

# Home Energy Rating Certificate

## Final Report

Rating Date: 2020-07-17

Registry ID: 812790871

Ekotrope ID: 3LMalk5L

### HERS® Index Score:

# 45

Your home's HERS score is a relative performance score. The lower the number, the more energy efficient the home. To learn more, visit [www.hersindex.com](http://www.hersindex.com)

### Annual Savings

# \$2,183

\*Relative to an average U.S. home

### Home:

544 S 85th St

Omaha, NE 68114

### Builder:

Omaha Construction

### Your Home's Estimated Energy Use:

	Use [MBtu]	Annual Cost
Heating	62.9	\$323
Cooling	4.2	\$113
Hot Water	11.9	\$59
Lights/Appliances	33.7	\$743
Service Charges		\$525
Generation (e.g. Solar)	0.0	\$0
<b>Total:</b>	<b>112.6</b>	<b>\$1,763</b>

### This home meets or exceeds the criteria of the following:

2018 International Energy Conservation Code  
2015 International Energy Conservation Code  
2012 International Energy Conservation Code  
2009 International Energy Conservation Code  
2006 International Energy Conservation Code

### Rating Completed by:

**Energy Rater:** Larry Emanuel

RESNET ID: 2305325

**Rating Company:** Future Energy Dynamics

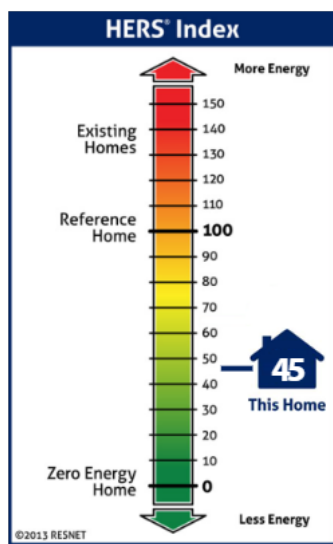
11347 S 198th St, Gretna NE 68028

402 661-9500

**Rating Provider:** EnergyLogic

PO Box N Berthoud, CO 80513

(970) 556-0839



### Home Feature Summary:

Home Type:	Single family detached
Model:	EPS Model
Community:	N/A
Conditioned Floor Area:	5,640 ft <sup>2</sup>
Number of Bedrooms:	5
Primary Heating System:	Furnace • Natural Gas • 96 AFUE
Primary Cooling System:	Air Conditioner • Electric • 16 SEER
Primary Water Heating:	Water Heater • Natural Gas • 0.96 Energy Factor
House Tightness:	1255 CFM50 (1.52 ACH50)
Ventilation:	36 CFM • 12.6 Watts (Default)
Duct Leakage to Outside:	37 CFM @ 25Pa (0.66 / 100 s.f.)
Above Grade Walls:	R-26
Ceiling:	Attic, R-49
Window Type:	U-Value: 0.31, SHGC: 0.26
Foundation Walls:	R-24



Ekotrope RATER - Version:3.1.1.2490  
The Energy Rating Disclosure for this home is available from the Approved Rating Provider.  
This report does not constitute any warranty or guarantee.



Larry Emanuel, Certified Energy Rater  
Digitally signed: 7/27/20 at 8:15 AM

# IECC 2009 Performance Compliance

## Property

544 S 85th St  
Omaha, NE 68114  
Model: EPS Model

544 S 85th St 10390  
544 S 85th St

## Organization

Future Energy Dynamics  
Larry Emanuel  
402 661-9500

## Builder

Omaha Construction

## Inspection Status

2020-07-17  
Rater ID (RTIN): 2305325  
RESNET Registered  
(Confirmed)

## Annual Energy Cost

Design	IECC 2009 Performance	As Designed
Heating	\$1,596	\$699
Cooling	\$207	\$160
Water Heating	\$222	\$222
<b>SubTotal - Used to determine compliance</b>	<b>\$2,025</b>	<b>\$1,082</b>
Lights & Appliances	\$806	\$774
Onsite generation	\$0	\$0
<b>Total</b>	<b>\$2,831</b>	<b>\$1,856</b>

## Requirements

✓	405.3	Performance-based compliance passes by 46.6%
✓	R402.4.1.2	Air Leakage Testing Air sealing is 1.52 ACH at 50 Pa. It must not exceed 7.00 ACH at 50 Pa.
✓	402.5	Area-weighted average fenestration SHGC
✓	402.5	Area-weighted average fenestration U-Factor
✓	403.2.2	Duct Testing
✓	Mandatory Checklist	Mandatory code requirements that are not checked by Ekotrope must be met.
✓	R405.2	Duct Insulation

**Design exceeds requirements for IECC 2009 Performance compliance by 46.6%.**

As a 3rd party extension of the code jurisdiction utilizing these reports, I certify that this energy code compliance document has been created in accordance with the requirements of Chapter 4 of the adopted International Energy Conservation Code based on Climate Zone 5. If rating is Projected, I certify that the building design described herein is consistent with the building plans, specifications, and other calculations submitted with the permit application. If rating is Confirmed, I certify that the address referenced above has been inspected/tested and that the mandatory provisions of the IECC have been installed to meet or exceed the intent of the IECC or will be verified as such by another party.

