

# 2017 Florida Energy Code Software Verification Test Report: EnergyGauge® USA version 6.0

Florida Solar Energy Center  
September 21, 2017

## Introduction

This report contains results from a series of software verification tests required by the Florida Building Commission for Florida Energy Code compliance tools.<sup>1</sup> These tests consist of two suites of building load tests, referred to as ASHRAE Standard 140 (HERS BESTEST<sup>2</sup>) and Florida HERS BESTEST<sup>3</sup> developed by the National Renewable Energy Laboratory, a Standard Reference Design Auto-generation test suite developed by the State of Florida (Appendix C of Reference 1) and three test suites developed by RESNET to test Heating, Ventilating and Air Conditioning (HVAC) equipment algorithms,<sup>4</sup> Distribution System Efficiency (DSE) algorithms<sup>5</sup> and Domestic Hot Water (DHW) algorithms<sup>6</sup> and eRatio Method-tests.

## Test Reports

In addition to the results reported here, a functional copy of EnergyGauge® USA, version 6.0, the software tool that performed the tests is available for download at <http://www.energygauge.com/florida-code-submissions/>. Also available for download are all of the input, output spreadsheet report, and procedures files used to conduct the tests. The folders are arranged as sub directories named in accordance with their contents as follows:

- ASHRAE Standard 140
- FL-BESTEST
- FL-AutoGen
- HVAC-tests
- DSE-tests
- DHW-tests
- eRatio Method-tests

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<sup>1</sup> J.M. Juda Corporation, January 17, 2012, “Energy Simulation Tool Approval Technical Assistance Manual.” 2010 Florida Building Code, Energy Conservation Document Number: TAM-2010-1.0, West Palm Beach, FL.

<sup>2</sup> Judkoff, R. and J. Neymark, November 1995. “Home Energy Rating System Building Energy Simulation Test (HERS BESTEST),” Volume 1 Tier 1 and Tier 2 Tests User’s Manual, NREL/TP-472-7332a, Golden, CO. <http://www.nrel.gov/docs/legosti/fy96/7332a.pdf>

<sup>3</sup> Judkoff, R. and J. Neymark, August 1997. “Home Energy Rating System Building Energy Simulation Test for Florida (Florida-HERS BESTEST),” Volume 1 Tier 1 and Tier 2 Tests User’s Manual, NREL/TP-550-23124a, golden, CO. <http://www.nrel.gov/docs/legosti/fy97/23124a.pdf>

<sup>4</sup> RESNET, March 2007, “Procedures for Verification of International Energy Conservation Code Performance Path Calculations Tools.” RESNET Publication No. 07-003, Residential Energy Services Network, Oceanside, CA. [http://www.resnet.us/programs/RESNET\\_Pub\\_07-003\\_errata.pdf](http://www.resnet.us/programs/RESNET_Pub_07-003_errata.pdf)

<sup>5</sup> *ibid*

<sup>6</sup> *ibid*

Each of the above directories contains a series of subdirectories, which include all of the specific information for the given series of verification tests, as follows:

- Input – contains the EnergyGauge input files for each test
- Output – contains PDF copies of the output files generated by EnergyGauge for each test
- Procedures – contains the written procedures for each test suite
- Results – contains the results completed spreadsheets provided by the Florida Building Commission for reporting results

## **Re-Running the Verification Tests**

The test results reported here may be verified by others using EnergyGauge USA v.6.0 and the following instructions.

### a) ASHRAE Standard 140, Teir 1 Tests (including Florida-HERS BESTEST):

The BESTEST cases are named in the format 'LxxxAy' corresponding to the case numbers in the HERS BESTEST Document(s), where 'y' is the first character of the city for which the test is run ('C' for Colorado Springs, CO; 'L' for Las Vegas, NV and 'O' for Orlando, FL).

These cases are run by loading the case into the software and then selecting the following actions on the main menu bar:

- Calculate > BESTEST Loads

*The building heating and/or cooling loads are reported at the top of the initial page of the report that appears at the conclusion of the simulation*

### b) Florida Standard Reference Design Auto-generation tests:

The Auto-generation cases are named in the format AutoGen\_case...

These cases are run by loading the case into the software and then selecting the following actions on the main menu bar:

To run test cases 1-4, make the following selections from the main menu bar

- View > View Florida Std. Reference 2017
- Then select
- Reports > Reference Home Characteristics

*The Florida Standard Reference Design characteristics are displayed on this report.*

To run test case 5, make the following selections from the main menu bar

- View > View Florida Std. Reference 2017

Then select

- Calculate > Florida Code Compliance 2017 > Performance Method

Then select

- Reports > Florida Code Summary 2017

*The Total Proposed Modified Loads and the Total Baseline Loads used to calculate the e-Ratio are given on this report.*

c) HVAC Tests:

The HVAC test cases are named in the format HVAC\_TestCase-xx

These cases are run by loading the case into the software and then selecting the following actions on the main menu bar:

- Calculate > Annual Simulation

*The heating and cooling energy use values for these tests are given on the report that appears on the screen at the conclusion of the annual simulation.*

d) Distribution System Efficiency (DSE) Tests:

The Distribution System Efficiency test cases are named in the format DSE\_HVAC-xx

These cases are run by loading the case into the software and then selecting the following actions on the main menu bar:

- Calculate > Annual Simulation

*The heating and cooling energy use values for these tests are given on the report that appears on the screen at the conclusion of the annual simulation.*

e) Hot Water System Performance tests:

The hot water performance test cases are named in the format DHW-xx-xx-x

These cases are run by loading the case into the software and then selecting the following actions on the main menu bar:

- Calculate > Annual Simulation

*The hot water energy use values are given on the report that appears on the screen at the conclusion of the annual simulation.*

f) eRatio Method Tests:

The eRatio Method test cases are named in the format eRatio\_L130AO-xx

These cases are run by loading the case into the software and then selecting the following actions on the main menu bar:

- Calculate > Florida Code Compliance 2017 > e-ratio Test

Then select

- Reports > Florida Code Summary 2017

*The Reference and Proposed heating, cooling and hot water energy and load values for these tests are given on this report.*

## **Test Results**

The results from all software verification tests required by the Florida Building Commission are provided in this section of the report. These results comprise PDF printouts of the completed results spreadsheets, including affiliated charts and graphs for each spreadsheet, as provided by the Florida Building Commission for this purpose. In addition, the PDF copies of each test result output file coming from EnergyGauge® USA v.6.0 are included in a set of appendices to this report.

The results spreadsheet reports are presented on the following pages in the following order:

- ASHRAE Standard 140
- FL-BESTEST
- FL-AutoGen
- HVAC-tests
- DSE-tests
- DHW-tests
- eRatio Method-tests

The appendices containing the EnergyGauge output files follow these results spreadsheet reports.

HERS BESTEST results for:

Software Name:

EnergyGauge USA 6.0

User input data fields indicated by pale yellow  
 Test result fields indicated by pale green

**Annual Heating Loads: Colorado Springs, CO**

Heating	range max	range min	Result	pass/fail
L100AC	79.48	48.75	55.50	pass
L110AC	103.99	71.88	76.84	pass
L120AC	64.30	37.82	42.52	pass
L130AC	53.98	41.82	45.32	pass
L140AC	56.48	43.24	48.04	pass
L150AC	71.33	40.95	49.13	pass
L155AC	74.18	43.53	51.37	pass
L160AC	81.00	48.78	57.32	pass
L170AC	92.40	61.03	69.02	pass
L200AC	185.87	106.41	132.48	pass
L202AC	190.05	111.32	140.95	pass
L302XC	90.52	52.66	55.32	pass
L304XC	75.32	43.91	46.84	pass
L322XC	118.20	68.35	73.59	pass
L324XC	80.04	44.01	48.63	pass

**Annual Heating Load deltas: Colorado Springs, CO**

Heating	range max	range min	Result	pass/fail
L110AC-L100AC	28.12	19.37	21.34	pass
L120AC-L100AC	-7.67	-18.57	-12.98	pass
L130AC-L100AC	-5.97	-27.50	-10.18	pass
L140AC-L100AC	-4.56	-24.42	-7.46	pass
L150AC-L100AC	-3.02	-12.53	-6.37	pass
L155AC-L150AC	6.88	-1.54	2.24	pass
L160AC-L100AC	5.10	-3.72	1.82	pass
L170AC-L100AC	17.64	7.12	13.52	pass
L200AC-L100AC	107.66	56.39	76.98	pass
L202AC-L200AC	9.94	-0.51	8.47	pass
L302XC-L100AC	14.50	-3.29	-0.18	pass
L302XC-L304XC	17.75	5.66	8.48	pass
L322XC-L100AC	39.29	15.71	18.09	pass
L322XC-L324XC	38.27	20.21	24.96	pass

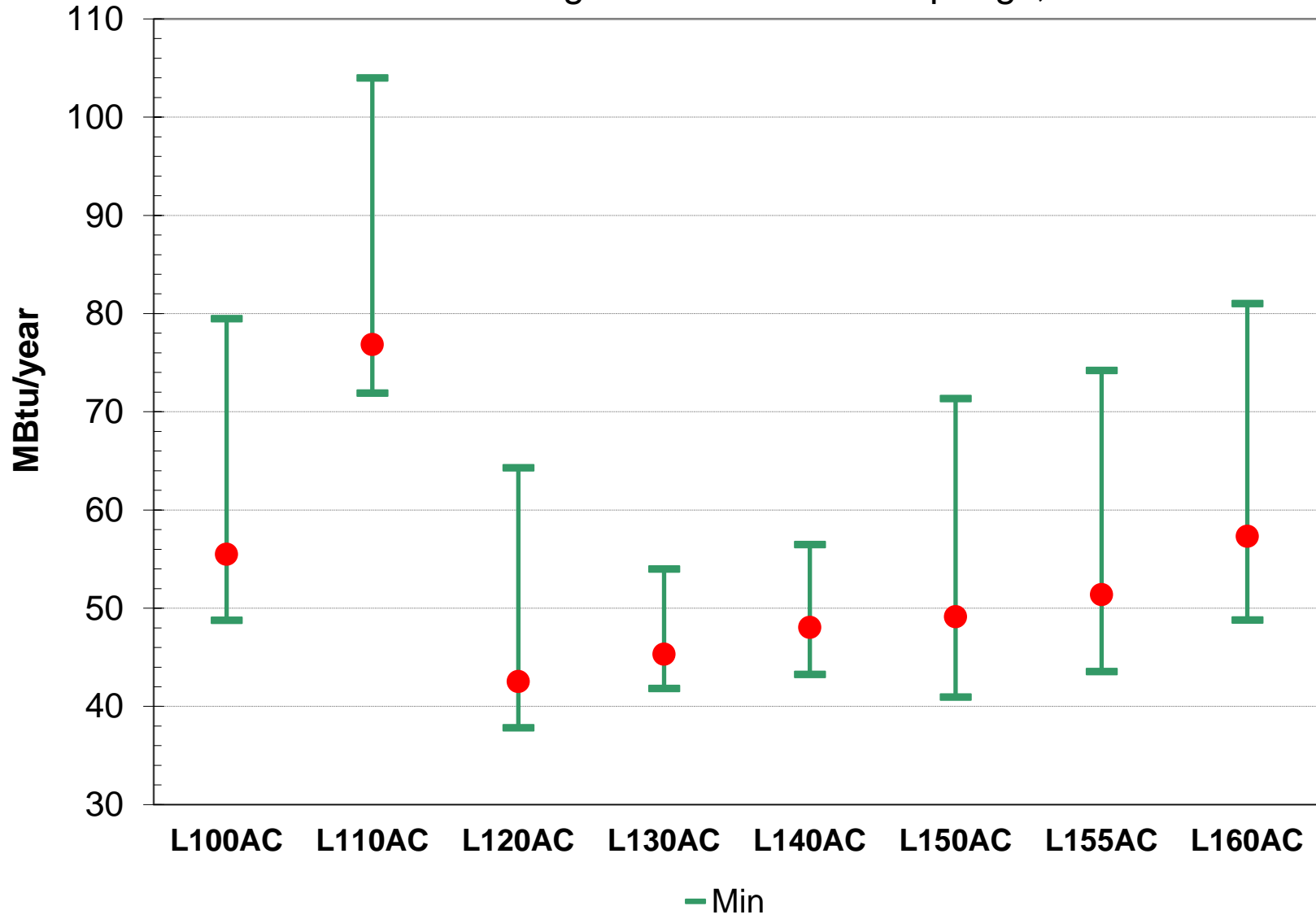
**Annual Cooling Loads: Las Vegas, NV**

Cooling	range max	range min	Result	pass/fail
L100AL	64.88	50.66	54.61	pass
L110AL	68.50	53.70	56.72	pass
L120AL	60.14	47.34	49.05	pass
L130AL	45.26	32.95	38.51	pass
L140AL	30.54	19.52	25.48	pass
L150AL	82.33	62.41	70.74	pass
L155AL	63.06	50.08	56.51	pass
L160AL	72.99	58.61	64.32	pass
L170AL	53.31	41.83	43.18	pass
L200AL	83.43	60.25	67.56	pass
L202AL	75.96	52.32	55.21	pass

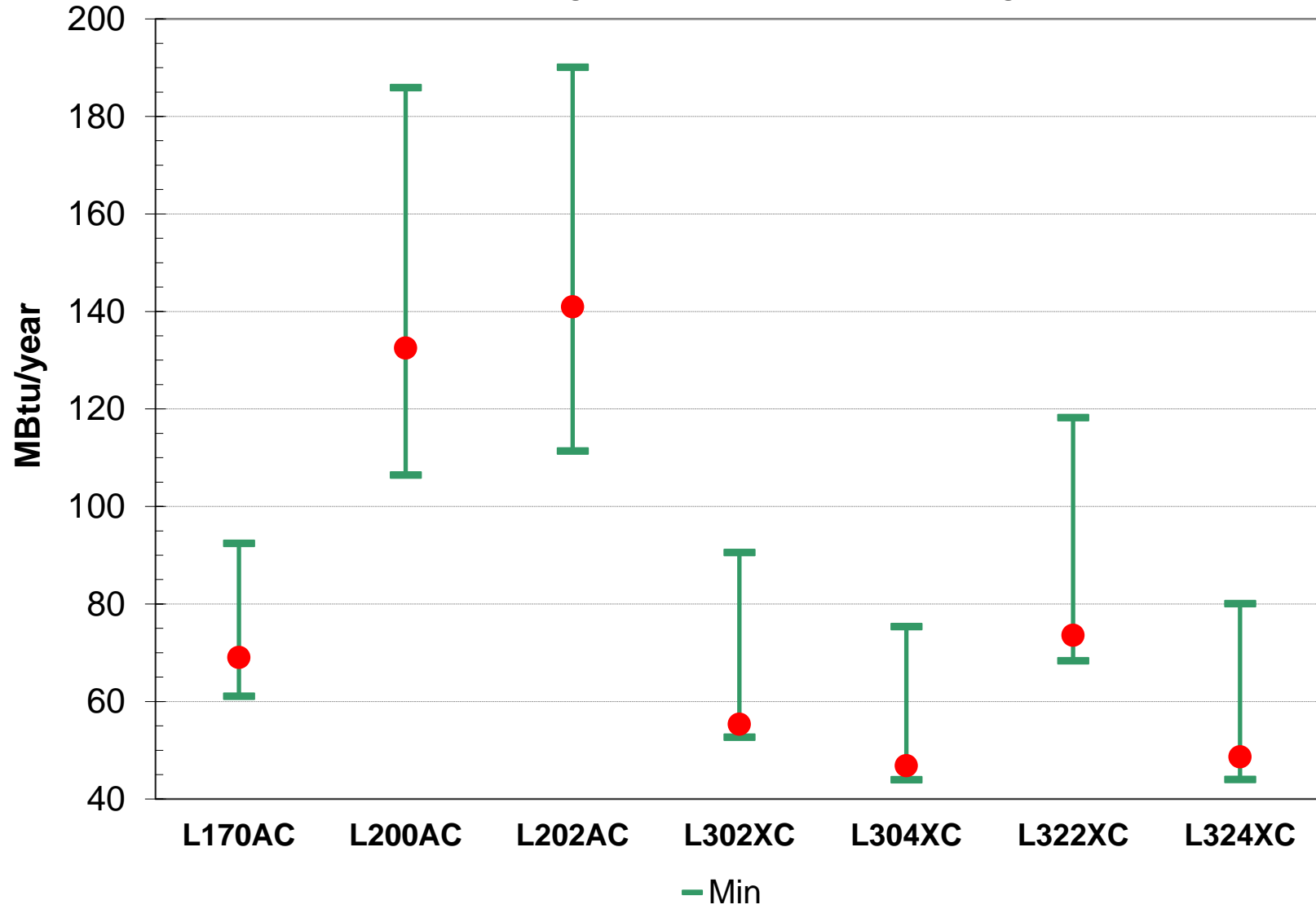
**Annual Cooling Load deltas: Las Vegas, NV**

Cooling	range max	range min	Result	pass/fail
L110AL-L100AL	7.84	-0.98	2.11	pass
L120AL-L100AL	0.68	-8.67	-5.56	pass
L130AL-L100AL	-13.71	-24.40	-16.10	pass
L140AL-L100AL	-27.14	-38.68	-29.13	pass
L150AL-L100AL	20.55	8.72	16.13	pass
L155AL-L150AL	-9.64	-22.29	-14.23	pass
L160AL-L100AL	12.28	3.88	9.71	pass
L170AL-L100AL	-4.83	-15.74	-11.43	pass
L200AL-L100AL	21.39	6.63	12.95	pass
L200AL-L202AL	14.86	2.03	12.35	pass

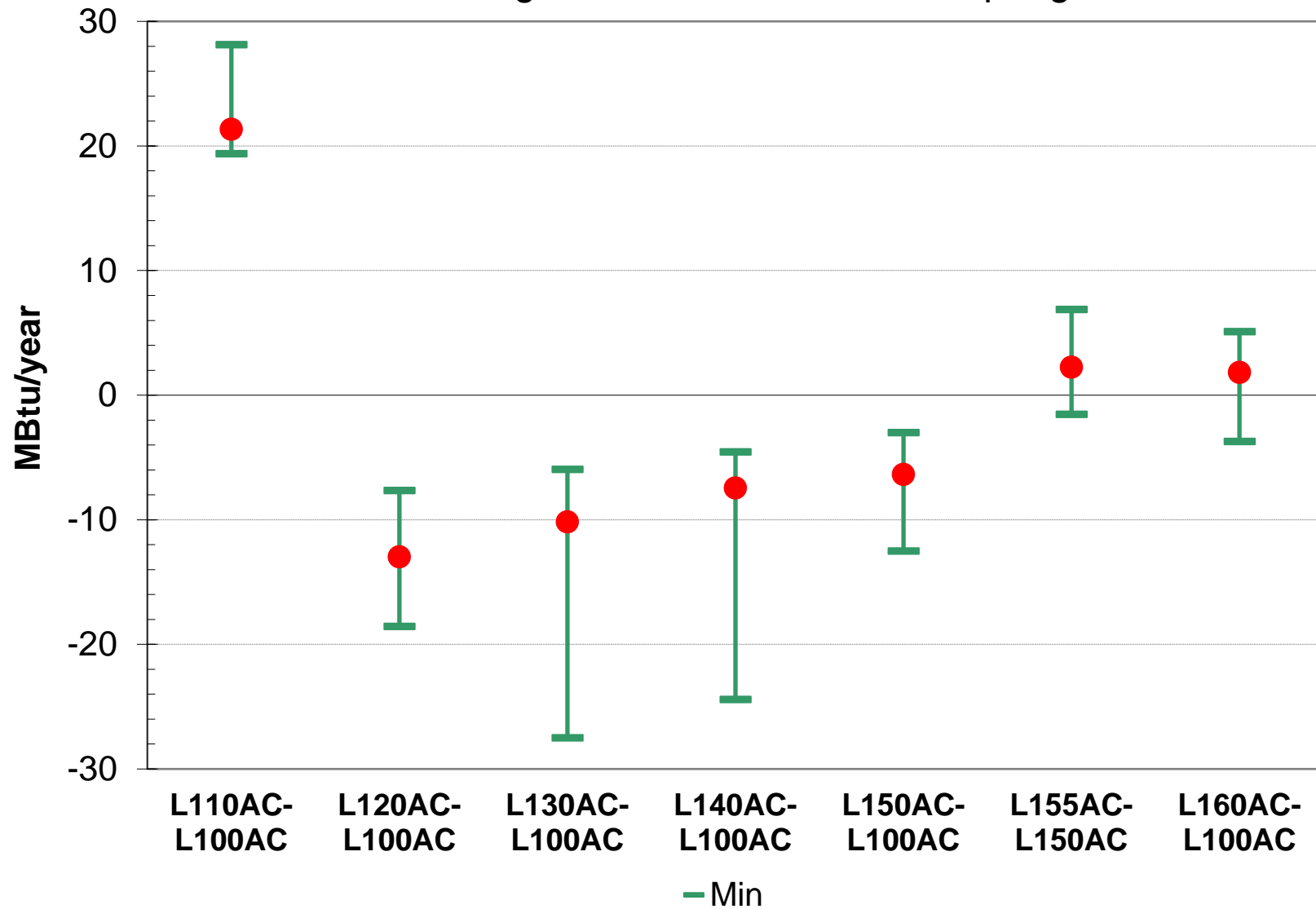
# Annual Heating Loads: Colorado Springs, CO



# Annual Heating Loads: Colorado Springs, CO

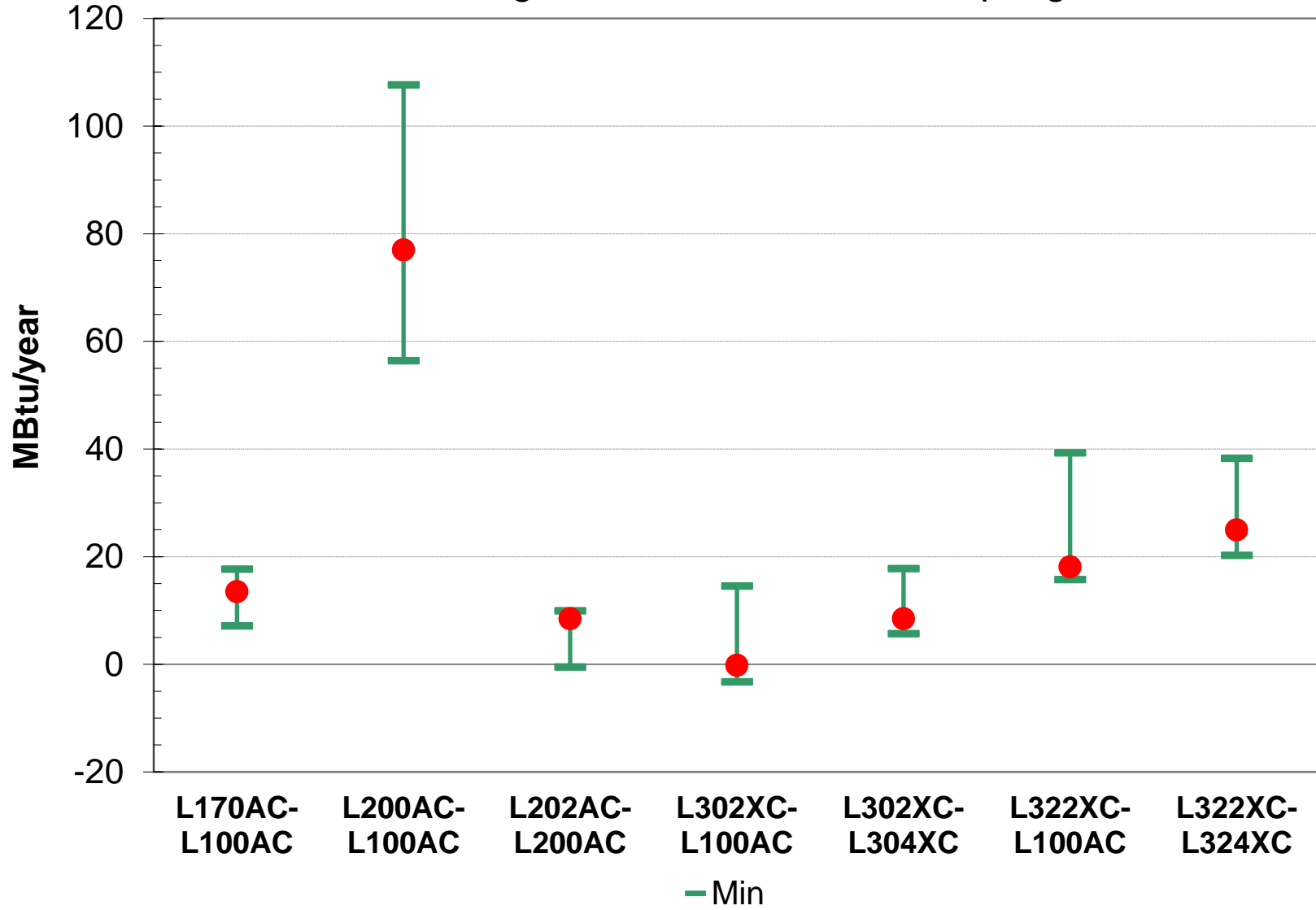


Annual Heating Load Deltas: Colorado Springs, CO

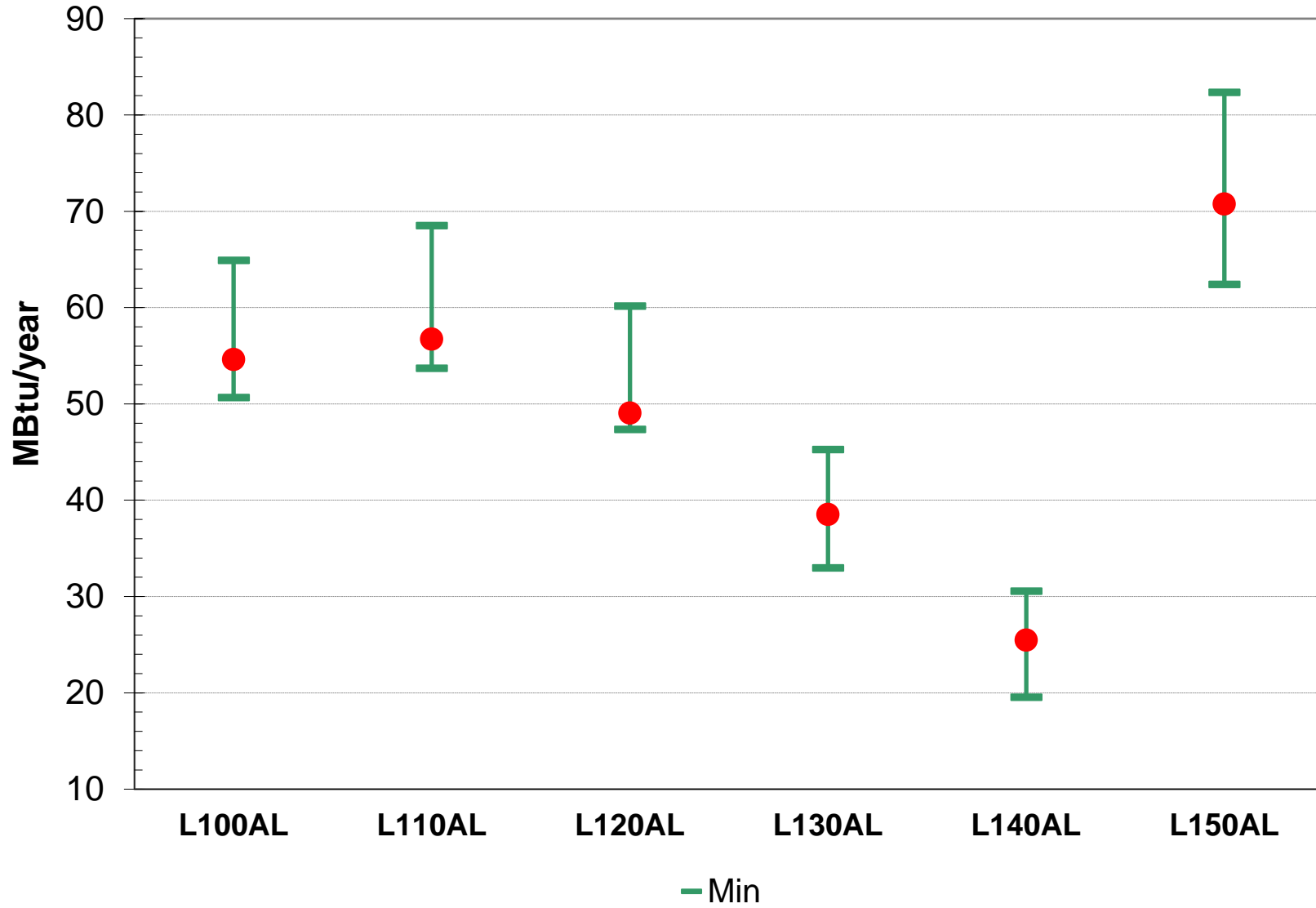




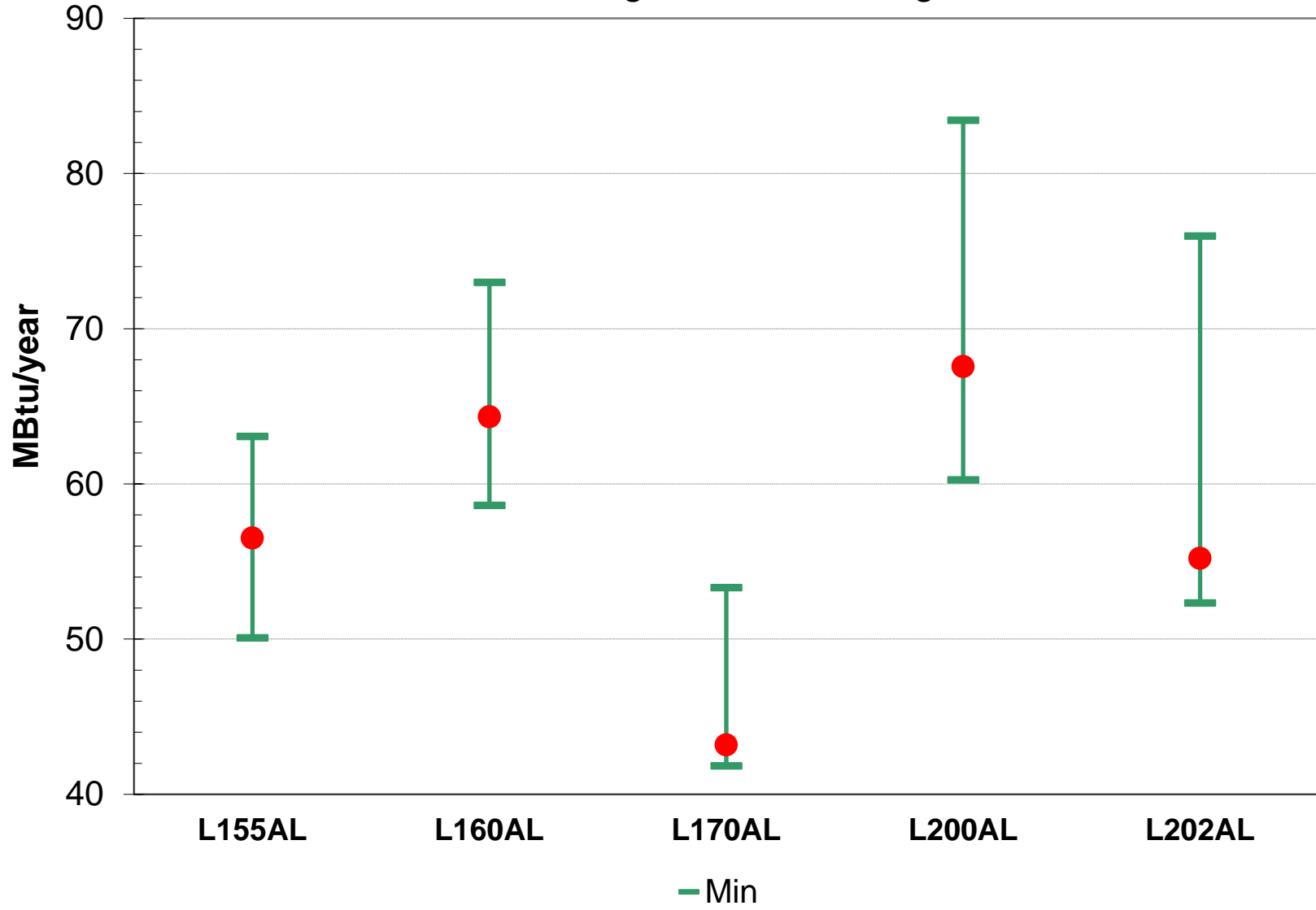
# Annual Heating Load Deltas: Colorado Springs, CO



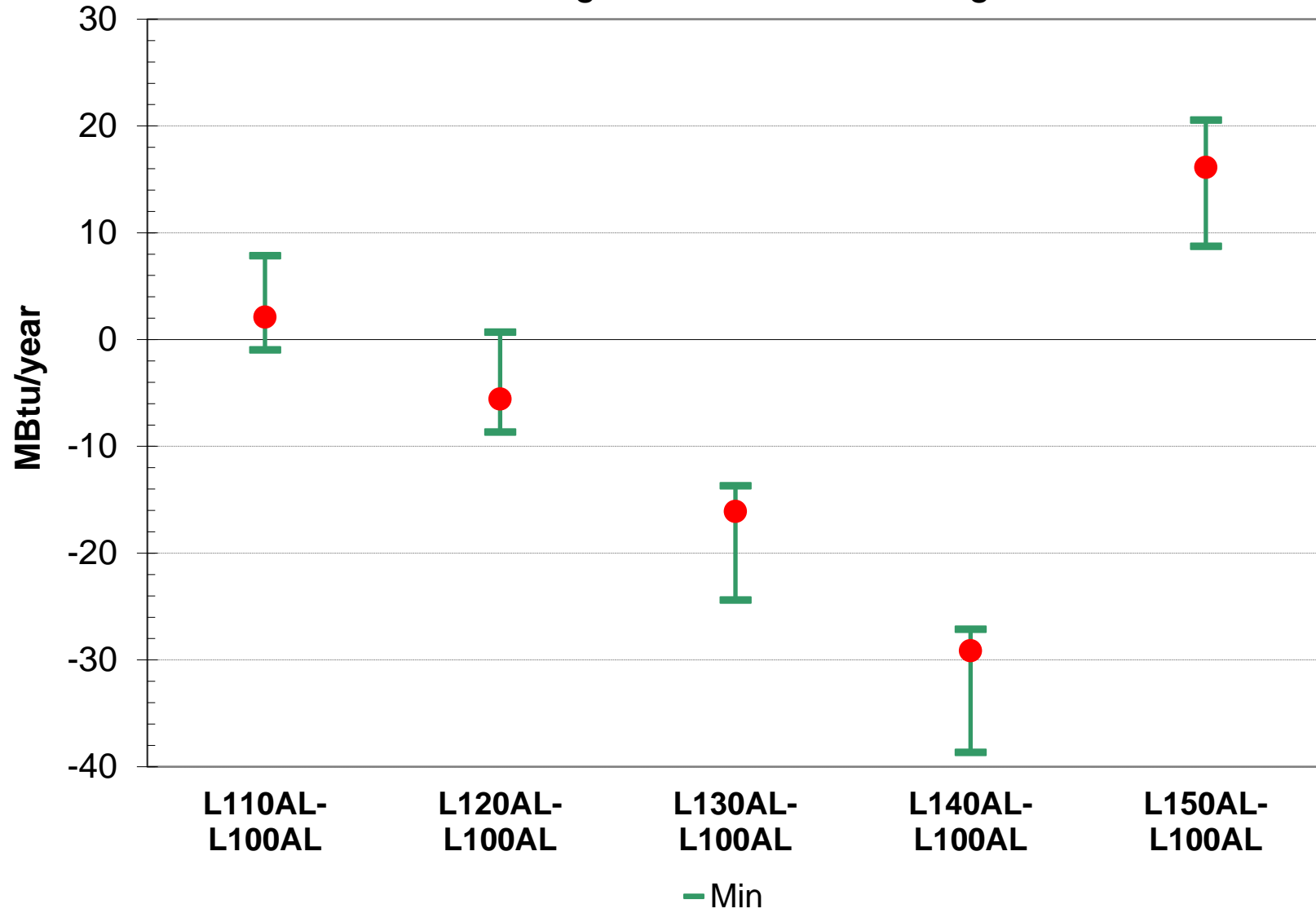
# Annual Cooling Loads: Las Vegas, NV



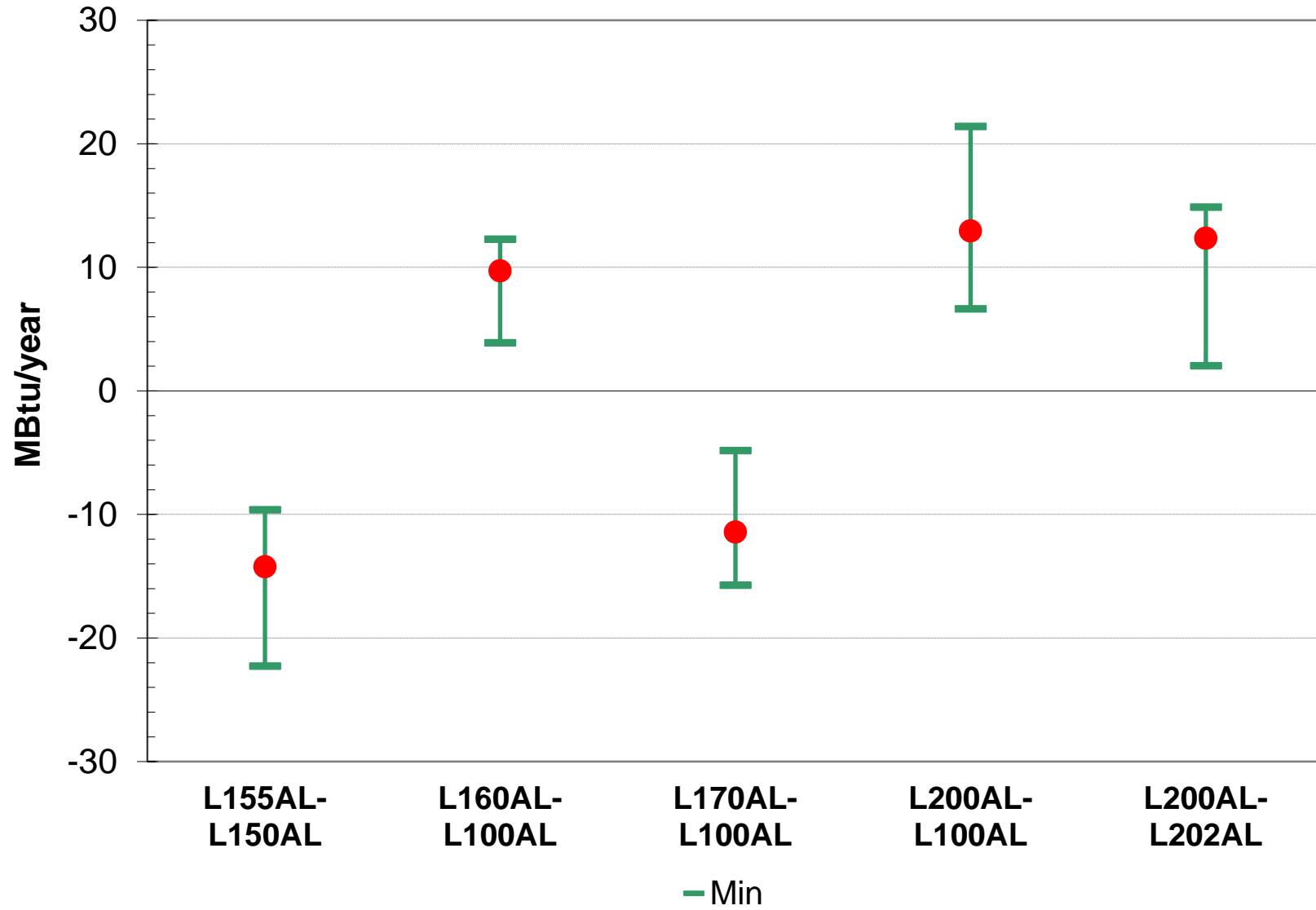
# Annual Cooling Loads: Las Vegas, NV



# Annual Cooling Load Deltas: Las Vegas, NV



# Annual Cooling Load Deltas: Las Vegas, NV



**Appendix A-1**  
**ASHRAE Standard 140 Colorado Springs Heating Load Reports**

## ASHRAE Standard 140 - Colorado Springs

L100AC (base case)

CoolingLoad = 0.00 HeatingLoad = -55.50

L110AC (high infiltration)

CoolingLoad = 0.00 HeatingLoad = -76.84

L120AC (improved insulation)

CoolingLoad = 0.00 HeatingLoad = -42.52

L130AC (low-e windows)

CoolingLoad = 0.00 HeatingLoad = -45.32

L140AC (zero windows)

CoolingLoad = 0.00 HeatingLoad = -48.04

L150AC (all south glass)

CoolingLoad = 0.00 HeatingLoad = -49.13

L155AC (south glass with OH)

CoolingLoad = 0.00 HeatingLoad = -51.37

L160AC (east-west windows)

CoolingLoad = 0.00 HeatingLoad = -57.32

L170AC (no internal gains)

CoolingLoad = 0.00 HeatingLoad = -69.02

L200AC (inefficient)

CoolingLoad = 0.00 HeatingLoad = -132.48

L202AC (low alpha)

CoolingLoad = 0.00 HeatingLoad = -140.95

L302AC (slab case)

CoolingLoad = 0.00 HeatingLoad = -55.32

L304AC (slab with insul)

CoolingLoad = 0.00 HeatingLoad = -46.84

L322AC (basement)

CoolingLoad = 0.00 HeatingLoad = -73.59

L324AC (basement-insulated)

CoolingLoad = 0.00 HeatingLoad = -48.63



# Building Input Summary Report

PROJECT									
Title:	L100AC (base case)		Bedrooms:	0		Address Type:			
Building Type:	User		Bathrooms:	0		Lot #			
Owner:	FSEC		Conditioned Area:	1539 sq.ft.		Block/SubDivision:			
# of Units:	1		Total Stories:	1		PlatBook:			
Builder Name:	James Q. Hammer		Worst Case:	No		Street:	111 Anywhere Lane		
Permit Office:			Rotate Angle:	0		County:			
Jurisdiction:			Cross Ventilation:			City, State, Zip:	Colorado Springs , CO ,		
Family Type:	Single-family		Whole House Fan:						
New/Existing:	New (From Plans)		Terrain:	Suburban					
Year Construct:			Shielding:	Suburban					
Comment:	HERS BESTEST basecase home								
CLIMATE									
Design Location	Tmy Site	Design Temp 97.5 %	Design Temp 2.5 %	Int Design Temp Winter	Int Design Temp Summer	Heating Degree Days	Design Moisture	Daily Temp Range	
CO, COLORADO_SPRING	CO_COLORADO_SPRINGTMY1	7	88	70	75	6114.5	0	High	
UTILITY RATES									
Fuel	Unit	Utility Name				Monthly Fixed Cost			\$/Unit
Electricity	kWh	EnergyGauge Default				0			0.1188
Natural Gas	Therm	EnergyGauge Default				0			0.682
Fuel Oil	Gallon	EnergyGauge Default				0			1.1
Propane	Gallon	EnergyGauge Default				0			1.4
SURROUNDINGS									
Ornt	Type	Shade Trees Height	Width	Distance	Exist	Adjacent Buildings Height	Width	Distance	
N	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
NE	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
E	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
SE	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
S	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
SW	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
W	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
NW	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
BLOCKS									
Number	Name	Area	Volume						
1	Block1	1539	12312						
SPACES									
Number	Name	Area	Volume	Kitchen	Occupants	Bedrooms	Finished	Cooled	Heated
1	Main	1539	12312	Yes	0	0	Yes	Yes	Yes
FLOORS									
#	Floor Type	Space	R-Value	Area	Tile	Wood	Carpet		
1	Raised Floor	Main	----	1539 ft <sup>2</sup>	10.4	0	0	1	

# Building Input Summary Report

ROOF														
#	Type	Materials	Roof Area	Gable Area	Roof Color	Solar Absor.	SA Tested	Emitt	Emitt Tested	Deck Insul.	Pitch (deg)			
1	Gable or shed	Composition shingles	1622 ft²	256 ft²	Medium	0.6	No	0.9	No	0	18.4			
ATTIC														
#	Type	Ventilation	Vent Ratio (1 in)	Area	RBS	IRCC								
1	Full attic	Vented	150	1539 ft²	N	N								
CEILING														
#	Ceiling Type	Space	R-Value	Area	Framing Fraction	Truss Type								
1	Under Attic ()	Main	16.7	1539 ft²	0.11	Wood								
WALLS														
Wall orientation below is as entered. Actual orientation is modified by rotate angle shown in "Project" section above.														
#	Ornt	Adjacent To	Wall Type	Space	Cavity R-Value	Width Ft	In	Height Ft	In	Area	Sheathing R-Value	Framing Fraction	Solar Absor.	Below Grade%
1	N	Exterior	Frame - Wood	Main	11	57		8		456.0 ft²		0.25	0.6	0
2	S	Exterior	Frame - Wood	Main	11	57		8		456.0 ft²		0.25	0.6	0
3	E	Exterior	Frame - Wood	Main	11	27		8		216.0 ft²		0.25	0.6	0
4	W	Exterior	Frame - Wood	Main	11	27		8		216.0 ft²		0.25	0.6	0
DOORS														
#	Ornt	Door Type	Space	Storms	U-Value	Width Ft	In	Height Ft	In	Area				
1	N	Insulated	Main	None	.46	3		6	8	20 ft²				
2	S	Insulated	Main	None	.46	3		6	8	20 ft²				
WINDOWS														
#	Ornt	Wall ID	Frame	Panes	NFRC	U-Factor	SHGC	Storm	Area	Overhang Depth	Overhang Separation	Interior Shade	Screening	
1	N	1	TIM	Single (Clear)	Yes	1.09	0.7	N	90.0 ft²	0 ft 0 in	0 ft 0 in	None	None	
2	S	2	TIM	Single (Clear)	Yes	1.09	0.7	N	90.0 ft²	0 ft 0 in	0 ft 0 in	None	None	
3	E	3	TIM	Single (Clear)	Yes	1.09	0.7	N	45.0 ft²	0 ft 0 in	0 ft 0 in	None	None	
4	W	4	TIM	Single (Clear)	Yes	1.09	0.7	N	45.0 ft²	0 ft 0 in	0 ft 0 in	None	None	
INFILTRATION														
#	Scope	Method	SLA	CFM 50	ELA	EqLA	ACH	ACH 50	Space(s)					
1	Wholehouse	Proposed ACH	.000684	2759.9	151.51	284.94	.67	13.449	All					
MASS														
Mass Type	Area	Thickness	Furniture Fraction	Space										
No Added Mass	0 ft²	0 ft	0	Main										

# Building Input Summary Report

HEATING SYSTEM														
#	System Type	Subtype			Efficiency	Capacity	-----Geothermal HeatPump-----				Ducts	Block		
						Entry	Power	Volt.	Curr					
1	Electric Strip Heat	None			COP:1	112 kBtu/hr		0	0	0	sys#1		1	
COOLING SYSTEM														
#	System Type	Subtype			Efficiency	Capacity	Air Flow	SHR	Ducts	Block				
1	Central Unit	None			SEER:10	24.8 kBtu/hr	750 cfm	0.75	sys#1	1				
HOT WATER SYSTEM														
#	System Type	SubType	Location	EF	Cap	Use	SetPnt	Credits						
					gal	gal	deg							
DUCTS														
DUCT #	Location	----- Supply -----		----- Return -----		Leakage Type	Air Handler	CFM 25 TOT	CFM25 OUT	QN	RLF	HVAC #		
1	Main	R-Value	Area	Location	Area	Number		--- cfm	--- cfm	0.00	0.60	1	1	
TEMPERATURES														
Programable Thermostat: N					Ceiling Fans: N									
Cooling	<input type="checkbox"/> Jan	<input type="checkbox"/> Feb	<input type="checkbox"/> Mar	<input type="checkbox"/> Apr	<input type="checkbox"/> May	<input type="checkbox"/> Jun	<input type="checkbox"/> Jul	<input type="checkbox"/> Aug	<input type="checkbox"/> Sep	<input type="checkbox"/> Oct	<input type="checkbox"/> Nov	<input type="checkbox"/> Dec		
Heating	<input checked="" type="checkbox"/> Jan	<input checked="" type="checkbox"/> Feb	<input checked="" type="checkbox"/> Mar	<input checked="" type="checkbox"/> Apr	<input checked="" type="checkbox"/> May	<input checked="" type="checkbox"/> Jun	<input checked="" type="checkbox"/> Jul	<input checked="" type="checkbox"/> Aug	<input checked="" type="checkbox"/> Sep	<input checked="" type="checkbox"/> Oct	<input checked="" type="checkbox"/> Nov	<input checked="" type="checkbox"/> Dec		
Venting	<input type="checkbox"/> Jan	<input type="checkbox"/> Feb	<input type="checkbox"/> Mar	<input type="checkbox"/> Apr	<input type="checkbox"/> May	<input type="checkbox"/> Jun	<input type="checkbox"/> Jul	<input type="checkbox"/> Aug	<input type="checkbox"/> Sep	<input type="checkbox"/> Oct	<input type="checkbox"/> Nov	<input type="checkbox"/> Dec		
Thermostat Schedule: BESTEST-heating														
Schedule Type		1	2	3	4	5	6	7	8	9	10	11	12	Hours
Cooling (WD)	AM	78	78	78	78	78	78	78	78	78	78	78	78	78
	PM	78	78	78	78	78	78	78	78	78	78	78	78	78
Cooling (WEH)	AM	78	78	78	78	78	78	78	78	78	78	78	78	78
	PM	78	78	78	78	78	78	78	78	78	78	78	78	78
Heating (WD)	AM	68	68	68	68	68	68	68	68	68	68	68	68	68
	PM	68	68	68	68	68	68	68	68	68	68	68	68	68
Heating (WEH)	AM	68	68	68	68	68	68	68	68	68	68	68	68	68
	PM	68	68	68	68	68	68	68	68	68	68	68	68	68

# Building Input Summary Report

## APPLIANCES & LIGHTING

Appliance Schedule: BESTEST-gains		Hours											
Schedule Type		1	2	3	4	5	6	7	8	9	10	11	12
Ceiling Fans (Summer)	AM	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.5	0.5	0.5	0.5	0.5
% Released: 0	PM	0.5	0.5	0.5	0.5	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.75
Annual Use: 0 kWh/Yr		Peak Value: 0 Watts											
Clothes Washer	AM	0.105	0.081	0.046	0.046	0.081	0.128	0.256	0.57	0.849	1	0.977	0.872
% Released: 60	PM	0.779	0.698	0.605	0.57	0.581	0.57	0.57	0.57	0.57	0.488	0.43	0.198
Annual Use: 0 kWh/Yr		Peak Value: 0 Watts											
Dishwasher	AM	0.139	0.05	0.028	0.024	0.029	0.09	0.169	0.303	0.541	0.594	0.502	0.443
% Released: 60	PM	0.377	0.396	0.335	0.323	0.344	0.448	0.791	1	0.8	0.597	0.383	0.281
Annual Use: 0 kWh/Yr		Peak Value: 0 Watts											
Dryer	AM	0.2	0.1	0.05	0.05	0.05	0.075	0.2	0.375	0.5	0.8	0.95	1
% Released: 0	PM	0.875	0.85	0.8	0.625	0.625	0.6	0.575	0.55	0.625	0.7	0.65	0.375
Annual Use: 0 kWh/Yr		Peak Value: 0 Watts											
Lighting	AM	0.144	0.144	0.144	0.144	0.144	0.243	0.304	0.607	0.356	0.216	0.216	0.29
% Released: 100	PM	0.216	0.183	0.186	0.186	0.274	0.295	0.317	0.499	0.499	0.523	0.523	0.469
Annual Use: 800 kWh/Yr		Peak Value: 308 Watts											
Miscellaneous	AM	0.238	0.238	0.238	0.238	0.238	0.398	0.5	1	0.583	0.357	0.357	0.476
% Released: 100	PM	0.357	0.297	0.31	0.31	0.453	0.488	0.524	0.821	0.821	0.857	0.857	0.774
Annual Use: 6500 kWh/Yr		Peak Value: 1518 Watts											
Pool Pump	AM	0	0	0	0	0	0	0	0	0	1	1	1
% Released: 0	PM	1	1	1	1	0	0	0	0	0	0	0	0
Annual Use: 0 kWh/Yr		Peak Value: 0 Watts											
Range	AM	0.057	0.057	0.057	0.057	0.057	0.114	0.171	0.286	0.343	0.343	0.343	0.4
% Released: 0	PM	0.457	0.343	0.286	0.4	0.571	1	0.857	0.429	0.286	0.229	0.171	0.114
Annual Use: 0 kWh/Yr		Peak Value: 0 Watts											
Refrigeration	AM	0.85	0.78	0.75	0.73	0.73	0.73	0.75	0.75	0.8	0.8	0.8	0.8
% Released: 0	PM	0.88	0.85	0.85	0.83	0.88	0.95	1	0.98	0.95	0.93	0.9	0.85
Annual Use: 0 kWh/Yr		Peak Value: 0 Watts											
Well Pump	AM	0.05	0.05	0.05	0.05	0.05	0.05	0.1	0.1	0.1	0.1	0.1	0.1
% Released: 0	PM	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Annual Use: 0 kWh/Yr		Peak Value: 0 Watts											

## MECHANICAL VENTILATION

Type	Supply CFM	Exhaust CFM	HRV	Fan	Run Time	Heating System	Cooling System
None	0	0	0	0W	0%	1 - Electric Strip Heat	1 - Central Unit

## DISHWASHERS

ID	Type	Screen	Location	Capacity	Vintage	Make	Model	Schedule	kWhPerYr
1	Dishwash	Default New	Main	12	2004 or N			HERS201	372

## RANGE OVEN

ID	Type	Screen	Location	Type	Fueltype	Make	Model	Cooktop	Oven
1	RangeOv	Default New	Main	CooktopOven C	Natural G			Electric fl	Not Conv

# Building Input Summary Report

HARD WIRED LIGHTING										
ID	Type	Screen	Location	Total#	Qualify#	Comp FI	All Other FL	txtBulbtype	Schedule	Watts per bulb
1	Hard-Wir	By Count - Qualif	Main	15	11	0	2	Incandes	HERS201	60
2	Hard-Wir	By Count - Qualif	2nd Floor	18	7	0	2	Incandes	HERS201	60
3	Hard-Wir	By Count - Qualif	Basemen	8	0	0	2	Incandes	HERS201	60
4	Hard-Wir	By Count - Qualif	Exterior	4	1	0	2	Incandes	HERS201	60
5	Hard-Wir	By Count - Qualif	Garage	1	0	0	2	Incandes	HERS201	60
MISC ELECTRICAL LOADS										
ID	Type	Screen	Item	Quantity	Catagory	Operating	Location	Schedule	Off Standby	
1	Misc Elec	Simple Default		1		1	Main	HERS201	1	
CEILING FANS										
ID	Type	Screen	Default New	cfmperWatt						
1	CeilingFa	Default New	Standard	70.5						
2	CeilingFa	Default New	Standard	70.5						

# Building Input Summary Report

PROJECT											
Title:	L110AC (high infiltration)		Bedrooms:	0		Address Type:					
Building Type:	User		Bathrooms:	0		Lot #					
Owner:	FSEC		Conditioned Area:	1539 sq.ft.		Block/SubDivision:					
# of Units:	1		Total Stories:	1		PlatBook:					
Builder Name:	James Q. Hammer		Worst Case:	No		Street: 111 Anywhere Lane					
Permit Office:			Rotate Angle:	0		County:					
Jurisdiction:			Cross Ventilation:			City, State, Zip: Colorado Springs , CO ,					
Family Type:	Single-family		Whole House Fan:								
New/Existing:	New (From Plans)		Terrain:	Suburban							
Year Construct:			Shielding:	Suburban							
Comment:	HERS BESTEST high infiltration case										
CLIMATE											
Design Location	Tmy Site		Design Temp	97.5 %	2.5 %	Int Design Temp	Winter	Summer	Heating Degree Days	Design Moisture	Daily Temp Range
CO, COLORADO_SPRING	CO_COLORADO_SPRINGTMY1		7	88		70	75	6114.5	0		High
UTILITY RATES											
Fuel	Unit	Utility Name					Monthly Fixed Cost	\$/Unit			
Electricity	kWh	EnergyGauge Default					0	0.1188			
Natural Gas	Therm	EnergyGauge Default					0	0.682			
Fuel Oil	Gallon	EnergyGauge Default					0	1.1			
Propane	Gallon	EnergyGauge Default					0	1.4			
SURROUNDINGS											
Ornt	Type	Shade Trees			Adjacent Buildings						
		Height	Width	Distance	Exist	Height	Width	Distance			
N	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft			
NE	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft			
E	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft			
SE	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft			
S	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft			
SW	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft			
W	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft			
NW	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft			
BLOCKS											
Number	Name	Area	Volume								
1	Block1	1539	12312								
SPACES											
Number	Name	Area	Volume	Kitchen	Occupants	Bedrooms	Finished	Cooled	Heated		
1	Main	1539	12312	Yes	0	0	Yes	Yes	Yes		
FLOORS											
#	Floor Type	Space	R-Value	Area	Tile	Wood	Carpet				
1	Raised Floor	Main	----	1539 ft <sup>2</sup>	10.4	0	0	1			

# Building Input Summary Report

ROOF														
#	Type	Materials	Roof Area	Gable Area	Roof Color	Solar Absor.	SA Tested	Emitt	Emitt Tested	Deck Insul.	Pitch (deg)			
1	Gable or shed	Composition shingles	1622 ft²	256 ft²	Medium	0.6	No	0.9	No	0	18.4			
ATTIC														
#	Type	Ventilation	Vent Ratio (1 in)	Area	RBS	IRCC								
1	Full attic	Vented	150	1539 ft²	N	N								
CEILING														
#	Ceiling Type	Space	R-Value	Area	Framing Fraction	Truss Type								
1	Under Attic ()	Main	16.7	1539 ft²	0.11	Wood								
WALLS														
Wall orientation below is as entered. Actual orientation is modified by rotate angle shown in "Project" section above.														
#	Ornt	Adjacent To	Wall Type	Space	Cavity R-Value	Width Ft	In	Height Ft	In	Area	Sheathing R-Value	Framing Fraction	Solar Absor.	Below Grade%
1	N	Exterior	Frame - Wood	Main	11	57		8		456.0 ft²		0.25	0.6	0
2	S	Exterior	Frame - Wood	Main	11	57		8		456.0 ft²		0.25	0.6	0
3	E	Exterior	Frame - Wood	Main	11	27		8		216.0 ft²		0.25	0.6	0
4	W	Exterior	Frame - Wood	Main	11	27		8		216.0 ft²		0.25	0.6	0
DOORS														
#	Ornt	Door Type	Space	Storms	U-Value	Width Ft	In	Height Ft	In	Area				
1	N	Insulated	Main	None	.46	3		6	8	20 ft²				
2	S	Insulated	Main	None	.46	3		6	8	20 ft²				
WINDOWS														
#	Ornt	Wall ID	Frame	Panes	NFRC	U-Factor	SHGC	Storm	Area	Overhang Depth	Overhang Separation	Interior Shade	Screening	
1	N	1	TIM	Single (Clear)	Yes	1.09	0.7	N	90.0 ft²	0 ft 0 in	0 ft 0 in	None	None	
2	S	2	TIM	Single (Clear)	Yes	1.09	0.7	N	90.0 ft²	0 ft 0 in	0 ft 0 in	None	None	
3	E	3	TIM	Single (Clear)	Yes	1.09	0.7	N	45.0 ft²	0 ft 0 in	0 ft 0 in	None	None	
4	W	4	TIM	Single (Clear)	Yes	1.09	0.7	N	45.0 ft²	0 ft 0 in	0 ft 0 in	None	None	
INFILTRATION														
#	Scope	Method	SLA	CFM 50	ELA	EqLA	ACH	ACH 50	Space(s)					
1	Wholehouse	Proposed ACH	.001531	6178.8	339.21	637.93	1.5	30.111	All					
MASS														
Mass Type	Area	Thickness	Furniture Fraction	Space										
No Added Mass	0 ft²	0 ft	0	Main										

# Building Input Summary Report

HEATING SYSTEM														
#	System Type	Subtype			Efficiency	Capacity	-----Geothermal HeatPump-----				Ducts	Block		
						Entry	Power	Volt.	Curr					
1	Electric Strip Heat	None			COP:1	150 kBtu/hr		0	0	0	sys#1			1
COOLING SYSTEM														
#	System Type	Subtype			Efficiency	Capacity	Air Flow	SHR	Ducts	Block				
1	Central Unit	None			SEER:10	27.7 kBtu/hr	831 cfm	0.75	sys#1	1				
HOT WATER SYSTEM														
#	System Type	SubType	Location	EF	Cap	Use	SetPnt	Credits						
					gal	gal	deg							
DUCTS														
DUCT #	Location	----- Supply -----		----- Return -----		Leakage Type	Air Handler	CFM 25 TOT	CFM25 OUT	QN	RLF	HVAC #		
1	Main	R-Value	Area	Location	Area	Number		--- cfm	--- cfm	0.00	0.60	1	1	
TEMPERATURES														
Programable Thermostat: N					Ceiling Fans: N									
Cooling	<input type="checkbox"/> Jan	<input type="checkbox"/> Feb	<input type="checkbox"/> Mar	<input type="checkbox"/> Apr	<input type="checkbox"/> May	<input type="checkbox"/> Jun	<input type="checkbox"/> Jul	<input type="checkbox"/> Aug	<input type="checkbox"/> Sep	<input type="checkbox"/> Oct	<input type="checkbox"/> Nov	<input type="checkbox"/> Dec		
Heating	<input checked="" type="checkbox"/> Jan	<input checked="" type="checkbox"/> Feb	<input checked="" type="checkbox"/> Mar	<input checked="" type="checkbox"/> Apr	<input checked="" type="checkbox"/> May	<input checked="" type="checkbox"/> Jun	<input checked="" type="checkbox"/> Jul	<input checked="" type="checkbox"/> Aug	<input checked="" type="checkbox"/> Sep	<input checked="" type="checkbox"/> Oct	<input checked="" type="checkbox"/> Nov	<input checked="" type="checkbox"/> Dec		
Venting	<input type="checkbox"/> Jan	<input type="checkbox"/> Feb	<input type="checkbox"/> Mar	<input type="checkbox"/> Apr	<input type="checkbox"/> May	<input type="checkbox"/> Jun	<input type="checkbox"/> Jul	<input type="checkbox"/> Aug	<input type="checkbox"/> Sep	<input type="checkbox"/> Oct	<input type="checkbox"/> Nov	<input type="checkbox"/> Dec		
Thermostat Schedule: BESTEST-heating														
Schedule Type		1	2	3	4	5	6	7	8	9	10	11	12	Hours
Cooling (WD)	AM	78	78	78	78	78	78	78	78	78	78	78	78	78
	PM	78	78	78	78	78	78	78	78	78	78	78	78	78
Cooling (WEH)	AM	78	78	78	78	78	78	78	78	78	78	78	78	78
	PM	78	78	78	78	78	78	78	78	78	78	78	78	78
Heating (WD)	AM	68	68	68	68	68	68	68	68	68	68	68	68	68
	PM	68	68	68	68	68	68	68	68	68	68	68	68	68
Heating (WEH)	AM	68	68	68	68	68	68	68	68	68	68	68	68	68
	PM	68	68	68	68	68	68	68	68	68	68	68	68	68



# Building Input Summary Report

## APPLIANCES & LIGHTING

Appliance Schedule: BESTEST-gains		Hours											
Schedule Type		1	2	3	4	5	6	7	8	9	10	11	12
Ceiling Fans (Summer)	AM	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.5	0.5	0.5	0.5	0.5
% Released: 0	PM	0.5	0.5	0.5	0.5	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.75
Annual Use: 0 kWh/Yr		Peak Value: 0 Watts											
Clothes Washer	AM	0.105	0.081	0.046	0.046	0.081	0.128	0.256	0.57	0.849	1	0.977	0.872
% Released: 60	PM	0.779	0.698	0.605	0.57	0.581	0.57	0.57	0.57	0.57	0.488	0.43	0.198
Annual Use: 0 kWh/Yr		Peak Value: 0 Watts											
Dishwasher	AM	0.139	0.05	0.028	0.024	0.029	0.09	0.169	0.303	0.541	0.594	0.502	0.443
% Released: 60	PM	0.377	0.396	0.335	0.323	0.344	0.448	0.791	1	0.8	0.597	0.383	0.281
Annual Use: 0 kWh/Yr		Peak Value: 0 Watts											
Dryer	AM	0.2	0.1	0.05	0.05	0.05	0.075	0.2	0.375	0.5	0.8	0.95	1
% Released: 0	PM	0.875	0.85	0.8	0.625	0.625	0.6	0.575	0.55	0.625	0.7	0.65	0.375
Annual Use: 0 kWh/Yr		Peak Value: 0 Watts											
Lighting	AM	0.144	0.144	0.144	0.144	0.144	0.243	0.304	0.607	0.356	0.216	0.216	0.29
% Released: 100	PM	0.216	0.183	0.186	0.186	0.274	0.295	0.317	0.499	0.499	0.523	0.523	0.469
Annual Use: 800 kWh/Yr		Peak Value: 308 Watts											
Miscellaneous	AM	0.238	0.238	0.238	0.238	0.238	0.398	0.5	1	0.583	0.357	0.357	0.476
% Released: 100	PM	0.357	0.297	0.31	0.31	0.453	0.488	0.524	0.821	0.821	0.857	0.857	0.774
Annual Use: 6500 kWh/Yr		Peak Value: 1518 Watts											
Pool Pump	AM	0	0	0	0	0	0	0	0	0	1	1	1
% Released: 0	PM	1	1	1	1	0	0	0	0	0	0	0	0
Annual Use: 0 kWh/Yr		Peak Value: 0 Watts											
Range	AM	0.057	0.057	0.057	0.057	0.057	0.114	0.171	0.286	0.343	0.343	0.343	0.4
% Released: 0	PM	0.457	0.343	0.286	0.4	0.571	1	0.857	0.429	0.286	0.229	0.171	0.114
Annual Use: 0 kWh/Yr		Peak Value: 0 Watts											
Refrigeration	AM	0.85	0.78	0.75	0.73	0.73	0.73	0.75	0.75	0.8	0.8	0.8	0.8
% Released: 0	PM	0.88	0.85	0.85	0.83	0.88	0.95	1	0.98	0.95	0.93	0.9	0.85
Annual Use: 0 kWh/Yr		Peak Value: 0 Watts											
Well Pump	AM	0.05	0.05	0.05	0.05	0.05	0.05	0.1	0.1	0.1	0.1	0.1	0.1
% Released: 0	PM	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Annual Use: 0 kWh/Yr		Peak Value: 0 Watts											

## MECHANICAL VENTILATION

Type	Supply CFM	Exhaust CFM	HRV	Fan	Run Time	Heating System	Cooling System
None	0	0	0	0W	0%	1 - Electric Strip Heat	1 - Central Unit

## DISHWASHERS

ID	Type	Screen	Location	Capacity	Vintage	Make	Model	Schedule	kWhPerYr
1	Dishwash	Default New	Main	12	2004 or N			HERS201	372

## RANGE OVEN

ID	Type	Screen	Location	Type	Fueltype	Make	Model	Cooktop	Oven
1	RangeOv	Default New	Main	CooktopOven C	Natural G			Electric fl	Not Conv

# Building Input Summary Report

HARD WIRED LIGHTING										
ID	Type	Screen	Location	Total#	Qualify#	Comp FI	All Other FL	txtBulbtype	Schedule	Watts per bulb
1	Hard-Wir	By Count - Qualif	Main	15	11	0	2	Incandes	HERS201	60
2	Hard-Wir	By Count - Qualif	2nd Floor	18	7	0	2	Incandes	HERS201	60
3	Hard-Wir	By Count - Qualif	Basemen	8	0	0	2	Incandes	HERS201	60
4	Hard-Wir	By Count - Qualif	Exterior	4	1	0	2	Incandes	HERS201	60
5	Hard-Wir	By Count - Qualif	Garage	1	0	0	2	Incandes	HERS201	60
MISC ELECTRICAL LOADS										
ID	Type	Screen	Item	Quantity	Catagory	Operating	Location	Schedule	Off Standby	
1	Misc Elec	Simple Default		1		1	Main	HERS201	1	
CEILING FANS										
ID	Type	Screen	Default New	cfmperWatt						
1	CeilingFa	Default New	Standard	70.5						
2	CeilingFa	Default New	Standard	70.5						

# Building Input Summary Report

PROJECT											
Title:	L120AC (improved insulation)		Bedrooms:	0		Address Type:					
Building Type:	User		Bathrooms:	0		Lot #					
Owner:	FSEC		Conditioned Area:	1539 sq.ft.		Block/SubDivision:					
# of Units:	1		Total Stories:	1		PlatBook:					
Builder Name:	James Q. Hammer		Worst Case:	No		Street: 111 Anywhere Lane					
Permit Office:			Rotate Angle:	0		County:					
Jurisdiction:			Cross Ventilation:			City, State, Zip: Colorado Springs , CO ,					
Family Type:	Single-family		Whole House Fan:								
New/Existing:	New (From Plans)		Terrain:	Suburban							
Year Construct:			Shielding:	Suburban							
Comment:	HERS BESTEST improved insulation case										
CLIMATE											
Design Location	Tmy Site		Design Temp	97.5 %	2.5 %	Int Design Temp	Winter	Summer	Heating Degree Days	Design Moisture	Daily Temp Range
CO, COLORADO_SPRING	CO_COLORADO_SPRINGTMY1		7	88		70	75	6114.5	0		High
UTILITY RATES											
Fuel	Unit	Utility Name					Monthly Fixed Cost	\$/Unit			
Electricity	kWh	EnergyGauge Default					0	0.1188			
Natural Gas	Therm	EnergyGauge Default					0	1.389			
Fuel Oil	Gallon	EnergyGauge Default					0	2.5			
Propane	Gallon	EnergyGauge Default					0	2.27			
SURROUNDINGS											
Ornt	Type	Shade Trees			Adjacent Buildings						
		Height	Width	Distance	Exist	Height	Width	Distance			
N	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	0 ft		
NE	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	0 ft		
E	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	0 ft		
SE	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	0 ft		
S	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	0 ft		
SW	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	0 ft		
W	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	0 ft		
NW	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	0 ft		
BLOCKS											
Number	Name	Area	Volume								
1	Block1	1539	12312								
SPACES											
Number	Name	Area	Volume	Kitchen	Occupants	Bedrooms	Finished	Cooled	Heated		
1	Main	1539	12312	Yes	0	0	Yes	Yes	Yes		
FLOORS											
#	Floor Type	Space	R-Value	Area	Tile	Wood	Carpet				
1	Raised Floor	Main	----	1539 ft <sup>2</sup>	10.4	0	0	1			

