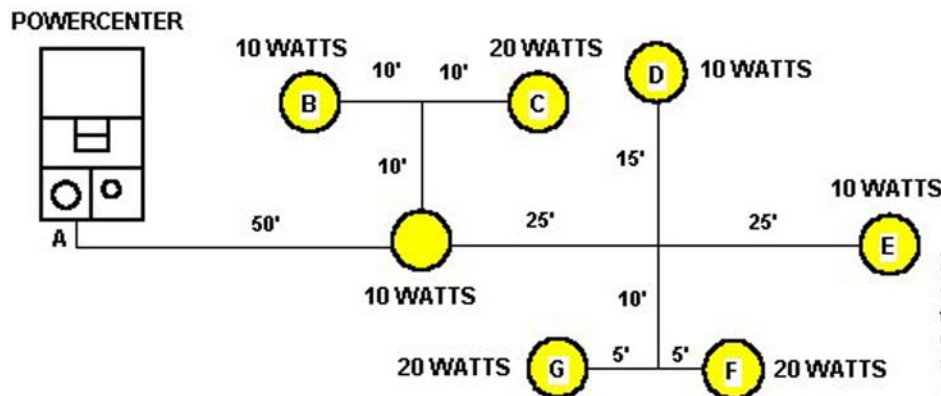


A BASIC GUIDE TO WIRE SIZING

1. Add the wattages of all the fixtures on the run together to get **TOTAL WATTAGE**.
2. Measure the longest cable run (in feet) from the transformer (**DISTANCE**).
3. Multiply **TOTAL WATTS x DISTANCE** of cable.

***If total is 10,000 or less: Use #12 wire.
 If total is 10,001 to 15,000: Use #10 wire.
 If total is 15,001 to 25,000: Use #8 wire.
 If total exceeds 25,000...split the run into 2 runs
 and recalculate.

EXAMPLE DIAGRAM



EXAMPLE:

1. **ADD TOTAL WATTAGE:**
 4 fixtures @ 10 watts ea. = 40 watts
 3 fixtures @ 20 watts ea. = 60 watts
TOTAL WATTAGE = 100 WATTS.
2. **MEASURE LONGEST CABLE RUN:**
 Point A to point B is 70'
 Point A to point C is 70'
 Point A to point D is 90'
 Point A to point E is 100'
 Point A to point F is 90'
 Point A to point G is 90'
 ***Point A to point E is the longest run: 100'

3. **MULTIPLY WATTS X DISTANCE:**
 ***100 WATTS x 100' = 10,000
4. **SELECT WIRE SIZE FROM CHART:**
 Total is 10,000...use #12 wire. If total is between 10,001 and 15,000...use #10 wire. If total is between 15,001 and 25,000...use #8 wire. If total exceeds 25,000...split the run in two and re-calculate.

***This method is ONLY a basic guide to figure wire sizing on a run. It is NOT a reliable way to figure actual voltage drop. Cable runs designed using these guidelines will work when using a standard transformer. When working with an H30 transformer, or to determine actual voltage drop, use the voltage drop formula.