



RESIDENTIAL ELECTRIC LOAD CALCULATION (SIMPLE METHOD)

Revision Date: 4/10/2025

Name:	
Address:	

STEP 1 Estimate General Electric Load Excluding Heating and AC

					Volt Amps
Square Footage of Structure		General Lighting Load	3	Watts per square foot	=
# of Small Appliance Circuits (2 min.)		# Small Appliance Circuits	1500	Watts each	=
# of Laundry Circuits (1 min.)		# Laundry Circuits	1500	Watts each	=
Step 1 Total =					

STEP 2 Estimate Heating/AC Electric Load

A/C Condensor & Fixed Space Heating					Volt Amps
	# of units		Common Values		
A/C Heat up to 8 kW		x	8300	=	
A/C Heat up to 15 kW		x	14000	=	
A/C Heat up to 20 kW		x	22400	=	
Cond/Heat Pump to 2 T		x	2500	=	
Cond/Heat Pump to 4 T		x	5500	=	
Cond/Heat Pump to 5 T		x	7000	=	
Other Electric Heating Device		x		Volt Amps from Label	=
Step 2 Total =					

STEP 3 Estimate Other Electric Load

Dedicated Equipment					(Watts)	Common Values
	# of units		Volt			
Electric Water Heater		x		Volt Amps from Label	=	4,500
Refrigerator		x		Volt Amps from Label	=	1,400
Freezer		x		Volt Amps from Label	=	600
Dishwasher		x		Volt Amps from Label	=	1,200
Disposal		x		Volt Amps from Label	=	800
Range Hood		x		Volt Amps from Label	=	600
Microwave		x		Volt Amps from Label	=	1,500
Mini Fridge		x		Volt Amps from Label	=	900
Instant Hot Water Unit		x		Volt Amps from Label	=	
Jacuzzi Tub		x		Volt Amps from Label	=	800
EVSE		x		Volt Amps from Label x 1.25	=	
Res. Elevator		x		Volt Amps from Label	=	
Step 3 Total =						

STEP 4 Estimate Major Equipment Load

Major Equipment					(Watts)	Common Values
	# of units					
Cook Range		x		Volt Amps from Label	=	8,000
Cook Oven		x		Volt Amps from Label	=	5,000
Clothes Dryer		x		Volt Amps from Label	=	5,000
Pool Motor		x		Volt Amps from Label	=	
Pool Heater		x		Volt Amps from Label	=	
Pool Light		x		Volt Amps from Label	=	300
Patio Heaters		x		Volt Amps from Label	=	1,500
Step 4 Total =						

Heat Pump Water Heater		x		Volt Amps from Label	=	
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STEP 5 Determine Whether Electric Service Panel Requires Upgrade

Total General Load excl Heating/AC (Add Steps 1, 3 and 4 Totals)		(Box 1)
Heat Pump Water Heater Electrical Load		(Box 2)
General Service Load (Add Box 1 + Box 2)		(Box 3)
First 10,000 Volt Amps at 100%		(Box 4)
Remaining General Service Load at 40% = (Box 3 - 10,000) x 40%		(Box 5)
Heating/Cooling Load at 100% (from Step 2 Total)		(Box 6)
TOTAL ADJUSTED HOUSE LOAD (Add Box 4 + Box 5 + Box 6)		(Box 7)
Minimum Service Ampacity (Box 7 divided by 240)		(Box "A")
Enter Your Existing Electrical Service Size (amps)		(Box "B")

NOTE: For One-Family Dwellings, the service disconnecting means shall have a rating of not less than 100 amps, 3-wire.

Completed by (Print Name)	Signature	Date
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