

2005 EPACT Energy Efficient Home 45L Tax Credit (Pub.001-16)



Property

TBD
3275 Mystery Lane
Hot Springs, SD 57747

Organization

Johnson Environmental LLC
605-940-0759
Chris Johnson

HERS

Confirmed
2021-01-07
Rating No:4_4417
Rater ID:8875892
Registry ID: 922975847

Weather:Rapid City, SD

3275 Mystery Ln
3275_Mystery_Ln__Trenbeath_Re
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Builder

Erskin Construction

Normalized, Modified End-Use Loads (MMBtu/yr)

	2006 IECC	
	50% Target	As Designed
Heating	32.9	26.8
Cooling	4.9	4.7
Total	37.7	31.6

Envelope Loads (MMBtu/yr)

	2006 IECC	
	90% Target	As Designed
Heating	59.1	33.0
Cooling	8.8	7.0
Total	67.9	40.0

Building Features

Ceiling Flat	R-48.7
Sealed Attic	NA
Vaulted Ceiling	NA
Above Grade Walls	R-25.2
Foundation Walls	R-26.0
Air-Source HP	Electric, Htg: 9.0 HSPF. Clg: 16.0 SEER.

Exposed Floor	NA
Slab	R-40.0
Duct	R-6.0
Window	U-Value: 0.280, SHGC: 0.140

This home **MEETS** the requirements for the residential energy efficiency tax credits under Section 1332, Credit for Construction of New Energy Efficient Homes, of the Energy Policy Act of 2005 extended to December 31, 2021.

This dwelling unit has a projected annual heating and cooling energy consumption that is at least 50% below the 2006 IECC reference dwelling in the same climate zone, and the building envelope components improvements alone account for at least 10% of those savings. The projected energy savings above have been calculated in the manner prescribed in Appendix A of the RESNET Publication 001-16. Field inspections of the dwelling unit performed by the undersigned eligible certifier during construction and after completion have confirmed that all features of the home affecting such heating and cooling energy consumption comply with the design specifications provided to the certifier.

Under penalties of perjury, I declare that I have examined this certification, including accompanying documents, and to the best of my knowledge and belief, the facts presented in support of this certification are true, correct, and complete.

Name | Chris Johnson
Company | Johnson Environmental LLC
Address | 629 S. Minnesota Ave. # 204, Sioux Falls, SD 57104

Date | 19 May 2021

Signature |

REM/Rate - Residential Energy Analysis and Rating Software v16.0.6

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

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Home Energy Rating Certificate

Property	HERS		
TBD	Rating Type: Confirmed	Certified Energy Rater: Chris Johnson	
3275 Mystery Lane	Rating Date: 2021-01-07	Rating Number: 4_4417	
Hot Springs, SD 57747	Registry ID: 922975847		



HERS Index: 63

General Information

Conditioned Area	2566 sq. ft.	House Type	Single-family detached
Conditioned Volume	27585 cubic ft.	Foundation	Slab
Bedrooms	1		

Mechanical Systems Features

Air-source heat pump:	Electric, Htg: 9.0 HSPF. Clg: 16.0 SEER.
Heating:	Electric baseboard or radiant, Electric, 100.0 % EFF.
Water Heating:	Conventional, Electric, 0.90 EF, 50.0 Gal.
Duct Leakage to Outside	26.00 CFM25
Ventilation System	Balanced: HRV, 129 cfm, 50.0 watts.
Programmable Thermostat	Heat=Yes; Cool=Yes

Building Shell Features

Ceiling Flat	R-48.7	Slab	R-20.0 Edge, R-20.0 Under
Sealed Attic	NA	Exposed Floor	NA
Vaulted Ceiling	NA	Window Type	U-Value: 0.280, SHGC: 0.140
Above Grade Walls	R-25.2	Infiltration Rate	131 CFM50 (0.28 ACH50)
Foundation Walls	R-26.0	Method	Blower door

Lights and Appliance Features

Interior Fluor Lighting (%)	0.0	Range/Oven Fuel	Electric
Interior LED Lighting (%)	100.0	Clothes Dryer Fuel	Electric
Refrigerator (kWh/yr)	690	Clothes Dryer CEF	2.62
Dishwasher (kWh/yr)	265	Ceiling Fan (cfm/Watt)	0.00

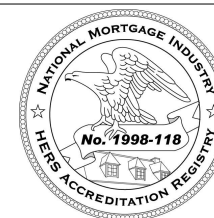
Estimated Annual Energy Cost

Use	MMBtu	Cost	Percent
Heating	33.0	\$850	50%
Cooling	1.3	\$33	2%
Hot Water	6.3	\$163	10%
Lights/Appliances	19.9	\$515	30%
Photovoltaics	-0.0	\$-0	-0%
Service Charges		\$144	8%
Total	60.5	\$1706	100%

