Energy Cost and Features

Property 1314 W 21st St Unit B Houston, TX 77008

Weather:Houston, TX Project # 1314 W 21st St Unit B Houston Tx Plan 2235 Snyder.blg **Organization** Snyder Energy Services

832-878-2914 Frank Wagner

Builder

HERS

Projected Rating 10/5/2014 Rating No:License # 00132720 Rater ID:7356719

Annual Energy Costs	\$/yr
Heating	232
Cooling	347
Water Heating	149
Lights & Appliances	924
Photovoltaics	-0
Service Charges	158
Total	1811
Average Monthly(\$/Month)	151

Energy Features

Ceiling w/Attic	None
Sealed Attic	None
Vaulted Ceiling	R-21 Spray Foam U=0.046, with Barrier
Above Grade Wall	R-13 GL I Foam U=0.083
Foundation Walls (Cond)	None
Foundation Walls (Uncond)	None
Doors	Fiberglass U=0.128
Windows	ENERGY STAR CZ-25 U=0.300
Floors	R-19 Foam 5.5" U=0.052
Slab Floors	None
Infiltration	Htg: 2050 Clg: 2050 CFM50
Infiltration Measure	Blower door test
Mechanical Ventilation	Supply Only: 150 cfm, 50.0 watts.
Interior Mass	None
Mechanical Equipment 1	Heating: Fuel-fired air distribution, 50.0 kBtuh, 95.0 AFUE.
Mechanical Equipment 2	Heating: Fuel-fired air distribution, 60.0 kBtuh, 95.0 AFUE.
Mechanical Equipment 3	Cooling: Air conditioner, 24.0 kBtuh, 16.0 SEER.
Mechanical Equipment 4	Cooling: Air conditioner, 36.0 kBtuh, 16.0 SEER.
Mechanical Equipment 5	Water Heating: Instant water heater, Gas, 0.95 EF.
Programmable Thermostat	Heat=Yes; Cool=Yes
Ducts	R-6.0Conditioned space
Duct Leakage to Outside	0.00 CFM @ 25 Pascals

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

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Weather:Houston, TX Project # 1314 W 21st St Unit B Houston Tx Plan 2235 Snyder.blg Organization

Snyder Energy Services 832-878-2914 Frank Wagner

Builder

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Energy Features

Total Duct Leakage	85.00 CFM @ 25 Pascals
Lights/Appliances	Defaults
Active Solar	None
Photovoltaics	0.00
Sunspace	No

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

2009 IECC Energy Cost Compliance

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Builder

HERS Projected Rating 10/5/2014 Rating No:License # 00132720 Rater ID:7356719

\$/yr

1

Annual Energy Cost

	2009 IECC	As Designed
Heating	416	333
Cooling	481	408
Water Heating	248	149
SubTotal - Used to Determine Compliance	1145	890
Lights & Appliances	918	907
Photovoltaics	-0	-0
Service Charge	158	158
Total	2221	1955

Mandatory Requirements

Window SHGC Check (Section 402.5)		
Window SHGC Value (Design must be equal or lower)	0.500	0.250
Home Infiltration (Section 402.4.2)		PASSES
Duct Leakage (Section 403.2.2)		PASSES

This home MEETS the annual energy cost requirements of Section 405 of the 2009 International Energy Conservation Code based on a climate zone of 2A. In fact, this home surpasses the requirements by 22.3%.

Name	Frank Wagner	Signature	Froller
Organization	Snyder Energy Services	Date	7 October 2014

Mechanical Systems

Heating	Fuel-fired air distribution, 50.0 kBtuh, 95.0 AFUE.
Heating	Fuel-fired air distribution, 60.0 kBtuh, 95.0 AFUE.
Cooling	Air conditioner, 24.0 kBtuh, 16.0 SEER.
Cooling	Air conditioner, 36.0 kBtuh, 16.0 SEER.
Water Heating	Instant water heater, Gas, 0.95 EF.
Window-to-Floor Area Ratio:	0.15
Blower door test	Htg: 2050 Clg: 2050 CFM50

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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 2009 IECC. These standards are subject to change, and software updates should be obtained periodically to ensure the compliance calculations reflect current federal minimum standards.

