



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

100 N. Senate Avenue • Indianapolis, IN 46204

(800) 451-6027 • (317) 232-8603 • www.idem.IN.gov

Eric J. Holcomb
Governor

Brian C. Rockensuess
Commissioner

July 2, 2024

Richard B. Cromer
10641 E. 200 N.
Lafayette, Indiana 47905

Dear Homeowner:

Re: Geothermal Heating/Cooling Device
Pursuant to IC 6-1.1-12-34
Property Tax Deduction for
Parcel Number: 79-08-124-400-001,000-009

The above referenced claim for a property tax deduction, attached State Form 18865 and supplemental attachments, submitted by the above referenced applicant, have been reviewed by this Office in accordance with IC 6-1.1-12-35.5. Please be advised that the heating/cooling system outlined in the claim for exemption (18865) qualifies as a geothermal system as defined in IC 6-1.1-12-34. The total amount of this claim shall be pursuant to IC 6-1.1-12-34(b). This certification does not include a determination as to the total actual or depreciated value of the claimed property.

This certification is for the life of the installed equipment and does not need to be requested on an annual basis. However, when the equipment is no longer in service, the owner of the equipment for which this certification is made must give written confirmation to the assessor of the township or county in which the equipment is installed.

Additionally, this certification does not include a determination as to the timeliness of the claim nor whether the property claimed for exemption is real or personal property.

You must follow up with your county auditor's office and notify them of the successful certification of each geothermal unit. Also, they may require additional information regarding the unit(s).

If you have any questions concerning this matter, you may contact our office at (317) 232-8670.

Sincerely,

Kathryn Teachout

Geothermal Division
Operations Section
Office of Water Quality

Certification/Approval Number: 2003480
Richard B. Cromer



STATEMENT FOR DEDUCTION OF ASSESSED VALUATION
 (Attributed to Solar Energy System or Solar, Wind, Geothermal, or Hydroelectric Power Device)

FORM SES / WPD

State Form 18865 (R12 / 1-20)

Prescribed by the Department of Local Government Finance

INSTRUCTIONS: To be filed in person or by mail by the owner of such property with the County Auditor of the county in which the property is located. A person who is no longer eligible for this deduction shall notify the County Auditor of this change. (IC 6-1.1-12-36)

- FILING DATES:**
- (1) Must be completed and dated by December 31 of the year for which the person wishes to obtain the deduction and filed or postmarked on or before January 5 of the calendar year in which the property taxes are first due and payable.
 - (2) State Distributable Property under IC 6-1.1-8 (solar powered device only): Must be completed and dated by December 31 of the year for which the person wishes to obtain the deduction and filed on or before January 5 of the following calendar year.
 - (3) Personal Property under IC 6-1.1-3 (solar powered device only): Must be completed and dated by December 31 of the year for which the person wishes to obtain the deduction and filed on or before January 5 of the following calendar year. In addition to filing this form for the deduction, an applicant must also attach a Form 103-SPD to either his personal property tax return or his amended personal property tax return for each year the deduction is desired.
 (IC 6-1.1-12-26; 6-1.1-12-26.1; 6-1.1-12-27.1; 6-1.1-12-29; 6-1.1-12-30; 6-1.1-12-33; 6-1.1-12-34; 6-1.1-12-35.5; 6-1.1-12-36)

All claims for a deduction filed on a geothermal or hydroelectric system or device must be accompanied by proof of certification of qualification by the Department of Environmental Management pursuant to IC 6-1.1-12-35.5.

#2003480

CERTIFICATION STATEMENT	
I (We), <u>Richard B Cromer</u> certify that I (we) own or am (are) buying on contract or am (are) leasing the real property from the real property owner the following real property, mobile/manufactured home, state distributable property, or personal property that is subject to assessment and property taxation and for which a:	
<input type="checkbox"/> Solar Energy Heating or Cooling System <input type="checkbox"/> Wind Power Device <input checked="" type="checkbox"/> Geothermal Device <input type="checkbox"/> Hydroelectric Device	
Solar Power Device*: <input type="checkbox"/> Real <input type="checkbox"/> Mobile/Manufactured Home <input type="checkbox"/> State Distributable <input type="checkbox"/> Personal Property *Applies to a solar power device installed after December 31, 2011.	
deduction from assessed valuation is hereby claimed in <u>Tippecanoe</u> county.	
Date system/device was installed (month, day, year) <u>06/03/2024</u>	Total deduction claimed <u>\$ 40,210.00</u>

