

## **MOBILE HOME ELECTRICAL POWER SUPPLY**

An electrical permit is required for all mobile homes. South Carolina Law prohibits any person or entity from installing, modifying, altering, or repairing the structural, mechanical, or electrical systems of a Manufactured Home without first obtaining a license issued or recognized by the South Carolina Manufactured Housing Board. **SC 40-29-30**

### **WIRING SPECIFICATIONS**

All service wires should be protected from physical and weather damage by conduit and the proper conduit connectors. The conduit shall be continuous from the outside service equipment to the inside panel. Conduit outside mobile home foundation/footprint shall be buried 18 inches below grade. Once under the mobile home, the conduit can be supported by the ground or strapped to the frame with approved hangers or straps.

Make sure to maintain 36 inches of clear space in front of your service equipment. This is measured from the front of the equipment straight out.

The main service equipment enclosure shall be bonded to the neutral bus bar. **Grounding of the main service equipment shall be made by means of a minimum size #6 continuous copper wire to TWO approved 8 ft ground rods spaced a minimum of six ft apart, driven in the ground near the service equipment (Code Section E3608.4 SC International Residential Code (SC-IRC)).** The grounding electrode conductor shall be installed in one continuous length without splices or joints.

The power feeder from the main service equipment to the inside panel shall consist of #4 insulated, color-coded conductors shall be connected to the load side of the main disconnect breaker located in the service panel and to the line side of the main breaker in the panel box inside the mobile home.

Both the white and the green wires are connected to the grounded neutral buss bar in the main service equipment. In the panel box inside the mobile home, the white wire is connected to the neutral buss bar and the green wire is connected to the separate equipment grounding buss that is bonded to the panel box enclosure.

**\*\*Make sure to use a #4-wire insulated conductor approved for the ampacity of the panel's main breaker and rated for installation in a wet location or ground contact. \*\***

### CONDUCTOR TYPES AND SIZES

<u>AMPS</u>	<u>COPPER</u>			<u>ALUMINUM</u>		
	<u>2-HOT</u>	<u>NEUT.</u>	<u>GND.</u>	<u>2-HOT</u>	<u>NEUT.</u>	<u>GND.</u>
200	2/0	#1	#6	4/0	2/0	#4
175	1/0	#2	#6	3/0	1/0	#4
150	#1	#3	#6	2/0	#1	#4
125	#2	#4	#8	1/0	#2	#6
100	#4	#8	#8	#2	#4	#6