# Building Input Summary Report

ROOF														
#	Type	Materials	Roof Area	Gable Area	Roof Color	Solar Absor.	SA Tested	Emitt	Emitt Tested	Deck Insul.	Pitch (deg)			
1	Gable or shed	Composition shingles	1622 ft²	256 ft²	Medium	0.6	No	0.9	No	0	18.4			
ATTIC														
#	Type	Ventilation	Vent Ratio (1 in)	Area	RBS	IRCC								
1	Full attic	Vented	150	1539 ft²	N	N								
CEILING														
#	Ceiling Type	Space	R-Value	Area	Framing Fraction	Truss Type								
1	Under Attic ()	Main	54.3	1539 ft²	0.11	Wood								
WALLS														
Wall orientation below is as entered. Actual orientation is modified by rotate angle shown in "Project" section above.														
#	Ornt	Adjacent To	Wall Type	Space	Cavity R-Value	Width Ft	In	Height Ft	In	Area	Sheathing R-Value	Framing Fraction	Solar Absor.	Below Grade%
1	N	Exterior	Frame - Wood	Main	18	57	8	456.0 ft²	7.2	0.22	0.6	0		
2	S	Exterior	Frame - Wood	Main	18	57	8	456.0 ft²	7.2	0.22	0.6	0		
3	E	Exterior	Frame - Wood	Main	18	27	8	216.0 ft²	7.2	0.22	0.6	0		
4	W	Exterior	Frame - Wood	Main	18	27	8	216.0 ft²	7.2	0.22	0.6	0		
DOORS														
#	Ornt	Door Type	Space	Storms	U-Value	Width Ft	In	Height Ft	In	Area				
1	N	Insulated	Main	None	.46	3	6	8	20 ft²					
2	S	Insulated	Main	None	.46	3	6	8	20 ft²					
WINDOWS														
#	Ornt	Wall ID	Frame	Panes	NFRC	U-Factor	SHGC	Storm	Area	Overhang Depth	Overhang Separation	Interior Shade	Screening	
1	N	1	TIM	Single (Clear)	Yes	1.09	0.7	N	90.0 ft²	0 ft 0 in	0 ft 0 in	None	None	
2	S	2	TIM	Single (Clear)	Yes	1.09	0.7	N	90.0 ft²	0 ft 0 in	0 ft 0 in	None	None	
3	E	3	TIM	Single (Clear)	Yes	1.09	0.7	N	45.0 ft²	0 ft 0 in	0 ft 0 in	None	None	
4	W	4	TIM	Single (Clear)	Yes	1.09	0.7	N	45.0 ft²	0 ft 0 in	0 ft 0 in	None	None	
INFILTRATION														
#	Scope	Method	SLA	CFM 50	ELA	EqLA	ACH	ACH 50	Space(s)					
1	Wholehouse	Proposed ACH	.000684	2759.9	151.51	284.94	.67	13.449	All					
MASS														
Mass Type	Area	Thickness	Furniture Fraction	Space										
No Added Mass	0 ft²	0 ft	0	Main										

# Building Input Summary Report

HEATING SYSTEM														
#	System Type	Subtype			Efficiency	Capacity	-----Geothermal HeatPump-----				Ducts	Block		
						Entry	Power	Volt.	Curr					
1	Electric Strip Heat	None			COP:1	100 kBtu/hr		0	0	0	sys#1		1	
COOLING SYSTEM														
#	System Type	Subtype			Efficiency	Capacity	Air Flow	SHR	Ducts	Block				
1	Central Unit	None			SEER:10	22.4 kBtu/hr	672 cfm	0.75	sys#1	1				
HOT WATER SYSTEM														
#	System Type	SubType	Location	EF	Cap	Use	SetPnt	Credits						
					gal	gal	deg							
DUCTS														
DUCT #	Location	----- Supply -----		----- Return -----		Leakage Type	Air Handler	CFM 25 TOT	CFM25 OUT	QN	RLF	HVAC #		
1	Main	R-Value	Area	Location	Area	Number		--- cfm	--- cfm	0.00	0.60	1	1	
TEMPERATURES														
Programable Thermostat: N					Ceiling Fans: N									
Cooling	<input type="checkbox"/> Jan	<input type="checkbox"/> Feb	<input type="checkbox"/> Mar	<input type="checkbox"/> Apr	<input type="checkbox"/> May	<input type="checkbox"/> Jun	<input type="checkbox"/> Jul	<input type="checkbox"/> Aug	<input type="checkbox"/> Sep	<input type="checkbox"/> Oct	<input type="checkbox"/> Nov	<input type="checkbox"/> Dec		
Heating	<input checked="" type="checkbox"/> Jan	<input checked="" type="checkbox"/> Feb	<input checked="" type="checkbox"/> Mar	<input checked="" type="checkbox"/> Apr	<input checked="" type="checkbox"/> May	<input checked="" type="checkbox"/> Jun	<input checked="" type="checkbox"/> Jul	<input checked="" type="checkbox"/> Aug	<input checked="" type="checkbox"/> Sep	<input checked="" type="checkbox"/> Oct	<input checked="" type="checkbox"/> Nov	<input checked="" type="checkbox"/> Dec		
Venting	<input type="checkbox"/> Jan	<input type="checkbox"/> Feb	<input type="checkbox"/> Mar	<input type="checkbox"/> Apr	<input type="checkbox"/> May	<input type="checkbox"/> Jun	<input type="checkbox"/> Jul	<input type="checkbox"/> Aug	<input type="checkbox"/> Sep	<input type="checkbox"/> Oct	<input type="checkbox"/> Nov	<input type="checkbox"/> Dec		
Thermostat Schedule: BESTEST-heating														
Schedule Type		Hours												
		1	2	3	4	5	6	7	8	9	10	11	12	
Cooling (WD)	AM	78	78	78	78	78	78	78	78	78	78	78	78	78
	PM	78	78	78	78	78	78	78	78	78	78	78	78	78
Cooling (WEH)	AM	78	78	78	78	78	78	78	78	78	78	78	78	78
	PM	78	78	78	78	78	78	78	78	78	78	78	78	78
Heating (WD)	AM	68	68	68	68	68	68	68	68	68	68	68	68	68
	PM	68	68	68	68	68	68	68	68	68	68	68	68	68
Heating (WEH)	AM	68	68	68	68	68	68	68	68	68	68	68	68	68
	PM	68	68	68	68	68	68	68	68	68	68	68	68	68

# Building Input Summary Report

## APPLIANCES & LIGHTING

Appliance Schedule: BESTEST-gains		Hours											
Schedule Type		1	2	3	4	5	6	7	8	9	10	11	12
Ceiling Fans (Summer)	AM	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.5	0.5	0.5	0.5	0.5
% Released: 0	PM	0.5	0.5	0.5	0.5	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.75
Annual Use: 0 kWh/Yr		Peak Value: 0 Watts											
Clothes Washer	AM	0.105	0.081	0.046	0.046	0.081	0.128	0.256	0.57	0.849	1	0.977	0.872
% Released: 60	PM	0.779	0.698	0.605	0.57	0.581	0.57	0.57	0.57	0.57	0.488	0.43	0.198
Annual Use: 0 kWh/Yr		Peak Value: 0 Watts											
Dishwasher	AM	0.139	0.05	0.028	0.024	0.029	0.09	0.169	0.303	0.541	0.594	0.502	0.443
% Released: 60	PM	0.377	0.396	0.335	0.323	0.344	0.448	0.791	1	0.8	0.597	0.383	0.281
Annual Use: 0 kWh/Yr		Peak Value: 0 Watts											
Dryer	AM	0.2	0.1	0.05	0.05	0.05	0.075	0.2	0.375	0.5	0.8	0.95	1
% Released: 0	PM	0.875	0.85	0.8	0.625	0.625	0.6	0.575	0.55	0.625	0.7	0.65	0.375
Annual Use: 0 kWh/Yr		Peak Value: 0 Watts											
Lighting	AM	0.144	0.144	0.144	0.144	0.144	0.243	0.304	0.607	0.356	0.216	0.216	0.29
% Released: 100	PM	0.216	0.183	0.186	0.186	0.274	0.295	0.317	0.499	0.499	0.523	0.523	0.469
Annual Use: 800 kWh/Yr		Peak Value: 308 Watts											
Miscellaneous	AM	0.238	0.238	0.238	0.238	0.238	0.398	0.5	1	0.583	0.357	0.357	0.476
% Released: 100	PM	0.357	0.297	0.31	0.31	0.453	0.488	0.524	0.821	0.821	0.857	0.857	0.774
Annual Use: 6500 kWh/Yr		Peak Value: 1518 Watts											
Pool Pump	AM	0	0	0	0	0	0	0	0	0	1	1	1
% Released: 0	PM	1	1	1	1	0	0	0	0	0	0	0	0
Annual Use: 0 kWh/Yr		Peak Value: 0 Watts											
Range	AM	0.057	0.057	0.057	0.057	0.057	0.114	0.171	0.286	0.343	0.343	0.343	0.4
% Released: 0	PM	0.457	0.343	0.286	0.4	0.571	1	0.857	0.429	0.286	0.229	0.171	0.114
Annual Use: 0 kWh/Yr		Peak Value: 0 Watts											
Refrigeration	AM	0.85	0.78	0.75	0.73	0.73	0.73	0.75	0.75	0.8	0.8	0.8	0.8
% Released: 0	PM	0.88	0.85	0.85	0.83	0.88	0.95	1	0.98	0.95	0.93	0.9	0.85
Annual Use: 0 kWh/Yr		Peak Value: 0 Watts											
Well Pump	AM	0.05	0.05	0.05	0.05	0.05	0.05	0.1	0.1	0.1	0.1	0.1	0.1
% Released: 0	PM	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Annual Use: 0 kWh/Yr		Peak Value: 0 Watts											

## MECHANICAL VENTILATION

Type	Supply CFM	Exhaust CFM	HRV	Fan	Run Time	Heating System	Cooling System
None	0	0	0	0W	0%	1 - Electric Strip Heat	1 - Central Unit

## DISHWASHERS

ID	Type	Screen	Location	Capacity	Vintage	Make	Model	Schedule	kWhPerYr
1	Dishwash	Default New	Main	12	2004 or N			HERS201	372

## RANGE OVEN

ID	Type	Screen	Location	Type	Fueltype	Make	Model	Cooktop	Oven
1	RangeOv	Default New	Main	CooktopOven C	Natural G			Electric fl	Not Conv

# Building Input Summary Report

<b>HARD WIRED LIGHTING</b>										
ID	Type	Screen	Location	Total#	Qualify#	Comp FI	All Other FL	txtBulbtype	Schedule	Watts per bulb
1	Hard-Wir	By Count - Qualif	Main	15	11	0	2	Incandes	HERS201	60
2	Hard-Wir	By Count - Qualif	2nd Floor	18	7	0	2	Incandes	HERS201	60
3	Hard-Wir	By Count - Qualif	Basemen	8	0	0	2	Incandes	HERS201	60
4	Hard-Wir	By Count - Qualif	Exterior	4	1	0	2	Incandes	HERS201	60
5	Hard-Wir	By Count - Qualif	Garage	1	0	0	2	Incandes	HERS201	60
<b>MISC ELECTRICAL LOADS</b>										
ID	Type	Screen	Item	Quantity	Catagory	Operating	Location	Schedule	Off Standby	
1	Misc Elec	Simple Default		1		1	Main	HERS201	1	
<b>CEILING FANS</b>										
ID	Type	Screen	Default New	cfmperWatt						
1	CeilingFa	Default New	Standard	70.5						
2	CeilingFa	Default New	Standard	70.5						

# Building Input Summary Report

PROJECT										
Title:	L130AC (low-e windows)	Bedrooms:	0	Address Type:						
Building Type:	User	Bathrooms:	0	Lot #						
Owner:	FSEC	Conditioned Area:	1539 sq.ft.	Block/SubDivision:						
# of Units:	1	Total Stories:	1	PlatBook:						
Builder Name:	James Q. Hammer	Worst Case:	No	Street:	111 Anywhere Lane					
Permit Office:		Rotate Angle:	0	County:						
Jurisdiction:		Cross Ventilation:		City, State, Zip:	Colorado Springs , CO ,					
Family Type:	Single-family	Whole House Fan:								
New/Existing:	New (From Plans)	Terrain:	Suburban							
Year Construct:		Shielding:	Suburban							
Comment:	HERS BESTEST low-e windows case									
CLIMATE										
Design Location	Tmy Site	Design Temp	97.5 %	2.5 %	Int Design Temp	Heating Degree Days	Design Moisture	Daily Temp Range		
CO, COLORADO_SPRING	CO_COLORADO_SPRINGTMY1	7	88		70	75	6114.5	0	High	
UTILITY RATES										
Fuel	Unit	Utility Name				Monthly Fixed Cost				\$/Unit
Electricity	kWh	EnergyGauge Default				0				0.1188
Natural Gas	Therm	EnergyGauge Default				0				0.682
Fuel Oil	Gallon	EnergyGauge Default				0				1.1
Propane	Gallon	EnergyGauge Default				0				1.4
SURROUNDINGS										
Ornt	Type	Shade Trees			Adjacent Buildings					
		Height	Width	Distance	Exist	Height	Width	Distance		
N	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	0 ft	
NE	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	0 ft	
E	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	0 ft	
SE	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	0 ft	
S	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	0 ft	
SW	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	0 ft	
W	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	0 ft	
NW	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	0 ft	
BLOCKS										
Number	Name	Area	Volume							
1	Block1	1539	12312							
SPACES										
Number	Name	Area	Volume	Kitchen	Occupants	Bedrooms	Finished	Cooled	Heated	
1	Main	1539	12312	Yes	0	0		Yes	Yes	
FLOORS										
#	Floor Type	Space	R-Value	Area	Tile	Wood	Carpet			
1	Raised Floor	Main	----	1539 ft <sup>2</sup>	10.4	0	0	1		



# Building Input Summary Report

ROOF														
#	Type	Materials	Roof Area	Gable Area	Roof Color	Solar Absor.	SA Tested	Emitt	Emitt Tested	Deck Insul.	Pitch (deg)			
1	Gable or shed	Composition shingles	1622 ft²	256 ft²	Medium	0.6	No	0.9	No	0	18.4			
ATTIC														
#	Type	Ventilation	Vent Ratio (1 in)	Area	RBS	IRCC								
1	Full attic	Vented	150	1539 ft²	N	N								
CEILING														
#	Ceiling Type	Space	R-Value	Area	Framing Fraction	Truss Type								
1	Under Attic ()	Main	16.7	1539 ft²	0.11	Wood								
WALLS														
Wall orientation below is as entered. Actual orientation is modified by rotate angle shown in "Project" section above.														
#	Ornt	Adjacent To	Wall Type	Space	Cavity R-Value	Width Ft	In	Height Ft	In	Area	Sheathing R-Value	Framing Fraction	Solar Absor.	Below Grade%
1	N	Exterior	Frame - Wood	Main	11	57		8		456.0 ft²		0.25	0.6	0
2	S	Exterior	Frame - Wood	Main	11	57		8		456.0 ft²		0.25	0.6	0
3	E	Exterior	Frame - Wood	Main	11	27		8		216.0 ft²		0.25	0.6	0
4	W	Exterior	Frame - Wood	Main	11	27		8		216.0 ft²		0.25	0.6	0
DOORS														
#	Ornt	Door Type	Space	Storms	U-Value	Width Ft	In	Height Ft	In	Area				
1	N	Insulated	Main	None	.46	3		6	8	20 ft²				
2	S	Insulated	Main	None	.46	3		6	8	20 ft²				
WINDOWS														
#	Ornt	Wall ID	Frame	Panes	NFRC	U-Factor	SHGC	Storm	Area	Overhang Depth	Overhang Separation	Interior Shade	Screening	
1	N	1	Wood	Low-E Double	Yes	0.3	0.34	N	90.0 ft²	0 ft 0 in	0 ft 0 in	None	None	
2	S	2	Wood	Low-E Double	Yes	0.3	0.34	N	90.0 ft²	0 ft 0 in	0 ft 0 in	None	None	
3	E	3	Wood	Low-E Double	Yes	0.3	0.34	N	45.0 ft²	0 ft 0 in	0 ft 0 in	None	None	
4	W	4	Wood	Low-E Double	Yes	0.3	0.34	N	45.0 ft²	0 ft 0 in	0 ft 0 in	None	None	
INFILTRATION														
#	Scope	Method	SLA	CFM 50	ELA	EqLA	ACH	ACH 50	Space(s)					
1	Wholehouse	Proposed ACH	.000684	2759.9	151.51	284.94	.67	13.449	All					
MASS														
Mass Type	Area	Thickness	Furniture Fraction	Space										
No Added Mass	0 ft²	0 ft	0	Main										

# Building Input Summary Report

HEATING SYSTEM														
#	System Type	Subtype			Efficiency	Capacity	-----Geothermal HeatPump----- Entry Power Volt. Curr				Ducts	Block		
1	Electric Strip Heat	None			COP:1	85 kBtu/hr	0	0	0		sys#1	1		
COOLING SYSTEM														
#	System Type	Subtype			Efficiency	Capacity	Air Flow	SHR	Ducts	Block				
1	Central Unit	None			SEER:10	54 kBtu/hr	828 cfm	0.75	sys#1	1				
HOT WATER SYSTEM														
#	System Type	SubType	Location	EF	Cap	Use	SetPnt	Credits						
					gal	gal	deg							
DUCTS														
DUCT #	Location	----- Supply ----- R-Value Area		----- Return ----- Location Area		Number	Leakage Type	Air Handler	CFM 25 TOT	CFM25 OUT	QN	RLF	HVAC # Heat	Cool
1	Main	6	384.75 ft²	Main	77 ft²		Prop. Air Leakage	Main	--- cfm	--- cfm	0.00	0.60	1	1
TEMPERATURES														
Programable Thermostat: N					Ceiling Fans: N									
Cooling	<input type="checkbox"/> Jan	<input type="checkbox"/> Feb	<input type="checkbox"/> Mar	<input type="checkbox"/> Apr	<input type="checkbox"/> May	<input type="checkbox"/> Jun	<input type="checkbox"/> Jul	<input type="checkbox"/> Aug	<input type="checkbox"/> Sep	<input type="checkbox"/> Oct	<input type="checkbox"/> Nov	<input type="checkbox"/> Dec		
Heating	<input checked="" type="checkbox"/> Jan	<input checked="" type="checkbox"/> Feb	<input checked="" type="checkbox"/> Mar	<input checked="" type="checkbox"/> Apr	<input checked="" type="checkbox"/> May	<input checked="" type="checkbox"/> Jun	<input checked="" type="checkbox"/> Jul	<input checked="" type="checkbox"/> Aug	<input checked="" type="checkbox"/> Sep	<input checked="" type="checkbox"/> Oct	<input checked="" type="checkbox"/> Nov	<input checked="" type="checkbox"/> Dec		
Venting	<input type="checkbox"/> Jan	<input type="checkbox"/> Feb	<input type="checkbox"/> Mar	<input type="checkbox"/> Apr	<input type="checkbox"/> May	<input type="checkbox"/> Jun	<input type="checkbox"/> Jul	<input type="checkbox"/> Aug	<input type="checkbox"/> Sep	<input type="checkbox"/> Oct	<input type="checkbox"/> Nov	<input type="checkbox"/> Dec		
Thermostat Schedule: BESTEST-heating														
Schedule Type		Hours												
		1	2	3	4	5	6	7	8	9	10	11	12	
Cooling (WD)	AM	78	78	78	78	78	78	78	78	78	78	78	78	78
	PM	78	78	78	78	78	78	78	78	78	78	78	78	78
Cooling (WEH)	AM	78	78	78	78	78	78	78	78	78	78	78	78	78
	PM	78	78	78	78	78	78	78	78	78	78	78	78	78
Heating (WD)	AM	68	68	68	68	68	68	68	68	68	68	68	68	68
	PM	68	68	68	68	68	68	68	68	68	68	68	68	68
Heating (WEH)	AM	68	68	68	68	68	68	68	68	68	68	68	68	68
	PM	68	68	68	68	68	68	68	68	68	68	68	68	68

# Building Input Summary Report

## APPLIANCES & LIGHTING

Appliance Schedule: BESTEST-gains		Hours											
Schedule Type		1	2	3	4	5	6	7	8	9	10	11	12
Ceiling Fans (Summer)	AM	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.5	0.5	0.5	0.5	0.5
% Released: 0	PM	0.5	0.5	0.5	0.5	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.75
Annual Use: 0 kWh/Yr		Peak Value: 0 Watts											
Clothes Washer	AM	0.105	0.081	0.046	0.046	0.081	0.128	0.256	0.57	0.849	1	0.977	0.872
% Released: 60	PM	0.779	0.698	0.605	0.57	0.581	0.57	0.57	0.57	0.57	0.488	0.43	0.198
Annual Use: 0 kWh/Yr		Peak Value: 0 Watts											
Dishwasher	AM	0.139	0.05	0.028	0.024	0.029	0.09	0.169	0.303	0.541	0.594	0.502	0.443
% Released: 60	PM	0.377	0.396	0.335	0.323	0.344	0.448	0.791	1	0.8	0.597	0.383	0.281
Annual Use: 0 kWh/Yr		Peak Value: 0 Watts											
Dryer	AM	0.2	0.1	0.05	0.05	0.05	0.075	0.2	0.375	0.5	0.8	0.95	1
% Released: 0	PM	0.875	0.85	0.8	0.625	0.625	0.6	0.575	0.55	0.625	0.7	0.65	0.375
Annual Use: 0 kWh/Yr		Peak Value: 0 Watts											
Lighting	AM	0.144	0.144	0.144	0.144	0.144	0.243	0.304	0.607	0.356	0.216	0.216	0.29
% Released: 100	PM	0.216	0.183	0.186	0.186	0.274	0.295	0.317	0.499	0.499	0.523	0.523	0.469
Annual Use: 800 kWh/Yr		Peak Value: 308 Watts											
Miscellaneous	AM	0.238	0.238	0.238	0.238	0.238	0.398	0.5	1	0.583	0.357	0.357	0.476
% Released: 100	PM	0.357	0.297	0.31	0.31	0.453	0.488	0.524	0.821	0.821	0.857	0.857	0.774
Annual Use: 6500 kWh/Yr		Peak Value: 1518 Watts											
Pool Pump	AM	0	0	0	0	0	0	0	0	0	1	1	1
% Released: 0	PM	1	1	1	1	0	0	0	0	0	0	0	0
Annual Use: 0 kWh/Yr		Peak Value: 0 Watts											
Range	AM	0.057	0.057	0.057	0.057	0.057	0.114	0.171	0.286	0.343	0.343	0.343	0.4
% Released: 0	PM	0.457	0.343	0.286	0.4	0.571	1	0.857	0.429	0.286	0.229	0.171	0.114
Annual Use: 0 kWh/Yr		Peak Value: 0 Watts											
Refrigeration	AM	0.85	0.78	0.75	0.73	0.73	0.73	0.75	0.75	0.8	0.8	0.8	0.8
% Released: 0	PM	0.88	0.85	0.85	0.83	0.88	0.95	1	0.98	0.95	0.93	0.9	0.85
Annual Use: 0 kWh/Yr		Peak Value: 0 Watts											
Well Pump	AM	0.05	0.05	0.05	0.05	0.05	0.05	0.1	0.1	0.1	0.1	0.1	0.1
% Released: 0	PM	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Annual Use: 0 kWh/Yr		Peak Value: 0 Watts											

## MECHANICAL VENTILATION

Type	Supply CFM	Exhaust CFM	HRV	Fan	Run Time	Heating System	Cooling System
None	0	0	0	0W	0%	1 - Electric Strip Heat	1 - Central Unit

## DISHWASHERS

ID	Type	Screen	Location	Capacity	Vintage	Make	Model	Schedule	kWhPerYr
1	Dishwash	Default New	Main	12	2004 or N			HERS201	372

## RANGE OVEN

ID	Type	Screen	Location	Type	Fueltype	Make	Model	Cooktop	Oven
1	RangeOv	Default New	Main	CooktopOven C	Natural G			Electric fl	Not Conv

# Building Input Summary Report

<b>HARD WIRED LIGHTING</b>										
ID	Type	Screen	Location	Total#	Qualify#	Comp FI	All Other FL	txtBulbtype	Schedule	Watts per bulb
1	Hard-Wir	By Count - Qualif	Main	15	11	0	2	Incandes	HERS201	60
2	Hard-Wir	By Count - Qualif	2nd Floor	18	7	0	2	Incandes	HERS201	60
3	Hard-Wir	By Count - Qualif	Basemen	8	0	0	2	Incandes	HERS201	60
4	Hard-Wir	By Count - Qualif	Exterior	4	1	0	2	Incandes	HERS201	60
5	Hard-Wir	By Count - Qualif	Garage	1	0	0	2	Incandes	HERS201	60
<b>MISC ELECTRICAL LOADS</b>										
ID	Type	Screen	Item	Quantity	Catagory	Operating	Location	Schedule	Off Standby	
1	Misc Elec	Simple Default		1		1	Main	HERS201	1	
<b>CEILING FANS</b>										
ID	Type	Screen	Default New	cfmperWatt						
1	CeilingFa	Default New	Standard	70.5						
2	CeilingFa	Default New	Standard	70.5						

# Building Input Summary Report

PROJECT										
Title:	L140AC (zero windows)	Bedrooms:	0	Address Type:						
Building Type:	User	Bathrooms:	0	Lot #						
Owner:	FSEC	Conditioned Area:	1539 sq.ft.	Block/SubDivision:						
# of Units:	1	Total Stories:	1	PlatBook:						
Builder Name:	James Q. Hammer	Worst Case:	No	Street:	111 Anywhere Lane					
Permit Office:		Rotate Angle:	0	County:						
Jurisdiction:		Cross Ventilation:		City, State, Zip:	Colorado Springs , CO ,					
Family Type:	Single-family	Whole House Fan:								
New/Existing:	New (From Plans)	Terrain:	Suburban							
Year Construct:		Shielding:	Suburban							
Comment:	HERS BESTEST zero windows case									
CLIMATE										
Design Location	Tmy Site	Design Temp	97.5 %	2.5 %	Int Design Temp	Heating Degree Days	Design Moisture	Daily Temp Range		
CO, COLORADO_SPRING	CO_COLORADO_SPRINGTMY1	7	88		70	75	6114.5	0	High	
UTILITY RATES										
Fuel	Unit	Utility Name				Monthly Fixed Cost				\$/Unit
Electricity	kWh	EnergyGauge Default				0				0.1188
Natural Gas	Therm	EnergyGauge Default				0				0.682
Fuel Oil	Gallon	EnergyGauge Default				0				1.1
Propane	Gallon	EnergyGauge Default				0				1.4
SURROUNDINGS										
Ornt	Type	Shade Trees			Adjacent Buildings					
		Height	Width	Distance	Exist	Height	Width	Distance		
N	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
NE	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
E	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
SE	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
S	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
SW	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
W	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
NW	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
BLOCKS										
Number	Name	Area	Volume							
1	Block1	1539	12312							
SPACES										
Number	Name	Area	Volume	Kitchen	Occupants	Bedrooms	Finished	Cooled	Heated	
1	Main	1539	12312	Yes	0	0		Yes	Yes	
FLOORS										
#	Floor Type	Space	R-Value	Area	Tile	Wood	Carpet			
1	Raised Floor	Main	----	1539 ft <sup>2</sup>	10.4	0	0	1		

# Building Input Summary Report

ROOF													
#	Type	Materials	Roof Area	Gable Area	Roof Color	Solar Absor.	SA Tested	Emitt	Emitt Tested	Deck Insul.	Pitch (deg)		
1	Gable or shed	Composition shingles	1622 ft²	256 ft²	Medium	0.6	No	0.9	No	0	18.4		
ATTIC													
#	Type	Ventilation	Vent Ratio (1 in)	Area	RBS	IRCC							
1	Full attic	Vented	150	1539 ft²	N	N							
CEILING													
#	Ceiling Type	Space	R-Value	Area	Framing Fraction	Truss Type							
1	Under Attic ()	Main	16.7	1539 ft²	0.11	Wood							
WALLS													
Wall orientation below is as entered. Actual orientation is modified by rotate angle shown in "Project" section above.													
#	Ornt	Adjacent To	Wall Type	Space	Cavity R-Value	Width Ft In	Height Ft In	Area	Sheathing R-Value	Framing Fraction	Solar Absor.	Below Grade%	
1	N	Exterior	Frame - Wood	Main	11	57	8	456.0 ft²		0.25	0.6	0	
2	S	Exterior	Frame - Wood	Main	11	57	8	456.0 ft²		0.25	0.6	0	
3	E	Exterior	Frame - Wood	Main	11	27	8	216.0 ft²		0.25	0.6	0	
4	W	Exterior	Frame - Wood	Main	11	27	8	216.0 ft²		0.25	0.6	0	
DOORS													
#	Ornt	Door Type	Space	Storms	U-Value	Width Ft In	Height Ft In	Area					
1	N	Insulated	Main	None	.46	3	6	8	20 ft²				
2	S	Insulated	Main	None	.46	3	6	8	20 ft²				
WINDOWS													
#	Ornt	Wall ID	Frame	Panes	NFRC	U-Factor	SHGC	Storm	Area	Overhang Depth	Overhang Separation	Interior Shade	Screening
1	N	1	Vinyl	Low-E Double	Yes	0.09	0.01	N	0.0 ft²	0 ft 0 in	0 ft 0 in	Drapes/blinds	None
INFILTRATION													
#	Scope	Method	SLA	CFM 50	ELA	EqLA	ACH	ACH 50	Space(s)				
1	Wholehouse	Proposed ACH	.000684	2759.9	151.51	284.94	.67	13.449	All				
MASS													
Mass Type	Area	Thickness	Furniture Fraction	Space									
No Added Mass	0 ft²	0 ft	0	Main									

# Building Input Summary Report

HEATING SYSTEM														
#	System Type	Subtype			Efficiency	Capacity	-----Geothermal HeatPump-----				Ducts	Block		
						Entry	Power	Volt.	Curr					
1	Electric Strip Heat	None			COP:1	77 kBtu/hr		0	0	0	sys#1		1	
COOLING SYSTEM														
#	System Type	Subtype			Efficiency	Capacity	Air Flow	SHR	Ducts	Block				
1	Central Unit	None			SEER:10	8.6 kBtu/hr	258 cfm	0.75	sys#1	1				
HOT WATER SYSTEM														
#	System Type	SubType	Location	EF	Cap	Use	SetPnt	Credits						
					gal	gal	deg							
DUCTS														
DUCT #	Location	----- Supply -----		----- Return -----		Leakage Type	Air Handler	CFM 25 TOT	CFM25 OUT	QN	RLF	HVAC #		
1	Main	R-Value	Area	Location	Area	Number		--- cfm	--- cfm	0.00	0.60	1	1	
TEMPERATURES														
Programable Thermostat: N					Ceiling Fans: N									
Cooling	<input type="checkbox"/> Jan	<input type="checkbox"/> Feb	<input type="checkbox"/> Mar	<input type="checkbox"/> Apr	<input type="checkbox"/> May	<input type="checkbox"/> Jun	<input type="checkbox"/> Jul	<input type="checkbox"/> Aug	<input type="checkbox"/> Sep	<input type="checkbox"/> Oct	<input type="checkbox"/> Nov	<input type="checkbox"/> Dec		
Heating	<input checked="" type="checkbox"/> Jan	<input checked="" type="checkbox"/> Feb	<input checked="" type="checkbox"/> Mar	<input checked="" type="checkbox"/> Apr	<input checked="" type="checkbox"/> May	<input checked="" type="checkbox"/> Jun	<input checked="" type="checkbox"/> Jul	<input checked="" type="checkbox"/> Aug	<input checked="" type="checkbox"/> Sep	<input checked="" type="checkbox"/> Oct	<input checked="" type="checkbox"/> Nov	<input checked="" type="checkbox"/> Dec		
Venting	<input type="checkbox"/> Jan	<input type="checkbox"/> Feb	<input type="checkbox"/> Mar	<input type="checkbox"/> Apr	<input type="checkbox"/> May	<input type="checkbox"/> Jun	<input type="checkbox"/> Jul	<input type="checkbox"/> Aug	<input type="checkbox"/> Sep	<input type="checkbox"/> Oct	<input type="checkbox"/> Nov	<input type="checkbox"/> Dec		
Thermostat Schedule: BESTEST-heating														
Schedule Type		Hours												
		1	2	3	4	5	6	7	8	9	10	11	12	
Cooling (WD)	AM	78	78	78	78	78	78	78	78	78	78	78	78	78
	PM	78	78	78	78	78	78	78	78	78	78	78	78	78
Cooling (WEH)	AM	78	78	78	78	78	78	78	78	78	78	78	78	78
	PM	78	78	78	78	78	78	78	78	78	78	78	78	78
Heating (WD)	AM	68	68	68	68	68	68	68	68	68	68	68	68	68
	PM	68	68	68	68	68	68	68	68	68	68	68	68	68
Heating (WEH)	AM	68	68	68	68	68	68	68	68	68	68	68	68	68
	PM	68	68	68	68	68	68	68	68	68	68	68	68	68

# Building Input Summary Report

## APPLIANCES & LIGHTING

Appliance Schedule: BESTEST-gains		Hours											
Schedule Type		1	2	3	4	5	6	7	8	9	10	11	12
Ceiling Fans (Summer)	AM	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.5	0.5	0.5	0.5	0.5
% Released: 0	PM	0.5	0.5	0.5	0.5	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.75
Annual Use: 0 kWh/Yr		Peak Value: 0 Watts											
Clothes Washer	AM	0.105	0.081	0.046	0.046	0.081	0.128	0.256	0.57	0.849	1	0.977	0.872
% Released: 60	PM	0.779	0.698	0.605	0.57	0.581	0.57	0.57	0.57	0.57	0.488	0.43	0.198
Annual Use: 0 kWh/Yr		Peak Value: 0 Watts											
Dishwasher	AM	0.139	0.05	0.028	0.024	0.029	0.09	0.169	0.303	0.541	0.594	0.502	0.443
% Released: 60	PM	0.377	0.396	0.335	0.323	0.344	0.448	0.791	1	0.8	0.597	0.383	0.281
Annual Use: 0 kWh/Yr		Peak Value: 0 Watts											
Dryer	AM	0.2	0.1	0.05	0.05	0.05	0.075	0.2	0.375	0.5	0.8	0.95	1
% Released: 0	PM	0.875	0.85	0.8	0.625	0.625	0.6	0.575	0.55	0.625	0.7	0.65	0.375
Annual Use: 0 kWh/Yr		Peak Value: 0 Watts											
Lighting	AM	0.144	0.144	0.144	0.144	0.144	0.243	0.304	0.607	0.356	0.216	0.216	0.29
% Released: 100	PM	0.216	0.183	0.186	0.186	0.274	0.295	0.317	0.499	0.499	0.523	0.523	0.469
Annual Use: 800 kWh/Yr		Peak Value: 308 Watts											
Miscellaneous	AM	0.238	0.238	0.238	0.238	0.238	0.398	0.5	1	0.583	0.357	0.357	0.476
% Released: 100	PM	0.357	0.297	0.31	0.31	0.453	0.488	0.524	0.821	0.821	0.857	0.857	0.774
Annual Use: 6500 kWh/Yr		Peak Value: 1518 Watts											
Pool Pump	AM	0	0	0	0	0	0	0	0	0	1	1	1
% Released: 0	PM	1	1	1	1	0	0	0	0	0	0	0	0
Annual Use: 0 kWh/Yr		Peak Value: 0 Watts											
Range	AM	0.057	0.057	0.057	0.057	0.057	0.114	0.171	0.286	0.343	0.343	0.343	0.4
% Released: 0	PM	0.457	0.343	0.286	0.4	0.571	1	0.857	0.429	0.286	0.229	0.171	0.114
Annual Use: 0 kWh/Yr		Peak Value: 0 Watts											
Refrigeration	AM	0.85	0.78	0.75	0.73	0.73	0.73	0.75	0.75	0.8	0.8	0.8	0.8
% Released: 0	PM	0.88	0.85	0.85	0.83	0.88	0.95	1	0.98	0.95	0.93	0.9	0.85
Annual Use: 0 kWh/Yr		Peak Value: 0 Watts											
Well Pump	AM	0.05	0.05	0.05	0.05	0.05	0.05	0.1	0.1	0.1	0.1	0.1	0.1
% Released: 0	PM	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Annual Use: 0 kWh/Yr		Peak Value: 0 Watts											

## MECHANICAL VENTILATION

Type	Supply CFM	Exhaust CFM	HRV	Fan	Run Time	Heating System	Cooling System
None	0	0	0	0W	0%	1 - Electric Strip Heat	1 - Central Unit

## DISHWASHERS

ID	Type	Screen	Location	Capacity	Vintage	Make	Model	Schedule	kWhPerYr
1	Dishwash	Default New	Main	12	2004 or N			HERS201	372

## RANGE OVEN

ID	Type	Screen	Location	Type	Fueltype	Make	Model	Cooktop	Oven
1	RangeOv	Default New	Main	CooktopOven C	Natural G			Electric fl	Not Conv



# Building Input Summary Report

HARD WIRED LIGHTING										
ID	Type	Screen	Location	Total#	Qualify#	Comp FI	All Other FL	txtBulbtype	Schedule	Watts per bulb
1	Hard-Wir	By Count - Qualif	Main	15	11	0	2	Incandes	HERS201	60
2	Hard-Wir	By Count - Qualif	2nd Floor	18	7	0	2	Incandes	HERS201	60
3	Hard-Wir	By Count - Qualif	Basemen	8	0	0	2	Incandes	HERS201	60
4	Hard-Wir	By Count - Qualif	Exterior	4	1	0	2	Incandes	HERS201	60
5	Hard-Wir	By Count - Qualif	Garage	1	0	0	2	Incandes	HERS201	60

MISC ELECTRICAL LOADS										
ID	Type	Screen	Item	Quantity	Catagory	Operating	Location	Schedule	Off Standby	
1	Misc Elec	Simple Default		1		1	Main	HERS201	1	

CEILING FANS				
ID	Type	Screen	Default New	cfmperWatt
1	CeilingFa	Default New	Standard	70.5
2	CeilingFa	Default New	Standard	70.5

# Building Input Summary Report

PROJECT											
Title:	L150AC (all south glass)		Bedrooms:	0		Address Type:					
Building Type:	User		Bathrooms:	0		Lot #					
Owner:	FSEC		Conditioned Area:	1539 sq.ft.		Block/SubDivision:					
# of Units:	1		Total Stories:	1		PlatBook:					
Builder Name:	James Q. Hammer		Worst Case:	No		Street:	111 Anywhere Lane				
Permit Office:			Rotate Angle:	0		County:					
Jurisdiction:			Cross Ventilation:			City, State, Zip:	Colorado Springs , CO ,				
Family Type:	Single-family		Whole House Fan:								
New/Existing:	New (From Plans)		Terrain:	Suburban							
Year Construct:			Shielding:	Suburban							
Comment:	HERS BESTEST all south glass case										
CLIMATE											
Design Location	Tmy Site		Design Temp	97.5 %	2.5 %	Int Design Temp	Winter	Summer	Heating Degree Days	Design Moisture	Daily Temp Range
CO, COLORADO_SPRING	CO_COLORADO_SPRINGTMY1		7	88		70	75	6114.5	0	High	
UTILITY RATES											
Fuel	Unit	Utility Name					Monthly Fixed Cost	\$/Unit			
Electricity	kWh	EnergyGauge Default					0	0.1188			
Natural Gas	Therm	EnergyGauge Default					0	0.682			
Fuel Oil	Gallon	EnergyGauge Default					0	1.1			
Propane	Gallon	EnergyGauge Default					0	1.4			
SURROUNDINGS											
Ornt	Type	Shade Trees			Adjacent Buildings						
		Height	Width	Distance	Exist	Height	Width	Distance			
N	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft			
NE	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft			
E	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft			
SE	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft			
S	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft			
SW	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft			
W	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft			
NW	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft			
BLOCKS											
Number	Name	Area	Volume								
1	Block1	1539	12312								
SPACES											
Number	Name	Area	Volume	Kitchen	Occupants	Bedrooms	Finished	Cooled	Heated		
1	Main	1539	12312	Yes	0	0		Yes	Yes		
FLOORS											
#	Floor Type	Space	R-Value	Area	Tile	Wood	Carpet				
1	Raised Floor	Main	----	1539 ft <sup>2</sup>	10.4	0	0	1			

# Building Input Summary Report

ROOF													
#	Type	Materials	Roof Area	Gable Area	Roof Color	Solar Absor.	SA Tested	Emitt	Emitt Tested	Deck Insul.	Pitch (deg)		
1	Gable or shed	Composition shingles	1622 ft²	256 ft²	Medium	0.6	No	0.9	No	0	18.4		
ATTIC													
#	Type	Ventilation	Vent Ratio (1 in)	Area	RBS	IRCC							
1	Full attic	Vented	150	1539 ft²	N	N							
CEILING													
#	Ceiling Type	Space	R-Value	Area	Framing Fraction	Truss Type							
1	Under Attic ()	Main	16.7	1539 ft²	0.11	Wood							
WALLS													
Wall orientation below is as entered. Actual orientation is modified by rotate angle shown in "Project" section above.													
#	Ornt	Adjacent To	Wall Type	Space	Cavity R-Value	Width Ft In	Height Ft In	Area	Sheathing R-Value	Framing Fraction	Solar Absor.	Below Grade%	
1	N	Exterior	Frame - Wood	Main	11	57	8	456.0 ft²		0.25	0.6	0	
2	S	Exterior	Frame - Wood	Main	11	57	8	456.0 ft²		0.25	0.6	0	
3	E	Exterior	Frame - Wood	Main	11	27	8	216.0 ft²		0.25	0.6	0	
4	W	Exterior	Frame - Wood	Main	11	27	8	216.0 ft²		0.25	0.6	0	
DOORS													
#	Ornt	Door Type	Space	Storms	U-Value	Width Ft In	Height Ft In	Area					
1	N	Insulated	Main	None	.46	3	6	8	20 ft²				
2	S	Insulated	Main	None	.46	3	6	8	20 ft²				
WINDOWS													
#	Ornt	Wall ID	Frame	Panes	NFRC	U-Factor	SHGC	Storm	Area	Overhang Depth	Overhang Separation	Interior Shade	Screening
1	S	2	TIM	Single (Clear)	Yes	1.09	0.7	N	270.0 ft²	0 ft 0 in	0 ft 0 in	None	None
INFILTRATION													
#	Scope	Method	SLA	CFM 50	ELA	EqLA	ACH	ACH 50	Space(s)				
1	Wholehouse	Proposed ACH	.000684	2759.9	151.51	284.94	.67	13.449	All				
MASS													
Mass Type	Area	Thickness	Furniture Fraction	Space									
No Added Mass	0 ft²	0 ft	0	Main									

# Building Input Summary Report

HEATING SYSTEM														
#	System Type	Subtype		Efficiency	Capacity	-----Geothermal HeatPump----- Entry Power Volt. Curr				Ducts	Block			
1	Electric Strip Heat	None		COP:1	112 kBtu/hr	0	0	0		sys#1	1			
COOLING SYSTEM														
#	System Type	Subtype		Efficiency	Capacity	Air Flow	SHR	Ducts	Block					
1	Central Unit	None		SEER:10	31.5 kBtu/hr	945 cfm	0.75	sys#1	1					
HOT WATER SYSTEM														
#	System Type	SubType	Location	EF	Cap	Use	SetPnt	Credits						
					gal	gal	deg							
DUCTS														
DUCT #	Location	----- Supply ----- R-Value Area		----- Return ----- Location Area		Number	Leakage Type	Air Handler	CFM 25 TOT	CFM25 OUT	QN	RLF	HVAC # Heat	Cool
1	Main	6	384.75 ft²	Main	77 ft²		Prop. Air Leakage	Main	--- cfm	--- cfm	0.00	0.60	1	1
TEMPERATURES														
Programable Thermostat: N					Ceiling Fans: N									
Cooling	<input type="checkbox"/> Jan	<input type="checkbox"/> Feb	<input type="checkbox"/> Mar	<input type="checkbox"/> Apr	<input type="checkbox"/> May	<input type="checkbox"/> Jun	<input type="checkbox"/> Jul	<input type="checkbox"/> Aug	<input type="checkbox"/> Sep	<input type="checkbox"/> Oct	<input type="checkbox"/> Nov	<input type="checkbox"/> Dec		
Heating	<input checked="" type="checkbox"/> Jan	<input checked="" type="checkbox"/> Feb	<input checked="" type="checkbox"/> Mar	<input checked="" type="checkbox"/> Apr	<input checked="" type="checkbox"/> May	<input checked="" type="checkbox"/> Jun	<input checked="" type="checkbox"/> Jul	<input checked="" type="checkbox"/> Aug	<input checked="" type="checkbox"/> Sep	<input checked="" type="checkbox"/> Oct	<input checked="" type="checkbox"/> Nov	<input checked="" type="checkbox"/> Dec		
Venting	<input type="checkbox"/> Jan	<input type="checkbox"/> Feb	<input type="checkbox"/> Mar	<input type="checkbox"/> Apr	<input type="checkbox"/> May	<input type="checkbox"/> Jun	<input type="checkbox"/> Jul	<input type="checkbox"/> Aug	<input type="checkbox"/> Sep	<input type="checkbox"/> Oct	<input type="checkbox"/> Nov	<input type="checkbox"/> Dec		
Thermostat Schedule: BESTEST-heating														
Schedule Type		Hours												
		1	2	3	4	5	6	7	8	9	10	11	12	
Cooling (WD)	AM PM	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78
Cooling (WEH)	AM PM	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78
Heating (WD)	AM PM	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68
Heating (WEH)	AM PM	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68

# Building Input Summary Report

## APPLIANCES & LIGHTING

Appliance Schedule: BESTEST-gains		Hours											
Schedule Type		1	2	3	4	5	6	7	8	9	10	11	12
Ceiling Fans (Summer)	AM	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.5	0.5	0.5	0.5	0.5
% Released: 0	PM	0.5	0.5	0.5	0.5	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.75
Annual Use: 0 kWh/Yr		Peak Value: 0 Watts											
Clothes Washer	AM	0.105	0.081	0.046	0.046	0.081	0.128	0.256	0.57	0.849	1	0.977	0.872
% Released: 60	PM	0.779	0.698	0.605	0.57	0.581	0.57	0.57	0.57	0.57	0.488	0.43	0.198
Annual Use: 0 kWh/Yr		Peak Value: 0 Watts											
Dishwasher	AM	0.139	0.05	0.028	0.024	0.029	0.09	0.169	0.303	0.541	0.594	0.502	0.443
% Released: 60	PM	0.377	0.396	0.335	0.323	0.344	0.448	0.791	1	0.8	0.597	0.383	0.281
Annual Use: 0 kWh/Yr		Peak Value: 0 Watts											
Dryer	AM	0.2	0.1	0.05	0.05	0.05	0.075	0.2	0.375	0.5	0.8	0.95	1
% Released: 0	PM	0.875	0.85	0.8	0.625	0.625	0.6	0.575	0.55	0.625	0.7	0.65	0.375
Annual Use: 0 kWh/Yr		Peak Value: 0 Watts											
Lighting	AM	0.144	0.144	0.144	0.144	0.144	0.243	0.304	0.607	0.356	0.216	0.216	0.29
% Released: 100	PM	0.216	0.183	0.186	0.186	0.274	0.295	0.317	0.499	0.499	0.523	0.523	0.469
Annual Use: 800 kWh/Yr		Peak Value: 308 Watts											
Miscellaneous	AM	0.238	0.238	0.238	0.238	0.238	0.398	0.5	1	0.583	0.357	0.357	0.476
% Released: 100	PM	0.357	0.297	0.31	0.31	0.453	0.488	0.524	0.821	0.821	0.857	0.857	0.774
Annual Use: 6500 kWh/Yr		Peak Value: 1518 Watts											
Pool Pump	AM	0	0	0	0	0	0	0	0	0	1	1	1
% Released: 0	PM	1	1	1	1	0	0	0	0	0	0	0	0
Annual Use: 0 kWh/Yr		Peak Value: 0 Watts											
Range	AM	0.057	0.057	0.057	0.057	0.057	0.114	0.171	0.286	0.343	0.343	0.343	0.4
% Released: 0	PM	0.457	0.343	0.286	0.4	0.571	1	0.857	0.429	0.286	0.229	0.171	0.114
Annual Use: 0 kWh/Yr		Peak Value: 0 Watts											
Refrigeration	AM	0.85	0.78	0.75	0.73	0.73	0.73	0.75	0.75	0.8	0.8	0.8	0.8
% Released: 0	PM	0.88	0.85	0.85	0.83	0.88	0.95	1	0.98	0.95	0.93	0.9	0.85
Annual Use: 0 kWh/Yr		Peak Value: 0 Watts											
Well Pump	AM	0.05	0.05	0.05	0.05	0.05	0.05	0.1	0.1	0.1	0.1	0.1	0.1
% Released: 0	PM	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Annual Use: 0 kWh/Yr		Peak Value: 0 Watts											

## MECHANICAL VENTILATION

Type	Supply CFM	Exhaust CFM	HRV	Fan	Run Time	Heating System	Cooling System
None	0	0	0	0W	0%	1 - Electric Strip Heat	1 - Central Unit

## DISHWASHERS

ID	Type	Screen	Location	Capacity	Vintage	Make	Model	Schedule	kWhPerYr
1	Dishwash	Default New	Main	12	2004 or N			HERS201	372

## RANGE OVEN

ID	Type	Screen	Location	Type	Fueltype	Make	Model	Cooktop	Oven
1	RangeOv	Default New	Main	CooktopOven C	Natural G			Electric fl	Not Conv

# Building Input Summary Report

HARD WIRED LIGHTING										
ID	Type	Screen	Location	Total#	Qualify#	Comp FI	All Other FL	txtBulbtype	Schedule	Watts per bulb
1	Hard-Wir	By Count - Qualif	Main	15	11	0	2	Incandes	HERS201	60
2	Hard-Wir	By Count - Qualif	2nd Floor	18	7	0	2	Incandes	HERS201	60
3	Hard-Wir	By Count - Qualif	Basemen	8	0	0	2	Incandes	HERS201	60
4	Hard-Wir	By Count - Qualif	Exterior	4	1	0	2	Incandes	HERS201	60
5	Hard-Wir	By Count - Qualif	Garage	1	0	0	2	Incandes	HERS201	60
MISC ELECTRICAL LOADS										
ID	Type	Screen	Item	Quantity	Catagory	Operating	Location	Schedule	Off Standby	
1	Misc Elec	Simple Default		1		1	Main	HERS201	1	
CEILING FANS										
ID	Type	Screen	Default New	cfmperWatt						
1	CeilingFa	Default New	Standard	70.5						
2	CeilingFa	Default New	Standard	70.5						

# Building Input Summary Report

PROJECT											
Title:	L155AC (south glass with OH)		Bedrooms:	0		Address Type:					
Building Type:	User		Bathrooms:	0		Lot #					
Owner:	FSEC		Conditioned Area:	1539 sq.ft.		Block/SubDivision:					
# of Units:	1		Total Stories:	1		PlatBook:					
Builder Name:	James Q. Hammer		Worst Case:	No		Street:		111 Anywhere Lane			
Permit Office:			Rotate Angle:	0		County:					
Jurisdiction:			Cross Ventilation:			City, State, Zip:		Colorado Springs , CO ,			
Family Type:	Single-family		Whole House Fan:								
New/Existing:	New (From Plans)		Terrain:	Suburban							
Year Construct:			Shielding:	Suburban							
Comment:	HERS BESTEST south glass w/ overhang case										
CLIMATE											
Design Location	Tmy Site		Design Temp	97.5 %	2.5 %	Int Design Temp	Winter	Summer	Heating Degree Days	Design Moisture	Daily Temp Range
CO, COLORADO_SPRING	CO_COLORADO_SPRINGTMY1		7	88		70	75	6114.5	0	High	
UTILITY RATES											
Fuel	Unit	Utility Name					Monthly Fixed Cost	\$/Unit			
Electricity	kWh	EnergyGauge Default					0	0.1188			
Natural Gas	Therm	EnergyGauge Default					0	0.682			
Fuel Oil	Gallon	EnergyGauge Default					0	1.1			
Propane	Gallon	EnergyGauge Default					0	1.4			
SURROUNDINGS											
Ornt	Type	Shade Trees			Adjacent Buildings						
		Height	Width	Distance	Exist	Height	Width	Distance			
N	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft			
NE	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft			
E	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft			
SE	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft			
S	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft			
SW	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft			
W	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft			
NW	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft			
BLOCKS											
Number	Name	Area	Volume								
1	Block1	1539	12312								
SPACES											
Number	Name	Area	Volume	Kitchen	Occupants	Bedrooms	Finished	Cooled	Heated		
1	Main	1539	12312	Yes	0	0		Yes	Yes		
FLOORS											
#	Floor Type	Space	R-Value	Area	Tile	Wood	Carpet				
1	Raised Floor	Main	----	1539 ft <sup>2</sup>	10.4	0	0	1			

# Building Input Summary Report

ROOF													
#	Type	Materials	Roof Area	Gable Area	Roof Color	Solar Absor.	SA Tested	Emitt	Emitt Tested	Deck Insul.	Pitch (deg)		
1	Gable or shed	Composition shingles	1622 ft²	256 ft²	Medium	0.6	No	0.9	No	0	18.4		
ATTIC													
#	Type	Ventilation	Vent Ratio (1 in)	Area	RBS	IRCC							
1	Full attic	Vented	150	1539 ft²	N	N							
CEILING													
#	Ceiling Type	Space	R-Value	Area	Framing Fraction	Truss Type							
1	Under Attic ()	Main	16.7	1539 ft²	0.11	Wood							
WALLS													
Wall orientation below is as entered. Actual orientation is modified by rotate angle shown in "Project" section above.													
#	Ornt	Adjacent To	Wall Type	Space	Cavity R-Value	Width Ft In	Height Ft In	Area	Sheathing R-Value	Framing Fraction	Solar Absor.	Below Grade%	
1	N	Exterior	Frame - Wood	Main	11	57	8	456.0 ft²		0.25	0.6	0	
2	S	Exterior	Frame - Wood	Main	11	57	8	456.0 ft²		0.25	0.6	0	
3	E	Exterior	Frame - Wood	Main	11	27	8	216.0 ft²		0.25	0.6	0	
4	W	Exterior	Frame - Wood	Main	11	27	8	216.0 ft²		0.25	0.6	0	
DOORS													
#	Ornt	Door Type	Space	Storms	U-Value	Width Ft In	Height Ft In	Area					
1	N	Insulated	Main	None	.46	3	6	8	20 ft²				
2	S	Insulated	Main	None	.46	3	6	8	20 ft²				
WINDOWS													
#	Ornt	Wall ID	Frame	Panes	NFRC	U-Factor	SHGC	Storm	Area	Overhang Depth	Overhang Separation	Interior Shade	Screening
1	S	2	TIM	Single (Clear)	Yes	1.09	0.7	N	270.0 ft²	2 ft 6 in	1 ft 0 in	None	None
INFILTRATION													
#	Scope	Method	SLA	CFM 50	ELA	EqLA	ACH	ACH 50	Space(s)				
1	Wholehouse	Proposed ACH	.000684	2759.9	151.51	284.94	.67	13.449	All				
MASS													
Mass Type	Area	Thickness	Furniture Fraction	Space									
No Added Mass	0 ft²	0 ft	0	Main									



# Building Input Summary Report

HEATING SYSTEM														
#	System Type	Subtype		Efficiency	Capacity	-----Geothermal HeatPump-----				Ducts	Block			
						Entry	Power	Volt.	Curr					
1	Electric Strip Heat	None		COP:1	112 kBtu/hr		0	0	0	sys#1	1			
COOLING SYSTEM														
#	System Type	Subtype		Efficiency	Capacity	Air Flow	SHR	Ducts	Block					
1	Central Unit	None		SEER:10	25.2 kBtu/hr	756 cfm	0.75	sys#1	1					
HOT WATER SYSTEM														
#	System Type	SubType	Location	EF	Cap	Use	SetPnt	Credits						
					gal	gal	deg							
DUCTS														
DUCT #	Location	----- Supply -----		----- Return -----		Leakage Type	Air Handler	CFM 25 TOT	CFM25 OUT	QN	RLF	HVAC # Heat	Cool	
1	Main	6	384.75 ft²	Main	77 ft²	Prop. Air Leakage	Main	--- cfm	--- cfm	0.00	0.60	1	1	
TEMPERATURES														
Programable Thermostat: N					Ceiling Fans: N									
Cooling	<input type="checkbox"/> Jan	<input type="checkbox"/> Feb	<input type="checkbox"/> Mar	<input type="checkbox"/> Apr	<input type="checkbox"/> May	<input type="checkbox"/> Jun	<input type="checkbox"/> Jul	<input type="checkbox"/> Aug	<input type="checkbox"/> Sep	<input type="checkbox"/> Oct	<input type="checkbox"/> Nov	<input type="checkbox"/> Dec		
Heating	<input checked="" type="checkbox"/> Jan	<input checked="" type="checkbox"/> Feb	<input checked="" type="checkbox"/> Mar	<input checked="" type="checkbox"/> Apr	<input checked="" type="checkbox"/> May	<input checked="" type="checkbox"/> Jun	<input checked="" type="checkbox"/> Jul	<input checked="" type="checkbox"/> Aug	<input checked="" type="checkbox"/> Sep	<input checked="" type="checkbox"/> Oct	<input checked="" type="checkbox"/> Nov	<input checked="" type="checkbox"/> Dec		
Venting	<input type="checkbox"/> Jan	<input type="checkbox"/> Feb	<input type="checkbox"/> Mar	<input type="checkbox"/> Apr	<input type="checkbox"/> May	<input type="checkbox"/> Jun	<input type="checkbox"/> Jul	<input type="checkbox"/> Aug	<input type="checkbox"/> Sep	<input type="checkbox"/> Oct	<input type="checkbox"/> Nov	<input type="checkbox"/> Dec		
Thermostat Schedule: BESTEST-heating														
Schedule Type		1	2	3	4	5	6	7	8	9	10	11	12	
Cooling (WD)	AM	78	78	78	78	78	78	78	78	78	78	78	78	
	PM	78	78	78	78	78	78	78	78	78	78	78	78	
Cooling (WEH)	AM	78	78	78	78	78	78	78	78	78	78	78	78	
	PM	78	78	78	78	78	78	78	78	78	78	78	78	
Heating (WD)	AM	68	68	68	68	68	68	68	68	68	68	68	68	
	PM	68	68	68	68	68	68	68	68	68	68	68	68	
Heating (WEH)	AM	68	68	68	68	68	68	68	68	68	68	68	68	
	PM	68	68	68	68	68	68	68	68	68	68	68	68	

# Building Input Summary Report

## APPLIANCES & LIGHTING

Appliance Schedule: BESTEST-gains		Hours											
Schedule Type		1	2	3	4	5	6	7	8	9	10	11	12
Ceiling Fans (Summer)	AM	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.5	0.5	0.5	0.5	0.5
% Released: 0	PM	0.5	0.5	0.5	0.5	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.75
Annual Use: 0 kWh/Yr		Peak Value: 0 Watts											
Clothes Washer	AM	0.105	0.081	0.046	0.046	0.081	0.128	0.256	0.57	0.849	1	0.977	0.872
% Released: 60	PM	0.779	0.698	0.605	0.57	0.581	0.57	0.57	0.57	0.57	0.488	0.43	0.198
Annual Use: 0 kWh/Yr		Peak Value: 0 Watts											
Dishwasher	AM	0.139	0.05	0.028	0.024	0.029	0.09	0.169	0.303	0.541	0.594	0.502	0.443
% Released: 60	PM	0.377	0.396	0.335	0.323	0.344	0.448	0.791	1	0.8	0.597	0.383	0.281
Annual Use: 0 kWh/Yr		Peak Value: 0 Watts											
Dryer	AM	0.2	0.1	0.05	0.05	0.05	0.075	0.2	0.375	0.5	0.8	0.95	1
% Released: 0	PM	0.875	0.85	0.8	0.625	0.625	0.6	0.575	0.55	0.625	0.7	0.65	0.375
Annual Use: 0 kWh/Yr		Peak Value: 0 Watts											
Lighting	AM	0.144	0.144	0.144	0.144	0.144	0.243	0.304	0.607	0.356	0.216	0.216	0.29
% Released: 100	PM	0.216	0.183	0.186	0.186	0.274	0.295	0.317	0.499	0.499	0.523	0.523	0.469
Annual Use: 800 kWh/Yr		Peak Value: 308 Watts											
Miscellaneous	AM	0.238	0.238	0.238	0.238	0.238	0.398	0.5	1	0.583	0.357	0.357	0.476
% Released: 100	PM	0.357	0.297	0.31	0.31	0.453	0.488	0.524	0.821	0.821	0.857	0.857	0.774
Annual Use: 6500 kWh/Yr		Peak Value: 1518 Watts											
Pool Pump	AM	0	0	0	0	0	0	0	0	0	1	1	1
% Released: 0	PM	1	1	1	1	0	0	0	0	0	0	0	0
Annual Use: 0 kWh/Yr		Peak Value: 0 Watts											
Range	AM	0.057	0.057	0.057	0.057	0.057	0.114	0.171	0.286	0.343	0.343	0.343	0.4
% Released: 0	PM	0.457	0.343	0.286	0.4	0.571	1	0.857	0.429	0.286	0.229	0.171	0.114
Annual Use: 0 kWh/Yr		Peak Value: 0 Watts											
Refrigeration	AM	0.85	0.78	0.75	0.73	0.73	0.73	0.75	0.75	0.8	0.8	0.8	0.8
% Released: 0	PM	0.88	0.85	0.85	0.83	0.88	0.95	1	0.98	0.95	0.93	0.9	0.85
Annual Use: 0 kWh/Yr		Peak Value: 0 Watts											
Well Pump	AM	0.05	0.05	0.05	0.05	0.05	0.05	0.1	0.1	0.1	0.1	0.1	0.1
% Released: 0	PM	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Annual Use: 0 kWh/Yr		Peak Value: 0 Watts											

## MECHANICAL VENTILATION

Type	Supply CFM	Exhaust CFM	HRV	Fan	Run Time	Heating System	Cooling System
None	0	0	0	0W	0%	1 - Electric Strip Heat	1 - Central Unit

## DISHWASHERS

ID	Type	Screen	Location	Capacity	Vintage	Make	Model	Schedule	kWhPerYr
1	Dishwash	Default New	Main	12	2004 or N			HERS201	372

## RANGE OVEN

ID	Type	Screen	Location	Type	Fueltype	Make	Model	Cooktop	Oven
1	RangeOv	Default New	Main	CooktopOven C	Natural G			Electric fl	Not Conv

# Building Input Summary Report

HARD WIRED LIGHTING										
ID	Type	Screen	Location	Total#	Qualify#	Comp FI	All Other FL	txtBulbtype	Schedule	Watts per bulb
1	Hard-Wir	By Count - Qualif	Main	15	11	0	2	Incandes	HERS201	60
2	Hard-Wir	By Count - Qualif	2nd Floor	18	7	0	2	Incandes	HERS201	60
3	Hard-Wir	By Count - Qualif	Basemen	8	0	0	2	Incandes	HERS201	60
4	Hard-Wir	By Count - Qualif	Exterior	4	1	0	2	Incandes	HERS201	60
5	Hard-Wir	By Count - Qualif	Garage	1	0	0	2	Incandes	HERS201	60
MISC ELECTRICAL LOADS										
ID	Type	Screen	Item	Quantity	Catagory	Operating	Location	Schedule	Off Standby	
1	Misc Elec	Simple Default		1		1	Main	HERS201	1	
CEILING FANS										
ID	Type	Screen	Default New	cfmperWatt						
1	CeilingFa	Default New	Standard	70.5						
2	CeilingFa	Default New	Standard	70.5						

# Building Input Summary Report

PROJECT											
Title:	L160AC (east-west windows)		Bedrooms:	0		Address Type:					
Building Type:	User		Bathrooms:	0		Lot #					
Owner:	FSEC		Conditioned Area:	1539 sq.ft.		Block/SubDivision:					
# of Units:	1		Total Stories:	1		PlatBook:					
Builder Name:	James Q. Hammer		Worst Case:	No		Street: 111 Anywhere Lane					
Permit Office:			Rotate Angle:	0		County:					
Jurisdiction:			Cross Ventilation:			City, State, Zip: Colorado Springs , CO ,					
Family Type:	Single-family		Whole House Fan:								
New/Existing:	New (From Plans)		Terrain:	Suburban							
Year Construct:			Shielding:	Suburban							
Comment:	HERS BESTEST east-west windows case										
CLIMATE											
Design Location	Tmy Site		Design Temp	97.5 %	2.5 %	Int Design Temp	Winter	Summer	Heating Degree Days	Design Moisture	Daily Temp Range
CO, COLORADO_SPRING	CO_COLORADO_SPRINGTMY1		7	88		70	75	6114.5	0		High
UTILITY RATES											
Fuel	Unit	Utility Name					Monthly Fixed Cost	\$/Unit			
Electricity	kWh	EnergyGauge Default					0	0.1188			
Natural Gas	Therm	EnergyGauge Default					0	0.682			
Fuel Oil	Gallon	EnergyGauge Default					0	1.1			
Propane	Gallon	EnergyGauge Default					0	1.4			
SURROUNDINGS											
Ornt	Type	Shade Trees			Adjacent Buildings						
		Height	Width	Distance	Exist	Height	Width	Distance			
N	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft			
NE	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft			
E	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft			
SE	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft			
S	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft			
SW	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft			
W	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft			
NW	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft			
BLOCKS											
Number	Name	Area	Volume								
1	Block1	1539	12312								
SPACES											
Number	Name	Area	Volume	Kitchen	Occupants	Bedrooms	Finished	Cooled	Heated		
1	Main	1539	12312	Yes	0	0		Yes	Yes		
FLOORS											
#	Floor Type	Space	R-Value	Area	Tile	Wood	Carpet				
1	Raised Floor	Main	----	1539 ft <sup>2</sup>	10.4	0	0	1			

# Building Input Summary Report

ROOF													
#	Type	Materials	Roof Area	Gable Area	Roof Color	Solar Absor.	SA Tested	Emitt	Emitt Tested	Deck Insul.	Pitch (deg)		
1	Gable or shed	Composition shingles	1622 ft²	256 ft²	Medium	0.6	No	0.9	No	0	18.4		
ATTIC													
#	Type	Ventilation	Vent Ratio (1 in)	Area	RBS	IRCC							
1	Full attic	Vented	150	1539 ft²	N	N							
CEILING													
#	Ceiling Type	Space	R-Value	Area	Framing Fraction	Truss Type							
1	Under Attic ()	Main	16.7	1539 ft²	0.11	Wood							
WALLS													
Wall orientation below is as entered. Actual orientation is modified by rotate angle shown in "Project" section above.													
#	Ornt	Adjacent To	Wall Type	Space	Cavity R-Value	Width Ft In	Height Ft In	Area	Sheathing R-Value	Framing Fraction	Solar Absor.	Below Grade%	
1	N	Exterior	Frame - Wood	Main	11	57	8	456.0 ft²		0.25	0.6	0	
2	S	Exterior	Frame - Wood	Main	11	57	8	456.0 ft²		0.25	0.6	0	
3	E	Exterior	Frame - Wood	Main	11	28	8	224.0 ft²		0.25	0.6	0	
4	W	Exterior	Frame - Wood	Main	11	28	8	224.0 ft²		0.25	0.6	0	
DOORS													
#	Ornt	Door Type	Space	Storms	U-Value	Width Ft In	Height Ft In	Area					
1	N	Insulated	Main	None	.46	3	6	8	20 ft²				
2	S	Insulated	Main	None	.46	3	6	8	20 ft²				
WINDOWS													
#	Ornt	Wall ID	Frame	Panes	NFRC	U-Factor	SHGC	Storm	Area	Overhang Depth	Overhang Separation	Interior Shade	Screening
1	E	3	TIM	Single (Clear)	Yes	1.09	0.7	N	135.0 ft²	0 ft 0 in	0 ft 0 in	None	None
2	W	4	TIM	Single (Clear)	Yes	1.09	0.7	N	135.0 ft²	0 ft 0 in	0 ft 0 in	None	None
INFILTRATION													
#	Scope	Method	SLA	CFM 50	ELA	EqLA	ACH	ACH 50	Space(s)				
1	Wholehouse	Proposed ACH	.000684	2759.9	151.51	284.94	.67	13.449	All				
MASS													
Mass Type	Area	Thickness	Furniture Fraction	Space									
No Added Mass	0 ft²	0 ft	0	Main									

# Building Input Summary Report

HEATING SYSTEM														
#	System Type	Subtype			Efficiency	Capacity	-----Geothermal HeatPump-----				Ducts	Block		
						Entry	Power	Volt.	Curr					
1	Electric Strip Heat	None			COP:1	112 kBtu/hr		0	0	0	sys#1		1	
COOLING SYSTEM														
#	System Type	Subtype			Efficiency	Capacity	Air Flow	SHR	Ducts	Block				
1	Central Unit	None			SEER:10	31.4 kBtu/hr	942 cfm	0.75	sys#1	1				
HOT WATER SYSTEM														
#	System Type	SubType	Location	EF	Cap	Use	SetPnt	Credits						
					gal	gal	deg							
DUCTS														
DUCT #	Location	----- Supply -----		----- Return -----		Leakage Type	Air Handler	CFM 25 TOT	CFM25 OUT	QN	RLF	HVAC #		
1	Main	R-Value	Area	Location	Area	Number		--- cfm	--- cfm	0.00	0.60	1	1	
TEMPERATURES														
Programable Thermostat: N					Ceiling Fans: N									
Cooling	<input type="checkbox"/> Jan	<input type="checkbox"/> Feb	<input type="checkbox"/> Mar	<input type="checkbox"/> Apr	<input type="checkbox"/> May	<input type="checkbox"/> Jun	<input type="checkbox"/> Jul	<input type="checkbox"/> Aug	<input type="checkbox"/> Sep	<input type="checkbox"/> Oct	<input type="checkbox"/> Nov	<input type="checkbox"/> Dec		
Heating	<input checked="" type="checkbox"/> Jan	<input checked="" type="checkbox"/> Feb	<input checked="" type="checkbox"/> Mar	<input checked="" type="checkbox"/> Apr	<input checked="" type="checkbox"/> May	<input checked="" type="checkbox"/> Jun	<input checked="" type="checkbox"/> Jul	<input checked="" type="checkbox"/> Aug	<input checked="" type="checkbox"/> Sep	<input checked="" type="checkbox"/> Oct	<input checked="" type="checkbox"/> Nov	<input checked="" type="checkbox"/> Dec		
Venting	<input type="checkbox"/> Jan	<input type="checkbox"/> Feb	<input type="checkbox"/> Mar	<input type="checkbox"/> Apr	<input type="checkbox"/> May	<input type="checkbox"/> Jun	<input type="checkbox"/> Jul	<input type="checkbox"/> Aug	<input type="checkbox"/> Sep	<input type="checkbox"/> Oct	<input type="checkbox"/> Nov	<input type="checkbox"/> Dec		
Thermostat Schedule: BESTEST-heating														
Schedule Type		Hours												
		1	2	3	4	5	6	7	8	9	10	11	12	
Cooling (WD)	AM	78	78	78	78	78	78	78	78	78	78	78	78	78
	PM	78	78	78	78	78	78	78	78	78	78	78	78	78
Cooling (WEH)	AM	78	78	78	78	78	78	78	78	78	78	78	78	78
	PM	78	78	78	78	78	78	78	78	78	78	78	78	78
Heating (WD)	AM	68	68	68	68	68	68	68	68	68	68	68	68	68
	PM	68	68	68	68	68	68	68	68	68	68	68	68	68
Heating (WEH)	AM	68	68	68	68	68	68	68	68	68	68	68	68	68
	PM	68	68	68	68	68	68	68	68	68	68	68	68	68