PROPERTY DESCRIPTION		
Taxing District (city, town, township) <u>Lafayette</u>	Township <u>Perry</u>	Legal description or key number <u>PT W SE SEC 12 TWP 23 R3 3.235 A</u>
If a deduction was allowed last year, have there been any changes in the property? <u>N/A</u>		Parcel number <u>79-08-12-400-001.000-009</u>
Address of owner (number and street, city, state, and ZIP code) <u>10641 E. 250 N. Lafayette, IN 47905</u>		
I (We) hereby certify that the above statement is true, correct, and complete.	Signature <u>R. Blake Horn</u>	Date (month, day, year) <u>07/02/2024</u>

FOR AUDITOR'S USE ONLY	
1 Total assessed value of real property or mobile / manufactured home including qualifying device / system.	Assessment Date First Effective 20 <u> </u> Payable 20 <u> </u>
2(a) For wind; geothermal; hydroelectric; real property or mobile / manufactured home with a solar powered device: Enter the assessed valuation without the qualifying device / system.	\$ <u> </u>
2(b) For solar energy system only: Out-of-pocket expenditures for components and installation labor.	
2(c) For personal property solar power device deduction: Enter amount calculated on Form 103-SPD.	
2(d) For state distributable solar power device deduction: Enter assessed value of qualifying equipment.	
3 Deduction: Line 1 minus Line 2(a); or enter the actual amount shown on Line 2(b), 2(c), or 2(d).	

VERIFICATION BY ASSESSING OFFICIAL		
Is property recommended for deduction? <input type="checkbox"/> Yes <input type="checkbox"/> No	Recommended deduction	Comments, if any
Signature of assessing official	Printed name of assessing official	Date signed (month, day, year)

FINAL DETERMINATION OF COUNTY AUDITOR		
Deduction determined by County Auditor for assessment date of <u> </u> , 20 <u> </u> payable in 20 <u> </u> .	Approved deduction \$ <u> </u>	
Signature of county auditor	Printed name of county auditor	Date signed (month, day, year)
Description or reasons for change:		

Indiana 2020 Performance Compliance

Property

10641 E 250 N
Lafayette, IN 47905

Organization

Indy Energy Solutions
Tom Mesker

Inspection Status

null
Rater ID (RTIN): 8704754
Field Confirmed (Confirmed)

Cromer PMHP-22-BLAK-08962
final House Design

Builder

S Brown Construction

Annual Energy Cost

Design	Indiana 2020 Performance	As Designed
Heating	\$936	\$556
Cooling	\$71	\$57
Water Heating	\$81	\$81
Mechanical Ventilation	\$40	\$52
SubTotal - Used to determine compliance	\$1,128	\$746
Lights & Appliances w/out Ventilation	\$599	\$599
Onsite generation	\$0	\$0
Total	\$1,727	\$1,345

R405.3 Source Energy Exception: The proposed home uses 41.7 MBtu LESS source energy than the reference home.

Requirements

	1105	Performance-based compliance passes by 33.9%	The proposed house meets the Indiana 2020 Performance reference energy bill requirement by \$381.81 (41.7 MBtu).
	1102.4.1.2	Air Leakage Testing	Air sealing is 2.26 ACH at 50 Pa. It must not exceed 5.00 ACH at 50 Pa.
	1102.5	Area-weighted average fenestration SHGC	Area-weighted average fenestration SHGC is 0.29. The maximum allowed value is [No Limit].
	1102.5	Area-weighted average fenestration U-Factor	
	1104.1	Lighting Equipment	At least 90.0% of fixtures shall be high-efficacy lamps, currently 100.0% are high-efficacy.
	1103.6.1	Mechanical Ventilation Efficacy	
	Mandatory Checklist	Mandatory code requirements that are not checked by Ekotrope must be met.	2018 IECC Mandatory Checklist must be checked as complete.
	1103.6	Mechanical Ventilation Rate	
	1103.1.1	Programmable Thermostat	
	1105.2	Duct Insulation	All ducts outside the thermal envelope must be insulated to at least R6.0.

Design exceeds requirements for Indiana 2020 Performance compliance by 33.9%.

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 TIPPECANOE 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: Tom Mesker
Organization: Indy Energy Solutions

Signature: Tom Mesker
Digitally signed: 5/15/24 at 8:09 AM

Ekotrope RATER - Version 4.0.1.3400

Indiana 2020 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.

