

• 6823 W. O'Bannon •

Yolanda Willard 7/26/89



Southwestern Section 89
6823 W.
MAY 12 1989



Does Not Include Planning Or Construction
Make No Change Without Approval
Approval Of Plan Is Not A:

NICK HALLAS CONST.
BUILDING ADDRESS O'BANNON ST.

PREPARED BY SH DATE 3/25/89

NATIONAL
ELECTRICAL
CODE R SECTION.

Standard Calculation for Determining Size of Service & Feeders for
Single Family Dwelling Unit, as Per 1984 NATIONAL ELECTRICAL CODE R
Article 220 Part B/Chapter 9 B. Examples

Table 220-2b 220-16a 220-16a	LIGHTING LOAD Living Area Square Feet <u>2200</u> X <u>3</u> Volt-Amp per sq. ft. = <u>6600</u> VA Two Small Appliance Circuits <u>2</u> @ 1500 VA ea. (required) = <u>3000</u> VA Laundry Circuits <u>1</u> @ 1500 VA ea. (required) = <u>1500</u> VA Additional Small Appliance Circuit(s) _____ X 1500 VA = _____ VA LIGHTING LOAD SUBTOTAL = <u>11,100</u> VA																				
Table 220-11	LIGHTING LOAD TOTAL <u>5,835</u> Volt-Amperes () First 3000 Volt-Amperes of Lighting Load at 100% = <u>3000</u> VA From 3001 to 120,000 VA @ <u>8100</u> 35% = <u>2835</u> VA Remainder over 120,000 VA @ _____ 25% = _____ VA																				
Table 220-19	HOUSEHOLD COOKING APPLIANCES Cooking Units - Number of Appliances _____ (Use Table 220-19) = <u>GAS</u> VA COOKING UNITS TOTAL _____ Volt-Amperes ()																				
Table 220-17	APPLIANCE LOADS <table border="1"><thead><tr><th>NAMEPLATE</th><th>VA</th></tr></thead><tbody><tr><td>Microwave</td><td>1500 VA X <u>1</u> = <u>1500</u> VA</td></tr><tr><td>Compactor</td><td>1200 VA X <u>1</u> = _____ VA</td></tr><tr><td>Dishwasher</td><td>1200 VA X <u>1</u> = <u>1200</u> VA</td></tr><tr><td>Disposal</td><td>600 VA X <u>1</u> = <u>600</u> VA</td></tr><tr><td>Central Vacuum</td><td>1800 VA X _____ = _____ VA</td></tr><tr><td>Food Center</td><td>600 VA X _____ = _____ VA</td></tr><tr><td>Water Heater</td><td>4500 VA X _____ = _____ VA</td></tr><tr><td>_____</td><td>_____ VA X _____ = _____ VA</td></tr><tr><td>_____</td><td>_____ VA X _____ = _____ VA</td></tr></tbody></table> APPLIANCE SUBTOTAL = <u>3300</u> VA APPLIANCE TOTAL = <u>3300</u> Volt-Amperes () Appliance Subtotal <u>3300</u> X 100% = <u>3300</u> VA Less than 4 units 100% 4 or more units 75%	NAMEPLATE	VA	Microwave	1500 VA X <u>1</u> = <u>1500</u> VA	Compactor	1200 VA X <u>1</u> = _____ VA	Dishwasher	1200 VA X <u>1</u> = <u>1200</u> VA	Disposal	600 VA X <u>1</u> = <u>600</u> VA	Central Vacuum	1800 VA X _____ = _____ VA	Food Center	600 VA X _____ = _____ VA	Water Heater	4500 VA X _____ = _____ VA	_____	_____ VA X _____ = _____ VA	_____	_____ VA X _____ = _____ VA
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Table 220-18	Dryer 5000 VA or Nameplate = <u>5000</u> Volt-Amperes () (Whichever is greater)																				
Table 220-10b 220-15 220-21 430-24 220-15 220-21 430-24	TOTAL VOLT-AMPERES <u>14155</u> ÷ <u>240</u> VOLTS = <u>58.9</u> Amps Largest Cooler or Air Conditionery <u>19224</u> KVA ÷ <u>240</u> Volts = <u>80.1</u> Amps X 125% = <u>100.1</u> Amps OR Heating Load _____ KVA ÷ _____ Volts = _____ Amps X 125% = _____ Amps (Whichever is greater) Heat Pump Largest Condensing Unit _____ KVA ÷ _____ Volts = _____ Amps X 125% = _____ Amps Supplementary Heat _____ KVA ÷ _____ Volts = _____ Amps X 125% = _____ Amps Additional Condensing Unit or A/Cs _____ KVA ÷ _____ Volts = _____ Amps X 100% = _____ Amps Largest Motor _____ Amps X 125% = _____ Amps Total Additional Motors <u>72</u> Amps X 100% = <u>72</u> Amps Feeder Size <u>BY N.E.C.</u> Grounding Electrode Conductor <u>#4 Cu.</u> NOTE: KVA = KW (OR) VA = WATTS																				

USE 200 AMP SERVICE

RM-2/14/85 ©