# Building Input Summary Report

## APPLIANCES & LIGHTING

Appliance Schedule: BESTEST-gains		Hours											
Schedule Type		1	2	3	4	5	6	7	8	9	10	11	12
Ceiling Fans (Summer)	AM	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.5	0.5	0.5	0.5	0.5
% Released: 0	PM	0.5	0.5	0.5	0.5	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.75
Annual Use: 0 kWh/Yr		Peak Value: 0 Watts											
Clothes Washer	AM	0.105	0.081	0.046	0.046	0.081	0.128	0.256	0.57	0.849	1	0.977	0.872
% Released: 60	PM	0.779	0.698	0.605	0.57	0.581	0.57	0.57	0.57	0.57	0.488	0.43	0.198
Annual Use: 0 kWh/Yr		Peak Value: 0 Watts											
Dishwasher	AM	0.139	0.05	0.028	0.024	0.029	0.09	0.169	0.303	0.541	0.594	0.502	0.443
% Released: 60	PM	0.377	0.396	0.335	0.323	0.344	0.448	0.791	1	0.8	0.597	0.383	0.281
Annual Use: 0 kWh/Yr		Peak Value: 0 Watts											
Dryer	AM	0.2	0.1	0.05	0.05	0.05	0.075	0.2	0.375	0.5	0.8	0.95	1
% Released: 0	PM	0.875	0.85	0.8	0.625	0.625	0.6	0.575	0.55	0.625	0.7	0.65	0.375
Annual Use: 0 kWh/Yr		Peak Value: 0 Watts											
Lighting	AM	0.144	0.144	0.144	0.144	0.144	0.243	0.304	0.607	0.356	0.216	0.216	0.29
% Released: 100	PM	0.216	0.183	0.186	0.186	0.274	0.295	0.317	0.499	0.499	0.523	0.523	0.469
Annual Use: 800 kWh/Yr		Peak Value: 308 Watts											
Miscellaneous	AM	0.238	0.238	0.238	0.238	0.238	0.398	0.5	1	0.583	0.357	0.357	0.476
% Released: 100	PM	0.357	0.297	0.31	0.31	0.453	0.488	0.524	0.821	0.821	0.857	0.857	0.774
Annual Use: 6500 kWh/Yr		Peak Value: 1518 Watts											
Pool Pump	AM	0	0	0	0	0	0	0	0	0	1	1	1
% Released: 0	PM	1	1	1	1	0	0	0	0	0	0	0	0
Annual Use: 0 kWh/Yr		Peak Value: 0 Watts											
Range	AM	0.057	0.057	0.057	0.057	0.057	0.114	0.171	0.286	0.343	0.343	0.343	0.4
% Released: 0	PM	0.457	0.343	0.286	0.4	0.571	1	0.857	0.429	0.286	0.229	0.171	0.114
Annual Use: 0 kWh/Yr		Peak Value: 0 Watts											
Refrigeration	AM	0.85	0.78	0.75	0.73	0.73	0.73	0.75	0.75	0.8	0.8	0.8	0.8
% Released: 0	PM	0.88	0.85	0.85	0.83	0.88	0.95	1	0.98	0.95	0.93	0.9	0.85
Annual Use: 0 kWh/Yr		Peak Value: 0 Watts											
Well Pump	AM	0.05	0.05	0.05	0.05	0.05	0.05	0.1	0.1	0.1	0.1	0.1	0.1
% Released: 0	PM	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Annual Use: 0 kWh/Yr		Peak Value: 0 Watts											

## MECHANICAL VENTILATION

Type	Supply CFM	Exhaust CFM	HRV	Fan	Run Time	Heating System	Cooling System
None	0	0	0	0W	0%	1 - Electric Strip Heat	1 - Central Unit

## DISHWASHERS

ID	Type	Screen	Location	Capacity	Vintage	Make	Model	Schedule	kWhPerYr
1	Dishwash	Default New	Main	12	2004 or N			HERS201	372

## RANGE OVEN

ID	Type	Screen	Location	Type	Fueltype	Make	Model	Cooktop	Oven
1	RangeOv	Default New	Main	CooktopOven C	Natural G			Electric fl	Not Conv

# Building Input Summary Report

HARD WIRED LIGHTING										
ID	Type	Screen	Location	Total#	Qualify#	Comp FI	All Other FL	txtBulbtype	Schedule	Watts per bulb
1	Hard-Wir	By Count - Qualif	Main	15	11	0	2	Incandes	HERS201	60
2	Hard-Wir	By Count - Qualif	2nd Floor	18	7	0	2	Incandes	HERS201	60
3	Hard-Wir	By Count - Qualif	Basemen	8	0	0	2	Incandes	HERS201	60
4	Hard-Wir	By Count - Qualif	Exterior	4	1	0	2	Incandes	HERS201	60
5	Hard-Wir	By Count - Qualif	Garage	1	0	0	2	Incandes	HERS201	60
MISC ELECTRICAL LOADS										
ID	Type	Screen	Item	Quantity	Catagory	Operating	Location	Schedule	Off Standby	
1	Misc Elec	Simple Default		1		1	Main	HERS201	1	
CEILING FANS										
ID	Type	Screen	Default New	cfmperWatt						
1	CeilingFa	Default New	Standard	70.5						
2	CeilingFa	Default New	Standard	70.5						



# Building Input Summary Report

PROJECT										
Title:	L170AC (no internal gains)	Bedrooms:	0	Address Type:						
Building Type:	User	Bathrooms:	0	Lot #						
Owner:	FSEC	Conditioned Area:	1539 sq.ft.	Block/SubDivision:						
# of Units:	1	Total Stories:	1	PlatBook:						
Builder Name:	James Q. Hammer	Worst Case:	No	Street:	111 Anywhere Lane					
Permit Office:		Rotate Angle:	0	County:						
Jurisdiction:		Cross Ventilation:		City, State, Zip:	Colorado Springs , CO ,					
Family Type:	Single-family	Whole House Fan:								
New/Existing:	New (From Plans)	Terrain:	Suburban							
Year Construct:		Shielding:	Suburban							
Comment:	HERS BESTEST no internal gains case									
CLIMATE										
Design Location	Tmy Site	Design Temp	97.5 %	2.5 %	Int Design Temp	Heating	Design	Daily Temp		
					Winter	Summer	Degree Days	Moisture	Range	
CO, COLORADO_SPRING	CO_COLORADO_SPRINGTMY1	7	88		70	75	6114.5	0	High	
UTILITY RATES										
Fuel	Unit	Utility Name					Monthly Fixed Cost	\$/Unit		
Electricity	kWh	EnergyGauge Default					0	0.1188		
Natural Gas	Therm	EnergyGauge Default					0	0.682		
Fuel Oil	Gallon	EnergyGauge Default					0	1.1		
Propane	Gallon	EnergyGauge Default					0	1.4		
SURROUNDINGS										
Ornt	Type	Shade Trees			Adjacent Buildings					
		Height	Width	Distance	Exist	Height	Width	Distance		
N	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
NE	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
E	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
SE	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
S	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
SW	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
W	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
NW	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
BLOCKS										
Number	Name	Area	Volume							
1	Block1	1539	12312							
SPACES										
Number	Name	Area	Volume	Kitchen	Occupants	Bedrooms	Finished	Cooled	Heated	
1	Main	1539	12312	Yes	0	0		Yes	Yes	
FLOORS										
#	Floor Type	Space	R-Value	Area	Tile	Wood	Carpet			
1	Raised Floor	Main	----	1539 ft <sup>2</sup>	10.4	0	0	1		

# Building Input Summary Report

ROOF														
#	Type	Materials	Roof Area	Gable Area	Roof Color	Solar Absor.	SA Tested	Emitt	Emitt Tested	Deck Insul.	Pitch (deg)			
1	Gable or shed	Composition shingles	1622 ft²	256 ft²	Medium	0.6	No	0.9	No	0	18.4			
ATTIC														
#	Type	Ventilation	Vent Ratio (1 in)	Area	RBS	IRCC								
1	Full attic	Vented	150	1539 ft²	N	N								
CEILING														
#	Ceiling Type	Space	R-Value	Area	Framing Fraction	Truss Type								
1	Under Attic ()	Main	16.7	1539 ft²	0.11	Wood								
WALLS														
Wall orientation below is as entered. Actual orientation is modified by rotate angle shown in "Project" section above.														
#	Ornt	Adjacent To	Wall Type	Space	Cavity R-Value	Width Ft	In	Height Ft	In	Area	Sheathing R-Value	Framing Fraction	Solar Absor.	Below Grade%
1	N	Exterior	Frame - Wood	Main	11	57		8		456.0 ft²		0.25	0.6	0
2	S	Exterior	Frame - Wood	Main	11	57		8		456.0 ft²		0.25	0.6	0
3	E	Exterior	Frame - Wood	Main	11	27		8		216.0 ft²		0.25	0.6	0
4	W	Exterior	Frame - Wood	Main	11	27		8		216.0 ft²		0.25	0.6	0
DOORS														
#	Ornt	Door Type	Space	Storms	U-Value	Width Ft	In	Height Ft	In	Area				
1	N	Insulated	Main	None	.46	3		6	8	20 ft²				
2	S	Insulated	Main	None	.46	3		6	8	20 ft²				
WINDOWS														
#	Ornt	Wall ID	Frame	Panes	NFRC	U-Factor	SHGC	Storm	Area	Overhang Depth	Overhang Separation	Interior Shade	Screening	
1	N	1	TIM	Single (Clear)	Yes	1.09	0.7	N	90.0 ft²	0 ft 0 in	0 ft 0 in	None	None	
2	S	2	TIM	Single (Clear)	Yes	1.09	0.7	N	90.0 ft²	0 ft 0 in	0 ft 0 in	None	None	
3	E	3	TIM	Single (Clear)	Yes	1.09	0.7	N	45.0 ft²	0 ft 0 in	0 ft 0 in	None	None	
4	W	4	TIM	Single (Clear)	Yes	1.09	0.7	N	45.0 ft²	0 ft 0 in	0 ft 0 in	None	None	
INFILTRATION														
#	Scope	Method	SLA	CFM 50	ELA	EqLA	ACH	ACH 50	Space(s)					
1	Wholehouse	Proposed ACH	.000684	2759.9	151.51	284.94	.67	13.449	All					
MASS														
Mass Type	Area	Thickness	Furniture Fraction	Space										
No Added Mass	0 ft²	0 ft	0	Main										

# Building Input Summary Report

HEATING SYSTEM														
#	System Type	Subtype			Efficiency	Capacity	-----Geothermal HeatPump----- Entry Power Volt. Curr				Ducts	Block		
1	Electric Strip Heat	None			COP:1	112 kBtu/hr	0	0	0		sys#1	1		
COOLING SYSTEM														
#	System Type	Subtype			Efficiency	Capacity	Air Flow	SHR	Ducts	Block				
1	Central Unit	None			SEER:10	24.8 kBtu/hr	744 cfm	0.75	sys#1	1				
HOT WATER SYSTEM														
#	System Type	SubType	Location	EF	Cap	Use	SetPnt	Credits						
					gal	gal	deg							
DUCTS														
DUCT #	Location	----- Supply ----- R-Value Area		----- Return ----- Location Area		Number	Leakage Type	Air Handler	CFM 25 TOT	CFM25 OUT	QN	RLF	HVAC # Heat	Cool
1	Main	6	384.75 ft²	Main	77 ft²		Prop. Air Leakage	Main	--- cfm	--- cfm	0.00	0.60	1	1
TEMPERATURES														
Programable Thermostat: N					Ceiling Fans: N									
Cooling	<input type="checkbox"/> Jan	<input type="checkbox"/> Feb	<input type="checkbox"/> Mar	<input type="checkbox"/> Apr	<input type="checkbox"/> May	<input type="checkbox"/> Jun	<input type="checkbox"/> Jul	<input type="checkbox"/> Aug	<input type="checkbox"/> Sep	<input type="checkbox"/> Oct	<input type="checkbox"/> Nov	<input type="checkbox"/> Dec		
Heating	<input checked="" type="checkbox"/> Jan	<input checked="" type="checkbox"/> Feb	<input checked="" type="checkbox"/> Mar	<input checked="" type="checkbox"/> Apr	<input checked="" type="checkbox"/> May	<input checked="" type="checkbox"/> Jun	<input checked="" type="checkbox"/> Jul	<input checked="" type="checkbox"/> Aug	<input checked="" type="checkbox"/> Sep	<input checked="" type="checkbox"/> Oct	<input checked="" type="checkbox"/> Nov	<input checked="" type="checkbox"/> Dec		
Venting	<input type="checkbox"/> Jan	<input type="checkbox"/> Feb	<input type="checkbox"/> Mar	<input type="checkbox"/> Apr	<input type="checkbox"/> May	<input type="checkbox"/> Jun	<input type="checkbox"/> Jul	<input type="checkbox"/> Aug	<input type="checkbox"/> Sep	<input type="checkbox"/> Oct	<input type="checkbox"/> Nov	<input type="checkbox"/> Dec		
Thermostat Schedule: BESTEST-heating														
Schedule Type		Hours												
		1	2	3	4	5	6	7	8	9	10	11	12	
Cooling (WD)	AM	78	78	78	78	78	78	78	78	78	78	78	78	78
	PM	78	78	78	78	78	78	78	78	78	78	78	78	78
Cooling (WEH)	AM	78	78	78	78	78	78	78	78	78	78	78	78	78
	PM	78	78	78	78	78	78	78	78	78	78	78	78	78
Heating (WD)	AM	68	68	68	68	68	68	68	68	68	68	68	68	68
	PM	68	68	68	68	68	68	68	68	68	68	68	68	68
Heating (WEH)	AM	68	68	68	68	68	68	68	68	68	68	68	68	68
	PM	68	68	68	68	68	68	68	68	68	68	68	68	68

# Building Input Summary Report

## APPLIANCES & LIGHTING

Appliance Schedule: BESTEST-no_gains		Hours											
Schedule Type		1	2	3	4	5	6	7	8	9	10	11	12
Well Pump	AM	0.05	0.05	0.05	0.05	0.05	0.05	0.1	0.1	0.1	0.1	0.1	0.1
% Released: 0	PM	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Annual Use: 0 kWh/Yr		Peak Value: 0 Watts											
Refrigeration	AM	0.85	0.78	0.75	0.73	0.73	0.73	0.75	0.75	0.8	0.8	0.8	0.8
% Released: 0	PM	0.88	0.85	0.85	0.83	0.88	0.95	1	0.98	0.95	0.93	0.9	0.85
Annual Use: 0 kWh/Yr		Peak Value: 0 Watts											
Range	AM	0.057	0.057	0.057	0.057	0.057	0.114	0.171	0.286	0.343	0.343	0.343	0.4
% Released: 0	PM	0.457	0.343	0.286	0.4	0.571	1	0.857	0.429	0.286	0.229	0.171	0.114
Annual Use: 0 kWh/Yr		Peak Value: 0 Watts											
Pool Pump	AM	0	0	0	0	0	0	0	0	0	1	1	1
% Released: 0	PM	1	1	1	1	0	0	0	0	0	0	0	0
Annual Use: 0 kWh/Yr		Peak Value: 0 Watts											
Miscellaneous	AM	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
% Released: 0	PM	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Annual Use: 0 kWh/Yr		Peak Value: 0 Watts											
Lighting	AM	0.144	0.144	0.144	0.144	0.144	0.243	0.304	0.607	0.356	0.216	0.216	0.29
% Released: 0	PM	0.216	0.183	0.187	0.187	0.274	0.295	0.317	0.499	0.499	0.523	0.523	0.469
Annual Use: 0 kWh/Yr		Peak Value: 0 Watts											
Dryer	AM	0.2	0.1	0.05	0.05	0.05	0.075	0.2	0.375	0.5	0.8	0.95	1
% Released: 0	PM	0.875	0.85	0.8	0.625	0.625	0.6	0.575	0.55	0.625	0.7	0.65	0.375
Annual Use: 0 kWh/Yr		Peak Value: 0 Watts											
Clothes Washer	AM	0.105	0.081	0.046	0.046	0.081	0.128	0.256	0.57	0.849	1	0.977	0.872
% Released: 60	PM	0.779	0.698	0.605	0.57	0.581	0.57	0.57	0.57	0.57	0.488	0.43	0.198
Annual Use: 0 kWh/Yr		Peak Value: 0 Watts											
Ceiling Fans (Summer)	AM	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.5	0.5	0.5	0.5	0.5
% Released: 0	PM	0.5	0.5	0.5	0.5	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.75
Annual Use: 0 kWh/Yr		Peak Value: 0 Watts											

## MECHANICAL VENTILATION

Type	Supply CFM	Exhaust CFM	HRV	Fan	Run Time	Heating System	Cooling System
None	0	0	0	0W	0%	1 - Electric Strip Heat	1 - Central Unit

## DISHWASHERS

ID	Type	Screen	Location	Capacity	Vintage	Make	Model	Schedule	kWhPerYr
1	Dishwash	Default New	Main	12	2004 or N			HERS201	372

## RANGE OVEN

ID	Type	Screen	Location	Type	Fueltype	Make	Model	Cooktop	Oven
1	RangeOv	Default New	Main	CooktopOven C	Natural G			Electric fl	Not Conv

## HARD WIRED LIGHTING

ID	Type	Screen	Location	Total#	Qualify#	Comp Fl	All Other FL	txtBulbtype	Schedule	Watts per bulb
1	Hard-Wir	By Count - Qualif	Main	15	11	0	2	Incandes	HERS201	60
2	Hard-Wir	By Count - Qualif	2nd Floor	18	7	0	2	Incandes	HERS201	60
3	Hard-Wir	By Count - Qualif	Basemen	8	0	0	2	Incandes	HERS201	60
4	Hard-Wir	By Count - Qualif	Exterior	4	1	0	2	Incandes	HERS201	60
5	Hard-Wir	By Count - Qualif	Garage	1	0	0	2	Incandes	HERS201	60

# Building Input Summary Report

<b>MISC ELECTRICAL LOADS</b>									
ID	Type	Screen	Item	Quantity	Category	Operating	Location	Schedule	Off Standby
1	Misc Elec	Simple Default		1		1	Main	HERS201	1
<b>CEILING FANS</b>									
ID	Type	Screen	Default New	cfmperWatt					
1	CeilingFa	Default New	Standard	70.5					
2	CeilingFa	Default New	Standard	70.5					

# Building Input Summary Report

PROJECT										
Title:	L200AC (inefficient)	Bedrooms:	0	Address Type:						
Building Type:	User	Bathrooms:	0	Lot #						
Owner:	FSEC	Conditioned Area:	1539 sq.ft.	Block/SubDivision:						
# of Units:	1	Total Stories:	1	PlatBook:						
Builder Name:	James Q. Hammer	Worst Case:	No	Street:	111 Anywhere Lane					
Permit Office:		Rotate Angle:	0	County:						
Jurisdiction:		Cross Ventilation:		City, State, Zip:	Colorado Springs , CO ,					
Family Type:	Single-family	Whole House Fan:								
New/Existing:	New (From Plans)	Terrain:	Suburban							
Year Construct:		Shielding:	Suburban							
Comment:	HERS BESTEST inefficient case									
CLIMATE										
Design Location	Tmy Site	Design Temp	97.5 % 2.5 %	Int Design Temp	Winter	Summer	Heating Degree Days	Design Moisture	Daily Temp Range	
CO, COLORADO_SPRING	CO_COLORADO_SPRINGSTMY1	7	88	70	75	6114.5	0	High		
UTILITY RATES										
Fuel	Unit	Utility Name					Monthly Fixed Cost	\$/Unit		
Electricity	kWh	EnergyGauge Default					0	0.1188		
Natural Gas	Therm	EnergyGauge Default					0	0.682		
Fuel Oil	Gallon	EnergyGauge Default					0	1.1		
Propane	Gallon	EnergyGauge Default					0	1.4		
SURROUNDINGS										
Ornt	Type	Shade Trees			Adjacent Buildings					
		Height	Width	Distance	Exist	Height	Width	Distance		
N	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	0 ft	
NE	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	0 ft	
E	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	0 ft	
SE	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	0 ft	
S	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	0 ft	
SW	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	0 ft	
W	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	0 ft	
NW	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	0 ft	
BLOCKS										
Number	Name	Area	Volume							
1	Block1	1539	12312							
SPACES										
Number	Name	Area	Volume	Kitchen	Occupants	Bedrooms	Finished	Cooled	Heated	
1	Main	1539	12312	Yes	0	0		Yes	Yes	
FLOORS										
#	Floor Type	Space	R-Value	Area	Tile	Wood	Carpet			
1	Raised Floor	Main	----	1539 ft <sup>2</sup>	0	0	0	1		

# Building Input Summary Report

ROOF														
#	Type	Materials	Roof Area	Gable Area	Roof Color	Solar Absor.	SA Tested	Emitt	Emitt Tested	Deck Insul.	Pitch (deg)			
1	Gable or shed	Composition shingles	1622 ft²	256 ft²	Medium	0.6	No	0.9	No	0	18.4			
ATTIC														
#	Type	Ventilation	Vent Ratio (1 in)	Area	RBS	IRCC								
1	Full attic	Vented	150	1539 ft²	N	N								
CEILING														
#	Ceiling Type	Space	R-Value	Area	Framing Fraction	Truss Type								
1	Under Attic ()	Main	9.1	1539 ft²	0.11	Wood								
WALLS														
Wall orientation below is as entered. Actual orientation is modified by rotate angle shown in "Project" section above.														
#	Ornt	Adjacent To	Wall Type	Space	Cavity R-Value	Width Ft	In	Height Ft	In	Area	Sheathing R-Value	Framing Fraction	Solar Absor.	Below Grade%
1	N	Exterior	Frame - Wood	Main	1.01	57		8		456.0 ft²		0.25	0.6	0
2	S	Exterior	Frame - Wood	Main	1.01	57		8		456.0 ft²		0.25	0.6	0
3	E	Exterior	Frame - Wood	Main	1.01	27		8		216.0 ft²		0.25	0.6	0
4	W	Exterior	Frame - Wood	Main	1.01	27		8		216.0 ft²		0.25	0.6	0
DOORS														
#	Ornt	Door Type	Space	Storms	U-Value	Width Ft	In	Height Ft	In	Area				
1	N	Insulated	Main	None	.46	3		6	8	20 ft²				
2	S	Insulated	Main	None	.46	3		6	8	20 ft²				
WINDOWS														
#	Ornt	Wall ID	Frame	Panes	NFRC	U-Factor	SHGC	Storm	Area	Overhang Depth	Overhang Separation	Interior Shade	Screening	
1	N	1	TIM	Single (Clear)	Yes	1.09	0.7	N	90.0 ft²	0 ft 0 in	0 ft 0 in	None	None	
2	S	2	TIM	Single (Clear)	Yes	1.09	0.7	N	90.0 ft²	0 ft 0 in	0 ft 0 in	None	None	
3	E	3	TIM	Single (Clear)	Yes	1.09	0.7	N	45.0 ft²	0 ft 0 in	0 ft 0 in	None	None	
4	W	4	TIM	Single (Clear)	Yes	1.09	0.7	N	45.0 ft²	0 ft 0 in	0 ft 0 in	None	None	
INFILTRATION														
#	Scope	Method	SLA	CFM 50	ELA	EqLA	ACH	ACH 50	Space(s)					
1	Wholehouse	Proposed ACH	.001531	6178.8	339.21	637.93	1.5	30.111	All					
MASS														
Mass Type	Area	Thickness	Furniture Fraction	Space										
No Added Mass	0 ft²	0 ft	0	Main										

# Building Input Summary Report

HEATING SYSTEM														
#	System Type	Subtype		Efficiency	Capacity	-----Geothermal HeatPump-----				Ducts	Block			
						Entry	Power	Volt.	Curr					
1	Electric Strip Heat	None		COP:1	217 kBtu/hr		0	0	0	sys#1	1			
COOLING SYSTEM														
#	System Type	Subtype		Efficiency	Capacity	Air Flow	SHR	Ducts	Block					
1	Central Unit	None		SEER:10	32.1 kBtu/hr	963 cfm	0.75	sys#1	1					
HOT WATER SYSTEM														
#	System Type	SubType	Location	EF	Cap	Use	SetPnt	Credits						
					gal	gal	deg							
DUCTS														
DUCT #	Location	----- Supply -----		----- Return -----		Leakage Type	Air Handler	CFM 25 TOT	CFM25 OUT	QN	RLF	HVAC # Heat	Cool	
1	Main	6	384.75 ft²	Main	77 ft²	Prop. Air Leakage	Main	--- cfm	--- cfm	0.00	0.60	1	1	
TEMPERATURES														
Programable Thermostat: N					Ceiling Fans: N									
Cooling	<input type="checkbox"/> Jan	<input type="checkbox"/> Feb	<input type="checkbox"/> Mar	<input type="checkbox"/> Apr	<input type="checkbox"/> May	<input type="checkbox"/> Jun	<input type="checkbox"/> Jul	<input type="checkbox"/> Aug	<input type="checkbox"/> Sep	<input type="checkbox"/> Oct	<input type="checkbox"/> Nov	<input type="checkbox"/> Dec		
Heating	<input checked="" type="checkbox"/> Jan	<input checked="" type="checkbox"/> Feb	<input checked="" type="checkbox"/> Mar	<input checked="" type="checkbox"/> Apr	<input checked="" type="checkbox"/> May	<input checked="" type="checkbox"/> Jun	<input checked="" type="checkbox"/> Jul	<input checked="" type="checkbox"/> Aug	<input checked="" type="checkbox"/> Sep	<input checked="" type="checkbox"/> Oct	<input checked="" type="checkbox"/> Nov	<input checked="" type="checkbox"/> Dec		
Venting	<input type="checkbox"/> Jan	<input type="checkbox"/> Feb	<input type="checkbox"/> Mar	<input type="checkbox"/> Apr	<input type="checkbox"/> May	<input type="checkbox"/> Jun	<input type="checkbox"/> Jul	<input type="checkbox"/> Aug	<input type="checkbox"/> Sep	<input type="checkbox"/> Oct	<input type="checkbox"/> Nov	<input type="checkbox"/> Dec		
Thermostat Schedule: BESTEST-heating														
Schedule Type		1	2	3	4	5	6	7	8	9	10	11	12	
Cooling (WD)	AM	78	78	78	78	78	78	78	78	78	78	78	78	
	PM	78	78	78	78	78	78	78	78	78	78	78	78	
Cooling (WEH)	AM	78	78	78	78	78	78	78	78	78	78	78	78	
	PM	78	78	78	78	78	78	78	78	78	78	78	78	
Heating (WD)	AM	68	68	68	68	68	68	68	68	68	68	68	68	
	PM	68	68	68	68	68	68	68	68	68	68	68	68	
Heating (WEH)	AM	68	68	68	68	68	68	68	68	68	68	68	68	
	PM	68	68	68	68	68	68	68	68	68	68	68	68	



# Building Input Summary Report

## APPLIANCES & LIGHTING

Appliance Schedule: BESTEST-gains		Hours											
Schedule Type		1	2	3	4	5	6	7	8	9	10	11	12
Ceiling Fans (Summer)	AM	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.5	0.5	0.5	0.5	0.5
% Released: 0	PM	0.5	0.5	0.5	0.5	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.75
Annual Use: 0 kWh/Yr		Peak Value: 0 Watts											
Clothes Washer	AM	0.105	0.081	0.046	0.046	0.081	0.128	0.256	0.57	0.849	1	0.977	0.872
% Released: 60	PM	0.779	0.698	0.605	0.57	0.581	0.57	0.57	0.57	0.57	0.488	0.43	0.198
Annual Use: 0 kWh/Yr		Peak Value: 0 Watts											
Dishwasher	AM	0.139	0.05	0.028	0.024	0.029	0.09	0.169	0.303	0.541	0.594	0.502	0.443
% Released: 60	PM	0.377	0.396	0.335	0.323	0.344	0.448	0.791	1	0.8	0.597	0.383	0.281
Annual Use: 0 kWh/Yr		Peak Value: 0 Watts											
Dryer	AM	0.2	0.1	0.05	0.05	0.05	0.075	0.2	0.375	0.5	0.8	0.95	1
% Released: 0	PM	0.875	0.85	0.8	0.625	0.625	0.6	0.575	0.55	0.625	0.7	0.65	0.375
Annual Use: 0 kWh/Yr		Peak Value: 0 Watts											
Lighting	AM	0.144	0.144	0.144	0.144	0.144	0.243	0.304	0.607	0.356	0.216	0.216	0.29
% Released: 100	PM	0.216	0.183	0.186	0.186	0.274	0.295	0.317	0.499	0.499	0.523	0.523	0.469
Annual Use: 800 kWh/Yr		Peak Value: 308 Watts											
Miscellaneous	AM	0.238	0.238	0.238	0.238	0.238	0.398	0.5	1	0.583	0.357	0.357	0.476
% Released: 100	PM	0.357	0.297	0.31	0.31	0.453	0.488	0.524	0.821	0.821	0.857	0.857	0.774
Annual Use: 6500 kWh/Yr		Peak Value: 1518 Watts											
Pool Pump	AM	0	0	0	0	0	0	0	0	0	1	1	1
% Released: 0	PM	1	1	1	1	0	0	0	0	0	0	0	0
Annual Use: 0 kWh/Yr		Peak Value: 0 Watts											
Range	AM	0.057	0.057	0.057	0.057	0.057	0.114	0.171	0.286	0.343	0.343	0.343	0.4
% Released: 0	PM	0.457	0.343	0.286	0.4	0.571	1	0.857	0.429	0.286	0.229	0.171	0.114
Annual Use: 0 kWh/Yr		Peak Value: 0 Watts											
Refrigeration	AM	0.85	0.78	0.75	0.73	0.73	0.73	0.75	0.75	0.8	0.8	0.8	0.8
% Released: 0	PM	0.88	0.85	0.85	0.83	0.88	0.95	1	0.98	0.95	0.93	0.9	0.85
Annual Use: 0 kWh/Yr		Peak Value: 0 Watts											
Well Pump	AM	0.05	0.05	0.05	0.05	0.05	0.05	0.1	0.1	0.1	0.1	0.1	0.1
% Released: 0	PM	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Annual Use: 0 kWh/Yr		Peak Value: 0 Watts											

## MECHANICAL VENTILATION

Type	Supply CFM	Exhaust CFM	HRV	Fan	Run Time	Heating System	Cooling System
None	0	0	0	0W	0%	1 - Electric Strip Heat	1 - Central Unit

## DISHWASHERS

ID	Type	Screen	Location	Capacity	Vintage	Make	Model	Schedule	kWhPerYr
1	Dishwash	Default New	Main	12	2004 or N			HERS201	372

## RANGE OVEN

ID	Type	Screen	Location	Type	Fueltype	Make	Model	Cooktop	Oven
1	RangeOv	Default New	Main	CooktopOven C	Natural G			Electric fl	Not Conv

# Building Input Summary Report

HARD WIRED LIGHTING										
ID	Type	Screen	Location	Total#	Qualify#	Comp FI	All Other FL	txtBulbtype	Schedule	Watts per bulb
1	Hard-Wir	By Count - Qualif	Main	15	11	0	2	Incandes	HERS201	60
2	Hard-Wir	By Count - Qualif	2nd Floor	18	7	0	2	Incandes	HERS201	60
3	Hard-Wir	By Count - Qualif	Basemen	8	0	0	2	Incandes	HERS201	60
4	Hard-Wir	By Count - Qualif	Exterior	4	1	0	2	Incandes	HERS201	60
5	Hard-Wir	By Count - Qualif	Garage	1	0	0	2	Incandes	HERS201	60

MISC ELECTRICAL LOADS										
ID	Type	Screen	Item	Quantity	Catagory	Operating	Location	Schedule	Off Standby	
1	Misc Elec	Simple Default		1		1	Main	HERS201	1	

CEILING FANS				
ID	Type	Screen	Default New	cfmperWatt
1	CeilingFa	Default New	Standard	70.5
2	CeilingFa	Default New	Standard	70.5

# Building Input Summary Report

PROJECT										
Title:	L202AC (low alpha)	Bedrooms:	0	Address Type:						
Building Type:	User	Bathrooms:	0	Lot #						
Owner:	FSEC	Conditioned Area:	1539 sq.ft.	Block/SubDivision:						
# of Units:	1	Total Stories:	1	PlatBook:						
Builder Name:	James Q. Hammer	Worst Case:	No	Street:	111 Anywhere Lane					
Permit Office:		Rotate Angle:	0	County:						
Jurisdiction:		Cross Ventilation:		City, State, Zip:	Colorado Springs , CO ,					
Family Type:	Single-family	Whole House Fan:								
New/Existing:	New (From Plans)	Terrain:	Suburban							
Year Construct:		Shielding:	Suburban							
Comment:	HERS BESTEST low alpha case									
CLIMATE										
Design Location	Tmy Site	Design Temp	97.5 %	2.5 %	Int Design Temp	Heating	Design	Daily Temp		
					Winter	Summer	Degree Days	Moisture	Range	
CO, COLORADO_SPRING	CO_COLORADO_SPRINGTMY1	7	88		70	75	6114.5	0	High	
UTILITY RATES										
Fuel	Unit	Utility Name					Monthly Fixed Cost	\$/Unit		
Electricity	kWh	EnergyGauge Default					0	0.1188		
Natural Gas	Therm	EnergyGauge Default					0	0.682		
Fuel Oil	Gallon	EnergyGauge Default					0	1.1		
Propane	Gallon	EnergyGauge Default					0	1.4		
SURROUNDINGS										
Ornt	Type	Shade Trees			Adjacent Buildings					
		Height	Width	Distance	Exist	Height	Width	Distance		
N	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
NE	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
E	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
SE	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
S	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
SW	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
W	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
NW	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
BLOCKS										
Number	Name	Area	Volume							
1	Block1	1539	12312							
SPACES										
Number	Name	Area	Volume	Kitchen	Occupants	Bedrooms	Finished	Cooled	Heated	
1	Main	1539	12312	Yes	0	0		Yes	Yes	
FLOORS										
#	Floor Type	Space	R-Value	Area	Tile	Wood	Carpet			
1	Raised Floor	Main	----	1539 ft <sup>2</sup>	0	0	0	1		

# Building Input Summary Report

ROOF														
#	Type	Materials	Roof Area	Gable Area	Roof Color	Solar Absor.	SA Tested	Emitt	Emitt Tested	Deck Insul.	Pitch (deg)			
1	Gable or shed	Composition shingles	1622 ft²	256 ft²	Medium	0.2	No	0.9	No	0	18.4			
ATTIC														
#	Type	Ventilation	Vent Ratio (1 in)	Area	RBS	IRCC								
1	Full attic	Vented	150	1539 ft²	N	N								
CEILING														
#	Ceiling Type	Space	R-Value	Area	Framing Fraction	Truss Type								
1	Under Attic ()	Main	9.1	1539 ft²	0.11	Wood								
WALLS														
Wall orientation below is as entered. Actual orientation is modified by rotate angle shown in "Project" section above.														
#	Ornt	Adjacent To	Wall Type	Space	Cavity R-Value	Width Ft	In	Height Ft	In	Area	Sheathing R-Value	Framing Fraction	Solar Absor.	Below Grade%
1	N	Exterior	Frame - Wood	Main	1.01	57		8		456.0 ft²		0.25	0.2	0
2	S	Exterior	Frame - Wood	Main	1.01	57		8		456.0 ft²		0.25	0.2	0
3	E	Exterior	Frame - Wood	Main	1.01	27		8		216.0 ft²		0.25	0.2	0
4	W	Exterior	Frame - Wood	Main	1.01	27		8		216.0 ft²		0.25	0.2	0
DOORS														
#	Ornt	Door Type	Space	Storms	U-Value	Width Ft	In	Height Ft	In	Area				
1	N	Insulated	Main	None	.46	3		6	8	20 ft²				
2	S	Insulated	Main	None	.46	3		6	8	20 ft²				
WINDOWS														
#	Ornt	Wall ID	Frame	Panes	NFRC	U-Factor	SHGC	Storm	Area	Overhang Depth	Overhang Separation	Interior Shade	Screening	
1	N	1	TIM	Single (Clear)	Yes	1.09	0.7	N	90.0 ft²	0 ft 0 in	0 ft 0 in	None	None	
2	S	2	TIM	Single (Clear)	Yes	1.09	0.7	N	90.0 ft²	0 ft 0 in	0 ft 0 in	None	None	
3	E	3	TIM	Single (Clear)	Yes	1.09	0.7	N	45.0 ft²	0 ft 0 in	0 ft 0 in	None	None	
4	W	4	TIM	Single (Clear)	Yes	1.09	0.7	N	45.0 ft²	0 ft 0 in	0 ft 0 in	None	None	
INFILTRATION														
#	Scope	Method	SLA	CFM 50	ELA	EqLA	ACH	ACH 50	Space(s)					
1	Wholehouse	Proposed ACH	.001531	6178.8	339.21	637.93	1.5	30.111	All					
MASS														
Mass Type	Area	Thickness	Furniture Fraction	Space										
No Added Mass	0 ft²	0 ft	0	Main										

# Building Input Summary Report

HEATING SYSTEM														
#	System Type	Subtype			Efficiency	Capacity	-----Geothermal HeatPump-----				Ducts	Block		
						Entry	Power	Volt.	Curr					
1	Electric Strip Heat	None			COP:1	214 kBtu/hr		0	0	0	sys#1		1	
COOLING SYSTEM														
#	System Type	Subtype			Efficiency	Capacity	Air Flow	SHR	Ducts	Block				
1	Central Unit	None			SEER:10	32.1 kBtu/hr	963 cfm	0.75	sys#1	1				
HOT WATER SYSTEM														
#	System Type	SubType	Location	EF	Cap	Use	SetPnt	Credits						
					gal	gal	deg							
DUCTS														
DUCT #	Location	----- Supply -----		----- Return -----		Leakage Type	Air Handler	CFM 25 TOT	CFM25 OUT	QN	RLF	HVAC #		
1	Main	R-Value	Area	Location	Area	Number		--- cfm	--- cfm	0.00	0.60	1	1	
TEMPERATURES														
Programable Thermostat: N					Ceiling Fans: N									
Cooling	<input type="checkbox"/> Jan	<input type="checkbox"/> Feb	<input type="checkbox"/> Mar	<input type="checkbox"/> Apr	<input type="checkbox"/> May	<input type="checkbox"/> Jun	<input type="checkbox"/> Jul	<input type="checkbox"/> Aug	<input type="checkbox"/> Sep	<input type="checkbox"/> Oct	<input type="checkbox"/> Nov	<input type="checkbox"/> Dec		
Heating	<input checked="" type="checkbox"/> Jan	<input checked="" type="checkbox"/> Feb	<input checked="" type="checkbox"/> Mar	<input checked="" type="checkbox"/> Apr	<input checked="" type="checkbox"/> May	<input checked="" type="checkbox"/> Jun	<input checked="" type="checkbox"/> Jul	<input checked="" type="checkbox"/> Aug	<input checked="" type="checkbox"/> Sep	<input checked="" type="checkbox"/> Oct	<input checked="" type="checkbox"/> Nov	<input checked="" type="checkbox"/> Dec		
Venting	<input type="checkbox"/> Jan	<input type="checkbox"/> Feb	<input type="checkbox"/> Mar	<input type="checkbox"/> Apr	<input type="checkbox"/> May	<input type="checkbox"/> Jun	<input type="checkbox"/> Jul	<input type="checkbox"/> Aug	<input type="checkbox"/> Sep	<input type="checkbox"/> Oct	<input type="checkbox"/> Nov	<input type="checkbox"/> Dec		
Thermostat Schedule: BESTEST-heating														
Schedule Type		1	2	3	4	5	6	7	8	9	10	11	12	Hours
Cooling (WD)	AM	78	78	78	78	78	78	78	78	78	78	78	78	78
	PM	78	78	78	78	78	78	78	78	78	78	78	78	78
Cooling (WEH)	AM	78	78	78	78	78	78	78	78	78	78	78	78	78
	PM	78	78	78	78	78	78	78	78	78	78	78	78	78
Heating (WD)	AM	68	68	68	68	68	68	68	68	68	68	68	68	68
	PM	68	68	68	68	68	68	68	68	68	68	68	68	68
Heating (WEH)	AM	68	68	68	68	68	68	68	68	68	68	68	68	68
	PM	68	68	68	68	68	68	68	68	68	68	68	68	68

# Building Input Summary Report

## APPLIANCES & LIGHTING

Appliance Schedule: BESTEST-gains		Hours											
Schedule Type		1	2	3	4	5	6	7	8	9	10	11	12
Ceiling Fans (Summer)	AM	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.5	0.5	0.5	0.5	0.5
% Released: 0	PM	0.5	0.5	0.5	0.5	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.75
Annual Use: 0 kWh/Yr		Peak Value: 0 Watts											
Clothes Washer	AM	0.105	0.081	0.046	0.046	0.081	0.128	0.256	0.57	0.849	1	0.977	0.872
% Released: 60	PM	0.779	0.698	0.605	0.57	0.581	0.57	0.57	0.57	0.57	0.488	0.43	0.198
Annual Use: 0 kWh/Yr		Peak Value: 0 Watts											
Dishwasher	AM	0.139	0.05	0.028	0.024	0.029	0.09	0.169	0.303	0.541	0.594	0.502	0.443
% Released: 60	PM	0.377	0.396	0.335	0.323	0.344	0.448	0.791	1	0.8	0.597	0.383	0.281
Annual Use: 0 kWh/Yr		Peak Value: 0 Watts											
Dryer	AM	0.2	0.1	0.05	0.05	0.05	0.075	0.2	0.375	0.5	0.8	0.95	1
% Released: 0	PM	0.875	0.85	0.8	0.625	0.625	0.6	0.575	0.55	0.625	0.7	0.65	0.375
Annual Use: 0 kWh/Yr		Peak Value: 0 Watts											
Lighting	AM	0.144	0.144	0.144	0.144	0.144	0.243	0.304	0.607	0.356	0.216	0.216	0.29
% Released: 100	PM	0.216	0.183	0.186	0.186	0.274	0.295	0.317	0.499	0.499	0.523	0.523	0.469
Annual Use: 800 kWh/Yr		Peak Value: 308 Watts											
Miscellaneous	AM	0.238	0.238	0.238	0.238	0.238	0.398	0.5	1	0.583	0.357	0.357	0.476
% Released: 100	PM	0.357	0.297	0.31	0.31	0.453	0.488	0.524	0.821	0.821	0.857	0.857	0.774
Annual Use: 6500 kWh/Yr		Peak Value: 1518 Watts											
Pool Pump	AM	0	0	0	0	0	0	0	0	0	1	1	1
% Released: 0	PM	1	1	1	1	0	0	0	0	0	0	0	0
Annual Use: 0 kWh/Yr		Peak Value: 0 Watts											
Range	AM	0.057	0.057	0.057	0.057	0.057	0.114	0.171	0.286	0.343	0.343	0.343	0.4
% Released: 0	PM	0.457	0.343	0.286	0.4	0.571	1	0.857	0.429	0.286	0.229	0.171	0.114
Annual Use: 0 kWh/Yr		Peak Value: 0 Watts											
Refrigeration	AM	0.85	0.78	0.75	0.73	0.73	0.73	0.75	0.75	0.8	0.8	0.8	0.8
% Released: 0	PM	0.88	0.85	0.85	0.83	0.88	0.95	1	0.98	0.95	0.93	0.9	0.85
Annual Use: 0 kWh/Yr		Peak Value: 0 Watts											
Well Pump	AM	0.05	0.05	0.05	0.05	0.05	0.05	0.1	0.1	0.1	0.1	0.1	0.1
% Released: 0	PM	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Annual Use: 0 kWh/Yr		Peak Value: 0 Watts											

## MECHANICAL VENTILATION

Type	Supply CFM	Exhaust CFM	HRV	Fan	Run Time	Heating System	Cooling System
None	0	0	0	0W	0%	1 - Electric Strip Heat	1 - Central Unit

## DISHWASHERS

ID	Type	Screen	Location	Capacity	Vintage	Make	Model	Schedule	kWhPerYr
1	Dishwash	Default New	Main	12	2004 or N			HERS201	372

## RANGE OVEN

ID	Type	Screen	Location	Type	Fueltype	Make	Model	Cooktop	Oven
1	RangeOv	Default New	Main	CooktopOven C	Natural G			Electric fl	Not Conv

# Building Input Summary Report

<b>HARD WIRED LIGHTING</b>										
ID	Type	Screen	Location	Total#	Qualify#	Comp FI	All Other FL	txtBulbtype	Schedule	Watts per bulb
1	Hard-Wir	By Count - Qualif	Main	15	11	0	2	Incandes	HERS201	60
2	Hard-Wir	By Count - Qualif	2nd Floor	18	7	0	2	Incandes	HERS201	60
3	Hard-Wir	By Count - Qualif	Basemen	8	0	0	2	Incandes	HERS201	60
4	Hard-Wir	By Count - Qualif	Exterior	4	1	0	2	Incandes	HERS201	60
5	Hard-Wir	By Count - Qualif	Garage	1	0	0	2	Incandes	HERS201	60

<b>MISC ELECTRICAL LOADS</b>										
ID	Type	Screen	Item	Quantity	Catagory	Operating	Location	Schedule	Off Standby	
1	Misc Elec	Simple Default		1		1	Main	HERS201	1	

<b>CEILING FANS</b>				
ID	Type	Screen	Default New	cfmperWatt
1	CeilingFa	Default New	Standard	70.5
2	CeilingFa	Default New	Standard	70.5

# Building Input Summary Report

PROJECT											
Title:	L302AC (slab case)		Bedrooms:	0		Address Type:					
Building Type:	User		Bathrooms:	0		Lot #					
Owner:	FSEC		Conditioned Area:	1539 sq.ft.		Block/SubDivision:					
# of Units:	1		Total Stories:	1		PlatBook:					
Builder Name:	James Q. Hammer		Worst Case:	No		Street: 111 Anywhere Lane					
Permit Office:			Rotate Angle:	0		County:					
Jurisdiction:			Cross Ventilation:			City, State, Zip: Colorado Springs ,					
Family Type:	Single-family		Whole House Fan:			CO ,					
New/Existing:	New (From Plans)		Terrain:	Suburban							
Year Construct:			Shielding:	Suburban							
Comment:	HERS BESTEST slab case										
CLIMATE											
Design Location	Tmy Site		Design Temp	97.5 %	2.5 %	Int Design Temp	Winter	Summer	Heating Degree Days	Design Moisture	Daily Temp Range
CO, COLORADO_SPRING	CO_COLORADO_SPRINGTMY1		7	88		70	75	6114.5	0		High
UTILITY RATES											
Fuel	Unit	Utility Name					Monthly Fixed Cost				\$/Unit
Electricity	kWh	EnergyGauge Default					0				0.1188
Natural Gas	Therm	EnergyGauge Default					0				0.682
Fuel Oil	Gallon	EnergyGauge Default					0				1.1
Propane	Gallon	EnergyGauge Default					0				1.4
SURROUNDINGS											
Ornt	Type	Shade Trees			Adjacent Buildings						
		Height	Width	Distance	Exist	Height	Width	Distance			
N	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft			
NE	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft			
E	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft			
SE	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft			
S	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft			
SW	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft			
W	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft			
NW	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft			
BLOCKS											
Number	Name	Area	Volume								
1	Block1	1539	12312								
SPACES											
Number	Name	Area	Volume	Kitchen	Occupants	Bedrooms	Finished	Cooled	Heated		
1	Main	1539	12312	Yes	0	0		Yes	Yes		
FLOORS											
#	Floor Type	Space	Perimeter	R-Value	Area			Tile	Wood	Carpet	
1	Slab-On-Grade Edge Insulation	Main	168 ft	0	1539 ft <sup>2</sup>	----		0	0	1	



# Building Input Summary Report

ROOF													
#	Type	Materials	Roof Area	Gable Area	Roof Color	Solar Absor.	SA Tested	Emitt	Emitt Tested	Deck Insul.	Pitch (deg)		
1	Gable or shed	Composition shingles	1622 ft²	256 ft²	Medium	0.6	No	0.9	No	0	18.4		
ATTIC													
#	Type	Ventilation	Vent Ratio (1 in)	Area	RBS	IRCC							
1	Full attic	Vented	150	1539 ft²	N	N							
CEILING													
#	Ceiling Type	Space	R-Value	Area	Framing Fraction	Truss Type							
1	Under Attic ()	Main	16.7	1539 ft²	0.11	Wood							
WALLS													
Wall orientation below is as entered. Actual orientation is modified by rotate angle shown in "Project" section above.													
#	Ornt	Adjacent To	Wall Type	Space	Cavity R-Value	Width Ft In	Height Ft In	Area	Sheathing R-Value	Framing Fraction	Solar Absor.	Below Grade%	
1	N	Exterior	Frame - Wood	Main	11	57	8	456.0 ft²		0.25	0.6	0	
2	S	Exterior	Frame - Wood	Main	11	57	8	456.0 ft²		0.25	0.6	0	
3	E	Exterior	Frame - Wood	Main	11	27	8	216.0 ft²		0.25	0.6	0	
4	W	Exterior	Frame - Wood	Main	11	27	8	216.0 ft²		0.25	0.6	0	
DOORS													
#	Ornt	Door Type	Space	Storms	U-Value	Width Ft In	Height Ft In	Area					
1	N	Insulated	Main	None	.46	3	6	8	20 ft²				
2	S	Insulated	Main	None	.46	3	6	8	20 ft²				
WINDOWS													
#	Ornt	Wall ID	Frame	Panes	NFRC	U-Factor	SHGC	Storm	Area	Overhang Depth	Overhang Separation	Interior Shade	Screening
1	N	1	TIM	Single (Clear)	Yes	1.09	0.7	N	90.0 ft²	0 ft 0 in	0 ft 0 in	None	None
2	S	2	TIM	Single (Clear)	Yes	1.09	0.7	N	90.0 ft²	0 ft 0 in	0 ft 0 in	None	None
3	E	3	TIM	Single (Clear)	Yes	1.09	0.7	N	45.0 ft²	0 ft 0 in	0 ft 0 in	None	None
4	W	4	TIM	Single (Clear)	Yes	1.09	0.7	N	45.0 ft²	0 ft 0 in	0 ft 0 in	None	None
INFILTRATION													
#	Scope	Method	SLA	CFM 50	ELA	EqLA	ACH	ACH 50	Space(s)				
1	Wholehouse	Proposed ACH	.000684	2759.9	151.51	284.94	.67	13.449	All				
MASS													
Mass Type	Area	Thickness	Furniture Fraction	Space									
No Added Mass	0 ft²	0 ft	0	Main									

# Building Input Summary Report

HEATING SYSTEM														
#	System Type	Subtype		Efficiency	Capacity	-----Geothermal HeatPump-----				Ducts	Block			
						Entry	Power	Volt.	Curr					
1	Electric Strip Heat	None		COP:1	116 kBtu/hr		0	0	0	sys#1	1			
COOLING SYSTEM														
#	System Type	Subtype		Efficiency	Capacity	Air Flow	SHR	Ducts	Block					
1	Central Unit	None		SEER:10	24.4 kBtu/hr	732 cfm	0.75	sys#1	1					
HOT WATER SYSTEM														
#	System Type	SubType	Location	EF	Cap	Use	SetPnt	Credits						
					gal	gal	deg							
DUCTS														
DUCT #	Location	----- Supply -----		----- Return -----		Leakage Type	Air Handler	CFM 25 TOT	CFM25 OUT	QN	RLF	HVAC # Heat	Cool	
1	Main	6	384.75 ft²	Main	77 ft²	Prop. Air Leakage	Main	--- cfm	--- cfm	0.00	0.60	1	1	
TEMPERATURES														
Programable Thermostat: N					Ceiling Fans: N									
Cooling	<input type="checkbox"/> Jan	<input type="checkbox"/> Feb	<input type="checkbox"/> Mar	<input type="checkbox"/> Apr	<input type="checkbox"/> May	<input type="checkbox"/> Jun	<input type="checkbox"/> Jul	<input type="checkbox"/> Aug	<input type="checkbox"/> Sep	<input type="checkbox"/> Oct	<input type="checkbox"/> Nov	<input type="checkbox"/> Dec		
Heating	<input checked="" type="checkbox"/> Jan	<input checked="" type="checkbox"/> Feb	<input checked="" type="checkbox"/> Mar	<input checked="" type="checkbox"/> Apr	<input checked="" type="checkbox"/> May	<input checked="" type="checkbox"/> Jun	<input checked="" type="checkbox"/> Jul	<input checked="" type="checkbox"/> Aug	<input checked="" type="checkbox"/> Sep	<input checked="" type="checkbox"/> Oct	<input checked="" type="checkbox"/> Nov	<input checked="" type="checkbox"/> Dec		
Venting	<input type="checkbox"/> Jan	<input type="checkbox"/> Feb	<input type="checkbox"/> Mar	<input type="checkbox"/> Apr	<input type="checkbox"/> May	<input type="checkbox"/> Jun	<input type="checkbox"/> Jul	<input type="checkbox"/> Aug	<input type="checkbox"/> Sep	<input type="checkbox"/> Oct	<input type="checkbox"/> Nov	<input type="checkbox"/> Dec		
Thermostat Schedule: BESTEST-heating														
Schedule Type		1	2	3	4	5	6	7	8	9	10	11	12	
Cooling (WD)	AM	78	78	78	78	78	78	78	78	78	78	78	78	
	PM	78	78	78	78	78	78	78	78	78	78	78	78	
Cooling (WEH)	AM	78	78	78	78	78	78	78	78	78	78	78	78	
	PM	78	78	78	78	78	78	78	78	78	78	78	78	
Heating (WD)	AM	68	68	68	68	68	68	68	68	68	68	68	68	
	PM	68	68	68	68	68	68	68	68	68	68	68	68	
Heating (WEH)	AM	68	68	68	68	68	68	68	68	68	68	68	68	
	PM	68	68	68	68	68	68	68	68	68	68	68	68	

# Building Input Summary Report

## APPLIANCES & LIGHTING

Appliance Schedule: BESTEST-gains		Hours											
Schedule Type		1	2	3	4	5	6	7	8	9	10	11	12
Ceiling Fans (Summer)	AM	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.5	0.5	0.5	0.5	0.5
% Released: 0	PM	0.5	0.5	0.5	0.5	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.75
Annual Use: 0 kWh/Yr		Peak Value: 0 Watts											
Clothes Washer	AM	0.105	0.081	0.046	0.046	0.081	0.128	0.256	0.57	0.849	1	0.977	0.872
% Released: 60	PM	0.779	0.698	0.605	0.57	0.581	0.57	0.57	0.57	0.57	0.488	0.43	0.198
Annual Use: 0 kWh/Yr		Peak Value: 0 Watts											
Dishwasher	AM	0.139	0.05	0.028	0.024	0.029	0.09	0.169	0.303	0.541	0.594	0.502	0.443
% Released: 60	PM	0.377	0.396	0.335	0.323	0.344	0.448	0.791	1	0.8	0.597	0.383	0.281
Annual Use: 0 kWh/Yr		Peak Value: 0 Watts											
Dryer	AM	0.2	0.1	0.05	0.05	0.05	0.075	0.2	0.375	0.5	0.8	0.95	1
% Released: 0	PM	0.875	0.85	0.8	0.625	0.625	0.6	0.575	0.55	0.625	0.7	0.65	0.375
Annual Use: 0 kWh/Yr		Peak Value: 0 Watts											
Lighting	AM	0.144	0.144	0.144	0.144	0.144	0.243	0.304	0.607	0.356	0.216	0.216	0.29
% Released: 100	PM	0.216	0.183	0.186	0.186	0.274	0.295	0.317	0.499	0.499	0.523	0.523	0.469
Annual Use: 800 kWh/Yr		Peak Value: 308 Watts											
Miscellaneous	AM	0.238	0.238	0.238	0.238	0.238	0.398	0.5	1	0.583	0.357	0.357	0.476
% Released: 100	PM	0.357	0.297	0.31	0.31	0.453	0.488	0.524	0.821	0.821	0.857	0.857	0.774
Annual Use: 6500 kWh/Yr		Peak Value: 1518 Watts											
Pool Pump	AM	0	0	0	0	0	0	0	0	0	1	1	1
% Released: 0	PM	1	1	1	1	0	0	0	0	0	0	0	0
Annual Use: 0 kWh/Yr		Peak Value: 0 Watts											
Range	AM	0.057	0.057	0.057	0.057	0.057	0.114	0.171	0.286	0.343	0.343	0.343	0.4
% Released: 0	PM	0.457	0.343	0.286	0.4	0.571	1	0.857	0.429	0.286	0.229	0.171	0.114
Annual Use: 0 kWh/Yr		Peak Value: 0 Watts											
Refrigeration	AM	0.85	0.78	0.75	0.73	0.73	0.73	0.75	0.75	0.8	0.8	0.8	0.8
% Released: 0	PM	0.88	0.85	0.85	0.83	0.88	0.95	1	0.98	0.95	0.93	0.9	0.85
Annual Use: 0 kWh/Yr		Peak Value: 0 Watts											
Well Pump	AM	0.05	0.05	0.05	0.05	0.05	0.05	0.1	0.1	0.1	0.1	0.1	0.1
% Released: 0	PM	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Annual Use: 0 kWh/Yr		Peak Value: 0 Watts											

## MECHANICAL VENTILATION

Type	Supply CFM	Exhaust CFM	HRV	Fan	Run Time	Heating System	Cooling System
None	0	0	0	0W	0%	1 - Electric Strip Heat	1 - Central Unit

## DISHWASHERS

ID	Type	Screen	Location	Capacity	Vintage	Make	Model	Schedule	kWhPerYr
1	Dishwash	Default New	Main	12	2004 or N			HERS201	372

## RANGE OVEN

ID	Type	Screen	Location	Type	Fueltype	Make	Model	Cooktop	Oven
1	RangeOv	Default New	Main	CooktopOven C	Natural G			Electric fl	Not Conv

# Building Input Summary Report

HARD WIRED LIGHTING										
ID	Type	Screen	Location	Total#	Qualify#	Comp FI	All Other FL	txtBulbtype	Schedule	Watts per bulb
1	Hard-Wir	By Count - Qualif	Main	15	11	0	2	Incandes	HERS201	60
2	Hard-Wir	By Count - Qualif	2nd Floor	18	7	0	2	Incandes	HERS201	60
3	Hard-Wir	By Count - Qualif	Basemen	8	0	0	2	Incandes	HERS201	60
4	Hard-Wir	By Count - Qualif	Exterior	4	1	0	2	Incandes	HERS201	60
5	Hard-Wir	By Count - Qualif	Garage	1	0	0	2	Incandes	HERS201	60
MISC ELECTRICAL LOADS										
ID	Type	Screen	Item	Quantity	Catagory	Operating	Location	Schedule	Off Standby	
1	Misc Elec	Simple Default		1		1	Main	HERS201	1	
CEILING FANS										
ID	Type	Screen	Default New	cfmperWatt						
1	CeilingFa	Default New	Standard	70.5						
2	CeilingFa	Default New	Standard	70.5						

# Building Input Summary Report

PROJECT											
Title:	L304AC (slab with insul)		Bedrooms:	0		Address Type:					
Building Type:	User		Bathrooms:	0		Lot #					
Owner:	FSEC		Conditioned Area:	1539 sq.ft.		Block/SubDivision:					
# of Units:	1		Total Stories:	1		PlatBook:					
Builder Name:	James Q. Hammer		Worst Case:	No		Street:	111 Anywhere Lane				
Permit Office:			Rotate Angle:	0		County:					
Jurisdiction:			Cross Ventilation:			City, State, Zip:	Colorado Springs , CO ,				
Family Type:	Single-family		Whole House Fan:								
New/Existing:	New (From Plans)		Terrain:	Suburban							
Year Construct:			Shielding:	Suburban							
Comment:	HERS BESTEST insulated slab case										
CLIMATE											
Design Location	Tmy Site		Design Temp	97.5 %	2.5 %	Int Design Temp	Winter	Summer	Heating Degree Days	Design Moisture	Daily Temp Range
CO, COLORADO_SPRING	CO_COLORADO_SPRINGTMY1		7	88		70	75	6114.5	0	High	
UTILITY RATES											
Fuel	Unit	Utility Name					Monthly Fixed Cost	\$/Unit			
Electricity	kWh	EnergyGauge Default					0	0.1188			
Natural Gas	Therm	EnergyGauge Default					0	0.682			
Fuel Oil	Gallon	EnergyGauge Default					0	1.1			
Propane	Gallon	EnergyGauge Default					0	1.4			
SURROUNDINGS											
Ornt	Type	Shade Trees			Adjacent Buildings						
		Height	Width	Distance	Exist	Height	Width	Distance			
N	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft			
NE	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft			
E	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft			
SE	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft			
S	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft			
SW	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft			
W	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft			
NW	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft			
BLOCKS											
Number	Name	Area	Volume								
1	Block1	1539	12312								
SPACES											
Number	Name	Area	Volume	Kitchen	Occupants	Bedrooms	Finished	Cooled	Heated		
1	Main	1539	12312	Yes	0	0	Yes	Yes	Yes		
FLOORS											
#	Floor Type	Space	Perimeter	R-Value	Area			Tile	Wood	Carpet	
1	Slab-On-Grade Edge Insulation	Main	168 ft	5.4	1539 ft <sup>2</sup>	----		0	0	1	

# Building Input Summary Report

ROOF														
#	Type	Materials	Roof Area	Gable Area	Roof Color	Solar Absor.	SA Tested	Emitt	Emitt Tested	Deck Insul.	Pitch (deg)			
1	Gable or shed	Composition shingles	1622 ft²	256 ft²	Medium	0.6	No	0.9	No	0	18.4			
ATTIC														
#	Type	Ventilation	Vent Ratio (1 in)	Area	RBS	IRCC								
1	Full attic	Vented	150	1539 ft²	N	N								
CEILING														
#	Ceiling Type	Space	R-Value	Area	Framing Fraction	Truss Type								
1	Under Attic ()	Main	16.7	1539 ft²	0.11	Wood								
WALLS														
Wall orientation below is as entered. Actual orientation is modified by rotate angle shown in "Project" section above.														
#	Ornt	Adjacent To	Wall Type	Space	Cavity R-Value	Width Ft	In	Height Ft	In	Area	Sheathing R-Value	Framing Fraction	Solar Absor.	Below Grade%
1	N	Exterior	Frame - Wood	Main	11	57		8		456.0 ft²		0.25	0.6	0
2	S	Exterior	Frame - Wood	Main	11	57		8		456.0 ft²		0.25	0.6	0
3	E	Exterior	Frame - Wood	Main	11	27		8		216.0 ft²		0.25	0.6	0
4	W	Exterior	Frame - Wood	Main	11	27		8		216.0 ft²		0.25	0.6	0
DOORS														
#	Ornt	Door Type	Space	Storms	U-Value	Width Ft	In	Height Ft	In	Area				
1	N	Insulated	Main	None	.46	3		6	8	20 ft²				
2	S	Insulated	Main	None	.46	3		6	8	20 ft²				
WINDOWS														
#	Ornt	Wall ID	Frame	Panes	NFRC	U-Factor	SHGC	Storm	Area	Overhang Depth	Overhang Separation	Interior Shade	Screening	
1	N	1	TIM	Single (Clear)	Yes	1.09	0.7	N	90.0 ft²	0 ft 0 in	0 ft 0 in	None	None	
2	S	2	TIM	Single (Clear)	Yes	1.09	0.7	N	90.0 ft²	0 ft 0 in	0 ft 0 in	None	None	
3	E	3	TIM	Single (Clear)	Yes	1.09	0.7	N	45.0 ft²	0 ft 0 in	0 ft 0 in	None	None	
4	W	4	TIM	Single (Clear)	Yes	1.09	0.7	N	45.0 ft²	0 ft 0 in	0 ft 0 in	None	None	
INFILTRATION														
#	Scope	Method	SLA	CFM 50	ELA	EqLA	ACH	ACH 50	Space(s)					
1	Wholehouse	Proposed ACH	.000684	2759.9	151.51	284.94	.67	13.449	All					
MASS														
Mass Type	Area	Thickness	Furniture Fraction	Space										
No Added Mass	0 ft²	0 ft	0	Main										

# Building Input Summary Report

HEATING SYSTEM														
#	System Type	Subtype		Efficiency	Capacity	-----Geothermal HeatPump-----				Ducts	Block			
						Entry	Power	Volt.	Curr					
1	Electric Strip Heat	None		COP:1	106 kBtu/hr	0	0	0		sys#1	1			
COOLING SYSTEM														
#	System Type	Subtype		Efficiency	Capacity	Air Flow	SHR	Ducts	Block					
1	Central Unit	None		SEER:10	24.4 kBtu/hr	732 cfm	0.75	sys#1	1					
HOT WATER SYSTEM														
#	System Type	SubType	Location	EF	Cap	Use	SetPnt	Credits						
					gal	gal	deg							
DUCTS														
DUCT #	Location	----- Supply -----		----- Return -----		Leakage Type	Air Handler	CFM 25 TOT	CFM25 OUT	QN	RLF	HVAC #		
1	Main	R-Value	Area	Location	Area	Number		---	---	0.00	0.60	1	1	
		6	384.75 ft²	Main	77 ft²		Prop. Air Leakage	cfm	cfm					
TEMPERATURES														
Programable Thermostat: N					Ceiling Fans: N									
Cooling	<input type="checkbox"/> Jan	<input type="checkbox"/> Feb	<input type="checkbox"/> Mar	<input type="checkbox"/> Apr	<input type="checkbox"/> May	<input type="checkbox"/> Jun	<input type="checkbox"/> Jul	<input type="checkbox"/> Aug	<input type="checkbox"/> Sep	<input type="checkbox"/> Oct	<input type="checkbox"/> Nov	<input type="checkbox"/> Dec		
Heating	<input checked="" type="checkbox"/> Jan	<input checked="" type="checkbox"/> Feb	<input checked="" type="checkbox"/> Mar	<input checked="" type="checkbox"/> Apr	<input checked="" type="checkbox"/> May	<input checked="" type="checkbox"/> Jun	<input checked="" type="checkbox"/> Jul	<input checked="" type="checkbox"/> Aug	<input checked="" type="checkbox"/> Sep	<input checked="" type="checkbox"/> Oct	<input checked="" type="checkbox"/> Nov	<input checked="" type="checkbox"/> Dec		
Venting	<input type="checkbox"/> Jan	<input type="checkbox"/> Feb	<input type="checkbox"/> Mar	<input type="checkbox"/> Apr	<input type="checkbox"/> May	<input type="checkbox"/> Jun	<input type="checkbox"/> Jul	<input type="checkbox"/> Aug	<input type="checkbox"/> Sep	<input type="checkbox"/> Oct	<input type="checkbox"/> Nov	<input type="checkbox"/> Dec		
Thermostat Schedule: BESTEST-heating														
Schedule Type		Hours												
		1	2	3	4	5	6	7	8	9	10	11	12	
Cooling (WD)	AM	78	78	78	78	78	78	78	78	78	78	78	78	
	PM	78	78	78	78	78	78	78	78	78	78	78	78	
Cooling (WEH)	AM	78	78	78	78	78	78	78	78	78	78	78	78	
	PM	78	78	78	78	78	78	78	78	78	78	78	78	
Heating (WD)	AM	68	68	68	68	68	68	68	68	68	68	68	68	
	PM	68	68	68	68	68	68	68	68	68	68	68	68	
Heating (WEH)	AM	68	68	68	68	68	68	68	68	68	68	68	68	
	PM	68	68	68	68	68	68	68	68	68	68	68	68	

# Building Input Summary Report

## APPLIANCES & LIGHTING

Appliance Schedule: BESTEST-gains		Hours											
Schedule Type		1	2	3	4	5	6	7	8	9	10	11	12
Ceiling Fans (Summer)	AM	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.5	0.5	0.5	0.5	0.5
% Released: 0	PM	0.5	0.5	0.5	0.5	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.75
Annual Use: 0 kWh/Yr		Peak Value: 0 Watts											
Clothes Washer	AM	0.105	0.081	0.046	0.046	0.081	0.128	0.256	0.57	0.849	1	0.977	0.872
% Released: 60	PM	0.779	0.698	0.605	0.57	0.581	0.57	0.57	0.57	0.57	0.488	0.43	0.198
Annual Use: 0 kWh/Yr		Peak Value: 0 Watts											
Dishwasher	AM	0.139	0.05	0.028	0.024	0.029	0.09	0.169	0.303	0.541	0.594	0.502	0.443
% Released: 60	PM	0.377	0.396	0.335	0.323	0.344	0.448	0.791	1	0.8	0.597	0.383	0.281
Annual Use: 0 kWh/Yr		Peak Value: 0 Watts											
Dryer	AM	0.2	0.1	0.05	0.05	0.05	0.075	0.2	0.375	0.5	0.8	0.95	1
% Released: 0	PM	0.875	0.85	0.8	0.625	0.625	0.6	0.575	0.55	0.625	0.7	0.65	0.375
Annual Use: 0 kWh/Yr		Peak Value: 0 Watts											
Lighting	AM	0.144	0.144	0.144	0.144	0.144	0.243	0.304	0.607	0.356	0.216	0.216	0.29
% Released: 100	PM	0.216	0.183	0.186	0.186	0.274	0.295	0.317	0.499	0.499	0.523	0.523	0.469
Annual Use: 800 kWh/Yr		Peak Value: 308 Watts											
Miscellaneous	AM	0.238	0.238	0.238	0.238	0.238	0.398	0.5	1	0.583	0.357	0.357	0.476
% Released: 100	PM	0.357	0.297	0.31	0.31	0.453	0.488	0.524	0.821	0.821	0.857	0.857	0.774
Annual Use: 6500 kWh/Yr		Peak Value: 1518 Watts											
Pool Pump	AM	0	0	0	0	0	0	0	0	0	1	1	1
% Released: 0	PM	1	1	1	1	0	0	0	0	0	0	0	0
Annual Use: 0 kWh/Yr		Peak Value: 0 Watts											
Range	AM	0.057	0.057	0.057	0.057	0.057	0.114	0.171	0.286	0.343	0.343	0.343	0.4
% Released: 0	PM	0.457	0.343	0.286	0.4	0.571	1	0.857	0.429	0.286	0.229	0.171	0.114
Annual Use: 0 kWh/Yr		Peak Value: 0 Watts											
Refrigeration	AM	0.85	0.78	0.75	0.73	0.73	0.73	0.75	0.75	0.8	0.8	0.8	0.8
% Released: 0	PM	0.88	0.85	0.85	0.83	0.88	0.95	1	0.98	0.95	0.93	0.9	0.85
Annual Use: 0 kWh/Yr		Peak Value: 0 Watts											
Well Pump	AM	0.05	0.05	0.05	0.05	0.05	0.05	0.1	0.1	0.1	0.1	0.1	0.1
% Released: 0	PM	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Annual Use: 0 kWh/Yr		Peak Value: 0 Watts											

## MECHANICAL VENTILATION

Type	Supply CFM	Exhaust CFM	HRV	Fan	Run Time	Heating System	Cooling System
None	0	0	0	0W	0%	1 - Electric Strip Heat	1 - Central Unit

## DISHWASHERS

ID	Type	Screen	Location	Capacity	Vintage	Make	Model	Schedule	kWhPerYr
1	Dishwash	Default New	Main	12	2004 or N			HERS201	372

## RANGE OVEN

ID	Type	Screen	Location	Type	Fueltype	Make	Model	Cooktop	Oven
1	RangeOv	Default New	Main	CooktopOven C	Natural G			Electric fl	Not Conv



# Building Input Summary Report

<b>HARD WIRED LIGHTING</b>										
ID	Type	Screen	Location	Total#	Qualify#	Comp FI	All Other FL	txtBulbtype	Schedule	Watts per bulb
1	Hard-Wir	By Count - Qualif	Main	15	11	0	2	Incandes	HERS201	60
2	Hard-Wir	By Count - Qualif	2nd Floor	18	7	0	2	Incandes	HERS201	60
3	Hard-Wir	By Count - Qualif	Basemen	8	0	0	2	Incandes	HERS201	60
4	Hard-Wir	By Count - Qualif	Exterior	4	1	0	2	Incandes	HERS201	60
5	Hard-Wir	By Count - Qualif	Garage	1	0	0	2	Incandes	HERS201	60
<b>MISC ELECTRICAL LOADS</b>										
ID	Type	Screen	Item	Quantity	Catagory	Operating	Location	Schedule	Off Standby	
1	Misc Elec	Simple Default		1		1	Main	HERS201	1	
<b>CEILING FANS</b>										
ID	Type	Screen	Default New	cfmperWatt						
1	CeilingFa	Default New	Standard	70.5						
2	CeilingFa	Default New	Standard	70.5						

