



AIR LEAKAGE REPORT

Date:	June 26, 2009	Rating No.:	10090
Building Name:	Omni Homes	Rating Org.:	Above and Beyond Energy
Owner's Name:	Omni Homes Homeowner	Phone No.:	910.398.7301
Property:	3216 Northwoods Dr	Rater's Name:	M Jabaley
Address:	Jacksonville, NC 28541	Rater's No.:	P-06
Builder's Name:	Omni Homes		
Weather Site:	Wilmington, NC	Rating Type:	Confirmed Rating
File Name:	3216 Northwoods Dr - Omni Homes - ABEnergy -	Rating Date:	6/25/09

Whole House Infiltration	Blower door test	
	<i>Heating</i>	<i>Cooling</i>
Natural ACH:	0.15	0.10
ACH @ 50 Pascals:	3.09	3.09
CFM @ 25 Pascals:	682	682
CFM @ 50 Pascals:	1070	1070
Eff. Leakage Area:	58.7	58.7
Specific Leakage Area:	0.00017	0.00017
ELA/100 sf shell:	0.83	0.83

Total Duct Leakage to Outside	
CFM @ 25 Pascals:	49
CFM25 / CFMfan:	0.0422
CFM25 / CFA:	0.0208
CFM per Std 152:	N/A
CFM per Std 152 / CFA:	N/A
CFM @ 50 Pascals:	77
Eff. Leakage Area:	4.22
Thermal Efficiency:	N/A

Ventilation	
Mechanical:	None
Sensible Recovery Eff. (%):	0.0
Total Recovery Eff. (%):	0.0
Rate (cfm):	0
Hours/Day:	24.0
Fan Watts:	0.0
Cooling Ventilation:	No Ventilation

ASHRAE 62.2 - 2003 Ventilation Requirements

For this home to comply with ASHRAE Standard 62.2 - 2003 Ventilation and Acceptable Indoor Air Quality in Low-Rise Residential Buildings, a minimum of 61 cfm of mechanical ventilation must be provided continuously, 24 hours per day. Alternatively, an intermittently operating mechanical ventilation system may be used if the ventilation rate is adjusted accordingly. For example, a 122 cfm mechanical ventilation system would need to operate 12 hours per day, as long as the system operates to provide required average ventilation once each hour.

REM/Rate - Residential Energy Analysis and Rating Software v12.61

This information does not constitute any warranty of energy cost or savings.
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SOURCE ENERGY & EMISSIONS REPORT

Date:	June 26, 2009	Rating No.:	10090
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Source Energy Consumption (MMBtu/year)

All Electric

	<i>Reference Home</i>	<i>As Designed</i>	<i>Difference</i>	<i>% Difference</i>
Heating:	77.5	48.0	-29.5	-38.1%
Cooling:	35.0	17.8	-17.2	-49.2%
Water heating:	46.6	45.6	-1.0	-2.2%
Lights & Appliances:	96.8	96.2	-0.6	-0.6%
Photovoltaics:	0.0	0.0		
Total:	256.0	207.5	-48.4	-18.9%

Total Emissions (lbs/year)

All Electric

<i>Type of Emissions</i>	<i>Reference Home</i>	<i>As Designed</i>	<i>Difference</i>	<i>% Difference</i>
Carbon Dioxide (CO2)	26863.6	21780.6	-5083.0	-18.9%
Sulfur Dioxide (SO2)	168.3	136.5	-31.8	-18.9%
Nitrogen Oxides (NOx)	44.1	35.8	-8.3	-18.9%

Emissions By End-Use (lbs/year)
(All Electric Reference Home versus As Designed)

	CO2		SO2		NOx	
	<i>Ref</i>	<i>Des</i>	<i>Ref</i>	<i>Des</i>	<i>Ref</i>	<i>Des</i>
Heating	8134.6	5034.0	51.0	31.5	13.4	8.3
Cooling	3677.3	1869.0	23.0	11.7	6.0	3.1
Water Heating	4892.7	4782.8	30.7	30.0	8.0	7.9
Lights & Appliances	10159.0	10094.8	63.6	63.2	16.7	16.6
Photovoltaics	0.0	0.0	0.0	0.0	0.0	0.0

The energy and emission values are calculated by comparing the Rated Home to an all-electric version of the Reference Home as defined in the "Mortgage Industry National Home Energy Rating Systems Standards" as promulgated by the Residential Energy Services Network (RESNET). Site-to-source energy multipliers and air emission data were taken from the USEPA eGRID2006 database.