Name: Larry Emanuel

Organization: Future Energy Dynamics

Signature: 

Digitally signed: 7/27/20 at 8:15 AM

## Ekotrope RATER - Version 3.1.1.2490

IECC 2009 Performance compliance results calculated using Ekotrope RATER's energy and code compliance algorithm.  
Ekotrope RATER is a RESNET Accredited HERS Rating Tool. All results are based on data entered by Ekotrope users.  
Ekotrope disclaims all liability for the information shown on this report.

# 544 S 85th St

Omaha, NE 68114

Builder: Omaha Construction

Model: EPS Model

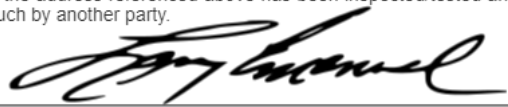
## THIS HOME IS CERTIFIED TO MEET THE 2009 INTERNATIONAL ENERGY CONSERVATION CODE

### Building Features

<b>Ceiling</b> Attic, R-49	<b>Duct</b> Supply R-6.0, Return R-6.0
<b>Above Grade Walls</b> R-26	<b>Duct Leakage to Outside</b> 37 CFM @ 25Pa (0.66 / 100 s.f.)
<b>Foundation Walls</b> R-24	<b>Total Duct Leakage</b> 1068 CFM @ 25Pa (Post-Construction)
<b>Framed Floor</b> R-39	<b>Heating</b> Furnace • Natural Gas • 96 AFUE
<b>Slab</b> R-0.0 Perimeter, R-0.0 Under	<b>Cooling</b> Air Conditioner • Electric • 16 SEER
<b>Infiltration</b> 1255 CFM50 (1.52 ACH50)	<b>Water Heating</b> Water Heater • Natural Gas • 0.96 Energy Factor
<b>Window</b> U-Value: 0.31, SHGC: 0.26	

As a 3rd party extension of the code jurisdiction utilizing these reports, I certify that this energy code compliance document has been created in accordance with the requirements of Chapter 4 of the adopted International Energy Conservation Code based on Climate Zone 5. If rating is Projected, I certify that the building design described herein is consistent with the building plans, specifications, and other calculations submitted with the permit application. If rating is Confirmed, I certify that the address referenced above has been inspected/tested and that the mandatory provisions of the IECC have been installed to meet or exceed the intent of the IECC or will be verified as such by another party.

Name: Larry Emanuel  
Organization: Future Energy Dynamics

Signature:   
Digitally signed: 7/27/20 at 8:15 AM

Ekotrope RATER - Version 3.1.1.2490

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## **IECC 2009 Label**

***544 S 85th St***

Model: EPS Model

Ekotrope RATER - Version: 3.1.1.2490

HERS® Index Score: 45

### **Building Envelope Specs**

Ceiling: R-49

Above Grade Walls: R-26

Foundation Walls: R-24

Exposed Floor: R-39

Slab: R-0

Infiltration: 1255 CFM50 (1.52 ACH50)

Duct Insulation: Supply: R6, Return: R6

Duct Lkg to Outdoors: 37 CFM @ 25Pa (0.66 / 100 s.f.)

### **Window & Door Specs**

U-Value: 0.31, SHGC: 0.26

Door: R-7

### **Mechanical Equipment Specs**

Heating: Furnace • Natural Gas • 96 AFUE

Cooling: Air Conditioner • Electric • 16 SEER

Hot Water: Water Heater • Natural Gas • 0.96

Energy Factor

### **Builder or Design Professional**

Signature: \_\_\_\_\_



# RESNET HOME ENERGY RATING Standard Disclosure

For home(s) located at: 544 S 85th St , Omaha, NE


Check the applicable disclosure(s):

- ☒ 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 the 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)
- ☐ 3. The Rater or the 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:

Products	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
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): <input type="text"/>	<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). Rater Certification #: 2305325

Name: Larry Emanuel  
Organization: Future Energy Dynamics

Signature:   
Digitally signed: 7/27/20 at 8:15 AM

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 102.1.4.6 of the standard and are posted at

<https://standards.resnet.us>

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

RESNET Form 03001-2 - Amended March 20, 2017