

Energy Cost and Features



Property
Southaven Homes
1647 Woodvine
Houston, TX 77055

Organization
Brown Inspection Service
281-364-0736
Derrick Brown

HERS
Projected Rating
5/19/2017
Rating
No:DB-SHH,1647,5/19/2017
Rater ID:5816014

Weather:Houston-Bush Intercont,
TX
Woodvine
Southaven Homes (16417

Builder
Southaven Homes

Annual Energy Costs	\$/yr
Heating	215
Cooling	95
Water Heating	106
Lights & Appliances	921
Photovoltaics	-0
Service Charges	286
Total	1622
Average Monthly(\$/Month)	135

Energy Features

Ceiling w/Attic	R-38 Bln 8" 19oc***** U=0.027, with Barrier
Sealed Attic	None
Vaulted Ceiling	None
Above Grade Wall	R-13 Gr 1***** U=0.085
Foundation Walls (Cond)	None
Foundation Walls (Uncond)	None
Doors	1-3/4 Fiber 1/2 L***** U=0.195
Windows	SHGC21-U29***** U=0.290
Floors	None
Slab Floors	Uninsulated NONE***** U=0.663
Infiltration	Htg: 5.00 Clg: 5.00 ACH50
Infiltration Measure	Blower door test
Mechanical Ventilation	Air Cyclor: 83 cfm, 250.0 watts.
Interior Mass	None
Mechanical Equipment 1	Heating: Fuel-fired air distribution, 80.0 kBtuh, 80.0 AFUE.
Mechanical Equipment 2	Heating: Fuel-fired air distribution, 80.0 kBtuh, 80.0 AFUE.
Mechanical Equipment 3	Cooling: Air conditioner, 36.0 kBtuh, 14.0 SEER.
Mechanical Equipment 4	Cooling: Air conditioner, 36.0 kBtuh, 14.0 SEER.
Mechanical Equipment 5	Water Heating: Conventional, Gas, 0.62 EF.
Programmable Thermostat	Heat=Yes; Cool=Yes
Ducts	R-8.0Attic, exposed
Duct Leakage to Outside	72.12 CFM @ 25 Pascals
Total Duct Leakage	96.16 CFM @ 25 Pascals

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

REM/Rate - Residential Energy Analysis and Rating Software v14.6.3
This information does not constitute any warranty of energy cost or savings.
© 1985-2016 Noresco, Boulder, Colorado.

Energy Cost and Features



Property
Southaven Homes
1647 Woodvine
Houston, TX 77055

Organization
Brown Inspection Service
281-364-0736
Derrick Brown

HERS
Projected Rating
5/19/2017
Rating
No:DB-SHH,1647,5/19/2017
Rater ID:5816014

Weather:Houston-Bush Intercont,
TX
Woodvine
Southaven Homes (16417)

Builder
Southaven Homes

Energy Features

Lights/Appliances	Rating Tab
Active Solar	None
Photovoltaics	0.00
Sunspace	No

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

2015 IECC Building UA Compliance



Property
Southaven Homes
1647 Woodvine
Houston, TX 77055

Organization
Brown Inspection Service
281-364-0736
Derrick Brown

HERS
Projected Rating
5/19/2017
Rating
No:DB-SHH,1647,5/19/2017
Rater ID:5816014

Weather:Houston-Bush Intercont,
TX
Woodvine
Southaven Homes (16417)

Builder
Southaven Homes

Elements

Insulation Levels

	2015 IECC	As Designed
Shell UA Check		
Ceilings:	46.3	48.8
Above-Grade Walls:	340.3	343.5
Windows and Doors:	228.6	166.1
Slab Floor:	80.9	80.9
Overall UA (Design must be equal or lower):	696.0	639.4

Mandatory Requirements

Shell UA Check	PASSES
Duct Insulation R-Value Check (per Section 403.3.1)	PASSES
Window U-Value and SHGC Check (per Section 402.5)	PASSES
Home Infiltration (Section 402.4.1.2)	PASSES
Duct Leakage (Section 403.3.3)	PASSES
Mechanical Ventilation (Section 403.6)	PASSES
Mechanical Ventilation Fan Efficacy (Section 403.6.1)	PASSES
Mandatory Requirements Check Box (IECC 15)	PASSES

This home **MEETS** the overall thermal performance requirements and verifications of the International Energy Conservation Code based on a climate zone of 2A. (Section 402, International Energy Conservation Code, 2015 edition.) In fact, this home surpasses the requirements by 8.1%.

