

Residential Optional Calculation

9/25/1997

FAULKNER 30 Brazan Ct FUQUAY-VARINA

by: John Sokolik

Version 2011 L

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

sq. ft	1533	General Lighting load	4,599 VA
	2	Small Appliance	3,000 VA
	1	Laundry circuit	1,500 VA
		Gen.Lgt, Sm App.& Laun. Load	9,099 VA

WIRETECH COMPANY

3101 Stony Brook Drive Suite148
Raleigh, NC 27604
919-847-1617

3/14/2025 9:20

STEP 2 Article 220.82 (C)



General lighting, Sm. Appl. & Laundry

9,099 VA

A/C Condenser & Fixed Electric Space Heating

QTY

Total 1

3 ton	4,600 VA	AHU 1	9.6 kW	10,589 VA	1
	VA	AHU 2	Select	VA	Qty
	VA	AHU 3	Select	VA	Qty
	VA	AHU 4	Select	VA	Qty
	VA	AHU 5	Select	VA	Qty

Heating Load	7,229 VA
CU Load	5,589 VA

Electric Space Heat @ 65% <4, 40% >3, vs. A/C @ 100% 7,229 VA

STEP 3 Article 220.82 (B) (3)

Appliance Demand Load

12,378 VA

4,500 VA	1	Water Heater	4,500 VA
828 VA	1	Refrigerator	828 VA
690 VA	1	Freezer	690 VA
1,200 VA	1	Dishwasher	1,200 VA
1,140 VA	1	Disposal	1,140 VA
	0		VA
1,800 VA	1	Microwave	1,800 VA
	0		VA
720 VA	1	Door Opener	720 VA
1,500 VA	1	Gas Top + Hood Fan	1,500 VA
	0		VA
	0		VA

Dryer Demand Load

6,240 VA

Range Demand Load

14,000 VA

Service Demand

29,916 VA

Demand Load

125 A

Neutral Demand

85 A

Min.Service Req.

125 A

Min. Feeder size

1/0

Min. Neutral size

2

Eq. Grding Cond.

4



Aluminium

Total Appliance Load

12,378 VA

STEP 4 Article 220.82 (B) (3)

Electric Clothes Dryers

6,240 VA

STEP 5 Article 220.82 (B) (3)

Electric Ranges

14,000 W

Col C demand

8800

or Number of appliances

☐ Check Box for Gas Range

Cooktop

Col B demand

Cooktop

Col B demand

Oven(s)

Col B demand

Oven(s)

Col B demand

Number of appliances

0 Dem. Factor

Cooktop & Oven Demand Load

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

AWG

Minimum Panel Rating

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