# Building Input Summary Report

PROJECT										
Title:	L322AC (basement)	Bedrooms:	0	Address Type:						
Building Type:	User	Bathrooms:	0	Lot #						
Owner:	FSEC	Conditioned Area:	3078 sq.ft.	Block/SubDivision:						
# of Units:	1	Total Stories:	1	PlatBook:						
Builder Name:	James Q. Hammer	Worst Case:	No	Street: 111 Anywhere Lane						
Permit Office:		Rotate Angle:	0	County:						
Jurisdiction:		Cross Ventilation:		City, State, Zip: Colorado Springs ,						
Family Type:	Single-family	Whole House Fan:		CO ,						
New/Existing:	New (From Plans)	Terrain:	Suburban							
Year Construct:		Shielding:	Suburban							
Comment:	HERS BESTEST basement case									
CLIMATE										
Design Location	Tmy Site	Design Temp	97.5 %	2.5 %	Int Design Temp	Winter	Summer	Heating Degree Days	Design Moisture	Daily Temp Range
CO, COLORADO_SPRING	CO_COLORADO_SPRINGTMY1	7	88		70	75	6114.5	0		High
UTILITY RATES										
Fuel	Unit	Utility Name					Monthly Fixed Cost	\$/Unit		
Electricity	kWh	EnergyGauge Default					0	0.1188		
Natural Gas	Therm	EnergyGauge Default					0	0.682		
Fuel Oil	Gallon	EnergyGauge Default					0	1.1		
Propane	Gallon	EnergyGauge Default					0	1.4		
SURROUNDINGS										
Ornt	Type	Shade Trees			Adjacent Buildings					
		Height	Width	Distance	Exist	Height	Width	Distance		
N	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	0 ft	
NE	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	0 ft	
E	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	0 ft	
SE	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	0 ft	
S	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	0 ft	
SW	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	0 ft	
W	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	0 ft	
NW	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	0 ft	
BLOCKS										
Number	Name	Area	Volume							
1	Block1	3078	23469.8							
SPACES										
Number	Name	Area	Volume	Kitchen	Occupants	Bedrooms	Finished	Cooled	Heated	
1	Main	1539	12312	Yes	0	0	Yes	Yes	Yes	
2	BSMT-2	1539	11157.8	No	0	0	No	Yes	Yes	

# Building Input Summary Report

FLOORS														
#	Floor Type	Space	Perimeter	Perimeter R-Value	Area	Joist R-Value	Tile	Wood	Carpet					
1	Floor Over Other Space	Main			1539 ft²	0	1	0	0					
2	Slab-Below-Grade	BSMT-2	----	----	1539 ft²	----	1	0	0					
ROOF														
#	Type	Materials	Roof Area	Gable Area	Roof Color	Solar Absor.	SA Tested	Emitt	Emitt Tested	Deck Insul.	Pitch (deg)			
1	Gable or shed	Composition shingles	1622 ft²	256 ft²	Medium	0.6	No	0.9	No	0	18.4			
ATTIC														
#	Type	Ventilation	Vent Ratio (1 in)	Area	RBS	IRCC								
1	Full attic	Vented	150	1539 ft²	N	N								
CEILING														
#	Ceiling Type	Space	R-Value	Area	Framing Fraction	Truss Type								
1	Under Attic ()	Main	16.7	1539 ft²	0.11	Wood								
WALLS														
Wall orientation below is as entered. Actual orientation is modified by rotate angle shown in "Project" section above.														
#	Ornt	Adjacent To	Wall Type	Space	Cavity R-Value	Width Ft	In	Height Ft	In	Area	Sheathing R-Value	Framing Fraction	Solar Absor.	Below Grade%
1	N	Exterior	Frame - Wood	Main	11	57		8		456.0 ft²		0.25	0.6	0
2	S	Exterior	Frame - Wood	Main	11	57		8		456.0 ft²		0.25	0.6	0
3	E	Exterior	Frame - Wood	Main	11	27		8		216.0 ft²		0.25	0.6	0
4	W	Exterior	Frame - Wood	Main	11	27		8		216.0 ft²		0.25	0.6	0
5	N	Exterior	Frame - Wood	BSMT-2	1.87	57		9		42.8 ft²		0	0.6	0
6	S	Exterior	Frame - Wood	BSMT-2	1.87	57		9		42.8 ft²		0	0.6	0
7	E	Exterior	Frame - Wood	BSMT-2	1.87	27		9		20.3 ft²		0	0.6	0
8	W	Exterior	Frame - Wood	BSMT-2	1.87	27		9		20.3 ft²		0	0.6	0
9	N	Exterior	Concrete - 6 inch	BSMT-2	0	57	0	7.25	0	413.3 ft²	0	0	0.75	90.80413
10	S	Exterior	Concrete - 6 inch	BSMT-2	0	57	0	7.25	0	413.3 ft²	0	0	0.75	90.80413
11	E	Exterior	Concrete - 6 inch	BSMT-2	0	27	0	7.25	0	195.8 ft²	0	0	0.75	90.80413
12	W	Exterior	Concrete - 6 inch	BSMT-2	0	27	0	7.25	0	195.8 ft²	0	0	0.75	90.80413
DOORS														
#	Ornt	Door Type	Space	Storms	U-Value	Width Ft	In	Height Ft	In	Area				
1	N	Insulated	Main	None	.46	3		6	8	20 ft²				
2	S	Insulated	Main	None	.46	3		6	8	20 ft²				

# Building Input Summary Report

WINDOWS													
#	Wall				NFRC	U-Factor	SHGC	Storm	Area	Overhang			
	Ornt	ID	Frame	Panes						Depth	Separation	Interior Shade	Screening
1	N	1	TIM	Single (Clear)	Yes	1.09	0.7	N	90.0 ft²	0 ft 0 in	0 ft 0 in	None	None
2	S	2	TIM	Single (Clear)	Yes	1.09	0.7	N	90.0 ft²	0 ft 0 in	0 ft 0 in	None	None
3	E	3	TIM	Single (Clear)	Yes	1.09	0.7	N	45.0 ft²	0 ft 0 in	0 ft 0 in	None	None
4	W	4	TIM	Single (Clear)	Yes	1.09	0.7	N	45.0 ft²	0 ft 0 in	0 ft 0 in	None	None

INFILTRATION									
#	Scope	Method	SLA	CFM 50	ELA	EqLA	ACH	ACH 50	Space(s)
1	Wholehouse	Proposed ACH	.000347	2801.1	153.77	289.2	.34	7.1609	All

MASS					
Mass Type	Area	Thickness	Furniture Fraction	Space	
No Added Mass	0 ft²	0 ft	0	Main	
No Added Mass	0 ft²	0 ft	0	BSMT-2	

HEATING SYSTEM										
#	System Type	Subtype	Efficiency	Capacity	-----Geothermal HeatPump-----				Ducts	Block
					Entry	Power	Volt.	Curr		
1	Electric Strip Heat	None	COP:1	140 kBtu/hr	0	0	0	0	sys#1	1

COOLING SYSTEM									
#	System Type	Subtype	Efficiency	Capacity	Air Flow	SHR	Ducts	Block	
1	Central Unit	None	SEER:10	25 kBtu/hr	750 cfm	0.75	sys#1	1	

HOT WATER SYSTEM									
#	System Type	SubType	Location	EF	Cap	Use	SetPnt	Credits	
					gal	gal	deg		

DUCTS														
DUCT #	Location	Supply R-Value	Supply Area	Return Location	Return Area	Number	Leakage Type	Air Handler	CFM 25 TOT	CFM25 OUT	QN	RLF	HVAC # Heat	# Cool
1	Main	6	384.75 ft²	Main	77 ft²		Prop. Air Leakage	Main	--- cfm	--- cfm	0.00	0.60	1	1

TEMPERATURES																								
Programable Thermostat: N							Ceiling Fans: N																	
Cooling	<input type="checkbox"/>	Jan	<input type="checkbox"/>	Feb	<input type="checkbox"/>	Mar	<input type="checkbox"/>	Apr	<input type="checkbox"/>	May	<input type="checkbox"/>	Jun	<input type="checkbox"/>	Jul	<input type="checkbox"/>	Aug	<input type="checkbox"/>	Sep	<input type="checkbox"/>	Oct	<input type="checkbox"/>	Nov	<input type="checkbox"/>	Dec
Heating	<input checked="" type="checkbox"/>	Jan	<input checked="" type="checkbox"/>	Feb	<input checked="" type="checkbox"/>	Mar	<input checked="" type="checkbox"/>	Apr	<input checked="" type="checkbox"/>	May	<input checked="" type="checkbox"/>	Jun	<input checked="" type="checkbox"/>	Jul	<input checked="" type="checkbox"/>	Aug	<input checked="" type="checkbox"/>	Sep	<input checked="" type="checkbox"/>	Oct	<input checked="" type="checkbox"/>	Nov	<input checked="" type="checkbox"/>	Dec
Venting	<input type="checkbox"/>	Jan	<input type="checkbox"/>	Feb	<input type="checkbox"/>	Mar	<input type="checkbox"/>	Apr	<input type="checkbox"/>	May	<input type="checkbox"/>	Jun	<input type="checkbox"/>	Jul	<input type="checkbox"/>	Aug	<input type="checkbox"/>	Sep	<input type="checkbox"/>	Oct	<input type="checkbox"/>	Nov	<input type="checkbox"/>	Dec

# Building Input Summary Report

Thermostat Schedule: BESTEST-heating		Hours											
Schedule Type		1	2	3	4	5	6	7	8	9	10	11	12
Cooling (WD)	AM	78	78	78	78	78	78	78	78	78	78	78	78
	PM	78	78	78	78	78	78	78	78	78	78	78	78
Cooling (WEH)	AM	78	78	78	78	78	78	78	78	78	78	78	78
	PM	78	78	78	78	78	78	78	78	78	78	78	78
Heating (WD)	AM	68	68	68	68	68	68	68	68	68	68	68	68
	PM	68	68	68	68	68	68	68	68	68	68	68	68
Heating (WEH)	AM	68	68	68	68	68	68	68	68	68	68	68	68
	PM	68	68	68	68	68	68	68	68	68	68	68	68

## APPLIANCES & LIGHTING

Appliance Schedule: BESTEST-gains		Hours											
Schedule Type		1	2	3	4	5	6	7	8	9	10	11	12
Ceiling Fans (Summer)	AM	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.5	0.5	0.5	0.5	0.5
	PM	0.5	0.5	0.5	0.5	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.75
Annual Use: 0 kWh/Yr		Peak Value: 0 Watts											
Clothes Washer	AM	0.105	0.081	0.046	0.046	0.081	0.128	0.256	0.57	0.849	1	0.977	0.872
	PM	0.779	0.698	0.605	0.57	0.581	0.57	0.57	0.57	0.57	0.488	0.43	0.198
Annual Use: 0 kWh/Yr		Peak Value: 0 Watts											
Dishwasher	AM	0.139	0.05	0.028	0.024	0.029	0.09	0.169	0.303	0.541	0.594	0.502	0.443
	PM	0.377	0.396	0.335	0.323	0.344	0.448	0.791	1	0.8	0.597	0.383	0.281
Annual Use: 0 kWh/Yr		Peak Value: 0 Watts											
Dryer	AM	0.2	0.1	0.05	0.05	0.05	0.075	0.2	0.375	0.5	0.8	0.95	1
	PM	0.875	0.85	0.8	0.625	0.625	0.6	0.575	0.55	0.625	0.7	0.65	0.375
Annual Use: 0 kWh/Yr		Peak Value: 0 Watts											
Lighting	AM	0.144	0.144	0.144	0.144	0.144	0.243	0.304	0.607	0.356	0.216	0.216	0.29
	PM	0.216	0.183	0.186	0.186	0.274	0.295	0.317	0.499	0.499	0.523	0.523	0.469
Annual Use: 800 kWh/Yr		Peak Value: 308 Watts											
Miscellaneous	AM	0.238	0.238	0.238	0.238	0.238	0.398	0.5	1	0.583	0.357	0.357	0.476
	PM	0.357	0.297	0.31	0.31	0.453	0.488	0.524	0.821	0.821	0.857	0.857	0.774
Annual Use: 6500 kWh/Yr		Peak Value: 1518 Watts											
Pool Pump	AM	0	0	0	0	0	0	0	0	0	1	1	1
	PM	1	1	1	1	0	0	0	0	0	0	0	0
Annual Use: 0 kWh/Yr		Peak Value: 0 Watts											
Range	AM	0.057	0.057	0.057	0.057	0.057	0.114	0.171	0.286	0.343	0.343	0.343	0.4
	PM	0.457	0.343	0.286	0.4	0.571	1	0.857	0.429	0.286	0.229	0.171	0.114
Annual Use: 0 kWh/Yr		Peak Value: 0 Watts											
Refrigeration	AM	0.85	0.78	0.75	0.73	0.73	0.73	0.75	0.75	0.8	0.8	0.8	0.8
	PM	0.88	0.85	0.85	0.83	0.88	0.95	1	0.98	0.95	0.93	0.9	0.85
Annual Use: 0 kWh/Yr		Peak Value: 0 Watts											
Well Pump	AM	0.05	0.05	0.05	0.05	0.05	0.05	0.1	0.1	0.1	0.1	0.1	0.1
	PM	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Annual Use: 0 kWh/Yr		Peak Value: 0 Watts											

## MECHANICAL VENTILATION

Type	Supply CFM	Exhaust CFM	HRV	Fan	Run Time	Heating System	Cooling System
None	0	0	0	0W	0%	1 - Electric Strip Heat	1 - Central Unit

# Building Input Summary Report

DISHWASHERS										
ID	Type	Screen	Location	Capacity	Vintage	Make	Model	Schedule	kWhPerYr	
1	Dishwash	Default New	Main	12	2004 or N			HERS201	372	
RANGE OVEN										
ID	Type	Screen	Location	Type	Fueltype	Make	Model	Cooktop	Oven	
1	RangeOv	Default New	Main	CooktopOven C	Natural G			Electric fl	Not Conv	
HARD WIRED LIGHTING										
ID	Type	Screen	Location	Total#	Qualify#	Comp FI	All Other FL	txtBulbtype	Schedule	Watts per bulb
1	Hard-Wir	By Count - Qualif	Main	15	11	0	2	Incandes	HERS201	60
2	Hard-Wir	By Count - Qualif	2nd Floor	18	7	0	2	Incandes	HERS201	60
3	Hard-Wir	By Count - Qualif	Basemen	8	0	0	2	Incandes	HERS201	60
4	Hard-Wir	By Count - Qualif	Exterior	4	1	0	2	Incandes	HERS201	60
5	Hard-Wir	By Count - Qualif	Garage	1	0	0	2	Incandes	HERS201	60
MISC ELECTRICAL LOADS										
ID	Type	Screen	Item	Quantity	Catagory	Operating	Location	Schedule	Off Standby	
1	Misc Elec	Simple Default		1		1	Main	HERS201	1	
CEILING FANS										
ID	Type	Screen	Default New	cfmperWatt						
1	CeilingFa	Default New	Standard	70.5						
2	CeilingFa	Default New	Standard	70.5						

# Building Input Summary Report

PROJECT										
Title:	L324AC (basement-insulated)	Bedrooms:	0	Address Type:						
Building Type:	User	Bathrooms:	0	Lot #						
Owner:	FSEC	Conditioned Area:	3078 sq.ft.	Block/SubDivision:						
# of Units:	1	Total Stories:	1	PlatBook:						
Builder Name:	James Q. Hammer	Worst Case:	No	Street: 111 Anywhere Lane						
Permit Office:		Rotate Angle:	0	County:						
Jurisdiction:		Cross Ventilation:		City, State, Zip: Colorado Springs ,						
Family Type:	Single-family	Whole House Fan:		CO ,						
New/Existing:	New (From Plans)	Terrain:	Suburban							
Year Construct:		Shielding:	Suburban							
Comment:	HERS BESTEST insulated basement case									
CLIMATE										
Design Location	Tmy Site	Design Temp	97.5 %	2.5 %	Int Design Temp	Winter	Summer	Heating Degree Days	Design Moisture	Daily Temp Range
CO, COLORADO_SPRING	CO_COLORADO_SPRINGTMY1	7	88		70	75	6114.5	0		High
UTILITY RATES										
Fuel	Unit	Utility Name					Monthly Fixed Cost	\$/Unit		
Electricity	kWh	EnergyGauge Default					0	0.1188		
Natural Gas	Therm	EnergyGauge Default					0	0.682		
Fuel Oil	Gallon	EnergyGauge Default					0	1.1		
Propane	Gallon	EnergyGauge Default					0	1.4		
SURROUNDINGS										
Ornt	Type	Shade Trees			Adjacent Buildings					
		Height	Width	Distance	Exist	Height	Width	Distance		
N	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	0 ft	
NE	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	0 ft	
E	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	0 ft	
SE	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	0 ft	
S	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	0 ft	
SW	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	0 ft	
W	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	0 ft	
NW	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	0 ft	
BLOCKS										
Number	Name	Area	Volume							
1	Block1	3078	23469.8							
SPACES										
Number	Name	Area	Volume	Kitchen	Occupants	Bedrooms	Finished	Cooled	Heated	
1	Main	1539	12312	Yes	0	0	Yes	Yes	Yes	
2	BSMT-2	1539	11157.8	No	0	0	Yes	Yes	Yes	

# Building Input Summary Report

FLOORS											
#	Floor Type	Space	Perimeter	Perimeter R-Value	Area	Joist R-Value	Tile	Wood	Carpet		
1	Floor Over Other Space	Main			1539 ft <sup>2</sup>	0	1	0	0		
2	Slab-Below-Grade	BSMT-2	----	----	1539 ft <sup>2</sup>	----	1	0	0		

ROOF											
#	Type	Materials	Roof Area	Gable Area	Roof Color	Solar Absor.	SA Tested	Emitt	Emitt Tested	Deck Insul.	Pitch (deg)
1	Gable or shed	Composition shingles	1622 ft <sup>2</sup>	256 ft <sup>2</sup>	Medium	0.6	No	0.9	No	0	18.4

ATTIC						
#	Type	Ventilation	Vent Ratio (1 in)	Area	RBS	IRCC
1	Full attic	Vented	150	1539 ft <sup>2</sup>	N	N

CEILING						
#	Ceiling Type	Space	R-Value	Area	Framing Fraction	Truss Type
1	Under Attic ()	Main	16.7	1539 ft <sup>2</sup>	0.11	Wood

WALLS														
Wall orientation below is as entered. Actual orientation is modified by rotate angle shown in "Project" section above.														
#	Ornt	Adjacent To	Wall Type	Space	Cavity R-Value	Width Ft	In	Height Ft	In	Area	Sheathing R-Value	Framing Fraction	Solar Absor.	Below Grade%
1	N	Exterior	Frame - Wood	Main	11	57		8		456.0 ft <sup>2</sup>		0.25	0.6	0
2	S	Exterior	Frame - Wood	Main	11	57		8		456.0 ft <sup>2</sup>		0.25	0.6	0
3	E	Exterior	Frame - Wood	Main	11	27		8		216.0 ft <sup>2</sup>		0.25	0.6	0
4	W	Exterior	Frame - Wood	Main	11	27		8		216.0 ft <sup>2</sup>		0.25	0.6	0
5	N	Exterior	Frame - Wood	BSMT-2	12.87	57		9		42.8 ft <sup>2</sup>		0.1	0.6	0
6	S	Exterior	Frame - Wood	BSMT-2	12.87	57		9		42.8 ft <sup>2</sup>		0.1	0.6	0
7	E	Exterior	Frame - Wood	BSMT-2	12.87	27		9		20.3 ft <sup>2</sup>		0.1	0.6	0
8	W	Exterior	Frame - Wood	BSMT-2	12.87	27		9		20.3 ft <sup>2</sup>		0.1	0.6	0
9	N	Exterior	Concrete - 6 inch	BSMT-2	11	57	0	7.25	0	413.3 ft <sup>2</sup>	0	0	0.75	90.80413
10	S	Exterior	Concrete - 6 inch	BSMT-2	11	57	0	7.25	0	413.3 ft <sup>2</sup>	0	0	0.75	90.80413
11	E	Exterior	Concrete - 6 inch	BSMT-2	11	27	0	7.25	0	195.8 ft <sup>2</sup>	0	0	0.75	90.80413
12	W	Exterior	Concrete - 6 inch	BSMT-2	11	27	0	7.25	0	195.8 ft <sup>2</sup>	0	0	0.75	90.80413

DOORS										
#	Ornt	Door Type	Space	Storms	U-Value	Width Ft	In	Height Ft	In	Area
1	N	Insulated	Main	None	.46	3		6	8	20 ft <sup>2</sup>
2	S	Insulated	Main	None	.46	3		6	8	20 ft <sup>2</sup>



# Building Input Summary Report

WINDOWS													
#	Wall				NFRC	U-Factor	SHGC	Storm	Area	Overhang			Screening
	Ornt	ID	Frame	Panes						Depth	Separation	Interior Shade	
1	N	1	TIM	Single (Clear)	Yes	1.09	0.7	N	90.0 ft²	0 ft 0 in	0 ft 0 in	None	None
2	S	2	TIM	Single (Clear)	Yes	1.09	0.7	N	90.0 ft²	0 ft 0 in	0 ft 0 in	None	None
3	E	3	TIM	Single (Clear)	Yes	1.09	0.7	N	45.0 ft²	0 ft 0 in	0 ft 0 in	None	None
4	W	4	TIM	Single (Clear)	Yes	1.09	0.7	N	45.0 ft²	0 ft 0 in	0 ft 0 in	None	None

INFILTRATION									
#	Scope	Method	SLA	CFM 50	ELA	EqLA	ACH	ACH 50	Space(s)
1	Wholehouse	Proposed ACH	.000347	2801.1	153.77	289.2	.34	7.1609	All

MASS					
Mass Type	Area	Thickness	Furniture Fraction	Space	
No Added Mass	0 ft²	0 ft	0	Main	
No Added Mass	0 ft²	0 ft	0	BSMT-2	

HEATING SYSTEM										
#	System Type	Subtype	Efficiency	Capacity	-----Geothermal HeatPump-----				Ducts	Block
					Entry	Power	Volt.	Curr		
1	Electric Strip Heat	None	COP:1	130 kBtu/hr	0	0	0	0	sys#1	1

COOLING SYSTEM									
#	System Type	Subtype	Efficiency	Capacity	Air Flow	SHR	Ducts	Block	
1	Central Unit	None	SEER:10	24.8 kBtu/hr	744 cfm	0.75	sys#1	1	

HOT WATER SYSTEM									
#	System Type	SubType	Location	EF	Cap	Use	SetPnt	Credits	
					gal	gal	deg		

DUCTS														
DUCT #	Location	----- Supply -----		----- Return -----		Number	Leakage Type	Air Handler	CFM 25		CFM25		HVAC #	
		R-Value	Area	Location	Area				TOT	OUT	QN	RLF	Heat	Cool
1	Main	6	384.75 ft²	Main	77 ft²		Prop. Air Leakage	Main	--- cfm	--- cfm	0.00	0.60	1	1

TEMPERATURES																								
Programable Thermostat: N							Ceiling Fans: N																	
Cooling	<input type="checkbox"/>	Jan	<input type="checkbox"/>	Feb	<input type="checkbox"/>	Mar	<input type="checkbox"/>	Apr	<input type="checkbox"/>	May	<input type="checkbox"/>	Jun	<input type="checkbox"/>	Jul	<input type="checkbox"/>	Aug	<input type="checkbox"/>	Sep	<input type="checkbox"/>	Oct	<input type="checkbox"/>	Nov	<input type="checkbox"/>	Dec
Heating	<input checked="" type="checkbox"/>	Jan	<input checked="" type="checkbox"/>	Feb	<input checked="" type="checkbox"/>	Mar	<input checked="" type="checkbox"/>	Apr	<input checked="" type="checkbox"/>	May	<input checked="" type="checkbox"/>	Jun	<input checked="" type="checkbox"/>	Jul	<input checked="" type="checkbox"/>	Aug	<input checked="" type="checkbox"/>	Sep	<input checked="" type="checkbox"/>	Oct	<input checked="" type="checkbox"/>	Nov	<input checked="" type="checkbox"/>	Dec
Venting	<input type="checkbox"/>	Jan	<input type="checkbox"/>	Feb	<input type="checkbox"/>	Mar	<input type="checkbox"/>	Apr	<input type="checkbox"/>	May	<input type="checkbox"/>	Jun	<input type="checkbox"/>	Jul	<input type="checkbox"/>	Aug	<input type="checkbox"/>	Sep	<input type="checkbox"/>	Oct	<input type="checkbox"/>	Nov	<input type="checkbox"/>	Dec

# Building Input Summary Report

Thermostat Schedule: BESTEST-heating		Hours											
Schedule Type		1	2	3	4	5	6	7	8	9	10	11	12
Cooling (WD)	AM	78	78	78	78	78	78	78	78	78	78	78	78
	PM	78	78	78	78	78	78	78	78	78	78	78	78
Cooling (WEH)	AM	78	78	78	78	78	78	78	78	78	78	78	78
	PM	78	78	78	78	78	78	78	78	78	78	78	78
Heating (WD)	AM	68	68	68	68	68	68	68	68	68	68	68	68
	PM	68	68	68	68	68	68	68	68	68	68	68	68
Heating (WEH)	AM	68	68	68	68	68	68	68	68	68	68	68	68
	PM	68	68	68	68	68	68	68	68	68	68	68	68

## APPLIANCES & LIGHTING

Appliance Schedule: BESTEST-gains		Hours											
Schedule Type		1	2	3	4	5	6	7	8	9	10	11	12
Ceiling Fans (Summer)	AM	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.5	0.5	0.5	0.5	0.5
	PM	0.5	0.5	0.5	0.5	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.75
Annual Use: 0 kWh/Yr		Peak Value: 0 Watts											
Clothes Washer	AM	0.105	0.081	0.046	0.046	0.081	0.128	0.256	0.57	0.849	1	0.977	0.872
	PM	0.779	0.698	0.605	0.57	0.581	0.57	0.57	0.57	0.57	0.488	0.43	0.198
Annual Use: 0 kWh/Yr		Peak Value: 0 Watts											
Dishwasher	AM	0.139	0.05	0.028	0.024	0.029	0.09	0.169	0.303	0.541	0.594	0.502	0.443
	PM	0.377	0.396	0.335	0.323	0.344	0.448	0.791	1	0.8	0.597	0.383	0.281
Annual Use: 0 kWh/Yr		Peak Value: 0 Watts											
Dryer	AM	0.2	0.1	0.05	0.05	0.05	0.075	0.2	0.375	0.5	0.8	0.95	1
	PM	0.875	0.85	0.8	0.625	0.625	0.6	0.575	0.55	0.625	0.7	0.65	0.375
Annual Use: 0 kWh/Yr		Peak Value: 0 Watts											
Lighting	AM	0.144	0.144	0.144	0.144	0.144	0.243	0.304	0.607	0.356	0.216	0.216	0.29
	PM	0.216	0.183	0.186	0.186	0.274	0.295	0.317	0.499	0.499	0.523	0.523	0.469
Annual Use: 800 kWh/Yr		Peak Value: 308 Watts											
Miscellaneous	AM	0.238	0.238	0.238	0.238	0.238	0.398	0.5	1	0.583	0.357	0.357	0.476
	PM	0.357	0.297	0.31	0.31	0.453	0.488	0.524	0.821	0.821	0.857	0.857	0.774
Annual Use: 6500 kWh/Yr		Peak Value: 1518 Watts											
Pool Pump	AM	0	0	0	0	0	0	0	0	0	1	1	1
	PM	1	1	1	1	0	0	0	0	0	0	0	0
Annual Use: 0 kWh/Yr		Peak Value: 0 Watts											
Range	AM	0.057	0.057	0.057	0.057	0.057	0.114	0.171	0.286	0.343	0.343	0.343	0.4
	PM	0.457	0.343	0.286	0.4	0.571	1	0.857	0.429	0.286	0.229	0.171	0.114
Annual Use: 0 kWh/Yr		Peak Value: 0 Watts											
Refrigeration	AM	0.85	0.78	0.75	0.73	0.73	0.73	0.75	0.75	0.8	0.8	0.8	0.8
	PM	0.88	0.85	0.85	0.83	0.88	0.95	1	0.98	0.95	0.93	0.9	0.85
Annual Use: 0 kWh/Yr		Peak Value: 0 Watts											
Well Pump	AM	0.05	0.05	0.05	0.05	0.05	0.05	0.1	0.1	0.1	0.1	0.1	0.1
	PM	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Annual Use: 0 kWh/Yr		Peak Value: 0 Watts											

## MECHANICAL VENTILATION

Type	Supply CFM	Exhaust CFM	HRV	Fan	Run Time	Heating System	Cooling System
None	0	0	0	0W	0%	1 - Electric Strip Heat	1 - Central Unit

# Building Input Summary Report

DISHWASHERS										
ID	Type	Screen	Location	Capacity	Vintage	Make	Model	Schedule	kWhPerYr	
1	Dishwash	Default New	Main	12	2004 or N			HERS201	372	
RANGE OVEN										
ID	Type	Screen	Location	Type	Fueltype	Make	Model	Cooktop	Oven	
1	RangeOv	Default New	Main	CooktopOven C	Natural G			Electric fl	Not Conv	
HARD WIRED LIGHTING										
ID	Type	Screen	Location	Total#	Qualify#	Comp FI	All Other FL	txtBulbtype	Schedule	Watts per bulb
1	Hard-Wir	By Count - Qualif	Main	15	11	0	2	Incandes	HERS201	60
2	Hard-Wir	By Count - Qualif	2nd Floor	18	7	0	2	Incandes	HERS201	60
3	Hard-Wir	By Count - Qualif	Basemen	8	0	0	2	Incandes	HERS201	60
4	Hard-Wir	By Count - Qualif	Exterior	4	1	0	2	Incandes	HERS201	60
5	Hard-Wir	By Count - Qualif	Garage	1	0	0	2	Incandes	HERS201	60
MISC ELECTRICAL LOADS										
ID	Type	Screen	Item	Quantity	Catagory	Operating	Location	Schedule	Off Standby	
1	Misc Elec	Simple Default		1		1	Main	HERS201	1	
CEILING FANS										
ID	Type	Screen	Default New	cfmperWatt						
1	CeilingFa	Default New	Standard	70.5						
2	CeilingFa	Default New	Standard	70.5						

# Building Input Summary Report

PROJECT										
Title:	L100AC (base case)				Address type:	Y				
Building Type:	User	Bedrooms:	0			Lot #:				
Owner:	FSEC	Conditioned Area:	1539			Block/SubDivision:				
Builder Name:	James Q. Hammer	Total Stories:	1			PlatBook:	111 Anywhere Lane			
Permit Office:		Worst Case:	No			County:				
Jurisdiction:		Rotate Angle:	0			City, State, Zip:	Colorado Springs, CO,			
Family Type:	Single-family	Cross Ventilation:								
New/Existing:	New (From Plans)	Whole House Fan:								
Year Construct:		Terrain:	Suburban							
Comment:	HERS BESTEST basecase home				Shielding:	Suburban				
CLIMATE										
Design Location	Tmy Site	Design Temp	97.5%	2.5%	Int Design Temp	Winter	Summer	Heating Degree Days	Design Moisture	Daily temp Range
CO, COLORADO_SPRINGSTM	CO_COLORADO_SPRINGSTM	7	88		70	75	6114.5	0		High
UTILITY										
Fuel	Unit	Utility Name					Monthly Fixed Cost	\$/Unit		
Electricity	kWh	EnergyGauge Default					0.00	0.12		
Natural Gas	Therm	EnergyGauge Default					0.00	0.68		
Fuel Oil	Gallon	EnergyGauge Default					0.00	1.10		
Propane	Gallon	EnergyGauge Default					0.00	1.40		
SURROUNDINGS										
Ornt	Type	-----Shade Trees-----			Exist	-----Adjacent Buildings-----				
		Height	Width	Distance		Height	Width	Distance		
N	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
NE	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
E	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
SE	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
S	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
SW	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
W	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
NW	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
BLOCKS										
Number	Name	Area	Volume							
1	Block1	1539	12312							
SPACES										
Number	Name	Area	Volume	Kitchen	Occupants	Bedrooms	Finished	Cooled	Heated	
1	Main	1539	12312	Yes	0	0	Yes	Yes	Yes	

# Building Input Summary Report

FLOORS														
#	Floor Type	Space	Exposed Perim	Perimeter R-Value	Area	Joist R-Value	Tile	Wood	Carpet					
1	Raised Floor	Main	---	---	1539 ft	10.4	0	0	1					
ROOF														
#	Type	Materials	Roof Area	Gable Area	Roof Color	Solar Absor.	SA Tested	Emitt	Emitt Tested	Deck Insul.	Pitch (deg)			
1	Gable or shed	Composition shingles	1622 ft²	256 ft²	Medium	0.6	No	0.9	No	0	18.4			
ATTIC														
#	Type	Ventilation	Vent Ratio (1 in)	Area	RBS	IRCC								
1	Full attic	Vented	150	1539 ft²	N	N								
CEILING														
#	Ceiling Type	Space	R-Value	Ins. Type	Area	Framing Fraction	Truss Type							
1	Under Attic(Vented)	Main	16.7	Blown	1539.0ft²	0.11	Wood							
WALLS														
#	Ornt	Adjacent To	Wall Type	Space	Cavity R-Value	Width Ft	In	Height Ft	In	Sheathing Area	R-Value	Framing Fraction	Solar Absor.	Below Grade
1	N	Exterior	Frame - Wood	Main	11	57.0	0	8.0	0	456.0ft²		0.25	0.6	0 %
2	S	Exterior	Frame - Wood	Main	11	57.0	0	8.0	0	456.0ft²		0.25	0.6	0 %
3	E	Exterior	Frame - Wood	Main	11	27.0	0	8.0	0	216.0ft²		0.25	0.6	0 %
4	W	Exterior	Frame - Wood	Main	11	27.0	0	8.0	0	216.0ft²		0.25	0.6	0 %
DOORS														
#	Ornt	Adjacent To	Door Type	Space	Storms	U-Value	Width Ft	In	Height Ft	In	Area			
1	N	Exterior	Insulated	Main	None	0.46	3.00	0	6.00	8	20.0ft²			
2	S	Exterior	Insulated	Main	None	0.46	3.00	0	6.00	8	20.0ft²			
WINDOWS														
#	Ornt	Wall ID	Frame	Panes	NFRC	U-Factor	SHGC	Storm	Area	----Overhang----		Interior Shade	Screening	
1	N	1	TIM	Single (Clear)	Yes	1.09	0.70	N	90.0ft²	0.0 ft 0 in	0.0 ft 0 in	None	None	
2	S	2	TIM	Single (Clear)	Yes	1.09	0.70	N	90.0ft²	0.0 ft 0 in	0.0 ft 0 in	None	None	
3	E	3	TIM	Single (Clear)	Yes	1.09	0.70	N	45.0ft²	0.0 ft 0 in	0.0 ft 0 in	None	None	
4	W	4	TIM	Single (Clear)	Yes	1.09	0.70	N	45.0ft²	0.0 ft 0 in	0.0 ft 0 in	None	None	
INFILTRATION														
#	Scope	Method	SLA	CFM50	ELA	EqLA	ACH	ACH50	Space(s)					
1	Wholehouse	Proposed ACH	0.00068	2760	151.51	284.94	0.6700	13.4	All					

# Building Input Summary Report

<b>MASS</b>													
#	Mass Type	Area	Thickness	Furniture Fraction	Space								
1	No Added Mass	0 ft²	0 ft	0.00	Main								
<b>HEATING SYSTEM</b>													
#	System Type	Subtype	AHRI #	Efficiency	Capacity kBtu/hr	---Geothermal Entry	HeatPump--- Power	Volts	Current	Ducts	Block		
1	Electric Strip Heat	None		COP: 1.00	112.0		0.00	0.00	0.00	sys#1	1		
<b>COOLING SYSTEM</b>													
#	System Type	Subtype	AHRI #	Efficiency	Capacity kBtu/hr	Air Flow cfm	SHR	Duct	Block				
1	Central Unit	None		SEER:10	24.8	750	0.75	sys#1	1				
<b>HOT WATER SYSTEM</b>													
#	System Type	Subtype	Location	EF	Cap	Use	SetPnt	Fixture Flow	Pipe Ins.	Pipe length			
	Recirculation System	Recirc Control Type	Loop length	Branch length	Pump power	DWHR	Facilities Connected	Equal Flow	DWHR Eff	Other Credits			
<b>DUCTS</b>													
Duct #	-----Supply----- Location	R-Value	Area	-----Return----- Location	R-Value	Area	Leakage Type	Air Handler	CFM 25 TOT	CFM 25 OUT	QN	RLF	HVAC # Heat Cool
1	Main	6.0	385 ft²	Main	6.0	77 ft²	Prop. Air Leakage	Main	---	---	0.00	0.60	1 1
<b>MECHANICAL VENTILATION</b>													
Type	Supply CFM	Exhaust CFM	HRV	Fan	Run Time	Heating System	Cooling System						
None	0.0	0.0	0.0	0.0 W	0 %	1 - Electric Strip Heat	1 - Central Unit						
<b>TEMPERATURES</b>													
Programable Thermostat: N						Ceiling Fans: N							
Cooling	<input type="checkbox"/> Jan	<input type="checkbox"/> Feb	<input type="checkbox"/> Mar	<input type="checkbox"/> Apr	<input type="checkbox"/> May	<input type="checkbox"/> Jun	<input type="checkbox"/> Jul	<input type="checkbox"/> Aug	<input type="checkbox"/> Sep	<input type="checkbox"/> Oct	<input type="checkbox"/> Nov	<input type="checkbox"/> Dec	
Heating	<input checked="" type="checkbox"/> Jan	<input checked="" type="checkbox"/> Feb	<input checked="" type="checkbox"/> Mar	<input checked="" type="checkbox"/> Apr	<input checked="" type="checkbox"/> May	<input checked="" type="checkbox"/> Jun	<input checked="" type="checkbox"/> Jul	<input checked="" type="checkbox"/> Aug	<input checked="" type="checkbox"/> Sep	<input checked="" type="checkbox"/> Oct	<input checked="" type="checkbox"/> Nov	<input checked="" type="checkbox"/> Dec	
Venting	<input type="checkbox"/> Jan	<input type="checkbox"/> Feb	<input type="checkbox"/> Mar	<input type="checkbox"/> Apr	<input type="checkbox"/> May	<input type="checkbox"/> Jun	<input type="checkbox"/> Jul	<input type="checkbox"/> Aug	<input type="checkbox"/> Sep	<input type="checkbox"/> Oct	<input type="checkbox"/> Nov	<input type="checkbox"/> Dec	
Thermostat Schedule: BESTEST-heating													
Schedule Type		1	2	3	4	5	6	7	8	9	10	11	12
Cooling (WD)	AM PM	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78
Cooling (WEH)	AM PM	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78

# Building Input Summary Report

## TEMPERATURES(Continued)

Heating (WD)	AM	68	68	68	68	68	68	68	68	68	68	68	68	68
	PM	68	68	68	68	68	68	68	68	68	68	68	68	68
Heating (WEH)	AM	68	68	68	68	68	68	68	68	68	68	68	68	68
	PM	68	68	68	68	68	68	68	68	68	68	68	68	68

## CLOTHES DRYERS

ID	Type	Screen	Location	Quantity	Fuel Type	Make	Model	Schedule	kWhPerYr
1	Dryers	Default New	Main		Electricity			HERS2011	0

## RANGE OVENS

ID	Type	Screen	Location	Type	Fuel Type	Make	Model	Cooktop	Oven
1	Ranges	Default New	Main	Combo	Elec			Elec Flat Coil	Not Convec

## HARD WIRED LIGHTING

ID	Type	Screen	Location	Total#	Quantity#	Comp FI	All Other FI	Bulb Type	Schedule	Watts per bulb
1	Hard-Wired	By Count - Qualifying	Main	100	10				HERS2011	
2	Hard-Wired	Default New	Exterior						HERS2011	
3	Hard-Wired	Default New	Garage						HERS2011	

## MISC ELECTRICAL LOADS

ID	Type	Screen	Location	Item	Quantity	Catagory	Operating	Schedule	Off Standby
1	Misc Elec Load	Simple Default	Main		1		1	HERS2011	1

## APPLIANCES & LIGHTING SCHEDULES

Appliance Schedule:		HERS2014		Hours											
Schedule Type		1	2	3	4	5	6	7	8	9	10	11	12		
Occupancy peak:	400 Btu	AM	0.930	0.930	0.930	0.930	0.930	0.930	0.930	0.980	0.460	0.270	0.270	0.270	
% Released:	100 %	PM	0.270	0.270	0.270	0.270	0.330	0.610	1.000	1.000	0.930	0.930	0.930	0.930	
refrig peak:	0 W	AM	0.824	0.804	0.784	0.764	0.744	0.734	0.744	0.754	0.764	0.794	0.814	0.854	
% Released:	100 %	PM	0.854	0.864	0.884	0.904	0.925	0.945	0.925	0.915	0.904	0.894	0.874	0.854	
cWash peak:	0 W	AM	0.200	0.100	0.050	0.050	0.050	0.075	0.200	0.375	0.500	0.800	0.950	1.000	
% Released:	30 %	PM	0.875	0.850	0.800	0.625	0.625	0.600	0.575	0.550	0.625	0.700	0.650	0.375	
E-cDry peak:	119 W	AM	0.200	0.100	0.050	0.050	0.050	0.075	0.200	0.375	0.500	0.800	0.950	1.000	
% Released:	15 %	PM	0.875	0.850	0.800	0.625	0.625	0.600	0.575	0.550	0.625	0.700	0.650	0.375	
dWash peak:	0 W	AM	0.139	0.050	0.028	0.024	0.029	0.090	0.169	0.303	0.541	0.594	0.502	0.443	
% Released:	60 %	PM	0.376	0.396	0.334	0.323	0.344	0.448	0.791	1.000	0.800	0.597	0.383	0.281	
E-rOven peak:	122 W	AM	0.057	0.057	0.057	0.057	0.057	0.114	0.171	0.286	0.343	0.343	0.343	0.400	
% Released:	80 %	PM	0.457	0.343	0.286	0.400	0.571	1.000	0.857	0.429	0.286	0.229	0.171	0.114	
TVs peak:	151 W	AM	0.100	0.050	0.050	0.050	0.100	0.200	0.400	0.450	0.400	0.200	0.100	0.100	
% Released:	100 %	PM	0.050	0.050	0.150	0.450	0.850	1.000	0.950	0.800	0.500	0.250	0.150	0.100	

# Building Input Summary Report

## APPLIANCES & LIGHTING SCHEDULES(Continued)

cFan peak:	0 W	AM	0.600	0.600	0.600	0.600	0.600	0.600	0.600	0.250	0.250	0.250	0.250	0.250
% Released:	100 %	PM	0.250	0.250	0.250	0.250	0.250	0.250	0.550	0.600	0.600	0.600	0.600	0.600
lgts-in peak:	545 W	AM	0.160	0.150	0.160	0.180	0.230	0.450	0.420	0.260	0.190	0.160	0.120	0.110
% Released:	100 %	PM	0.160	0.170	0.250	0.270	0.340	0.550	0.600	0.880	1.000	0.880	0.510	0.280
lgts-out peak:	47 W	AM	1.000	1.000	1.000	1.000	1.000	0.750	0.750	0.000	0.000	0.000	0.000	0.000
% Released:	0 %	PM	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.750	0.750	0.750	1.000
lgts-gar peak:	0 W	AM	0.000	0.000	0.000	0.000	0.000	0.500	0.750	1.000	0.750	0.500	0.000	0.000
% Released:	0 %	PM	0.000	0.000	0.500	0.500	0.750	1.000	0.750	0.500	0.000	0.000	0.000	0.000
MEL peak:	184 W	AM	0.500	0.500	0.500	0.750	0.750	0.850	1.000	1.000	1.000	1.000	0.900	0.900
% Released:	90 %	PM	0.900	0.900	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.850	0.750	0.750



# Building Input Summary Report

PROJECT									
Title:	L110AC (high infiltration)			Address type:	Y				
Building Type:	User	Bedrooms:	0	Lot #:					
Owner:	FSEC	Conditioned Area:	1539	Block/SubDivision:					
Builder Name:	James Q. Hammer	Total Stories:	1	PlatBook:	111 Anywhere Lane				
Permit Office:		Worst Case:	No	County:					
Jurisdiction:		Rotate Angle:	0	City, State, Zip:	Colorado Springs, CO,				
Family Type:	Single-family	Cross Ventilation:							
New/Existing:	New (From Plans)	Whole House Fan:							
Year Construct:		Terrain:	Suburban						
Comment:	HERS BESTEST high infiltration case			Shielding:	Suburban				
CLIMATE									
Design Location	Tmy Site	Design Temp	97.5% 2.5%	Int Design Temp	Winter	Summer	Heating Degree Days	Design Moisture	Daily temp Range
CO, COLORADO_SPRINGSTM	CO_COLORADO_SPRINGSTM	7	88	70	75	6114.5	0	High	
UTILITY									
Fuel	Unit	Utility Name		Monthly Fixed Cost	\$/Unit				
Electricity	kWh	EnergyGauge Default		0.00	0.12				
Natural Gas	Therm	EnergyGauge Default		0.00	0.68				
Fuel Oil	Gallon	EnergyGauge Default		0.00	1.10				
Propane	Gallon	EnergyGauge Default		0.00	1.40				
SURROUNDINGS									
Ornt	Type	-----Shade Trees-----			Exist	-----Adjacent Buildings-----			
		Height	Width	Distance		Height	Width	Distance	
N	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
NE	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
E	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
SE	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
S	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
SW	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
W	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
NW	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
BLOCKS									
Number	Name	Area	Volume						
1	Block1	1539	12312						
SPACES									
Number	Name	Area	Volume	Kitchen	Occupants	Bedrooms	Finished	Cooled	Heated
1	Main	1539	12312	Yes	0	0	Yes	Yes	Yes

# Building Input Summary Report

FLOORS														
#	Floor Type	Space	Exposed Perim	Perimeter R-Value	Area	Joist R-Value	Tile	Wood	Carpet					
1	Raised Floor	Main	---	---	1539 ft	10.4	0	0	1					
ROOF														
#	Type	Materials	Roof Area	Gable Area	Roof Color	Solar Absor.	SA Tested	Emitt	Emitt Tested	Deck Insul.	Pitch (deg)			
1	Gable or shed	Composition shingles	1622 ft²	256 ft²	Medium	0.6	No	0.9	No	0	18.4			
ATTIC														
#	Type	Ventilation	Vent Ratio (1 in)	Area	RBS	IRCC								
1	Full attic	Vented	150	1539 ft²	N	N								
CEILING														
#	Ceiling Type	Space	R-Value	Ins. Type	Area	Framing Fraction	Truss Type							
1	Under Attic(Vented)	Main	16.7	Blown	1539.0ft²	0.11	Wood							
WALLS														
#	Ornt	Adjacent To	Wall Type	Space	Cavity R-Value	Width Ft	In	Height Ft	In	Sheathing Area	R-Value	Framing Fraction	Solar Absor.	Below Grade
1	N	Exterior	Frame - Wood	Main	11	57.0	0	8.0	0	456.0ft²		0.25	0.6	0 %
2	S	Exterior	Frame - Wood	Main	11	57.0	0	8.0	0	456.0ft²		0.25	0.6	0 %
3	E	Exterior	Frame - Wood	Main	11	27.0	0	8.0	0	216.0ft²		0.25	0.6	0 %
4	W	Exterior	Frame - Wood	Main	11	27.0	0	8.0	0	216.0ft²		0.25	0.6	0 %
DOORS														
#	Ornt	Adjacent To	Door Type	Space	Storms	U-Value	Width Ft	In	Height Ft	In	Area			
1	N	Exterior	Insulated	Main	None	0.46	3.00	0	6.00	8	20.0ft²			
2	S	Exterior	Insulated	Main	None	0.46	3.00	0	6.00	8	20.0ft²			
WINDOWS														
#	Ornt	Wall ID	Frame	Panes	NFRC	U-Factor	SHGC	Storm	Area	----Overhang----		Interior Shade	Screening	
1	N	1	TIM	Single (Clear)	Yes	1.09	0.70	N	90.0ft²	0.0 ft 0 in	0.0 ft 0 in	None	None	
2	S	2	TIM	Single (Clear)	Yes	1.09	0.70	N	90.0ft²	0.0 ft 0 in	0.0 ft 0 in	None	None	
3	E	3	TIM	Single (Clear)	Yes	1.09	0.70	N	45.0ft²	0.0 ft 0 in	0.0 ft 0 in	None	None	
4	W	4	TIM	Single (Clear)	Yes	1.09	0.70	N	45.0ft²	0.0 ft 0 in	0.0 ft 0 in	None	None	
INFILTRATION														
#	Scope	Method	SLA	CFM50	ELA	EqLA	ACH	ACH50	Space(s)					
1	Wholehouse	Proposed ACH	0.00153	6179	339.21	637.93	1.5000	30.1	All					

# Building Input Summary Report

<b>MASS</b>													
#	Mass Type	Area	Thickness	Furniture Fraction	Space								
1	No Added Mass	0 ft²	0 ft	0.00	Main								
<b>HEATING SYSTEM</b>													
#	System Type	Subtype	AHRI #	Efficiency	Capacity kBtu/hr	---Geothermal HeatPump---		Ducts	Block				
1	Electric Strip Heat	None		COP: 1.00	150.0	Entry	Power	Volt	Current	sys#1	1		
<b>COOLING SYSTEM</b>													
#	System Type	Subtype	AHRI #	Efficiency	Capacity kBtu/hr	Air Flow cfm	SHR	Duct	Block				
1	Central Unit	None		SEER:10	27.7	831	0.75	sys#1	1				
<b>HOT WATER SYSTEM</b>													
#	System Type	Subtype	Location	EF	Cap	Use	SetPnt	Fixture Flow	Pipe Ins.	Pipe length			
	Recirculation System	Recirc Control Type	Loop length	Branch length	Pump power	DWHR	Facilities Connected	Equal Flow	DWHR Eff	Other Credits			
<b>DUCTS</b>													
Duct #	-----Supply-----			-----Return-----			Leakage Type	Air Handler	CFM 25 TOT	CFM 25 OUT	QN	RLF	HVAC # Heat Cool
1	Main	6.0	385 ft²	Main	6.0	77 ft²	Prop. Air Leakage	Main	---	---	0.00	0.60	1 1
<b>MECHANICAL VENTILATION</b>													
Type	Supply CFM	Exhaust CFM	HRV	Fan	Run Time	Heating System	Cooling System						
None	0.0	0.0	0.0	0.0 W	0 %	1 - Electric Strip Heat	1 - Central Unit						
<b>TEMPERATURES</b>													
Programable Thermostat: N						Ceiling Fans: N							
Cooling	<input type="checkbox"/> Jan	<input type="checkbox"/> Feb	<input type="checkbox"/> Mar	<input type="checkbox"/> Apr	<input type="checkbox"/> May	<input type="checkbox"/> Jun	<input type="checkbox"/> Jul	<input type="checkbox"/> Aug	<input type="checkbox"/> Sep	<input type="checkbox"/> Oct	<input type="checkbox"/> Nov	<input type="checkbox"/> Dec	
Heating	<input checked="" type="checkbox"/> Jan	<input checked="" type="checkbox"/> Feb	<input checked="" type="checkbox"/> Mar	<input checked="" type="checkbox"/> Apr	<input checked="" type="checkbox"/> May	<input checked="" type="checkbox"/> Jun	<input checked="" type="checkbox"/> Jul	<input checked="" type="checkbox"/> Aug	<input checked="" type="checkbox"/> Sep	<input checked="" type="checkbox"/> Oct	<input checked="" type="checkbox"/> Nov	<input checked="" type="checkbox"/> Dec	
Venting	<input type="checkbox"/> Jan	<input type="checkbox"/> Feb	<input type="checkbox"/> Mar	<input type="checkbox"/> Apr	<input type="checkbox"/> May	<input type="checkbox"/> Jun	<input type="checkbox"/> Jul	<input type="checkbox"/> Aug	<input type="checkbox"/> Sep	<input type="checkbox"/> Oct	<input type="checkbox"/> Nov	<input type="checkbox"/> Dec	
Thermostat Schedule: BESTEST-heating													
Schedule Type		1	2	3	4	5	6	7	8	9	10	11	12
Cooling (WD)	AM PM	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78
Cooling (WEH)	AM PM	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78

# Building Input Summary Report

## TEMPERATURES(Continued)

Heating (WD)	AM	68	68	68	68	68	68	68	68	68	68	68	68	68
	PM	68	68	68	68	68	68	68	68	68	68	68	68	68
Heating (WEH)	AM	68	68	68	68	68	68	68	68	68	68	68	68	68
	PM	68	68	68	68	68	68	68	68	68	68	68	68	68

## CLOTHES DRYERS

ID	Type	Screen	Location	Quantity	Fuel Type	Make	Model	Schedule	kWhPerYr
1	Dryers	Default New	Main		Electricity			HERS2011	0

## RANGE OVENS

ID	Type	Screen	Location	Type	Fuel Type	Make	Model	Cooktop	Oven
1	Ranges	Default New	Main	Combo	Elec			Elec Flat Coil	Not Convec

## HARD WIRED LIGHTING

ID	Type	Screen	Location	Total#	Quantity#	Comp FI	All Other FI	Bulb Type	Schedule	Watts per bulb
1	Hard-Wired	By Count - Qualifying	Main	100	10				HERS2011	
2	Hard-Wired	Default New	Exterior						HERS2011	
3	Hard-Wired	Default New	Garage						HERS2011	

## MISC ELECTRICAL LOADS

ID	Type	Screen	Location	Item	Quantity	Catagory	Operating	Schedule	Off Standby
1	Misc Elec Load	Simple Default	Main		1		1	HERS2011	1

## APPLIANCES & LIGHTING SCHEDULES

Appliance Schedule:		HERS2014		Hours											
Schedule Type		1	2	3	4	5	6	7	8	9	10	11	12		
Occupancy peak:	400 Btu	AM	0.930	0.930	0.930	0.930	0.930	0.930	0.930	0.980	0.460	0.270	0.270	0.270	
% Released:	100 %	PM	0.270	0.270	0.270	0.270	0.330	0.610	1.000	1.000	0.930	0.930	0.930	0.930	
refrig peak:	0 W	AM	0.824	0.804	0.784	0.764	0.744	0.734	0.744	0.754	0.764	0.794	0.814	0.854	
% Released:	100 %	PM	0.854	0.864	0.884	0.904	0.925	0.945	0.925	0.915	0.904	0.894	0.874	0.854	
cWash peak:	0 W	AM	0.200	0.100	0.050	0.050	0.050	0.075	0.200	0.375	0.500	0.800	0.950	1.000	
% Released:	30 %	PM	0.875	0.850	0.800	0.625	0.625	0.600	0.575	0.550	0.625	0.700	0.650	0.375	
E-cDry peak:	119 W	AM	0.200	0.100	0.050	0.050	0.050	0.075	0.200	0.375	0.500	0.800	0.950	1.000	
% Released:	15 %	PM	0.875	0.850	0.800	0.625	0.625	0.600	0.575	0.550	0.625	0.700	0.650	0.375	
dWash peak:	0 W	AM	0.139	0.050	0.028	0.024	0.029	0.090	0.169	0.303	0.541	0.594	0.502	0.443	
% Released:	60 %	PM	0.376	0.396	0.334	0.323	0.344	0.448	0.791	1.000	0.800	0.597	0.383	0.281	
E-rOven peak:	122 W	AM	0.057	0.057	0.057	0.057	0.057	0.114	0.171	0.286	0.343	0.343	0.343	0.400	
% Released:	80 %	PM	0.457	0.343	0.286	0.400	0.571	1.000	0.857	0.429	0.286	0.229	0.171	0.114	
TVs peak:	151 W	AM	0.100	0.050	0.050	0.050	0.100	0.200	0.400	0.450	0.400	0.200	0.100	0.100	
% Released:	100 %	PM	0.050	0.050	0.150	0.450	0.850	1.000	0.950	0.800	0.500	0.250	0.150	0.100	

# Building Input Summary Report

## APPLIANCES & LIGHTING SCHEDULES(Continued)

cFan peak:	0 W	AM	0.600	0.600	0.600	0.600	0.600	0.600	0.600	0.250	0.250	0.250	0.250	0.250
% Released:	100 %	PM	0.250	0.250	0.250	0.250	0.250	0.250	0.550	0.600	0.600	0.600	0.600	0.600
lgts-in peak:	545 W	AM	0.160	0.150	0.160	0.180	0.230	0.450	0.420	0.260	0.190	0.160	0.120	0.110
% Released:	100 %	PM	0.160	0.170	0.250	0.270	0.340	0.550	0.600	0.880	1.000	0.880	0.510	0.280
lgts-out peak:	47 W	AM	1.000	1.000	1.000	1.000	1.000	0.750	0.750	0.000	0.000	0.000	0.000	0.000
% Released:	0 %	PM	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.750	0.750	0.750	1.000
lgts-gar peak:	0 W	AM	0.000	0.000	0.000	0.000	0.000	0.500	0.750	1.000	0.750	0.500	0.000	0.000
% Released:	0 %	PM	0.000	0.000	0.500	0.500	0.750	1.000	0.750	0.500	0.000	0.000	0.000	0.000
MEL peak:	184 W	AM	0.500	0.500	0.500	0.750	0.750	0.850	1.000	1.000	1.000	1.000	0.900	0.900
% Released:	90 %	PM	0.900	0.900	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.850	0.750	0.750

# Building Input Summary Report

PROJECT										
Title:	L120AC (improved insulation)				Address type:	Y				
Building Type:	User	Bedrooms:	0			Lot #:				
Owner:	FSEC	Conditioned Area:	1539			Block/SubDivision:				
Builder Name:	James Q. Hammer	Total Stories:	1			PlatBook:	111 Anywhere Lane			
Permit Office:		Worst Case:	No			County:				
Jurisdiction:		Rotate Angle:	0			City, State, Zip:	Colorado Springs, CO,			
Family Type:	Single-family	Cross Ventilation:								
New/Existing:	New (From Plans)	Whole House Fan:								
Year Construct:		Terrain:	Suburban							
Comment:	HERS BESTEST improved insulation case									
CLIMATE										
Design Location	Tmy Site	Design Temp	97.5%	2.5%	Int Design Temp	Winter	Summer	Heating Degree Days	Design Moisture	Daily temp Range
CO, COLORADO_SPRINGSTM	CO_COLORADO_SPRINGSTM	7	88		70	75	6114.5	0		High
UTILITY										
Fuel	Unit	Utility Name					Monthly Fixed Cost	\$/Unit		
Electricity	kWh	EnergyGauge Default					0.00	0.12		
Natural Gas	Therm	EnergyGauge Default					0.00	1.39		
Fuel Oil	Gallon	EnergyGauge Default					0.00	2.50		
Propane	Gallon	EnergyGauge Default					0.00	2.27		
SURROUNDINGS										
Ornt	Type	-----Shade Trees-----			Exist	-----Adjacent Buildings-----				
		Height	Width	Distance		Height	Width	Distance		
N	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
NE	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
E	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
SE	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
S	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
SW	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
W	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
NW	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
BLOCKS										
Number	Name	Area	Volume							
1	Block1	1539	12312							
SPACES										
Number	Name	Area	Volume	Kitchen	Occupants	Bedrooms	Finished	Cooled	Heated	
1	Main	1539	12312	Yes	0	0	Yes	Yes	Yes	

# Building Input Summary Report

FLOORS														
#	Floor Type		Space	Exposed Perim	Perimeter R-Value	Area	Joist R-Value	Tile	Wood	Carpet				
1	Raised Floor		Main	---	---	1539 ft	10.4	0	0	1				
ROOF														
#	Type	Materials		Roof Area	Gable Area	Roof Color	Solar Absor.	SA Tested	Emitt	Emitt Tested	Deck Insul.	Pitch (deg)		
1	Gable or shed	Composition shingles		1622 ft²	256 ft²	Medium	0.6	No	0.9	No	0	18.4		
ATTIC														
#	Type	Ventilation		Vent Ratio (1 in)	Area	RBS	IRCC							
1	Full attic	Vented		150	1539 ft²	N	N							
CEILING														
#	Ceiling Type		Space	R-Value	Ins. Type	Area	Framing Fraction	Truss Type						
1	Under Attic(Vented)		Main	54.3	Blown	1539.0ft²	0.11	Wood						
WALLS														
#	Adjacent Ornt	To	Wall Type	Space	Cavity R-Value	Width Ft	In	Height Ft	In	Sheathing Area	R-Value	Framing Fraction	Solar Absor.	Below Grade
1	N	Exterior	Frame - Wood	Main	18	57.0	0	8.0	0	456.0ft²	7.2	0.22	0.6	0 %
2	S	Exterior	Frame - Wood	Main	18	57.0	0	8.0	0	456.0ft²	7.2	0.22	0.6	0 %
3	E	Exterior	Frame - Wood	Main	18	27.0	0	8.0	0	216.0ft²	7.2	0.22	0.6	0 %
4	W	Exterior	Frame - Wood	Main	18	27.0	0	8.0	0	216.0ft²	7.2	0.22	0.6	0 %
DOORS														
#	Ornt	Adjacent To	Door Type	Space	Storms	U-Value	Width Ft	In	Height Ft	In	Area			
1	N	Exterior	Insulated	Main	None	0.46	3.00	0	6.00	8	20.0ft²			
2	S	Exterior	Insulated	Main	None	0.46	3.00	0	6.00	8	20.0ft²			
WINDOWS														
#	Wall Ornt	ID	Frame	Panes	NFRC	U-Factor	SHGC	Storm	Area	----Overhang----		Interior Shade	Screening	
1	N	1	TIM	Single (Clear)	Yes	1.09	0.70	N	90.0ft²	0.0 ft 0 in	0.0 ft 0 in	None	None	
2	S	2	TIM	Single (Clear)	Yes	1.09	0.70	N	90.0ft²	0.0 ft 0 in	0.0 ft 0 in	None	None	
3	E	3	TIM	Single (Clear)	Yes	1.09	0.70	N	45.0ft²	0.0 ft 0 in	0.0 ft 0 in	None	None	
4	W	4	TIM	Single (Clear)	Yes	1.09	0.70	N	45.0ft²	0.0 ft 0 in	0.0 ft 0 in	None	None	
INFILTRATION														
#	Scope	Method	SLA	CFM50	ELA	EqLA	ACH	ACH50	Space(s)					
1	Wholehouse	Proposed ACH	0.00068	2760	151.51	284.94	0.6700	13.4	All					

# Building Input Summary Report

<b>MASS</b>													
#	Mass Type	Area	Thickness	Furniture Fraction	Space								
1	No Added Mass	0 ft²	0 ft	0.00	Main								
<b>HEATING SYSTEM</b>													
#	System Type	Subtype	AHRI #	Efficiency	Capacity kBtu/hr	---Geothermal Entry	HeatPump--- Power	Volts	Current	Ducts	Block		
1	Electric Strip Heat	None		COP: 1.00	100.0		0.00	0.00	0.00	sys#1	1		
<b>COOLING SYSTEM</b>													
#	System Type	Subtype	AHRI #	Efficiency	Capacity kBtu/hr	Air Flow cfm	SHR	Duct	Block				
1	Central Unit	None		SEER:10	22.4	672	0.75	sys#1	1				
<b>HOT WATER SYSTEM</b>													
#	System Type	Subtype	Location	EF	Cap	Use	SetPnt	Fixture Flow	Pipe Ins.	Pipe length			
	Recirculation System	Recirc Control Type	Loop length	Branch length	Pump power	DWHR	Facilities Connected	Equal Flow	DWHR Eff	Other Credits			
<b>DUCTS</b>													
Duct #	-----Supply----- Location	R-Value	Area	-----Return----- Location	R-Value	Area	Leakage Type	Air Handler	CFM 25 TOT	CFM 25 OUT	QN	RLF	HVAC # Heat Cool
1	Main	6.0	385 ft²	Main	6.0	77 ft²	Prop. Air Leakage	Main	---	---	0.00	0.60	1 1
<b>MECHANICAL VENTILATION</b>													
Type	Supply CFM	Exhaust CFM	HRV	Fan	Run Time	Heating System	Cooling System						
None	0.0	0.0	0.0	0.0 W	0 %	1 - Electric Strip Heat	1 - Central Unit						
<b>TEMPERATURES</b>													
Programable Thermostat: N				Ceiling Fans: N									
Cooling	<input type="checkbox"/> Jan	<input type="checkbox"/> Feb	<input type="checkbox"/> Mar	<input type="checkbox"/> Apr	<input type="checkbox"/> May	<input type="checkbox"/> Jun	<input type="checkbox"/> Jul	<input type="checkbox"/> Aug	<input type="checkbox"/> Sep	<input type="checkbox"/> Oct	<input type="checkbox"/> Nov	<input type="checkbox"/> Dec	
Heating	<input checked="" type="checkbox"/> Jan	<input checked="" type="checkbox"/> Feb	<input checked="" type="checkbox"/> Mar	<input checked="" type="checkbox"/> Apr	<input checked="" type="checkbox"/> May	<input checked="" type="checkbox"/> Jun	<input checked="" type="checkbox"/> Jul	<input checked="" type="checkbox"/> Aug	<input checked="" type="checkbox"/> Sep	<input checked="" type="checkbox"/> Oct	<input checked="" type="checkbox"/> Nov	<input checked="" type="checkbox"/> Dec	
Venting	<input type="checkbox"/> Jan	<input type="checkbox"/> Feb	<input type="checkbox"/> Mar	<input type="checkbox"/> Apr	<input type="checkbox"/> May	<input type="checkbox"/> Jun	<input type="checkbox"/> Jul	<input type="checkbox"/> Aug	<input type="checkbox"/> Sep	<input type="checkbox"/> Oct	<input type="checkbox"/> Nov	<input type="checkbox"/> Dec	
Thermostat Schedule: BESTEST-heating													
Schedule Type		1	2	3	4	5	6	7	8	9	10	11	12
Cooling (WD)	AM PM	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78
Cooling (WEH)	AM PM	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78



# Building Input Summary Report

## TEMPERATURES(Continued)

Heating (WD)	AM	68	68	68	68	68	68	68	68	68	68	68	68	68
	PM	68	68	68	68	68	68	68	68	68	68	68	68	68
Heating (WEH)	AM	68	68	68	68	68	68	68	68	68	68	68	68	68
	PM	68	68	68	68	68	68	68	68	68	68	68	68	68

## CLOTHES DRYERS

ID	Type	Screen	Location	Quantity	Fuel Type	Make	Model	Schedule	kWhPerYr
1	Dryers	Default New	Main		Electricity			HERS2011	0

## RANGE OVENS

ID	Type	Screen	Location	Type	Fuel Type	Make	Model	Cooktop	Oven
1	Ranges	Default New	Main	Combo	Elec			Elec Flat Coil	Not Convec

## HARD WIRED LIGHTING

ID	Type	Screen	Location	Total#	Quantity#	Comp FI	All Other FI	Bulb Type	Schedule	Watts per bulb
1	Hard-Wired	By Count - Qualifying	Main	100	10				HERS2011	
2	Hard-Wired	Default New	Exterior						HERS2011	
3	Hard-Wired	Default New	Garage						HERS2011	

## MISC ELECTRICAL LOADS

ID	Type	Screen	Location	Item	Quantity	Catagory	Operating	Schedule	Off Standby
1	Misc Elec Load	Simple Default	Main		1		1	HERS2011	1

## APPLIANCES & LIGHTING SCHEDULES

Appliance Schedule:		HERS2014		Hours											
Schedule Type		1	2	3	4	5	6	7	8	9	10	11	12		
Occupancy peak:	400 Btu	AM	0.930	0.930	0.930	0.930	0.930	0.930	0.930	0.980	0.460	0.270	0.270	0.270	
% Released:	100 %	PM	0.270	0.270	0.270	0.270	0.330	0.610	1.000	1.000	0.930	0.930	0.930	0.930	
refrig peak:	0 W	AM	0.824	0.804	0.784	0.764	0.744	0.734	0.744	0.754	0.764	0.794	0.814	0.854	
% Released:	100 %	PM	0.854	0.864	0.884	0.904	0.925	0.945	0.925	0.915	0.904	0.894	0.874	0.854	
cWash peak:	0 W	AM	0.200	0.100	0.050	0.050	0.050	0.075	0.200	0.375	0.500	0.800	0.950	1.000	
% Released:	30 %	PM	0.875	0.850	0.800	0.625	0.625	0.600	0.575	0.550	0.625	0.700	0.650	0.375	
E-cDry peak:	119 W	AM	0.200	0.100	0.050	0.050	0.050	0.075	0.200	0.375	0.500	0.800	0.950	1.000	
% Released:	15 %	PM	0.875	0.850	0.800	0.625	0.625	0.600	0.575	0.550	0.625	0.700	0.650	0.375	
dWash peak:	0 W	AM	0.139	0.050	0.028	0.024	0.029	0.090	0.169	0.303	0.541	0.594	0.502	0.443	
% Released:	60 %	PM	0.376	0.396	0.334	0.323	0.344	0.448	0.791	1.000	0.800	0.597	0.383	0.281	
E-rOven peak:	122 W	AM	0.057	0.057	0.057	0.057	0.057	0.114	0.171	0.286	0.343	0.343	0.343	0.400	
% Released:	80 %	PM	0.457	0.343	0.286	0.400	0.571	1.000	0.857	0.429	0.286	0.229	0.171	0.114	
TVs peak:	151 W	AM	0.100	0.050	0.050	0.050	0.100	0.200	0.400	0.450	0.400	0.200	0.100	0.100	
% Released:	100 %	PM	0.050	0.050	0.150	0.450	0.850	1.000	0.950	0.800	0.500	0.250	0.150	0.100	

# Building Input Summary Report

## APPLIANCES & LIGHTING SCHEDULES(Continued)

cFan peak:	0 W	AM	0.600	0.600	0.600	0.600	0.600	0.600	0.600	0.250	0.250	0.250	0.250	0.250
% Released:	100 %	PM	0.250	0.250	0.250	0.250	0.250	0.250	0.550	0.600	0.600	0.600	0.600	0.600
lgts-in peak:	545 W	AM	0.160	0.150	0.160	0.180	0.230	0.450	0.420	0.260	0.190	0.160	0.120	0.110
% Released:	100 %	PM	0.160	0.170	0.250	0.270	0.340	0.550	0.600	0.880	1.000	0.880	0.510	0.280
lgts-out peak:	47 W	AM	1.000	1.000	1.000	1.000	1.000	0.750	0.750	0.000	0.000	0.000	0.000	0.000
% Released:	0 %	PM	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.750	0.750	0.750	1.000
lgts-gar peak:	0 W	AM	0.000	0.000	0.000	0.000	0.000	0.500	0.750	1.000	0.750	0.500	0.000	0.000
% Released:	0 %	PM	0.000	0.000	0.500	0.500	0.750	1.000	0.750	0.500	0.000	0.000	0.000	0.000
MEL peak:	184 W	AM	0.500	0.500	0.500	0.750	0.750	0.850	1.000	1.000	1.000	1.000	0.900	0.900
% Released:	90 %	PM	0.900	0.900	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.850	0.750	0.750

# Building Input Summary Report

PROJECT									
Title:	L130AC (low-e windows)			Address type:	Y				
Building Type:	User	Bedrooms:	0	Lot #:					
Owner:	FSEC	Conditioned Area:	1539	Block/SubDivision:					
Builder Name:	James Q. Hammer	Total Stories:	1	PlatBook:	111 Anywhere Lane				
Permit Office:		Worst Case:	No	County:					
Jurisdiction:		Rotate Angle:	0	City, State, Zip:	Colorado Springs, CO,				
Family Type:	Single-family	Cross Ventilation:							
New/Existing:	New (From Plans)	Whole House Fan:							
Year Construct:		Terrain:	Suburban						
Comment:	HERS BESTEST low-e windows case			Shielding:	Suburban				
CLIMATE									
Design Location	Tmy Site	Design Temp	97.5% 2.5%	Int Design Temp	Winter	Summer	Heating Degree Days	Design Moisture	Daily temp Range
CO, COLORADO_SPRINGSTM	CO_COLORADO_SPRINGSTM	7	88	70	75	6114.5	0	High	
UTILITY									
Fuel	Unit	Utility Name		Monthly Fixed Cost	\$/Unit				
Electricity	kWh	EnergyGauge Default		0.00	0.12				
Natural Gas	Therm	EnergyGauge Default		0.00	0.68				
Fuel Oil	Gallon	EnergyGauge Default		0.00	1.10				
Propane	Gallon	EnergyGauge Default		0.00	1.40				
SURROUNDINGS									
Ornt	Type	-----Shade Trees-----			Exist	-----Adjacent Buildings-----			
		Height	Width	Distance		Height	Width	Distance	
N	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
NE	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
E	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
SE	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
S	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
SW	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
W	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
NW	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
BLOCKS									
Number	Name	Area	Volume						
1	Block1	1539	12312						
SPACES									
Number	Name	Area	Volume	Kitchen	Occupants	Bedrooms	Finished	Cooled	Heated
1	Main	1539	12312	Yes	0	0		Yes	Yes

