FUEL SUMMARY				
Date:	November 14, 2012	Rating No.:		
Building Name:	Evolve 1.9 Lot 94	Rating Org.:	Everyday Green	
Owner's Name:		Phone No.:	717-587-0921	
Property:	664 Richmond Drive	Rater's Name:	Scott Pusey	
Address:	Lancaster, PA 17601	Rater's No.:	6780062	
Builder's Name:	HESS Home builders			
Weather Site:	Harrisburg, PA	Rating Type:	Confirmed	

2012-11-02

Hess-C-Lot 94-664 Richmond Drive 10-26-12.blc Rating Date:

File Name:

	Evolv	e 1.9 Lot 94	
Annual Energy Cost (\$/yr)			
Natural gas	\$	546	
Electric	\$	1261	
Annual End-Use Cost (\$/yr)			
Heating	\$	620	
Cooling	\$	271	
Water Heating	\$	157	
Lights & Appliances	\$	760	
Photovoltaics	\$	-0	
Service Charges	\$	204	
Total	\$	2012	
Annual End-Use Consumption			
Heating (CCF)		375	
Heating (kWh)		1904	
Cooling (kWh)		2057	
Water Heating (CCF)		114	
Water Heating (kWh)		338	
Lights & Appliances (CCF)		67	
Lights & Appliances (kWh)		5250	
Annual Energy Demands (kW)			
Heating		2.2	
Cooling		1.7	
Water Heating (Winter Peak)		0.1	
Water Heating (Summer Peak)		0.0	
Lights & Appliances (Winter Peak)		0.5	
Lights & Appliances (Summer Peak)		0.9	
Total Winter Peak		2.7	
Total Summer Peak		2.6	

## **FUEL SUMMARY**

Evolve 1.9 Lot 94 Page 2

**Utility Rates:** 

Electricity: PPL (new)
Gas: UGI

## **ENERGY COST AND FEATURE REPORT**

Date: November 14, 2012 Rating No.:

Building Name: Evolve 1.9 Lot 94 Rating Org.: Everyday Green

Owner's Name: Phone No.: 717-587-0921

Property: 664 Richmond Drive Rater's Name: Scott Pusey
Address: Lancaster, PA 17601 Rater's No.: 6780062

Builder's Name: HESS Home builders

Weather Site: Harrisburg, PA Rating Type: Confirmed
File Name: Hess-C-Lot 94-664 Richmond Drive 10-26-12.blg Rating Date: 2012-11-02

## Evolve 1.9 Lot 94

### **ANNUAL ENERGY COSTS**

Heating	\$ 620
Cooling	\$ 271
Water Heating	\$ 157
Lights & Appliances	\$ 760
Photovoltaics	\$ -0
Service Charges	\$ 204
Total	\$ 2012
Average Monthly	\$ 168

### **ENERGY FEATURES**

Ceiling w/Attic: R-38 Blown, Attic U=0.026

Sealed Attic: None

Vaulted Ceiling: R-25, Vaulted U=0.059

Above Grade Walls: R-19 U=0.072

Foundation Walls (Cond): None

Found. Walls (Uncond): R-13 Draped, Full R=13.0

Doors: MI 3580 U=0.222

Windows: U:0.31, SHGC:0.46 U=0.310

Frame Floors: Uninsulated U=0.257

Slab Floors: None

Infiltration: Htg: 1003 Clg: 1003 CFM50

Infilt. Measure: Blower door test

Mechanical Ventilation: None Interior Mass: None

Mech Equip List: Heating: Fuel-fired air distribution, 56.0

kBtuh, 95.0 AFUE.

Water Heating: Instant water heater,

Gas, 0.94 EF.

Water Heating: Conventional, Elec, 0.93 EF.

## **ENERGY COST AND FEATURE REPORT**

Evolve 1.9 Lot 94 Page 2

Cooling: Air conditioner, 24.0 kBtuh, 13.0

SEER.

ASHP: Htg: 20.9 kBtuh, 11.3 HSPF. Clg:

9.0 kBtuh, 13.0 SEER.

Programmable Thermostat: Heat=Yes; Cool=Yes

Ducts: Uninsulated Conditioned space

Duct Leakage to Outside: 47.00 CFM per Std 152
Total Duct Leakage: 137.00 CFM per Std 152

Lights/Appliances: Defaults
Active Solar: None
Photovoltaics: 0.00
Sunspace: No

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

## PERFORMANCE SUMMARY

Date: November 14, 2012 Rating No.:

Building Name: Evolve 1.9 Lot 94 Rating Org.: Everyday Green

Owner's Name: Phone No.: 717-587-0921

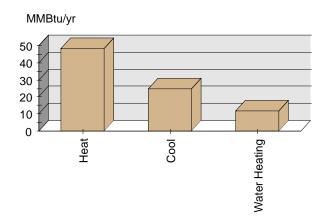
Property: 664 Richmond Drive Rater's Name: Scott Pusey
Address: Lancaster, PA 17601 Rater's No.: 6780062

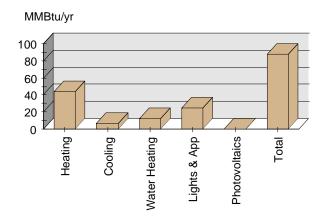
Builder's Name: HESS Home builders

Weather Site: Harrisburg, PA Rating Type: Confirmed
File Name: Hess-C-Lot 94-664 Richmond Drive 10-26-12.blg Rating Date: 2012-11-02