10641 E 250 N

Lafayette, IN 47905

Builder: S Brown Construction

THIS HOME IS CERTIFIED TO MEET THE INDIANA 2020 ENERGY CODE

Building Features

Ceiling Attic, R-60	Duct Supply R-8.0, Return R-6.0
Above Grade Walls R-21	Duct Leakage to Outside 50 CFM @ 25Pa (1.92 / 100 ft ²)
Foundation Walls N/A	Total Duct Leakage 100 CFM @ 25Pa (Post-Construction)
Framed Floor N/A	Heating Ground Source Heat Pump • Electric • 4.8 COP
Slab R-23.0 Perimeter, R-8.8 Under	Cooling Ground Source Heat Pump • Electric • 26.1 EER
Infiltration 2.26 ACH50	Water Heating Residential Water Heater • Electric • 3.88 Energy Factor
Window U-Value: 0.3, SHGC: 0.29	

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Organization: Indy Energy Solutions

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Ekotrope RATER - Version 4.0.1.3400

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Indiana 2020 Label

10641 E 250 N

Ekotrope RATER - Version: 4.0.1.3400

Building Envelope Specs

Ceiling: R-60

Above Grade Walls: R-21

Foundation Walls: N/A

Exposed Floor: N/A

Slab: R-23

Infiltration: 2.26 ACH50

Duct Insulation: Supply: R8, Return: R6

Duct Lkg to Outdoors: 50 CFM @ 25Pa (1.92 / 100 ft²)

Window & Door Specs

U-Value: 0.3, SHGC: 0.29

Door: R-4

Mechanical Equipment Specs

Heating: Ground Source Heat Pump • Electric • 4.8 COP

Cooling: Ground Source Heat Pump • Electric • 26.1 EER

Hot Water: Residential Water Heater • Electric • 3.88

Energy Factor

Average Mechanical Ventilation: 100 CFM

Builder or Design Professional

Signature: _____

Building Summary

Property

10641 E 250 N
Lafayette, IN 47905

Cromer PMHP-22-BLAK-08962
final House Design

Organization

Indy Energy Solutions
Tom Mesker

Builder

S Brown Construction

Inspection Status

null
Rater ID (RTIN): 8704754
Field Confirmed (Confirmed)

General Building Information

Number Of Bedrooms	4
Number Of Floors	2
Conditioned Floor Area [sq. ft.]	2,653
Has Electric Vehicle Ready Space	Yes
Unconditioned, attached garage?	Yes
Conditioned Volume [cu. ft.]	26,530
Total Units in Building	1
Residence Type	Single family detached
Number of Floors in Building	-
Floor Number	-
Model	
Community	
RESNET/IECC 2006-2018 Climate Zone	5A
IECC 2021 Climate Zone	5A

Foundation Wall

None Present

Foundation Wall Library List

None Present

Slab

Name	Library Type	Perimeter	Floor Grade	Carpet R	Exposed Masonry Area	Surface Area	Location	Enclosing
Slab	icf slab	204	On Grade	2	0	2,605.0 ft ²	Exposed Exterior	Conditioned Space

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
icf slab	Wood Frame / Other	No	14	2	23	Yes	Yes	8.80

Framed Floor

None Present

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Framed Floor Library List

None Present

Rim Joist

None Present

Rim Joist Library List

None Present

Wall

Name	Library Type	Surface Color	Surface Area	Location
Wall	R-21 CC foam	Medium	1,560.0 ft ²	Exposed Exterior
garage	R-15HD	Medium	480.0 ft ²	Unconditioned, attached garage

Wall Library List

Name	Effective R-value
R-15HD	12.589
R-21 CC foam	15.693

Glazing

Name	Library Type	Wall Assignment	Foundation Wall Assignment	Is Operable	Overhang Depth	Overhang Ft To Top	Overhang Ft To Bottom	Orientation	Surface Area
EAST Window / Glass Door	Anderson .30/.29	Wall		Yes	1	1	7	East	120.0 ft ²
NORTH Window / Glass Door	Anderson .30/.29	Wall		Yes	1	1	7	North	36.0 ft ²
WEST Window / Glass Door	Anderson .30/.29	Wall		Yes	1	1	7	West	42.0 ft ²

