



Jackson Energy Cooperative

Residential Underground Secondary Service Requirements

From the Pole to the House

1. Dig a ditch, a minimum of 24 inches deep, from the pole to the house. The bottom of the trench should be undisturbed, tamped, or relatively smooth earth. If the ditch can't be dug to a depth of 24 inches the conduit shall be encased in 4 inches of concrete at a depth of at least 12 inches.
2. Place schedule 40 conduit in the ditch (schedule 80 under driveways).
3. Conduit should be 2.5 inches in diameter for a 200-amp service and 3 inches in diameter for a 400-amp service.
4. Leave the ditch open until Jackson Energy personnel have inspected the ditch and measured to determine the length of underground wire needed.
5. There must be a one-foot minimum separation between the underground electric lines and any other utility lines in a ditch. The ditch for the underground electric lines may cross the ditch for water or gas lines, but the electric lines can not be installed in the same ditch with the water or gas lines.
6. Television and telephone lines may be installed in the same ditch with the underground electric lines. There must be a one-foot minimum separation between the underground electric lines and the television or telephone lines. This separation can be either horizontal or vertical. For horizontal separation be sure to dig the ditch wide enough to maintain a one-foot minimum separation. Place the conduit for the electric line in the ditch on one side. Install the television or telephone line on the other side of the ditch. Backfill the ditch a least one foot, place the marking tape, then finish backfilling the ditch. If vertical separation is used then the conduit for the underground electric line shall be installed at the bottom of the ditch, then one foot or more of backfill, next marking tape shall be placed in the ditch on top of the backfill, then install the television or telephone line, finally finish backfilling the ditch.
7. All backfill shall be free of materials that might damage the conduit.
8. The conduit from the ground to the meter base and from the ground up to the pole shall be schedule 80.
9. All elbows used must be at least 24-inch sweep (36-inch sweep elbows preferred)
10. A maximum of three elbows are permitted in an underground service. This includes the elbow at the pole and the elbow at the meter. Two elbows shall not be installed back to back.
11. The conduit at the pole shall be installed a distance of 4 to 6 inches from the pole.
12. The conduit at the house shall be mounted flush to the outside wall.
13. The meter base shall be placed on an outside wall and shall be designed for an underground service entrance. A meter base designed for an overhead service entrance will not work.
14. While 200-amp meter bases come with lugs, most 400-amp meter bases do not come with lugs. Lugs must be purchased separately for a 400-amp meter base.
15. Place a pull rope in the conduit. The rope shall be 250-pound test or greater and shall be installed the entire length of the conduit. The rope shall be tied off at both ends.
16. The conduit at the pole should be capped to prevent water filling the conduit.

17. The following items must be left at the pole for the Jackson Energy crews: a weather head and 3 to 4 joints of schedule 80 conduit. Jackson Energy crews will install these items on the pole. (This will be determined by the staking engineer).
18. Stand off brackets for the conduit on the poll shall be provided by Jackson Energy Cooperative. These brackets will be brought to the site by the Jackson Energy crews.

Any deviation from these guidelines requires the approval of the staking engineer supervisor.