

Home Energy Rating Certificate

Projected Report

Based on Plans

Rating Date:

Registry ID:

Ekotrope ID: vwYJb19L



HERS® Index Score:

49

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

Annual Savings

\$2,108

*Relative to an average U.S. home

Home:

1213 ABINGTON STATION DRIVE
O'FALLON, IL 62269

Builder:

CA JONES

Your Home's Estimated Energy Use:

	Use [MBtu]	Annual Cost
Heating	32.3	\$421
Cooling	3.0	\$83
Hot Water	9.6	\$284
Lights/Appliances	23.8	\$699
Service Charges		\$521
Generation (e.g. Solar)	0.0	\$0
Total:	68.7	\$2,008

This home meets or exceeds the criteria of the following:

2015 Illinois Energy Code
2021 International Energy Conservation Code
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

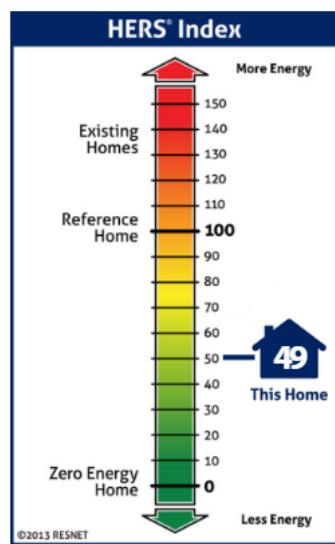
Rating Completed by:

Energy Rater: Chance Hagler
RESNET ID: 2761428

Rating Company: Goley Insulation
1707 BLUFFVIEW DR.
618-286-3355

Rating Provider: Energy Efficient Homes Midwest

Chance Hagler, Certified Energy Rater
Date: 6/17/24 at 10:29 AM



Home Feature Summary:

Home Type:	Single family detached
Model:	ALEXANDRIA
Community:	PARK BRIDGE STATION LOT 1
Conditioned Floor Area:	3,016 ft ²
Number of Bedrooms:	4
Primary Heating System:	Furnace • Natural Gas • 92 AFUE
Primary Cooling System:	Air Conditioner • Electric • 13 SEER
Primary Water Heating:	Residential Water Heater • Electric • 0.92 Energy Factor
House Tightness:	3 ACH50
Ventilation:	68 CFM • 45 Watts • ERV
Duct Leakage to Outside:	4 CFM @ 25Pa (0.4 / 100 ft ²)
Above Grade Walls:	R-15
Ceiling:	Attic, R-49
Window Type:	U-Value: 0.27, SHGC: 0.3
Foundation Walls:	R-11
Framed Floor:	N/A



Ekotrope RATER - Version:4.2.2.3420

The Energy Rating Disclosure for this home is available from the Approved Rating Provider.
This report does not constitute any warranty or guarantee.

Home Energy Rating Certificate

Projected Report
Based on Plans

Rating Date:
Registry ID:
Ekotrope ID: vwYJb19L



HERS® Index Score:

49

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

Annual Savings

\$2,136

*Relative to an average U.S. home

Home:

1213 ABINGTON STATION DRIVE
O'FALLON, IL 62269

Builder:

CA JONES

Your Home's Estimated Energy Use:

	Use [MBtu]	Annual Cost
Heating	31.1	\$405
Cooling	3.0	\$83
Hot Water	9.6	\$284
Lights/Appliances	23.4	\$686
Service Charges		\$521
Generation (e.g. Solar)	0.0	\$0
Total:	67.1	\$1,980

This home meets or exceeds the criteria of the following:

2015 Illinois Energy Code
2021 International Energy Conservation Code
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

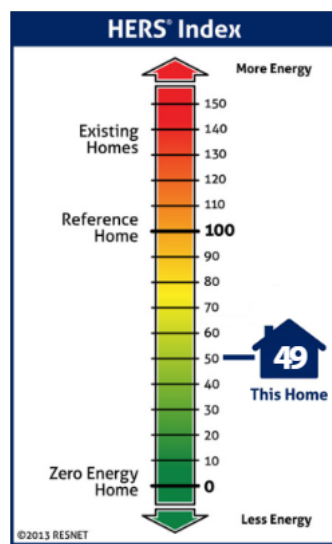
Rating Completed by:

Energy Rater: Chance Hagler
RESNET ID: 2761428

Rating Company: Goley Insulation
1707 BLUFFVIEW DR.
618-286-3355

Rating Provider: Energy Efficient Homes Midwest

Chance Hagler, Certified Energy Rater
Date: 6/17/24 at 10:29 AM



Home Feature Summary:

Home Type:	Single family detached
Model:	ALEXANDRIA
Community:	PARK BRIDGE STATION LOT 1
Conditioned Floor Area:	3,016 ft ²
Number of Bedrooms:	4
Primary Heating System:	Furnace • Natural Gas • 92 AFUE
Primary Cooling System:	Air Conditioner • Electric • 13 SEER
Primary Water Heating:	Residential Water Heater • Electric • 0.92 Energy Factor
House Tightness:	3 ACH50
Ventilation:	68 CFM • 45 Watts • ERV
Duct Leakage to Outside:	4 CFM @ 25Pa (0.4 / 100 ft ²)
Above Grade Walls:	R-15
Ceiling:	Attic, R-49
Window Type:	U-Value: 0.27, SHGC: 0.3
Foundation Walls:	R-11
Framed Floor:	N/A



Energy savings calculated without modifications to the energy model. (As Modeled)

Ekotrope RATER - Version:4.2.2.3420

The Energy Rating Disclosure for this home is available from the Approved Rating Provider.
This report does not constitute any warranty or guarantee.

