What's on a Pole?



Common Equipment on an Electric Distribution Pole

Insulator

Prevents energized wires from coming in contact with each other or the utility pole.

Primary Wire

On top of the pole and usually carries 12,000 volts of electricity from a substation.

Crossarm

Holds the wires up on the pole.

Lightning Arrestor

Protects the pole and equipment from lightning strikes.

Transformer

Converts higher voltage electricity carried by primary wires and lowers the voltage for use by customers.

Telephone & Cable Wires

Typically the lowest wires.

Ground Wire

Runs the entire length of the pole. It directs any electricity on the pole safely into the earth.



Acts like a fuse and open when there is a problem with the line or a section of it.

Neutral Wire

Below the transformer and acts as a line back to the substation and balances out the amount of electricity or load on the system.

Secondary Wire

Carries the lower voltage electricity after it passes through the transformer.

Guy Wire

Helps stabilize utility poles.