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Glazing Library List

Name	Shgc	U-factor
Anderson .30/.29	0.29	0.300

Skylight

None Present

Skylight Library List

None Present

Opaque Door

Name	Library Type	Wall Assignment	Foundation Wall Assignment	Emittance	Solar Absorptance	Surface Color	Surface Area	Location
front back	Steel-polyurethane	Wall		0.9	0.75	Medium	40.0 ft ²	Exposed Exterior
garage	Steel-polyurethane	garage		0.9	0.75	Medium	90.0 ft ²	Unconditioned, attached garage

Opaque Door Library List

Name	Effective R-value
Steel-polyurethane	3.60

Roof Insulation

Name	Library Type	Attic Exterior Area [ft ²]	Clay or Concrete Roof Tiles	Surface Color	Surface Area	Location
Roof	R-60 blown	2,900	No	Medium	2,605.0 ft ²	Attic

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Roof Insulation Library List

Name	Has Radiant Barrier	Effective R-value
R-60 blown	No	51.532

Whole House Infiltration

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

Mechanical Ventilation

Ventilation Type	Ventilation Rate [ft ³ / Minute]	Operational hours per day	Fan Watts	Runs once every three hours	Energy Recovery Percent	Model Number	Manufacturer
ERV	100 CFM	24	60 Watts	Yes	80		

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

Building Summary

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Dehumidifier

None Present

Dehumidifier Library List

None Present

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
GEO	Geocomfort GYT036		100%	100%	15%	Conditioned Space
Water Heater	proph50 t2 rh375 30		0%	0%	85%	Conditioned Space

Equipment Type: Geocomfort GYT036

Equipment Type	Ground Source Heat Pump
Fuel Type	Electric
Distribution Type	Forced Air
Motor Type	ECM (Variable Speed)
Heating Efficiency	4.8 COP
Heating Capacity [kBtu/h]	36
Cooling Efficiency	26.1 EER
Cooling Capacity [kBtu/h]	36
Hot Water Efficiency	5 Energy Factor
Tank Capacity (gal.)	40
Closed Loop Ground Source Heat Pump?	No
Use Default Fan and Pump Power	Yes

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Equipment Type: proph50 t2 rh375 30

Equipment Type	Residential Water Heater
Fuel Type	Electric
Distribution Type	Hydronic Delivery (Radiant)
Hot Water Efficiency	3.88 Energy Factor
Tank Capacity (gal.)	50

Distribution System

Distribution Type	Forced Air
Heating Equipment	GEO
Cooling Equipment	GEO
Sq. Feet Served	2,605
# Return Grilles	4
Supply Duct R Value	8
Return Duct R Value	6
Supply Duct Area [ft ²]	703.35
Return Duct Area [ft ²]	521
Leakage to Outdoors	50 CFM @ 25Pa (1.92 / 100 ft ²)
Total Leakage	100 CFM25
Total Leakage Duct Test Conditions	Post-Construction
Use Default Flow Rate	Yes
Duct 1	
Duct Location	Attic (well vented, under insulation)
Percent Supply Area	100
Percent Return Area	100
Duct 2	
Duct Location	Attic (well vented, under insulation)
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

HVAC Grading

HVAC Grading Not Conducted

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Ceiling Fan

Has Ceiling Fan	No
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Water Distribution

Water Fixture Type	Low-flow
Use Default Hot Water Pipe Length	No
Hot Water Pipe Length [ft]	60
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	400 kWh/Year
Annual Gas Cost	\$27.00
Electric Rate	\$0.12/kWh
Gas Rate	\$1.09/Therm
Capacity	3
Imef	1
Defaults Type	HERS Reference
Load Type	Front-load
Loads Per Week	6
Is Outside Conditioned Space	No
Clothes Washer Available	Yes

Dishwasher

Dishwasher Defaults Type	HERS Reference
Dishwasher Size	Standard
Dishwasher Efficiency	467 kWh
Annual Gas Cost	\$33.12
Electric Rate	\$0.12/kWh
Gas Rate	\$1.09/Therm
Is Outside Conditioned Space	No
Dishwasher Available	Yes

Building Summary

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Appliances and Controls

Programmable thermostat?	Yes
Range/Oven Fuel	Electric
Convection Oven?	Yes
Induction Range?	Yes
Range/Oven Outside Conditioned Space?	No
Refrigerator Consumption	691 kWh/Year
Refrigerator Outside Conditioned Space?	No

Notes