HERS Emissions Comparison



Property
1213 ABINGTON STATION DRIVE
O'FALLON, IL 62269
Model: ALEXANDRIA
Community: PARK BRIDGE STATION LOT 1

PARK BRIDGE STATION LOT 1

Organization
Goley Insulation
Chance Hagler

Builder
CA JONES

Inspection Status
Results are projected

Carbon Dioxide Equivalent (CO ₂ e) [tons/yr]	HERS Ref.	Rated Home	Savings	% Saved
Heating [Natural Gas]	5.96	2.29	3.67	
Heating [Electric]	0.26	0.11	0.15	
Heating Total	6.22	2.41	3.81	61.30%
Cooling Total	0.62	0.22	0.40	63.80%
Hot Water Total	1.09	0.80	0.29	26.77%
Lights & Appliances Total	2.91	2.08	0.83	28.54%
Emissions Savings from Onsite Generation	-0.00	-0.00	0.00	
TOTAL	10.84	5.51	5.33	49.16%

Sulfur Dioxide (SO ₂) [lbs/yr]	HERS Ref.	Rated Home	Savings	% Saved
TOTAL	43.24	28.25	14.99	34.67%

Nitrogen Oxide (NO _x) [lbs/yr]	HERS Ref.	Rated Home	Savings	% Saved
TOTAL	26.77	15.49	11.28	42.13%

Energy Use Intensity (EUI) [kBtu/ft ²]	HERS Ref.	Rated Home	Savings	% Saved
Site EUI	45.89	22.78	23.11	50.35%

Emissions are calculated using the Emission Factors published in the Table 5.1.2(1) of RESNET MINHERS Addendum 66f by RESNET, in Table Table 5.1.2(1) and in accordance with Section 6.2.

CO₂ equivalent (CO₂e) emissions combine three gasses: carbon dioxide (CO₂), methane (CH₄), and nitrous oxides (N₂O).

According to the MINHERS Addendum 66f, CO₂e Emissions are computed on an hourly basis using the Purchased Energy by fuel type, instead of the annual energy balance.

RESNET HOME ENERGY RATING

Standard Disclosure



For home(s) located at: 1213 ABINGTON STATION DRIVE,
O'FALLON, IL

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 checked="" 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 #: 2761428

Name: Chance Hagler Signature: _____

Organization: Goley Insulation Date: 6/17/24 at 10:29 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.

Illinois 2021 Performance Compliance

**Property**

1213 ABINGTON STATION DRIVE
O'FALLON, IL 62269
Model: ALEXANDRIA
Community: PARK BRIDGE STATION LOT 1
PARK BRIDGE STATION LOT 1

Organization

Goley Insulation
Chance Hagler

Inspection Status

Results are projected

Builder

CA JONES

This report is based on a proposed design and does not confirm field enforcement of design elements.

Annual Energy Cost

Design	Illinois 2021 Performance	As Designed
Heating	\$508	\$399
Cooling	\$182	\$177
Water Heating	\$426	\$426
Mechanical Ventilation	\$57	\$45
SubTotal - Used to determine compliance	\$1,172	\$1,047
Lights & Appliances w/out Ventilation	\$739	\$739
Onsite generation	\$0	\$0
Total	\$1,911	\$1,786

R405.3 Source Energy Exception: The proposed home uses 12.7 MBtu LESS source energy than the reference home.

Requirements

✓	R405.2	Performance-based compliance passes by 11.1%	The proposed house meets the Illinois 2021 Performance reference energy bill requirement by \$125.38 (12.7 MBtu).
✓	R405.2 Item 2 (IECC 2009)	Total UA alternative compliance passes by 14.7%.	The proposed home meets the UA requirement by 14.7%
✓	R405.2 Item 2 (IECC 2009)	Glazed Fenestration SHGC	
✓	R402.4.1.2	Air Leakage Testing	Air sealing is 3.00 ACH at 50 Pa and 0.23 CFM50 / ft ² Shell Area. It must not exceed 5.00 ACH at 50 Pa or 0.28 CFM50 / ft ² Shell Area.
✓	R403.3.1	Duct Insulation	All ducts are inside the thermal envelope or outside and insulated to at least R8.0.
✓	R403.3.5	Duct Testing	
✓	R404.1	Lighting Equipment	At least 100.0% of fixtures shall be high-efficacy lamps, currently 100.0% are high-efficacy.
✓	Mandatory Checklist	Mandatory code requirements that are not checked by Ekotrope must be met.	2021 IECC Required Items must be checked as complete.
✓	R403.6.2	Mechanical Ventilation Efficacy	
✓	R403.6.1	Mechanical Ventilation Energy Recovery	
✓	R402.5	Area-weighted average fenestration SHGC	Area-weighted average fenestration SHGC is 0.3. The maximum allowed value is [No Limit].
✓	R402.5	Area-weighted average fenestration U-Factor	
✓	R401.2.5 Option 2	Additional energy efficiency	R401.2.5: 2.2 - 95% Threshold Met.

Design exceeds requirements for Illinois 2021 Performance compliance by 11.1%.

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 SAINT CLAIR County. 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: Chance Hagler
Organization: Goley Insulation

Signature: _____
Date: 6/17/24 at 10:29 AM

Ekotrope RATER - Version 4.2.2.3420

Illinois 2021 Performance compliance results calculated using Ekotrope RATER's energy and code compliance algorithm, including appropriate amendments.

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.

