

Home Energy Rating Certificate

110 ELMWOOD DRIVE
MICHIGAN CITY, IN 46360



5 Stars Plus

Confirmed Rating

Uniform Energy Rating System

1 Star	1 Star Plus	2 Stars	2 Stars Plus	3 Stars	3 Stars Plus	4 Stars	4 Stars Plus	5 Stars	5 Stars Plus
500-401	400-301	300-251	250-201	200-151	150-101	100-91	90-86	85-71	70 or Less

HERS Index: 51

General Information

Conditioned Area: 2122 sq. ft.
Conditioned Volume: 16976 cubic ft.
Bedrooms: 3

House Type: Single-family detached
Foundation: Conditioned basement

Mechanical Systems Features

Heating: Fuel-fired air distribution, Natural gas, 93.0 AFUE.
Cooling: Air conditioner, Electric, 15.0 SEER.
Water Heating: Instant water heater, Natural gas, 0.98 EF, 0.0 Gal.
Duct Leakage to Outside: 0.00 CFM.
Ventilation System: Balanced: ERV, 150 cfm, 25.0 watts.
Programmable Thermostat: Heating: Yes Cooling: Yes

Building Shell Features

Ceiling Flat: R-52
Vaulted Ceiling: NA
Above Grade Walls: R-33
Foundation Walls: R-13.0
Slab: R-0.0 Edge, R-0.0 Under
Exposed Floor: NA
Window Type: .26 24*
Infiltration: Rate: Htg: 536 Cig: 536 CFM50
Method: Blower door test

Lights and Appliance Features

Percent Fluorescent Pin-Based: 10.00
Percent Fluorescent CFL: 0.00
Refrigerator (kWh/yr): 775.00
Dishwasher Energy Factor: 0.46
Clothes Dryer Fuel: Natural gas
Range/Oven Fuel: Natural gas
Ceiling Fan (cfm/Watt): 0.00

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

REM/Rate - Residential Energy Analysis and Rating Software v12.6

This information does not constitute any warranty of energy cost or savings.
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Rating Number: EEHM1016922

Certified Energy Rater: JERRY THATCHER

Rating Date: 07/14/09

Rating Ordered For: NEW HOMEBUYER

Estimated Annual Energy Cost

Use	MMBtu	Cost	Percent
Heating	21.9	\$282	22%
Cooling	2.2	\$84	5%
Hot Water	12.3	\$159	12%
Lights/Appliances	27.1	\$852	50%
Photovoltaics	-0.0	\$-0	-0%
Service Charges		\$148	11%
Total		\$1304	100%

This home meets or exceeds the minimum

criteria for all of the following:

- 1998 International Energy Conservation Code
- 2000 International Energy Conservation Code
- 2001 International Energy Conservation Code
- 2003 International Energy Conservation Code
- 2004 International Energy Conservation Code
- 2006 International Energy Conservation Code

1992 CABO Model Energy Code

1993 CABO Model Energy Code

1995 CABO Model Energy Code

Eligible for Special Mortgage Incentives

EEH MIDWEST INC

PO BOX 503248

INDIANAPOLIS IN 46256

317-915-9204

317-915-9206 Fax



An ENERGY STAR® Qualified Home

This home built at

110 ELMWOOD DRIVE, MICHIGAN CITY, IN

by FLEMINGTON CONSTRUCTION

has been verified by ENERGY DIAGNOSTICS, an independent professional or organization,
to meet or exceed strict energy efficiency guidelines
set by the U.S. Environmental Protection Agency.

HERS Index: 51

07/14/09



David Lee
Chief
ENERGY STAR Residential Branch

www.energystar.gov



Sam Rashkin
National Director
ENERGY STAR for Homes

ENERGY STAR HOME REPORT

Date: July 15, 2009	Rating No.: EEHM1016922
Building Name: JT10911	Rating Org.: ENERGY DIAGNOSTICS
Owner's Name: NEW HOMEBUYER	Phone No.: 219-464-4457
Property: 110 ELMWOOD DRIVE	Rater's Name: JERRY THATCHER
Address: MICHIGAN CITY, IN 46360	Rater's No.: 1001
Builder's Name: FLEMINGTON CONSTRUCTION	
Weather Site: South Bend, IN	Rating Type: Confirmed Rating
File Name: JT10911V12.61.blg	Rating Date: 07/14/09

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

	ENERGY STAR	As Designed
Heating:	34.4	12.6
Cooling:	13.4	6.3
Water heating:	10.2	2.5
Lighting & Appliances:	23.0	27.1
Total:	80.9	48.4
HERS Index:	85	51

ENERGY STAR Mandatory Requirements

- | | |
|---|--|
| <input checked="" type="checkbox"/> Thermal Bypass Inspection Checklist * | <input checked="" type="checkbox"/> ENERGY STAR Products * |
| <input checked="" type="checkbox"/> Ductwork Requirements | <input checked="" type="checkbox"/> ENERGY STAR Scoring Exceptions |

* Thermal Bypass Checklist and ENERGY STAR Products are not checked in REM/Rate at this time.

