

Commercial  Residential INSTALL \_\_\_ REPAIR \_\_\_ REPLACE \_\_\_

<b>PROJECT INFORMATION:</b>		
<b>APPLICANT:</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> _____ SQ, FT, X 3 VOLT-AMPS (VA) =		
<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>	(1)	VA
<b>SMALL APPLIANCE LOAD: NUMBER OF 2-WIRE, 20-AMP (A) CIRCUITS (2 MINIMUM) _____ X 1,500 VA =</b>	(2)	VA
<b>LAUNDRY LOAD: NUMBER OF 2-WIRE, 20-A LAUNDRY CIRCUITS (1 MINIMUM) _____ X 1,500 VA =</b>	(3)	VA
<b>TOTAL NAMEPLATE VA RATING OF ALL FASTENED-IN-PLACE, PERMANENTLY CONNECTED, OR LOCATED TO BE ON A SPECIFIC CIRCUITE. INCLUDE ALL MOTORS AND ALL LOW-POWERE-FACTOR LOADS:</b>		
QTY _____ RANGE(S)	(4)	VA
QTY _____ WALL-MOUNTED OVEN(S)	(5)	VA
QTY _____ COUNTER MOUNTED COOKING UNIT(S)	(6)	VA
QTY _____ MICROWAVE(S)	(7)	VA
QTY _____ COOKING EXHAUST HOOD(S)	(8)	VA
QTY _____ CLOTHES (DRYER(S)	(9)	VA
QTY _____ WATER HEATER(S)	(10)	VA
QTY _____ DISHWASHER(S)	(11)	VA
QTY _____ TRASH COMPACTOR(S)	(12)	VA
QTY _____ GARBAGE DISPOSAL(S)	(13)	VA
QTY _____ CEILING FAN(S)	(14)	VA
QTY _____ BATHROOM/LAUNDRY EXHAUST FAN(S)	(15)	VA
QTY _____ GARAGE DOOR OPENER(S)	(16)	VA
QTY _____ HYDROMASSAGE BATHTUB(S)	(17)	VA
QTY _____ WELL PUMP(S)	(18)	VA
QTY _____ SUMP PUMP (S)	(19)	VA
QTY _____ ELEVATOR(S)	(20)	VA
QTY _____ ELECTRIC WELDER(S)	(21)	VA
QTY _____ AIR COMPRESSOR(S)	(22)	VA
QTY _____ OTHER – SPECIFY: _____ <small>(Central vacuum system(s), electric fireplaces, gas fireplace blower unit(s), etc.)</small>	(23)	VA
QTY _____ OTHER – SPECIFY: _____ <small>(Attic fan, freezer, water heater recirc. Pump, electric steam unit, etc.)</small>	(24)	VA
<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>		

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 =	(26)	VA
REMAINDER OVER 10,000 VA AT 40%:		
(GENERAL LOADS SUBTOTAL (line 25) _____ VA – 10,000 VA) X 0.40 =	(27)	VA
GENERAL LOADS TOTAL (ADD LINES 26 AND 27 ABOVE):	(28)	VA
INDICATE ALL OF THE FOLLOWING HEATING AND AIR-CONDITIONING LOADS (AS APPLICABLE):		
100% OF THE NAMEPLATE RATING(S) OF THE AIR CONDITIONING AND COOLING:	(29)	VA
100% OF THE NAMEPLATE RATING(S) OF THE HEATING WHEN A HEAT PUMP IS USED WITHOUT ANY SUPPLEMENTAL ELECTRIC HEATING:	(30)	VA
100% OF THE NAME PLATE 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.	(31)	VA
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:	(32)	VA
65% OF THE NAMEPLATE RATING(S) OF ELECTRIC SPACE HEATING IF LESS THAN FOUR SEPARATELY CONTROLLED UNITS:	(33)	VA
40% OF THE NAMEPLATE RATING(S) OF ELECTRIC SPACE HEATING IF FOUR OR MORE SEPARATELY CONTROLLED UNITS:	(34)	VA
TOTAL HEATING AND AIR-CONDITIONING LOAD (INDICATE THE LARGEST LINE-ITEM VA FROM LINES 29 THRU 34 ABOVE):	(35)	VA
CALCULATE LOAD FOR SERVICE SIZE		
TOTAL LOAD (ADD LINES 28 AND 35): LINE 28 _____ VA + LINE 35 _____ VA =	(36)	VA
DIVIDE LINE 36 BY 24-VOLTS (V): LINE 36 _____ VA / 240 v =	(37)	VA
STANDARD AMPERE RATINGS:		
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.		

**Limitations.** This calculation worksheet is based on the 2011 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 proved 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 2011 NEC. Where differences occur between this worksheet and the 2011 NEC, the provisions of the 2011 NEC shall apply.

**Validity of permit.** The issuance of a permit shall not be construed to be a permit for, or and 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 City of East Point Planning & Community Development Department (EPP&CDD) from requiring the correction of errors in the construction documents and other data. The EPP&CDD is 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 EPP&CDD) is unlawful.

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PREPARED BY (SIGNATURE) \_\_\_\_\_ DATE

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