Illinois 2018 Performance Compliance

**Property**

1213 ABINGTON STATION DRIVE
O'FALLON, IL 62269
Model: ALEXANDRIA
Community: PARK BRIDGE STATION LOT
PARK BRIDGE STATION LOT 1

Organization

Goley Insulation
Chance Hagler

Inspection Status

Results are projected

Builder

CA JONES

This report is based on a proposed design and does not confirm field enforcement of design elements.

Annual Energy Cost

Design	Illinois 2018 Performance	As Designed
Heating	\$604	\$399
Cooling	\$191	\$177
Water Heating	\$426	\$426
Mechanical Ventilation	\$49	\$45
SubTotal - Used to determine compliance	\$1,269	\$1,047
Lights & Appliances w/out Ventilation	\$739	\$739
Onsite generation	\$0	\$0
Total	\$2,008	\$1,786

R405.3 Source Energy Exception: The proposed home uses 22.6 MBtu LESS source energy than the reference home.

Requirements

✓	R405.3	Performance-based compliance passes by 18.1%	The proposed house meets the Illinois 2018 Performance reference energy bill requirement by \$221.88 (22.6 MBtu).
✓	R402.4.1.2	Air Leakage Testing	Air sealing is 3.00 ACH at 50 Pa. It must not exceed 4.00 ACH at 50 Pa.
✓	R402.5	Area-weighted average fenestration U-Factor	
✓	R404.1	Lighting Equipment	At least 90.0% of fixtures shall be high-efficacy lamps, currently 100.0% are high-efficacy.
✓	R403.6.1	Mechanical Ventilation Efficacy	
✓	R403.3.3	Duct Testing	
✓	Mandatory Checklist	Mandatory code requirements that are not checked by Ekotrope must be met.	2018 IECC Mandatory Checklist must be checked as complete.
✓	IRC M1505.4.3	Mechanical Ventilation Rate	
✓		Mechanical Ventilation	
✓	R403.3	Duct Leakage Testing	Total duct leakage must be tested unless all of the ducts and air handlers are contained within conditioned space.
✓	R405.2	Duct Insulation	All ducts outside the thermal envelope must be insulated to at least R6.0.

Design exceeds requirements for Illinois 2018 Performance compliance by 18.1%.

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 SAINT CLAIR County. 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: Chance Hagler
Organization: Goley Insulation

Signature: _____
Date: 6/17/24 at 10:29 AM

Ekotrope RATER - Version 4.2.2.3420

Illinois 2018 Performance compliance results calculated using Ekotrope RATER's energy and code compliance algorithm, including appropriate amendments.

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.

Illinois 2015 Performance Compliance

**Property**

1213 ABINGTON STATION DRIVE
O'FALLON, IL 62269
Model: ALEXANDRIA
Community: PARK BRIDGE STATION LOT 1
PARK BRIDGE STATION LOT 1

Organization

Goley Insulation
Chance Hagler

Inspection Status

Results are projected

Builder

CA JONES

This report is based on a proposed design and does not confirm field enforcement of design elements.

Annual Energy Cost

Design	Illinois 2015 Performance	As Designed
Heating	\$667	\$399
Cooling	\$194	\$177
Water Heating	\$426	\$426
SubTotal - Used to determine compliance	\$1,287	\$1,002
Lights & Appliances	\$770	\$784
Onsite generation	\$0	\$0
Total	\$2,057	\$1,786

R405.3 Source Energy Exception: The proposed home uses 29 MBtu LESS source energy than the reference home.

Requirements

✓	R405.3	Performance-based compliance passes by 22.9%	The proposed house meets the Illinois 2015 Performance reference energy bill requirement by \$285.11 (29.0 MBtu).
✓	R402.4.1.2	Air Leakage Testing	Air sealing is 3.00 ACH at 50 Pa. It must not exceed 5.00 ACH at 50 Pa.
✓	R402.5	Area-weighted average fenestration U-Factor	
✓	R404.1	Lighting Equipment	At least 75.0% of fixtures shall be high-efficacy lamps, currently 100.0% are high-efficacy.
✓	R403.6.1	Mechanical Ventilation Efficacy	
✓	R403.3.3	Duct Testing	
✓	Mandatory Checklist	Mandatory code requirements that are not checked by Ekotrope must be met.	2015 IECC Mandatory Checklist must be checked as complete.
✓	Mechanical Ventilation		
✓	R405.2	Duct Insulation	All ducts outside the thermal envelope must be insulated to at least R6.0.

Design exceeds requirements for Illinois 2015 Performance compliance by 22.9%.

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 SAINT CLAIR County. 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: Chance Hagler
Organization: Goley Insulation

Signature: _____
Date: 6/17/24 at 10:29 AM

Ekotrope RATER - Version 4.2.2.3420

Illinois 2015 Performance compliance results calculated using Ekotrope RATER's energy and code compliance algorithm, including appropriate amendments.

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.

45L Tax Credit (Pre-2023)



Property
1213 ABINGTON STATION DRIVE
O'FALLON, IL 62269
Model: ALEXANDRIA
Community: PARK BRIDGE STATION LOT 1

PARK BRIDGE STATION LOT 1

Organization
Goley Insulation
Chance Hagler

Builder
CA JONES

Inspection Status
Results are projected

Projected Rating: Based on Plans - Field Confirmation Required

This report is valid for new homes sold prior to 1/1/2023.

