



**Fayette County**  
**Permits & Inspections Department**  
 140 Stonewall Avenue West · Suite 201 · Fayetteville, GA 30214  
 Phone: 770-305-5403 Fax 770-305-5212  
 Web: [http://www.fayettecountyga.gov/bldg\\_permits/infobldg.asp](http://www.fayettecountyga.gov/bldg_permits/infobldg.asp)

## DWELLING ELECTRICAL CALCULATION

**PERMIT APPLICATIONS, PLANS AND/OR SUPPORTING DOCUMENTATION THAT ARE INCOMPLETE, ILLEGIBLE OR SUBMITTED IN ERASABLE MEDIA WILL NOT BE ACCEPTED. TYPE OR PRINT CLEARLY USING PERMANENT BLUE OR BLACK INK.**

<b>PROJECT INFORMATION:</b>		
<b>APPLICANT'S NAME:</b>	<b>PROJECT NAME:</b>	
<b>OWNER'S NAME:</b>	<b>PROJECT ADDRESS:</b>	
<b>ADD THE FOLLOWING GENERAL LOADS:</b>		
<b>GENERAL LIGHTING LOAD:</b> _____ <b>SQ. FT. X 3 VOLT-AMPS (VA) =</b> <small>(The calculated floor area shall not include open porches, garages, or unused/unfinished spaces not adaptable for future use such as attics and crawl spaces, but shall include unfinished basements. The 3 VA per sq. ft. unit value is based on minimum load conditions and 100% power factor and may not provide sufficient capacity for the installation contemplated.)</small>	<b>(1)</b>	<b>VA</b>
<b>SMALL APPLIANCE LOAD: NUMBER OF 2-WIRE, 20-AMP (A) CIRCUITS (2 MINIMUM) _____ X 1,500 VA =</b>	<b>(2)</b>	<b>VA</b>
<b>LAUNDRY LOAD: NUMBER OF 2-WIRE, 20-A LAUNDRY CIRCUITS (1 MINIMUM) _____ X 1,500 VA =</b>	<b>(3)</b>	<b>VA</b>
<b>TOTAL NAMEPLATE VA RATING OF ALL FASTENED-IN-PLACE, PERMANENTLY CONNECTED, OR LOCATED TO BE ON A SPECIFIC CIRCUIT. INCLUDE ALL MOTORS AND ALL LOW-POWER-FACTOR LOADS:</b>		
QTY: _____ <b>RANGE(S)</b>	<b>(4)</b>	<b>VA</b>
QTY: _____ <b>WALL-MOUNTED OVEN(S)</b>	<b>(5)</b>	<b>VA</b>
QTY: _____ <b>COUNTER MOUNTED COOKING UNIT(S)</b>	<b>(6)</b>	<b>VA</b>
QTY: _____ <b>MICROWAVE(S)</b>	<b>(7)</b>	<b>VA</b>
QTY: _____ <b>COOKING EXHAUST HOOD(S)</b>	<b>(8)</b>	<b>VA</b>
QTY: _____ <b>CLOTHES DRYER(S)</b>	<b>(9)</b>	<b>VA</b>
QTY: _____ <b>WATER HEATER(S)</b>	<b>(10)</b>	<b>VA</b>
QTY: _____ <b>DISHWASHER(S)</b>	<b>(11)</b>	<b>VA</b>
QTY: _____ <b>TRASH COMPACTOR(S)</b>	<b>(12)</b>	<b>VA</b>
QTY: _____ <b>GARBAGE DISPOSAL(S)</b>	<b>(13)</b>	<b>VA</b>
QTY: _____ <b>CEILING FAN(S)</b>	<b>(14)</b>	<b>VA</b>
QTY: _____ <b>BATHROOM/LAUNDRY EXHAUST FAN(S)</b>	<b>(15)</b>	<b>VA</b>
QTY: _____ <b>GARAGE DOOR OPENER(S)</b>	<b>(16)</b>	<b>VA</b>
QTY: _____ <b>HYDROMASSAGE BATHTUB(S)</b>	<b>(17)</b>	<b>VA</b>
QTY: _____ <b>WELL PUMP(S)</b>	<b>(18)</b>	<b>VA</b>
QTY: _____ <b>SUMP PUMP(S)</b>	<b>(19)</b>	<b>VA</b>
QTY: _____ <b>ELEVATOR(S)</b>	<b>(20)</b>	<b>VA</b>
QTY: _____ <b>ELECTRIC WELDER(S)</b>	<b>(21)</b>	<b>VA</b>
QTY: _____ <b>AIR COMPRESSOR(S)</b>	<b>(22)</b>	<b>VA</b>
QTY: _____ <b>OTHER – SPECIFY: _____</b> <small>(Central vacuum system(s), electric fireplaces, gas fireplace blower unit(s), etc.)</small>	<b>(23)</b>	<b>VA</b>
QTY: _____ <b>OTHER – SPECIFY: _____</b> <small>(Attic fan, freezer, water heater recirc. pump, electric steam unit, etc.)</small>	<b>(24)</b>	<b>VA</b>

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(APPLICANT'S INITIALS)