# Building Input Summary Report

FLOORS													
#	Floor Type	Space	Exposed Perim	Perimeter R-Value	Area	Joist R-Value	Tile	Wood	Carpet				
1	Raised Floor	Main	---	---	1539 ft	10.4	0	0	1				
ROOF													
#	Type	Materials	Roof Area	Gable Area	Roof Color	Solar Absor.	SA Tested	Emitt	Emitt Tested	Deck Insul.	Pitch (deg)		
1	Gable or shed	Composition shingles	1622 ft²	256 ft²	Medium	0.6	No	0.9	No	0	18.4		
ATTIC													
#	Type	Ventilation	Vent Ratio (1 in)	Area	RBS	IRCC							
1	Full attic	Vented	150	1539 ft²	N	N							
CEILING													
#	Ceiling Type	Space	R-Value	Ins. Type	Area	Framing Fraction	Truss Type						
1	Under Attic(Vented)	Main	16.7	Blown	1539.0ft²	0.11	Wood						
WALLS													
#	Ornt	Adjacent To	Wall Type	Space	Cavity R-Value	Width Ft In	Height Ft In	Sheathing Area	R-Value	Framing Fraction	Solar Absor.	Below Grade	
1	N	Exterior	Frame - Wood	Main	11	57.0 0	8.0 0	456.0ft²		0.25	0.6	0 %	
2	S	Exterior	Frame - Wood	Main	11	57.0 0	8.0 0	456.0ft²		0.25	0.6	0 %	
3	E	Exterior	Frame - Wood	Main	11	27.0 0	8.0 0	216.0ft²		0.25	0.6	0 %	
4	W	Exterior	Frame - Wood	Main	11	27.0 0	8.0 0	216.0ft²		0.25	0.6	0 %	
DOORS													
#	Ornt	Adjacent To	Door Type	Space	Storms	U-Value	Width Ft In	Height Ft In	Area				
1	N	Exterior	Insulated	Main	None	0.46	3.00 0	6.00 8	20.0ft²				
2	S	Exterior	Insulated	Main	None	0.46	3.00 0	6.00 8	20.0ft²				
WINDOWS													
#	Ornt	Wall ID	Frame	Panes	NFRC	U-Factor	SHGC	Storm	Area	----Overhang----		Interior Shade	Screening
										Depth	Separation		
1	N	1	Wood	Low-E Double	Yes	0.30	0.34	N	90.0ft²	0.0 ft 0 in	0.0 ft 0 in	None	None
2	S	2	Wood	Low-E Double	Yes	0.30	0.34	N	90.0ft²	0.0 ft 0 in	0.0 ft 0 in	None	None
3	E	3	Wood	Low-E Double	Yes	0.30	0.34	N	45.0ft²	0.0 ft 0 in	0.0 ft 0 in	None	None
4	W	4	Wood	Low-E Double	Yes	0.30	0.34	N	45.0ft²	0.0 ft 0 in	0.0 ft 0 in	None	None
INFILTRATION													
#	Scope	Method	SLA	CFM50	ELA	EqLA	ACH	ACH50	Space(s)				
1	Wholehouse	Proposed ACH	0.00068	2760	151.51	284.94	0.6700	13.4	All				

# Building Input Summary Report

<b>MASS</b>													
#	Mass Type	Area	Thickness	Furniture Fraction	Space								
1	No Added Mass	0 ft²	0 ft	0.00	Main								
<b>HEATING SYSTEM</b>													
#	System Type	Subtype	AHRI #	Efficiency	Capacity kBtu/hr	---Geothermal HeatPump---		Ducts	Block				
1	Electric Strip Heat	None		COP: 1.00	85.0	Entry	Power	Volt	Current	sys#1	1		
<b>COOLING SYSTEM</b>													
#	System Type	Subtype	AHRI #	Efficiency	Capacity kBtu/hr	Air Flow cfm	SHR	Duct	Block				
1	Central Unit	None		SEER:10	54.0	828	0.75	sys#1	1				
<b>HOT WATER SYSTEM</b>													
#	System Type	Subtype	Location	EF	Cap	Use	SetPnt	Fixture Flow	Pipe Ins.	Pipe length			
	Recirculation System	Recirc Control Type	Loop length	Branch length	Pump power	DWHR	Facilities Connected	Equal Flow	DWHR Eff	Other Credits			
<b>DUCTS</b>													
Duct #	-----Supply-----			-----Return-----			Leakage Type	Air Handler	CFM 25 TOT	CFM 25 OUT	QN	RLF	HVAC # Heat Cool
1	Main	6.0	385 ft²	Main	6.0	77 ft²	Prop. Air Leakage	Main	---	---	0.00	0.60	1 1
<b>MECHANICAL VENTILATION</b>													
Type	Supply CFM	Exhaust CFM	HRV	Fan	Run Time	Heating System	Cooling System						
None	0.0	0.0	0.0	0.0 W	0 %	1 - Electric Strip Heat	1 - Central Unit						
<b>TEMPERATURES</b>													
Programable Thermostat: N						Ceiling Fans: N							
Cooling	<input type="checkbox"/> Jan	<input type="checkbox"/> Feb	<input type="checkbox"/> Mar	<input type="checkbox"/> Apr	<input type="checkbox"/> May	<input type="checkbox"/> Jun	<input type="checkbox"/> Jul	<input type="checkbox"/> Aug	<input type="checkbox"/> Sep	<input type="checkbox"/> Oct	<input type="checkbox"/> Nov	<input type="checkbox"/> Dec	
Heating	<input checked="" type="checkbox"/> Jan	<input checked="" type="checkbox"/> Feb	<input checked="" type="checkbox"/> Mar	<input checked="" type="checkbox"/> Apr	<input checked="" type="checkbox"/> May	<input checked="" type="checkbox"/> Jun	<input checked="" type="checkbox"/> Jul	<input checked="" type="checkbox"/> Aug	<input checked="" type="checkbox"/> Sep	<input checked="" type="checkbox"/> Oct	<input checked="" type="checkbox"/> Nov	<input checked="" type="checkbox"/> Dec	
Venting	<input type="checkbox"/> Jan	<input type="checkbox"/> Feb	<input type="checkbox"/> Mar	<input type="checkbox"/> Apr	<input type="checkbox"/> May	<input type="checkbox"/> Jun	<input type="checkbox"/> Jul	<input type="checkbox"/> Aug	<input type="checkbox"/> Sep	<input type="checkbox"/> Oct	<input type="checkbox"/> Nov	<input type="checkbox"/> Dec	
Thermostat Schedule: BESTEST-heating													
Schedule Type		1	2	3	4	5	6	7	8	9	10	11	12
Cooling (WD)		AM 78	78	78	78	78	78	78	78	78	78	78	78
Cooling (WEH)		AM 78	78	78	78	78	78	78	78	78	78	78	78

# Building Input Summary Report

## TEMPERATURES(Continued)

Heating (WD)	AM	68	68	68	68	68	68	68	68	68	68	68	68	68
	PM	68	68	68	68	68	68	68	68	68	68	68	68	68
Heating (WEH)	AM	68	68	68	68	68	68	68	68	68	68	68	68	68
	PM	68	68	68	68	68	68	68	68	68	68	68	68	68

## CLOTHES DRYERS

ID	Type	Screen	Location	Quantity	Fuel Type	Make	Model	Schedule	kWhPerYr
1	Dryers	Default New	Main		Electricity			HERS2011	0

## RANGE OVENS

ID	Type	Screen	Location	Type	Fuel Type	Make	Model	Cooktop	Oven
1	Ranges	Default New	Main	Combo	Elec			Elec Flat Coil	Not Convec

## HARD WIRED LIGHTING

ID	Type	Screen	Location	Total#	Quantity#	Comp FI	All Other FI	Bulb Type	Schedule	Watts per bulb
1	Hard-Wired	By Count - Qualifying	Main	100	10				HERS2011	
2	Hard-Wired	Default New	Exterior						HERS2011	
3	Hard-Wired	Default New	Garage						HERS2011	

## MISC ELECTRICAL LOADS

ID	Type	Screen	Location	Item	Quantity	Catagory	Operating	Schedule	Off Standby
1	Misc Elec Load	Simple Default	Main		1		1	HERS2011	1

## APPLIANCES & LIGHTING SCHEDULES

Appliance Schedule:		HERS2014		Hours											
Schedule Type		1	2	3	4	5	6	7	8	9	10	11	12		
Occupancy peak:	400 Btu	AM	0.930	0.930	0.930	0.930	0.930	0.930	0.930	0.980	0.460	0.270	0.270	0.270	
% Released:	100 %	PM	0.270	0.270	0.270	0.270	0.330	0.610	1.000	1.000	0.930	0.930	0.930	0.930	
refrig peak:	0 W	AM	0.824	0.804	0.784	0.764	0.744	0.734	0.744	0.754	0.764	0.794	0.814	0.854	
% Released:	100 %	PM	0.854	0.864	0.884	0.904	0.925	0.945	0.925	0.915	0.904	0.894	0.874	0.854	
cWash peak:	0 W	AM	0.200	0.100	0.050	0.050	0.050	0.075	0.200	0.375	0.500	0.800	0.950	1.000	
% Released:	30 %	PM	0.875	0.850	0.800	0.625	0.625	0.600	0.575	0.550	0.625	0.700	0.650	0.375	
E-cDry peak:	119 W	AM	0.200	0.100	0.050	0.050	0.050	0.075	0.200	0.375	0.500	0.800	0.950	1.000	
% Released:	15 %	PM	0.875	0.850	0.800	0.625	0.625	0.600	0.575	0.550	0.625	0.700	0.650	0.375	
dWash peak:	0 W	AM	0.139	0.050	0.028	0.024	0.029	0.090	0.169	0.303	0.541	0.594	0.502	0.443	
% Released:	60 %	PM	0.376	0.396	0.334	0.323	0.344	0.448	0.791	1.000	0.800	0.597	0.383	0.281	
E-rOven peak:	122 W	AM	0.057	0.057	0.057	0.057	0.057	0.114	0.171	0.286	0.343	0.343	0.343	0.400	
% Released:	80 %	PM	0.457	0.343	0.286	0.400	0.571	1.000	0.857	0.429	0.286	0.229	0.171	0.114	
TVs peak:	151 W	AM	0.100	0.050	0.050	0.050	0.100	0.200	0.400	0.450	0.400	0.200	0.100	0.100	
% Released:	100 %	PM	0.050	0.050	0.150	0.450	0.850	1.000	0.950	0.800	0.500	0.250	0.150	0.100	

# Building Input Summary Report

## APPLIANCES & LIGHTING SCHEDULES(Continued)

cFan peak:	0 W	AM	0.600	0.600	0.600	0.600	0.600	0.600	0.600	0.250	0.250	0.250	0.250	0.250
% Released:	100 %	PM	0.250	0.250	0.250	0.250	0.250	0.250	0.550	0.600	0.600	0.600	0.600	0.600
lgts-in peak:	545 W	AM	0.160	0.150	0.160	0.180	0.230	0.450	0.420	0.260	0.190	0.160	0.120	0.110
% Released:	100 %	PM	0.160	0.170	0.250	0.270	0.340	0.550	0.600	0.880	1.000	0.880	0.510	0.280
lgts-out peak:	47 W	AM	1.000	1.000	1.000	1.000	1.000	0.750	0.750	0.000	0.000	0.000	0.000	0.000
% Released:	0 %	PM	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.750	0.750	0.750	1.000
lgts-gar peak:	0 W	AM	0.000	0.000	0.000	0.000	0.000	0.500	0.750	1.000	0.750	0.500	0.000	0.000
% Released:	0 %	PM	0.000	0.000	0.500	0.500	0.750	1.000	0.750	0.500	0.000	0.000	0.000	0.000
MEL peak:	184 W	AM	0.500	0.500	0.500	0.750	0.750	0.850	1.000	1.000	1.000	1.000	0.900	0.900
% Released:	90 %	PM	0.900	0.900	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.850	0.750	0.750

# Building Input Summary Report

PROJECT									
Title:	L140AC (zero windows)			Address type:	Y				
Building Type:	User	Bedrooms:	0	Lot #:					
Owner:	FSEC	Conditioned Area:	1539	Block/SubDivision:					
Builder Name:	James Q. Hammer	Total Stories:	1	PlatBook:	111 Anywhere Lane				
Permit Office:		Worst Case:	No	County:					
Jurisdiction:		Rotate Angle:	0	City, State, Zip:	Colorado Springs, CO,				
Family Type:	Single-family	Cross Ventilation:							
New/Existing:	New (From Plans)	Whole House Fan:							
Year Construct:		Terrain:	Suburban						
Comment:	HERS BESTEST zero windows case			Shielding:	Suburban				
CLIMATE									
Design Location	Tmy Site	Design Temp	97.5% 2.5%	Int Design Temp	Winter	Summer	Heating Degree Days	Design Moisture	Daily temp Range
CO, COLORADO_SPRINGSTM	CO_COLORADO_SPRINGSTM	7	88	70	75	6114.5	0	High	
UTILITY									
Fuel	Unit	Utility Name		Monthly Fixed Cost	\$/Unit				
Electricity	kWh	EnergyGauge Default		0.00	0.12				
Natural Gas	Therm	EnergyGauge Default		0.00	0.68				
Fuel Oil	Gallon	EnergyGauge Default		0.00	1.10				
Propane	Gallon	EnergyGauge Default		0.00	1.40				
SURROUNDINGS									
Ornt	Type	-----Shade Trees-----			Exist	-----Adjacent Buildings-----			
		Height	Width	Distance		Height	Width	Distance	
N	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
NE	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
E	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
SE	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
S	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
SW	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
W	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
NW	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
BLOCKS									
Number	Name	Area	Volume						
1	Block1	1539	12312						
SPACES									
Number	Name	Area	Volume	Kitchen	Occupants	Bedrooms	Finished	Cooled	Heated
1	Main	1539	12312	Yes	0	0		Yes	Yes



# Building Input Summary Report

FLOORS														
#	Floor Type	Space	Exposed Perim	Perimeter R-Value	Area	Joist R-Value	Tile	Wood	Carpet					
1	Raised Floor	Main	---	---	1539 ft	10.4	0	0	1					
ROOF														
#	Type	Materials	Roof Area	Gable Area	Roof Color	Solar Absor.	SA Tested	Emitt	Emitt Tested	Deck Insul.	Pitch (deg)			
1	Gable or shed	Composition shingles	1622 ft²	256 ft²	Medium	0.6	No	0.9	No	0	18.4			
ATTIC														
#	Type	Ventilation	Vent Ratio (1 in)	Area	RBS	IRCC								
1	Full attic	Vented	150	1539 ft²	N	N								
CEILING														
#	Ceiling Type	Space	R-Value	Ins. Type	Area	Framing Fraction	Truss Type							
1	Under Attic(Vented)	Main	16.7	Blown	1539.0ft²	0.11	Wood							
WALLS														
#	Ornt	Adjacent To	Wall Type	Space	Cavity R-Value	Width Ft	In	Height Ft	In	Sheathing Area	R-Value	Framing Fraction	Solar Absor.	Below Grade
1	N	Exterior	Frame - Wood	Main	11	57.0	0	8.0	0	456.0ft²		0.25	0.6	0 %
2	S	Exterior	Frame - Wood	Main	11	57.0	0	8.0	0	456.0ft²		0.25	0.6	0 %
3	E	Exterior	Frame - Wood	Main	11	27.0	0	8.0	0	216.0ft²		0.25	0.6	0 %
4	W	Exterior	Frame - Wood	Main	11	27.0	0	8.0	0	216.0ft²		0.25	0.6	0 %
DOORS														
#	Ornt	Adjacent To	Door Type	Space	Storms	U-Value	Width Ft	In	Height Ft	In	Area			
1	N	Exterior	Insulated	Main	None	0.46	3.00	0	6.00	8	20.0ft²			
2	S	Exterior	Insulated	Main	None	0.46	3.00	0	6.00	8	20.0ft²			
WINDOWS														
#	Ornt	Wall ID	Frame	Panes	NFRC	U-Factor	SHGC	Storm	Area	-----Overhang----- Depth	Separation	Interior Shade	Screening	
1	N	1	Vinyl	Low-E Double	Yes	0.09	0.01	N	0.0ft²	0.0 ft 0 in	0.0 ft 0 in	Drapes/blinds	None	
INFILTRATION														
#	Scope	Method	SLA	CFM50	ELA	EqLA	ACH	ACH50	Space(s)					
1	Wholehouse	Proposed ACH	0.00068	2760	151.51	284.94	0.6700	13.4	All					

# Building Input Summary Report

<b>MASS</b>													
#	Mass Type	Area	Thickness	Furniture Fraction	Space								
1	No Added Mass	0 ft²	0 ft	0.00	Main								
<b>HEATING SYSTEM</b>													
#	System Type	Subtype	AHRI #	Efficiency	Capacity kBtu/hr	---Geothermal Entry	HeatPump--- Power	Volts	Current	Ducts	Block		
1	Electric Strip Heat	None		COP: 1.00	77.0		0.00	0.00	0.00	sys#1	1		
<b>COOLING SYSTEM</b>													
#	System Type	Subtype	AHRI #	Efficiency	Capacity kBtu/hr	Air Flow cfm	SHR	Duct	Block				
1	Central Unit	None		SEER:10	8.6	258	0.75	sys#1	1				
<b>HOT WATER SYSTEM</b>													
#	System Type	Subtype	Location	EF	Cap	Use	SetPnt	Fixture Flow	Pipe Ins.	Pipe length			
	Recirculation System	Recirc Control Type	Loop length	Branch length	Pump power	DWHR	Facilities Connected	Equal Flow	DWHR Eff	Other Credits			
<b>DUCTS</b>													
Duct #	-----Supply----- Location	R-Value	Area	-----Return----- Location	R-Value	Area	Leakage Type	Air Handler	CFM 25 TOT	CFM 25 OUT	QN	RLF	HVAC # Heat Cool
1	Main	6.0	385 ft²	Main	6.0	77 ft²	Prop. Air Leakage	Main	---	---	0.00	0.60	1 1
<b>MECHANICAL VENTILATION</b>													
Type	Supply CFM	Exhaust CFM	HRV	Fan	Run Time	Heating System	Cooling System						
None	0.0	0.0	0.0	0.0 W	0 %	1 - Electric Strip Heat	1 - Central Unit						
<b>TEMPERATURES</b>													
Programable Thermostat: N				Ceiling Fans: N									
Cooling	<input type="checkbox"/> Jan	<input type="checkbox"/> Feb	<input type="checkbox"/> Mar	<input type="checkbox"/> Apr	<input type="checkbox"/> May	<input type="checkbox"/> Jun	<input type="checkbox"/> Jul	<input type="checkbox"/> Aug	<input type="checkbox"/> Sep	<input type="checkbox"/> Oct	<input type="checkbox"/> Nov	<input type="checkbox"/> Dec	
Heating	<input checked="" type="checkbox"/> Jan	<input checked="" type="checkbox"/> Feb	<input checked="" type="checkbox"/> Mar	<input checked="" type="checkbox"/> Apr	<input checked="" type="checkbox"/> May	<input checked="" type="checkbox"/> Jun	<input checked="" type="checkbox"/> Jul	<input checked="" type="checkbox"/> Aug	<input checked="" type="checkbox"/> Sep	<input checked="" type="checkbox"/> Oct	<input checked="" type="checkbox"/> Nov	<input checked="" type="checkbox"/> Dec	
Venting	<input type="checkbox"/> Jan	<input type="checkbox"/> Feb	<input type="checkbox"/> Mar	<input type="checkbox"/> Apr	<input type="checkbox"/> May	<input type="checkbox"/> Jun	<input type="checkbox"/> Jul	<input type="checkbox"/> Aug	<input type="checkbox"/> Sep	<input type="checkbox"/> Oct	<input type="checkbox"/> Nov	<input type="checkbox"/> Dec	
Thermostat Schedule: BESTEST-heating													
Schedule Type		1	2	3	4	5	6	7	8	9	10	11	12
Cooling (WD)		AM 78	78	78	78	78	78	78	78	78	78	78	78
Cooling (WEH)		AM 78	78	78	78	78	78	78	78	78	78	78	78

# Building Input Summary Report

## TEMPERATURES(Continued)

Heating (WD)	AM	68	68	68	68	68	68	68	68	68	68	68	68	68
	PM	68	68	68	68	68	68	68	68	68	68	68	68	68
Heating (WEH)	AM	68	68	68	68	68	68	68	68	68	68	68	68	68
	PM	68	68	68	68	68	68	68	68	68	68	68	68	68

## CLOTHES DRYERS

ID	Type	Screen	Location	Quantity	Fuel Type	Make	Model	Schedule	kWhPerYr
1	Dryers	Default New	Main		Electricity			HERS2011	0

## RANGE OVENS

ID	Type	Screen	Location	Type	Fuel Type	Make	Model	Cooktop	Oven
1	Ranges	Default New	Main	Combo	Elec			Elec Flat Coil	Not Convec

## HARD WIRED LIGHTING

ID	Type	Screen	Location	Total#	Quantity#	Comp FI	All Other FI	Bulb Type	Schedule	Watts per bulb
1	Hard-Wired	By Count - Qualifying	Main	100	10				HERS2011	
2	Hard-Wired	Default New	Exterior						HERS2011	
3	Hard-Wired	Default New	Garage						HERS2011	

## MISC ELECTRICAL LOADS

ID	Type	Screen	Location	Item	Quantity	Catagory	Operating	Schedule	Off Standby
1	Misc Elec Load	Simple Default	Main		1		1	HERS2011	1

## APPLIANCES & LIGHTING SCHEDULES

Appliance Schedule:		HERS2014		Hours											
Schedule Type		1	2	3	4	5	6	7	8	9	10	11	12		
Occupancy peak:	400 Btu	AM	0.930	0.930	0.930	0.930	0.930	0.930	0.930	0.980	0.460	0.270	0.270	0.270	
% Released:	100 %	PM	0.270	0.270	0.270	0.270	0.330	0.610	1.000	1.000	0.930	0.930	0.930	0.930	
refrig peak:	0 W	AM	0.824	0.804	0.784	0.764	0.744	0.734	0.744	0.754	0.764	0.794	0.814	0.854	
% Released:	100 %	PM	0.854	0.864	0.884	0.904	0.925	0.945	0.925	0.915	0.904	0.894	0.874	0.854	
cWash peak:	0 W	AM	0.200	0.100	0.050	0.050	0.050	0.075	0.200	0.375	0.500	0.800	0.950	1.000	
% Released:	30 %	PM	0.875	0.850	0.800	0.625	0.625	0.600	0.575	0.550	0.625	0.700	0.650	0.375	
E-cDry peak:	119 W	AM	0.200	0.100	0.050	0.050	0.050	0.075	0.200	0.375	0.500	0.800	0.950	1.000	
% Released:	15 %	PM	0.875	0.850	0.800	0.625	0.625	0.600	0.575	0.550	0.625	0.700	0.650	0.375	
dWash peak:	0 W	AM	0.139	0.050	0.028	0.024	0.029	0.090	0.169	0.303	0.541	0.594	0.502	0.443	
% Released:	60 %	PM	0.376	0.396	0.334	0.323	0.344	0.448	0.791	1.000	0.800	0.597	0.383	0.281	
E-rOven peak:	122 W	AM	0.057	0.057	0.057	0.057	0.057	0.114	0.171	0.286	0.343	0.343	0.343	0.400	
% Released:	80 %	PM	0.457	0.343	0.286	0.400	0.571	1.000	0.857	0.429	0.286	0.229	0.171	0.114	
TVs peak:	151 W	AM	0.100	0.050	0.050	0.050	0.100	0.200	0.400	0.450	0.400	0.200	0.100	0.100	
% Released:	100 %	PM	0.050	0.050	0.150	0.450	0.850	1.000	0.950	0.800	0.500	0.250	0.150	0.100	

# Building Input Summary Report

## APPLIANCES & LIGHTING SCHEDULES(Continued)

cFan peak:	0 W	AM	0.600	0.600	0.600	0.600	0.600	0.600	0.600	0.250	0.250	0.250	0.250	0.250
% Released:	100 %	PM	0.250	0.250	0.250	0.250	0.250	0.250	0.550	0.600	0.600	0.600	0.600	0.600
lgts-in peak:	545 W	AM	0.160	0.150	0.160	0.180	0.230	0.450	0.420	0.260	0.190	0.160	0.120	0.110
% Released:	100 %	PM	0.160	0.170	0.250	0.270	0.340	0.550	0.600	0.880	1.000	0.880	0.510	0.280
lgts-out peak:	47 W	AM	1.000	1.000	1.000	1.000	1.000	0.750	0.750	0.000	0.000	0.000	0.000	0.000
% Released:	0 %	PM	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.750	0.750	0.750	1.000
lgts-gar peak:	0 W	AM	0.000	0.000	0.000	0.000	0.000	0.500	0.750	1.000	0.750	0.500	0.000	0.000
% Released:	0 %	PM	0.000	0.000	0.500	0.500	0.750	1.000	0.750	0.500	0.000	0.000	0.000	0.000
MEL peak:	184 W	AM	0.500	0.500	0.500	0.750	0.750	0.850	1.000	1.000	1.000	1.000	0.900	0.900
% Released:	90 %	PM	0.900	0.900	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.850	0.750	0.750

# Building Input Summary Report

PROJECT										
Title:	L150AC (all south glass)				Address type:	Y				
Building Type:	User	Bedrooms:	0			Lot #:				
Owner:	FSEC	Conditioned Area:	1539			Block/SubDivision:				
Builder Name:	James Q. Hammer	Total Stories:	1			PlatBook:	111 Anywhere Lane			
Permit Office:		Worst Case:	No			County:				
Jurisdiction:		Rotate Angle:	0			City, State, Zip:	Colorado Springs, CO,			
Family Type:	Single-family	Cross Ventilation:								
New/Existing:	New (From Plans)	Whole House Fan:								
Year Construct:		Terrain:	Suburban							
Comment:	HERS BESTEST all south glass case				Shielding:	Suburban				
CLIMATE										
Design Location	Tmy Site	Design Temp	97.5%	2.5%	Int Design Temp	Winter	Summer	Heating Degree Days	Design Moisture	Daily temp Range
CO, COLORADO_SPRINGSTM	CO_COLORADO_SPRINGSTM	7	88		70	75	6114.5	0		High
UTILITY										
Fuel	Unit	Utility Name					Monthly Fixed Cost	\$/Unit		
Electricity	kWh	EnergyGauge Default					0.00	0.12		
Natural Gas	Therm	EnergyGauge Default					0.00	0.68		
Fuel Oil	Gallon	EnergyGauge Default					0.00	1.10		
Propane	Gallon	EnergyGauge Default					0.00	1.40		
SURROUNDINGS										
Ornt	Type	-----Shade Trees-----			Exist	-----Adjacent Buildings-----				
		Height	Width	Distance		Height	Width	Distance		
N	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
NE	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
E	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
SE	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
S	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
SW	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
W	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
NW	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
BLOCKS										
Number	Name	Area	Volume							
1	Block1	1539	12312							
SPACES										
Number	Name	Area	Volume	Kitchen	Occupants	Bedrooms	Finished	Cooled	Heated	
1	Main	1539	12312	Yes	0	0		Yes	Yes	

# Building Input Summary Report

FLOORS														
#	Floor Type	Space	Exposed Perim	Perimeter R-Value	Area	Joist R-Value	Tile	Wood	Carpet					
1	Raised Floor	Main	---	---	1539 ft	10.4	0	0	1					
ROOF														
#	Type	Materials	Roof Area	Gable Area	Roof Color	Solar Absor.	SA Tested	Emitt	Emitt Tested	Deck Insul.	Pitch (deg)			
1	Gable or shed	Composition shingles	1622 ft²	256 ft²	Medium	0.6	No	0.9	No	0	18.4			
ATTIC														
#	Type	Ventilation	Vent Ratio (1 in)	Area	RBS	IRCC								
1	Full attic	Vented	150	1539 ft²	N	N								
CEILING														
#	Ceiling Type	Space	R-Value	Ins. Type	Area	Framing Fraction	Truss Type							
1	Under Attic(Vented)	Main	16.7	Blown	1539.0ft²	0.11	Wood							
WALLS														
#	Ornt	Adjacent To	Wall Type	Space	Cavity R-Value	Width Ft	In	Height Ft	In	Sheathing Area	R-Value	Framing Fraction	Solar Absor.	Below Grade
1	N	Exterior	Frame - Wood	Main	11	57.0	0	8.0	0	456.0ft²		0.25	0.6	0 %
2	S	Exterior	Frame - Wood	Main	11	57.0	0	8.0	0	456.0ft²		0.25	0.6	0 %
3	E	Exterior	Frame - Wood	Main	11	27.0	0	8.0	0	216.0ft²		0.25	0.6	0 %
4	W	Exterior	Frame - Wood	Main	11	27.0	0	8.0	0	216.0ft²		0.25	0.6	0 %
DOORS														
#	Ornt	Adjacent To	Door Type	Space	Storms	U-Value	Width Ft	In	Height Ft	In	Area			
1	N	Exterior	Insulated	Main	None	0.46	3.00	0	6.00	8	20.0ft²			
2	S	Exterior	Insulated	Main	None	0.46	3.00	0	6.00	8	20.0ft²			
WINDOWS														
#	Ornt	Wall ID	Frame	Panes	NFRC	U-Factor	SHGC	Storm	Area	-----Overhang----- Depth	Separation	Interior Shade	Screening	
1	S	2	TIM	Single (Clear)	Yes	1.09	0.70	N	270.0ft²	0.0 ft 0 in	0.0 ft 0 in	None	None	
INFILTRATION														
#	Scope	Method	SLA	CFM50	ELA	EqLA	ACH	ACH50	Space(s)					
1	Wholehouse	Proposed ACH	0.00068	2760	151.51	284.94	0.6700	13.4	All					

# Building Input Summary Report

<b>MASS</b>													
#	Mass Type	Area	Thickness	Furniture Fraction	Space								
1	No Added Mass	0 ft²	0 ft	0.00	Main								
<b>HEATING SYSTEM</b>													
#	System Type	Subtype	AHRI #	Efficiency	Capacity kBtu/hr	---Geothermal Entry	HeatPump--- Power	Volts	Current	Ducts	Block		
1	Electric Strip Heat	None		COP: 1.00	112.0		0.00	0.00	0.00	sys#1	1		
<b>COOLING SYSTEM</b>													
#	System Type	Subtype	AHRI #	Efficiency	Capacity kBtu/hr	Air Flow cfm	SHR	Duct	Block				
1	Central Unit	None		SEER:10	31.5	945	0.75	sys#1	1				
<b>HOT WATER SYSTEM</b>													
#	System Type	Subtype	Location	EF	Cap	Use	SetPnt	Fixture Flow	Pipe Ins.	Pipe length			
	Recirculation System	Recirc Control Type	Loop length	Branch length	Pump power	DWHR	Facilities Connected	Equal Flow	DWHR Eff	Other Credits			
<b>DUCTS</b>													
Duct #	-----Supply----- Location	R-Value	Area	-----Return----- Location	R-Value	Area	Leakage Type	Air Handler	CFM 25 TOT	CFM 25 OUT	QN	RLF	HVAC # Heat Cool
1	Main	6.0	385 ft²	Main	6.0	77 ft²	Prop. Air Leakage	Main	---	---	0.00	0.60	1 1
<b>MECHANICAL VENTILATION</b>													
Type	Supply CFM	Exhaust CFM	HRV	Fan	Run Time	Heating System	Cooling System						
None	0.0	0.0	0.0	0.0 W	0 %	1 - Electric Strip Heat	1 - Central Unit						
<b>TEMPERATURES</b>													
Programable Thermostat: N				Ceiling Fans: N									
Cooling	<input type="checkbox"/> Jan	<input type="checkbox"/> Feb	<input type="checkbox"/> Mar	<input type="checkbox"/> Apr	<input type="checkbox"/> May	<input type="checkbox"/> Jun	<input type="checkbox"/> Jul	<input type="checkbox"/> Aug	<input type="checkbox"/> Sep	<input type="checkbox"/> Oct	<input type="checkbox"/> Nov	<input type="checkbox"/> Dec	
Heating	<input checked="" type="checkbox"/> Jan	<input checked="" type="checkbox"/> Feb	<input checked="" type="checkbox"/> Mar	<input checked="" type="checkbox"/> Apr	<input checked="" type="checkbox"/> May	<input checked="" type="checkbox"/> Jun	<input checked="" type="checkbox"/> Jul	<input checked="" type="checkbox"/> Aug	<input checked="" type="checkbox"/> Sep	<input checked="" type="checkbox"/> Oct	<input checked="" type="checkbox"/> Nov	<input checked="" type="checkbox"/> Dec	
Venting	<input type="checkbox"/> Jan	<input type="checkbox"/> Feb	<input type="checkbox"/> Mar	<input type="checkbox"/> Apr	<input type="checkbox"/> May	<input type="checkbox"/> Jun	<input type="checkbox"/> Jul	<input type="checkbox"/> Aug	<input type="checkbox"/> Sep	<input type="checkbox"/> Oct	<input type="checkbox"/> Nov	<input type="checkbox"/> Dec	
Thermostat Schedule: BESTEST-heating													
Schedule Type		1	2	3	4	5	6	7	8	9	10	11	12
Cooling (WD)	AM PM	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78
Cooling (WEH)	AM PM	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78

# Building Input Summary Report

## TEMPERATURES(Continued)

Heating (WD)	AM PM	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68
Heating (WEH)	AM PM	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68

## CLOTHES DRYERS

ID	Type	Screen	Location	Quantity	Fuel Type	Make	Model	Schedule	kWhPerYr
1	Dryers	Default New	Main		Electricity			HERS2011	0

## RANGE OVENS

ID	Type	Screen	Location	Type	Fuel Type	Make	Model	Cooktop	Oven
1	Ranges	Default New	Main	Combo	Elec			Elec Flat Coil	Not Convec

## HARD WIRED LIGHTING

ID	Type	Screen	Location	Total#	Quantity#	Comp FI	All Other FI	Bulb Type	Schedule	Watts per bulb
1	Hard-Wired	By Count - Qualifying	Main	100	10				HERS2011	
2	Hard-Wired	Default New	Exterior						HERS2011	
3	Hard-Wired	Default New	Garage						HERS2011	

## MISC ELECTRICAL LOADS

ID	Type	Screen	Location	Item	Quantity	Catagory	Operating	Schedule	Off Standby
1	Misc Elec Load	Simple Default	Main		1		1	HERS2011	1

## APPLIANCES & LIGHTING SCHEDULES

Appliance Schedule:		HERS2014		Hours											
Schedule Type		1	2	3	4	5	6	7	8	9	10	11	12		
Occupancy peak:	400 Btu	AM	0.930	0.930	0.930	0.930	0.930	0.930	0.930	0.980	0.460	0.270	0.270	0.270	
% Released:	100 %	PM	0.270	0.270	0.270	0.270	0.330	0.610	1.000	1.000	0.930	0.930	0.930	0.930	
refrig peak:	0 W	AM	0.824	0.804	0.784	0.764	0.744	0.734	0.744	0.754	0.764	0.794	0.814	0.854	
% Released:	100 %	PM	0.854	0.864	0.884	0.904	0.925	0.945	0.925	0.915	0.904	0.894	0.874	0.854	
cWash peak:	0 W	AM	0.200	0.100	0.050	0.050	0.050	0.075	0.200	0.375	0.500	0.800	0.950	1.000	
% Released:	30 %	PM	0.875	0.850	0.800	0.625	0.625	0.600	0.575	0.550	0.625	0.700	0.650	0.375	
E-cDry peak:	119 W	AM	0.200	0.100	0.050	0.050	0.050	0.075	0.200	0.375	0.500	0.800	0.950	1.000	
% Released:	15 %	PM	0.875	0.850	0.800	0.625	0.625	0.600	0.575	0.550	0.625	0.700	0.650	0.375	
dWash peak:	0 W	AM	0.139	0.050	0.028	0.024	0.029	0.090	0.169	0.303	0.541	0.594	0.502	0.443	
% Released:	60 %	PM	0.376	0.396	0.334	0.323	0.344	0.448	0.791	1.000	0.800	0.597	0.383	0.281	
E-rOven peak:	122 W	AM	0.057	0.057	0.057	0.057	0.057	0.114	0.171	0.286	0.343	0.343	0.343	0.400	
% Released:	80 %	PM	0.457	0.343	0.286	0.400	0.571	1.000	0.857	0.429	0.286	0.229	0.171	0.114	
TVs peak:	151 W	AM	0.100	0.050	0.050	0.050	0.100	0.200	0.400	0.450	0.400	0.200	0.100	0.100	
% Released:	100 %	PM	0.050	0.050	0.150	0.450	0.850	1.000	0.950	0.800	0.500	0.250	0.150	0.100	



# Building Input Summary Report

## APPLIANCES & LIGHTING SCHEDULES(Continued)

cFan peak:	0 W	AM	0.600	0.600	0.600	0.600	0.600	0.600	0.600	0.250	0.250	0.250	0.250	0.250
% Released:	100 %	PM	0.250	0.250	0.250	0.250	0.250	0.250	0.550	0.600	0.600	0.600	0.600	0.600
lgts-in peak:	545 W	AM	0.160	0.150	0.160	0.180	0.230	0.450	0.420	0.260	0.190	0.160	0.120	0.110
% Released:	100 %	PM	0.160	0.170	0.250	0.270	0.340	0.550	0.600	0.880	1.000	0.880	0.510	0.280
lgts-out peak:	47 W	AM	1.000	1.000	1.000	1.000	1.000	0.750	0.750	0.000	0.000	0.000	0.000	0.000
% Released:	0 %	PM	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.750	0.750	0.750	1.000
lgts-gar peak:	0 W	AM	0.000	0.000	0.000	0.000	0.000	0.500	0.750	1.000	0.750	0.500	0.000	0.000
% Released:	0 %	PM	0.000	0.000	0.500	0.500	0.750	1.000	0.750	0.500	0.000	0.000	0.000	0.000
MEL peak:	184 W	AM	0.500	0.500	0.500	0.750	0.750	0.850	1.000	1.000	1.000	1.000	0.900	0.900
% Released:	90 %	PM	0.900	0.900	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.850	0.750	0.750

# Building Input Summary Report

PROJECT										
Title:	L155AC (south glass with OH)				Address type: Y					
Building Type:	User	Bedrooms:	0		Lot #:					
Owner:	FSEC	Conditioned Area:	1539		Block/SubDivision:					
Builder Name:	James Q. Hammer	Total Stories:	1		PlatBook:					
Permit Office:		Worst Case:	No		Street: 111 Anywhere Lane					
Jurisdiction:		Rotate Angle:	0		County:					
Family Type:	Single-family	Cross Ventilation:			City, State, Zip: Colorado Springs, CO,					
New/Existing:	New (From Plans)	Whole House Fan:								
Year Construct:		Terrain:	Suburban							
Comment:	HERS BESTEST south glass w/ overhang case				Shielding: Suburban					
CLIMATE										
Design Location	Tmy Site	Design Temp	97.5%	2.5%	Int Design Temp	Winter	Summer	Heating Degree Days	Design Moisture	Daily temp Range
CO, COLORADO_SPRINGSTM	CO_COLORADO_SPRINGSTM	7	88		70	75	6114.5	0		High
UTILITY										
Fuel	Unit	Utility Name					Monthly Fixed Cost	\$/Unit		
Electricity	kWh	EnergyGauge Default					0.00	0.12		
Natural Gas	Therm	EnergyGauge Default					0.00	0.68		
Fuel Oil	Gallon	EnergyGauge Default					0.00	1.10		
Propane	Gallon	EnergyGauge Default					0.00	1.40		
SURROUNDINGS										
Ornt	Type	-----Shade Trees-----			Exist	-----Adjacent Buildings-----				
		Height	Width	Distance		Height	Width	Distance		
N	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
NE	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
E	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
SE	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
S	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
SW	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
W	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
NW	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
BLOCKS										
Number	Name	Area	Volume							
1	Block1	1539	12312							
SPACES										
Number	Name	Area	Volume	Kitchen	Occupants	Bedrooms	Finished	Cooled	Heated	
1	Main	1539	12312	Yes	0	0		Yes	Yes	

# Building Input Summary Report

FLOORS														
#	Floor Type	Space	Exposed Perim	Perimeter R-Value	Area	Joist R-Value	Tile	Wood	Carpet					
1	Raised Floor	Main	---	---	1539 ft	10.4	0	0	1					
ROOF														
#	Type	Materials	Roof Area	Gable Area	Roof Color	Solar Absor.	SA Tested	Emitt	Emitt Tested	Deck Insul.	Pitch (deg)			
1	Gable or shed	Composition shingles	1622 ft²	256 ft²	Medium	0.6	No	0.9	No	0	18.4			
ATTIC														
#	Type	Ventilation	Vent Ratio (1 in)	Area	RBS	IRCC								
1	Full attic	Vented	150	1539 ft²	N	N								
CEILING														
#	Ceiling Type	Space	R-Value	Ins. Type	Area	Framing Fraction	Truss Type							
1	Under Attic(Vented)	Main	16.7	Blown	1539.0ft²	0.11	Wood							
WALLS														
#	Ornt	Adjacent To	Wall Type	Space	Cavity R-Value	Width Ft	In	Height Ft	In	Sheathing Area	R-Value	Framing Fraction	Solar Absor.	Below Grade
1	N	Exterior	Frame - Wood	Main	11	57.0	0	8.0	0	456.0ft²		0.25	0.6	0 %
2	S	Exterior	Frame - Wood	Main	11	57.0	0	8.0	0	456.0ft²		0.25	0.6	0 %
3	E	Exterior	Frame - Wood	Main	11	27.0	0	8.0	0	216.0ft²		0.25	0.6	0 %
4	W	Exterior	Frame - Wood	Main	11	27.0	0	8.0	0	216.0ft²		0.25	0.6	0 %
DOORS														
#	Ornt	Adjacent To	Door Type	Space	Storms	U-Value	Width Ft	In	Height Ft	In	Area			
1	N	Exterior	Insulated	Main	None	0.46	3.00	0	6.00	8	20.0ft²			
2	S	Exterior	Insulated	Main	None	0.46	3.00	0	6.00	8	20.0ft²			
WINDOWS														
#	Ornt	Wall ID	Frame	Panes	NFRC	U-Factor	SHGC	Storm	Area	-----Overhang----- Depth	Separation	Interior Shade	Screening	
1	S	2	TIM	Single (Clear)	Yes	1.09	0.70	N	270.0ft²	2.0 ft 6 in	1.0 ft 0 in	None	None	
INFILTRATION														
#	Scope	Method	SLA	CFM50	ELA	EqLA	ACH	ACH50	Space(s)					
1	Wholehouse	Proposed ACH	0.00068	2760	151.51	284.94	0.6700	13.4	All					

# Building Input Summary Report

<b>MASS</b>													
#	Mass Type	Area	Thickness	Furniture Fraction	Space								
1	No Added Mass	0 ft²	0 ft	0.00	Main								
<b>HEATING SYSTEM</b>													
#	System Type	Subtype	AHRI #	Efficiency	Capacity kBtu/hr	---Geothermal HeatPump---		Ducts	Block				
1	Electric Strip Heat	None		COP: 1.00	112.0	Entry	Power	Volt	Current	sys#1	1		
<b>COOLING SYSTEM</b>													
#	System Type	Subtype	AHRI #	Efficiency	Capacity kBtu/hr	Air Flow cfm	SHR	Duct	Block				
1	Central Unit	None		SEER:10	25.2	756	0.75	sys#1	1				
<b>HOT WATER SYSTEM</b>													
#	System Type	Subtype	Location	EF	Cap	Use	SetPnt	Fixture Flow	Pipe Ins.	Pipe length			
	Recirculation System	Recirc Control Type	Loop length	Branch length	Pump power	DWHR	Facilities Connected	Equal Flow	DWHR Eff	Other Credits			
<b>DUCTS</b>													
Duct #	-----Supply-----			-----Return-----			Leakage Type	Air Handler	CFM 25 TOT	CFM 25 OUT	QN	RLF	HVAC # Heat Cool
1	Main	6.0	385 ft²	Main	6.0	77 ft²	Prop. Air Leakage	Main	---	---	0.00	0.60	1 1
<b>MECHANICAL VENTILATION</b>													
Type	Supply CFM	Exhaust CFM	HRV	Fan	Run Time	Heating System	Cooling System						
None	0.0	0.0	0.0	0.0 W	0 %	1 - Electric Strip Heat	1 - Central Unit						
<b>TEMPERATURES</b>													
Programable Thermostat: N						Ceiling Fans: N							
Cooling	<input type="checkbox"/> Jan	<input type="checkbox"/> Feb	<input type="checkbox"/> Mar	<input type="checkbox"/> Apr	<input type="checkbox"/> May	<input type="checkbox"/> Jun	<input type="checkbox"/> Jul	<input type="checkbox"/> Aug	<input type="checkbox"/> Sep	<input type="checkbox"/> Oct	<input type="checkbox"/> Nov	<input type="checkbox"/> Dec	
Heating	<input checked="" type="checkbox"/> Jan	<input checked="" type="checkbox"/> Feb	<input checked="" type="checkbox"/> Mar	<input checked="" type="checkbox"/> Apr	<input checked="" type="checkbox"/> May	<input checked="" type="checkbox"/> Jun	<input checked="" type="checkbox"/> Jul	<input checked="" type="checkbox"/> Aug	<input checked="" type="checkbox"/> Sep	<input checked="" type="checkbox"/> Oct	<input checked="" type="checkbox"/> Nov	<input checked="" type="checkbox"/> Dec	
Venting	<input type="checkbox"/> Jan	<input type="checkbox"/> Feb	<input type="checkbox"/> Mar	<input type="checkbox"/> Apr	<input type="checkbox"/> May	<input type="checkbox"/> Jun	<input type="checkbox"/> Jul	<input type="checkbox"/> Aug	<input type="checkbox"/> Sep	<input type="checkbox"/> Oct	<input type="checkbox"/> Nov	<input type="checkbox"/> Dec	
Thermostat Schedule: BESTEST-heating													
Schedule Type		1	2	3	4	5	6	7	8	9	10	11	12
Cooling (WD)	AM PM	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78
Cooling (WEH)	AM PM	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78

# Building Input Summary Report

## TEMPERATURES(Continued)

Heating (WD)	AM	68	68	68	68	68	68	68	68	68	68	68	68	68
	PM	68	68	68	68	68	68	68	68	68	68	68	68	68
Heating (WEH)	AM	68	68	68	68	68	68	68	68	68	68	68	68	68
	PM	68	68	68	68	68	68	68	68	68	68	68	68	68

## CLOTHES DRYERS

ID	Type	Screen	Location	Quantity	Fuel Type	Make	Model	Schedule	kWhPerYr
1	Dryers	Default New	Main		Electricity			HERS2011	0

## RANGE OVENS

ID	Type	Screen	Location	Type	Fuel Type	Make	Model	Cooktop	Oven
1	Ranges	Default New	Main	Combo	Elec			Elec Flat Coil	Not Convec

## HARD WIRED LIGHTING

ID	Type	Screen	Location	Total#	Quantity#	Comp FI	All Other FI	Bulb Type	Schedule	Watts per bulb
1	Hard-Wired	By Count - Qualifying	Main	100	10				HERS2011	
2	Hard-Wired	Default New	Exterior						HERS2011	
3	Hard-Wired	Default New	Garage						HERS2011	

## MISC ELECTRICAL LOADS

ID	Type	Screen	Location	Item	Quantity	Catagory	Operating	Schedule	Off Standby
1	Misc Elec Load	Simple Default	Main		1		1	HERS2011	1

## APPLIANCES & LIGHTING SCHEDULES

Appliance Schedule:		HERS2014		Hours											
Schedule Type		1	2	3	4	5	6	7	8	9	10	11	12		
Occupancy peak:	400 Btu	AM	0.930	0.930	0.930	0.930	0.930	0.930	0.930	0.980	0.460	0.270	0.270	0.270	
% Released:	100 %	PM	0.270	0.270	0.270	0.270	0.330	0.610	1.000	1.000	0.930	0.930	0.930	0.930	
refrig peak:	0 W	AM	0.824	0.804	0.784	0.764	0.744	0.734	0.744	0.754	0.764	0.794	0.814	0.854	
% Released:	100 %	PM	0.854	0.864	0.884	0.904	0.925	0.945	0.925	0.915	0.904	0.894	0.874	0.854	
cWash peak:	0 W	AM	0.200	0.100	0.050	0.050	0.050	0.075	0.200	0.375	0.500	0.800	0.950	1.000	
% Released:	30 %	PM	0.875	0.850	0.800	0.625	0.625	0.600	0.575	0.550	0.625	0.700	0.650	0.375	
E-cDry peak:	119 W	AM	0.200	0.100	0.050	0.050	0.050	0.075	0.200	0.375	0.500	0.800	0.950	1.000	
% Released:	15 %	PM	0.875	0.850	0.800	0.625	0.625	0.600	0.575	0.550	0.625	0.700	0.650	0.375	
dWash peak:	0 W	AM	0.139	0.050	0.028	0.024	0.029	0.090	0.169	0.303	0.541	0.594	0.502	0.443	
% Released:	60 %	PM	0.376	0.396	0.334	0.323	0.344	0.448	0.791	1.000	0.800	0.597	0.383	0.281	
E-rOven peak:	122 W	AM	0.057	0.057	0.057	0.057	0.057	0.114	0.171	0.286	0.343	0.343	0.343	0.400	
% Released:	80 %	PM	0.457	0.343	0.286	0.400	0.571	1.000	0.857	0.429	0.286	0.229	0.171	0.114	
TVs peak:	151 W	AM	0.100	0.050	0.050	0.050	0.100	0.200	0.400	0.450	0.400	0.200	0.100	0.100	
% Released:	100 %	PM	0.050	0.050	0.150	0.450	0.850	1.000	0.950	0.800	0.500	0.250	0.150	0.100	

# Building Input Summary Report

## APPLIANCES & LIGHTING SCHEDULES(Continued)

cFan peak:	0 W	AM	0.600	0.600	0.600	0.600	0.600	0.600	0.600	0.250	0.250	0.250	0.250	0.250
% Released:	100 %	PM	0.250	0.250	0.250	0.250	0.250	0.250	0.550	0.600	0.600	0.600	0.600	0.600
lgts-in peak:	545 W	AM	0.160	0.150	0.160	0.180	0.230	0.450	0.420	0.260	0.190	0.160	0.120	0.110
% Released:	100 %	PM	0.160	0.170	0.250	0.270	0.340	0.550	0.600	0.880	1.000	0.880	0.510	0.280
lgts-out peak:	47 W	AM	1.000	1.000	1.000	1.000	1.000	0.750	0.750	0.000	0.000	0.000	0.000	0.000
% Released:	0 %	PM	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.750	0.750	0.750	1.000
lgts-gar peak:	0 W	AM	0.000	0.000	0.000	0.000	0.000	0.500	0.750	1.000	0.750	0.500	0.000	0.000
% Released:	0 %	PM	0.000	0.000	0.500	0.500	0.750	1.000	0.750	0.500	0.000	0.000	0.000	0.000
MEL peak:	184 W	AM	0.500	0.500	0.500	0.750	0.750	0.850	1.000	1.000	1.000	1.000	0.900	0.900
% Released:	90 %	PM	0.900	0.900	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.850	0.750	0.750

# Building Input Summary Report

PROJECT										
Title:	L160AC (east-west windows)				Address type:	Y				
Building Type:	User	Bedrooms:	0			Lot #:				
Owner:	FSEC	Conditioned Area:	1539			Block/SubDivision:				
Builder Name:	James Q. Hammer	Total Stories:	1			PlatBook:	111 Anywhere Lane			
Permit Office:		Worst Case:	No			County:				
Jurisdiction:		Rotate Angle:	0			City, State, Zip:	Colorado Springs, CO,			
Family Type:	Single-family	Cross Ventilation:								
New/Existing:	New (From Plans)	Whole House Fan:								
Year Construct:		Terrain:	Suburban							
Comment:	HERS BESTEST east-west windows case									
CLIMATE										
Design Location	Tmy Site	Design Temp	97.5%	2.5%	Int Design Temp	Winter	Summer	Heating Degree Days	Design Moisture	Daily temp Range
CO, COLORADO_SPRINGSTM	CO_COLORADO_SPRINGSTM	7	88		70	75	6114.5	0		High
UTILITY										
Fuel	Unit	Utility Name					Monthly Fixed Cost	\$/Unit		
Electricity	kWh	EnergyGauge Default					0.00	0.12		
Natural Gas	Therm	EnergyGauge Default					0.00	0.68		
Fuel Oil	Gallon	EnergyGauge Default					0.00	1.10		
Propane	Gallon	EnergyGauge Default					0.00	1.40		
SURROUNDINGS										
Ornt	Type	-----Shade Trees-----			Exist	-----Adjacent Buildings-----				
		Height	Width	Distance		Height	Width	Distance		
N	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
NE	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
E	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
SE	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
S	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
SW	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
W	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
NW	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
BLOCKS										
Number	Name	Area	Volume							
1	Block1	1539	12312							
SPACES										
Number	Name	Area	Volume	Kitchen	Occupants	Bedrooms	Finished	Cooled	Heated	
1	Main	1539	12312	Yes	0	0		Yes	Yes	

# Building Input Summary Report

FLOORS														
#	Floor Type		Space	Exposed Perim	Perimeter R-Value	Area	Joist R-Value	Tile	Wood	Carpet				
1	Raised Floor		Main	---	---	1539 ft	10.4	0	0	1				
ROOF														
#	Type	Materials		Roof Area	Gable Area	Roof Color	Solar Absor.	SA Tested	Emitt	Emitt Tested	Deck Insul.	Pitch (deg)		
1	Gable or shed	Composition shingles		1622 ft²	256 ft²	Medium	0.6	No	0.9	No	0	18.4		
ATTIC														
#	Type	Ventilation		Vent Ratio (1 in)	Area	RBS	IRCC							
1	Full attic	Vented		150	1539 ft²	N	N							
CEILING														
#	Ceiling Type		Space	R-Value	Ins. Type	Area	Framing Fraction	Truss Type						
1	Under Attic(Vented)		Main	16.7	Blown	1539.0ft²	0.11	Wood						
WALLS														
#	Ornt	Adjacent To	Wall Type	Space	Cavity R-Value	Width Ft	In	Height Ft	In	Sheathing Area	R-Value	Framing Fraction	Solar Absor.	Below Grade
1	N	Exterior	Frame - Wood	Main	11	57.0	0	8.0	0	456.0ft²		0.25	0.6	0 %
2	S	Exterior	Frame - Wood	Main	11	57.0	0	8.0	0	456.0ft²		0.25	0.6	0 %
3	E	Exterior	Frame - Wood	Main	11	28.0	0	8.0	0	224.0ft²		0.25	0.6	0 %
4	W	Exterior	Frame - Wood	Main	11	28.0	0	8.0	0	224.0ft²		0.25	0.6	0 %
DOORS														
#	Ornt	Adjacent To	Door Type	Space	Storms	U-Value	Width Ft	In	Height Ft	In	Area			
1	N	Exterior	Insulated	Main	None	0.46	3.00	0	6.00	8	20.0ft²			
2	S	Exterior	Insulated	Main	None	0.46	3.00	0	6.00	8	20.0ft²			
WINDOWS														
#	Ornt	Wall ID	Frame	Panes	NFRC	U-Factor	SHGC	Storm	Area	-----Overhang----- Depth Separation		Interior Shade	Screening	
1	E	3	TIM	Single (Clear)	Yes	1.09	0.70	N	135.0ft²	0.0 ft 0 in	0.0 ft 0 in	None	None	
2	W	4	TIM	Single (Clear)	Yes	1.09	0.70	N	135.0ft²	0.0 ft 0 in	0.0 ft 0 in	None	None	
INFILTRATION														
#	Scope	Method	SLA	CFM50	ELA	EqLA	ACH	ACH50	Space(s)					
1	Wholehouse	Proposed ACH	0.00068	2760	151.51	284.94	0.6700	13.4	All					



# Building Input Summary Report

<b>MASS</b>													
#	Mass Type	Area	Thickness	Furniture Fraction	Space								
1	No Added Mass	0 ft²	0 ft	0.00	Main								
<b>HEATING SYSTEM</b>													
#	System Type	Subtype	AHRI #	Efficiency	Capacity kBtu/hr	---Geothermal Entry	HeatPump--- Power	Volts	Current	Ducts	Block		
1	Electric Strip Heat	None		COP: 1.00	112.0		0.00	0.00	0.00	sys#1	1		
<b>COOLING SYSTEM</b>													
#	System Type	Subtype	AHRI #	Efficiency	Capacity kBtu/hr	Air Flow cfm	SHR	Duct	Block				
1	Central Unit	None		SEER:10	31.4	942	0.75	sys#1	1				
<b>HOT WATER SYSTEM</b>													
#	System Type	Subtype	Location	EF	Cap	Use	SetPnt	Fixture Flow	Pipe Ins.	Pipe length			
	Recirculation System	Recirc Control Type	Loop length	Branch length	Pump power	DWHR	Facilities Connected	Equal Flow	DWHR Eff	Other Credits			
<b>DUCTS</b>													
Duct #	-----Supply----- Location	R-Value	Area	-----Return----- Location	R-Value	Area	Leakage Type	Air Handler	CFM 25 TOT	CFM 25 OUT	QN	RLF	HVAC # Heat Cool
1	Main	6.0	385 ft²	Main	6.0	77 ft²	Prop. Air Leakage	Main	---	---	0.00	0.60	1 1
<b>MECHANICAL VENTILATION</b>													
Type	Supply CFM	Exhaust CFM	HRV	Fan	Run Time	Heating System	Cooling System						
None	0.0	0.0	0.0	0.0 W	0 %	1 - Electric Strip Heat	1 - Central Unit						
<b>TEMPERATURES</b>													
Programable Thermostat: N				Ceiling Fans: N									
Cooling	<input type="checkbox"/> Jan	<input type="checkbox"/> Feb	<input type="checkbox"/> Mar	<input type="checkbox"/> Apr	<input type="checkbox"/> May	<input type="checkbox"/> Jun	<input type="checkbox"/> Jul	<input type="checkbox"/> Aug	<input type="checkbox"/> Sep	<input type="checkbox"/> Oct	<input type="checkbox"/> Nov	<input type="checkbox"/> Dec	
Heating	<input checked="" type="checkbox"/> Jan	<input checked="" type="checkbox"/> Feb	<input checked="" type="checkbox"/> Mar	<input checked="" type="checkbox"/> Apr	<input checked="" type="checkbox"/> May	<input checked="" type="checkbox"/> Jun	<input checked="" type="checkbox"/> Jul	<input checked="" type="checkbox"/> Aug	<input checked="" type="checkbox"/> Sep	<input checked="" type="checkbox"/> Oct	<input checked="" type="checkbox"/> Nov	<input checked="" type="checkbox"/> Dec	
Venting	<input type="checkbox"/> Jan	<input type="checkbox"/> Feb	<input type="checkbox"/> Mar	<input type="checkbox"/> Apr	<input type="checkbox"/> May	<input type="checkbox"/> Jun	<input type="checkbox"/> Jul	<input type="checkbox"/> Aug	<input type="checkbox"/> Sep	<input type="checkbox"/> Oct	<input type="checkbox"/> Nov	<input type="checkbox"/> Dec	
Thermostat Schedule: BESTEST-heating													
Schedule Type		1	2	3	4	5	6	7	8	9	10	11	12
Cooling (WD)	AM PM	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78
Cooling (WEH)	AM PM	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78

# Building Input Summary Report

## TEMPERATURES(Continued)

Heating (WD)	AM PM	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68
Heating (WEH)	AM PM	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68

## CLOTHES DRYERS

ID	Type	Screen	Location	Quantity	Fuel Type	Make	Model	Schedule	kWhPerYr
1	Dryers	Default New	Main		Electricity			HERS2011	0

## RANGE OVENS

ID	Type	Screen	Location	Type	Fuel Type	Make	Model	Cooktop	Oven
1	Ranges	Default New	Main	Combo	Elec			Elec Flat Coil	Not Convec

## HARD WIRED LIGHTING

ID	Type	Screen	Location	Total#	Quantity#	Comp FI	All Other FI	Bulb Type	Schedule	Watts per bulb
1	Hard-Wired	By Count - Qualifying	Main	100	10				HERS2011	
2	Hard-Wired	Default New	Exterior						HERS2011	
3	Hard-Wired	Default New	Garage						HERS2011	

## MISC ELECTRICAL LOADS

ID	Type	Screen	Location	Item	Quantity	Catagory	Operating	Schedule	Off Standby
1	Misc Elec Load	Simple Default	Main		1		1	HERS2011	1

## APPLIANCES & LIGHTING SCHEDULES

Appliance Schedule:		HERS2014		Hours											
Schedule Type		1	2	3	4	5	6	7	8	9	10	11	12		
Occupancy peak:	400 Btu	AM	0.930	0.930	0.930	0.930	0.930	0.930	0.930	0.980	0.460	0.270	0.270	0.270	
% Released:	100 %	PM	0.270	0.270	0.270	0.270	0.330	0.610	1.000	1.000	0.930	0.930	0.930	0.930	
refrig peak:	0 W	AM	0.824	0.804	0.784	0.764	0.744	0.734	0.744	0.754	0.764	0.794	0.814	0.854	
% Released:	100 %	PM	0.854	0.864	0.884	0.904	0.925	0.945	0.925	0.915	0.904	0.894	0.874	0.854	
cWash peak:	0 W	AM	0.200	0.100	0.050	0.050	0.050	0.075	0.200	0.375	0.500	0.800	0.950	1.000	
% Released:	30 %	PM	0.875	0.850	0.800	0.625	0.625	0.600	0.575	0.550	0.625	0.700	0.650	0.375	
E-cDry peak:	119 W	AM	0.200	0.100	0.050	0.050	0.050	0.075	0.200	0.375	0.500	0.800	0.950	1.000	
% Released:	15 %	PM	0.875	0.850	0.800	0.625	0.625	0.600	0.575	0.550	0.625	0.700	0.650	0.375	
dWash peak:	0 W	AM	0.139	0.050	0.028	0.024	0.029	0.090	0.169	0.303	0.541	0.594	0.502	0.443	
% Released:	60 %	PM	0.376	0.396	0.334	0.323	0.344	0.448	0.791	1.000	0.800	0.597	0.383	0.281	
E-rOven peak:	122 W	AM	0.057	0.057	0.057	0.057	0.057	0.114	0.171	0.286	0.343	0.343	0.343	0.400	
% Released:	80 %	PM	0.457	0.343	0.286	0.400	0.571	1.000	0.857	0.429	0.286	0.229	0.171	0.114	
TVs peak:	151 W	AM	0.100	0.050	0.050	0.050	0.100	0.200	0.400	0.450	0.400	0.200	0.100	0.100	
% Released:	100 %	PM	0.050	0.050	0.150	0.450	0.850	1.000	0.950	0.800	0.500	0.250	0.150	0.100	

# Building Input Summary Report

## APPLIANCES & LIGHTING SCHEDULES(Continued)

cFan peak:	0 W	AM	0.600	0.600	0.600	0.600	0.600	0.600	0.600	0.250	0.250	0.250	0.250	0.250
% Released:	100 %	PM	0.250	0.250	0.250	0.250	0.250	0.250	0.550	0.600	0.600	0.600	0.600	0.600
lgts-in peak:	545 W	AM	0.160	0.150	0.160	0.180	0.230	0.450	0.420	0.260	0.190	0.160	0.120	0.110
% Released:	100 %	PM	0.160	0.170	0.250	0.270	0.340	0.550	0.600	0.880	1.000	0.880	0.510	0.280
lgts-out peak:	47 W	AM	1.000	1.000	1.000	1.000	1.000	0.750	0.750	0.000	0.000	0.000	0.000	0.000
% Released:	0 %	PM	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.750	0.750	0.750	1.000
lgts-gar peak:	0 W	AM	0.000	0.000	0.000	0.000	0.000	0.500	0.750	1.000	0.750	0.500	0.000	0.000
% Released:	0 %	PM	0.000	0.000	0.500	0.500	0.750	1.000	0.750	0.500	0.000	0.000	0.000	0.000
MEL peak:	184 W	AM	0.500	0.500	0.500	0.750	0.750	0.850	1.000	1.000	1.000	1.000	0.900	0.900
% Released:	90 %	PM	0.900	0.900	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.850	0.750	0.750

# Building Input Summary Report

PROJECT										
Title:	L170AC (no internal gains)				Address type:	Y				
Building Type:	User	Bedrooms:	0			Lot #:				
Owner:	FSEC	Conditioned Area:	1539			Block/SubDivision:				
Builder Name:	James Q. Hammer	Total Stories:	1			PlatBook:	111 Anywhere Lane			
Permit Office:		Worst Case:	No			County:				
Jurisdiction:		Rotate Angle:	0			City, State, Zip:	Colorado Springs, CO,			
Family Type:	Single-family	Cross Ventilation:								
New/Existing:	New (From Plans)	Whole House Fan:								
Year Construct:		Terrain:	Suburban							
Comment:	HERS BESTEST no internal gains case				Shielding:	Suburban				
CLIMATE										
Design Location	Tmy Site	Design Temp	97.5%	2.5%	Int Design Temp	Winter	Summer	Heating Degree Days	Design Moisture	Daily temp Range
CO, COLORADO_SPRINGSTM	CO_COLORADO_SPRINGSTM	7	88		70	75	6114.5	0		High
UTILITY										
Fuel	Unit	Utility Name					Monthly Fixed Cost	\$/Unit		
Electricity	kWh	EnergyGauge Default					0.00	0.12		
Natural Gas	Therm	EnergyGauge Default					0.00	0.68		
Fuel Oil	Gallon	EnergyGauge Default					0.00	1.10		
Propane	Gallon	EnergyGauge Default					0.00	1.40		
SURROUNDINGS										
Ornt	Type	-----Shade Trees-----			Exist	-----Adjacent Buildings-----				
		Height	Width	Distance		Height	Width	Distance		
N	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
NE	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
E	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
SE	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
S	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
SW	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
W	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
NW	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
BLOCKS										
Number	Name	Area	Volume							
1	Block1	1539	12312							
SPACES										
Number	Name	Area	Volume	Kitchen	Occupants	Bedrooms	Finished	Cooled	Heated	
1	Main	1539	12312	Yes	0	0		Yes	Yes	

# Building Input Summary Report

FLOORS														
#	Floor Type	Space	Exposed Perim	Perimeter R-Value	Area	Joist R-Value	Tile	Wood	Carpet					
1	Raised Floor	Main	---	---	1539 ft	10.4	0	0	1					
ROOF														
#	Type	Materials	Roof Area	Gable Area	Roof Color	Solar Absor.	SA Tested	Emitt	Emitt Tested	Deck Insul.	Pitch (deg)			
1	Gable or shed	Composition shingles	1622 ft²	256 ft²	Medium	0.6	No	0.9	No	0	18.4			
ATTIC														
#	Type	Ventilation	Vent Ratio (1 in)	Area	RBS	IRCC								
1	Full attic	Vented	150	1539 ft²	N	N								
CEILING														
#	Ceiling Type	Space	R-Value	Ins. Type	Area	Framing Fraction	Truss Type							
1	Under Attic(Vented)	Main	16.7	Blown	1539.0ft²	0.11	Wood							
WALLS														
#	Ornt	Adjacent To	Wall Type	Space	Cavity R-Value	Width Ft	In	Height Ft	In	Sheathing Area	R-Value	Framing Fraction	Solar Absor.	Below Grade
1	N	Exterior	Frame - Wood	Main	11	57.0	0	8.0	0	456.0ft²		0.25	0.6	0 %
2	S	Exterior	Frame - Wood	Main	11	57.0	0	8.0	0	456.0ft²		0.25	0.6	0 %
3	E	Exterior	Frame - Wood	Main	11	27.0	0	8.0	0	216.0ft²		0.25	0.6	0 %
4	W	Exterior	Frame - Wood	Main	11	27.0	0	8.0	0	216.0ft²		0.25	0.6	0 %
DOORS														
#	Ornt	Adjacent To	Door Type	Space	Storms	U-Value	Width Ft	In	Height Ft	In	Area			
1	N	Exterior	Insulated	Main	None	0.46	3.00	0	6.00	8	20.0ft²			
2	S	Exterior	Insulated	Main	None	0.46	3.00	0	6.00	8	20.0ft²			
WINDOWS														
#	Ornt	Wall ID	Frame	Panes	NFRC	U-Factor	SHGC	Storm	Area	----Overhang----		Interior Shade	Screening	
1	N	1	TIM	Single (Clear)	Yes	1.09	0.70	N	90.0ft²	0.0 ft 0 in	0.0 ft 0 in	None	None	
2	S	2	TIM	Single (Clear)	Yes	1.09	0.70	N	90.0ft²	0.0 ft 0 in	0.0 ft 0 in	None	None	
3	E	3	TIM	Single (Clear)	Yes	1.09	0.70	N	45.0ft²	0.0 ft 0 in	0.0 ft 0 in	None	None	
4	W	4	TIM	Single (Clear)	Yes	1.09	0.70	N	45.0ft²	0.0 ft 0 in	0.0 ft 0 in	None	None	
INFILTRATION														
#	Scope	Method	SLA	CFM50	ELA	EqLA	ACH	ACH50	Space(s)					
1	Wholehouse	Proposed ACH	0.00068	2760	151.51	284.94	0.6700	13.4	All					

# Building Input Summary Report

<b>MASS</b>													
#	Mass Type	Area	Thickness	Furniture Fraction	Space								
1	No Added Mass	0 ft²	0 ft	0.00	Main								
<b>HEATING SYSTEM</b>													
#	System Type	Subtype	AHRI #	Efficiency	Capacity kBtu/hr	---Geothermal HeatPump---		Ducts	Block				
1	Electric Strip Heat	None		COP: 1.00	112.0	Entry	Power	Volt	Current	sys#1	1		
<b>COOLING SYSTEM</b>													
#	System Type	Subtype	AHRI #	Efficiency	Capacity kBtu/hr	Air Flow cfm	SHR	Duct	Block				
1	Central Unit	None		SEER:10	24.8	744	0.75	sys#1	1				
<b>HOT WATER SYSTEM</b>													
#	System Type	Subtype	Location	EF	Cap	Use	SetPnt	Fixture Flow	Pipe Ins.	Pipe length			
	Recirculation System	Recirc Control Type	Loop length	Branch length	Pump power	DWHR	Facilities Connected	Equal Flow	DWHR Eff	Other Credits			
<b>DUCTS</b>													
Duct #	-----Supply-----			-----Return-----			Leakage Type	Air Handler	CFM 25 TOT	CFM 25 OUT	QN	RLF	HVAC # Heat Cool
1	Main	6.0	385 ft²	Main	6.0	77 ft²	Prop. Air Leakage	Main	---	---	0.00	0.60	1 1
<b>MECHANICAL VENTILATION</b>													
Type	Supply CFM	Exhaust CFM	HRV	Fan	Run Time	Heating System	Cooling System						
None	0.0	0.0	0.0	0.0 W	0 %	1 - Electric Strip Heat	1 - Central Unit						
<b>TEMPERATURES</b>													
Programable Thermostat: N						Ceiling Fans: N							
Cooling	<input type="checkbox"/> Jan	<input type="checkbox"/> Feb	<input type="checkbox"/> Mar	<input type="checkbox"/> Apr	<input type="checkbox"/> May	<input type="checkbox"/> Jun	<input type="checkbox"/> Jul	<input type="checkbox"/> Aug	<input type="checkbox"/> Sep	<input type="checkbox"/> Oct	<input type="checkbox"/> Nov	<input type="checkbox"/> Dec	
Heating	<input checked="" type="checkbox"/> Jan	<input checked="" type="checkbox"/> Feb	<input checked="" type="checkbox"/> Mar	<input checked="" type="checkbox"/> Apr	<input checked="" type="checkbox"/> May	<input checked="" type="checkbox"/> Jun	<input checked="" type="checkbox"/> Jul	<input checked="" type="checkbox"/> Aug	<input checked="" type="checkbox"/> Sep	<input checked="" type="checkbox"/> Oct	<input checked="" type="checkbox"/> Nov	<input checked="" type="checkbox"/> Dec	
Venting	<input type="checkbox"/> Jan	<input type="checkbox"/> Feb	<input type="checkbox"/> Mar	<input type="checkbox"/> Apr	<input type="checkbox"/> May	<input type="checkbox"/> Jun	<input type="checkbox"/> Jul	<input type="checkbox"/> Aug	<input type="checkbox"/> Sep	<input type="checkbox"/> Oct	<input type="checkbox"/> Nov	<input type="checkbox"/> Dec	
Thermostat Schedule: BESTEST-heating													
Schedule Type		1	2	3	4	5	6	7	8	9	10	11	12
Cooling (WD)	AM PM	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78
Cooling (WEH)	AM PM	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78