**This home MEETS OR EXCEEDS the energy efficiency requirements
for designation as an EPA ENERGY STAR Qualified Home.**

Pollution Prevented

Energy Cost Savings (\$/year)

Type of Emissions	Reduction (lb/year)		
Carbon Dioxide (CO2)	8008.2	Heating:	\$555
Sulfur Dioxide (SO2)	12.7	Cooling:	\$94
Nitrogen Oxides (NOx)	10.9	Water Heating:	\$98
		Lights & Appliances:	\$-2
		Total:	\$745

The energy savings and pollution prevented are calculated by comparing the Rated Home to the Reference Home as defined in the "Mortgage Industry National Home Energy Rating Systems Standards" as promulgated by the Residential Energy Services Network (RESNET). In accordance with these guidelines, building inputs affecting setpoints, infiltration rates, window shading and the existence of mechanical systems may have been changed prior to calculating loads.

REM/Rate - Residential Energy Analysis and Rating Software v12.6

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ENERGY STAR HOME VERIFICATION SUMMARY

Date:	July 15, 2009	Rating No.:	EEHM1016922
Building Name:	JT10911	Rating Org.:	ENERGY DIAGNOSTICS
Owner's Name:	NEW HOMEBUYER	Phone No.:	219-464-4457
Property:	110 ELMWOOD DRIVE	Rater's Name:	JERRY THATCHER
Address:	MICHIGAN CITY, IN 46360	Rater's No.:	1001
Builder's Name:	FLEMINGTON CONSTRUCTION		
Weather Site:	South Bend, IN	Rating Type:	Confirmed Rating
File Name:	JT10911V12.61.blg	Rating Date:	07/14/09

Building Information

Conditioned Area (sq ft):	2122	Housing Type:	Single-family detached
Conditioned Volume (cubic ft):	16976	Foundation Type:	Conditioned basement
Insulated Shell Area (sq ft):	3959	HERS Index:	51 *****
Number of Bedrooms:	3		

Building Shell

Ceiling w/Attic:	R-52 ATTIC* U=0.019	Window/Wall Ratio:	0.20
Vaulted Ceiling:	None	Window Type:	.26 .24*
Above Grade Walls:	8" SIPS R-33* U=0.027	Window U-Value:	0.260
Found. Walls (Cond):	R-13 WALL* R=13.0	Window SHGC:	0.240
Found. Walls (Uncond):	None	Infiltration:	Htg: 536 Clg: 536 CFM50
Frame Floors:	None	Measured Duct Leakage:	0.00 CFM25
Slab Floors:	Uninsulated* U=0.365	Leakage to Outside:	0.00 CFM

Mechanical Systems

Heating:	Fuel-fired air distribution, 56.0 kBtuh, 93.0 AFUE.
Cooling:	Air conditioner, 24.0 kBtuh, 15.0 SEER.
Water Heating:	Instant water heater, Gas, 0.98 EF.
Programmable Thermostat:	Heat=Yes; Cool=Yes

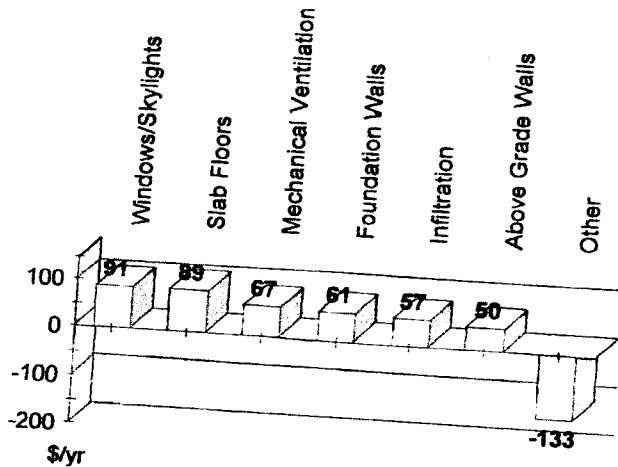
Note: Where feature level varies in home, the dominant value is shown.

This home MEETS OR EXCEEDS the EPA's requirements for an ENERGY STAR Home.

