

## **RESIDENTIAL SERVICE LOAD WORKSHEET**

Optional Calculation for Dwelling Unit per California Electrical Code (CEC)

Building sq. ft::       Gas Furnace? Y       N         Rating of:       NPR (Name plate Rating)       Watts (= volts x amps)       X*       =       Total (a)         Air Conditioning*       NPR       X 1.00 =	Address:			Permit #:			Date:	
Rating of:       NPR (Name plate Rating)       Watts (= volts x amps)       X %       =       Total (a)         Air Conditioning*       NPR       X 1.00 =		Build	ing sq. ft.:	·				
Air Conditioning*       NPR       X 1.00 =         Heat Pump       NPR       X 1.00 =         Heat Pump       NPR       X 1.00 =         Electric Central Heating System       NPR       X 1.00 =         Less than 4 separately controlled units       X 65 =	Rating of:			; (= volts x a	amps)	Χ%	=	Total (a)
Electric Central Heating System       NPR       X.65 =         Electric Space Heaters       NPR         Less than 4 separately controlled units       X.65 =         Electric Space Heaters       NPR         4 or more separately controlled units       X.40 =         Transfer the largest value (watts) from the above 5 lines to the space below titled "from above" **         * Air Conditioning Example:       Compressor =       16.0 amps         Air handler =       2.0 amps         25% of the largest motor =       4.0 amps         Quantity       Item       Watts (= volts x amps)         (2) 20 Amp appliance circuits @1500 watts each (kitchen) =				•		X 1.00	=	
Electric Space Heaters NPR Less than 4 separately controlled units NPR 4 or more separately controlled units NPR 4 or more separately controlled units X .40 =	Heat Pump	-	NPR			X 1.00	=	
Electric Space Heaters NPR Less than 4 separately controlled units NPR 4 or more separately controlled units NPR 4 or more separately controlled units X .40 =	Electric Centr	al Heating System	NPR			X.65	=	
Electric Space Heaters NPR 4 or more separately controlled units X .40 = Transfer the largest value (watts) from the above 5 lines to the space below titled "from above" ** * Air Conditioning Example: Compressor = 16.0 amps Air handler = 2.0 amps 25% of the largest motor = 4.0 amps Total = 22.0 amps X 240 volts = 5,280 Watts Quantity Item								
4 or more separately controlled units       X.40 =         Transfer the largest value (watts) from the above 5 lines to the space below titled "from above" **         * Air Conditioning Example:       Compressor = 16.0 amps Air handler = 2.0 amps 25% of the largest motor = 4.0 amps Total = 22.0 amps X 240 volts = 5.280 Watts         Quantity       Item       Watts (= volts x amps)	Less than	4 separately controll	ed units			X .65	=	
Transfer the largest value (watts) from the above 5 lines to the space below titled "from above" **         * Air Conditioning Example:       Compressor = 16.0 amps Air handler = 2.0 amps 25% of the largest motor = 4.0 amps Total = 22.0 amps X 240 volts = 5,280 Watts         Quantity       Item       Watts (= volts x amps)	Electric Space	e Heaters	NPR					
* Air Conditioning Example: Compressor = 16.0 amps Air handler = 2.0 amps 25% of the largest motor = 4.0 amps Total = 22.0 amps X 240 volts = 5,280 Watts Quantity Item Watts (= volts x amps) Sq. Ft. X 3 watts per sq. ft. = (2) 20 Amp appliance circuits @1500 watts each (kitchen) = Range/Cooktop/Ovens NPR = Microwave (separate) NPR = Water Heater (if electric) NPR = Water Heater (if electric) NPR = Washer (1) 20 Amp @1500 watts = Electric Dryer greater of 5000 or NPR = Motor loads NPR = Other loads (le. EVCS) NPR = Cother loads (le. EVCS) NPR	4 or more	separately controlled	l units			X .40	=	
* Air Conditioning Example: Compressor = 16.0 amps Air handler = 2.0 amps 25% of the largest motor = 4.0 amps Total = 22.0 amps X 240 volts = 5,280 Watts Quantity Item Watts (= volts x amps) Sq. Ft. X 3 watts per sq. ft. = (2) 20 Amp appliance circuits @1500 watts each (kitchen) = Range/Cooktop/Ovens NPR = Microwave (separate) NPR = Water Heater (if electric) NPR = Water Heater (if electric) NPR = Washer (1) 20 Amp @1500 watts = Electric Dryer greater of 5000 or NPR = Motor loads NPR = Other loads (le. EVCS) NPR = Cother loads (le. EVCS) NPR								