Normalized Modified End-Use Loads (MBtu / year)		
Category	2006 IECC 50% Target	As Designed
Heating	23.6	18.9
Cooling	4.2	4.5
Total	27.8	23.4

Envelope Loads (MBtu / year)		
Category	2006 IECC 90% Target	As Designed
Heating	42.4	29.4
Cooling	7.5	7.0
Total	49.9	36.4

Building Features

Ceiling U: 0.02
Wall U: 0.073
Framed Floor U: N/A
Slab R: R-0
Glazing Properties: U-Value: 0.27, SHGC: 0.3

Heating System: Furnace • Natural Gas • 92 AFUE
Cooling System: Air Conditioner • Electric • 13 SEER
Duct Leakage to Outside: 4 CFM @ 25Pa (0.4 / 100 ft²)

This home meets the requirements for the residential energy efficiency tax credit under section 1332, Credit for Construction of New Energy Efficient Homes, of the Energy Policy Act of 2005. Builder should verify that the 45L Tax Credit is available for the year in which this home was built.

The undersigned certifier verifies that:

- (1) The dwelling unit has a projected level of annual heating and cooling energy consumption that is at least 50 percent below the annual level of heating and cooling energy consumption of a reference dwelling unit in the same climate zone;
- (2) Building envelope component improvements alone account for a level of annual heating and cooling energy consumption that is at least 10 percent below the annual level of heating and cooling energy consumption of a reference dwelling unit in the same climate zone; and
- (3) Heating and cooling energy consumption have been calculated in the manner prescribed in section 2.03 of this notice.
- (4) Field inspections of the dwelling unit (or of other dwelling units under the ENERGY STAR® for Homes Sampling Protocol Guidelines) performed by the eligible certifier during and after the completion of construction have confirmed that all features of the home affecting such heating and cooling energy consumption comply with the design specifications provided to the eligible 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: Chance Hagler Signature: _____
Organization: Goley Insulation Date: 6/17/24 at 10:29 AM

Projected (From Plans)
Not Valid as Tax Documentation

Air Leakage Report

Property

1213 ABINGTON STATION DRIVE
O'FALLON, IL 62269
Model: ALEXANDRIA
Community: PARK BRIDGE STATION LOT 1

PARK BRIDGE STATION LOT 1

Organization

Goley Insulation
Chance Hagler

Builder

CA JONES

Inspection Status

Results are projected



General Information

Conditioned Floor Area [ft ²]	3,016
Infiltration Volume [ft ³]	27,211
Number of Bedrooms	4

Air Leakage

Measured Infiltration	3 ACH50
ACH50 (Calculated)	3.00
ELA [sq. in.] (Calculated)	74.64
ELA per 100 s.f. Shell Area (Calculated)	1.237
CFM50 (Calculated)	1,361
CFM50 / s.f. Shell Area (Calculated)	0.225

Duct Leakage

	System 1
Leakage to Outdoors	4 CFM @ 25Pa (0.4 / 100 ft ²)
Total Leakage Test Type	Rough-In, with Air Handler
Total Leakage [CFM @ 25 Pa]	87.0
Total Leakage [CFM25 / 100 s.f.]	8.7
Total Leakage [CFM25 / CFA]	0.087

Mechanical Ventilation

Rate [CFM]	68 CFM
Hours per day	24.0
Fan Power	45 Watts
Recovery Efficiency %	65.0
Runs at least once every 3 hrs?	true
Average Rate [CFM]	68.0 CFM
2010 ASHRAE 62.2 Req. Cont. Ventilation	67.7
2013 ASHRAE 62.2 Req. Cont. Ventilation	90.0
2016 ASHRAE 62.2 Req. Cont. Ventilation	90.0

Energy Code Inspection Checklist




Property 1213 ABINGTON STATION DRIVE O'FALLON, IL 62269 Model: ALEXANDRIA Community: PARK BRIDGE STATION LOT 1 PARK BRIDGE STATION LOT 1	Organization Goley Insulation Chance Hagler Builder CA JONES	Inspection Status Results are projected
--	--	---

General Building Information

Conditioned Area (sq ft)	3,016
Conditioned Volume (cubic ft)	27,211
Insulated Shell Area (sq ft)	6,036

The building energy model in Ekotrope reflects the building assemblies and energy features listed below. Sometimes energy features will change in the field from what has been modeled. The inspection process should identify any changes and ensure that the home continues to meet the applicable energy code.


Slab


	Name: BELOW(1,508 s.f., 172 ft. exterior perimeter) R-0 perimeter insulation, R-0 under slab insulation.
--	---

Framed Floor


None Present

Foundation Wall

	Name: UNFINISHED AREA (Exterior Perimeter [ft]: 123, Height Above Grade [ft]: 1, Depth Below Grade [ft]: 7) R-11 continuous insulation, R-0 cavity insulation Insulation Grade: I Feet from top of wall to top of insulation: 0, Feet from top of wall to bottom of insulation: 8
--	--

	Name: FINISHED AREA (Exterior Perimeter [ft]: 49, Height Above Grade [ft]: 1, Depth Below Grade [ft]: 7) R-0 continuous insulation, R-13 cavity insulation Insulation Grade: I Fully insulated (top to bottom)
--	---

Above Grade Wall

	Name: 4" COLDWALL (192 s.f.) R-0 continuous insulation, R-15 cavity insulation Insulation Grade: I
--	--

Energy Code Inspection Checklist



Property

1213 ABINGTON STATION DRIVE

O'FALLON, IL 62269

Model: ALEXANDRIA

Community: PARK BRIDGE STATION LOT

Organization

Goley Insulation

Chance Hagler

Inspection Status

Results are projected

Builder

CA JONES

PARK BRIDGE STATION LOT 1



Name: 4" AMBIENT (1,154 s.f.)

