securely to the structure between 5' and 6' above final grade and in an area not subject to future additions. *The meter base must be accessible to REMC personnel at all times.* The member is responsible for installing or having installed the entire electrical entrance on the structure. The member must then notify the local county planning and zoning authority for an on-site inspection.

Meter Pole or Pedestal for Mobile Home, Modular Home or Central Distribution

An overhead meterbase cannot be mounted directly on a mobile or modular home. A 4-wire service (including insulated ground wire) must be installed from the mobile or modular home to the meter pole or pedestal. All four wires must be terminated in the breaker box on the meter pole or pedestal. It is recommended that the wires be installed in 2" electrical grade PVC the entire distance from the mobile or modular home to the meter pole or pedestal. Wires can be buried directly in the ground provided the cable has the proper insulation for such use. *The proper depth of the wires from the meter pole or pedestal to the home, according to the National Electric Safety Code, is 24".*