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(2) 20 Amp appliance circuits @1500 watts each (kitchen) =         Range/Cooktop/Ovens       NPR         Microwave (separate)       NPR         Water Heater (if electric)       NPR         Dishwasher/Garbage Disposal       NPR         Washer       (1) 20 Amp @1500 watts =         Electric Dryer       greater of 5000 or NPR         Motor loads       NPR         Pool and/or Spa       NPR         Other loads (le. EVCS)       NPR         Total =       X.40         ** from above       +         +       10,000         Grant Total (watts)       +         Existing service size:       Amp	Quantity		<i>C</i> 1				Watts (	= volts x amps)
Range/Cooktop/Ovens       NPR       =         Microwave (separate)       NPR       =         Water Heater (if electric)       NPR       =         Dishwasher/Garbage Disposal       NPR       =         Washer       (1) 20 Amp @1500 watts =       =         Washer       (1) 20 Amp @1500 watts =       =         Washer       greater of 5000 or NPR =       =         Motor loads       NPR       =         Pool and/or Spa       NPR       =         Other loads (le. EVCS)       NPR       =         Total =       X.40       =								
Microwave (separate)       NPR       =         Water Heater (if electric)       NPR       =         Dishwasher/Garbage Disposal       NPR       =         Washer       (1) 20 Amp @1500 watts =       =         Electric Dryer       greater of 5000 or NPR =       =         Motor loads       NPR       =       =         Pool and/or Spa       NPR       =       =         Other loads (le. EVCS)       NPR       =       =         Total =       X.40       =       =         Total =       X.40       =       =         Grant Total (watts)       =       2       10,000         Grant Total (watts)       +       10,000       =         Existing service size:       Amp       Service Load (Amps)					n (kitchen)			
Water Heater (if electric)       NPR       =         Dishwasher/Garbage Disposal       NPR       =         Washer       (1) 20 Amp @1500 watts =								
Dishwasher/Garbage Disposal       NPR       =         Washer       (1) 20 Amp @1500 watts =								
Washer       (1) 20 Amp @1500 watts =         Electric Dryer       greater of 5000 or NPR =         Motor loads       NPR         Pool and/or Spa       NPR         Other loads (le. EVCS)       NPR         Total =       X.40         ** from above       +         Grant Total (watts)       ÷ 240 Volts =         Existing service size:       Amp								
Electric Dryer       greater of 5000 or NPR       =         Motor loads       NPR       =         Pool and/or Spa       NPR       =         Other loads (le. EVCS)       NPR       =         Subtotal       =					4500 11			
Motor loads       NPR       =         Pool and/or Spa       NPR       =         Other loads (le. EVCS)       NPR       =         Subtotal       =								
Pool and/or Spa       NPR       =         Other loads (le. EVCS)       NPR       =         Subtotal       =			Ų		U OF NPR			
Other loads (le. EVCS)       NPR       =         Subtotal       =         Less       -10,000         Total =       X .40       =         ** from above       +         Grand Total (watts)       =       -10,000         Fxisting service size:       +       10,000         Amp       -       Service Load (Amps)								
Subtotal       =						=		
Total =       Less       -10,000         Total =       X .40 =       -10,000         ** from above       +       10,000         Grand Total (watts)       =       -10,000         Grand Total (watts)       =       Service Load (Amps)         Existing service size:       Amp		Other loads (Ie. EV					=	_
Total =       X .40 =         ** from above       +         Grand Total (watts)       =         Grant Total (watts)       -         Existing service size:       Amp						=		40.000
** from above       +       10,000         +       10,000         Grant Total (watts)       =       Service Load (Amps)         Existing service size:       Amp				SS	X 40			-10,000
Grand Total (watts)  Grand Total (watts)			1 otal =	** 6				
Grand Total (watts) = Grant Total (watts) ÷ 240 Volts =Service Load (Amps) Existing service size: Amp				** from	apove			40.000
Grant Total (watts) ÷ 240 Volts =Service Load (Amps) Existing service size: Amp						-		10,000
Existing service size: Amp	One set Tetal (s		. 040		al (watts)			
Signature – Electrical Contractor, owner/builder			volts =		5	ervice L	oad (Amps)	
Signature – Electrical Contractor, Owner/Dulider			Amp	Signature	- Electric	al Contr	actor o	wpor/buildor
				Signature				
Rev. 1/17/2023			Rov 1/17/2022					