ENERGY STAR HOME VERIFICATION SUMMARY

Date: June 26, 2009 Rating No.: 10090
Building Name: Omni Homes Rating Org.: Above and Beyond Energy
Owner's Name: Omni Homes Homeowner Phone No.: 910.398.7301
Property: 3216 Northwoods Dr Rater's Name: M Jabaley
Address: Jacksonville, NC 28541 Rater's No.: P-06
Builder's Name: Omni Homes
Weather Site: Wilmington, NC Rating Type: Confirmed Rating
File Name: 3216 Northwoods Dr - Omni Homes - ABEnergy - Rating Date: 6/25/09

Building Information

Conditioned Area (sq ft): 2357 Housing Type: Single-family detached
Conditioned Volume (cubic ft): 20776 Foundation Type: Slab
Insulated Shell Area (sq ft): 7088 HERS Index: 73 *****
Number of Bedrooms: 4

Building Shell

Ceiling w/Attic: R-30 Blown, Attic G1 U=0.033, with Barrier Window/Wall Ratio: 0.11
Vaulted Ceiling: R-30 Vault Cavity G2 U=0.041, with Barrier Window Type: Low E 31 / 28
Above Grade Walls: R-13 Grade 2 U=0.085 Window U-Value: 0.310
Found. Walls (Cond): None Window SHGC: 0.280
Found. Walls (Uncond): None Infiltration: Htg: 1070 Clg: 1070 CFM50
Frame Floors: 12" R-19 Grade 2 U=0.054 Measured Duct Leakage: 49.00 CFM25
Slab Floors: Uninsulated U=0.365 Leakage to Outside: 49.00 CFM

Mechanical Systems

Heating: Air-source heat pump, 33.8 kBtuh, 8.2 HSPF.
Cooling: Air conditioner, 34.8 kBtuh, 14.0 SEER.
Water Heating: Conventional, Elec, 0.86 EF.
Programmable Thermostat: Heat=No; Cool=No

Note: Where feature level varies in home, the dominant value is shown.

This home MEETS OR EXCEEDS the EPA's requirements for an ENERGY STAR Home.



An ENERGY STAR[®] Qualified Home

This home built at

3216 Northwoods Dr, Jacksonville, NC

by Omni Homes

has been verified by Above and Beyond Energy, an independent professional or organization,
to meet or exceed strict energy efficiency guidelines
set by the U.S. Environmental Protection Agency.

HERS Index: 73

6/25/09

A handwritten signature in black ink, appearing to read "David Lee".

David Lee
Chief
ENERGY STAR Residential Branch

A handwritten signature in black ink, appearing to read "Sam Rashkin".

Sam Rashkin
National Director
ENERGY STAR for Homes

www.energystar.gov



2004 IECC ANNUAL ENERGY COST COMPLIANCE

Date: June 26, 2009 Rating No.: 10090
Building Name: Omni Homes Rating Org.: Above and Beyond Energy
Owner's Name: Omni Homes Homeowner Phone No.: 910.398.7301
Property: 3216 Northwoods Dr Rater's Name: M Jabaley
Address: Jacksonville, NC 28541 Rater's No.: P-06
Builder's Name: Omni Homes
Weather Site: Wilmington, NC Rating Type: Confirmed Rating
File Name: 3216 Northwoods Dr - Omni Homes - ABEnergy - Rating Date: 6/25/09

Annual Energy Cost

Table with 3 columns: Category, 2004 IECC, As Designed. Rows include Heating (709 vs 438), Cooling (320 vs 163), Water Heating (417 vs 417), Lights & Appliances (881 vs 881), Photovoltaics (-0 vs -0), Service Charge (81 vs 81), Total (2408 vs 1980 *), Duct Insulation R-Value Check (8.0 vs 6.0), and Window SHGC Check (0.500 vs 0.280).

This home DOES NOT meet the annual energy cost requirements of Section 404 of the 2004 International Energy Conservation Code based on a climate zone of 3A.

* Design energy cost is based on the following systems:
Heating: Air-source heat pump, 33.8 kBtuh, 8.2 HSPF.
Cooling: Air conditioner, 34.8 kBtuh, 14.0 SEER.
Water Heating: Conventional, Elec, 0.86 EF.
Window-to-Wall Area Ratio: 0.11
Blower door test: Htg: 1070 Clg: 1070 CFM50

In accordance with IECC, building inputs, such as setpoints, infiltration rates, and window shading may have been changed prior to calculating annual energy cost. Furthermore, the standard reference design HVAC system efficiencies are set

to the "prevailing federal minimum standards" as of January, 2006. These standards are subject to change, and software updates should be obtained periodically to ensure the compliance calculations reflect current federal minimum standards.