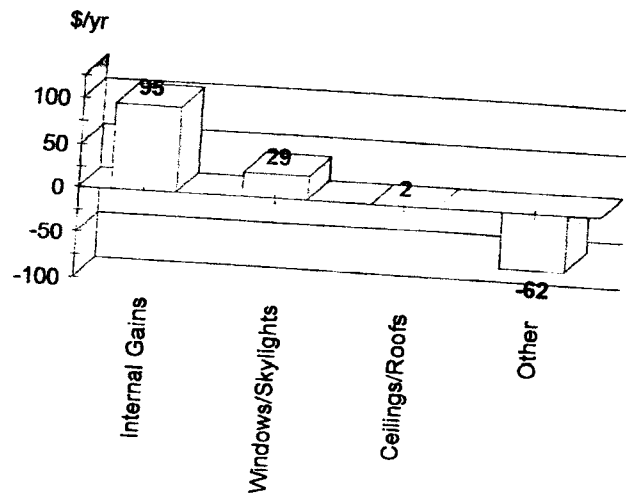
ACTION REPORT

Date: July 15, 2009	Rating No.: EEHM1016922
Building Name: JT10911	Rating Org.: ENERGY DIAGNOSTICS
Owner's Name: NEW HOMEBUYER	Phone No.: 219-464-4457
Property: 110 ELMWOOD DRIVE	Rater's Name: JERRY THATCHER
Address: MICHIGAN CITY, IN 46360	Rater's No.: 1001
Builder's Name: FLEMINGTON CONSTRUCTION	
Weather Site: South Bend, IN	
File Name: JT10911V12.61.blg	Rating Type: Confirmed Rating
	Rating Date: 07/14/09

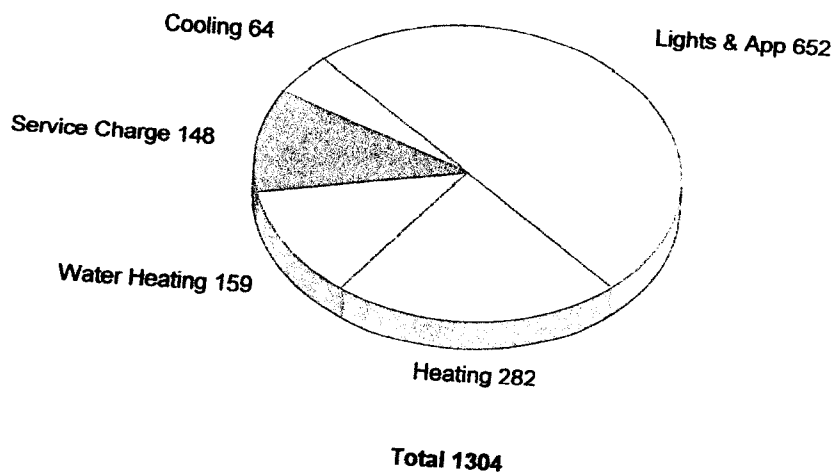
Heating Cost (\$/yr)



Cooling Cost (\$/yr)



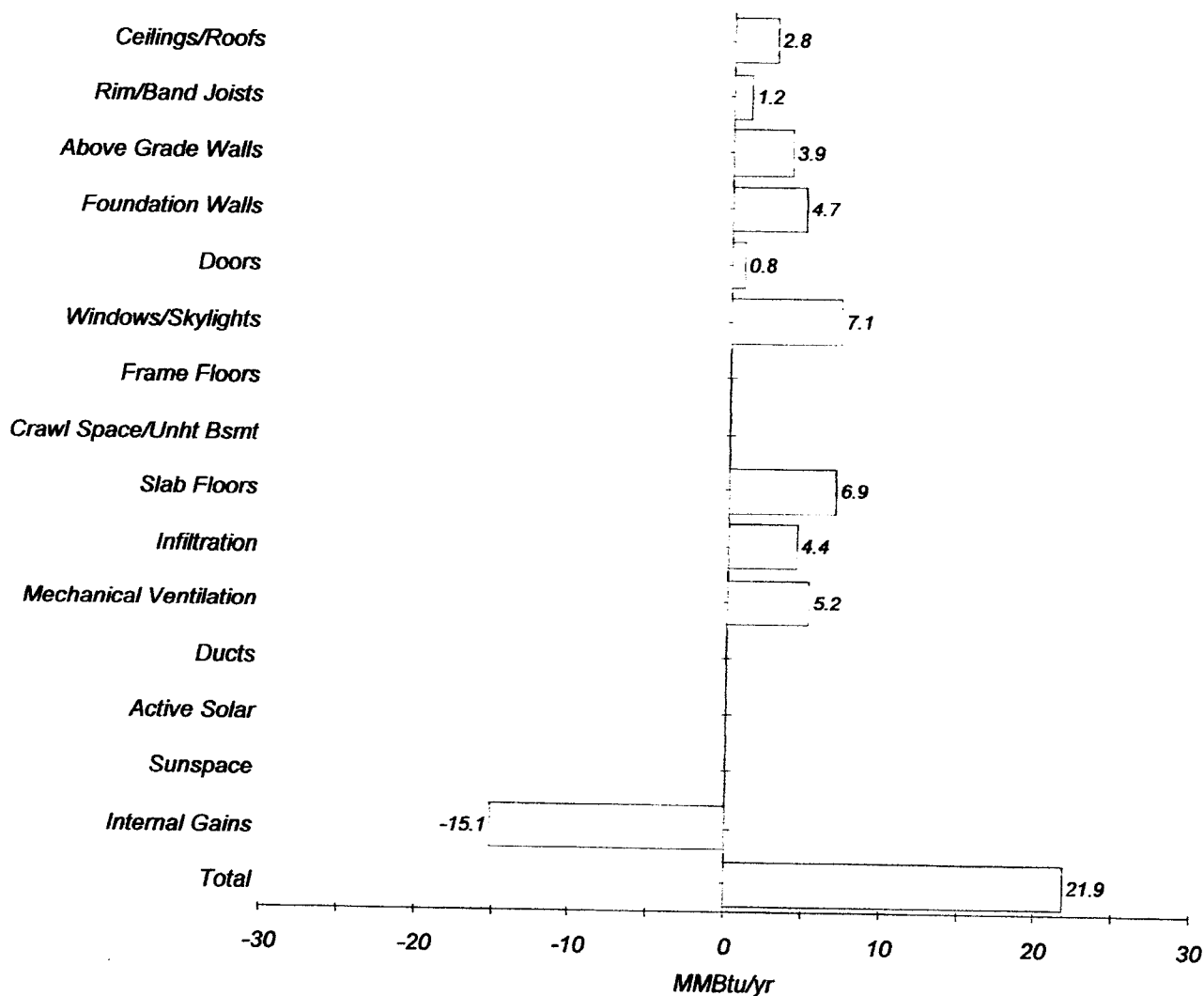
Annual Energy Cost (\$/yr)



