



City of Newark
 37101 Newark Boulevard
 Newark, CA 94560-3796

Electrical Service Worksheet

Single Family Residence

Project Address:

Equipment or Load	Quantity	Unit, Factor, Watts	Total Wattage
Small Appliance Circuits (Minimum of 2)	circuits	@ 1,500 watts / circuit	=
Laundry Circuit (120 volt recepticle for clothes washer and/or gas dryer)	each	@ 1,500 watts / circuit	=
Electric Clothes Dryer	each	@ 5,500 watts / dryer	=
Electric Range (Higher of name plate rating or 12,000 watts)	each	@ watts	=
Electric Cook Top (Higher of name plate rating or 5,000 watts)	each	@ watts	=
Electric Oven (Higher of name plate rating or 4,000 watts)	each	@ watts	=
Dishwasher	each	@ 1,200 watts / washer	=
Built-in Microwave Oven	each	@ 1,500 watts / oven	=
Disposer	each	@ 1,000 watts / disposer	=
Lighting and General Outlets (Based on living area)	sf	@ 3 watts / sf	=
Sub-Total - Gross Watts			=

Load Calculation	Quantity	Unit, Factor, Watts	Total Wattage
100% of First 10,000 watts (From Sub-Total above)	10,000 watts	@ 100%	=
40% of Watts Over 10,000 (Based on living area)	watts	@ 40%	=
Electric Water Heater (Based on name plate rating)	each	@ watts / unit	=
Electric Air Conditioning (Based on name plate rating)	each	@ watts / unit	=
Total Calculated Gross Load in Watts		Watts	=
Total Calculated Load in Amps (Total calculated gross load in watts divided by 230 volts)		Amps	=

Service Size In Amps	Service Entrance Conductors		Grounding Conductor copper only	Bonding Conductor copper only
	cu	al		
100	4	2	8	8
110	3	1	8	8
125	2	1/0	8	8
150	1	2/0	6	8
175	1/0	3/0	6	8
200	2/0	4/0	4	6

Size of Service and Main Disconnect (Must be larger than calculated load per leg)	amps
Size of Service Entrance Conductors (Indicate copper "cu" or aluminum "al")	cu al
Size of Service Grounding Electrode Conductor (From "Table For Wire Sizing" - Use copper only)	cu
Size of Service Bonding Conductor (From "Table For Wire Sizing" - Use copper only)	cu