R-0 continuous insulation, R-15 cavity insulation

Insulation Grade: I



Name: KNEEWALL AMB (63 s.f.)

R-0 continuous insulation, R-15 cavity insulation

Insulation Grade: I



Name: KNEEWALL ATTIC (63 s.f.)

R-0 continuous insulation, R-15 cavity insulation

Insulation Grade: II

Rim Joist



Name: COLDWALL (24 s.f.)

R: 17.00



Name: AMBIENT (148 s.f.)

R: 17.00

Ceiling / Roof



Name: ATTIC (1,508 s.f.)

R-40 continuous insulation, R-9 cavity insulation

Insulation Grade: I

Opaque Door



Name: COLDWALL (20 s.f.)

U: 0.140



Name: ENTRY (20 s.f.)

U: 0.140

Glazing



Name: EGRESS (16 s.f.), U: 0.330, SHGC: 0.3, Orientation: EAST

Energy Code Inspection Checklist



Property

1213 ABINGTON STATION DRIVE

O'FALLON, IL 62269

Model: ALEXANDRIA

Community: PARK BRIDGE STATION LOT 1

Organization

Goley Insulation

Chance Hagler

Inspection Status

Results are projected

PARK BRIDGE STATION LOT 1



Name: BED 2 (30 s.f.), U: 0.270, SHGC: 0.3, Orientation: NORTH



Name: BED 3 (30 s.f.), U: 0.270, SHGC: 0.3, Orientation: NORTH



Name: DINING (40 s.f.), U: 0.270, SHGC: 0.3, Orientation: SOUTH



Name: GREAT (30 s.f.), U: 0.270, SHGC: 0.3, Orientation: SOUTH



Name: MASTER BED (30 s.f.), U: 0.270, SHGC: 0.3, Orientation: SOUTH

Skylight

None Present

Mechanical Ventilation



Mechanical ventilation system rated for, and capable of, providing continuous ventilation.
System shall include automatic timing controls.
System type: ERV, 24 hrs/day, 45 Watts

Mechanical Equipment



FURNACE 1 • Natural Gas • 100% Heating Load @ 92 AFUE



A/C 1 • Electric • 100% Cooling Load @ 13 SEER



WATER HEATER • Electric • 100% Hot Water Load @ 0.92 Energy Factor

Air Leakage Control



Test Status: Blower-door tested
House is air-sealed as to achieve 1,361 CFM50 (3.00 ACH50) or less at final blower-door test.

Energy Code Inspection Checklist



Property

1213 ABINGTON STATION DRIVE
O'FALLON, IL 62269
Model: ALEXANDRIA
Community: PARK BRIDGE STATION LOT 1
PARK BRIDGE STATION LOT 1

Organization

Goley Insulation
Chance Hagler

Inspection Status

Results are projected

Builder

CA JONES

Infiltration Requirements for IECC in Climate Zone 4

- 2009 IECC Infiltration limit for the design home is 7 ACH50.
- 2012 IECC Infiltration limit for the design home is 3 ACH50.
- 2015 IECC Infiltration limit for the design home is 3 ACH50.
- 2018 IECC Infiltration limit for the design home is 3 ACH50.
- 2021 IECC Infiltration limit for the design home is 5 ACH50.

Duct Leakage

Duct System 1

- All ducts and equipment within conditioned space
- Leakage to Outside specified as: 4 CFM @ 25Pa (0.4 / 100 ft²)
- Total Leakage specified as: 87 CFM @ 25Pa (Rough-In, with Air Handler)

Duct Leakage Code Requirements for IECC

2009 IECC:

- Postconstruction Leakage Test: Duct Leakage to Outdoors $\leq 8 \text{ CFM}_{25} / 100 \text{ sq ft CFA}$.
- Rough in Test with AHU: Total Duct Leakage $\leq 6 \text{ CFM}_{25} / 100 \text{ sq ft CFA}$.
- Rough in Test without AHU: Total Duct Leakage $\leq 4 \text{ CFM}_{25} / 100 \text{ sq ft CFA}$.

2012 IECC Mandatory, 2015, 2018, & 2021 IECC Prescriptive Paths:

- Postconstruction Leakage Test: Total Duct Leakage $\leq 4 \text{ CFM}_{25} / 100 \text{ sq ft CFA}$.
- Rough in Test with AHU: Total Duct Leakage $\leq 4 \text{ CFM}_{25} / 100 \text{ sq ft CFA}$.
- Rough in Test without AHU: Total Duct Leakage $\leq 3 \text{ CFM}_{25} / 100 \text{ sq ft CFA}$.
- * Note: IECC 2021 requires Total Duct Leakage $\leq 8 \text{ CFM}_{25} / 100 \text{ sq ft CFA}$ when all ducts and air handlers are within the building thermal envelope.

2015 and 2018 IECC Performance Paths (Cost Compliance):

- Leakage testing is required UNLESS all ducts and air handlers are located entirely within the thermal envelope.
- There is no pass/fail threshold for duct leakage on the performance path.