COMPONENT CONSUMPTION SUMMARY

Date:	July 15, 2009	Rating No.:	EEHM1016922
Building Name:	JT10911	Rating Org.:	ENERGY DIAGNOSTICS
Owner's Name:	NEW HOMEBUYER	Phone No.:	219-464-4457
Property:	110 ELMWOOD DRIVE	Rater's Name:	JERRY THATCHER
Address:	MICHIGAN CITY, IN 46360	Rater's No.:	1001
Builder's Name:	FLEMINGTON CONSTRUCTION		
Weather Site:	South Bend, IN	Rating Type:	Confirmed Rating
File Name:	JT10911V12.61.big	Rating Date:	07/14/09

Heating Season



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AIR LEAKAGE REPORT

Date: July 15, 2009	Rating No.:
Building Name: JT10911	Rating Org.: ENERGY DIAGNOSTICS
Owner's Name: NEW HOMEBUYER	Phone No.: 219-464-4457
Property: 110 ELMWOOD DRIVE	Rater's Name: JERRY THATCHER
Address: MICHIGAN CITY, IN 46360	Rater's No.: 1001
Builder's Name: FLEMINGTON CONSTRUCTION	
Weather Site: South Bend, IN	Rating Type: Confirmed Rating
File Name: JT10911V12.61.big	Rating Date: 07/14/09

Whole House Infiltration

	Blower door test	
	Heating	Cooling
Natural ACH:	0.09	0.07
ACH @ 50 Pascals:	1.89	1.89
CFM @ 25 Pascals:	342	342
CFM @ 50 Pascals:	536	536
Eff. Leakage Area:	29.4	29.4
Specific Leakage Area:	0.00010	0.00010
ELA/100 sf shell:	0.74	0.74

Total Duct Leakage to Outside

CFM @ 25 Pascals:	0
CFM25 / CFMfan:	0.0000
CFM25 / CFA:	0.0000
CFM per Std 152:	N/A
CFM per Std 152 / CFA:	N/A
CFM @ 50 Pascals:	0
Eff. Leakage Area:	0.00
Thermal Efficiency:	N/A

Ventilation

Mechanical:	Balanced
Sensible Recovery Eff. (%):	80.0
Total Recovery Eff. (%):	80.0
Rate (cfm):	150
Hours/Day:	24.0
Fan Watts:	25.0
Cooling Ventilation:	Natural Ventilation

ASHRAE 62.2 - 2003 Ventilation Requirements

For this home to comply with ASHRAE Standard 62.2 - 2003 Ventilation and Acceptable Indoor Air Quality in Low-Rise Residential Buildings, a minimum of 51 cfm of mechanical ventilation must be provided continuously, 24 hours per day. Alternatively, an intermittently operating mechanical ventilation system may be used if the ventilation rate is adjusted accordingly. For example, a 1 cfm mechanical ventilation system would need to operate 12 hours per day, as long as the system operates to provide required average ventilation once each hour.