

Figure 1: General concept for the pedestal and underground service

The diagram illustrates the electrical connections from a utility service point to a home. On the left, a vertical line represents the service drop, with labels F, G, J, H, and L pointing to various components. A 'Point of Service' is indicated where the service drop enters the home. Inside the home, a 'BREC' (Branch-Entry-Connection) box contains 'Hot Leg' and 'Neutral' terminals. Red lines represent the hot legs, and a blue line represents the neutral. These connect to a 'Breakers' panel. The 'Home Neutral' is shown as a blue line connecting the BREC neutral to the Breakers panel. The Breakers panel also shows 'NEUT' and 'GND' (Ground) connections. A 'M' (Meter) is shown between the BREC and the Breakers panel. A 'Notes:' section is at the bottom right.

1. 4 Wires required for mobile homes
 - * 2 hot wires
 - * 1 ground wire
 - * 1 neutral wire
2. Mark both neutrals with white tape for BREC and Home
3. See Table 1 for description of parts
4. See Table 2 for wire sizes
5. All phone, cable and satellite connections are to be bonded to the point of service as specified in the NEC.
6. Ground rod must be less than 25 ohms as specified in the NEC
7. INSTALL MINIMUM ¼ in. NYLON ROPE IN CONDUIT.

Item	Service	Capacity
Wire Size	100 Amps	200 Amps
Copper	#2	#3/0
Aluminum	#2	#4/0
Conduit Size	2 1/2 in. schedule 40 PVC	2 1/2 in. schedule 40 PVC
Bare copper ground wire	#6	#6
Ground rod	5/8 in. diameter	5/8 in. diameter
Copper weld or galvanized	8 ft. long	8 ft. long

Item	Part	Qty.	Notes
C	2 1/2 in. schedule 40 conduit or larger		Set 20 ft. minimum from Buckeye REC pole. Long sweeping elbow. No right angle elbows allowed. Supplied and installed by member. Weep holes optional with gravel to allow water to drain.
D	6 in. x 6 in. treated posts	2	Bury 3 ft. deep. Must be tall enough so that the center of the meter base will be 5 ft. to 6 ft. tall. Cut the top of the post at an angle such that water will drain away from the electrical panels.
E	Backboard for mounting meter base and disconnect box		Use 2 in. x 6 in. treated boards. Use enough boards to mount the meter base and disconnect box. Nail the 2 in. x 6 in. boards to the 6 in. x 6 in. treated posts.
F	Meter base	1	Must be level, face the street or walkway and be Underwriters Laboratories (UL) Listed
G	Disconnect Box	1	Must be level, multi-circuit, must be Underwriters Laboratories (UL) Listed
H	Ground wire, ground rod and ground clamp		See Table 1.
I	2 1/2 in. schedule 40 conduit or larger		Exits bottom of disconnect
J	Ground Wire		See Table 1. Connect to neutral bar
K	Ground Clamp		Connects the ground wire to the ground rod
L	Ground Rod	2	See Table 1. To be buried at least 18 in. from meter base and 8 ft. deep. Reference NEC 250.56 for resistance levels.
M	Water tight connectors		Connects the conduit to the electrical panels



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