Project Notes

FACES : NORTH

Emissions Summary



Property
1213 ABINGTON STATION DRIVE
O'FALLON, IL 62269
Model: ALEXANDRIA
Community: PARK BRIDGE STATION LOT 1

PARK BRIDGE STATION LOT 1

Organization
Goley Insulation
Chance Hagler

Builder
CA JONES

Inspection Status
Results are projected

Emissions by End-Use

Carbon Dioxide Equivalent (CO₂e) [tons/yr]

Heating [Natural Gas]	2.2
Heating [Electric]	0.1
Cooling [Electric]	0.2
Hot Water [Electric]	0.8
Lights & Appliances [Electric]	2.0
Emissions Savings from Onsite Generation	-0.0
TOTAL	5.4

Sulfur Dioxide (SO₂) [lbs/yr]

TOTAL	27.9
-------	------

Nitrogen Oxide (NO_x) [lbs/yr]

TOTAL	15.2
-------	------

Energy Use Intensity (EUI) [kBtu/ft²]

Site EUI	22.3
----------	------

Emissions are calculated using the Emission Factors published in the Table 5.1.2(1) of RESNET MINHERS Addendum 66f by RESNET, in Table Table 5.1.2(1) and in accordance with Section 6.2.

CO₂ equivalent (CO₂e) emissions combine three gasses: carbon dioxide (CO₂), methane (CH₄), and nitrous oxides (N₂O).

According to the MINHERS Addendum 66f, CO₂e Emissions are computed on an hourly basis using the Purchased Energy by fuel type, instead of the annual energy balance.

Fuel Summary



Property
1213 ABINGTON STATION DRIVE
O'FALLON, IL 62269
Model: ALEXANDRIA
Community: PARK BRIDGE STATION LOT 1

PARK BRIDGE STATION LOT 1

Organization
Goley Insulation
Chance Hagler

Builder
CA JONES

Inspection Status
Results are projected

Annual Energy Cost

Natural Gas	\$737
Electric	\$1,243

Annual End-Use Cost

Heating	\$405
Cooling	\$83
Water Heating	\$284
Lights & Appliances	\$686
Onsite Generation	-\$0
Service Charges	\$521
Total	\$1,980

Annual End-Use Consumption

Heating [Natural Gas Therms]	300.1
Heating [Electric kWh]	333.5
Cooling [Electric kWh]	871.5
Hot Water [Electric kWh]	2,820.2
Lights & Appliances [Electric kWh]	6,844.8
Total [Natural Gas Therms]	300.1
Total [Electric kWh]	10,870.0
Total Onsite Generation [Electric kWh]	0.0

Peak Electric Consumption

Peak Winter kW	1.46
Peak Summer kW	2.17

Utility Rates

Electricity	AMEREN IL ELECTRIC
Natural Gas	AMEREN IL GAS

Building Summary

Property

1213 ABINGTON STATION DRIVE
O'FALLON, IL 62269
Model: ALEXANDRIA
Community: PARK BRIDGE STATION LOT 1

Organization

Goley Insulation
Chance Hagler

Inspection Status

Results are projected



Builder

CA JONES

PARK BRIDGE STATION LOT 1

General Building Information

Number Of Bedrooms	4
Number Of Floors	1
Conditioned Floor Area [sq. ft.]	3,016
Has Electric Vehicle Ready Space	Yes
Unconditioned, attached garage?	Yes
Conditioned Volume [cu. ft.]	27,211
Total Units in Building	1
Residence Type	Single family detached
Number of Floors in Building	-
Floor Number	-
Model	ALEXANDRIA
Community	PARK BRIDGE STATION LOT 1
RESNET/IECC 2006-2018 Climate Zone	4A
IECC 2021 Climate Zone	4A

Foundation Wall

Name	Library Type	Height Above Grade	Depth Below Grade	Perimeter	Location	Enclosing
FINISHED AREA	R13 G1 16oc	1	7	49	Exposed Exterior	Conditioned Space
UNFINISHED AREA	R11 BLANKET 8'	1	7	123	Exposed Exterior	Conditioned Space

Foundation Wall Library List

Name	Feet From Wall Top To Continuous Insulation Top	Feet From Wall Top To Continuous Insulation Bottom	Is Fully Insulated	Continuous R-value	Cavity R-value	Effective Insulation R-value
R11 BLANKET 8'	0	8	No	11.00	N/A	N/A
R13 G1 16oc	N/A	N/A	Yes	0.00	13.00	N/A

Slab

Name	Library Type	Perimeter	Floor Grade	Carpet R	Exposed Masonry Area	Surface Area	Location	Enclosing
BELOW	UNINSULATED	172	Below Grade	2	841	1,508.0 ft ²	Exposed Exterior	Conditioned Space

Building Summary



Property
1213 ABINGTON STATION DRIVE
O'FALLON, IL 62269
Model: ALEXANDRIA
Community: PARK BRIDGE STATION LOT 1

PARK BRIDGE STATION LOT 1

Organization
Goley Insulation
Chance Hagler

Builder
CA JONES

Inspection Status
Results are projected

Slab Library List

Name	Wall Construction Type	Slab Completely Insulated?	Underslab Insulation Width [ft]	Perimeter Insulation Depth [ft]	Perimeter Insulation R Value	Perimeter Insulation Is Exterior	Thermal Break	Effective R-value
UNINSULATED	Wood Frame / Other	No	0	0	0	Yes	No	0.00

Framed Floor

None Present

Framed Floor Library List

None Present

Rim Joist

Name	Library Type	Surface Area	Location
AMBIENT	R 19 G2	148.0 ft²	Exposed Exterior
COLDWALL	R 19 G2	24.0 ft²	Unconditioned, attached garage

Rim Joist Library List

Name	Effective Insulation R-value
R 19 G2	17.00

Wall

Name	Library Type	Surface Color	Surface Area	Location
4" AMBIENT	R15 G1	Medium	1,154.0 ft²	Exposed Exterior
4" COLDWALL	R15 G1	Light	192.0 ft²	Unconditioned, attached garage
KNEEWALL AMB	R15 G1	Medium	63.0 ft²	Exposed Exterior