Criteria

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

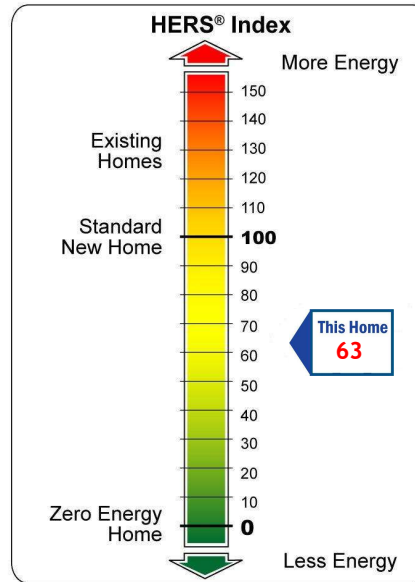
Accurate Rater Network
11601 Orchard Road
Kansas City, MO 64134
816-224-5550



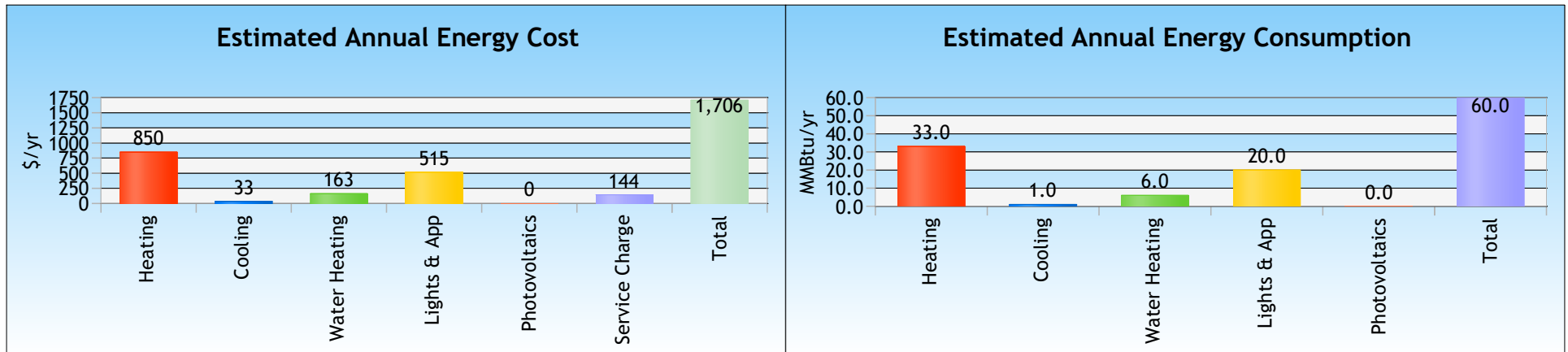
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The Home Energy Rating Standard Disclosure for this home is available from the rating provider.

HERS PERFORMANCE



ENERGY RATING CERTIFICATE



Address 3275 Mystery Lane
Hot Springs, SD 57747

House Type Single-family detached

Cond. Area 2566 sq. ft.

Rating No. 4_4417

Issue Date May 19, 2021

Certification Inspected and Tested

Annual Estimates*

Electric(kWh): 17717

CO2 emissions(Tons): 8

Annual Savings**: \$1589

* Based on standard operating conditions

** Based on a HERS 130 Index Home

Accurate Rater Network

11601 Orchard Road

Certified Rater Chris Johnson

Rater ID 8875892

Registry ID 922975847

Rating Date 2021-01-07

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RESNET Home Energy Rating Standard Disclosure



For home located at: 3275 Mystery Lane

City: Hot Springs

State: SD

1. ☒ The Rater or 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 mortgage for some portion of the financial 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:

HVAC Systems
Thermal Insulation Systems
Air sealing of envelope or duct systems
Windows or window shading systems
Energy efficient appliances
Construction (builder, developer, construction contractor, etc.)
Other (specify below):

Installed in this home by:		OR	is in the business of:	
<input type="checkbox"/> Rater	<input type="checkbox"/> Employer		<input type="checkbox"/> Rater	<input type="checkbox"/> Employer
<input type="checkbox"/> Rater	<input type="checkbox"/> Employer		<input type="checkbox"/> Rater	<input type="checkbox"/> Employer
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<input type="checkbox"/> Rater	<input type="checkbox"/> Employer		<input type="checkbox"/> Rater	<input type="checkbox"/> Employer

5. ☐ This home has been verified under the provisions of Chapter 6, Section 603 'Technical Requirements for Sampling' of the Mortgage Industry National Home Energy Rating Standard as set forth by the Residential Energy Services Network (RESNET).

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://resnet.us/standards/RESNET_Mortgage_Industry_National_HERS_Standards.pdf. The Home Energy Rating Standard Disclosure for this home is available from the rating provider.

Chris Johnson
Rater's Printed Name

Rater's Signature

8875892

Certification #

May 19, 2021

Date

RESNET Form 0300-2

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