Home E	Energy	Rating Ce 1314 W 21st St Uni Houston, TX 7700	it B	Registry ID Rating Number Certified Energy Rater Rating Date Rating Ordered For	License Frank Wa 10/5/201	-	
				Estimated A	Annual En	ergy Cost	
				Use	MMBtu	Cost	Percent
		5 Stars Plus		Heating	14.5	\$234	13%
		Projected Rating HERS Index: 56	-	Cooling	7.6	\$345	1 9 %
		TERS INDEX. 50		Hot Water	10.4	\$162	9 %
Projected Rating:	Based on Pla	ns - Field Confirm	ation Required.	Lights/Appliances	24.3	\$907	50%
General Information			•	Photovoltaics	-0.0	\$-0	-0%
Conditioned Area	2235 sq. ft.	House Type Sing	le-family detached	Service Charges		\$158	9 %
Conditioned Volume	2235 sq. rt. 22350 cubic ft.		n crawl space/raised floor	Total	56.9	\$1807	100%
Bedrooms	3		in crawe space/raised noor		Criteria		
200.00	•						
Mechanical Systems F				This home meets or exceeds t	the minimum o	riteria for the	following:
Mechanical Systems F Heating: Heating: Cooling: Duct Leakage to Outside Ventilation System Programmable Thermostat	Fuel-fired air dist Fuel-fired air dist			This home meets or exceeds t	the minimum o	riteria for the	following:
Heating: Heating: Cooling: Duct Leakage to Outside Ventilation System Programmable Thermostat	Fuel-fired air dist Fuel-fired air dist Air conditioner, E 0.00 CFM25. Supply Only: 150 o Heat=Yes; Cool=Y	ribution, Natural gas, 95.0 AF lectric, 16.0 SEER. cfm, 50.0 watts.		This home meets or exceeds t	the minimum o	riteria for the	following:
Heating: Heating: Cooling: Duct Leakage to Outside Ventilation System Programmable Thermostat Building Shell Feature	Fuel-fired air dist Fuel-fired air dist Air conditioner, E 0.00 CFM25. Supply Only: 150 o Heat=Yes; Cool=Y es	ribution, Natural gas, 95.0 AF lectric, 16.0 SEER. cfm, 50.0 watts. es	FUE.	This home meets or exceeds t	the minimum o	riteria for the	following:
Heating: Heating: Cooling: Duct Leakage to Outside Ventilation System Programmable Thermostat	Fuel-fired air dist Fuel-fired air dist Air conditioner, E 0.00 CFM25. Supply Only: 150 o Heat=Yes; Cool=Y	ribution, Natural gas, 95.0 AF lectric, 16.0 SEER. cfm, 50.0 watts. es Slab	FUE. None	This home meets or exceeds t	the minimum o	riteria for the	following:
Heating: Heating: Cooling: Duct Leakage to Outside Ventilation System Programmable Thermostat Building Shell Feature Ceiling Flat Sealed Attic	Fuel-fired air dist Fuel-fired air dist Air conditioner, E 0.00 CFM25. Supply Only: 150 o Heat=Yes; Cool=Y es NA	ribution, Natural gas, 95.0 AF lectric, 16.0 SEER. cfm, 50.0 watts. es Slab Exposed Floor	FUE.	This home meets or exceeds to	the minimum o	riteria for the	following:
Heating: Heating: Cooling: Duct Leakage to Outside Ventilation System Programmable Thermostat Building Shell Feature Ceiling Flat	Fuel-fired air dist Fuel-fired air dist Air conditioner, E 0.00 CFM25. Supply Only: 150 o Heat=Yes; Cool=Y es NA NA	ribution, Natural gas, 95.0 AF lectric, 16.0 SEER. cfm, 50.0 watts. es Slab	FUE. None R-19.0 U-Value: 0.300, SHGC: 0.250		the minimum o	riteria for the	following:
Heating: Heating: Cooling: Duct Leakage to Outside Ventilation System Programmable Thermostat Building Shell Feature Ceiling Flat Sealed Attic Vaulted Ceiling	Fuel-fired air dist Fuel-fired air dist Air conditioner, E 0.00 CFM25. Supply Only: 150 o Heat=Yes; Cool=Y es NA NA R-21.0 w/RB	ribution, Natural gas, 95.0 AF lectric, 16.0 SEER. cfm, 50.0 watts. es Slab Exposed Floor Window Type	FUE. None R-19.0	TITLE	the minimum o	riteria for the	following:
Heating: Heating: Cooling: Duct Leakage to Outside Ventilation System Programmable Thermostat Building Shell Feature Ceiling Flat Sealed Attic Vaulted Ceiling Above Grade Walls Foundation Walls	Fuel-fired air dist Fuel-fired air dist Air conditioner, E 0.00 CFM25. Supply Only: 150 o Heat=Yes; Cool=Y es NA NA R-21.0 w/RB R-13.0 NA	ribution, Natural gas, 95.0 AF lectric, 16.0 SEER. cfm, 50.0 watts. es Slab Exposed Floor Window Type Infiltration Rate	FUE. None R-19.0 U-Value: 0.300, SHGC: 0.250 Htg: 2050 Clg: 2050 CFM50	TITLE Company Address City, State, Zip	the minimum o	riteria for the	following:
Heating: Heating: Cooling: Duct Leakage to Outside Ventilation System Programmable Thermostat Building Shell Feature Ceiling Flat Sealed Attic Vaulted Ceiling Above Grade Walls Foundation Walls	Fuel-fired air dist Fuel-fired air dist Air conditioner, E 0.00 CFM25. Supply Only: 150 o Heat=Yes; Cool=Y es NA NA R-21.0 w/RB R-13.0 NA Features	ribution, Natural gas, 95.0 AF lectric, 16.0 SEER. cfm, 50.0 watts. es Slab Exposed Floor Window Type Infiltration Rate Method	FUE. None R-19.0 U-Value: 0.300, SHGC: 0.250 Htg: 2050 Clg: 2050 CFM50 Blower door test	TITLE Company Address City, State, Zip Phone #	the minimum o	riteria for the	following:
Heating: Heating: Cooling: Duct Leakage to Outside Ventilation System Programmable Thermostat Building Shell Feature Ceiling Flat Sealed Attic Vaulted Ceiling Above Grade Walls Foundation Walls Lights and Appliance Percent Interior Lighting	Fuel-fired air dist Fuel-fired air dist Air conditioner, E 0.00 CFM25. Supply Only: 150 o Heat=Yes; Cool=Y es NA NA R-21.0 w/RB R-13.0 NA Features 90.00	ribution, Natural gas, 95.0 AF lectric, 16.0 SEER. cfm, 50.0 watts. es Slab Exposed Floor Window Type Infiltration Rate Method Range/Oven Fuel	FUE. None R-19.0 U-Value: 0.300, SHGC: 0.250 Htg: 2050 Clg: 2050 CFM50 Blower door test Natural gas	TITLE Company Address City, State, Zip	the minimum o	riteria for the	following:
Heating: Heating: Cooling: Duct Leakage to Outside Ventilation System Programmable Thermostat Building Shell Feature Ceiling Flat Sealed Attic Vaulted Ceiling Above Grade Walls Foundation Walls	Fuel-fired air dist Fuel-fired air dist Air conditioner, E 0.00 CFM25. Supply Only: 150 o Heat=Yes; Cool=Y es NA NA R-21.0 w/RB R-13.0 NA Features	ribution, Natural gas, 95.0 AF lectric, 16.0 SEER. cfm, 50.0 watts. es Slab Exposed Floor Window Type Infiltration Rate Method	FUE. None R-19.0 U-Value: 0.300, SHGC: 0.250 Htg: 2050 Clg: 2050 CFM50 Blower door test	TITLE Company Address City, State, Zip Phone #	the minimum o	riteria for the	following:

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