

# Energy Cost and Features

## Property

Scott Hollowell  
8382 McDougald Rd.  
Broadway, NC 27505

## Organization

Energy Modeling Agency  
325 NC-42, Ahoskie, NC. 27910  
Charlie Ashcom

Weather: Raleigh, NC

Hollowell Residence Spray Foam  
Hollowell Residence Spray  
Foam.blg

## Builder

	Hollowell Residence Fiberglass	Hollowell Residence Spray Foam	Savings	%Saved
<b>Annual Energy Costs (\$/yr)</b>				
Heating	473	236	237	50.2%
Cooling	509	252	258	50.6%
Water Heating	55	55		
Lights & Appliances	466	466		
Photovoltaics	-0	-0		
Service Charges	120	120		
<b>Total</b>	<b>1623</b>	<b>1128</b>	<b>495</b>	<b>30.5%</b>
<b>Average Monthly (\$/Month)</b>	<b>135</b>	<b>94</b>	<b>41</b>	<b>30.5%</b>

## Energy Features

	Hollowell Residence Fiberglass	Hollowell Residence Spray Foam
Ceiling w/Attic	R-49 fiberglassAttic U=0.065	R-21 SprayFoam Attic U=0.043
Sealed Attic	None	
Vaulted Ceiling	None	
Above Grade Wall	R-19 fiberglass U=0.072	R-19 batts U=0.072
Foundation Walls (Cond)	None	
Foundation Walls (Uncond)	R-13 Finished R=13.0	
Doors	Steel-urth w/brk U=0.187	
Windows	Dbl/LoE/Arg - Vinyl U=0.330	
Floors	R-19 Fiberglass U=0.062	
Slab Floors	None	
Infiltration	Htg: 0.67 Clg: 0.67 ACHnat	Htg: 1.00 Clg: 1.00 ACH50
Infiltration Measure	User estimate	Blower door
Mechanical Ventilation	None	
Interior Mass	None	
Mechanical Equipment 1	Heating: Fuel-fired air distribution, 60.0 kBtuh, 94.0 AFUE.	Heating: Fuel-fired air distribution, 36.0 kBtuh, 94.0 AFUE.
Mechanical Equipment 2	Cooling: Air conditioner, 54.0 kBtuh, 15.0 SEER.	Cooling: Air conditioner, 30.0 kBtuh, 15.0 SEER.
Mechanical Equipment 3	Water Heating: Instant water heater, Gas, 0.80 EF.	Water Heating: Instant water heater, Gas, 0.80 EF.
Programmable Thermostat	Heat=No; Cool=No	
Ducts	UninsulatedConditioned space	
Duct Leakage to Outside	RESNET/HERS default	

Note: Where feature level varies in home, the dominate value is shown. Only changed features are shown for second building.

REM/Design - Residential Energy Analysis Software v16.0.2

This information does not constitute any warranty of energy costs or savings.

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# Equipment Sizing

## Property

Scott Hollowell  
8364 McDougald Rd.  
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## Builder

### Hollowell Residence Fiberglass

### Hollowell Residence Spray Foam

## Heating

Calculated Peak Load (kBtu/hr)	53.1	34.4
Infiltration	16.0	1.2
Envelope	37.1	33.2
Sizing Factor (%)	100.0	100.0
Heating Equipment Capacity(kBtu/hr)		
Required	53.1	34.4
Specified	60.0	36.0

## Cooling

Calculated Peak Load (kBtu/hr)	49.0	26.5
Sensible	38.8	24.8
Latent	10.2	1.8
SHF	0.8	0.9
Sizing Factor(%)	100.0	100.0
Cooling Equipment Capacity (kBtu/hr)		
Required Total	49.0	26.5
Specified Total	54.0	30.0
Specified SHF	0.7	0.7
Required Sensible	38.83	24.75
Specified Sensible	37.80	21.00
Required Latent	10.17	1.77
Specified Latent	16.20	9.00
Excess Latent Capacity	6.03	7.23