

Residential Optional Calculation

9/25/1997

RAU 570 Rollins Mill Rd HOLLY SPRINGS

by: John Sokolik

Version 2011 L

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

sq. ft	1623	General Lighting load	4,869 VA
	2	Small Appliance	3,000 VA
	1	Laundry circuit	1,500 VA
		Gen.Lgt, Sm App.& Laun. Load	9,369 VA

WIRETECH COMPANY

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

9/3/2025 10:10

STEP 2 Article 220.82 (C)



General lighting, Sm. Appl. & Laundry

9,369 VA

A/C Condenser & Fixed Electric Space Heating

QTY

Total 2

2 ton	3,266 VA	AHU 1	Select	VA	1	
3.5 ton	5,520 VA	AHU 2	Select	VA	1	
	VA	AHU 3	Select	VA	Qty	
	VA	AHU 4	Select	VA	Qty	
	VA	AHU 5	Select	VA	Qty	

Heating Load	VA
CU Load	8,786 VA

Electric Space Heat @ 65% <4, 40% >3, vs. A/C @ 100% 8,786 VA

STEP 3 Article 220.82 (B) (3)

Appliance Demand Load

11,537 VA

4,500 VA	1	Water Heater	4,500 VA
357 VA	1	Refrigerator	357 VA
320 VA	1	Freezer	320 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	Hood Fan	1,500 VA
	0		VA
	0		VA

Dryer Demand Load

VA

Range Demand Load

7,200 VA

Service Demand

26,028 VA

Demand Load

108 A

Neutral Demand

56 A

Min.Service Req.

110 A

Min. Feeder size

1

Min. Neutral size

4

Eq. Grding Cond.

4



Aluminium

Total Appliance Load

11,537 VA

STEP 4 Article 220.82 (B) (3)

Electric Clothes Dryers

STEP 5 Article 220.82 (B) (3)

Electric Ranges

Col C demand

0

or Number of appliances

☐ Check Box for Gas Range

Cooktop		Col B demand
Cooktop	7,200 W	Col B demand
Oven(s)		Col B demand
Oven(s)		Col B demand

Existing RIGHT 200Amp Main Panel

Number of appliances

1 Dem. Factor

Cooktop & Oven Demand Load

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