



Electrical Load Calculation Worksheet

City of Boulder City
 Community Development Department
 Building and Safety Division
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 Boulder City, NV 89005
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Property Address: _____ Boulder City, NV 89005

1 GENERAL LIGHTING LOAD [Table 220.12]	TOTALS
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_____ Sq. Ft X 3 VA/ft ²	=	_____ VA(a)	
Small Appliance Circuits: [Sec. 220.52(A)]			
_____ Circuits @ 1,500 VA (minimum of 2)	=	_____ VA(b)	
Laundry [Sec. 220.52(B)]	=	1,500	VA(c)
Sub Total: (a+b+c)	=	_____	VA(d)
Application of Demand Factor [Table 220.42]			
First 3,000 VA(d) @ 100%	=	3,000	VA
(≤120,000) Remainder of _____ @ 35%	=	_____	VA
(>120,000) Remainder of _____ @ 25%	=	_____	VA
Sub Total:	=	_____	VA
		=	_____ VA(1)

2 FIXED APPLIANCES [Section 220.53]	
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_____ Garbage Disposal (600 VA)		_____ VA	
_____ Water Heater (4,500 VA)		_____ VA	
_____ Dishwasher (1,200 VA)		_____ VA	
_____ Compactor (1,200 VA)		_____ VA	
_____ Microwave (1,500 VA)		_____ VA	
_____		_____ VA	
_____		_____ VA	
Sub Total:	=	_____ (e) @ 100%	VA(2)
<i>(4 or more appliances, a demand factor of 75% may be used)</i>			

3 DRYER [Section 220.54, Table 220.54]	
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5,000 VA or Name Plate _____ whichever is larger	VA @ 100%	_____	=	_____ VA(3)
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4 COOKING EQUIPMENT [Table 220.55] Notes	
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# of Units:	1 each	8,000 VA @ 100%	_____	VA	
	2 each	11,000 VA @ 100%	_____	VA	
	3 each	14,000 VA @ 100%	_____	VA	
Total:	_____ VA(f)		_____	VA	= _____ VA(4)
<i>(may be reduced per Table 220.55)</i>					

5 HEATING OR A/C [Section 220.60]	
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Total load for Supplemental Heating Unit (i)	=	_____ VA	
Total load for A/C Unit (ii)	=	_____ VA	
Total load for Heat Pump (iii)	=	_____ VA	
Largest load of (i)+(ii) or (ii)+(iii)	=	_____ @ 100%	= _____ VA(5)

6 LARGEST MOTOR [Sec. 220.14 (C)], [Sec. 220.50] - Usually A/C Compressor	
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Single Phase _____ VA @ 25%	=	_____ VA	=	_____ VA(6)
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7 OTHER LOADS (i.e., pool pump, spa, welder)	
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Pool Pump, Spa, Welder	=	_____ VA	=	_____ VA(7)
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TOTAL: Add VA(1) through VA(7)	=	_____ VA(8)
Calculated Load for Service (VA(8)/240	=	_____ AMPS

Service Panel Size	=	_____
Grounding Electrode Conductor	=	_____