# Building Input Summary Report

## TEMPERATURES(Continued)

Heating (WD)	AM	68	68	68	68	68	68	68	68	68	68	68	68	68
	PM	68	68	68	68	68	68	68	68	68	68	68	68	68
Heating (WEH)	AM	68	68	68	68	68	68	68	68	68	68	68	68	68
	PM	68	68	68	68	68	68	68	68	68	68	68	68	68

## CLOTHES DRYERS

ID	Type	Screen	Location	Quantity	Fuel Type	Make	Model	Schedule	kWhPerYr
1	Dryers	Default New	Main		Electricity			HERS2011	0

## RANGE OVENS

ID	Type	Screen	Location	Type	Fuel Type	Make	Model	Cooktop	Oven
1	Ranges	Default New	Main	Combo	Elec			Elec Flat Coil	Not Convec

## HARD WIRED LIGHTING

ID	Type	Screen	Location	Total#	Quantity#	Comp FI	All Other FI	Bulb Type	Schedule	Watts per bulb
1	Hard-Wired	By Count - Qualifying	Main	100	10				HERS2011	
2	Hard-Wired	Default New	Exterior						HERS2011	
3	Hard-Wired	Default New	Garage						HERS2011	

## MISC ELECTRICAL LOADS

ID	Type	Screen	Location	Item	Quantity	Catagory	Operating	Schedule	Off Standby
1	Misc Elec Load	Simple Default	Main		1		1	HERS2011	1

## APPLIANCES & LIGHTING SCHEDULES

Appliance Schedule:		HERS2014		Hours											
Schedule Type		1	2	3	4	5	6	7	8	9	10	11	12		
Occupancy peak:	400 Btu	AM	0.930	0.930	0.930	0.930	0.930	0.930	0.930	0.980	0.460	0.270	0.270	0.270	
% Released:	100 %	PM	0.270	0.270	0.270	0.270	0.330	0.610	1.000	1.000	0.930	0.930	0.930	0.930	
refrig peak:	0 W	AM	0.824	0.804	0.784	0.764	0.744	0.734	0.744	0.754	0.764	0.794	0.814	0.854	
% Released:	100 %	PM	0.854	0.864	0.884	0.904	0.925	0.945	0.925	0.915	0.904	0.894	0.874	0.854	
cWash peak:	0 W	AM	0.200	0.100	0.050	0.050	0.050	0.075	0.200	0.375	0.500	0.800	0.950	1.000	
% Released:	30 %	PM	0.875	0.850	0.800	0.625	0.625	0.600	0.575	0.550	0.625	0.700	0.650	0.375	
E-cDry peak:	119 W	AM	0.200	0.100	0.050	0.050	0.050	0.075	0.200	0.375	0.500	0.800	0.950	1.000	
% Released:	15 %	PM	0.875	0.850	0.800	0.625	0.625	0.600	0.575	0.550	0.625	0.700	0.650	0.375	
dWash peak:	0 W	AM	0.139	0.050	0.028	0.024	0.029	0.090	0.169	0.303	0.541	0.594	0.502	0.443	
% Released:	60 %	PM	0.376	0.396	0.334	0.323	0.344	0.448	0.791	1.000	0.800	0.597	0.383	0.281	
E-rOven peak:	122 W	AM	0.057	0.057	0.057	0.057	0.057	0.114	0.171	0.286	0.343	0.343	0.343	0.400	
% Released:	80 %	PM	0.457	0.343	0.286	0.400	0.571	1.000	0.857	0.429	0.286	0.229	0.171	0.114	
TVs peak:	151 W	AM	0.100	0.050	0.050	0.050	0.100	0.200	0.400	0.450	0.400	0.200	0.100	0.100	
% Released:	100 %	PM	0.050	0.050	0.150	0.450	0.850	1.000	0.950	0.800	0.500	0.250	0.150	0.100	

# Building Input Summary Report

## APPLIANCES & LIGHTING SCHEDULES(Continued)

cFan peak:	0 W	AM	0.600	0.600	0.600	0.600	0.600	0.600	0.600	0.250	0.250	0.250	0.250	0.250
% Released:	100 %	PM	0.250	0.250	0.250	0.250	0.250	0.250	0.550	0.600	0.600	0.600	0.600	0.600
lgts-in peak:	545 W	AM	0.160	0.150	0.160	0.180	0.230	0.450	0.420	0.260	0.190	0.160	0.120	0.110
% Released:	100 %	PM	0.160	0.170	0.250	0.270	0.340	0.550	0.600	0.880	1.000	0.880	0.510	0.280
lgts-out peak:	47 W	AM	1.000	1.000	1.000	1.000	1.000	0.750	0.750	0.000	0.000	0.000	0.000	0.000
% Released:	0 %	PM	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.750	0.750	0.750	1.000
lgts-gar peak:	0 W	AM	0.000	0.000	0.000	0.000	0.000	0.500	0.750	1.000	0.750	0.500	0.000	0.000
% Released:	0 %	PM	0.000	0.000	0.500	0.500	0.750	1.000	0.750	0.500	0.000	0.000	0.000	0.000
MEL peak:	184 W	AM	0.500	0.500	0.500	0.750	0.750	0.850	1.000	1.000	1.000	1.000	0.900	0.900
% Released:	90 %	PM	0.900	0.900	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.850	0.750	0.750



# Building Input Summary Report

PROJECT									
Title:	L200AC (inefficient)			Address type:	Y				
Building Type:	User	Bedrooms:	0	Lot #:					
Owner:	FSEC	Conditioned Area:	1539	Block/SubDivision:					
Builder Name:	James Q. Hammer	Total Stories:	1	PlatBook:	111 Anywhere Lane				
Permit Office:		Worst Case:	No	County:					
Jurisdiction:		Rotate Angle:	0	City, State, Zip:	Colorado Springs, CO,				
Family Type:	Single-family	Cross Ventilation:							
New/Existing:	New (From Plans)	Whole House Fan:							
Year Construct:		Terrain:	Suburban						
Comment:	HERS BESTEST inefficient case			Shielding:	Suburban				
CLIMATE									
Design Location	Tmy Site	Design Temp	97.5% 2.5%	Int Design Temp	Winter	Summer	Heating Degree Days	Design Moisture	Daily temp Range
CO, COLORADO_SPRINGSTM	CO_COLORADO_SPRINGSTM	7	88	70	75	6114.5	0	High	
UTILITY									
Fuel	Unit	Utility Name		Monthly Fixed Cost	\$/Unit				
Electricity	kWh	EnergyGauge Default		0.00	0.12				
Natural Gas	Therm	EnergyGauge Default		0.00	0.68				
Fuel Oil	Gallon	EnergyGauge Default		0.00	1.10				
Propane	Gallon	EnergyGauge Default		0.00	1.40				
SURROUNDINGS									
Ornt	Type	-----Shade Trees-----			Exist	-----Adjacent Buildings-----			
		Height	Width	Distance		Height	Width	Distance	
N	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
NE	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
E	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
SE	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
S	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
SW	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
W	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
NW	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
BLOCKS									
Number	Name	Area	Volume						
1	Block1	1539	12312						
SPACES									
Number	Name	Area	Volume	Kitchen	Occupants	Bedrooms	Finished	Cooled	Heated
1	Main	1539	12312	Yes	0	0		Yes	Yes

# Building Input Summary Report

FLOORS													
#	Floor Type	Space	Exposed Perim	Perimeter R-Value	Area	Joist R-Value	Tile	Wood	Carpet				
1	Raised Floor	Main	---	---	1539 ft	0	0	0	1				
ROOF													
#	Type	Materials	Roof Area	Gable Area	Roof Color	Solar Absor.	SA Tested	Emitt	Emitt Tested	Deck Insul.	Pitch (deg)		
1	Gable or shed	Composition shingles	1622 ft²	256 ft²	Medium	0.6	No	0.9	No	0	18.4		
ATTIC													
#	Type	Ventilation	Vent Ratio (1 in)	Area	RBS	IRCC							
1	Full attic	Vented	150	1539 ft²	N	N							
CEILING													
#	Ceiling Type	Space	R-Value	Ins. Type	Area	Framing Fraction	Truss Type						
1	Under Attic(Vented)	Main	9.1	Blown	1539.0ft²	0.11	Wood						
WALLS													
#	Ornt	Adjacent To	Wall Type	Space	Cavity R-Value	Width Ft	Height Ft	Sheathing Area	R-Value	Framing Fraction	Solar Absor.	Below Grade	
1	N	Exterior	Frame - Wood	Main	1.01	57.0	0	8.0	0	456.0ft²	0.25	0.6	0 %
2	S	Exterior	Frame - Wood	Main	1.01	57.0	0	8.0	0	456.0ft²	0.25	0.6	0 %
3	E	Exterior	Frame - Wood	Main	1.01	27.0	0	8.0	0	216.0ft²	0.25	0.6	0 %
4	W	Exterior	Frame - Wood	Main	1.01	27.0	0	8.0	0	216.0ft²	0.25	0.6	0 %
DOORS													
#	Ornt	Adjacent To	Door Type	Space	Storms	U-Value	Width Ft	Height Ft	Area				
1	N	Exterior	Insulated	Main	None	0.46	3.00	0	6.00	8	20.0ft²		
2	S	Exterior	Insulated	Main	None	0.46	3.00	0	6.00	8	20.0ft²		
WINDOWS													
#	Ornt	Wall ID	Frame	Panes	NFRC	U-Factor	SHGC	Storm	Area	----Overhang----		Interior Shade	Screening
1	N	1	TIM	Single (Clear)	Yes	1.09	0.70	N	90.0ft²	0.0 ft 0 in	0.0 ft 0 in	None	None
2	S	2	TIM	Single (Clear)	Yes	1.09	0.70	N	90.0ft²	0.0 ft 0 in	0.0 ft 0 in	None	None
3	E	3	TIM	Single (Clear)	Yes	1.09	0.70	N	45.0ft²	0.0 ft 0 in	0.0 ft 0 in	None	None
4	W	4	TIM	Single (Clear)	Yes	1.09	0.70	N	45.0ft²	0.0 ft 0 in	0.0 ft 0 in	None	None
INFILTRATION													
#	Scope	Method	SLA	CFM50	ELA	EqLA	ACH	ACH50	Space(s)				
1	Wholehouse	Proposed ACH	0.00153	6179	339.21	637.93	1.5000	30.1	All				

# Building Input Summary Report

<b>MASS</b>													
#	Mass Type	Area	Thickness	Furniture Fraction	Space								
1	No Added Mass	0 ft²	0 ft	0.00	Main								
<b>HEATING SYSTEM</b>													
#	System Type	Subtype	AHRI #	Efficiency	Capacity kBtu/hr	---Geothermal HeatPump---		Ducts	Block				
1	Electric Strip Heat	None		COP: 1.00	217.0	Entry	Power	Volt	Current	sys#1	1		
<b>COOLING SYSTEM</b>													
#	System Type	Subtype	AHRI #	Efficiency	Capacity kBtu/hr	Air Flow cfm	SHR	Duct	Block				
1	Central Unit	None		SEER:10	32.1	963	0.75	sys#1	1				
<b>HOT WATER SYSTEM</b>													
#	System Type	Subtype	Location	EF	Cap	Use	SetPnt	Fixture Flow	Pipe Ins.	Pipe length			
	Recirculation System	Recirc Control Type	Loop length	Branch length	Pump power	DWHR	Facilities Connected	Equal Flow	DWHR Eff	Other Credits			
<b>DUCTS</b>													
Duct #	-----Supply-----			-----Return-----			Leakage Type	Air Handler	CFM 25 TOT	CFM 25 OUT	QN	RLF	HVAC # Heat Cool
1	Main	6.0	385 ft²	Main	6.0	77 ft²	Prop. Air Leakage	Main	---	---	0.00	0.60	1 1
<b>MECHANICAL VENTILATION</b>													
Type	Supply CFM	Exhaust CFM	HRV	Fan	Run Time	Heating System	Cooling System						
None	0.0	0.0	0.0	0.0 W	0 %	1 - Electric Strip Heat	1 - Central Unit						
<b>TEMPERATURES</b>													
Programable Thermostat: N						Ceiling Fans: N							
Cooling	<input type="checkbox"/> Jan	<input type="checkbox"/> Feb	<input type="checkbox"/> Mar	<input type="checkbox"/> Apr	<input type="checkbox"/> May	<input type="checkbox"/> Jun	<input type="checkbox"/> Jul	<input type="checkbox"/> Aug	<input type="checkbox"/> Sep	<input type="checkbox"/> Oct	<input type="checkbox"/> Nov	<input type="checkbox"/> Dec	
Heating	<input checked="" type="checkbox"/> Jan	<input checked="" type="checkbox"/> Feb	<input checked="" type="checkbox"/> Mar	<input checked="" type="checkbox"/> Apr	<input checked="" type="checkbox"/> May	<input checked="" type="checkbox"/> Jun	<input checked="" type="checkbox"/> Jul	<input checked="" type="checkbox"/> Aug	<input checked="" type="checkbox"/> Sep	<input checked="" type="checkbox"/> Oct	<input checked="" type="checkbox"/> Nov	<input checked="" type="checkbox"/> Dec	
Venting	<input type="checkbox"/> Jan	<input type="checkbox"/> Feb	<input type="checkbox"/> Mar	<input type="checkbox"/> Apr	<input type="checkbox"/> May	<input type="checkbox"/> Jun	<input type="checkbox"/> Jul	<input type="checkbox"/> Aug	<input type="checkbox"/> Sep	<input type="checkbox"/> Oct	<input type="checkbox"/> Nov	<input type="checkbox"/> Dec	
Thermostat Schedule: BESTEST-heating													
Schedule Type		1	2	3	4	5	6	7	8	9	10	11	12
Cooling (WD)	AM	78	78	78	78	78	78	78	78	78	78	78	78
	PM	78	78	78	78	78	78	78	78	78	78	78	78
Cooling (WEH)	AM	78	78	78	78	78	78	78	78	78	78	78	78
	PM	78	78	78	78	78	78	78	78	78	78	78	78

# Building Input Summary Report

## TEMPERATURES(Continued)

Heating (WD)	AM	68	68	68	68	68	68	68	68	68	68	68	68	68
	PM	68	68	68	68	68	68	68	68	68	68	68	68	68
Heating (WEH)	AM	68	68	68	68	68	68	68	68	68	68	68	68	68
	PM	68	68	68	68	68	68	68	68	68	68	68	68	68

## CLOTHES DRYERS

ID	Type	Screen	Location	Quantity	Fuel Type	Make	Model	Schedule	kWhPerYr
1	Dryers	Default New	Main		Electricity			HERS2011	0

## RANGE OVENS

ID	Type	Screen	Location	Type	Fuel Type	Make	Model	Cooktop	Oven
1	Ranges	Default New	Main	Combo	Elec			Elec Flat Coil	Not Convec

## HARD WIRED LIGHTING

ID	Type	Screen	Location	Total#	Quantity#	Comp FI	All Other FI	Bulb Type	Schedule	Watts per bulb
1	Hard-Wired	By Count - Qualifying	Main	100	10				HERS2011	
2	Hard-Wired	Default New	Exterior						HERS2011	
3	Hard-Wired	Default New	Garage						HERS2011	

## MISC ELECTRICAL LOADS

ID	Type	Screen	Location	Item	Quantity	Catagory	Operating	Schedule	Off Standby
1	Misc Elec Load	Simple Default	Main		1		1	HERS2011	1

## APPLIANCES & LIGHTING SCHEDULES

Appliance Schedule:		HERS2014		Hours											
Schedule Type		1	2	3	4	5	6	7	8	9	10	11	12		
Occupancy peak:	400 Btu	AM	0.930	0.930	0.930	0.930	0.930	0.930	0.930	0.980	0.460	0.270	0.270	0.270	
% Released:	100 %	PM	0.270	0.270	0.270	0.270	0.330	0.610	1.000	1.000	0.930	0.930	0.930	0.930	
refrig peak:	0 W	AM	0.824	0.804	0.784	0.764	0.744	0.734	0.744	0.754	0.764	0.794	0.814	0.854	
% Released:	100 %	PM	0.854	0.864	0.884	0.904	0.925	0.945	0.925	0.915	0.904	0.894	0.874	0.854	
cWash peak:	0 W	AM	0.200	0.100	0.050	0.050	0.050	0.075	0.200	0.375	0.500	0.800	0.950	1.000	
% Released:	30 %	PM	0.875	0.850	0.800	0.625	0.625	0.600	0.575	0.550	0.625	0.700	0.650	0.375	
E-cDry peak:	119 W	AM	0.200	0.100	0.050	0.050	0.050	0.075	0.200	0.375	0.500	0.800	0.950	1.000	
% Released:	15 %	PM	0.875	0.850	0.800	0.625	0.625	0.600	0.575	0.550	0.625	0.700	0.650	0.375	
dWash peak:	0 W	AM	0.139	0.050	0.028	0.024	0.029	0.090	0.169	0.303	0.541	0.594	0.502	0.443	
% Released:	60 %	PM	0.376	0.396	0.334	0.323	0.344	0.448	0.791	1.000	0.800	0.597	0.383	0.281	
E-rOven peak:	122 W	AM	0.057	0.057	0.057	0.057	0.057	0.114	0.171	0.286	0.343	0.343	0.343	0.400	
% Released:	80 %	PM	0.457	0.343	0.286	0.400	0.571	1.000	0.857	0.429	0.286	0.229	0.171	0.114	
TVs peak:	151 W	AM	0.100	0.050	0.050	0.050	0.100	0.200	0.400	0.450	0.400	0.200	0.100	0.100	
% Released:	100 %	PM	0.050	0.050	0.150	0.450	0.850	1.000	0.950	0.800	0.500	0.250	0.150	0.100	

# Building Input Summary Report

## APPLIANCES & LIGHTING SCHEDULES(Continued)

cFan peak:	0 W	AM	0.600	0.600	0.600	0.600	0.600	0.600	0.600	0.250	0.250	0.250	0.250	0.250
% Released:	100 %	PM	0.250	0.250	0.250	0.250	0.250	0.250	0.550	0.600	0.600	0.600	0.600	0.600
lgts-in peak:	545 W	AM	0.160	0.150	0.160	0.180	0.230	0.450	0.420	0.260	0.190	0.160	0.120	0.110
% Released:	100 %	PM	0.160	0.170	0.250	0.270	0.340	0.550	0.600	0.880	1.000	0.880	0.510	0.280
lgts-out peak:	47 W	AM	1.000	1.000	1.000	1.000	1.000	0.750	0.750	0.000	0.000	0.000	0.000	0.000
% Released:	0 %	PM	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.750	0.750	0.750	1.000
lgts-gar peak:	0 W	AM	0.000	0.000	0.000	0.000	0.000	0.500	0.750	1.000	0.750	0.500	0.000	0.000
% Released:	0 %	PM	0.000	0.000	0.500	0.500	0.750	1.000	0.750	0.500	0.000	0.000	0.000	0.000
MEL peak:	184 W	AM	0.500	0.500	0.500	0.750	0.750	0.850	1.000	1.000	1.000	1.000	0.900	0.900
% Released:	90 %	PM	0.900	0.900	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.850	0.750	0.750

# Building Input Summary Report

PROJECT									
Title:	L202AC (low alpha)			Address type:	Y				
Building Type:	User	Bedrooms:	0	Lot #:					
Owner:	FSEC	Conditioned Area:	1539	Block/SubDivision:					
Builder Name:	James Q. Hammer	Total Stories:	1	PlatBook:	111 Anywhere Lane				
Permit Office:		Worst Case:	No	County:					
Jurisdiction:		Rotate Angle:	0	City, State, Zip:	Colorado Springs, CO,				
Family Type:	Single-family	Cross Ventilation:							
New/Existing:	New (From Plans)	Whole House Fan:							
Year Construct:		Terrain:	Suburban						
Comment:	HERS BESTEST low alpha case			Shielding:	Suburban				
CLIMATE									
Design Location	Tmy Site	Design Temp	97.5% 2.5%	Int Design Temp	Winter	Summer	Heating Degree Days	Design Moisture	Daily temp Range
CO, COLORADO_SPRINGSTM	CO_COLORADO_SPRINGSTM	7	88	70	75	6114.5	0	High	
UTILITY									
Fuel	Unit	Utility Name		Monthly Fixed Cost	\$/Unit				
Electricity	kWh	EnergyGauge Default		0.00	0.12				
Natural Gas	Therm	EnergyGauge Default		0.00	0.68				
Fuel Oil	Gallon	EnergyGauge Default		0.00	1.10				
Propane	Gallon	EnergyGauge Default		0.00	1.40				
SURROUNDINGS									
Ornt	Type	-----Shade Trees-----			Exist	-----Adjacent Buildings-----			
		Height	Width	Distance		Height	Width	Distance	
N	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
NE	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
E	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
SE	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
S	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
SW	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
W	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
NW	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
BLOCKS									
Number	Name	Area	Volume						
1	Block1	1539	12312						
SPACES									
Number	Name	Area	Volume	Kitchen	Occupants	Bedrooms	Finished	Cooled	Heated
1	Main	1539	12312	Yes	0	0		Yes	Yes

# Building Input Summary Report

FLOORS													
#	Floor Type	Space	Exposed Perim	Perimeter R-Value	Area	Joist R-Value	Tile	Wood	Carpet				
1	Raised Floor	Main	---	---	1539 ft	0	0	0	1				
ROOF													
#	Type	Materials	Roof Area	Gable Area	Roof Color	Solar Absor.	SA Tested	Emitt	Emitt Tested	Deck Insul.	Pitch (deg)		
1	Gable or shed	Composition shingles	1622 ft²	256 ft²	Medium	0.2	No	0.9	No	0	18.4		
ATTIC													
#	Type	Ventilation	Vent Ratio (1 in)	Area	RBS	IRCC							
1	Full attic	Vented	150	1539 ft²	N	N							
CEILING													
#	Ceiling Type	Space	R-Value	Ins. Type	Area	Framing Fraction	Truss Type						
1	Under Attic(Vented)	Main	9.1	Blown	1539.0ft²	0.11	Wood						
WALLS													
#	Ornt	Adjacent To	Wall Type	Space	Cavity R-Value	Width Ft In	Height Ft In	Sheathing Area	R-Value	Framing Fraction	Solar Absor.	Below Grade	
1	N	Exterior	Frame - Wood	Main	1.01	57.0 0	8.0 0	456.0ft²		0.25	0.2	0 %	
2	S	Exterior	Frame - Wood	Main	1.01	57.0 0	8.0 0	456.0ft²		0.25	0.2	0 %	
3	E	Exterior	Frame - Wood	Main	1.01	27.0 0	8.0 0	216.0ft²		0.25	0.2	0 %	
4	W	Exterior	Frame - Wood	Main	1.01	27.0 0	8.0 0	216.0ft²		0.25	0.2	0 %	
DOORS													
#	Ornt	Adjacent To	Door Type	Space	Storms	U-Value	Width Ft In	Height Ft In	Area				
1	N	Exterior	Insulated	Main	None	0.46	3.00 0	6.00 8	20.0ft²				
2	S	Exterior	Insulated	Main	None	0.46	3.00 0	6.00 8	20.0ft²				
WINDOWS													
#	Ornt	Wall ID	Frame	Panes	NFRC	U-Factor	SHGC	Storm	Area	----Overhang----		Interior Shade	Screening
									Depth	Separation			
1	N	1	TIM	Single (Clear)	Yes	1.09	0.70	N	90.0ft²	0.0 ft 0 in	0.0 ft 0 in	None	None
2	S	2	TIM	Single (Clear)	Yes	1.09	0.70	N	90.0ft²	0.0 ft 0 in	0.0 ft 0 in	None	None
3	E	3	TIM	Single (Clear)	Yes	1.09	0.70	N	45.0ft²	0.0 ft 0 in	0.0 ft 0 in	None	None
4	W	4	TIM	Single (Clear)	Yes	1.09	0.70	N	45.0ft²	0.0 ft 0 in	0.0 ft 0 in	None	None
INFILTRATION													
#	Scope	Method	SLA	CFM50	ELA	EqLA	ACH	ACH50	Space(s)				
1	Wholehouse	Proposed ACH	0.00153	6179	339.21	637.93	1.5000	30.1	All				

# Building Input Summary Report

<b>MASS</b>													
#	Mass Type	Area	Thickness	Furniture Fraction	Space								
1	No Added Mass	0 ft²	0 ft	0.00	Main								
<b>HEATING SYSTEM</b>													
#	System Type	Subtype	AHRI #	Efficiency	Capacity kBtu/hr	---Geothermal HeatPump---		Ducts	Block				
1	Electric Strip Heat	None		COP: 1.00	214.0	Entry	Power	Volt	Current	sys#1	1		
<b>COOLING SYSTEM</b>													
#	System Type	Subtype	AHRI #	Efficiency	Capacity kBtu/hr	Air Flow cfm	SHR	Duct	Block				
1	Central Unit	None		SEER:10	32.1	963	0.75	sys#1	1				
<b>HOT WATER SYSTEM</b>													
#	System Type	Subtype	Location	EF	Cap	Use	SetPnt	Fixture Flow	Pipe Ins.	Pipe length			
	Recirculation System	Recirc Control Type	Loop length	Branch length	Pump power	DWHR	Facilities Connected	Equal Flow	DWHR Eff	Other Credits			
<b>DUCTS</b>													
Duct #	-----Supply-----			-----Return-----			Leakage Type	Air Handler	CFM 25 TOT	CFM 25 OUT	QN	RLF	HVAC # Heat Cool
1	Main	6.0	385 ft²	Main	6.0	77 ft²	Prop. Air Leakage	Main	---	---	0.00	0.60	1 1
<b>MECHANICAL VENTILATION</b>													
Type	Supply CFM	Exhaust CFM	HRV	Fan	Run Time	Heating System	Cooling System						
None	0.0	0.0	0.0	0.0 W	0 %	1 - Electric Strip Heat	1 - Central Unit						
<b>TEMPERATURES</b>													
Programable Thermostat: N						Ceiling Fans: N							
Cooling	<input type="checkbox"/> Jan	<input type="checkbox"/> Feb	<input type="checkbox"/> Mar	<input type="checkbox"/> Apr	<input type="checkbox"/> May	<input type="checkbox"/> Jun	<input type="checkbox"/> Jul	<input type="checkbox"/> Aug	<input type="checkbox"/> Sep	<input type="checkbox"/> Oct	<input type="checkbox"/> Nov	<input type="checkbox"/> Dec	
Heating	<input checked="" type="checkbox"/> Jan	<input checked="" type="checkbox"/> Feb	<input checked="" type="checkbox"/> Mar	<input checked="" type="checkbox"/> Apr	<input checked="" type="checkbox"/> May	<input checked="" type="checkbox"/> Jun	<input checked="" type="checkbox"/> Jul	<input checked="" type="checkbox"/> Aug	<input checked="" type="checkbox"/> Sep	<input checked="" type="checkbox"/> Oct	<input checked="" type="checkbox"/> Nov	<input checked="" type="checkbox"/> Dec	
Venting	<input type="checkbox"/> Jan	<input type="checkbox"/> Feb	<input type="checkbox"/> Mar	<input type="checkbox"/> Apr	<input type="checkbox"/> May	<input type="checkbox"/> Jun	<input type="checkbox"/> Jul	<input type="checkbox"/> Aug	<input type="checkbox"/> Sep	<input type="checkbox"/> Oct	<input type="checkbox"/> Nov	<input type="checkbox"/> Dec	
Thermostat Schedule: BESTEST-heating													
Schedule Type		1	2	3	4	5	6	7	8	9	10	11	12
Cooling (WD)	AM PM	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78
Cooling (WEH)	AM PM	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78



# Building Input Summary Report

## TEMPERATURES(Continued)

Heating (WD)	AM PM	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68
Heating (WEH)	AM PM	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68

## CLOTHES DRYERS

ID	Type	Screen	Location	Quantity	Fuel Type	Make	Model	Schedule	kWhPerYr
1	Dryers	Default New	Main		Electricity			HERS2011	0

## RANGE OVENS

ID	Type	Screen	Location	Type	Fuel Type	Make	Model	Cooktop	Oven
1	Ranges	Default New	Main	Combo	Elec			Elec Flat Coil	Not Convec

## HARD WIRED LIGHTING

ID	Type	Screen	Location	Total#	Quantity#	Comp FI	All Other FI	Bulb Type	Schedule	Watts per bulb
1	Hard-Wired	By Count - Qualifying	Main	100	10				HERS2011	
2	Hard-Wired	Default New	Exterior						HERS2011	
3	Hard-Wired	Default New	Garage						HERS2011	

## MISC ELECTRICAL LOADS

ID	Type	Screen	Location	Item	Quantity	Catagory	Operating	Schedule	Off Standby
1	Misc Elec Load	Simple Default	Main		1		1	HERS2011	1

## APPLIANCES & LIGHTING SCHEDULES

Appliance Schedule:		HERS2014		Hours											
Schedule Type		1	2	3	4	5	6	7	8	9	10	11	12		
Occupancy peak:	400 Btu	AM	0.930	0.930	0.930	0.930	0.930	0.930	0.930	0.980	0.460	0.270	0.270	0.270	
% Released:	100 %	PM	0.270	0.270	0.270	0.270	0.330	0.610	1.000	1.000	0.930	0.930	0.930	0.930	
refrig peak:	0 W	AM	0.824	0.804	0.784	0.764	0.744	0.734	0.744	0.754	0.764	0.794	0.814	0.854	
% Released:	100 %	PM	0.854	0.864	0.884	0.904	0.925	0.945	0.925	0.915	0.904	0.894	0.874	0.854	
cWash peak:	0 W	AM	0.200	0.100	0.050	0.050	0.050	0.075	0.200	0.375	0.500	0.800	0.950	1.000	
% Released:	30 %	PM	0.875	0.850	0.800	0.625	0.625	0.600	0.575	0.550	0.625	0.700	0.650	0.375	
E-cDry peak:	119 W	AM	0.200	0.100	0.050	0.050	0.050	0.075	0.200	0.375	0.500	0.800	0.950	1.000	
% Released:	15 %	PM	0.875	0.850	0.800	0.625	0.625	0.600	0.575	0.550	0.625	0.700	0.650	0.375	
dWash peak:	0 W	AM	0.139	0.050	0.028	0.024	0.029	0.090	0.169	0.303	0.541	0.594	0.502	0.443	
% Released:	60 %	PM	0.376	0.396	0.334	0.323	0.344	0.448	0.791	1.000	0.800	0.597	0.383	0.281	
E-rOven peak:	122 W	AM	0.057	0.057	0.057	0.057	0.057	0.114	0.171	0.286	0.343	0.343	0.343	0.400	
% Released:	80 %	PM	0.457	0.343	0.286	0.400	0.571	1.000	0.857	0.429	0.286	0.229	0.171	0.114	
TVs peak:	151 W	AM	0.100	0.050	0.050	0.050	0.100	0.200	0.400	0.450	0.400	0.200	0.100	0.100	
% Released:	100 %	PM	0.050	0.050	0.150	0.450	0.850	1.000	0.950	0.800	0.500	0.250	0.150	0.100	

# Building Input Summary Report

## APPLIANCES & LIGHTING SCHEDULES(Continued)

cFan peak:	0 W	AM	0.600	0.600	0.600	0.600	0.600	0.600	0.600	0.250	0.250	0.250	0.250	0.250
% Released:	100 %	PM	0.250	0.250	0.250	0.250	0.250	0.250	0.550	0.600	0.600	0.600	0.600	0.600
lgts-in peak:	545 W	AM	0.160	0.150	0.160	0.180	0.230	0.450	0.420	0.260	0.190	0.160	0.120	0.110
% Released:	100 %	PM	0.160	0.170	0.250	0.270	0.340	0.550	0.600	0.880	1.000	0.880	0.510	0.280
lgts-out peak:	47 W	AM	1.000	1.000	1.000	1.000	1.000	0.750	0.750	0.000	0.000	0.000	0.000	0.000
% Released:	0 %	PM	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.750	0.750	0.750	1.000
lgts-gar peak:	0 W	AM	0.000	0.000	0.000	0.000	0.000	0.500	0.750	1.000	0.750	0.500	0.000	0.000
% Released:	0 %	PM	0.000	0.000	0.500	0.500	0.750	1.000	0.750	0.500	0.000	0.000	0.000	0.000
MEL peak:	184 W	AM	0.500	0.500	0.500	0.750	0.750	0.850	1.000	1.000	1.000	1.000	0.900	0.900
% Released:	90 %	PM	0.900	0.900	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.850	0.750	0.750

# Building Input Summary Report

PROJECT									
Title:	L302AC (slab case)			Address type:	Y				
Building Type:	User	Bedrooms:	0	Lot #:					
Owner:	FSEC	Conditioned Area:	1539	Block/SubDivision:					
Builder Name:	James Q. Hammer	Total Stories:	1	PlatBook:	111 Anywhere Lane				
Permit Office:		Worst Case:	No	County:					
Jurisdiction:		Rotate Angle:	0	City, State, Zip:	Colorado Springs, CO,				
Family Type:	Single-family	Cross Ventilation:							
New/Existing:	New (From Plans)	Whole House Fan:							
Year Construct:		Terrain:	Suburban						
Comment:	HERS BESTEST slab case			Shielding:	Suburban				
CLIMATE									
Design Location	Tmy Site	Design Temp	97.5% 2.5%	Int Design Temp	Winter	Summer	Heating Degree Days	Design Moisture	Daily temp Range
CO, COLORADO_SPRINGSTM	CO_COLORADO_SPRINGSTM	7	88	70	75	6114.5	0	High	
UTILITY									
Fuel	Unit	Utility Name		Monthly Fixed Cost	\$/Unit				
Electricity	kWh	EnergyGauge Default		0.00	0.12				
Natural Gas	Therm	EnergyGauge Default		0.00	0.68				
Fuel Oil	Gallon	EnergyGauge Default		0.00	1.10				
Propane	Gallon	EnergyGauge Default		0.00	1.40				
SURROUNDINGS									
Ornt	Type	-----Shade Trees-----			Exist	-----Adjacent Buildings-----			
		Height	Width	Distance		Height	Width	Distance	
N	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
NE	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
E	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
SE	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
S	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
SW	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
W	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
NW	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
BLOCKS									
Number	Name	Area	Volume						
1	Block1	1539	12312						
SPACES									
Number	Name	Area	Volume	Kitchen	Occupants	Bedrooms	Finished	Cooled	Heated
1	Main	1539	12312	Yes	0	0		Yes	Yes

# Building Input Summary Report

FLOORS														
#	Floor Type	Space	Exposed Perim	Perimeter R-Value	Area	Joist R-Value	Tile	Wood	Carpet					
1	Slab-On-Grade Edge Ins	Main	168	0	1539 ft	---	0	0	1					
ROOF														
#	Type	Materials	Roof Area	Gable Area	Roof Color	Solar Absor.	SA Tested	Emitt	Emitt Tested	Deck Insul.	Pitch (deg)			
1	Gable or shed	Composition shingles	1622 ft²	256 ft²	Medium	0.6	No	0.9	No	0	18.4			
ATTIC														
#	Type	Ventilation	Vent Ratio (1 in)	Area	RBS	IRCC								
1	Full attic	Vented	150	1539 ft²	N	N								
CEILING														
#	Ceiling Type	Space	R-Value	Ins. Type	Area	Framing Fraction	Truss Type							
1	Under Attic(Vented)	Main	16.7	Blown	1539.0ft²	0.11	Wood							
WALLS														
#	Ornt	Adjacent To	Wall Type	Space	Cavity R-Value	Width Ft	In	Height Ft	In	Sheathing Area	R-Value	Framing Fraction	Solar Absor.	Below Grade
1	N	Exterior	Frame - Wood	Main	11	57.0	0	8.0	0	456.0ft²		0.25	0.6	0 %
2	S	Exterior	Frame - Wood	Main	11	57.0	0	8.0	0	456.0ft²		0.25	0.6	0 %
3	E	Exterior	Frame - Wood	Main	11	27.0	0	8.0	0	216.0ft²		0.25	0.6	0 %
4	W	Exterior	Frame - Wood	Main	11	27.0	0	8.0	0	216.0ft²		0.25	0.6	0 %
DOORS														
#	Ornt	Adjacent To	Door Type	Space	Storms	U-Value	Width Ft	In	Height Ft	In	Area			
1	N	Exterior	Insulated	Main	None	0.46	3.00	0	6.00	8	20.0ft²			
2	S	Exterior	Insulated	Main	None	0.46	3.00	0	6.00	8	20.0ft²			
WINDOWS														
#	Ornt	Wall ID	Frame	Panes	NFRC	U-Factor	SHGC	Storm	Area	----Overhang----		Interior Shade	Screening	
1	N	1	TIM	Single (Clear)	Yes	1.09	0.70	N	90.0ft²	0.0 ft 0 in	0.0 ft 0 in	None	None	
2	S	2	TIM	Single (Clear)	Yes	1.09	0.70	N	90.0ft²	0.0 ft 0 in	0.0 ft 0 in	None	None	
3	E	3	TIM	Single (Clear)	Yes	1.09	0.70	N	45.0ft²	0.0 ft 0 in	0.0 ft 0 in	None	None	
4	W	4	TIM	Single (Clear)	Yes	1.09	0.70	N	45.0ft²	0.0 ft 0 in	0.0 ft 0 in	None	None	
INFILTRATION														
#	Scope	Method	SLA	CFM50	ELA	EqLA	ACH	ACH50	Space(s)					
1	Wholehouse	Proposed ACH	0.00068	2760	151.51	284.94	0.6700	13.4	All					

# Building Input Summary Report

<b>MASS</b>													
#	Mass Type	Area	Thickness	Furniture Fraction	Space								
1	No Added Mass	0 ft²	0 ft	0.00	Main								
<b>HEATING SYSTEM</b>													
#	System Type	Subtype	AHRI #	Efficiency	Capacity kBtu/hr	---Geothermal Entry	HeatPump--- Power	Volts	Current	Ducts	Block		
1	Electric Strip Heat	None		COP: 1.00	116.0		0.00	0.00	0.00	sys#1	1		
<b>COOLING SYSTEM</b>													
#	System Type	Subtype	AHRI #	Efficiency	Capacity kBtu/hr	Air Flow cfm	SHR	Duct	Block				
1	Central Unit	None		SEER:10	24.4	732	0.75	sys#1	1				
<b>HOT WATER SYSTEM</b>													
#	System Type	Subtype	Location	EF	Cap	Use	SetPnt	Fixture Flow	Pipe Ins.	Pipe length			
	Recirculation System	Recirc Control Type	Loop length	Branch length	Pump power	DWHR	Facilities Connected	Equal Flow	DWHR Eff	Other Credits			
<b>DUCTS</b>													
Duct #	-----Supply----- Location	R-Value	Area	-----Return----- Location	R-Value	Area	Leakage Type	Air Handler	CFM 25 TOT	CFM 25 OUT	QN	RLF	HVAC # Heat Cool
1	Main	6.0	385 ft²	Main	6.0	77 ft²	Prop. Air Leakage	Main	---	---	0.00	0.60	1 1
<b>MECHANICAL VENTILATION</b>													
Type	Supply CFM	Exhaust CFM	HRV	Fan	Run Time	Heating System	Cooling System						
None	0.0	0.0	0.0	0.0 W	0 %	1 - Electric Strip Heat	1 - Central Unit						
<b>TEMPERATURES</b>													
Programable Thermostat: N						Ceiling Fans: N							
Cooling	<input type="checkbox"/> Jan	<input type="checkbox"/> Feb	<input type="checkbox"/> Mar	<input type="checkbox"/> Apr	<input type="checkbox"/> May	<input type="checkbox"/> Jun	<input type="checkbox"/> Jul	<input type="checkbox"/> Aug	<input type="checkbox"/> Sep	<input type="checkbox"/> Oct	<input type="checkbox"/> Nov	<input type="checkbox"/> Dec	
Heating	<input checked="" type="checkbox"/> Jan	<input checked="" type="checkbox"/> Feb	<input checked="" type="checkbox"/> Mar	<input checked="" type="checkbox"/> Apr	<input checked="" type="checkbox"/> May	<input checked="" type="checkbox"/> Jun	<input checked="" type="checkbox"/> Jul	<input checked="" type="checkbox"/> Aug	<input checked="" type="checkbox"/> Sep	<input checked="" type="checkbox"/> Oct	<input checked="" type="checkbox"/> Nov	<input checked="" type="checkbox"/> Dec	
Venting	<input type="checkbox"/> Jan	<input type="checkbox"/> Feb	<input type="checkbox"/> Mar	<input type="checkbox"/> Apr	<input type="checkbox"/> May	<input type="checkbox"/> Jun	<input type="checkbox"/> Jul	<input type="checkbox"/> Aug	<input type="checkbox"/> Sep	<input type="checkbox"/> Oct	<input type="checkbox"/> Nov	<input type="checkbox"/> Dec	
Thermostat Schedule: BESTEST-heating													
Schedule Type		1	2	3	4	5	6	7	8	9	10	11	12
Cooling (WD)	AM PM	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78
Cooling (WEH)	AM PM	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78

# Building Input Summary Report

## TEMPERATURES(Continued)

Heating (WD)	AM	68	68	68	68	68	68	68	68	68	68	68	68	68
	PM	68	68	68	68	68	68	68	68	68	68	68	68	68
Heating (WEH)	AM	68	68	68	68	68	68	68	68	68	68	68	68	68
	PM	68	68	68	68	68	68	68	68	68	68	68	68	68

## CLOTHES DRYERS

ID	Type	Screen	Location	Quantity	Fuel Type	Make	Model	Schedule	kWhPerYr
1	Dryers	Default New	Main		Electricity			HERS2011	0

## RANGE OVENS

ID	Type	Screen	Location	Type	Fuel Type	Make	Model	Cooktop	Oven
1	Ranges	Default New	Main	Combo	Elec			Elec Flat Coil	Not Convec

## HARD WIRED LIGHTING

ID	Type	Screen	Location	Total#	Quantity#	Comp FI	All Other FI	Bulb Type	Schedule	Watts per bulb
1	Hard-Wired	By Count - Qualifying	Main	100	10				HERS2011	
2	Hard-Wired	Default New	Exterior						HERS2011	
3	Hard-Wired	Default New	Garage						HERS2011	

## MISC ELECTRICAL LOADS

ID	Type	Screen	Location	Item	Quantity	Catagory	Operating	Schedule	Off Standby
1	Misc Elec Load	Simple Default	Main		1		1	HERS2011	1

## APPLIANCES & LIGHTING SCHEDULES

Appliance Schedule:		HERS2014		Hours											
Schedule Type		1	2	3	4	5	6	7	8	9	10	11	12		
Occupancy peak:	400 Btu	AM	0.930	0.930	0.930	0.930	0.930	0.930	0.930	0.980	0.460	0.270	0.270	0.270	
% Released:	100 %	PM	0.270	0.270	0.270	0.270	0.330	0.610	1.000	1.000	0.930	0.930	0.930	0.930	
refrig peak:	0 W	AM	0.824	0.804	0.784	0.764	0.744	0.734	0.744	0.754	0.764	0.794	0.814	0.854	
% Released:	100 %	PM	0.854	0.864	0.884	0.904	0.925	0.945	0.925	0.915	0.904	0.894	0.874	0.854	
cWash peak:	0 W	AM	0.200	0.100	0.050	0.050	0.050	0.075	0.200	0.375	0.500	0.800	0.950	1.000	
% Released:	30 %	PM	0.875	0.850	0.800	0.625	0.625	0.600	0.575	0.550	0.625	0.700	0.650	0.375	
E-cDry peak:	119 W	AM	0.200	0.100	0.050	0.050	0.050	0.075	0.200	0.375	0.500	0.800	0.950	1.000	
% Released:	15 %	PM	0.875	0.850	0.800	0.625	0.625	0.600	0.575	0.550	0.625	0.700	0.650	0.375	
dWash peak:	0 W	AM	0.139	0.050	0.028	0.024	0.029	0.090	0.169	0.303	0.541	0.594	0.502	0.443	
% Released:	60 %	PM	0.376	0.396	0.334	0.323	0.344	0.448	0.791	1.000	0.800	0.597	0.383	0.281	
E-rOven peak:	122 W	AM	0.057	0.057	0.057	0.057	0.057	0.114	0.171	0.286	0.343	0.343	0.343	0.400	
% Released:	80 %	PM	0.457	0.343	0.286	0.400	0.571	1.000	0.857	0.429	0.286	0.229	0.171	0.114	
TVs peak:	151 W	AM	0.100	0.050	0.050	0.050	0.100	0.200	0.400	0.450	0.400	0.200	0.100	0.100	
% Released:	100 %	PM	0.050	0.050	0.150	0.450	0.850	1.000	0.950	0.800	0.500	0.250	0.150	0.100	

# Building Input Summary Report

## APPLIANCES & LIGHTING SCHEDULES(Continued)

cFan peak:	0 W	AM	0.600	0.600	0.600	0.600	0.600	0.600	0.600	0.250	0.250	0.250	0.250	0.250
% Released:	100 %	PM	0.250	0.250	0.250	0.250	0.250	0.250	0.550	0.600	0.600	0.600	0.600	0.600
lgts-in peak:	545 W	AM	0.160	0.150	0.160	0.180	0.230	0.450	0.420	0.260	0.190	0.160	0.120	0.110
% Released:	100 %	PM	0.160	0.170	0.250	0.270	0.340	0.550	0.600	0.880	1.000	0.880	0.510	0.280
lgts-out peak:	47 W	AM	1.000	1.000	1.000	1.000	1.000	0.750	0.750	0.000	0.000	0.000	0.000	0.000
% Released:	0 %	PM	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.750	0.750	0.750	1.000
lgts-gar peak:	0 W	AM	0.000	0.000	0.000	0.000	0.000	0.500	0.750	1.000	0.750	0.500	0.000	0.000
% Released:	0 %	PM	0.000	0.000	0.500	0.500	0.750	1.000	0.750	0.500	0.000	0.000	0.000	0.000
MEL peak:	184 W	AM	0.500	0.500	0.500	0.750	0.750	0.850	1.000	1.000	1.000	1.000	0.900	0.900
% Released:	90 %	PM	0.900	0.900	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.850	0.750	0.750

# Building Input Summary Report

PROJECT									
Title:	L304AC (slab with insul)			Address type:	Y				
Building Type:	User	Bedrooms:	0	Lot #:					
Owner:	FSEC	Conditioned Area:	1539	Block/SubDivision:					
Builder Name:	James Q. Hammer	Total Stories:	1	PlatBook:	111 Anywhere Lane				
Permit Office:		Worst Case:	No	County:					
Jurisdiction:		Rotate Angle:	0	City, State, Zip:	Colorado Springs, CO,				
Family Type:	Single-family	Cross Ventilation:							
New/Existing:	New (From Plans)	Whole House Fan:							
Year Construct:		Terrain:	Suburban						
Comment:	HERS BESTEST insulated slab case			Shielding:	Suburban				
CLIMATE									
Design Location	Tmy Site	Design Temp	97.5% 2.5%	Int Design Temp	Winter	Summer	Heating Degree Days	Design Moisture	Daily temp Range
CO, COLORADO_SPRINGSTM	CO_COLORADO_SPRINGSTM	7	88	70	75	6114.5	0	High	
UTILITY									
Fuel	Unit	Utility Name		Monthly Fixed Cost	\$/Unit				
Electricity	kWh	EnergyGauge Default		0.00	0.12				
Natural Gas	Therm	EnergyGauge Default		0.00	0.68				
Fuel Oil	Gallon	EnergyGauge Default		0.00	1.10				
Propane	Gallon	EnergyGauge Default		0.00	1.40				
SURROUNDINGS									
Ornt	Type	-----Shade Trees-----			Exist	-----Adjacent Buildings-----			
		Height	Width	Distance		Height	Width	Distance	
N	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
NE	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
E	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
SE	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
S	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
SW	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
W	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
NW	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
BLOCKS									
Number	Name	Area	Volume						
1	Block1	1539	12312						
SPACES									
Number	Name	Area	Volume	Kitchen	Occupants	Bedrooms	Finished	Cooled	Heated
1	Main	1539	12312	Yes	0	0	Yes	Yes	Yes



# Building Input Summary Report

FLOORS														
#	Floor Type	Space	Exposed Perim	Perimeter R-Value	Area	Joist R-Value	Tile	Wood	Carpet					
1	Slab-On-Grade Edge Ins	Main	168	5.4	1539 ft	---	0	0	1					
ROOF														
#	Type	Materials	Roof Area	Gable Area	Roof Color	Solar Absor.	SA Tested	Emitt	Emitt Tested	Deck Insul.	Pitch (deg)			
1	Gable or shed	Composition shingles	1622 ft²	256 ft²	Medium	0.6	No	0.9	No	0	18.4			
ATTIC														
#	Type	Ventilation	Vent Ratio (1 in)	Area	RBS	IRCC								
1	Full attic	Vented	150	1539 ft²	N	N								
CEILING														
#	Ceiling Type	Space	R-Value	Ins. Type	Area	Framing Fraction	Truss Type							
1	Under Attic(Vented)	Main	16.7	Blown	1539.0ft²	0.11	Wood							
WALLS														
#	Ornt	Adjacent To	Wall Type	Space	Cavity R-Value	Width Ft	In	Height Ft	In	Sheathing Area	R-Value	Framing Fraction	Solar Absor.	Below Grade
1	N	Exterior	Frame - Wood	Main	11	57.0	0	8.0	0	456.0ft²		0.25	0.6	0 %
2	S	Exterior	Frame - Wood	Main	11	57.0	0	8.0	0	456.0ft²		0.25	0.6	0 %
3	E	Exterior	Frame - Wood	Main	11	27.0	0	8.0	0	216.0ft²		0.25	0.6	0 %
4	W	Exterior	Frame - Wood	Main	11	27.0	0	8.0	0	216.0ft²		0.25	0.6	0 %
DOORS														
#	Ornt	Adjacent To	Door Type	Space	Storms	U-Value	Width Ft	In	Height Ft	In	Area			
1	N	Exterior	Insulated	Main	None	0.46	3.00	0	6.00	8	20.0ft²			
2	S	Exterior	Insulated	Main	None	0.46	3.00	0	6.00	8	20.0ft²			
WINDOWS														
#	Ornt	Wall ID	Frame	Panes	NFRC	U-Factor	SHGC	Storm	Area	----Overhang----		Interior Shade	Screening	
1	N	1	TIM	Single (Clear)	Yes	1.09	0.70	N	90.0ft²	0.0 ft 0 in	0.0 ft 0 in	None	None	
2	S	2	TIM	Single (Clear)	Yes	1.09	0.70	N	90.0ft²	0.0 ft 0 in	0.0 ft 0 in	None	None	
3	E	3	TIM	Single (Clear)	Yes	1.09	0.70	N	45.0ft²	0.0 ft 0 in	0.0 ft 0 in	None	None	
4	W	4	TIM	Single (Clear)	Yes	1.09	0.70	N	45.0ft²	0.0 ft 0 in	0.0 ft 0 in	None	None	
INFILTRATION														
#	Scope	Method	SLA	CFM50	ELA	EqLA	ACH	ACH50	Space(s)					
1	Wholehouse	Proposed ACH	0.00068	2760	151.51	284.94	0.6700	13.4	All					

# Building Input Summary Report

<b>MASS</b>													
#	Mass Type	Area	Thickness	Furniture Fraction	Space								
1	No Added Mass	0 ft²	0 ft	0.00	Main								
<b>HEATING SYSTEM</b>													
#	System Type	Subtype	AHRI #	Efficiency	Capacity kBtu/hr	---Geothermal HeatPump---		Ducts	Block				
1	Electric Strip Heat	None		COP: 1.00	106.0	Entry	Power	Volt	Current	sys#1	1		
<b>COOLING SYSTEM</b>													
#	System Type	Subtype	AHRI #	Efficiency	Capacity kBtu/hr	Air Flow cfm	SHR	Duct	Block				
1	Central Unit	None		SEER:10	24.4	732	0.75	sys#1	1				
<b>HOT WATER SYSTEM</b>													
#	System Type	Subtype	Location	EF	Cap	Use	SetPnt	Fixture Flow	Pipe Ins.	Pipe length			
	Recirculation System	Recirc Control Type	Loop length	Branch length	Pump power	DWHR	Facilities Connected	Equal Flow	DWHR Eff	Other Credits			
<b>DUCTS</b>													
Duct #	-----Supply-----			-----Return-----			Leakage Type	Air Handler	CFM 25 TOT	CFM 25 OUT	QN	RLF	HVAC # Heat Cool
1	Main	6.0	385 ft²	Main	6.0	77 ft²	Prop. Air Leakage	Main	---	---	0.00	0.60	1 1
<b>MECHANICAL VENTILATION</b>													
Type	Supply CFM	Exhaust CFM	HRV	Fan	Run Time	Heating System	Cooling System						
None	0.0	0.0	0.0	0.0 W	0 %	1 - Electric Strip Heat	1 - Central Unit						
<b>TEMPERATURES</b>													
Programable Thermostat: N						Ceiling Fans: N							
Cooling	<input type="checkbox"/> Jan	<input type="checkbox"/> Feb	<input type="checkbox"/> Mar	<input type="checkbox"/> Apr	<input type="checkbox"/> May	<input type="checkbox"/> Jun	<input type="checkbox"/> Jul	<input type="checkbox"/> Aug	<input type="checkbox"/> Sep	<input type="checkbox"/> Oct	<input type="checkbox"/> Nov	<input type="checkbox"/> Dec	
Heating	<input checked="" type="checkbox"/> Jan	<input checked="" type="checkbox"/> Feb	<input checked="" type="checkbox"/> Mar	<input checked="" type="checkbox"/> Apr	<input checked="" type="checkbox"/> May	<input checked="" type="checkbox"/> Jun	<input checked="" type="checkbox"/> Jul	<input checked="" type="checkbox"/> Aug	<input checked="" type="checkbox"/> Sep	<input checked="" type="checkbox"/> Oct	<input checked="" type="checkbox"/> Nov	<input checked="" type="checkbox"/> Dec	
Venting	<input type="checkbox"/> Jan	<input type="checkbox"/> Feb	<input type="checkbox"/> Mar	<input type="checkbox"/> Apr	<input type="checkbox"/> May	<input type="checkbox"/> Jun	<input type="checkbox"/> Jul	<input type="checkbox"/> Aug	<input type="checkbox"/> Sep	<input type="checkbox"/> Oct	<input type="checkbox"/> Nov	<input type="checkbox"/> Dec	
Thermostat Schedule: BESTEST-heating													
Schedule Type		1	2	3	4	5	6	7	8	9	10	11	12
Cooling (WD)	AM PM	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78
Cooling (WEH)	AM PM	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78

# Building Input Summary Report

## TEMPERATURES(Continued)

Heating (WD)	AM PM	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68
Heating (WEH)	AM PM	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68

## CLOTHES DRYERS

ID	Type	Screen	Location	Quantity	Fuel Type	Make	Model	Schedule	kWhPerYr
1	Dryers	Default New	Main		Electricity			HERS2011	0

## RANGE OVENS

ID	Type	Screen	Location	Type	Fuel Type	Make	Model	Cooktop	Oven
1	Ranges	Default New	Main	Combo	Elec			Elec Flat Coil	Not Convec

## HARD WIRED LIGHTING

ID	Type	Screen	Location	Total#	Quantity#	Comp FI	All Other FI	Bulb Type	Schedule	Watts per bulb
1	Hard-Wired	By Count - Qualifying	Main	100	10				HERS2011	
2	Hard-Wired	Default New	Exterior						HERS2011	
3	Hard-Wired	Default New	Garage						HERS2011	

## MISC ELECTRICAL LOADS

ID	Type	Screen	Location	Item	Quantity	Catagory	Operating	Schedule	Off Standby
1	Misc Elec Load	Simple Default	Main		1		1	HERS2011	1

## APPLIANCES & LIGHTING SCHEDULES

Appliance Schedule:		HERS2014		Hours											
Schedule Type		1	2	3	4	5	6	7	8	9	10	11	12		
Occupancy peak:	400 Btu	AM	0.930	0.930	0.930	0.930	0.930	0.930	0.930	0.980	0.460	0.270	0.270	0.270	
% Released:	100 %	PM	0.270	0.270	0.270	0.270	0.330	0.610	1.000	1.000	0.930	0.930	0.930	0.930	
refrig peak:	0 W	AM	0.824	0.804	0.784	0.764	0.744	0.734	0.744	0.754	0.764	0.794	0.814	0.854	
% Released:	100 %	PM	0.854	0.864	0.884	0.904	0.925	0.945	0.925	0.915	0.904	0.894	0.874	0.854	
cWash peak:	0 W	AM	0.200	0.100	0.050	0.050	0.050	0.075	0.200	0.375	0.500	0.800	0.950	1.000	
% Released:	30 %	PM	0.875	0.850	0.800	0.625	0.625	0.600	0.575	0.550	0.625	0.700	0.650	0.375	
E-cDry peak:	119 W	AM	0.200	0.100	0.050	0.050	0.050	0.075	0.200	0.375	0.500	0.800	0.950	1.000	
% Released:	15 %	PM	0.875	0.850	0.800	0.625	0.625	0.600	0.575	0.550	0.625	0.700	0.650	0.375	
dWash peak:	0 W	AM	0.139	0.050	0.028	0.024	0.029	0.090	0.169	0.303	0.541	0.594	0.502	0.443	
% Released:	60 %	PM	0.376	0.396	0.334	0.323	0.344	0.448	0.791	1.000	0.800	0.597	0.383	0.281	
E-rOven peak:	122 W	AM	0.057	0.057	0.057	0.057	0.057	0.114	0.171	0.286	0.343	0.343	0.343	0.400	
% Released:	80 %	PM	0.457	0.343	0.286	0.400	0.571	1.000	0.857	0.429	0.286	0.229	0.171	0.114	
TVs peak:	151 W	AM	0.100	0.050	0.050	0.050	0.100	0.200	0.400	0.450	0.400	0.200	0.100	0.100	
% Released:	100 %	PM	0.050	0.050	0.150	0.450	0.850	1.000	0.950	0.800	0.500	0.250	0.150	0.100	

# Building Input Summary Report

## APPLIANCES & LIGHTING SCHEDULES(Continued)

cFan peak:	0 W	AM	0.600	0.600	0.600	0.600	0.600	0.600	0.600	0.250	0.250	0.250	0.250	0.250
% Released:	100 %	PM	0.250	0.250	0.250	0.250	0.250	0.250	0.550	0.600	0.600	0.600	0.600	0.600
lgts-in peak:	545 W	AM	0.160	0.150	0.160	0.180	0.230	0.450	0.420	0.260	0.190	0.160	0.120	0.110
% Released:	100 %	PM	0.160	0.170	0.250	0.270	0.340	0.550	0.600	0.880	1.000	0.880	0.510	0.280
lgts-out peak:	47 W	AM	1.000	1.000	1.000	1.000	1.000	0.750	0.750	0.000	0.000	0.000	0.000	0.000
% Released:	0 %	PM	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.750	0.750	0.750	1.000
lgts-gar peak:	0 W	AM	0.000	0.000	0.000	0.000	0.000	0.500	0.750	1.000	0.750	0.500	0.000	0.000
% Released:	0 %	PM	0.000	0.000	0.500	0.500	0.750	1.000	0.750	0.500	0.000	0.000	0.000	0.000
MEL peak:	184 W	AM	0.500	0.500	0.500	0.750	0.750	0.850	1.000	1.000	1.000	1.000	0.900	0.900
% Released:	90 %	PM	0.900	0.900	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.850	0.750	0.750

# Building Input Summary Report

PROJECT									
Title:	L322AC (basement)			Address type:	Y				
Building Type:	User	Bedrooms:	0	Lot #:					
Owner:	FSEC	Conditioned Area:	3078	Block/SubDivision:					
Builder Name:	James Q. Hammer	Total Stories:	1	PlatBook:	111 Anywhere Lane				
Permit Office:		Worst Case:	No	County:					
Jurisdiction:		Rotate Angle:	0	City, State, Zip:	Colorado Springs, CO,				
Family Type:	Single-family	Cross Ventilation:							
New/Existing:	New (From Plans)	Whole House Fan:							
Year Construct:		Terrain:	Suburban						
Comment:	HERS BESTEST basement case			Shielding:	Suburban				
CLIMATE									
Design Location	Tmy Site	Design Temp	97.5% 2.5%	Int Design Temp	Winter	Summer	Heating Degree Days	Design Moisture	Daily temp Range
CO, COLORADO_SPRINGSTM	CO_COLORADO_SPRINGSTM	7	88	70	75	6114.5	0	High	
UTILITY									
Fuel	Unit	Utility Name		Monthly Fixed Cost	\$/Unit				
Electricity	kWh	EnergyGauge Default		0.00	0.12				
Natural Gas	Therm	EnergyGauge Default		0.00	0.68				
Fuel Oil	Gallon	EnergyGauge Default		0.00	1.10				
Propane	Gallon	EnergyGauge Default		0.00	1.40				
SURROUNDINGS									
Ornt	Type	-----Shade Trees-----			Exist	-----Adjacent Buildings-----			
		Height	Width	Distance		Height	Width	Distance	
N	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
NE	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
E	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
SE	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
S	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
SW	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
W	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
NW	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
BLOCKS									
Number	Name	Area	Volume						
1	Block1	3078	23469.75						
SPACES									
Number	Name	Area	Volume	Kitchen	Occupants	Bedrooms	Finished	Cooled	Heated
1	Main	1539	12312	Yes	0	0	Yes	Yes	Yes
2	BSMT-2	1539	11157.75	No	0	0	No	Yes	Yes

# Building Input Summary Report

FLOORS													
#	Floor Type		Space	Exposed Perim	Perimeter R-Value	Area	Joist R-Value	Tile	Wood	Carpet			
1	Floor Over Other Space		Main	---	---	1539 ft		1	0	0			
2	Slab-Below-Grade		BSMT-2	---	---	1539 ft		1	0	0			

ROOF											
#	Type	Materials	Roof Area	Gable Area	Roof Color	Solar Absor.	SA Tested	Emitt	Emitt Tested	Deck Insul.	Pitch (deg)
1	Gable or shed	Composition shingles	1622 ft²	256 ft²	Medium	0.6	No	0.9	No	0	18.4

ATTIC						
#	Type	Ventilation	Vent Ratio (1 in)	Area	RBS	IRCC
1	Full attic	Vented	150	1539 ft²	N	N

CEILING							
#	Ceiling Type	Space	R-Value	Ins. Type	Area	Framing Fraction	Truss Type
1	Under Attic(Vented)	Main	16.7	Blown	1539.0ft²	0.11	Wood

WALLS														
#	Adjacent Ornt	To	Wall Type	Space	Cavity R-Value	Width Ft	In	Height Ft	In	Sheathing Area	R-Value	Framing Fraction	Solar Absor.	Below Grade
1	N	Exterior	Frame - Wood	Main	11	57.0	0	8.0	0	456.0ft²		0.25	0.6	0 %
2	S	Exterior	Frame - Wood	Main	11	57.0	0	8.0	0	456.0ft²		0.25	0.6	0 %
3	E	Exterior	Frame - Wood	Main	11	27.0	0	8.0	0	216.0ft²		0.25	0.6	0 %
4	W	Exterior	Frame - Wood	Main	11	27.0	0	8.0	0	216.0ft²		0.25	0.6	0 %
5	N	Exterior	Frame - Wood	BSMT-2	1.87	57.0	0	0.0	9	42.8ft²		0	0.6	0 %
6	S	Exterior	Frame - Wood	BSMT-2	1.87	57.0	0	0.0	9	42.8ft²		0	0.6	0 %
7	E	Exterior	Frame - Wood	BSMT-2	1.87	27.0	0	0.0	9	20.3ft²		0	0.6	0 %
8	W	Exterior	Frame - Wood	BSMT-2	1.87	27.0	0	0.0	9	20.3ft²		0	0.6	0 %
9	N	Exterior	Concrete - 6 inch	BSMT-2	0	57.0	0	7.3	0	413.3ft²	0	90.80	0.41380835	938 %
10	S	Exterior	Concrete - 6 inch	BSMT-2	0	57.0	0	7.3	0	413.3ft²	0	90.80	0.41380835	938 %
11	E	Exterior	Concrete - 6 inch	BSMT-2	0	27.0	0	7.3	0	195.8ft²	0	90.80	0.41380835	938 %
12	W	Exterior	Concrete - 6 inch	BSMT-2	0	27.0	0	7.3	0	195.8ft²	0	90.80	0.41380835	938 %

DOORS											
#	Ornt	Adjacent To	Door Type	Space	Storms	U-Value	Width Ft	In	Height Ft	In	Area
1	N	Exterior	Insulated	Main	None	0.46	3.00	0	6.00	8	20.0ft²
2	S	Exterior	Insulated	Main	None	0.46	3.00	0	6.00	8	20.0ft²

WINDOWS													
#	Wall Ornt	ID	Frame	Panes	NFRC	U-Factor	SHGC	Storm	Area	-----Overhang----- Depth	Separation	Interior Shade	Screening
1	N	1	TIM	Single (Clear)	Yes	1.09	0.70	N	90.0ft²	0.0 ft 0 in	0.0 ft 0 in	None	None
2	S	2	TIM	Single (Clear)	Yes	1.09	0.70	N	90.0ft²	0.0 ft 0 in	0.0 ft 0 in	None	None
3	E	3	TIM	Single (Clear)	Yes	1.09	0.70	N	45.0ft²	0.0 ft 0 in	0.0 ft 0 in	None	None

# Building Input Summary Report

## WINDOWS(Continued)

4	W	4	TIM	Single (Clear)	Yes	1.09	0.70	N	45.0ft²	0.0 ft 0 in	0.0 ft 0 in	None	None
---	---	---	-----	----------------	-----	------	------	---	---------	-------------	-------------	------	------

## INFILTRATION

#	Scope	Method	SLA	CFM50	ELA	EqLA	ACH	ACH50	Space(s)
1	Wholehouse	Proposed ACH	0.00035	2801	153.77	289.20	0.3400	7.2	All

## MASS

#	Mass Type	Area	Thickness	Furniture Fraction	Space
1	No Added Mass	0 ft²	0 ft	0.00	Main
2	No Added Mass	0 ft²	0 ft	0.00	BSMT-2

## HEATING SYSTEM

#	System Type	Subtype	AHRI #	Efficiency	Capacity kBtu/hr	---Geothermal HeatPump---			Ducts	Block
						Entry	Power	Volt	Current	
1	Electric Strip Heat	None		COP: 1.00	140.0		0.00	0.00	0.00	sys#1 1

## COOLING SYSTEM

#	System Type	Subtype	AHRI #	Efficiency	Capacity kBtu/hr	Air Flow cfm	SHR	Duct	Block
1	Central Unit	None		SEER:10	25.0	750	0.75	sys#1	1

## HOT WATER SYSTEM

#	System Type	Subtype	Location	EF	Cap	Use	SetPnt	Fixture Flow	Pipe Ins.	Pipe length
	Recirculation System	Recirc Control Type	Loop length	Branch length	Pump power	DWHR	Facilities Connected	Equal Flow	DWHR Eff	Other Credits

## DUCTS

Duct #	-----Supply-----			-----Return-----			Leakage Type	Air Handler	CFM 25 TOT	CFM 25 OUT	QN	RLF	HVAC # Heat Cool	
1	Main	6.0	385 ft²	Main	6.0	77 ft²	Prop. Air Leakage	Main	---	---	0.00	0.60	1	1

## MECHANICAL VENTILATION

Type	Supply CFM	Exhaust CFM	HRV	Fan	Run Time	Heating System	Cooling System
None	0.0	0.0	0.0	0.0 W	0 %	1 - Electric Strip Heat	1 - Central Unit

# Building Input Summary Report

TEMPERATURES														
Programable Thermostat: N				Ceiling Fans: N										
Cooling	<input type="checkbox"/> Jan	<input type="checkbox"/> Feb	<input type="checkbox"/> Mar	<input type="checkbox"/> Apr	<input type="checkbox"/> May	<input type="checkbox"/> Jun	<input type="checkbox"/> Jul	<input type="checkbox"/> Aug	<input type="checkbox"/> Sep	<input type="checkbox"/> Oct	<input type="checkbox"/> Nov	<input type="checkbox"/> Dec		
Heating	<input checked="" type="checkbox"/> Jan	<input checked="" type="checkbox"/> Feb	<input checked="" type="checkbox"/> Mar	<input checked="" type="checkbox"/> Apr	<input checked="" type="checkbox"/> May	<input checked="" type="checkbox"/> Jun	<input checked="" type="checkbox"/> Jul	<input checked="" type="checkbox"/> Aug	<input checked="" type="checkbox"/> Sep	<input checked="" type="checkbox"/> Oct	<input checked="" type="checkbox"/> Nov	<input checked="" type="checkbox"/> Dec		
Venting	<input type="checkbox"/> Jan	<input type="checkbox"/> Feb	<input type="checkbox"/> Mar	<input type="checkbox"/> Apr	<input type="checkbox"/> May	<input type="checkbox"/> Jun	<input type="checkbox"/> Jul	<input type="checkbox"/> Aug	<input type="checkbox"/> Sep	<input type="checkbox"/> Oct	<input type="checkbox"/> Nov	<input type="checkbox"/> Dec		
Thermostat Schedule: BESTEST-heating														
Hours														
Schedule Type	1	2	3	4	5	6	7	8	9	10	11	12		
Cooling (WD)	AM PM	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78
Cooling (WEH)	AM PM	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78
Heating (WD)	AM PM	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68
Heating (WEH)	AM PM	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68
CLOTHES DRYERS														
ID	Type	Screen	Location	Quantity	Fuel Type	Make	Model	Schedule	kWhPerYr					
1	Dryers	Default New	Main		Electricity			HERS2011	0					
RANGE OVENS														
ID	Type	Screen	Location	Type	Fuel Type	Make	Model	Cooktop	Oven					
1	Ranges	Default New	Main	Combo	Elec			Elec Flat Coil	Not Convec					
HARD WIRED LIGHTING														
ID	Type	Screen	Location	Total#	Quantity#	Comp FI	All Other FI	Bulb Type	Schedule	Watts per bulb				
1	Hard-Wired	By Count - Qualifying	Main	100	10				HERS2011					
2	Hard-Wired	Default New	Exterior						HERS2011					
3	Hard-Wired	Default New	Garage						HERS2011					
MISC ELECTRICAL LOADS														
ID	Type	Screen	Location	Item	Quantity	Catagory	Operating	Schedule	Off Standby					
1	Misc Elec Load	Simple Default	Main		1		1	HERS2011	1					