Home Energy Rating Certificate

Omni Homes
3216 Northwoods Dr
Jacksonville, NC 28541



5 Stars
Confirmed Rating

Uniform Energy Rating System

Energy Efficient

1 Star	1 Star Plus	2 Stars	2 Stars Plus	3 Stars	3 Stars Plus	4 Stars	4 Stars Plus	5 Stars	5 Stars Plus
500-401	400-301	300-251	250-201	200-151	150-101	100-91	90-86	85-71	70 or Less

HERS Index: 73

General Information

Conditioned Area:	2357 sq. ft.	HouseType:	Single-family detached
Conditioned Volume:	20776 cubic ft.	Foundation:	Slab
Bedrooms:	4		

Mechanical Systems Features

Heating:	Air-source heat pump, Electric, 8.2 HSPF.		
Cooling:	Air conditioner, Electric, 14.0 SEER.		
Water Heating:	Conventional, Electric, 0.86 EF, 80.0 Gal.		
Duct Leakage to Outside:	49.00 CFM.		
Ventilation System:	None		
Programmable Thermostat:	Heating: No	Cooling: No	

Building Shell Features

Ceiling Flat:	R-30w/RB	Exposed Floor:	R-19
Vaulted Ceiling:	R-30w/RB	Window Type:	Low E 31 / 28
Above Grade Walls:	R-14	Infiltration:	
Foundation Walls:	NA	Rate:	Htg: 1070 Clg: 1070 CFM50
Slab:	R-0.0 Edge, R-0.0 Under	Method:	Blower door test

Lights and Appliance Features

Percent Fluorescent Pin-Based:	10.00	Clothes Dryer Fuel:	Electric
Percent Fluorescent CFL:	0.00	Range/Oven Fuel:	Electric
Refrigerator (kWh/yr):	775.00	Ceiling Fan (cfm/Watt):	0.00
Dishwasher Energy Factor:	0.66		

The Home Energy Rating Standard Disclosure for this home is available from the rating provider.

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Rating Number: 10090

Certified Energy Rater: M Jabaley

Rating Date: 6/25/09

Rating Ordered For: Omni Homes Homeowner

Estimated Annual Energy Cost

Use	Confirmed Rating		
	MMBtu	Cost	Percent
Heating	14.1	\$438	22%
Cooling	5.2	\$163	8%
Hot Water	13.4	\$417	21%
Lights/Appliances	28.3	\$881	44%
Photovoltaics	-0.0	\$-0	-0%
Service Charges		\$81	4%
Total		\$1980	100%

This home meets or exceeds the minimum criteria for all of the following:

EPA Energy Star Home

2003 International Energy Conservation Code

HERS Provider: EnergyLogic
800.315.0459 www.nrglogic.com

HERS Rater:
Above & Beyond Energy
PO Box 3372 Wilmington NC 28406
910.398.7301
www.ABNRGY.com



RESNET HOME ENERGY RATING Standard Disclosure

For home located at: 3216 Northwoods Dr

City: Jacksonville

State: NC

1. The Rater or the Rater's employer is receiving a fee for providing the rating on this home.
2. In addition to the rating, the Rater or Rater's employer has also provided the following consulting services for this home:
- A. Mechanical system design
 - B. Moisture control or indoor air quality consulting
 - C. Performance testing and/or commissioning other than required for the rating itself
 - D. Training for sales or construction personnel
 - E. Other (specify below)

3. The Rater or Rater's employer is:
- A. The seller of this home or their agent
 - B. The mortgagor for some portion of the financed payments on this home
 - C. An employee, contractor or consultant of the electric and/or natural gas utility serving this home

4. The Rater or Rater's employer is a supplier or installer of products, which may include:

	Installed in this home by:		OR	Is in the business of:	
HVAC systems	<input type="checkbox"/> Rater	<input type="checkbox"/> Employer		<input type="checkbox"/> Rater	<input type="checkbox"/> Employer
Thermal insulation systems	<input type="checkbox"/> Rater	<input type="checkbox"/> Employer		<input type="checkbox"/> Rater	<input type="checkbox"/> Employer
Air sealing of envelope or duct systems	<input type="checkbox"/> Rater	<input type="checkbox"/> Employer		<input type="checkbox"/> Rater	<input type="checkbox"/> Employer
Windows or window shading systems	<input type="checkbox"/> Rater	<input type="checkbox"/> Employer		<input type="checkbox"/> Rater	<input type="checkbox"/> Employer
Energy efficient appliances	<input type="checkbox"/> Rater	<input type="checkbox"/> Employer		<input type="checkbox"/> Rater	<input type="checkbox"/> Employer
Construction (builder, developer, construction contractor, etc.)	<input type="checkbox"/> Rater	<input type="checkbox"/> Employer		<input type="checkbox"/> Rater	<input type="checkbox"/> Employer
Other (specify below):	<input type="checkbox"/> Rater	<input type="checkbox"/> Employer		<input type="checkbox"/> Rater	<input type="checkbox"/> Employer

I attest that the above information is true and correct to the best of my knowledge. As a Rater or Rating Provider I abide by the rating quality control provisions of the Mortgage Industry National Home Energy Rating Standard as set forth by the Residential Energy Services Network (RESNET). The national rating quality control provisions of the rating standard are contained in Chapter One 4.C.8 of the standard and are posted at <http://www.natresnet.org/accred/standards.pdf>. This home may have been verified under the provisions of Chapter Six, Section 603, "Technical Requirements for Sampling" of the Standard.

M Jabaley

Rater's Printed Name

P-06

Certification #

June 26, 2009

Date

Rater's Signature