**Fayette County Permits and Inspections Department  
Dwelling Electrical Calculation**

<b>GENERAL LOADS SUBTOTAL (ADD LINES 1 THRU 24 ABOVE):</b>	(25)	VA
<b>APPLY DEMAND FACTOR TO GENERAL LOADS SUBTOTAL (LINE 25) AND ADD RESULTS AS FOLLOWS:</b>		
<b>FIRST 10,000 VA OF GENERAL LOADS SUBTOTAL (LINE 25) AT 100%: GENERAL LOADS SUBTOTAL (UP TO AND INCLUDING 10,000 VA) _____ VA X 1.00 =</b>	(26)	VA
<b>REMAINDER OVER 10,000 VA AT 40%: (GENERAL LOADS SUBTOTAL (LINE 25) _____ VA – 10,000 VA) X 0.40 =</b>	(27)	VA
<b>GENERAL LOADS TOTAL (ADD LINES 26 AND 27 ABOVE):</b>	(28)	VA
<b>INDICATE ALL OF THE FOLLOWING HEATING AND AIR-CONDITIONING LOADS (AS APPLICABLE):</b>		
<b>100% OF THE NAMEPLATE RATING(S) OF THE AIR CONDITIONING AND COOLING:</b>	(29)	VA
<b>100% OF THE NAMEPLATE RATING(S) OF THE HEATING WHEN A HEAT PUMP IS USED WITHOUT ANY SUPPLEMENTAL ELECTRIC HEATING:</b>	(30)	VA
<b>100% OF THE NAMEPLATE RATINGS OF ELECTRIC THERMAL STORAGE AND OTHER HEATING SYSTEMS WHERE THE USUAL LOAD IS EXPECTED TO BE CONTINUOUS AT THE FULL NAMEPLATE VALUE. SYSTEMS QUALIFYING UNDER THIS SELECTION SHALL NOT BE CALCULATED UNDER ANY OTHER SELECTION.</b>	(31)	VA
<b>100% OF THE NAMEPLATE RATING(S) OF THE HEAT PUMP COMPRESSOR AND 65% OF THE SUPPLEMENTAL ELECTRIC HEATING FOR CENTRAL ELECTRIC SPACE HEATING SYSTEMS. IF THE HEAT PUMP COMPRESSOR IS PREVENTED FROM OPERATING AT THE SAME TIME AS THE SUPPLEMENTARY HEAT, IT DOES NOT NEED TO BE ADDED TO THE SUPPLEMENTARY HEAT FOR THE TOTAL CENTRAL SPACE HEATING LOAD:</b>	(32)	VA
<b>65% OF THE NAMEPLATE RATING(S) OF ELECTRIC SPACE HEATING IF LESS THAN FOUR SEPARATELY CONTROLLED UNITS:</b>	(33)	VA
<b>40% OF THE NAMEPLATE RATING(S) OF ELECTRIC SPACE HEATING IF FOUR OR MORE SEPARATELY CONTROLLED UNITS:</b>	(34)	VA
<b>TOTAL HEATING AND AIR-CONDITIONING LOAD (INDICATE THE LARGEST LINE ITEM VA FROM LINES 29 THRU 34 ABOVE):</b>	(35)	VA
<b>CALCULATE LOAD FOR SERVICE SIZE:</b>		
<b>TOTAL LOAD (ADD LINES 28 AND 35): LINE 28 _____ VA + LINE 35 _____ VA =</b>	(36)	VA
<b>DIVIDE LINE 36 BY 240-VOLTS (V): LINE 36 _____ VA / 240 V =</b>	(37)	A
<b>STANDARD AMPERE RATINGS:</b>		
<b>THE STANDARD AMPERE RATINGS FOR FUSES AND INVERSE TIME CIRCUIT BREAKERS SHALL BE CONSIDERED 100 (MINIMUM FOR ONE-FAMILY DWELLINGS), 110, 125, 150, 175, 200, 225, 250, 300, 350, 400, 450, 500, 600 AMPERES.</b>		

**Limitations.** This calculation worksheet is based on the latest version of state adopted mandatory National Electrical Code® (NEC), Article 220, Part IV "Optional Feeder and Service Load Calculations" and applies to a single dwelling unit having the total connected load served by a single 120/240-volt, 3-wire service with an ampacity of 100 or greater. This calculation worksheet is provided to assist the permit applicant in demonstrating minimum code compliance and may not consider all elements or permutations of the proposed electrical system. This worksheet shall not be construed to replace or supercede the minimum code requirements of the NEC. Where differences occur between this worksheet and the NEC, the provisions of the NEC shall apply.

**Validity of permit.** The issuance of a permit shall not be construed to be a permit for, or an approval of, any violation of any of the provisions of the construction codes or of any other ordinance. Permits presuming to give authority to violate or cancel the provisions of the construction codes or ordinances of the jurisdiction shall not be valid. The issuance of a permit based on construction documents and other data shall not prevent the Fayette County Permits & Inspections Department (FCPID) from requiring the correction of errors in the construction documents and other data. The FCPID is also authorized to prevent occupancy or use of a structure where in violation of the construction codes or of any other ordinances of this jurisdiction.

**Amended construction documents.** Work shall be installed in accordance with the approved construction documents, and any changes made during construction that are not in compliance with the approved construction documents shall be resubmitted for approval as an amended set of construction documents. Willful and prejudicial departure from or disregard of construction documents in any material respect without the approval of the FCPID is unlawful.

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PREPARED BY (SIGNATURE)

\_\_\_\_\_  
DATE

\_\_\_\_\_  
PRINT NAME

\_\_\_\_\_  
TITLE (ELECTRICAL CONTRACTOR, OWNER, ETC.)