Name | Derrick Brown
Organization | Brown Inspection Service

Signature | 
Date | 20 July 2017

2015 IECC Energy Cost Compliance



Property
Southaven Homes
1647 Woodvine
Houston, TX 77055

Organization
Brown Inspection Service
281-364-0736
Derrick Brown

HERS
Projected Rating
5/19/2017
Rating
No:DB-SHH,1647,5/19/2017
Rater ID:5816014

Weather:Houston-Bush Intercont,
TX
Woodvine

Builder
Southaven Homes

Annual Energy Cost

\$/yr

	2015 IECC	As Designed
Heating	264	234
Cooling	118	108
Water Heating	105	106
SubTotal - Used to Determine Compliance	487	448
Lights & Appliances	788	921
Photovoltaics	-0	-0
Service Charge	286	286
Total	1561	1654

Mandatory Requirements

Annual Energy Cost Check	PASSES
Duct Insulation R-Value Check (per Section 405.2)	PASSES
Window U-Value and SHGC Check (per Section 402.5)	PASSES
Home Infiltration (Section 402.4.1.2)	PASSES
Duct Leakage (Section 403.3.3)	PASSES
Mechanical Ventilation (Section 403.6)	PASSES
Mechanical Ventilation Fan Efficacy (Section 403.6.1)	PASSES
Mandatory Requirements Check Box (2015 IECC)	PASSES

This home **MEETS** the annual energy cost requirements of Section 405 of the 2015 International Energy Conservation Code based on a climate zone of 2A. In fact, this home surpasses the requirements by 8.0%.

Name | Derrick Brown
Organization | Brown Inspection Service

Signature | 
Date | 20 July 2017

In accordance with IECC, building inputs, such as setpoints, infiltration rates, and window shading may have been changed prior to calculating annual energy cost. Furthermore, the standard reference design HVAC system efficiencies are set equal to those in the design home as specified in the 2015 IECC. These standards are subject to change, and software updates should be obtained periodically to ensure the compliance calculations reflect current federal minimum standards.

Certificate of Completion



Property
Southaven Homes
1647 Woodvine
Houston, TX 77055

Organization
Brown Inspection Service
281-364-0736
Derrick Brown

HERS
Projected Rating
5/19/2017
Rating
No:DB-SHH,1647,5/19/2017
Rater ID:5816014

Weather:Houston-Bush Intercont,
TX
Woodvine
Southaven Homes (16417

Builder
Southaven Homes

[Note: This form 701 must be executed by the HERS Certified Energy Rater, the Home Owner and the Contractor, and must be submitted to the Mortgage Lender prior to the Release of Escrowed Funds for Completion of Improvements to the Home.]

The Undersigned home owner has retained

(the 'Contractor') to complete certain recommended improvements as set forth in the Home Energy Certificate issued by the state approved Home Energy Rating System. The undersigned Home Owner, Contractor and HERS Certified Energy Rater hereby certify that they have inspected the property located at

and that the improvements to the property have been completed in a workmanlike manner and in accordance with the requirements of the FNMA/FHLMC Energy Mortgage Pilot Program. The undersigned understand that this certification will be relied upon by the Mortgage Lender to release monies currently held in escrow pending completion of said improvements.

HOME OWNER:

Date: _____

CONTRACTOR:

By: _____

Title: _____

Date: _____

State Approved

Home Energy Rating System

CERTIFIED ENERGY RATER:

By: _____

Title: _____

Date: _____

Energy Mortgage Pilot Form 701