Building Summary



Property
1213 ABINGTON STATION DRIVE
O'FALLON, IL 62269
Model: ALEXANDRIA
Community: PARK BRIDGE STATION LOT 1

PARK BRIDGE STATION LOT 1

Organization
Goley Insulation
Chance Hagler

Builder
CA JONES

Inspection Status
Results are projected

Name	Library Type	Surface Color	Surface Area	Location
KNEEWALL ATTIC	R15 BATTS G2	Medium	63.0 ft²	Attic

Wall Library List

Name	Effective R-value
R15 BATTS G2	13.211
R15 G1	13.771

Glazing

Name	Library Type	Wall Assignment	Foundation Wall Assignment	Is Operable	Overhang Depth	Overhang Ft To Top	Overhang Ft To Bottom	Orientation	Surface Area
BED 2	U.27 SHGC .30	4" AMBIENT		Yes	1.4	0.3	5.3	North	30.0 ft²
BED 3	U.27 SHGC .30	4" AMBIENT		Yes	4	0.3	5.3	North	30.0 ft²
DINING	U.27 SHGC .30	4" AMBIENT		Yes	1.4	0.3	7	South	40.0 ft²
EGRESS	U.33 SHGC .30		UNFINISHED AREA	Yes	1	10	14	East	16.0 ft²
GREAT	U.27 SHGC .30	4" AMBIENT		Yes	1.4	0.3	5.3	South	30.0 ft²
MASTER BED	U.27 SHGC .30	4" AMBIENT		Yes	1.4	0.3	5.3	South	30.0 ft²

Glazing Library List

Name	Shgc	U-factor
U.27 SHGC .30	0.3	0.270
U.33 SHGC .30	0.3	0.330

Skylight

None Present

Building Summary



Property
1213 ABINGTON STATION DRIVE
O'FALLON, IL 62269
Model: ALEXANDRIA
Community: PARK BRIDGE STATION LOT 1

PARK BRIDGE STATION LOT 1

Organization
Goley Insulation
Chance Hagler

Builder
CA JONES

Inspection Status
Results are projected

Skylight Library List

None Present

Opaque Door

Name	Library Type	Wall Assignment	Foundation Wall Assignment	Emittance	Solar Absorptance	Surface Color	Surface Area	Location
COLDWALL	U .14	4" COLDWALL		0.9	0.75	Medium	20.0 ft²	Unconditioned, attached garage
ENTRY	U .14	4" AMBIENT		0.9	0.75	Medium	20.0 ft²	Exposed Exterior

Opaque Door Library List

Name	Effective U-factor
U .14	0.140

Roof Insulation

Name	Library Type	Attic Exterior Area [ft²]	Clay or Concrete Roof Tiles	Surface Color	Surface Area	Location
ATTIC	R49 F/G	4,000	No	Medium	1,508.0 ft²	Attic

Roof Insulation Library List

Name	Has Radiant Barrier	Effective R-value
R49 F/G	No	49.859

Whole House Infiltration

Infiltration	Measurement Type	Shelter Class
3 ACH at 50 Pa	Blower-door tested	4

Building Summary



Property
1213 ABINGTON STATION DRIVE
O'FALLON, IL 62269
Model: ALEXANDRIA
Community: PARK BRIDGE STATION LOT 1

PARK BRIDGE STATION LOT 1

Organization
Goley Insulation
Chance Hagler

Builder
CA JONES

Inspection Status
Results are projected

Mechanical Ventilation

Ventilation Type	Ventilation Rate [ft³ / Minute]	Operational hours per day	Fan Watts	Runs once every three hours	Energy Recovery Percent	Model Number	Manufacturer
ERV	68 CFM	24	45 Watts	Yes	65	B130E65RT	BROAN

Lighting

% Interior Fluorescent Lighting	% Interior LED Lighting	% Exterior Fluorescent Lighting	% Exterior LED Lighting	% Garage Fluorescent Lighting	% Garage LED Lighting
0	100	0	100	0	100

Onsite Generation

None Present

Onsite Generation Library List

None Present

Solar Generation

None Present

Dehumidifier

None Present

Dehumidifier Library List

None Present

Building Summary



Property
1213 ABINGTON STATION DRIVE
O'FALLON, IL 62269
Model: ALEXANDRIA
Community: PARK BRIDGE STATION LOT 1

PARK BRIDGE STATION LOT 1

Organization
Goley Insulation
Chance Hagler

Builder
CA JONES

Inspection Status
Results are projected

Whole House Fan

None Present

Whole House Fan Library List

None Present

Conditioning Equipment

	Name	Library Type	Serial Number	Heating Percent Load	Cooling Percent Load	Hot Water Percent Load	Location
A/C 1		A/C 13S 28.4K		0%	100%	0%	Conditioned Space
FURNACE 1		F 92% 56K 245Eae		100%	0%	0%	Conditioned Space
WATER HEATER		50 GAL 0.92 ELECTRIC		0%	0%	100%	Conditioned Space

Equipment Type: 50 GAL 0.92 ELECTRIC

Equipment Type	Residential Water Heater
Fuel Type	Electric
Distribution Type	Hydronic Delivery (Radiant)
Hot Water Efficiency	0.92 Energy Factor
Tank Capacity (gal.)	50
Hot Water Capacity [kBtu/h]	4.5
Recovery Efficiency	0.98

