

Residential Optional Calculation

9/25/1997

SAENGON 496PersimmonTreeDr CAMERON

by: John Sokolik

Version 2011 L

STEP 1 Article 220.82 (B) (1),(2)

sq. ft	3117	General Lighting load	9,351 VA
	2	Small Appliance	3,000 VA
	1	Laundry circuit	1,500 VA
		Gen.Lgt, Sm App.& Laun. Load	13,851 VA

WIRETECH COMPANY

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STEP 2 Article 220.82 (C)



General lighting, Sm. Appl. & Laundry

13,851 VA

A/C Condenser & Fixed Electric Space Heating

QTY

Total 2

2.5 ton	4,186 VA	AHU 1	5. kW	5,989 VA	1
3 ton	4,669 VA	AHU 2	5. kW	5,989 VA	1
	VA	AHU 3	Select	VA	Qty
	VA	AHU 4	Select	VA	Qty
	VA	AHU 5	Select	VA	Qty

Heating Load	8,478 VA
CU Load	10,833 VA

Electric Space Heat @ 65% <4, 40% >3, vs. A/C @ 100% 10,833 VA

STEP 3 Article 220.82 (B) (3)

Appliance Demand Load

10,369 VA

4,500 VA	1	Water Heater	4,500 VA
817 VA	1	Refrigerator	817 VA
	0	Freezer	VA
972 VA	1	Dishwasher	972 VA
	0	Disposal	VA
	0		VA
1,800 VA	1	Microwave	1,800 VA
	0		VA
600 VA	3	Door Opener	1,800 VA
480 VA	1	Hood Fan	480 VA
	0		VA
	0		VA

Dryer Demand Load

5,760 VA

Range Demand Load

19,400 VA

Service Demand

36,585 VA

Demand Load

152 A

Neutral Demand

100 A

Min.Service Req.

175 A

Min. Feeder size

3/0

Min. Neutral size

1/0

Eq. Grding Cond.

4



Aluminium

Total Appliance Load

10,369 VA

STEP 4 Article 220.82 (B) (3)

Electric Clothes Dryers

5,760 VA

STEP 5 Article 220.82 (B) (3)

Electric Ranges

Col C demand

0

or Number of appliances

☐ Check Box for Gas Range

Cooktop

Cooktop

Oven(s)

Oven(s)

Number of appliances

Cooktop & Oven Demand Load

Col B demand

Col B demand

Col B demand

Col B demand

2 Dem. Factor

Existing 200Amp Service

jmp1jds@comcast.net

Pool Panel Feeder Calculation (See Note)

Continuous Motors	0	
Non-continuous	0	
Spa heater 11 kVA		
Pool heater 3.5 ton		
Pool heater 5 ton		
Pool Light	select	0
Blower	select	0
other load		0
other load		0

☐ Min.Copper Pool Feeder

Minimum Panel Rating

AWG

A

A	B	N
0	0	0
0	0	0
0	0	0
0	0	0
0	0	0
0	0	0
0	0	0
0	0	0
0	0	0
A	A	A
Phase Amperes		Neut. load

Continuous Motors

select	240v
select	240v
select	240v
select	240v
select	240v

Non-continuous Motors

select	240v
select	240v
select	240v
select	240v
select	240v

0.0

Motor Neutral Load

Max.Unbalanced Neutral Load