# Building Input Summary Report

APPLIANCES & LIGHTING SCHEDULES														
Appliance Schedule: HERS2014			Hours											
Schedule Type			1	2	3	4	5	6	7	8	9	10	11	12
Occupancy peak:	400 Btu	AM	0.930	0.930	0.930	0.930	0.930	0.930	0.930	0.980	0.460	0.270	0.270	0.270
% Released:	100 %	PM	0.270	0.270	0.270	0.270	0.330	0.610	1.000	1.000	0.930	0.930	0.930	0.930
refrig peak:	0 W	AM	0.824	0.804	0.784	0.764	0.744	0.734	0.744	0.754	0.764	0.794	0.814	0.854
% Released:	100 %	PM	0.854	0.864	0.884	0.904	0.925	0.945	0.925	0.915	0.904	0.894	0.874	0.854
cWash peak:	0 W	AM	0.200	0.100	0.050	0.050	0.050	0.075	0.200	0.375	0.500	0.800	0.950	1.000
% Released:	30 %	PM	0.875	0.850	0.800	0.625	0.625	0.600	0.575	0.550	0.625	0.700	0.650	0.375
E-cDry peak:	119 W	AM	0.200	0.100	0.050	0.050	0.050	0.075	0.200	0.375	0.500	0.800	0.950	1.000
% Released:	15 %	PM	0.875	0.850	0.800	0.625	0.625	0.600	0.575	0.550	0.625	0.700	0.650	0.375
dWash peak:	0 W	AM	0.139	0.050	0.028	0.024	0.029	0.090	0.169	0.303	0.541	0.594	0.502	0.443
% Released:	60 %	PM	0.376	0.396	0.334	0.323	0.344	0.448	0.791	1.000	0.800	0.597	0.383	0.281
E-rOven peak:	122 W	AM	0.057	0.057	0.057	0.057	0.057	0.114	0.171	0.286	0.343	0.343	0.343	0.400
% Released:	80 %	PM	0.457	0.343	0.286	0.400	0.571	1.000	0.857	0.429	0.286	0.229	0.171	0.114
TVs peak:	151 W	AM	0.100	0.050	0.050	0.050	0.100	0.200	0.400	0.450	0.400	0.200	0.100	0.100
% Released:	100 %	PM	0.050	0.050	0.150	0.450	0.850	1.000	0.950	0.800	0.500	0.250	0.150	0.100
cFan peak:	0 W	AM	0.600	0.600	0.600	0.600	0.600	0.600	0.600	0.250	0.250	0.250	0.250	0.250
% Released:	100 %	PM	0.250	0.250	0.250	0.250	0.250	0.250	0.550	0.600	0.600	0.600	0.600	0.600
Igts-in peak:	943 W	AM	0.160	0.150	0.160	0.180	0.230	0.450	0.420	0.260	0.190	0.160	0.120	0.110
% Released:	100 %	PM	0.160	0.170	0.250	0.270	0.340	0.550	0.600	0.880	1.000	0.880	0.510	0.280
Igts-out peak:	68 W	AM	1.000	1.000	1.000	1.000	1.000	0.750	0.750	0.000	0.000	0.000	0.000	0.000
% Released:	0 %	PM	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.750	0.750	0.750	1.000
Igts-gar peak:	0 W	AM	0.000	0.000	0.000	0.000	0.000	0.500	0.750	1.000	0.750	0.500	0.000	0.000
% Released:	0 %	PM	0.000	0.000	0.500	0.500	0.750	1.000	0.750	0.500	0.000	0.000	0.000	0.000
MEL peak:	369 W	AM	0.500	0.500	0.500	0.750	0.750	0.850	1.000	1.000	1.000	1.000	0.900	0.900
% Released:	90 %	PM	0.900	0.900	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.850	0.750	0.750

# Building Input Summary Report

PROJECT										
Title:	L324AC (basement-insulated)				Address type:	Y				
Building Type:	User	Bedrooms:	0		Lot #:					
Owner:	FSEC	Conditioned Area:	3078		Block/SubDivision:					
Builder Name:	James Q. Hammer	Total Stories:	1		PlatBook:	111 Anywhere Lane				
Permit Office:		Worst Case:	No		County:					
Jurisdiction:		Rotate Angle:	0		City, State, Zip:	Colorado Springs, CO,				
Family Type:	Single-family	Cross Ventilation:								
New/Existing:	New (From Plans)	Whole House Fan:								
Year Construct:		Terrain:	Suburban							
Comment:	HERS BESTEST insulated basement case				Shielding:	Suburban				
CLIMATE										
Design Location	Tmy Site	Design Temp	97.5%	2.5%	Int Design Temp	Winter	Summer	Heating Degree Days	Design Moisture	Daily temp Range
CO, COLORADO_SPRINGSTM	CO_COLORADO_SPRINGSTM	7	88		70	75	6114.5	0		High
UTILITY										
Fuel	Unit	Utility Name					Monthly Fixed Cost	\$/Unit		
Electricity	kWh	EnergyGauge Default					0.00	0.12		
Natural Gas	Therm	EnergyGauge Default					0.00	0.68		
Fuel Oil	Gallon	EnergyGauge Default					0.00	1.10		
Propane	Gallon	EnergyGauge Default					0.00	1.40		
SURROUNDINGS										
Ornt	Type	-----Shade Trees-----			Exist	-----Adjacent Buildings-----				
		Height	Width	Distance		Height	Width	Distance		
N	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
NE	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
E	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
SE	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
S	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
SW	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
W	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
NW	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
BLOCKS										
Number	Name	Area	Volume							
1	Block1	3078	23469.75							
SPACES										
Number	Name	Area	Volume	Kitchen	Occupants	Bedrooms	Finished	Cooled	Heated	
1	Main	1539	12312	Yes	0	0	Yes	Yes	Yes	
2	BSMT-2	1539	11157.75	No	0	0	Yes	Yes	Yes	

# Building Input Summary Report

FLOORS													
#	Floor Type		Space	Exposed Perim	Perimeter R-Value	Area	Joist R-Value	Tile	Wood	Carpet			
1	Floor Over Other Space		Main	---	---	1539 ft		1	0	0			
2	Slab-Below-Grade		BSMT-2	---	---	1539 ft		1	0	0			

ROOF											
#	Type	Materials	Roof Area	Gable Area	Roof Color	Solar Absor.	SA Tested	Emitt	Emitt Tested	Deck Insul.	Pitch (deg)
1	Gable or shed	Composition shingles	1622 ft²	256 ft²	Medium	0.6	No	0.9	No	0	18.4

ATTIC						
#	Type	Ventilation	Vent Ratio (1 in)	Area	RBS	IRCC
1	Full attic	Vented	150	1539 ft²	N	N

CEILING							
#	Ceiling Type	Space	R-Value	Ins. Type	Area	Framing Fraction	Truss Type
1	Under Attic(Vented)	Main	16.7	Blown	1539.0ft²	0.11	Wood

WALLS														
#	Adjacent Ornt	To	Wall Type	Space	Cavity R-Value	Width Ft	In	Height Ft	In	Sheathing Area	R-Value	Framing Fraction	Solar Absor.	Below Grade
1	N	Exterior	Frame - Wood	Main	11	57.0	0	8.0	0	456.0ft²		0.25	0.6	0 %
2	S	Exterior	Frame - Wood	Main	11	57.0	0	8.0	0	456.0ft²		0.25	0.6	0 %
3	E	Exterior	Frame - Wood	Main	11	27.0	0	8.0	0	216.0ft²		0.25	0.6	0 %
4	W	Exterior	Frame - Wood	Main	11	27.0	0	8.0	0	216.0ft²		0.25	0.6	0 %
5	N	Exterior	Frame - Wood	BSMT-2	12.87	57.0	0	0.0	9	42.8ft²		0.1	0.6	0 %
6	S	Exterior	Frame - Wood	BSMT-2	12.87	57.0	0	0.0	9	42.8ft²		0.1	0.6	0 %
7	E	Exterior	Frame - Wood	BSMT-2	12.87	27.0	0	0.0	9	20.3ft²		0.1	0.6	0 %
8	W	Exterior	Frame - Wood	BSMT-2	12.87	27.0	0	0.0	9	20.3ft²		0.1	0.6	0 %
9	N	Exterior	Concrete - 6 inch	BSMT-2	11	57.0	0	7.3	0	413.3ft²	0	90.80	0.41380835	938 %
10	S	Exterior	Concrete - 6 inch	BSMT-2	11	57.0	0	7.3	0	413.3ft²	0	90.80	0.41380835	938 %
11	E	Exterior	Concrete - 6 inch	BSMT-2	11	27.0	0	7.3	0	195.8ft²	0	90.80	0.41380835	938 %
12	W	Exterior	Concrete - 6 inch	BSMT-2	11	27.0	0	7.3	0	195.8ft²	0	90.80	0.41380835	938 %

DOORS											
#	Ornt	Adjacent To	Door Type	Space	Storms	U-Value	Width Ft	In	Height Ft	In	Area
1	N	Exterior	Insulated	Main	None	0.46	3.00	0	6.00	8	20.0ft²
2	S	Exterior	Insulated	Main	None	0.46	3.00	0	6.00	8	20.0ft²

WINDOWS													
#	Wall Ornt	ID	Frame	Panes	NFRC	U-Factor	SHGC	Storm	Area	-----Overhang----- Depth	Separation	Interior Shade	Screening
1	N	1	TIM	Single (Clear)	Yes	1.09	0.70	N	90.0ft²	0.0 ft 0 in	0.0 ft 0 in	None	None
2	S	2	TIM	Single (Clear)	Yes	1.09	0.70	N	90.0ft²	0.0 ft 0 in	0.0 ft 0 in	None	None
3	E	3	TIM	Single (Clear)	Yes	1.09	0.70	N	45.0ft²	0.0 ft 0 in	0.0 ft 0 in	None	None

# Building Input Summary Report

## WINDOWS(Continued)

4	W	4	TIM	Single (Clear)	Yes	1.09	0.70	N	45.0ft²	0.0 ft 0 in	0.0 ft 0 in	None	None
---	---	---	-----	----------------	-----	------	------	---	---------	-------------	-------------	------	------

## INFILTRATION

#	Scope	Method	SLA	CFM50	ELA	EqLA	ACH	ACH50	Space(s)
1	Wholehouse	Proposed ACH	0.00035	2801	153.77	289.20	0.3400	7.2	All

## MASS

#	Mass Type	Area	Thickness	Furniture Fraction	Space
1	No Added Mass	0 ft²	0 ft	0.00	Main
2	No Added Mass	0 ft²	0 ft	0.00	BSMT-2

## HEATING SYSTEM

#	System Type	Subtype	AHRI #	Efficiency	Capacity kBtu/hr	---Geothermal HeatPump---			Ducts	Block
						Entry	Power	Volt	Current	
1	Electric Strip Heat	None		COP: 1.00	130.0		0.00	0.00	0.00	sys#1 1

## COOLING SYSTEM

#	System Type	Subtype	AHRI #	Efficiency	Capacity kBtu/hr	Air Flow cfm	SHR	Duct	Block
1	Central Unit	None		SEER:10	24.8	744	0.75	sys#1	1

## HOT WATER SYSTEM

#	System Type	Subtype	Location	EF	Cap	Use	SetPnt	Fixture Flow	Pipe Ins.	Pipe length
	Recirculation System	Recirc Control Type	Loop length	Branch length	Pump power	DWHR	Facilities Connected	Equal Flow	DWHR Eff	Other Credits

## DUCTS

Duct #	-----Supply-----			-----Return-----			Leakage Type	Air Handler	CFM 25 TOT	CFM 25 OUT	QN	RLF	HVAC # Heat Cool	
1	Main	6.0	385 ft²	Main	6.0	77 ft²	Prop. Air Leakage	Main	---	---	0.00	0.60	1	1

## MECHANICAL VENTILATION

Type	Supply CFM	Exhaust CFM	HRV	Fan	Run Time	Heating System	Cooling System
None	0.0	0.0	0.0	0.0 W	0 %	1 - Electric Strip Heat	1 - Central Unit

# Building Input Summary Report

<b>TEMPERATURES</b>														
Programable Thermostat: N				Ceiling Fans: N										
Cooling	<input type="checkbox"/> Jan	<input type="checkbox"/> Feb	<input type="checkbox"/> Mar	<input type="checkbox"/> Apr	<input type="checkbox"/> May	<input type="checkbox"/> Jun	<input type="checkbox"/> Jul	<input type="checkbox"/> Aug	<input type="checkbox"/> Sep	<input type="checkbox"/> Oct	<input type="checkbox"/> Nov	<input type="checkbox"/> Dec		
Heating	<input checked="" type="checkbox"/> Jan	<input checked="" type="checkbox"/> Feb	<input checked="" type="checkbox"/> Mar	<input checked="" type="checkbox"/> Apr	<input checked="" type="checkbox"/> May	<input checked="" type="checkbox"/> Jun	<input checked="" type="checkbox"/> Jul	<input checked="" type="checkbox"/> Aug	<input checked="" type="checkbox"/> Sep	<input checked="" type="checkbox"/> Oct	<input checked="" type="checkbox"/> Nov	<input checked="" type="checkbox"/> Dec		
Venting	<input type="checkbox"/> Jan	<input type="checkbox"/> Feb	<input type="checkbox"/> Mar	<input type="checkbox"/> Apr	<input type="checkbox"/> May	<input type="checkbox"/> Jun	<input type="checkbox"/> Jul	<input type="checkbox"/> Aug	<input type="checkbox"/> Sep	<input type="checkbox"/> Oct	<input type="checkbox"/> Nov	<input type="checkbox"/> Dec		
Thermostat Schedule: BESTEST-heating														
Schedule Type		Hours												
		1	2	3	4	5	6	7	8	9	10	11	12	
Cooling (WD)	AM	78	78	78	78	78	78	78	78	78	78	78	78	78
	PM	78	78	78	78	78	78	78	78	78	78	78	78	78
Cooling (WEH)	AM	78	78	78	78	78	78	78	78	78	78	78	78	78
	PM	78	78	78	78	78	78	78	78	78	78	78	78	78
Heating (WD)	AM	68	68	68	68	68	68	68	68	68	68	68	68	68
	PM	68	68	68	68	68	68	68	68	68	68	68	68	68
Heating (WEH)	AM	68	68	68	68	68	68	68	68	68	68	68	68	68
	PM	68	68	68	68	68	68	68	68	68	68	68	68	68
<b>CLOTHES DRYERS</b>														
ID	Type	Screen	Location	Quantity	Fuel Type	Make	Model	Schedule	kWhPerYr					
1	Dryers	Default New	Main		Electricity			HERS2011	0					
<b>RANGE OVENS</b>														
ID	Type	Screen	Location	Type	Fuel Type	Make	Model	Cooktop	Oven					
1	Ranges	Default New	Main	Combo	Elec			Elec Flat Coil	Not Convec					
<b>HARD WIRED LIGHTING</b>														
ID	Type	Screen	Location	Total#	Quantity#	Comp FI	All Other FI	Bulb Type	Schedule	Watts per bulb				
1	Hard-Wired	By Count - Qualifying	Main	100	10				HERS2011					
2	Hard-Wired	Default New	Exterior						HERS2011					
3	Hard-Wired	Default New	Garage						HERS2011					
<b>MISC ELECTRICAL LOADS</b>														
ID	Type	Screen	Location	Item	Quantity	Catagory	Operating	Schedule	Off Standby					
1	Misc Elec Load	Simple Default	Main		1		1	HERS2011	1					

# Building Input Summary Report

APPLIANCES & LIGHTING SCHEDULES														
Appliance Schedule: HERS2014			Hours											
Schedule Type			1	2	3	4	5	6	7	8	9	10	11	12
Occupancy peak:	400 Btu	AM	0.930	0.930	0.930	0.930	0.930	0.930	0.930	0.980	0.460	0.270	0.270	0.270
% Released:	100 %	PM	0.270	0.270	0.270	0.270	0.330	0.610	1.000	1.000	0.930	0.930	0.930	0.930
refrig peak:	0 W	AM	0.824	0.804	0.784	0.764	0.744	0.734	0.744	0.754	0.764	0.794	0.814	0.854
% Released:	100 %	PM	0.854	0.864	0.884	0.904	0.925	0.945	0.925	0.915	0.904	0.894	0.874	0.854
cWash peak:	0 W	AM	0.200	0.100	0.050	0.050	0.050	0.075	0.200	0.375	0.500	0.800	0.950	1.000
% Released:	30 %	PM	0.875	0.850	0.800	0.625	0.625	0.600	0.575	0.550	0.625	0.700	0.650	0.375
E-cDry peak:	119 W	AM	0.200	0.100	0.050	0.050	0.050	0.075	0.200	0.375	0.500	0.800	0.950	1.000
% Released:	15 %	PM	0.875	0.850	0.800	0.625	0.625	0.600	0.575	0.550	0.625	0.700	0.650	0.375
dWash peak:	0 W	AM	0.139	0.050	0.028	0.024	0.029	0.090	0.169	0.303	0.541	0.594	0.502	0.443
% Released:	60 %	PM	0.376	0.396	0.334	0.323	0.344	0.448	0.791	1.000	0.800	0.597	0.383	0.281
E-rOven peak:	122 W	AM	0.057	0.057	0.057	0.057	0.057	0.114	0.171	0.286	0.343	0.343	0.343	0.400
% Released:	80 %	PM	0.457	0.343	0.286	0.400	0.571	1.000	0.857	0.429	0.286	0.229	0.171	0.114
TVs peak:	151 W	AM	0.100	0.050	0.050	0.050	0.100	0.200	0.400	0.450	0.400	0.200	0.100	0.100
% Released:	100 %	PM	0.050	0.050	0.150	0.450	0.850	1.000	0.950	0.800	0.500	0.250	0.150	0.100
cFan peak:	0 W	AM	0.600	0.600	0.600	0.600	0.600	0.600	0.600	0.250	0.250	0.250	0.250	0.250
% Released:	100 %	PM	0.250	0.250	0.250	0.250	0.250	0.250	0.550	0.600	0.600	0.600	0.600	0.600
Igts-in peak:	943 W	AM	0.160	0.150	0.160	0.180	0.230	0.450	0.420	0.260	0.190	0.160	0.120	0.110
% Released:	100 %	PM	0.160	0.170	0.250	0.270	0.340	0.550	0.600	0.880	1.000	0.880	0.510	0.280
Igts-out peak:	68 W	AM	1.000	1.000	1.000	1.000	1.000	0.750	0.750	0.000	0.000	0.000	0.000	0.000
% Released:	0 %	PM	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.750	0.750	0.750	1.000
Igts-gar peak:	0 W	AM	0.000	0.000	0.000	0.000	0.000	0.500	0.750	1.000	0.750	0.500	0.000	0.000
% Released:	0 %	PM	0.000	0.000	0.500	0.500	0.750	1.000	0.750	0.500	0.000	0.000	0.000	0.000
MEL peak:	369 W	AM	0.500	0.500	0.500	0.750	0.750	0.850	1.000	1.000	1.000	1.000	0.900	0.900
% Released:	90 %	PM	0.900	0.900	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.850	0.750	0.750

**Appendix A-2**  
**ASHRAE Standard 140 Las Vegas Cooling Load Reports**

**ASHRAE Standard 140 – Las Vegas**

L100AL (base case)

CoolingLoad = 54.61 HeatingLoad = 0.00

L110AL (high infiltration)

CoolingLoad = 56.72 HeatingLoad = 0.00

L120AL (improved insulation)

CoolingLoad = 49.05 HeatingLoad = 0.00

L130AL (low-e windows)

CoolingLoad = 38.51 HeatingLoad = 0.00

L140AL (zero windows)

CoolingLoad = 25.48 HeatingLoad = 0.00

L150AL (all south glass)

CoolingLoad = 70.74 HeatingLoad = 0.00

L155AL (south glass with OH)

CoolingLoad = 56.51 HeatingLoad = 0.00

L160AL (east-west windows)

CoolingLoad = 64.32 HeatingLoad = 0.00

L170AL (no internal gains)

CoolingLoad = 43.18 HeatingLoad = 0.00

L200AL (inefficient)

CoolingLoad = 67.56 HeatingLoad = 0.00

L202AL (low alpha)

CoolingLoad = 55.21 HeatingLoad = 0.00



# Building Input Summary Report

PROJECT										
Title:	L100AL (base case)			Address type:			Y			
Building Type:	User	Bedrooms:	0		Lot #:					
Owner:	FSEC	Conditioned Area:	1539		Block/SubDivision:					
Builder Name:	James Q. Hammer	Total Stories:	1		PlatBook:		111 Anywhere Lane			
Permit Office:		Worst Case:	No		County:					
Jurisdiction:		Rotate Angle:	0		City, State, Zip:		Las Vegas, NV,			
Family Type:	Single-family	Cross Ventilation:								
New/Existing:	New (From Plans)	Whole House Fan:								
Year Construct:		Terrain:	Suburban							
Comment:	HERS BESTEST basecase home			Shielding:		Suburban				
CLIMATE										
Design Location	Tmy Site	Design Temp	97.5%	2.5%	Int Design Temp	Winter	Summer	Heating Degree Days	Design Moisture	Daily temp Range
NV, LAS_VEGASTMY1	NV_LAS_VEGASTMY1	32	105		70	75	2300.5	0		High
UTILITY										
Fuel	Unit	Utility Name					Monthly Fixed Cost	\$/Unit		
Electricity	kWh	EnergyGauge Default					0.00	0.12		
Natural Gas	Therm	EnergyGauge Default					0.00	1.39		
Fuel Oil	Gallon	EnergyGauge Default					0.00	2.50		
Propane	Gallon	EnergyGauge Default					0.00	2.27		
SURROUNDINGS										
Ornt	Type	-----Shade Trees-----			Exist	-----Adjacent Buildings-----				
		Height	Width	Distance		Height	Width	Distance		
N	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
NE	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
E	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
SE	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
S	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
SW	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
W	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
NW	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
BLOCKS										
Number	Name	Area	Volume							
1	Block1	1539	12312							
SPACES										
Number	Name	Area	Volume	Kitchen	Occupants	Bedrooms	Finished	Cooled	Heated	
1	Main	1539	12312	Yes	1	0	Yes	Yes	Yes	

# Building Input Summary Report

FLOORS													
#	Floor Type	Space	Exposed Perim	Perimeter R-Value	Area	Joist R-Value	Tile	Wood	Carpet				
1	Raised Floor	Main	---	---	1539 ft	10.4	0	0	1				
ROOF													
#	Type	Materials	Roof Area	Gable Area	Roof Color	Solar Absor.	SA Tested	Emitt	Emitt Tested	Deck Insul.	Pitch (deg)		
1	Gable or shed	Composition shingles	1622 ft²	256 ft²	Medium	0.6	No	0.9	No	0	18.4		
ATTIC													
#	Type	Ventilation	Vent Ratio (1 in)	Area	RBS	IRCC							
1	Full attic	Vented	150	1539 ft²	N	N							
CEILING													
#	Ceiling Type	Space	R-Value	Ins. Type	Area	Framing Fraction	Truss Type						
1	Under Attic(Vented)	Main	16.7	Blown	1539.0ft²	0.11	Wood						
WALLS													
#	Ornt	Adjacent To	Wall Type	Space	Cavity R-Value	Width Ft In	Height Ft In	Sheathing Area	R-Value	Framing Fraction	Solar Absor.	Below Grade	
1	N	Exterior	Frame - Wood	Main	11	57.0 0	8.0 0	456.0ft²		0.25	0.6	0 %	
2	S	Exterior	Frame - Wood	Main	11	57.0 0	8.0 0	456.0ft²		0.25	0.6	0 %	
3	E	Exterior	Frame - Wood	Main	11	27.0 0	8.0 0	216.0ft²		0.25	0.6	0 %	
4	W	Exterior	Frame - Wood	Main	11	27.0 0	8.0 0	216.0ft²		0.25	0.6	0 %	
DOORS													
#	Ornt	Adjacent To	Door Type	Space	Storms	U-Value	Width Ft In	Height Ft In	Area				
1	N	Exterior	Insulated	Main	None	0.46	3.00 0	6.00 8	20.0ft²				
2	S	Exterior	Insulated	Main	None	0.46	3.00 0	6.00 8	20.0ft²				
WINDOWS													
#	Ornt	Wall ID	Frame	Panes	NFRC	U-Factor	SHGC	Storm	Area	----Overhang----		Interior Shade	Screening
										Depth	Separation		
1	N	1	TIM	Single (Clear)	Yes	1.09	0.70	N	90.0ft²	0.0 ft 0 in	0.0 ft 0 in	None	None
2	S	2	TIM	Single (Clear)	Yes	1.09	0.70	N	90.0ft²	0.0 ft 0 in	0.0 ft 0 in	None	None
3	E	3	TIM	Single (Clear)	Yes	1.09	0.70	N	45.0ft²	0.0 ft 0 in	0.0 ft 0 in	None	None
4	W	4	TIM	Single (Clear)	Yes	1.09	0.70	N	45.0ft²	0.0 ft 0 in	0.0 ft 0 in	None	None
INFILTRATION													
#	Scope	Method	SLA	CFM50	ELA	EqLA	ACH	ACH50	Space(s)				
1	Wholehouse	Proposed ACH	0.00074	3005	164.98	310.27	0.6700	14.6	All				

# Building Input Summary Report

MASS													
#	Mass Type	Area	Thickness	Furniture Fraction	Space								
1	No Added Mass	0 ft²	0 ft	0.00	Main								
HEATING SYSTEM													
#	System Type	Subtype	AHRI #	Efficiency	Capacity kBtu/hr	---Geothermal Entry	HeatPump--- Power	Volt	Current	Ducts	Block		
1	Electric Strip Heat	None		COP: 1.00	33.2		0.00	0.00	0.00	sys#1	1		
COOLING SYSTEM													
#	System Type	Subtype	AHRI #	Efficiency	Capacity kBtu/hr	Air Flow cfm	SHR	Duct	Block				
1	Central Unit	None		SEER:10	76.0	1149	0.75	sys#1	1				
HOT WATER SYSTEM													
#	System Type	Subtype	Location	EF	Cap	Use	SetPnt	Fixture Flow	Pipe Ins.	Pipe length			
	Recirculation System	Recirc Control Type	Loop length	Branch length	Pump power	DWHR	Facilities Connected	Equal Flow	DWHR Eff	Other Credits			
DUCTS													
Duct #	-----Supply----- Location	R-Value	Area	-----Return----- Location	R-Value	Area	Leakage Type	Air Handler	CFM 25 TOT	CFM 25 OUT	QN	RLF	HVAC # Heat Cool
1	Main	6.0	385 ft²	Main	6.0	77 ft²	Prop. Air Leakage	Main	---	---	0.00	0.60	1 1
MECHANICAL VENTILATION													
Type	Supply CFM	Exhaust CFM	HRV	Fan	Run Time	Heating System	Cooling System						
None	0.0	0.0	0.0	0.0 W	0 %	1 - Electric Strip Heat	1 - Central Unit						
TEMPERATURES													
Programable Thermostat: N						Ceiling Fans: N							
Cooling	<input checked="" type="checkbox"/> Jan	<input checked="" type="checkbox"/> Feb	<input checked="" type="checkbox"/> Mar	<input checked="" type="checkbox"/> Apr	<input checked="" type="checkbox"/> May	<input checked="" type="checkbox"/> Jun	<input checked="" type="checkbox"/> Jul	<input checked="" type="checkbox"/> Aug	<input checked="" type="checkbox"/> Sep	<input checked="" type="checkbox"/> Oct	<input checked="" type="checkbox"/> Nov	<input checked="" type="checkbox"/> Dec	
Heating	<input type="checkbox"/> Jan	<input type="checkbox"/> Feb	<input type="checkbox"/> Mar	<input type="checkbox"/> Apr	<input type="checkbox"/> May	<input type="checkbox"/> Jun	<input type="checkbox"/> Jul	<input type="checkbox"/> Aug	<input type="checkbox"/> Sep	<input type="checkbox"/> Oct	<input type="checkbox"/> Nov	<input type="checkbox"/> Dec	
Venting	<input type="checkbox"/> Jan	<input type="checkbox"/> Feb	<input type="checkbox"/> Mar	<input type="checkbox"/> Apr	<input type="checkbox"/> May	<input type="checkbox"/> Jun	<input type="checkbox"/> Jul	<input type="checkbox"/> Aug	<input type="checkbox"/> Sep	<input type="checkbox"/> Oct	<input type="checkbox"/> Nov	<input type="checkbox"/> Dec	
Thermostat Schedule: BESTEST-cooling													
Schedule Type		1	2	3	4	5	6	7	8	9	10	11	12
Cooling (WD)		AM 78	78	78	78	78	78	78	78	78	78	78	78
		PM	78	78	78	78	78	78	78	78	78	78	78
Cooling (WEH)		AM 78	78	78	78	78	78	78	78	78	78	78	78
		PM	78	78	78	78	78	78	78	78	78	78	78

# Building Input Summary Report

## TEMPERATURES(Continued)

Heating (WD)	AM PM	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68
Heating (WEH)	AM PM	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68

## CLOTHES DRYERS

ID	Type	Screen	Location	Quantity	Fuel Type	Make	Model	Schedule	kWhPerYr
1	Dryers	Default New	Main		Electricity			HERS2011	0

## RANGE OVENS

ID	Type	Screen	Location	Type	Fuel Type	Make	Model	Cooktop	Oven
1	Ranges	Default New	Main	Combo	Elec			Elec Flat Coil	Not Convec

## HARD WIRED LIGHTING

ID	Type	Screen	Location	Total#	Quantity#	Comp FI	All Other FI	Bulb Type	Schedule	Watts per bulb
1	Hard-Wired	By Count - Qualifying	Main	100	10				HERS2011	
2	Hard-Wired	Default New	Exterior						HERS2011	
3	Hard-Wired	Default New	Garage						HERS2011	

## MISC ELECTRICAL LOADS

ID	Type	Screen	Location	Item	Quantity	Catagory	Operating	Schedule	Off Standby
1	Misc Elec Load	Simple Default	Main		1		1	HERS2011	1

## APPLIANCES & LIGHTING SCHEDULES

Appliance Schedule:		HERS2014		Hours											
Schedule Type		1	2	3	4	5	6	7	8	9	10	11	12		
Occupancy peak:	400 Btu	AM	0.930	0.930	0.930	0.930	0.930	0.930	0.930	0.980	0.460	0.270	0.270	0.270	
% Released:	100 %	PM	0.270	0.270	0.270	0.270	0.330	0.610	1.000	1.000	0.930	0.930	0.930	0.930	
refrig peak:	0 W	AM	0.824	0.804	0.784	0.764	0.744	0.734	0.744	0.754	0.764	0.794	0.814	0.854	
% Released:	100 %	PM	0.854	0.864	0.884	0.904	0.925	0.945	0.925	0.915	0.904	0.894	0.874	0.854	
cWash peak:	0 W	AM	0.200	0.100	0.050	0.050	0.050	0.075	0.200	0.375	0.500	0.800	0.950	1.000	
% Released:	30 %	PM	0.875	0.850	0.800	0.625	0.625	0.600	0.575	0.550	0.625	0.700	0.650	0.375	
E-cDry peak:	119 W	AM	0.200	0.100	0.050	0.050	0.050	0.075	0.200	0.375	0.500	0.800	0.950	1.000	
% Released:	15 %	PM	0.875	0.850	0.800	0.625	0.625	0.600	0.575	0.550	0.625	0.700	0.650	0.375	
dWash peak:	0 W	AM	0.139	0.050	0.028	0.024	0.029	0.090	0.169	0.303	0.541	0.594	0.502	0.443	
% Released:	60 %	PM	0.376	0.396	0.334	0.323	0.344	0.448	0.791	1.000	0.800	0.597	0.383	0.281	
E-rOven peak:	122 W	AM	0.057	0.057	0.057	0.057	0.057	0.114	0.171	0.286	0.343	0.343	0.343	0.400	
% Released:	80 %	PM	0.457	0.343	0.286	0.400	0.571	1.000	0.857	0.429	0.286	0.229	0.171	0.114	
TVs peak:	151 W	AM	0.100	0.050	0.050	0.050	0.100	0.200	0.400	0.450	0.400	0.200	0.100	0.100	
% Released:	100 %	PM	0.050	0.050	0.150	0.450	0.850	1.000	0.950	0.800	0.500	0.250	0.150	0.100	

# Building Input Summary Report

## APPLIANCES & LIGHTING SCHEDULES(Continued)

cFan peak:	0 W	AM	0.600	0.600	0.600	0.600	0.600	0.600	0.600	0.250	0.250	0.250	0.250	0.250
% Released:	100 %	PM	0.250	0.250	0.250	0.250	0.250	0.250	0.550	0.600	0.600	0.600	0.600	0.600
lgts-in peak:	545 W	AM	0.160	0.150	0.160	0.180	0.230	0.450	0.420	0.260	0.190	0.160	0.120	0.110
% Released:	100 %	PM	0.160	0.170	0.250	0.270	0.340	0.550	0.600	0.880	1.000	0.880	0.510	0.280
lgts-out peak:	47 W	AM	1.000	1.000	1.000	1.000	1.000	0.750	0.750	0.000	0.000	0.000	0.000	0.000
% Released:	0 %	PM	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.750	0.750	0.750	1.000
lgts-gar peak:	0 W	AM	0.000	0.000	0.000	0.000	0.000	0.500	0.750	1.000	0.750	0.500	0.000	0.000
% Released:	0 %	PM	0.000	0.000	0.500	0.500	0.750	1.000	0.750	0.500	0.000	0.000	0.000	0.000
MEL peak:	184 W	AM	0.500	0.500	0.500	0.750	0.750	0.850	1.000	1.000	1.000	1.000	0.900	0.900
% Released:	90 %	PM	0.900	0.900	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.850	0.750	0.750

# Building Input Summary Report

PROJECT									
Title:	L110AL (high infiltration)			Address type:	Y				
Building Type:	User	Bedrooms:	0	Lot #:					
Owner:	FSEC	Conditioned Area:	1539	Block/SubDivision:					
Builder Name:	James Q. Hammer	Total Stories:	1	PlatBook:	111 Anywhere Lane				
Permit Office:		Worst Case:	No	County:					
Jurisdiction:		Rotate Angle:	0	City, State, Zip:	Las Vegas, NV,				
Family Type:	Single-family	Cross Ventilation:							
New/Existing:	New (From Plans)	Whole House Fan:							
Year Construct:		Terrain:	Suburban						
Comment:	HERS BESTEST high infiltration case			Shielding:	Suburban				
CLIMATE									
Design Location	Tmy Site	Design Temp 97.5%	Design Temp 2.5%	Int Design Temp Winter	Int Design Temp Summer	Heating Degree Days	Design Moisture	Daily temp Range	
NV, LAS_VEGASTMY1	NV_LAS_VEGASTMY1	32	105	70	75	2300.5	0	High	
UTILITY									
Fuel	Unit	Utility Name				Monthly Fixed Cost	\$/Unit		
Electricity	kWh	EnergyGauge Default				0.00	0.12		
Natural Gas	Therm	EnergyGauge Default				0.00	0.68		
Fuel Oil	Gallon	EnergyGauge Default				0.00	1.10		
Propane	Gallon	EnergyGauge Default				0.00	1.40		
SURROUNDINGS									
Ornt	Type	-----Shade Trees-----			Exist	-----Adjacent Buildings-----			
		Height	Width	Distance		Height	Width	Distance	
N	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
NE	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
E	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
SE	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
S	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
SW	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
W	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
NW	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
BLOCKS									
Number	Name	Area	Volume						
1	Block1	1539	12312						
SPACES									
Number	Name	Area	Volume	Kitchen	Occupants	Bedrooms	Finished	Cooled	Heated
1	Main	1539	12312	Yes	0	0	Yes	Yes	Yes

# Building Input Summary Report

FLOORS														
#	Floor Type	Space	Exposed Perim	Perimeter R-Value	Area	Joist R-Value	Tile	Wood	Carpet					
1	Raised Floor	Main	---	---	1539 ft	10.4	0	0	1					
ROOF														
#	Type	Materials	Roof Area	Gable Area	Roof Color	Solar Absor.	SA Tested	Emitt	Emitt Tested	Deck Insul.	Pitch (deg)			
1	Gable or shed	Composition shingles	1622 ft²	256 ft²	Medium	0.6	No	0.9	No	0	18.4			
ATTIC														
#	Type	Ventilation	Vent Ratio (1 in)	Area	RBS	IRCC								
1	Full attic	Vented	150	1539 ft²	N	N								
CEILING														
#	Ceiling Type	Space	R-Value	Ins. Type	Area	Framing Fraction	Truss Type							
1	Under Attic(Vented)	Main	16.7	Blown	1539.0ft²	0.11	Wood							
WALLS														
#	Ornt	Adjacent To	Wall Type	Space	Cavity R-Value	Width Ft	In	Height Ft	In	Sheathing Area	R-Value	Framing Fraction	Solar Absor.	Below Grade
1	N	Exterior	Frame - Wood	Main	11	57.0	0	8.0	0	456.0ft²		0.25	0.6	0 %
2	S	Exterior	Frame - Wood	Main	11	57.0	0	8.0	0	456.0ft²		0.25	0.6	0 %
3	E	Exterior	Frame - Wood	Main	11	27.0	0	8.0	0	216.0ft²		0.25	0.6	0 %
4	W	Exterior	Frame - Wood	Main	11	27.0	0	8.0	0	216.0ft²		0.25	0.6	0 %
DOORS														
#	Ornt	Adjacent To	Door Type	Space	Storms	U-Value	Width Ft	In	Height Ft	In	Area			
1	N	Exterior	Insulated	Main	None	0.46	3.00	0	6.00	8	20.0ft²			
2	S	Exterior	Insulated	Main	None	0.46	3.00	0	6.00	8	20.0ft²			
WINDOWS														
#	Ornt	Wall ID	Frame	Panes	NFRC	U-Factor	SHGC	Storm	Area	----Overhang----		Interior Shade	Screening	
1	N	1	TIM	Single (Clear)	Yes	1.09	0.70	N	90.0ft²	0.0 ft 0 in	0.0 ft 0 in	None	None	
2	S	2	TIM	Single (Clear)	Yes	1.09	0.70	N	90.0ft²	0.0 ft 0 in	0.0 ft 0 in	None	None	
3	E	3	TIM	Single (Clear)	Yes	1.09	0.70	N	45.0ft²	0.0 ft 0 in	0.0 ft 0 in	None	None	
4	W	4	TIM	Single (Clear)	Yes	1.09	0.70	N	45.0ft²	0.0 ft 0 in	0.0 ft 0 in	None	None	
INFILTRATION														
#	Scope	Method	SLA	CFM50	ELA	EqLA	ACH	ACH50	Space(s)					
1	Wholehouse	Proposed ACH	0.00167	6728	369.36	694.64	1.5000	32.8	All					

# Building Input Summary Report

MASS													
#	Mass Type	Area	Thickness	Furniture Fraction	Space								
1	No Added Mass	0 ft²	0 ft	0.00	Main								
HEATING SYSTEM													
#	System Type	Subtype	AHRI #	Efficiency	Capacity kBtu/hr	---Geothermal HeatPump---		Ducts	Block				
						Entry	Power	Volt	Current				
1	Electric Strip Heat	None		COP: 1.00	140.0		0.00	0.00	0.00	sys#1	1		
COOLING SYSTEM													
#	System Type	Subtype	AHRI #	Efficiency	Capacity kBtu/hr	Air Flow cfm	SHR	Duct	Block				
1	Central Unit	None		SEER:10	90.0	2700	0.75	sys#1	1				
HOT WATER SYSTEM													
#	System Type	Subtype	Location	EF	Cap	Use	SetPnt	Fixture Flow	Pipe Ins.	Pipe length			
	Recirculation System	Recirc Control Type	Loop length	Branch length	Pump power	DWHR	Facilities Connected	Equal Flow	DWHR Eff	Other Credits			
DUCTS													
Duct #	-----Supply-----			-----Return-----			Leakage Type	Air Handler	CFM 25 TOT	CFM 25 OUT	QN	RLF	HVAC # Heat Cool
1	Main	6.0	385 ft²	Main	6.0	77 ft²	Prop. Air Leakage	Main	---	---	0.00	0.60	1 1
MECHANICAL VENTILATION													
Type	Supply CFM	Exhaust CFM	HRV	Fan	Run Time	Heating System	Cooling System						
None	0.0	0.0	0.0	0.0 W	0 %	1 - Electric Strip Heat	1 - Central Unit						
TEMPERATURES													
Programable Thermostat: N						Ceiling Fans: N							
Cooling	<input checked="" type="checkbox"/> Jan	<input checked="" type="checkbox"/> Feb	<input checked="" type="checkbox"/> Mar	<input checked="" type="checkbox"/> Apr	<input checked="" type="checkbox"/> May	<input checked="" type="checkbox"/> Jun	<input checked="" type="checkbox"/> Jul	<input checked="" type="checkbox"/> Aug	<input checked="" type="checkbox"/> Sep	<input checked="" type="checkbox"/> Oct	<input checked="" type="checkbox"/> Nov	<input checked="" type="checkbox"/> Dec	
Heating	<input type="checkbox"/> Jan	<input type="checkbox"/> Feb	<input type="checkbox"/> Mar	<input type="checkbox"/> Apr	<input type="checkbox"/> May	<input type="checkbox"/> Jun	<input type="checkbox"/> Jul	<input type="checkbox"/> Aug	<input type="checkbox"/> Sep	<input type="checkbox"/> Oct	<input type="checkbox"/> Nov	<input type="checkbox"/> Dec	
Venting	<input type="checkbox"/> Jan	<input type="checkbox"/> Feb	<input type="checkbox"/> Mar	<input type="checkbox"/> Apr	<input type="checkbox"/> May	<input type="checkbox"/> Jun	<input type="checkbox"/> Jul	<input type="checkbox"/> Aug	<input type="checkbox"/> Sep	<input type="checkbox"/> Oct	<input type="checkbox"/> Nov	<input type="checkbox"/> Dec	
Thermostat Schedule: BESTEST-cooling													
Schedule Type		1	2	3	4	5	6	7	8	9	10	11	12
Cooling (WD)		AM 78	78	78	78	78	78	78	78	78	78	78	78
		PM	78	78	78	78	78	78	78	78	78	78	78
Cooling (WEH)		AM 78	78	78	78	78	78	78	78	78	78	78	78
		PM	78	78	78	78	78	78	78	78	78	78	78



# Building Input Summary Report

## TEMPERATURES(Continued)

Heating (WD)	AM	68	68	68	68	68	68	68	68	68	68	68	68	68
	PM	68	68	68	68	68	68	68	68	68	68	68	68	68
Heating (WEH)	AM	68	68	68	68	68	68	68	68	68	68	68	68	68
	PM	68	68	68	68	68	68	68	68	68	68	68	68	68

## CLOTHES DRYERS

ID	Type	Screen	Location	Quantity	Fuel Type	Make	Model	Schedule	kWhPerYr
1	Dryers	Default New	Main		Electricity			HERS2011	0

## RANGE OVENS

ID	Type	Screen	Location	Type	Fuel Type	Make	Model	Cooktop	Oven
1	Ranges	Default New	Main	Combo	Elec			Elec Flat Coil	Not Convec

## HARD WIRED LIGHTING

ID	Type	Screen	Location	Total#	Quantity#	Comp FI	All Other FI	Bulb Type	Schedule	Watts per bulb
1	Hard-Wired	By Count - Qualifying	Main	100	10				HERS2011	
2	Hard-Wired	Default New	Exterior						HERS2011	
3	Hard-Wired	Default New	Garage						HERS2011	

## MISC ELECTRICAL LOADS

ID	Type	Screen	Location	Item	Quantity	Catagory	Operating	Schedule	Off Standby
1	Misc Elec Load	Simple Default	Main		1		1	HERS2011	1

## APPLIANCES & LIGHTING SCHEDULES

Appliance Schedule:		HERS2014		Hours											
Schedule Type		1	2	3	4	5	6	7	8	9	10	11	12		
Occupancy peak:	400 Btu	AM	0.930	0.930	0.930	0.930	0.930	0.930	0.930	0.980	0.460	0.270	0.270	0.270	
% Released:	100 %	PM	0.270	0.270	0.270	0.270	0.330	0.610	1.000	1.000	0.930	0.930	0.930	0.930	
refrig peak:	0 W	AM	0.824	0.804	0.784	0.764	0.744	0.734	0.744	0.754	0.764	0.794	0.814	0.854	
% Released:	100 %	PM	0.854	0.864	0.884	0.904	0.925	0.945	0.925	0.915	0.904	0.894	0.874	0.854	
cWash peak:	0 W	AM	0.200	0.100	0.050	0.050	0.050	0.075	0.200	0.375	0.500	0.800	0.950	1.000	
% Released:	30 %	PM	0.875	0.850	0.800	0.625	0.625	0.600	0.575	0.550	0.625	0.700	0.650	0.375	
E-cDry peak:	119 W	AM	0.200	0.100	0.050	0.050	0.050	0.075	0.200	0.375	0.500	0.800	0.950	1.000	
% Released:	15 %	PM	0.875	0.850	0.800	0.625	0.625	0.600	0.575	0.550	0.625	0.700	0.650	0.375	
dWash peak:	0 W	AM	0.139	0.050	0.028	0.024	0.029	0.090	0.169	0.303	0.541	0.594	0.502	0.443	
% Released:	60 %	PM	0.376	0.396	0.334	0.323	0.344	0.448	0.791	1.000	0.800	0.597	0.383	0.281	
E-rOven peak:	122 W	AM	0.057	0.057	0.057	0.057	0.057	0.114	0.171	0.286	0.343	0.343	0.343	0.400	
% Released:	80 %	PM	0.457	0.343	0.286	0.400	0.571	1.000	0.857	0.429	0.286	0.229	0.171	0.114	
TVs peak:	151 W	AM	0.100	0.050	0.050	0.050	0.100	0.200	0.400	0.450	0.400	0.200	0.100	0.100	
% Released:	100 %	PM	0.050	0.050	0.150	0.450	0.850	1.000	0.950	0.800	0.500	0.250	0.150	0.100	

# Building Input Summary Report

## APPLIANCES & LIGHTING SCHEDULES(Continued)

cFan peak:	0 W	AM	0.600	0.600	0.600	0.600	0.600	0.600	0.600	0.250	0.250	0.250	0.250	0.250
% Released:	100 %	PM	0.250	0.250	0.250	0.250	0.250	0.250	0.550	0.600	0.600	0.600	0.600	0.600
lgts-in peak:	545 W	AM	0.160	0.150	0.160	0.180	0.230	0.450	0.420	0.260	0.190	0.160	0.120	0.110
% Released:	100 %	PM	0.160	0.170	0.250	0.270	0.340	0.550	0.600	0.880	1.000	0.880	0.510	0.280
lgts-out peak:	47 W	AM	1.000	1.000	1.000	1.000	1.000	0.750	0.750	0.000	0.000	0.000	0.000	0.000
% Released:	0 %	PM	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.750	0.750	0.750	1.000
lgts-gar peak:	0 W	AM	0.000	0.000	0.000	0.000	0.000	0.500	0.750	1.000	0.750	0.500	0.000	0.000
% Released:	0 %	PM	0.000	0.000	0.500	0.500	0.750	1.000	0.750	0.500	0.000	0.000	0.000	0.000
MEL peak:	184 W	AM	0.500	0.500	0.500	0.750	0.750	0.850	1.000	1.000	1.000	1.000	0.900	0.900
% Released:	90 %	PM	0.900	0.900	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.850	0.750	0.750

# Building Input Summary Report

PROJECT										
Title:	L120AL (improved insulation)				Address type:	Y				
Building Type:	User	Bedrooms:	0			Lot #:				
Owner:	FSEC	Conditioned Area:	1539			Block/SubDivision:				
Builder Name:	James Q. Hammer	Total Stories:	1			PlatBook:	111 Anywhere Lane			
Permit Office:		Worst Case:	No			County:				
Jurisdiction:		Rotate Angle:	0			City, State, Zip:	Las Vegas, NV,			
Family Type:	Single-family	Cross Ventilation:								
New/Existing:	New (From Plans)	Whole House Fan:								
Year Construct:		Terrain:	Suburban							
Comment:	HERS BESTEST improved insulation case									
CLIMATE										
Design Location	Tmy Site	Design Temp 97.5%	Design Temp 2.5%	Int Design Temp Winter	Int Design Temp Summer	Heating Degree Days	Design Moisture	Daily temp Range		
NV, LAS_VEGASTMY1	NV_LAS_VEGASTMY1	32	105	70	75	2300.5	0	High		
UTILITY										
Fuel	Unit	Utility Name				Monthly Fixed Cost	\$/Unit			
Electricity	kWh	EnergyGauge Default				0.00	0.12			
Natural Gas	Therm	EnergyGauge Default				0.00	0.68			
Fuel Oil	Gallon	EnergyGauge Default				0.00	1.10			
Propane	Gallon	EnergyGauge Default				0.00	1.40			
SURROUNDINGS										
Ornt	Type	-----Shade Trees-----			Exist	-----Adjacent Buildings-----				
		Height	Width	Distance		Height	Width	Distance		
N	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
NE	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
E	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
SE	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
S	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
SW	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
W	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
NW	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
BLOCKS										
Number	Name	Area	Volume							
1	Block1	1539	12312							
SPACES										
Number	Name	Area	Volume	Kitchen	Occupants	Bedrooms	Finished	Cooled	Heated	
1	Main	1539	12312	Yes	0	0	Yes	Yes	Yes	

# Building Input Summary Report

FLOORS														
#	Floor Type		Space	Exposed Perim	Perimeter R-Value	Area	Joist R-Value	Tile	Wood	Carpet				
1	Raised Floor		Main	---	---	1539 ft	10.4	0	0	1				
ROOF														
#	Type	Materials		Roof Area	Gable Area	Roof Color	Solar Absor.	SA Tested	Emitt	Emitt Tested	Deck Insul.	Pitch (deg)		
1	Gable or shed	Composition shingles		1622 ft²	256 ft²	Medium	0.6	No	0.9	No	0	18.4		
ATTIC														
#	Type	Ventilation		Vent Ratio (1 in)	Area	RBS	IRCC							
1	Full attic	Vented		150	1539 ft²	N	N							
CEILING														
#	Ceiling Type		Space	R-Value	Ins. Type	Area	Framing Fraction	Truss Type						
1	Under Attic(Vented)		Main	54.3	Blown	1539.0ft²	0.11	Wood						
WALLS														
#	Ornt	Adjacent To	Wall Type	Space	Cavity R-Value	Width Ft	In	Height Ft	In	Sheathing Area	R-Value	Framing Fraction	Solar Absor.	Below Grade
1	N	Exterior	Frame - Wood	Main	18	57.0	0	8.0	0	456.0ft²	7.2	0.22	0.6	0 %
2	S	Exterior	Frame - Wood	Main	18	57.0	0	8.0	0	456.0ft²	7.2	0.22	0.6	0 %
3	E	Exterior	Frame - Wood	Main	18	27.0	0	8.0	0	216.0ft²	7.2	0.22	0.6	0 %
4	W	Exterior	Frame - Wood	Main	18	27.0	0	8.0	0	216.0ft²	7.2	0.22	0.6	0 %
DOORS														
#	Ornt	Adjacent To	Door Type	Space	Storms	U-Value	Width Ft	In	Height Ft	In	Area			
1	N	Exterior	Insulated	Main	None	0.46	3.00	0	6.00	8	20.0ft²			
2	S	Exterior	Insulated	Main	None	0.46	3.00	0	6.00	8	20.0ft²			
WINDOWS														
#	Ornt	Wall ID	Frame	Panes	NFRC	U-Factor	SHGC	Storm	Area	----Overhang----		Interior Shade	Screening	
1	N	1	TIM	Single (Clear)	Yes	1.09	0.70	N	90.0ft²	0.0 ft 0 in	0.0 ft 0 in	None	None	
2	S	2	TIM	Single (Clear)	Yes	1.09	0.70	N	90.0ft²	0.0 ft 0 in	0.0 ft 0 in	None	None	
3	E	3	TIM	Single (Clear)	Yes	1.09	0.70	N	45.0ft²	0.0 ft 0 in	0.0 ft 0 in	None	None	
4	W	4	TIM	Single (Clear)	Yes	1.09	0.70	N	45.0ft²	0.0 ft 0 in	0.0 ft 0 in	None	None	
INFILTRATION														
#	Scope	Method	SLA	CFM50	ELA	EqLA	ACH	ACH50	Space(s)					
1	Wholehouse	Proposed ACH	0.00074	3005	164.98	310.27	0.6700	14.6	All					

# Building Input Summary Report

MASS													
#	Mass Type	Area	Thickness	Furniture Fraction	Space								
1	No Added Mass	0 ft²	0 ft	0.00	Main								
HEATING SYSTEM													
#	System Type	Subtype	AHRI #	Efficiency	Capacity kBtu/hr	---Geothermal HeatPump---		Ducts	Block				
1	Electric Strip Heat	None		COP: 1.00	30.4	Entry	Power	Volt	Current	sys#1	1		
COOLING SYSTEM													
#	System Type	Subtype	AHRI #	Efficiency	Capacity kBtu/hr	Air Flow cfm	SHR	Duct	Block				
1	Central Unit	None		SEER:10	70.0	1026	0.75	sys#1	1				
HOT WATER SYSTEM													
#	System Type	Subtype	Location	EF	Cap	Use	SetPnt	Fixture Flow	Pipe Ins.	Pipe length			
	Recirculation System	Recirc Control Type	Loop length	Branch length	Pump power	DWHR	Facilities Connected	Equal Flow	DWHR Eff	Other Credits			
DUCTS													
Duct #	-----Supply-----			-----Return-----			Leakage Type	Air Handler	CFM 25 TOT	CFM 25 OUT	QN	RLF	HVAC # Heat Cool
1	Main	6.0	385 ft²	Main	6.0	77 ft²	Prop. Air Leakage	Main	---	---	0.00	0.60	1 1
MECHANICAL VENTILATION													
Type	Supply CFM	Exhaust CFM	HRV	Fan	Run Time	Heating System	Cooling System						
None	0.0	0.0	0.0	0.0 W	0 %	1 - Electric Strip Heat	1 - Central Unit						
TEMPERATURES													
Programable Thermostat: N						Ceiling Fans: N							
Cooling	<input checked="" type="checkbox"/> Jan	<input checked="" type="checkbox"/> Feb	<input checked="" type="checkbox"/> Mar	<input checked="" type="checkbox"/> Apr	<input checked="" type="checkbox"/> May	<input checked="" type="checkbox"/> Jun	<input checked="" type="checkbox"/> Jul	<input checked="" type="checkbox"/> Aug	<input checked="" type="checkbox"/> Sep	<input checked="" type="checkbox"/> Oct	<input checked="" type="checkbox"/> Nov	<input checked="" type="checkbox"/> Dec	
Heating	<input type="checkbox"/> Jan	<input type="checkbox"/> Feb	<input type="checkbox"/> Mar	<input type="checkbox"/> Apr	<input type="checkbox"/> May	<input type="checkbox"/> Jun	<input type="checkbox"/> Jul	<input type="checkbox"/> Aug	<input type="checkbox"/> Sep	<input type="checkbox"/> Oct	<input type="checkbox"/> Nov	<input type="checkbox"/> Dec	
Venting	<input type="checkbox"/> Jan	<input type="checkbox"/> Feb	<input type="checkbox"/> Mar	<input type="checkbox"/> Apr	<input type="checkbox"/> May	<input type="checkbox"/> Jun	<input type="checkbox"/> Jul	<input type="checkbox"/> Aug	<input type="checkbox"/> Sep	<input type="checkbox"/> Oct	<input type="checkbox"/> Nov	<input type="checkbox"/> Dec	
Thermostat Schedule: BESTEST-cooling													
Schedule Type		1	2	3	4	5	6	7	8	9	10	11	12
Cooling (WD)		AM 78	78	78	78	78	78	78	78	78	78	78	78
		PM	78	78	78	78	78	78	78	78	78	78	78
Cooling (WEH)		AM	78	78	78	78	78	78	78	78	78	78	78
		PM	78	78	78	78	78	78	78	78	78	78	78

# Building Input Summary Report

## TEMPERATURES(Continued)

Heating (WD)	AM PM	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68
Heating (WEH)	AM PM	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68

## CLOTHES DRYERS

ID	Type	Screen	Location	Quantity	Fuel Type	Make	Model	Schedule	kWhPerYr
1	Dryers	Default New	Main		Electricity			HERS2011	0

## RANGE OVENS

ID	Type	Screen	Location	Type	Fuel Type	Make	Model	Cooktop	Oven
1	Ranges	Default New	Main	Combo	Elec			Elec Flat Coil	Not Convec

## HARD WIRED LIGHTING

ID	Type	Screen	Location	Total#	Quantity#	Comp FI	All Other FI	Bulb Type	Schedule	Watts per bulb
1	Hard-Wired	By Count - Qualifying	Main	100	10				HERS2011	
2	Hard-Wired	Default New	Exterior						HERS2011	
3	Hard-Wired	Default New	Garage						HERS2011	

## MISC ELECTRICAL LOADS

ID	Type	Screen	Location	Item	Quantity	Catagory	Operating	Schedule	Off Standby
1	Misc Elec Load	Simple Default	Main		1		1	HERS2011	1

## APPLIANCES & LIGHTING SCHEDULES

Appliance Schedule:		HERS2014		Hours											
Schedule Type		1	2	3	4	5	6	7	8	9	10	11	12		
Occupancy peak:	400 Btu	AM	0.930	0.930	0.930	0.930	0.930	0.930	0.930	0.980	0.460	0.270	0.270	0.270	
% Released:	100 %	PM	0.270	0.270	0.270	0.270	0.330	0.610	1.000	1.000	0.930	0.930	0.930	0.930	
refrig peak:	0 W	AM	0.824	0.804	0.784	0.764	0.744	0.734	0.744	0.754	0.764	0.794	0.814	0.854	
% Released:	100 %	PM	0.854	0.864	0.884	0.904	0.925	0.945	0.925	0.915	0.904	0.894	0.874	0.854	
cWash peak:	0 W	AM	0.200	0.100	0.050	0.050	0.050	0.075	0.200	0.375	0.500	0.800	0.950	1.000	
% Released:	30 %	PM	0.875	0.850	0.800	0.625	0.625	0.600	0.575	0.550	0.625	0.700	0.650	0.375	
E-cDry peak:	119 W	AM	0.200	0.100	0.050	0.050	0.050	0.075	0.200	0.375	0.500	0.800	0.950	1.000	
% Released:	15 %	PM	0.875	0.850	0.800	0.625	0.625	0.600	0.575	0.550	0.625	0.700	0.650	0.375	
dWash peak:	0 W	AM	0.139	0.050	0.028	0.024	0.029	0.090	0.169	0.303	0.541	0.594	0.502	0.443	
% Released:	60 %	PM	0.376	0.396	0.334	0.323	0.344	0.448	0.791	1.000	0.800	0.597	0.383	0.281	
E-rOven peak:	122 W	AM	0.057	0.057	0.057	0.057	0.057	0.114	0.171	0.286	0.343	0.343	0.343	0.400	
% Released:	80 %	PM	0.457	0.343	0.286	0.400	0.571	1.000	0.857	0.429	0.286	0.229	0.171	0.114	
TVs peak:	151 W	AM	0.100	0.050	0.050	0.050	0.100	0.200	0.400	0.450	0.400	0.200	0.100	0.100	
% Released:	100 %	PM	0.050	0.050	0.150	0.450	0.850	1.000	0.950	0.800	0.500	0.250	0.150	0.100	

# Building Input Summary Report

## APPLIANCES & LIGHTING SCHEDULES(Continued)

cFan peak:	0 W	AM	0.600	0.600	0.600	0.600	0.600	0.600	0.600	0.250	0.250	0.250	0.250	0.250
% Released:	100 %	PM	0.250	0.250	0.250	0.250	0.250	0.250	0.550	0.600	0.600	0.600	0.600	0.600
lgts-in peak:	545 W	AM	0.160	0.150	0.160	0.180	0.230	0.450	0.420	0.260	0.190	0.160	0.120	0.110
% Released:	100 %	PM	0.160	0.170	0.250	0.270	0.340	0.550	0.600	0.880	1.000	0.880	0.510	0.280
lgts-out peak:	47 W	AM	1.000	1.000	1.000	1.000	1.000	0.750	0.750	0.000	0.000	0.000	0.000	0.000
% Released:	0 %	PM	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.750	0.750	0.750	1.000
lgts-gar peak:	0 W	AM	0.000	0.000	0.000	0.000	0.000	0.500	0.750	1.000	0.750	0.500	0.000	0.000
% Released:	0 %	PM	0.000	0.000	0.500	0.500	0.750	1.000	0.750	0.500	0.000	0.000	0.000	0.000
MEL peak:	184 W	AM	0.500	0.500	0.500	0.750	0.750	0.850	1.000	1.000	1.000	1.000	0.900	0.900
% Released:	90 %	PM	0.900	0.900	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.850	0.750	0.750

# Building Input Summary Report

PROJECT									
Title:	L130AL (low-e windows)			Address type:	Y				
Building Type:	User	Bedrooms:	0	Lot #:					
Owner:	FSEC	Conditioned Area:	1539	Block/SubDivision:					
Builder Name:	James Q. Hammer	Total Stories:	1	PlatBook:	111 Anywhere Lane				
Permit Office:		Worst Case:	No	County:					
Jurisdiction:		Rotate Angle:	0	City, State, Zip:	Las Vegas, NV,				
Family Type:	Single-family	Cross Ventilation:							
New/Existing:	New (From Plans)	Whole House Fan:							
Year Construct:		Terrain:	Suburban						
Comment:	HERS BESTEST low-e windows case			Shielding:	Suburban				
CLIMATE									
Design Location	Tmy Site	Design Temp 97.5%	Design Temp 2.5%	Int Design Temp Winter	Int Design Temp Summer	Heating Degree Days	Design Moisture	Daily temp Range	
NV, LAS_VEGASTMY1	NV_LAS_VEGASTMY1	32	105	70	75	2300.5	0	High	
UTILITY									
Fuel	Unit	Utility Name				Monthly Fixed Cost	\$/Unit		
Electricity	kWh	EnergyGauge Default				0.00	0.12		
Natural Gas	Therm	EnergyGauge Default				0.00	0.68		
Fuel Oil	Gallon	EnergyGauge Default				0.00	1.10		
Propane	Gallon	EnergyGauge Default				0.00	1.40		
SURROUNDINGS									
Ornt	Type	-----Shade Trees-----			Exist	-----Adjacent Buildings-----			
		Height	Width	Distance		Height	Width	Distance	
N	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
NE	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
E	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
SE	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
S	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
SW	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
W	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
NW	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
BLOCKS									
Number	Name	Area	Volume						
1	Block1	1539	12312						
SPACES									
Number	Name	Area	Volume	Kitchen	Occupants	Bedrooms	Finished	Cooled	Heated
1	Main	1539	12312	Yes	0	0		Yes	Yes



# Building Input Summary Report

FLOORS														
#	Floor Type	Space	Exposed Perim	Perimeter R-Value	Area	Joist R-Value	Tile	Wood	Carpet					
1	Raised Floor	Main	---	---	1539 ft	10.4	0	0	1					
ROOF														
#	Type	Materials	Roof Area	Gable Area	Roof Color	Solar Absor.	SA Tested	Emitt	Emitt Tested	Deck Insul.	Pitch (deg)			
1	Gable or shed	Composition shingles	1622 ft²	256 ft²	Medium	0.6	No	0.9	No	0	18.4			
ATTIC														
#	Type	Ventilation	Vent Ratio (1 in)	Area	RBS	IRCC								
1	Full attic	Vented	150	1539 ft²	N	N								
CEILING														
#	Ceiling Type	Space	R-Value	Ins. Type	Area	Framing Fraction	Truss Type							
1	Under Attic(Vented)	Main	16.7	Blown	1539.0ft²	0.11	Wood							
WALLS														
#	Ornt	Adjacent To	Wall Type	Space	Cavity R-Value	Width Ft	In	Height Ft	In	Sheathing Area	R-Value	Framing Fraction	Solar Absor.	Below Grade
1	N	Exterior	Frame - Wood	Main	11	57.0	0	8.0	0	456.0ft²		0.25	0.6	0 %
2	S	Exterior	Frame - Wood	Main	11	57.0	0	8.0	0	456.0ft²		0.25	0.6	0 %
3	E	Exterior	Frame - Wood	Main	11	27.0	0	8.0	0	216.0ft²		0.25	0.6	0 %
4	W	Exterior	Frame - Wood	Main	11	27.0	0	8.0	0	216.0ft²		0.25	0.6	0 %
DOORS														
#	Ornt	Adjacent To	Door Type	Space	Storms	U-Value	Width Ft	In	Height Ft	In	Area			
1	N	Exterior	Insulated	Main	None	0.46	3.00	0	6.00	8	20.0ft²			
2	S	Exterior	Insulated	Main	None	0.46	3.00	0	6.00	8	20.0ft²			
WINDOWS														
#	Ornt	Wall ID	Frame	Panes	NFRC	U-Factor	SHGC	Storm	Area	----Overhang----		Interior Shade	Screening	
1	N	1	Wood	Low-E Double	Yes	0.30	0.34	N	90.0ft²	0.0 ft 0 in	0.0 ft 0 in	None	None	
2	S	2	Wood	Low-E Double	Yes	0.30	0.34	N	90.0ft²	0.0 ft 0 in	0.0 ft 0 in	None	None	
3	E	3	Wood	Low-E Double	Yes	0.30	0.34	N	45.0ft²	0.0 ft 0 in	0.0 ft 0 in	None	None	
4	W	4	Wood	Low-E Double	Yes	0.30	0.34	N	45.0ft²	0.0 ft 0 in	0.0 ft 0 in	None	None	
INFILTRATION														
#	Scope	Method	SLA	CFM50	ELA	EqLA	ACH	ACH50	Space(s)					
1	Wholehouse	Proposed ACH	0.00074	3005	164.98	310.27	0.6700	14.6	All					

# Building Input Summary Report

<b>MASS</b>													
#	Mass Type	Area	Thickness	Furniture Fraction	Space								
1	No Added Mass	0 ft²	0 ft	0.00	Main								
<b>HEATING SYSTEM</b>													
#	System Type	Subtype	AHRI #	Efficiency	Capacity kBtu/hr	---Geothermal HeatPump---		Ducts	Block				
1	Electric Strip Heat	None		COP: 1.00	140.0	Entry	Power	Volt	Current	sys#1	1		
<b>COOLING SYSTEM</b>													
#	System Type	Subtype	AHRI #	Efficiency	Capacity kBtu/hr	Air Flow cfm	SHR	Duct	Block				
1	Central Unit	None		SEER:10	50.0	777	0.75	sys#1	1				
<b>HOT WATER SYSTEM</b>													
#	System Type	Subtype	Location	EF	Cap	Use	SetPnt	Fixture Flow	Pipe Ins.	Pipe length			
	Recirculation System	Recirc Control Type	Loop length	Branch length	Pump power	DWHR	Facilities Connected	Equal Flow	DWHR Eff	Other Credits			
<b>DUCTS</b>													
Duct #	-----Supply-----			-----Return-----			Leakage Type	Air Handler	CFM 25 TOT	CFM 25 OUT	QN	RLF	HVAC # Heat Cool
1	Main	6.0	385 ft²	Main	6.0	77 ft²	Prop. Air Leakage	Main	---	---	0.00	0.60	1 1
<b>MECHANICAL VENTILATION</b>													
Type	Supply CFM	Exhaust CFM	HRV	Fan	Run Time	Heating System	Cooling System						
None	0.0	0.0	0.0	0.0 W	0 %	1 - Electric Strip Heat	1 - Central Unit						
<b>TEMPERATURES</b>													
Programable Thermostat: N						Ceiling Fans: N							
Cooling	<input checked="" type="checkbox"/> Jan	<input checked="" type="checkbox"/> Feb	<input checked="" type="checkbox"/> Mar	<input checked="" type="checkbox"/> Apr	<input checked="" type="checkbox"/> May	<input checked="" type="checkbox"/> Jun	<input checked="" type="checkbox"/> Jul	<input checked="" type="checkbox"/> Aug	<input checked="" type="checkbox"/> Sep	<input checked="" type="checkbox"/> Oct	<input checked="" type="checkbox"/> Nov	<input checked="" type="checkbox"/> Dec	
Heating	<input type="checkbox"/> Jan	<input type="checkbox"/> Feb	<input type="checkbox"/> Mar	<input type="checkbox"/> Apr	<input type="checkbox"/> May	<input type="checkbox"/> Jun	<input type="checkbox"/> Jul	<input type="checkbox"/> Aug	<input type="checkbox"/> Sep	<input type="checkbox"/> Oct	<input type="checkbox"/> Nov	<input type="checkbox"/> Dec	
Venting	<input type="checkbox"/> Jan	<input type="checkbox"/> Feb	<input type="checkbox"/> Mar	<input type="checkbox"/> Apr	<input type="checkbox"/> May	<input type="checkbox"/> Jun	<input type="checkbox"/> Jul	<input type="checkbox"/> Aug	<input type="checkbox"/> Sep	<input type="checkbox"/> Oct	<input type="checkbox"/> Nov	<input type="checkbox"/> Dec	
Thermostat Schedule: BESTEST-cooling													
Schedule Type		1	2	3	4	5	6	7	8	9	10	11	12
Cooling (WD)		AM 78	78	78	78	78	78	78	78	78	78	78	78
		PM	78	78	78	78	78	78	78	78	78	78	78
Cooling (WEH)		AM 78	78	78	78	78	78	78	78	78	78	78	78
		PM	78	78	78	78	78	78	78	78	78	78	78

# Building Input Summary Report

## TEMPERATURES(Continued)

Heating (WD)	AM PM	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68
Heating (WEH)	AM PM	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68

## CLOTHES DRYERS

ID	Type	Screen	Location	Quantity	Fuel Type	Make	Model	Schedule	kWhPerYr
1	Dryers	Default New	Main		Electricity			HERS2011	0

## RANGE OVENS

ID	Type	Screen	Location	Type	Fuel Type	Make	Model	Cooktop	Oven
1	Ranges	Default New	Main	Combo	Elec			Elec Flat Coil	Not Convec

## HARD WIRED LIGHTING

ID	Type	Screen	Location	Total#	Quantity#	Comp FI	All Other FI	Bulb Type	Schedule	Watts per bulb
1	Hard-Wired	By Count - Qualifying	Main	100	10				HERS2011	
2	Hard-Wired	Default New	Exterior						HERS2011	
3	Hard-Wired	Default New	Garage						HERS2011	

## MISC ELECTRICAL LOADS

ID	Type	Screen	Location	Item	Quantity	Catagory	Operating	Schedule	Off Standby
1	Misc Elec Load	Simple Default	Main		1		1	HERS2011	1

## APPLIANCES & LIGHTING SCHEDULES

Appliance Schedule:		HERS2014		Hours											
Schedule Type		1	2	3	4	5	6	7	8	9	10	11	12		
Occupancy peak:	400 Btu	AM	0.930	0.930	0.930	0.930	0.930	0.930	0.930	0.980	0.460	0.270	0.270	0.270	
% Released:	100 %	PM	0.270	0.270	0.270	0.270	0.330	0.610	1.000	1.000	0.930	0.930	0.930	0.930	
refrig peak:	0 W	AM	0.824	0.804	0.784	0.764	0.744	0.734	0.744	0.754	0.764	0.794	0.814	0.854	
% Released:	100 %	PM	0.854	0.864	0.884	0.904	0.925	0.945	0.925	0.915	0.904	0.894	0.874	0.854	
cWash peak:	0 W	AM	0.200	0.100	0.050	0.050	0.050	0.075	0.200	0.375	0.500	0.800	0.950	1.000	
% Released:	30 %	PM	0.875	0.850	0.800	0.625	0.625	0.600	0.575	0.550	0.625	0.700	0.650	0.375	
E-cDry peak:	119 W	AM	0.200	0.100	0.050	0.050	0.050	0.075	0.200	0.375	0.500	0.800	0.950	1.000	
% Released:	15 %	PM	0.875	0.850	0.800	0.625	0.625	0.600	0.575	0.550	0.625	0.700	0.650	0.375	
dWash peak:	0 W	AM	0.139	0.050	0.028	0.024	0.029	0.090	0.169	0.303	0.541	0.594	0.502	0.443	
% Released:	60 %	PM	0.376	0.396	0.334	0.323	0.344	0.448	0.791	1.000	0.800	0.597	0.383	0.281	
E-rOven peak:	122 W	AM	0.057	0.057	0.057	0.057	0.057	0.114	0.171	0.286	0.343	0.343	0.343	0.400	
% Released:	80 %	PM	0.457	0.343	0.286	0.400	0.571	1.000	0.857	0.429	0.286	0.229	0.171	0.114	
TVs peak:	151 W	AM	0.100	0.050	0.050	0.050	0.100	0.200	0.400	0.450	0.400	0.200	0.100	0.100	
% Released:	100 %	PM	0.050	0.050	0.150	0.450	0.850	1.000	0.950	0.800	0.500	0.250	0.150	0.100	