Equipment Type: A/C 13S 28.4K

Equipment Type	Air Conditioner
Fuel Type	Electric
Distribution Type	Forced Air
Motor Type	PSC (Single Speed)
Heat Pump System Type	Unspecified
Cooling Efficiency	13 SEER
Cooling Capacity [kBtu/h]	28.4

Building Summary

Property

1213 ABINGTON STATION DRIVE
O'FALLON, IL 62269
Model: ALEXANDRIA
Community: PARK BRIDGE STATION LOT 1

PARK BRIDGE STATION LOT 1

Organization

Goley Insulation
Chance Hagler

Builder

CA JONES

Inspection Status

Results are projected



Equipment Type: F 92% 56K 245Eae

Equipment Type	Furnace
Fuel Type	Natural Gas
Distribution Type	Forced Air
Motor Type	ECM (Variable Speed)
Heating Efficiency	92 AFUE
Heating Capacity [kBtu/h]	56
Use default EAE	No
EAE [kWh]	245

Distribution System

Distribution Type	Forced Air
Heating Equipment	FURNACE 1
Cooling Equipment	A/C 1
Sq. Feet Served	1,000
# Return Grilles	8
Supply Duct R Value	0
Return Duct R Value	0
Supply Duct Area [ft ²]	270
Return Duct Area [ft ²]	250
Leakage to Outdoors	4 CFM @ 25Pa (0.4 / 100 ft ²)
Total Leakage	87 CFM25
Total Leakage Duct Test Conditions	Rough-In, with Air Handler
Use Default Flow Rate	Yes
Duct 1	
Duct Location	Conditioned Space
Percent Supply Area	100
Percent Return Area	100
Duct 2	
Duct Location	Conditioned Space
Percent Supply Area	0
Percent Return Area	0
Duct 3	
Duct Location	Conditioned Space
Percent Supply Area	0
Percent Return Area	0
Duct 4	
Duct Location	Conditioned Space
Percent Supply Area	0
Percent Return Area	0
Duct 5	
Duct Location	Conditioned Space
Percent Supply Area	0
Percent Return Area	0
Duct 6	
Duct Location	Conditioned Space
Percent Supply Area	0
Percent Return Area	0

Building Summary

Property

1213 ABINGTON STATION DRIVE
O'FALLON, IL 62269
Model: ALEXANDRIA
Community: PARK BRIDGE STATION LOT 1

PARK BRIDGE STATION LOT 1

Organization

Goley Insulation
Chance Hagler

Builder

CA JONES

Inspection Status

Results are projected



HVAC Grading

HVAC Grading Not Conducted

Ceiling Fan

Has Ceiling Fan No

Water Distribution

Water Fixture Type	Low-flow
Use Default Hot Water Pipe Length	No
Hot Water Pipe Length [ft]	46
At Least R3 Pipe Insulation?	No
Hot Water Recirculation System?	No
Drain Water Heat Recovery?	No

Clothes Dryer

Cef	3.01
Fuel Type	Electric
Field Utilization	Timer Controls
Is Outside Conditioned Space	No
Clothes Dryer Available	Yes
Defaults Type	HERS Reference

Clothes Washer

Label Energy Rating	262 kWh/Year
Annual Gas Cost	\$23.00
Electric Rate	\$0.12/kWh
Gas Rate	\$1.09/Therm
Capacity	3.5
Imef	1.29
Defaults Type	Custom
Load Type	Front-load
Loads Per Week	6
Is Outside Conditioned Space	No
Clothes Washer Available	Yes

Building Summary



Property
1213 ABINGTON STATION DRIVE
O'FALLON, IL 62269
Model: ALEXANDRIA
Community: PARK BRIDGE STATION LOT 1

PARK BRIDGE STATION LOT 1

Organization
Goley Insulation
Chance Hagler

Builder
CA JONES

Inspection Status
Results are projected

Dishwasher

Dishwasher Defaults Type	ENERGY STAR Standard
Dishwasher Size	Standard
Dishwasher Efficiency	270 kWh
Annual Gas Cost	\$22.23
Electric Rate	\$0.12/kWh
Gas Rate	\$1.09/Therm
Is Outside Conditioned Space	No
Dishwasher Available	Yes

Appliances and Controls

Programmable thermostat?	Yes
Range/Oven Fuel	Electric
Convection Oven?	No
Induction Range?	No
Range/Oven Outside Conditioned Space?	No
Refrigerator Consumption	714 kWh/Year
Refrigerator Outside Conditioned Space?	No

Notes

FACES : NORTH

Builder Affidavit



Property
1213 ABINGTON STATION DRIVE
O'FALLON, IL 62269
Model: ALEXANDRIA
Community: PARK BRIDGE STATION LOT 1

PARK BRIDGE STATION LOT 1

Organization
Goley Insulation
Chance Hagler

Inspection Status
Results are projected

Builder
CA JONES

Important Notice to Builder

Builder affirms in this affidavit that all building characteristics described in the Building Summary Report accurately reflect this New Home. Builder agrees to allow the Home Energy Rating System (HERS) Provider and/or Rater to verify building characteristics of this New Home fully at the HERS Rater/Provider's discretion. The HERS Provider and Rater do not create or imply any duty or obligations to Builder or any subsequent owner. Builder is responsible for taking any actions necessary to protect Builder's interest. There is no guarantee or warranty whatsoever expressed or implied from the HERS Provider or Rater.

HERS® Index Score:49

Builder Name: CA JONES

Builder Signature: _____

Name: Chance Hagler
Organization: Goley Insulation

Signature: _____
Date: 6/17/24 at 10:29 AM