

Home Energy Rating Certificate

Property

Bob Stringman
24201 178th Street
Spirit Lake, IA 51360

HERS

Rating Type: Confirmed
Rating Date: 5-15-2016
Registry ID: 309891743

Certified Energy Rater: Jim Johnson
Rating Number: 0001

HERS Index: 41

General Information

Conditioned Area	6110 sq. ft.	House Type	Single-family detached
Conditioned Volume	76655 cubic ft.	Foundation	Conditioned basement
Bedrooms	5		

Mechanical Systems Features

Heating:	Fuel-fired air distribution, Natural gas, 96.1 AFUE.
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Heating:	Fuel-fired hydronic distribution, Natural gas, 95.0 % EFF.
Duct Leakage to Outside	101.00 CFM25.
Ventilation System	Balanced: ERV, 131 cfm, 63.0 watts.
Programmable Thermostat	Heat=Yes; Cool=Yes

Building Shell Features

Ceiling Flat	NA	Slab	R-25.0 Edge, R-10.0 Under
Sealed Attic	R-35.0	Exposed Floor	R-45.0
Vaulted Ceiling	NA	Window Type	U-Value: 0.300, SHGC: 0.140
Above Grade Walls	R-24.0	Infiltration Rate	Htg: 1246 Clg: 1246 CFM50
Foundation Walls	R-25.0	Method	Blower door test

Lights and Appliance Features

Percent Interior Lighting	100.00	Range/Oven Fuel	Natural gas
Percent Garage Lighting	100.00	Clothes Dryer Fuel	Natural gas
Refrigerator (kWh/yr)	691	Clothes Dryer EF	2.67
Dishwasher Energy Factor	0.46	Ceiling Fan (cfm/Watt)	0.00

Estimated Annual Energy Cost

Use	MMBtu	Cost	Percent
Heating	48.4	\$391	23%
Cooling	8.7	\$77	5%
Hot Water	6.1	\$142	8%
Lights/Appliances	43.6	\$823	48%
Photovoltaics	-0.0	\$-0	-0%
Service Charges		\$282	16%
Total	106.8	\$1716	100%

Criteria

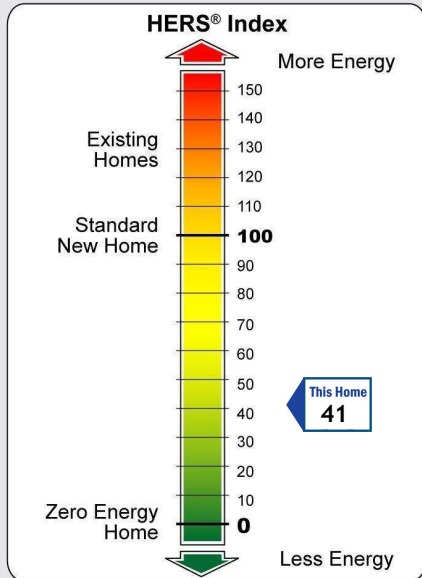
This home meets or exceeds the minimum criteria for the following:

TITLE
Company
Address
City, State, Zip
Phone #
Fax #

REM/Rate - Residential Energy Analysis and Rating Software v14.6.3.1

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

RESNET HERS Index Certificate



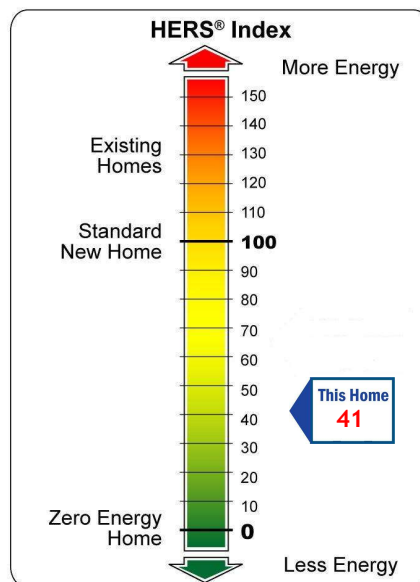
24201 178th Street
Spirit Lake, IA 51360
Rater: Jim Johnson
Registry ID: 309891743
Annual Estimates*:
Elec(kWh): 13517 Gas(Therms): 936
CO2 emissions(Tons): 17
Energy Savings (\$) **: 2022
*Based on standard operating conditions
**Based on U.S. DOE designation of a HERS
Index of 130 as the 'Typical Existing Home'

TITLE
Company
Address
City, State, Zip
Phone #

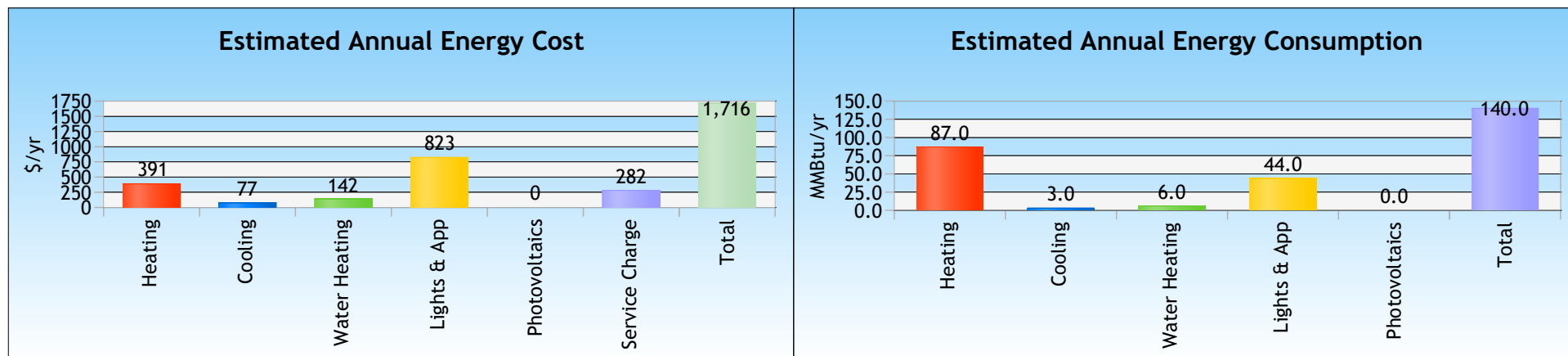
This home has been inspected
and performance tested in
accordance with Chapter 3 of
the RESNET standards.

RESNET®
www.resnet.us

HERS PERFORMANCE



ENERGY RATING CERTIFICATE



Address 24201 178th Street
Spirit Lake, IA 51360

House Type Single-family detached

Cond. Area 6110 sq. ft.

Rating No. 0001

Issue Date July 13, 2016

Certification Verified

Annual Estimates*

Electric(kWh): 13517

Natural gas(Therms): 936

CO2 emissions(Tons): 17

Annual Savings**: \$2022

* Based on standard operating conditions

** Based on a HERS 130 Index Home

TITLE

Company

Address

Certified Rater Jim Johnson

Rater ID 6527377

Registry ID 309891743

Rating Date 5-15-2016

REM/Rate - Residential Energy Analysis and Rating Software v14.6.3.1

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