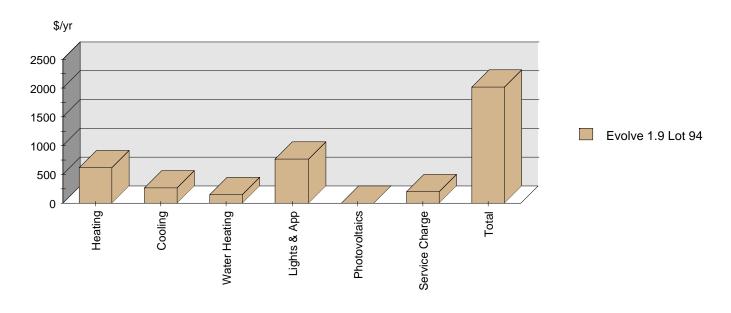
## **Annual Load**

## **Annual Consumption**



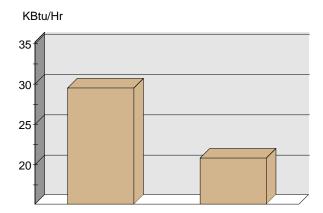


## **Annual Energy Cost**



Evolve 1.9 Lot 94 Page 2

# **Design Loads**



## **Utility Rates:**

Electricity: PPL (new)
Gas: UGI

## SOURCE ENERGY & EMISSIONS REPORT

Date: November 14, 2012 Rating No.:

Building Name: Evolve 1.9 Lot 94 Rating Org.: Everyday Green
Owner's Name: Phone No.: 717-587-0921

Owner's Name: Phone No.: 717-587-0921
Property: 664 Richmond Drive Rater's Name: Scott Pusey
Address: Lancaster, PA 17601 Rater's No.: 6780062

Builder's Name: HESS Home builders

Weather Site: Harrisburg, PA Rating Type: Confirmed
File Name: Hess-C-Lot 94-664 Richmond Drive 10-26-12.blg Rating Date: 2012-11-02

### Source Energy Consumption (MMBtu/year)

### All Electric

	Reference Home	As Designed	Difference	% Difference
Heating:	110.3	67.9	-42.4	-38.4%
Cooling:	30.9	16.0	-14.9	-48.2%
Water heating:	25.0	17.6	-7.4	-29.5%
Lights & Appliances:	87.2	71.7	-15.5	-17.8%
Photovoltaics:	0.0	0.0		
Total:	253.4	173.2	-80.1	-31.6%

#### **Total Emissions**

### All Electric

Type of Emissions	Reference Home	As Designed	Difference	% Difference
Carbon Dioxide (CO2) - tons/year	12.9	8.9	-4.0	-31.2%
Sulfur Dioxide (SO2) - lbs/year	131.1	81.6	-49.5	-37.8%
Nitrogen Oxides (NOx) - lbs/vear	34.8	23.8	-11.0	-31.7%

### **Emissions By End-Use**

(All Electric Reference Home versus As Designed)

	CO2-t	CO2-tons/yr		SO2-lbs/yr		lbs/yr
	Ref	Des	Ref	Des	Ref	Des
Heating	5.7	3.6	45.4	18.5	15.1	9.3
Cooling	1.5	0.8	23.0	11.9	4.3	2.2
Water Heating	1.3	0.9	3.1	3.1	3.4	2.4
Lights & Appliances	4.3	3.6	59.6	48.0	12.0	9.9
Photovoltaics	0.0	0.0	0.0	0.0	0.0	0.0

The energy and emission values are calculated by comparing the Rated Home to an all-electric version of the Reference Home as defined in the "Mortgage Industry National Home Energy Rating Systems Standards" as promulgated by the Residential Energy Services Network (RESNET). Site-to-source multipliers and air emission data were taken from the US EPA eGRID2007 database.

#### **EMISSIONS REPORT** Date: November 14, 2012 Rating No.: **Building Name:** Evolve 1.9 Lot 94 Rating Org.: Everyday Green Owner's Name: Phone No.: 717-587-0921 Rater's Name: Scott Pusey Property: 664 Richmond Drive 6780062 Address: Lancaster, PA 17601 Rater's No.: Builder's Name: **HESS Home builders** Weather Site: Harrisburg, PA Rating Type: Confirmed

### **Total Emissions**

2012-11-02

Hess-C-Lot 94-664 Richmond Drive 10-26-12.blc Rating Date:

File Name:

	Evolve 1.9 Lot 94
Type of Emissions	
Carbon Dioxide (CO2) - tons/year	9.1
Sulfur Dioxide (SO2) - Ibs/year	87.4
Nitrogen Oxides (NOx) - Ibs/year	24.4
Emissions By End-Use	
	Evolve 1.9 Lot 94
Carbon Dioxide (CO2) - tons/year	
Heating	3.4
Cooling	1.2
Water Heating	0.9
Lights & Appliances	3.6
Photovoltaics	0.0
Sulfur Dioxide (SO2) - lbs/year	
Heating	17.4
Cooling	18.8
Water Heating	3.1
Lights & Appliances	48.0
Photovoltaics	0.0
Nitrogen Oxide (NOx) - Ibs/year	
Heating	8.8
Cooling	3.5
Water Heating	2.3
Lights & Appliances	9.9
Photovoltaics	0.0

Site-to-source energy multipliers and air emission data were taken from the US EPA eGRID2007 database.