# Building Input Summary Report

## APPLIANCES & LIGHTING SCHEDULES(Continued)

cFan peak:	0 W	AM	0.600	0.600	0.600	0.600	0.600	0.600	0.600	0.250	0.250	0.250	0.250	0.250
% Released:	100 %	PM	0.250	0.250	0.250	0.250	0.250	0.250	0.550	0.600	0.600	0.600	0.600	0.600
lgts-in peak:	545 W	AM	0.160	0.150	0.160	0.180	0.230	0.450	0.420	0.260	0.190	0.160	0.120	0.110
% Released:	100 %	PM	0.160	0.170	0.250	0.270	0.340	0.550	0.600	0.880	1.000	0.880	0.510	0.280
lgts-out peak:	47 W	AM	1.000	1.000	1.000	1.000	1.000	0.750	0.750	0.000	0.000	0.000	0.000	0.000
% Released:	0 %	PM	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.750	0.750	0.750	1.000
lgts-gar peak:	0 W	AM	0.000	0.000	0.000	0.000	0.000	0.500	0.750	1.000	0.750	0.500	0.000	0.000
% Released:	0 %	PM	0.000	0.000	0.500	0.500	0.750	1.000	0.750	0.500	0.000	0.000	0.000	0.000
MEL peak:	184 W	AM	0.500	0.500	0.500	0.750	0.750	0.850	1.000	1.000	1.000	1.000	0.900	0.900
% Released:	90 %	PM	0.900	0.900	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.850	0.750	0.750

# Building Input Summary Report

PROJECT									
Title:	L140AL (zero windows)			Address type:	Y				
Building Type:	User	Bedrooms:	0	Lot #:					
Owner:	FSEC	Conditioned Area:	1539	Block/SubDivision:					
Builder Name:	James Q. Hammer	Total Stories:	1	PlatBook:	111 Anywhere Lane				
Permit Office:		Worst Case:	No	County:					
Jurisdiction:		Rotate Angle:	0	City, State, Zip:	Las Vegas, NV,				
Family Type:	Single-family	Cross Ventilation:							
New/Existing:	New (From Plans)	Whole House Fan:							
Year Construct:		Terrain:	Suburban						
Comment:	HERS BESTEST zero windows case			Shielding:	Suburban				
CLIMATE									
Design Location	Tmy Site	Design Temp	97.5%	2.5%	Int Design Temp	Heating Degree Days	Design Moisture	Daily temp Range	
NV, LAS_VEGASTMY1	NV_LAS_VEGASTMY1	32	105		70 75	2300.5	0	High	
UTILITY									
Fuel	Unit	Utility Name				Monthly Fixed Cost		\$/Unit	
Electricity	kWh	EnergyGauge Default				0.00		0.12	
Natural Gas	Therm	EnergyGauge Default				0.00		0.68	
Fuel Oil	Gallon	EnergyGauge Default				0.00		1.10	
Propane	Gallon	EnergyGauge Default				0.00		1.40	
SURROUNDINGS									
Ornt	Type	-----Shade Trees-----			Exist	-----Adjacent Buildings-----			
		Height	Width	Distance		Height	Width	Distance	
N	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
NE	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
E	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
SE	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
S	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
SW	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
W	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
NW	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
BLOCKS									
Number	Name	Area	Volume						
1	Block1	1539	12312						
SPACES									
Number	Name	Area	Volume	Kitchen	Occupants	Bedrooms	Finished	Cooled	Heated
1	Main	1539	12312	Yes	0	0		Yes	Yes

# Building Input Summary Report

FLOORS												
#	Floor Type	Space	Exposed Perim	Perimeter R-Value	Area	Joist R-Value	Tile	Wood	Carpet			
1	Raised Floor	Main	---	---	1539 ft	10.4	0	0	1			
ROOF												
#	Type	Materials	Roof Area	Gable Area	Roof Color	Solar Absor.	SA Tested	Emitt	Emitt Tested	Deck Insul.	Pitch (deg)	
1	Gable or shed	Composition shingles	1622 ft²	256 ft²	Medium	0.6	No	0.9	No	0	18.4	
ATTIC												
#	Type	Ventilation	Vent Ratio (1 in)	Area	RBS	IRCC						
1	Full attic	Vented	150	1539 ft²	N	N						
CEILING												
#	Ceiling Type	Space	R-Value	Ins. Type	Area	Framing Fraction	Truss Type					
1	Under Attic(Vented)	Main	16.7	Blown	1539.0ft²	0.11	Wood					
WALLS												
#	Ornt	Adjacent To	Wall Type	Space	Cavity R-Value	Width Ft In	Height Ft In	Sheathing Area	R-Value	Framing Fraction	Solar Absor.	Below Grade
1	N	Exterior	Frame - Wood	Main	11	57.0 0	8.0 0	456.0ft²		0.25	0.6	0 %
2	S	Exterior	Frame - Wood	Main	11	57.0 0	8.0 0	456.0ft²		0.25	0.6	0 %
3	E	Exterior	Frame - Wood	Main	11	27.0 0	8.0 0	216.0ft²		0.25	0.6	0 %
4	W	Exterior	Frame - Wood	Main	11	27.0 0	8.0 0	216.0ft²		0.25	0.6	0 %
DOORS												
#	Ornt	Adjacent To	Door Type	Space	Storms	U-Value	Width Ft In	Height Ft In	Area			
1	N	Exterior	Insulated	Main	None	0.46	3.00 0	6.00 8	20.0ft²			
2	S	Exterior	Insulated	Main	None	0.46	3.00 0	6.00 8	20.0ft²			
WINDOWS												
#	Ornt	Wall ID	Frame	Panes	NFRC	U-Factor	SHGC	Storm	Area	-----Overhang----- Depth Separation	Interior Shade	Screening
1	N	1	Vinyl	Low-E Double	Yes	0.09	0.01	N	0.0ft²	0.0 ft 0 in 0.0 ft 0 in	None	None
INFILTRATION												
#	Scope	Method	SLA	CFM50	ELA	EqLA	ACH	ACH50	Space(s)			
1	Wholehouse	Proposed ACH	0.00074	3005	164.98	310.27	0.6700	14.6	All			

# Building Input Summary Report

MASS													
#	Mass Type	Area	Thickness	Furniture Fraction	Space								
1	No Added Mass	0 ft²	0 ft	0.10	Main								
HEATING SYSTEM													
#	System Type	Subtype	AHRI #	Efficiency	Capacity kBtu/hr	---Geothermal Entry	HeatPump--- Power	Volt	Current	Ducts	Block		
1	Electric Strip Heat	None		COP: 1.00	140.0		0.00	0.00	0.00	sys#1	1		
COOLING SYSTEM													
#	System Type	Subtype	AHRI #	Efficiency	Capacity kBtu/hr	Air Flow cfm	SHR	Duct	Block				
1	Central Unit	None		SEER:10	54.0	1620	0.75	sys#1	1				
HOT WATER SYSTEM													
#	System Type	Subtype	Location	EF	Cap	Use	SetPnt	Fixture Flow	Pipe Ins.	Pipe length			
	Recirculation System	Recirc Control Type	Loop length	Branch length	Pump power	DWHR	Facilities Connected	Equal Flow	DWHR Eff	Other Credits			
DUCTS													
Duct #	-----Supply----- Location	R-Value	Area	-----Return----- Location	R-Value	Area	Leakage Type	Air Handler	CFM 25 TOT	CFM 25 OUT	QN	RLF	HVAC # Heat Cool
1	Main	6.0	385 ft²	Main	6.0	77 ft²	Prop. Air Leakage	Main	---	---	0.00	0.60	1 1
MECHANICAL VENTILATION													
Type	Supply CFM	Exhaust CFM	HRV	Fan	Run Time	Heating System	Cooling System						
None	0.0	0.0	0.0	0.0 W	0 %	1 - Electric Strip Heat	1 - Central Unit						
TEMPERATURES													
Programable Thermostat: N				Ceiling Fans: N									
Cooling	<input checked="" type="checkbox"/> Jan	<input checked="" type="checkbox"/> Feb	<input checked="" type="checkbox"/> Mar	<input checked="" type="checkbox"/> Apr	<input checked="" type="checkbox"/> May	<input checked="" type="checkbox"/> Jun	<input checked="" type="checkbox"/> Jul	<input checked="" type="checkbox"/> Aug	<input checked="" type="checkbox"/> Sep	<input checked="" type="checkbox"/> Oct	<input checked="" type="checkbox"/> Nov	<input checked="" type="checkbox"/> Dec	
Heating	<input type="checkbox"/> Jan	<input type="checkbox"/> Feb	<input type="checkbox"/> Mar	<input type="checkbox"/> Apr	<input type="checkbox"/> May	<input type="checkbox"/> Jun	<input type="checkbox"/> Jul	<input type="checkbox"/> Aug	<input type="checkbox"/> Sep	<input type="checkbox"/> Oct	<input type="checkbox"/> Nov	<input type="checkbox"/> Dec	
Venting	<input type="checkbox"/> Jan	<input type="checkbox"/> Feb	<input type="checkbox"/> Mar	<input type="checkbox"/> Apr	<input type="checkbox"/> May	<input type="checkbox"/> Jun	<input type="checkbox"/> Jul	<input type="checkbox"/> Aug	<input type="checkbox"/> Sep	<input type="checkbox"/> Oct	<input type="checkbox"/> Nov	<input type="checkbox"/> Dec	
Thermostat Schedule: BESTEST-cooling													
Schedule Type		1	2	3	4	5	6	7	8	9	10	11	12
Cooling (WD)		AM 78	78	78	78	78	78	78	78	78	78	78	78
		PM 78	78	78	78	78	78	78	78	78	78	78	78
Cooling (WEH)		AM 78	78	78	78	78	78	78	78	78	78	78	78
		PM 78	78	78	78	78	78	78	78	78	78	78	78

# Building Input Summary Report

## TEMPERATURES(Continued)

Heating (WD)	AM	68	68	68	68	68	68	68	68	68	68	68	68	68
	PM	68	68	68	68	68	68	68	68	68	68	68	68	68
Heating (WEH)	AM	68	68	68	68	68	68	68	68	68	68	68	68	68
	PM	68	68	68	68	68	68	68	68	68	68	68	68	68

## CLOTHES DRYERS

ID	Type	Screen	Location	Quantity	Fuel Type	Make	Model	Schedule	kWhPerYr
1	Dryers	Default New	Main		Electricity			HERS2011	0

## RANGE OVENS

ID	Type	Screen	Location	Type	Fuel Type	Make	Model	Cooktop	Oven
1	Ranges	Default New	Main	Combo	Elec			Elec Flat Coil	Not Convec

## HARD WIRED LIGHTING

ID	Type	Screen	Location	Total#	Quantity#	Comp FI	All Other FI	Bulb Type	Schedule	Watts per bulb
1	Hard-Wired	By Count - Qualifying	Main	100	10				HERS2011	
2	Hard-Wired	Default New	Exterior						HERS2011	
3	Hard-Wired	Default New	Garage						HERS2011	

## MISC ELECTRICAL LOADS

ID	Type	Screen	Location	Item	Quantity	Catagory	Operating	Schedule	Off Standby
1	Misc Elec Load	Simple Default	Main		1		1	HERS2011	1

## APPLIANCES & LIGHTING SCHEDULES

Appliance Schedule:		HERS2014		Hours											
Schedule Type		1	2	3	4	5	6	7	8	9	10	11	12		
Occupancy peak:	400 Btu	AM	0.930	0.930	0.930	0.930	0.930	0.930	0.930	0.980	0.460	0.270	0.270	0.270	
% Released:	100 %	PM	0.270	0.270	0.270	0.270	0.330	0.610	1.000	1.000	0.930	0.930	0.930	0.930	
refrig peak:	0 W	AM	0.824	0.804	0.784	0.764	0.744	0.734	0.744	0.754	0.764	0.794	0.814	0.854	
% Released:	100 %	PM	0.854	0.864	0.884	0.904	0.925	0.945	0.925	0.915	0.904	0.894	0.874	0.854	
cWash peak:	0 W	AM	0.200	0.100	0.050	0.050	0.050	0.075	0.200	0.375	0.500	0.800	0.950	1.000	
% Released:	30 %	PM	0.875	0.850	0.800	0.625	0.625	0.600	0.575	0.550	0.625	0.700	0.650	0.375	
E-cDry peak:	119 W	AM	0.200	0.100	0.050	0.050	0.050	0.075	0.200	0.375	0.500	0.800	0.950	1.000	
% Released:	15 %	PM	0.875	0.850	0.800	0.625	0.625	0.600	0.575	0.550	0.625	0.700	0.650	0.375	
dWash peak:	0 W	AM	0.139	0.050	0.028	0.024	0.029	0.090	0.169	0.303	0.541	0.594	0.502	0.443	
% Released:	60 %	PM	0.376	0.396	0.334	0.323	0.344	0.448	0.791	1.000	0.800	0.597	0.383	0.281	
E-rOven peak:	122 W	AM	0.057	0.057	0.057	0.057	0.057	0.114	0.171	0.286	0.343	0.343	0.343	0.400	
% Released:	80 %	PM	0.457	0.343	0.286	0.400	0.571	1.000	0.857	0.429	0.286	0.229	0.171	0.114	
TVs peak:	151 W	AM	0.100	0.050	0.050	0.050	0.100	0.200	0.400	0.450	0.400	0.200	0.100	0.100	
% Released:	100 %	PM	0.050	0.050	0.150	0.450	0.850	1.000	0.950	0.800	0.500	0.250	0.150	0.100	



# Building Input Summary Report

## APPLIANCES & LIGHTING SCHEDULES(Continued)

cFan peak:	0 W	AM	0.600	0.600	0.600	0.600	0.600	0.600	0.600	0.250	0.250	0.250	0.250	0.250
% Released:	100 %	PM	0.250	0.250	0.250	0.250	0.250	0.250	0.550	0.600	0.600	0.600	0.600	0.600
lgts-in peak:	545 W	AM	0.160	0.150	0.160	0.180	0.230	0.450	0.420	0.260	0.190	0.160	0.120	0.110
% Released:	100 %	PM	0.160	0.170	0.250	0.270	0.340	0.550	0.600	0.880	1.000	0.880	0.510	0.280
lgts-out peak:	47 W	AM	1.000	1.000	1.000	1.000	1.000	0.750	0.750	0.000	0.000	0.000	0.000	0.000
% Released:	0 %	PM	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.750	0.750	0.750	1.000
lgts-gar peak:	0 W	AM	0.000	0.000	0.000	0.000	0.000	0.500	0.750	1.000	0.750	0.500	0.000	0.000
% Released:	0 %	PM	0.000	0.000	0.500	0.500	0.750	1.000	0.750	0.500	0.000	0.000	0.000	0.000
MEL peak:	184 W	AM	0.500	0.500	0.500	0.750	0.750	0.850	1.000	1.000	1.000	1.000	0.900	0.900
% Released:	90 %	PM	0.900	0.900	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.850	0.750	0.750

# Building Input Summary Report

PROJECT										
Title:	L150AL (all south glass)				Address type:	Y				
Building Type:	User	Bedrooms:	0			Lot #:				
Owner:	FSEC	Conditioned Area:	1539			Block/SubDivision:				
Builder Name:	James Q. Hammer	Total Stories:	1			PlatBook:	111 Anywhere Lane			
Permit Office:		Worst Case:	No			County:				
Jurisdiction:		Rotate Angle:	0			City, State, Zip:	Las Vegas, NV,			
Family Type:	Single-family	Cross Ventilation:								
New/Existing:	New (From Plans)	Whole House Fan:								
Year Construct:		Terrain:	Suburban							
Comment:	HERS BESTEST all south glass case				Shielding:	Suburban				
CLIMATE										
Design Location	Tmy Site	Design Temp 97.5%	Design Temp 2.5%	Int Design Temp Winter	Int Design Temp Summer	Heating Degree Days	Design Moisture	Daily temp Range		
NV, LAS_VEGASTMY1	NV_LAS_VEGASTMY1	32	105	70	75	2300.5	0	High		
UTILITY										
Fuel	Unit	Utility Name				Monthly Fixed Cost	\$/Unit			
Electricity	kWh	EnergyGauge Default				0.00	0.12			
Natural Gas	Therm	EnergyGauge Default				0.00	0.68			
Fuel Oil	Gallon	EnergyGauge Default				0.00	1.10			
Propane	Gallon	EnergyGauge Default				0.00	1.40			
SURROUNDINGS										
Ornt	Type	-----Shade Trees-----			Exist	-----Adjacent Buildings-----				
		Height	Width	Distance		Height	Width	Distance		
N	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
NE	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
E	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
SE	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
S	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
SW	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
W	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
NW	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
BLOCKS										
Number	Name	Area	Volume							
1	Block1	1539	12312							
SPACES										
Number	Name	Area	Volume	Kitchen	Occupants	Bedrooms	Finished	Cooled	Heated	
1	Main	1539	12312	Yes	0	0		Yes	Yes	

# Building Input Summary Report

FLOORS												
#	Floor Type	Space	Exposed Perim	Perimeter R-Value	Area	Joist R-Value	Tile	Wood	Carpet			
1	Raised Floor	Main	---	---	1539 ft	10.4	0	0	1			
ROOF												
#	Type	Materials	Roof Area	Gable Area	Roof Color	Solar Absor.	SA Tested	Emitt	Emitt Tested	Deck Insul.	Pitch (deg)	
1	Gable or shed	Composition shingles	1622 ft²	256 ft²	Medium	0.6	No	0.9	No	0	18.4	
ATTIC												
#	Type	Ventilation	Vent Ratio (1 in)	Area	RBS	IRCC						
1	Full attic	Vented	150	1539 ft²	N	N						
CEILING												
#	Ceiling Type	Space	R-Value	Ins. Type	Area	Framing Fraction	Truss Type					
1	Under Attic(Vented)	Main	16.7	Blown	1539.0ft²	0.11	Wood					
WALLS												
#	Ornt	Adjacent To	Wall Type	Space	Cavity R-Value	Width Ft In	Height Ft In	Sheathing Area	R-Value	Framing Fraction	Solar Absor.	Below Grade
1	N	Exterior	Frame - Wood	Main	11	57.0 0	8.0 0	456.0ft²		0.25	0.6	0 %
2	S	Exterior	Frame - Wood	Main	11	57.0 0	8.0 0	456.0ft²		0.25	0.6	0 %
3	E	Exterior	Frame - Wood	Main	11	27.0 0	8.0 0	216.0ft²		0.25	0.6	0 %
4	W	Exterior	Frame - Wood	Main	11	27.0 0	8.0 0	216.0ft²		0.25	0.6	0 %
DOORS												
#	Ornt	Adjacent To	Door Type	Space	Storms	U-Value	Width Ft In	Height Ft In	Area			
1	N	Exterior	Insulated	Main	None	0.46	3.00 0	6.00 8	20.0ft²			
2	S	Exterior	Insulated	Main	None	0.46	3.00 0	6.00 8	20.0ft²			
WINDOWS												
#	Ornt	Wall ID	Frame	Panes	NFRC	U-Factor	SHGC	Storm	Area	-----Overhang----- Depth Separation	Interior Shade	Screening
1	S	2	TIM	Single (Clear)	Yes	1.09	0.70	N	270.0ft²	0.0 ft 0 in 0.0 ft 0 in	None	None
INFILTRATION												
#	Scope	Method	SLA	CFM50	ELA	EqLA	ACH	ACH50	Space(s)			
1	Wholehouse	Proposed ACH	0.00074	3005	164.98	310.27	0.6700	14.6	All			

# Building Input Summary Report

<b>MASS</b>													
#	Mass Type	Area	Thickness	Furniture Fraction	Space								
1	No Added Mass	0 ft²	0 ft	0.00	Main								
<b>HEATING SYSTEM</b>													
#	System Type	Subtype	AHRI #	Efficiency	Capacity kBtu/hr	---Geothermal HeatPump---		Ducts	Block				
1	Electric Strip Heat	None		COP: 1.00	140.0	Entry	Power	Volt	Current	sys#1	1		
<b>COOLING SYSTEM</b>													
#	System Type	Subtype	AHRI #	Efficiency	Capacity kBtu/hr	Air Flow cfm	SHR	Duct	Block				
1	Central Unit	None		SEER:10	100.0	1470	0.75	sys#1	1				
<b>HOT WATER SYSTEM</b>													
#	System Type	Subtype	Location	EF	Cap	Use	SetPnt	Fixture Flow	Pipe Ins.	Pipe length			
	Recirculation System	Recirc Control Type	Loop length	Branch length	Pump power	DWHR	Facilities Connected	Equal Flow	DWHR Eff	Other Credits			
<b>DUCTS</b>													
Duct #	-----Supply-----			-----Return-----			Leakage Type	Air Handler	CFM 25 TOT	CFM 25 OUT	QN	RLF	HVAC # Heat Cool
1	Main	6.0	385 ft²	Main	6.0	77 ft²	Prop. Air Leakage	Main	---	---	0.00	0.60	1 1
<b>MECHANICAL VENTILATION</b>													
Type	Supply CFM	Exhaust CFM	HRV	Fan	Run Time	Heating System	Cooling System						
None	0.0	0.0	0.0	0.0 W	0 %	1 - Electric Strip Heat	1 - Central Unit						
<b>TEMPERATURES</b>													
Programable Thermostat: N						Ceiling Fans: N							
Cooling	<input checked="" type="checkbox"/> Jan	<input checked="" type="checkbox"/> Feb	<input checked="" type="checkbox"/> Mar	<input checked="" type="checkbox"/> Apr	<input checked="" type="checkbox"/> May	<input checked="" type="checkbox"/> Jun	<input checked="" type="checkbox"/> Jul	<input checked="" type="checkbox"/> Aug	<input checked="" type="checkbox"/> Sep	<input checked="" type="checkbox"/> Oct	<input checked="" type="checkbox"/> Nov	<input checked="" type="checkbox"/> Dec	
Heating	<input type="checkbox"/> Jan	<input type="checkbox"/> Feb	<input type="checkbox"/> Mar	<input type="checkbox"/> Apr	<input type="checkbox"/> May	<input type="checkbox"/> Jun	<input type="checkbox"/> Jul	<input type="checkbox"/> Aug	<input type="checkbox"/> Sep	<input type="checkbox"/> Oct	<input type="checkbox"/> Nov	<input type="checkbox"/> Dec	
Venting	<input type="checkbox"/> Jan	<input type="checkbox"/> Feb	<input type="checkbox"/> Mar	<input type="checkbox"/> Apr	<input type="checkbox"/> May	<input type="checkbox"/> Jun	<input type="checkbox"/> Jul	<input type="checkbox"/> Aug	<input type="checkbox"/> Sep	<input type="checkbox"/> Oct	<input type="checkbox"/> Nov	<input type="checkbox"/> Dec	
Thermostat Schedule: BESTEST-cooling													
Schedule Type		1	2	3	4	5	6	7	8	9	10	11	12
Cooling (WD)	AM PM	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78
Cooling (WEH)	AM PM	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78

# Building Input Summary Report

## TEMPERATURES(Continued)

Heating (WD)	AM	68	68	68	68	68	68	68	68	68	68	68	68	68
	PM	68	68	68	68	68	68	68	68	68	68	68	68	68
Heating (WEH)	AM	68	68	68	68	68	68	68	68	68	68	68	68	68
	PM	68	68	68	68	68	68	68	68	68	68	68	68	68

## CLOTHES DRYERS

ID	Type	Screen	Location	Quantity	Fuel Type	Make	Model	Schedule	kWhPerYr
1	Dryers	Default New	Main		Electricity			HERS2011	0

## RANGE OVENS

ID	Type	Screen	Location	Type	Fuel Type	Make	Model	Cooktop	Oven
1	Ranges	Default New	Main	Combo	Elec			Elec Flat Coil	Not Convec

## HARD WIRED LIGHTING

ID	Type	Screen	Location	Total#	Quantity#	Comp FI	All Other FI	Bulb Type	Schedule	Watts per bulb
1	Hard-Wired	By Count - Qualifying	Main	100	10				HERS2011	
2	Hard-Wired	Default New	Exterior						HERS2011	
3	Hard-Wired	Default New	Garage						HERS2011	

## MISC ELECTRICAL LOADS

ID	Type	Screen	Location	Item	Quantity	Catagory	Operating	Schedule	Off Standby
1	Misc Elec Load	Simple Default	Main		1		1	HERS2011	1

## APPLIANCES & LIGHTING SCHEDULES

Appliance Schedule:		HERS2014		Hours											
Schedule Type		1	2	3	4	5	6	7	8	9	10	11	12		
Occupancy peak:	400 Btu	AM	0.930	0.930	0.930	0.930	0.930	0.930	0.930	0.980	0.460	0.270	0.270	0.270	
% Released:	100 %	PM	0.270	0.270	0.270	0.270	0.330	0.610	1.000	1.000	0.930	0.930	0.930	0.930	
refrig peak:	0 W	AM	0.824	0.804	0.784	0.764	0.744	0.734	0.744	0.754	0.764	0.794	0.814	0.854	
% Released:	100 %	PM	0.854	0.864	0.884	0.904	0.925	0.945	0.925	0.915	0.904	0.894	0.874	0.854	
cWash peak:	0 W	AM	0.200	0.100	0.050	0.050	0.050	0.075	0.200	0.375	0.500	0.800	0.950	1.000	
% Released:	30 %	PM	0.875	0.850	0.800	0.625	0.625	0.600	0.575	0.550	0.625	0.700	0.650	0.375	
E-cDry peak:	119 W	AM	0.200	0.100	0.050	0.050	0.050	0.075	0.200	0.375	0.500	0.800	0.950	1.000	
% Released:	15 %	PM	0.875	0.850	0.800	0.625	0.625	0.600	0.575	0.550	0.625	0.700	0.650	0.375	
dWash peak:	0 W	AM	0.139	0.050	0.028	0.024	0.029	0.090	0.169	0.303	0.541	0.594	0.502	0.443	
% Released:	60 %	PM	0.376	0.396	0.334	0.323	0.344	0.448	0.791	1.000	0.800	0.597	0.383	0.281	
E-rOven peak:	122 W	AM	0.057	0.057	0.057	0.057	0.057	0.114	0.171	0.286	0.343	0.343	0.343	0.400	
% Released:	80 %	PM	0.457	0.343	0.286	0.400	0.571	1.000	0.857	0.429	0.286	0.229	0.171	0.114	
TVs peak:	151 W	AM	0.100	0.050	0.050	0.050	0.100	0.200	0.400	0.450	0.400	0.200	0.100	0.100	
% Released:	100 %	PM	0.050	0.050	0.150	0.450	0.850	1.000	0.950	0.800	0.500	0.250	0.150	0.100	

# Building Input Summary Report

## APPLIANCES & LIGHTING SCHEDULES(Continued)

cFan peak:	0 W	AM	0.600	0.600	0.600	0.600	0.600	0.600	0.600	0.250	0.250	0.250	0.250	0.250
% Released:	100 %	PM	0.250	0.250	0.250	0.250	0.250	0.250	0.550	0.600	0.600	0.600	0.600	0.600
lgts-in peak:	545 W	AM	0.160	0.150	0.160	0.180	0.230	0.450	0.420	0.260	0.190	0.160	0.120	0.110
% Released:	100 %	PM	0.160	0.170	0.250	0.270	0.340	0.550	0.600	0.880	1.000	0.880	0.510	0.280
lgts-out peak:	47 W	AM	1.000	1.000	1.000	1.000	1.000	0.750	0.750	0.000	0.000	0.000	0.000	0.000
% Released:	0 %	PM	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.750	0.750	0.750	1.000
lgts-gar peak:	0 W	AM	0.000	0.000	0.000	0.000	0.000	0.500	0.750	1.000	0.750	0.500	0.000	0.000
% Released:	0 %	PM	0.000	0.000	0.500	0.500	0.750	1.000	0.750	0.500	0.000	0.000	0.000	0.000
MEL peak:	184 W	AM	0.500	0.500	0.500	0.750	0.750	0.850	1.000	1.000	1.000	1.000	0.900	0.900
% Released:	90 %	PM	0.900	0.900	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.850	0.750	0.750

# Building Input Summary Report

PROJECT										
Title:	L155AL (south glass with OH)				Address type: Y					
Building Type:	User	Bedrooms:	0		Lot #:					
Owner:	FSEC	Conditioned Area:	1539		Block/SubDivision:					
Builder Name:	James Q. Hammer	Total Stories:	1		PlatBook:					
Permit Office:		Worst Case:	No		Street: 111 Anywhere Lane					
Jurisdiction:		Rotate Angle:	0		County:					
Family Type:	Single-family	Cross Ventilation:			City, State, Zip: Las Vegas, NV,					
New/Existing:	New (From Plans)	Whole House Fan:								
Year Construct:		Terrain:	Suburban							
Comment:	HERS BESTEST south glass w/ overhang case				Shielding: Suburban					
CLIMATE										
Design Location	Tmy Site	Design Temp	97.5%	2.5%	Int Design Temp	Winter	Summer	Heating Degree Days	Design Moisture	Daily temp Range
NV, LAS_VEGASTMY1	NV_LAS_VEGASTMY1	32	105		70	75	2300.5	0		High
UTILITY										
Fuel	Unit	Utility Name					Monthly Fixed Cost	\$/Unit		
Electricity	kWh	EnergyGauge Default					0.00	0.12		
Natural Gas	Therm	EnergyGauge Default					0.00	0.68		
Fuel Oil	Gallon	EnergyGauge Default					0.00	1.10		
Propane	Gallon	EnergyGauge Default					0.00	1.40		
SURROUNDINGS										
Ornt	Type	-----Shade Trees-----			Exist	-----Adjacent Buildings-----				
		Height	Width	Distance		Height	Width	Distance		
N	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
NE	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
E	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
SE	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
S	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
SW	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
W	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
NW	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
BLOCKS										
Number	Name	Area	Volume							
1	Block1	1539	12312							
SPACES										
Number	Name	Area	Volume	Kitchen	Occupants	Bedrooms	Finished	Cooled	Heated	
1	Main	1539	12312	Yes	0	0		Yes	Yes	

# Building Input Summary Report

FLOORS														
#	Floor Type		Space	Exposed Perim	Perimeter R-Value	Area	Joist R-Value	Tile	Wood	Carpet				
1	Raised Floor		Main	---	---	1539 ft	10.4	0	0	1				
ROOF														
#	Type	Materials		Roof Area	Gable Area	Roof Color	Solar Absor.	SA Tested	Emitt	Emitt Tested	Deck Insul.	Pitch (deg)		
1	Gable or shed	Composition shingles		1622 ft²	256 ft²	Medium	0.6	No	0.9	No	0	18.4		
ATTIC														
#	Type	Ventilation		Vent Ratio (1 in)	Area	RBS	IRCC							
1	Full attic	Vented		150	1539 ft²	N	N							
CEILING														
#	Ceiling Type		Space	R-Value	Ins. Type	Area	Framing Fraction	Truss Type						
1	Under Attic(Vented)		Main	16.7	Blown	1539.0ft²	0.11	Wood						
WALLS														
#	Adjacent Ornt	To	Wall Type	Space	Cavity R-Value	Width Ft	In	Height Ft	In	Sheathing Area	R-Value	Framing Fraction	Solar Absor.	Below Grade
1	N	Exterior	Frame - Wood	Main	11	57.0	0	8.0	0	456.0ft²		0.25	0.6	0 %
2	S	Exterior	Frame - Wood	Main	11	57.0	0	8.0	0	456.0ft²		0.25	0.6	0 %
3	E	Exterior	Frame - Wood	Main	11	27.0	0	8.0	0	216.0ft²		0.25	0.6	0 %
4	W	Exterior	Frame - Wood	Main	11	27.0	0	8.0	0	216.0ft²		0.25	0.6	0 %
DOORS														
#	Ornt	Adjacent To	Door Type	Space	Storms	U-Value	Width Ft	In	Height Ft	In	Area			
1	N	Exterior	Insulated	Main	None	0.46	3.00	0	6.00	8	20.0ft²			
2	S	Exterior	Insulated	Main	None	0.46	3.00	0	6.00	8	20.0ft²			
WINDOWS														
#	Wall Ornt	ID	Frame	Panes	NFRC	U-Factor	SHGC	Storm	Area	-----Overhang----- Depth	Separation	Interior Shade	Screening	
1	S	2	TIM	Single (Clear)	Yes	1.09	0.70	N	270.0ft²	2.0 ft 6 in	1.0 ft 0 in	None	None	
INFILTRATION														
#	Scope	Method	SLA	CFM50	ELA	EqLA	ACH	ACH50	Space(s)					
1	Wholehouse	Proposed ACH	0.00074	3005	164.98	310.27	0.6700	14.6	All					



# Building Input Summary Report

MASS													
#	Mass Type	Area	Thickness	Furniture Fraction	Space								
1	No Added Mass	0 ft²	0 ft	0.00	Main								
HEATING SYSTEM													
#	System Type	Subtype	AHRI #	Efficiency	Capacity kBtu/hr	---Geothermal HeatPump---		Ducts	Block				
						Entry	Power	Volt	Current				
1	Electric Strip Heat	None		COP: 1.00	140.0		0.00	0.00	0.00	sys#1	1		
COOLING SYSTEM													
#	System Type	Subtype	AHRI #	Efficiency	Capacity kBtu/hr	Air Flow cfm	SHR	Duct	Block				
1	Central Unit	None		SEER:10	84.0	1260	0.75	sys#1	1				
HOT WATER SYSTEM													
#	System Type	Subtype	Location	EF	Cap	Use	SetPnt	Fixture Flow	Pipe Ins.	Pipe length			
	Recirculation System	Recirc Control Type	Loop length	Branch length	Pump power	DWHR	Facilities Connected	Equal Flow	DWHR Eff	Other Credits			
DUCTS													
Duct #	-----Supply-----			-----Return-----			Leakage Type	Air Handler	CFM 25 TOT	CFM 25 OUT	QN	RLF	HVAC # Heat Cool
1	Main	6.0	385 ft²	Main	6.0	77 ft²	Prop. Air Leakage	Main	---	---	0.00	0.60	1 1
MECHANICAL VENTILATION													
Type	Supply CFM	Exhaust CFM	HRV	Fan	Run Time	Heating System	Cooling System						
None	0.0	0.0	0.0	0.0 W	0 %	1 - Electric Strip Heat	1 - Central Unit						
TEMPERATURES													
Programable Thermostat: N						Ceiling Fans: N							
Cooling	<input checked="" type="checkbox"/> Jan	<input checked="" type="checkbox"/> Feb	<input checked="" type="checkbox"/> Mar	<input checked="" type="checkbox"/> Apr	<input checked="" type="checkbox"/> May	<input checked="" type="checkbox"/> Jun	<input checked="" type="checkbox"/> Jul	<input checked="" type="checkbox"/> Aug	<input checked="" type="checkbox"/> Sep	<input checked="" type="checkbox"/> Oct	<input checked="" type="checkbox"/> Nov	<input checked="" type="checkbox"/> Dec	
Heating	<input type="checkbox"/> Jan	<input type="checkbox"/> Feb	<input type="checkbox"/> Mar	<input type="checkbox"/> Apr	<input type="checkbox"/> May	<input type="checkbox"/> Jun	<input type="checkbox"/> Jul	<input type="checkbox"/> Aug	<input type="checkbox"/> Sep	<input type="checkbox"/> Oct	<input type="checkbox"/> Nov	<input type="checkbox"/> Dec	
Venting	<input type="checkbox"/> Jan	<input type="checkbox"/> Feb	<input type="checkbox"/> Mar	<input type="checkbox"/> Apr	<input type="checkbox"/> May	<input type="checkbox"/> Jun	<input type="checkbox"/> Jul	<input type="checkbox"/> Aug	<input type="checkbox"/> Sep	<input type="checkbox"/> Oct	<input type="checkbox"/> Nov	<input type="checkbox"/> Dec	
Thermostat Schedule: BESTEST-cooling													
Schedule Type		1	2	3	4	5	6	7	8	9	10	11	12
Cooling (WD)		AM 78	78	78	78	78	78	78	78	78	78	78	78
		PM	78	78	78	78	78	78	78	78	78	78	78
Cooling (WEH)		AM 78	78	78	78	78	78	78	78	78	78	78	78
		PM	78	78	78	78	78	78	78	78	78	78	78

# Building Input Summary Report

## TEMPERATURES(Continued)

Heating (WD)	AM	68	68	68	68	68	68	68	68	68	68	68	68	68
	PM	68	68	68	68	68	68	68	68	68	68	68	68	68
Heating (WEH)	AM	68	68	68	68	68	68	68	68	68	68	68	68	68
	PM	68	68	68	68	68	68	68	68	68	68	68	68	68

## CLOTHES DRYERS

ID	Type	Screen	Location	Quantity	Fuel Type	Make	Model	Schedule	kWhPerYr
1	Dryers	Default New	Main		Electricity			HERS2011	0

## RANGE OVENS

ID	Type	Screen	Location	Type	Fuel Type	Make	Model	Cooktop	Oven
1	Ranges	Default New	Main	Combo	Elec			Elec Flat Coil	Not Convec

## HARD WIRED LIGHTING

ID	Type	Screen	Location	Total#	Quantity#	Comp FI	All Other FI	Bulb Type	Schedule	Watts per bulb
1	Hard-Wired	By Count - Qualifying	Main	100	10				HERS2011	
2	Hard-Wired	Default New	Exterior						HERS2011	
3	Hard-Wired	Default New	Garage						HERS2011	

## MISC ELECTRICAL LOADS

ID	Type	Screen	Location	Item	Quantity	Catagory	Operating	Schedule	Off Standby
1	Misc Elec Load	Simple Default	Main		1		1	HERS2011	1

## APPLIANCES & LIGHTING SCHEDULES

Appliance Schedule:		HERS2014		Hours											
Schedule Type		1	2	3	4	5	6	7	8	9	10	11	12		
Occupancy peak:	400 Btu	AM	0.930	0.930	0.930	0.930	0.930	0.930	0.930	0.980	0.460	0.270	0.270	0.270	
% Released:	100 %	PM	0.270	0.270	0.270	0.270	0.330	0.610	1.000	1.000	0.930	0.930	0.930	0.930	
refrig peak:	0 W	AM	0.824	0.804	0.784	0.764	0.744	0.734	0.744	0.754	0.764	0.794	0.814	0.854	
% Released:	100 %	PM	0.854	0.864	0.884	0.904	0.925	0.945	0.925	0.915	0.904	0.894	0.874	0.854	
cWash peak:	0 W	AM	0.200	0.100	0.050	0.050	0.050	0.075	0.200	0.375	0.500	0.800	0.950	1.000	
% Released:	30 %	PM	0.875	0.850	0.800	0.625	0.625	0.600	0.575	0.550	0.625	0.700	0.650	0.375	
E-cDry peak:	119 W	AM	0.200	0.100	0.050	0.050	0.050	0.075	0.200	0.375	0.500	0.800	0.950	1.000	
% Released:	15 %	PM	0.875	0.850	0.800	0.625	0.625	0.600	0.575	0.550	0.625	0.700	0.650	0.375	
dWash peak:	0 W	AM	0.139	0.050	0.028	0.024	0.029	0.090	0.169	0.303	0.541	0.594	0.502	0.443	
% Released:	60 %	PM	0.376	0.396	0.334	0.323	0.344	0.448	0.791	1.000	0.800	0.597	0.383	0.281	
E-rOven peak:	122 W	AM	0.057	0.057	0.057	0.057	0.057	0.114	0.171	0.286	0.343	0.343	0.343	0.400	
% Released:	80 %	PM	0.457	0.343	0.286	0.400	0.571	1.000	0.857	0.429	0.286	0.229	0.171	0.114	
TVs peak:	151 W	AM	0.100	0.050	0.050	0.050	0.100	0.200	0.400	0.450	0.400	0.200	0.100	0.100	
% Released:	100 %	PM	0.050	0.050	0.150	0.450	0.850	1.000	0.950	0.800	0.500	0.250	0.150	0.100	

# Building Input Summary Report

## APPLIANCES & LIGHTING SCHEDULES(Continued)

cFan peak:	0 W	AM	0.600	0.600	0.600	0.600	0.600	0.600	0.600	0.250	0.250	0.250	0.250	0.250
% Released:	100 %	PM	0.250	0.250	0.250	0.250	0.250	0.250	0.550	0.600	0.600	0.600	0.600	0.600
lgts-in peak:	545 W	AM	0.160	0.150	0.160	0.180	0.230	0.450	0.420	0.260	0.190	0.160	0.120	0.110
% Released:	100 %	PM	0.160	0.170	0.250	0.270	0.340	0.550	0.600	0.880	1.000	0.880	0.510	0.280
lgts-out peak:	47 W	AM	1.000	1.000	1.000	1.000	1.000	0.750	0.750	0.000	0.000	0.000	0.000	0.000
% Released:	0 %	PM	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.750	0.750	0.750	1.000
lgts-gar peak:	0 W	AM	0.000	0.000	0.000	0.000	0.000	0.500	0.750	1.000	0.750	0.500	0.000	0.000
% Released:	0 %	PM	0.000	0.000	0.500	0.500	0.750	1.000	0.750	0.500	0.000	0.000	0.000	0.000
MEL peak:	184 W	AM	0.500	0.500	0.500	0.750	0.750	0.850	1.000	1.000	1.000	1.000	0.900	0.900
% Released:	90 %	PM	0.900	0.900	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.850	0.750	0.750

# Building Input Summary Report

PROJECT									
Title:	L160AL (east-west windows)				Address type: Y				
Building Type:	User	Bedrooms:	0		Lot #:				
Owner:	FSEC	Conditioned Area:	1539		Block/SubDivision:				
Builder Name:	James Q. Hammer	Total Stories:	1		PlatBook:				
Permit Office:		Worst Case:	No		Street: 111 Anywhere Lane				
Jurisdiction:		Rotate Angle:	0		County:				
Family Type:	Single-family	Cross Ventilation:			City, State, Zip: Las Vegas, NV,				
New/Existing:	New (From Plans)	Whole House Fan:							
Year Construct:		Terrain:	Suburban						
Comment:	HERS BESTEST east-west windows case				Shielding: Suburban				
CLIMATE									
Design Location	Tmy Site	Design Temp	97.5%	2.5%	Int Design Temp	Heating Degree Days	Design Moisture	Daily temp Range	
NV, LAS_VEGASTMY1	NV_LAS_VEGASTMY1	32	105	70	75	2300.5	0	High	
UTILITY									
Fuel	Unit	Utility Name				Monthly Fixed Cost	\$/Unit		
Electricity	kWh	EnergyGauge Default				0.00	0.12		
Natural Gas	Therm	EnergyGauge Default				0.00	0.68		
Fuel Oil	Gallon	EnergyGauge Default				0.00	1.10		
Propane	Gallon	EnergyGauge Default				0.00	1.40		
SURROUNDINGS									
Ornt	Type	-----Shade Trees-----			Exist	-----Adjacent Buildings-----			
		Height	Width	Distance		Height	Width	Distance	
N	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
NE	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
E	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
SE	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
S	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
SW	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
W	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
NW	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
BLOCKS									
Number	Name	Area	Volume						
1	Block1	1539	12312						
SPACES									
Number	Name	Area	Volume	Kitchen	Occupants	Bedrooms	Finished	Cooled	Heated
1	Main	1539	12312	Yes	0	0		Yes	Yes

# Building Input Summary Report

FLOORS														
#	Floor Type		Space	Exposed Perim	Perimeter R-Value	Area	Joist R-Value	Tile	Wood	Carpet				
1	Raised Floor		Main	---	---	1539 ft	10.4	0	0	1				
ROOF														
#	Type	Materials		Roof Area	Gable Area	Roof Color	Solar Absor.	SA Tested	Emitt	Emitt Tested	Deck Insul.	Pitch (deg)		
1	Gable or shed	Composition shingles		1622 ft²	256 ft²	Medium	0.6	No	0.9	No	0	18.4		
ATTIC														
#	Type	Ventilation		Vent Ratio (1 in)	Area	RBS	IRCC							
1	Full attic	Vented		150	1539 ft²	N	N							
CEILING														
#	Ceiling Type		Space	R-Value	Ins. Type	Area	Framing Fraction	Truss Type						
1	Under Attic(Vented)		Main	16.7	Blown	1539.0ft²	0.11	Wood						
WALLS														
#	Adjacent Ornt	To	Wall Type	Space	Cavity R-Value	Width Ft	In	Height Ft	In	Sheathing Area	R-Value	Framing Fraction	Solar Absor.	Below Grade
1	N	Exterior	Frame - Wood	Main	11	57.0	0	8.0	0	456.0ft²		0.25	0.6	0 %
2	S	Exterior	Frame - Wood	Main	11	57.0	0	8.0	0	456.0ft²		0.25	0.6	0 %
3	E	Exterior	Frame - Wood	Main	11	28.0	0	8.0	0	224.0ft²		0.25	0.6	0 %
4	W	Exterior	Frame - Wood	Main	11	28.0	0	8.0	0	224.0ft²		0.25	0.6	0 %
DOORS														
#	Ornt	Adjacent To	Door Type	Space	Storms	U-Value	Width Ft	In	Height Ft	In	Area			
1	N	Exterior	Insulated	Main	None	0.46	3.00	0	6.00	8	20.0ft²			
2	S	Exterior	Insulated	Main	None	0.46	3.00	0	6.00	8	20.0ft²			
WINDOWS														
#	Wall Ornt	ID	Frame	Panes	NFRC	U-Factor	SHGC	Storm	Area	-----Overhang----- Depth Separation		Interior Shade	Screening	
1	E	3	TIM	Single (Clear)	Yes	1.09	0.70	N	135.0ft²	0.0 ft 0 in	0.0 ft 0 in	None	None	
2	W	4	TIM	Single (Clear)	Yes	1.09	0.70	N	135.0ft²	0.0 ft 0 in	0.0 ft 0 in	None	None	
INFILTRATION														
#	Scope	Method	SLA	CFM50	ELA	EqLA	ACH	ACH50	Space(s)					
1	Wholehouse	Proposed ACH	0.00074	3005	164.98	310.27	0.6700	14.6	All					

# Building Input Summary Report

<b>MASS</b>													
#	Mass Type	Area	Thickness	Furniture Fraction	Space								
1	No Added Mass	0 ft²	0 ft	0.00	Main								
<b>HEATING SYSTEM</b>													
#	System Type	Subtype	AHRI #	Efficiency	Capacity kBtu/hr	---Geothermal HeatPump---		Ducts	Block				
1	Electric Strip Heat	None		COP: 1.00	140.0	Entry	Power	Volt	Current	sys#1	1		
<b>COOLING SYSTEM</b>													
#	System Type	Subtype	AHRI #	Efficiency	Capacity kBtu/hr	Air Flow cfm	SHR	Duct	Block				
1	Central Unit	None		SEER:10	90.0	1365	0.75	sys#1	1				
<b>HOT WATER SYSTEM</b>													
#	System Type	Subtype	Location	EF	Cap	Use	SetPnt	Fixture Flow	Pipe Ins.	Pipe length			
	Recirculation System	Recirc Control Type	Loop length	Branch length	Pump power	DWHR	Facilities Connected	Equal Flow	DWHR Eff	Other Credits			
<b>DUCTS</b>													
Duct #	-----Supply-----		-----Return-----			Leakage Type	Air Handler	CFM 25 TOT	CFM 25 OUT	QN	RLF	HVAC # Heat Cool	
1	Main	6.0 385 ft²	Main	6.0	77 ft²	Prop. Air Leakage	Main	---	---	0.00	0.60	1	1
<b>MECHANICAL VENTILATION</b>													
Type	Supply CFM	Exhaust CFM	HRV	Fan	Run Time	Heating System	Cooling System						
None	0.0	0.0	0.0	0.0 W	0 %	1 - Electric Strip Heat	1 - Central Unit						
<b>TEMPERATURES</b>													
Programable Thermostat: N						Ceiling Fans: N							
Cooling	<input checked="" type="checkbox"/> Jan	<input checked="" type="checkbox"/> Feb	<input checked="" type="checkbox"/> Mar	<input checked="" type="checkbox"/> Apr	<input checked="" type="checkbox"/> May	<input checked="" type="checkbox"/> Jun	<input checked="" type="checkbox"/> Jul	<input checked="" type="checkbox"/> Aug	<input checked="" type="checkbox"/> Sep	<input checked="" type="checkbox"/> Oct	<input checked="" type="checkbox"/> Nov	<input checked="" type="checkbox"/> Dec	
Heating	<input type="checkbox"/> Jan	<input type="checkbox"/> Feb	<input type="checkbox"/> Mar	<input type="checkbox"/> Apr	<input type="checkbox"/> May	<input type="checkbox"/> Jun	<input type="checkbox"/> Jul	<input type="checkbox"/> Aug	<input type="checkbox"/> Sep	<input type="checkbox"/> Oct	<input type="checkbox"/> Nov	<input type="checkbox"/> Dec	
Venting	<input type="checkbox"/> Jan	<input type="checkbox"/> Feb	<input type="checkbox"/> Mar	<input type="checkbox"/> Apr	<input type="checkbox"/> May	<input type="checkbox"/> Jun	<input type="checkbox"/> Jul	<input type="checkbox"/> Aug	<input type="checkbox"/> Sep	<input type="checkbox"/> Oct	<input type="checkbox"/> Nov	<input type="checkbox"/> Dec	
Thermostat Schedule: BESTEST-cooling													
Schedule Type		1	2	3	4	5	6	7	8	9	10	11	12
Cooling (WD)		AM 78	78	78	78	78	78	78	78	78	78	78	78
		PM	78	78	78	78	78	78	78	78	78	78	78
Cooling (WEH)		AM 78	78	78	78	78	78	78	78	78	78	78	78
		PM	78	78	78	78	78	78	78	78	78	78	78

# Building Input Summary Report

## TEMPERATURES(Continued)

Heating (WD)	AM	68	68	68	68	68	68	68	68	68	68	68	68	68
	PM	68	68	68	68	68	68	68	68	68	68	68	68	68
Heating (WEH)	AM	68	68	68	68	68	68	68	68	68	68	68	68	68
	PM	68	68	68	68	68	68	68	68	68	68	68	68	68

## CLOTHES DRYERS

ID	Type	Screen	Location	Quantity	Fuel Type	Make	Model	Schedule	kWhPerYr
1	Dryers	Default New	Main		Electricity			HERS2011	0

## RANGE OVENS

ID	Type	Screen	Location	Type	Fuel Type	Make	Model	Cooktop	Oven
1	Ranges	Default New	Main	Combo	Elec			Elec Flat Coil	Not Convec

## HARD WIRED LIGHTING

ID	Type	Screen	Location	Total#	Quantity#	Comp FI	All Other FI	Bulb Type	Schedule	Watts per bulb
1	Hard-Wired	By Count - Qualifying	Main	100	10				HERS2011	
2	Hard-Wired	Default New	Exterior						HERS2011	
3	Hard-Wired	Default New	Garage						HERS2011	

## MISC ELECTRICAL LOADS

ID	Type	Screen	Location	Item	Quantity	Catagory	Operating	Schedule	Off Standby
1	Misc Elec Load	Simple Default	Main		1		1	HERS2011	1

## APPLIANCES & LIGHTING SCHEDULES

Appliance Schedule:		HERS2014		Hours											
Schedule Type		1	2	3	4	5	6	7	8	9	10	11	12		
Occupancy peak:	400 Btu	AM	0.930	0.930	0.930	0.930	0.930	0.930	0.930	0.980	0.460	0.270	0.270	0.270	
% Released:	100 %	PM	0.270	0.270	0.270	0.270	0.330	0.610	1.000	1.000	0.930	0.930	0.930	0.930	
refrig peak:	0 W	AM	0.824	0.804	0.784	0.764	0.744	0.734	0.744	0.754	0.764	0.794	0.814	0.854	
% Released:	100 %	PM	0.854	0.864	0.884	0.904	0.925	0.945	0.925	0.915	0.904	0.894	0.874	0.854	
cWash peak:	0 W	AM	0.200	0.100	0.050	0.050	0.050	0.075	0.200	0.375	0.500	0.800	0.950	1.000	
% Released:	30 %	PM	0.875	0.850	0.800	0.625	0.625	0.600	0.575	0.550	0.625	0.700	0.650	0.375	
E-cDry peak:	119 W	AM	0.200	0.100	0.050	0.050	0.050	0.075	0.200	0.375	0.500	0.800	0.950	1.000	
% Released:	15 %	PM	0.875	0.850	0.800	0.625	0.625	0.600	0.575	0.550	0.625	0.700	0.650	0.375	
dWash peak:	0 W	AM	0.139	0.050	0.028	0.024	0.029	0.090	0.169	0.303	0.541	0.594	0.502	0.443	
% Released:	60 %	PM	0.376	0.396	0.334	0.323	0.344	0.448	0.791	1.000	0.800	0.597	0.383	0.281	
E-rOven peak:	122 W	AM	0.057	0.057	0.057	0.057	0.057	0.114	0.171	0.286	0.343	0.343	0.343	0.400	
% Released:	80 %	PM	0.457	0.343	0.286	0.400	0.571	1.000	0.857	0.429	0.286	0.229	0.171	0.114	
TVs peak:	151 W	AM	0.100	0.050	0.050	0.050	0.100	0.200	0.400	0.450	0.400	0.200	0.100	0.100	
% Released:	100 %	PM	0.050	0.050	0.150	0.450	0.850	1.000	0.950	0.800	0.500	0.250	0.150	0.100	

# Building Input Summary Report

## APPLIANCES & LIGHTING SCHEDULES(Continued)

cFan peak:	0 W	AM	0.600	0.600	0.600	0.600	0.600	0.600	0.600	0.250	0.250	0.250	0.250	0.250
% Released:	100 %	PM	0.250	0.250	0.250	0.250	0.250	0.250	0.550	0.600	0.600	0.600	0.600	0.600
lgts-in peak:	545 W	AM	0.160	0.150	0.160	0.180	0.230	0.450	0.420	0.260	0.190	0.160	0.120	0.110
% Released:	100 %	PM	0.160	0.170	0.250	0.270	0.340	0.550	0.600	0.880	1.000	0.880	0.510	0.280
lgts-out peak:	47 W	AM	1.000	1.000	1.000	1.000	1.000	0.750	0.750	0.000	0.000	0.000	0.000	0.000
% Released:	0 %	PM	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.750	0.750	0.750	1.000
lgts-gar peak:	0 W	AM	0.000	0.000	0.000	0.000	0.000	0.500	0.750	1.000	0.750	0.500	0.000	0.000
% Released:	0 %	PM	0.000	0.000	0.500	0.500	0.750	1.000	0.750	0.500	0.000	0.000	0.000	0.000
MEL peak:	184 W	AM	0.500	0.500	0.500	0.750	0.750	0.850	1.000	1.000	1.000	1.000	0.900	0.900
% Released:	90 %	PM	0.900	0.900	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.850	0.750	0.750



# Building Input Summary Report

PROJECT										
Title:	L170AL (no internal gains)				Address type:	Y				
Building Type:	User	Bedrooms:	0			Lot #:				
Owner:	FSEC	Conditioned Area:	1539			Block/SubDivision:				
Builder Name:	James Q. Hammer	Total Stories:	1			PlatBook:	111 Anywhere Lane			
Permit Office:		Worst Case:	No			County:				
Jurisdiction:		Rotate Angle:	0			City, State, Zip:	Las Vegas, NV,			
Family Type:	Single-family	Cross Ventilation:								
New/Existing:	New (From Plans)	Whole House Fan:								
Year Construct:		Terrain:	Suburban							
Comment:	HERS BESTEST no internal gains case				Shielding:	Suburban				
CLIMATE										
Design Location	Tmy Site	Design Temp	97.5%	2.5%	Int Design Temp	Winter	Summer	Heating Degree Days	Design Moisture	Daily temp Range
NV, LAS_VEGASTMY1	NV_LAS_VEGASTMY1	32	105		70	75	2300.5	0		High
UTILITY										
Fuel	Unit	Utility Name					Monthly Fixed Cost	\$/Unit		
Electricity	kWh	EnergyGauge Default					0.00	0.12		
Natural Gas	Therm	EnergyGauge Default					0.00	0.68		
Fuel Oil	Gallon	EnergyGauge Default					0.00	1.10		
Propane	Gallon	EnergyGauge Default					0.00	1.40		
SURROUNDINGS										
Ornt	Type	-----Shade Trees-----			Exist	-----Adjacent Buildings-----				
		Height	Width	Distance		Height	Width	Distance		
N	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
NE	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
E	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
SE	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
S	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
SW	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
W	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
NW	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
BLOCKS										
Number	Name	Area	Volume							
1	Block1	1539	12312							
SPACES										
Number	Name	Area	Volume	Kitchen	Occupants	Bedrooms	Finished	Cooled	Heated	
1	Main	1539	12312	Yes	0	0	Yes	Yes	Yes	

# Building Input Summary Report

FLOORS														
#	Floor Type	Space	Exposed Perim	Perimeter R-Value	Area	Joist R-Value	Tile	Wood	Carpet					
1	Raised Floor	Main	---	---	1539 ft	10.4	0	0	1					
ROOF														
#	Type	Materials	Roof Area	Gable Area	Roof Color	Solar Absor.	SA Tested	Emitt	Emitt Tested	Deck Insul.	Pitch (deg)			
1	Gable or shed	Composition shingles	1622 ft²	256 ft²	Medium	0.6	No	0.9	No	0	18.4			
ATTIC														
#	Type	Ventilation	Vent Ratio (1 in)	Area	RBS	IRCC								
1	Full attic	Vented	150	1539 ft²	N	N								
CEILING														
#	Ceiling Type	Space	R-Value	Ins. Type	Area	Framing Fraction	Truss Type							
1	Under Attic(Vented)	Main	16.7	Blown	1539.0ft²	0.11	Wood							
WALLS														
#	Ornt	Adjacent To	Wall Type	Space	Cavity R-Value	Width Ft	In	Height Ft	In	Sheathing Area	R-Value	Framing Fraction	Solar Absor.	Below Grade
1	N	Exterior	Frame - Wood	Main	11	57.0	0	8.0	0	456.0ft²		0.25	0.6	0 %
2	S	Exterior	Frame - Wood	Main	11	57.0	0	8.0	0	456.0ft²		0.25	0.6	0 %
3	E	Exterior	Frame - Wood	Main	11	27.0	0	8.0	0	216.0ft²		0.25	0.6	0 %
4	W	Exterior	Frame - Wood	Main	11	27.0	0	8.0	0	216.0ft²		0.25	0.6	0 %
DOORS														
#	Ornt	Adjacent To	Door Type	Space	Storms	U-Value	Width Ft	In	Height Ft	In	Area			
1	N	Exterior	Insulated	Main	None	0.46	3.00	0	6.00	8	20.0ft²			
2	S	Exterior	Insulated	Main	None	0.46	3.00	0	6.00	8	20.0ft²			
WINDOWS														
#	Ornt	Wall ID	Frame	Panes	NFRC	U-Factor	SHGC	Storm	Area	----Overhang----		Interior Shade	Screening	
1	N	1	TIM	Single (Clear)	Yes	1.09	0.70	N	90.0ft²	0.0 ft 0 in	0.0 ft 0 in	None	None	
2	S	2	TIM	Single (Clear)	Yes	1.09	0.70	N	90.0ft²	0.0 ft 0 in	0.0 ft 0 in	None	None	
3	E	3	TIM	Single (Clear)	Yes	1.09	0.70	N	45.0ft²	0.0 ft 0 in	0.0 ft 0 in	None	None	
4	W	4	TIM	Single (Clear)	Yes	1.09	0.70	N	45.0ft²	0.0 ft 0 in	0.0 ft 0 in	None	None	
INFILTRATION														
#	Scope	Method	SLA	CFM50	ELA	EqLA	ACH	ACH50	Space(s)					
1	Wholehouse	Proposed ACH	0.00074	3005	164.98	310.27	0.6700	14.6	All					

# Building Input Summary Report

MASS													
#	Mass Type	Area	Thickness	Furniture Fraction	Space								
1	No Added Mass	0 ft²	0 ft	0.00	Main								
HEATING SYSTEM													
#	System Type	Subtype	AHRI #	Efficiency	Capacity kBtu/hr	---Geothermal HeatPump---		Ducts	Block				
						Entry	Power	Volt	Current				
1	Electric Strip Heat	None		COP: 1.00	140.0		0.00	0.00	0.00	sys#1	1		
COOLING SYSTEM													
#	System Type	Subtype	AHRI #	Efficiency	Capacity kBtu/hr	Air Flow cfm	SHR	Duct	Block				
1	Central Unit	None		SEER:10	76.0	1149	0.75	sys#1	1				
HOT WATER SYSTEM													
#	System Type	Subtype	Location	EF	Cap	Use	SetPnt	Fixture Flow	Pipe Ins.	Pipe length			
	Recirculation System	Recirc Control Type	Loop length	Branch length	Pump power	DWHR	Facilities Connected	Equal Flow	DWHR Eff	Other Credits			
DUCTS													
Duct #	-----Supply-----			-----Return-----			Leakage Type	Air Handler	CFM 25 TOT	CFM 25 OUT	QN	RLF	HVAC # Heat Cool
1	Main	6.0	385 ft²	Main	6.0	77 ft²	Prop. Air Leakage	Main	---	---	0.00	0.60	1 1
MECHANICAL VENTILATION													
Type	Supply CFM	Exhaust CFM	HRV	Fan	Run Time	Heating System	Cooling System						
None	0.0	0.0	0.0	0.0 W	0 %	1 - Electric Strip Heat	1 - Central Unit						
TEMPERATURES													
Programable Thermostat: N						Ceiling Fans: N							
Cooling	<input checked="" type="checkbox"/> Jan	<input checked="" type="checkbox"/> Feb	<input checked="" type="checkbox"/> Mar	<input checked="" type="checkbox"/> Apr	<input checked="" type="checkbox"/> May	<input checked="" type="checkbox"/> Jun	<input checked="" type="checkbox"/> Jul	<input checked="" type="checkbox"/> Aug	<input checked="" type="checkbox"/> Sep	<input checked="" type="checkbox"/> Oct	<input checked="" type="checkbox"/> Nov	<input checked="" type="checkbox"/> Dec	
Heating	<input type="checkbox"/> Jan	<input type="checkbox"/> Feb	<input type="checkbox"/> Mar	<input type="checkbox"/> Apr	<input type="checkbox"/> May	<input type="checkbox"/> Jun	<input type="checkbox"/> Jul	<input type="checkbox"/> Aug	<input type="checkbox"/> Sep	<input type="checkbox"/> Oct	<input type="checkbox"/> Nov	<input type="checkbox"/> Dec	
Venting	<input type="checkbox"/> Jan	<input type="checkbox"/> Feb	<input type="checkbox"/> Mar	<input type="checkbox"/> Apr	<input type="checkbox"/> May	<input type="checkbox"/> Jun	<input type="checkbox"/> Jul	<input type="checkbox"/> Aug	<input type="checkbox"/> Sep	<input type="checkbox"/> Oct	<input type="checkbox"/> Nov	<input type="checkbox"/> Dec	
Thermostat Schedule: BESTEST-cooling													
Schedule Type		1	2	3	4	5	6	7	8	9	10	11	12
Cooling (WD)		AM 78	78	78	78	78	78	78	78	78	78	78	78
		PM	78	78	78	78	78	78	78	78	78	78	78
Cooling (WEH)		AM 78	78	78	78	78	78	78	78	78	78	78	78
		PM	78	78	78	78	78	78	78	78	78	78	78

# Building Input Summary Report

## TEMPERATURES(Continued)

Heating (WD)	AM PM	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68
Heating (WEH)	AM PM	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68

## CLOTHES DRYERS

ID	Type	Screen	Location	Quantity	Fuel Type	Make	Model	Schedule	kWhPerYr
1	Dryers	Default New	Main		Electricity			HERS2011	0

## RANGE OVENS

ID	Type	Screen	Location	Type	Fuel Type	Make	Model	Cooktop	Oven
1	Ranges	Default New	Main	Combo	Elec			Elec Flat Coil	Not Convec

## HARD WIRED LIGHTING

ID	Type	Screen	Location	Total#	Quantity#	Comp FI	All Other FI	Bulb Type	Schedule	Watts per bulb
1	Hard-Wired	By Count - Qualifying	Main	100	10				HERS2011	
2	Hard-Wired	Default New	Exterior						HERS2011	
3	Hard-Wired	Default New	Garage						HERS2011	

## MISC ELECTRICAL LOADS

ID	Type	Screen	Location	Item	Quantity	Catagory	Operating	Schedule	Off Standby
1	Misc Elec Load	Simple Default	Main		1		1	HERS2011	1

## APPLIANCES & LIGHTING SCHEDULES

Appliance Schedule:		HERS2014		Hours											
Schedule Type		1	2	3	4	5	6	7	8	9	10	11	12		
Occupancy peak:	400 Btu	AM	0.930	0.930	0.930	0.930	0.930	0.930	0.930	0.980	0.460	0.270	0.270	0.270	
% Released:	100 %	PM	0.270	0.270	0.270	0.270	0.330	0.610	1.000	1.000	0.930	0.930	0.930	0.930	
refrig peak:	0 W	AM	0.824	0.804	0.784	0.764	0.744	0.734	0.744	0.754	0.764	0.794	0.814	0.854	
% Released:	100 %	PM	0.854	0.864	0.884	0.904	0.925	0.945	0.925	0.915	0.904	0.894	0.874	0.854	
cWash peak:	0 W	AM	0.200	0.100	0.050	0.050	0.050	0.075	0.200	0.375	0.500	0.800	0.950	1.000	
% Released:	30 %	PM	0.875	0.850	0.800	0.625	0.625	0.600	0.575	0.550	0.625	0.700	0.650	0.375	
E-cDry peak:	119 W	AM	0.200	0.100	0.050	0.050	0.050	0.075	0.200	0.375	0.500	0.800	0.950	1.000	
% Released:	15 %	PM	0.875	0.850	0.800	0.625	0.625	0.600	0.575	0.550	0.625	0.700	0.650	0.375	
dWash peak:	0 W	AM	0.139	0.050	0.028	0.024	0.029	0.090	0.169	0.303	0.541	0.594	0.502	0.443	
% Released:	60 %	PM	0.376	0.396	0.334	0.323	0.344	0.448	0.791	1.000	0.800	0.597	0.383	0.281	
E-rOven peak:	122 W	AM	0.057	0.057	0.057	0.057	0.057	0.114	0.171	0.286	0.343	0.343	0.343	0.400	
% Released:	80 %	PM	0.457	0.343	0.286	0.400	0.571	1.000	0.857	0.429	0.286	0.229	0.171	0.114	
TVs peak:	151 W	AM	0.100	0.050	0.050	0.050	0.100	0.200	0.400	0.450	0.400	0.200	0.100	0.100	
% Released:	100 %	PM	0.050	0.050	0.150	0.450	0.850	1.000	0.950	0.800	0.500	0.250	0.150	0.100	

# Building Input Summary Report

## APPLIANCES & LIGHTING SCHEDULES(Continued)

cFan peak:	0 W	AM	0.600	0.600	0.600	0.600	0.600	0.600	0.600	0.250	0.250	0.250	0.250	0.250
% Released:	100 %	PM	0.250	0.250	0.250	0.250	0.250	0.250	0.550	0.600	0.600	0.600	0.600	0.600
lgts-in peak:	545 W	AM	0.160	0.150	0.160	0.180	0.230	0.450	0.420	0.260	0.190	0.160	0.120	0.110
% Released:	100 %	PM	0.160	0.170	0.250	0.270	0.340	0.550	0.600	0.880	1.000	0.880	0.510	0.280
lgts-out peak:	47 W	AM	1.000	1.000	1.000	1.000	1.000	0.750	0.750	0.000	0.000	0.000	0.000	0.000
% Released:	0 %	PM	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.750	0.750	0.750	1.000
lgts-gar peak:	0 W	AM	0.000	0.000	0.000	0.000	0.000	0.500	0.750	1.000	0.750	0.500	0.000	0.000
% Released:	0 %	PM	0.000	0.000	0.500	0.500	0.750	1.000	0.750	0.500	0.000	0.000	0.000	0.000
MEL peak:	184 W	AM	0.500	0.500	0.500	0.750	0.750	0.850	1.000	1.000	1.000	1.000	0.900	0.900
% Released:	90 %	PM	0.900	0.900	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.850	0.750	0.750

# Building Input Summary Report

PROJECT										
Title:	L200AL (inefficient)			Address type:			Y			
Building Type:	User	Bedrooms:	0		Lot #:					
Owner:	FSEC	Conditioned Area:	1539		Block/SubDivision:					
Builder Name:	James Q. Hammer	Total Stories:	1		PlatBook:		111 Anywhere Lane			
Permit Office:		Worst Case:	No		County:					
Jurisdiction:		Rotate Angle:	0		City, State, Zip:		Las Vegas, NV,			
Family Type:	Single-family	Cross Ventilation:								
New/Existing:	New (From Plans)	Whole House Fan:								
Year Construct:		Terrain:	Suburban							
Comment:	HERS BESTEST inefficient case			Shielding:		Suburban				
CLIMATE										
Design Location	Tmy Site	Design Temp	97.5%	2.5%	Int Design Temp	Winter	Summer	Heating Degree Days	Design Moisture	Daily temp Range
NV, LAS_VEGASTMY1	NV_LAS_VEGASTMY1	32	105		70	75	2300.5	0		High
UTILITY										
Fuel	Unit	Utility Name					Monthly Fixed Cost	\$/Unit		
Electricity	kWh	EnergyGauge Default					0.00	0.12		
Natural Gas	Therm	EnergyGauge Default					0.00	0.68		
Fuel Oil	Gallon	EnergyGauge Default					0.00	1.10		
Propane	Gallon	EnergyGauge Default					0.00	1.40		
SURROUNDINGS										
Ornt	Type	-----Shade Trees-----			Exist	-----Adjacent Buildings-----				
		Height	Width	Distance		Height	Width	Distance		
N	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
NE	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
E	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
SE	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
S	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
SW	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
W	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
NW	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
BLOCKS										
Number	Name	Area	Volume							
1	Block1	1539	12312							
SPACES										
Number	Name	Area	Volume	Kitchen	Occupants	Bedrooms	Finished	Cooled	Heated	
1	Main	1539	12312	Yes	0	0	Yes	Yes	Yes	

# Building Input Summary Report

FLOORS													
#	Floor Type	Space	Exposed Perim	Perimeter R-Value	Area	Joist R-Value	Tile	Wood	Carpet				
1	Raised Floor	Main	---	---	1539 ft	0	0	0	1				
ROOF													
#	Type	Materials	Roof Area	Gable Area	Roof Color	Solar Absor.	SA Tested	Emitt	Emitt Tested	Deck Insul.	Pitch (deg)		
1	Gable or shed	Composition shingles	1622 ft²	256 ft²	Medium	0.6	No	0.9	No	0	18.4		
ATTIC													
#	Type	Ventilation	Vent Ratio (1 in)	Area	RBS	IRCC							
1	Full attic	Vented	150	1539 ft²	N	N							
CEILING													
#	Ceiling Type	Space	R-Value	Ins. Type	Area	Framing Fraction	Truss Type						
1	Under Attic(Vented)	Main	9.1	Blown	1539.0ft²	0.11	Wood						
WALLS													
#	Ornt	Adjacent To	Wall Type	Space	Cavity R-Value	Width Ft In	Height Ft In	Sheathing Area	R-Value	Framing Fraction	Solar Absor.	Below Grade	
1	N	Exterior	Frame - Wood	Main	1.01	57.0 0	8.0 0	456.0ft²		0.25	0.6	0 %	
2	S	Exterior	Frame - Wood	Main	1.01	57.0 0	8.0 0	456.0ft²		0.25	0.6	0 %	
3	E	Exterior	Frame - Wood	Main	1.01	27.0 0	8.0 0	216.0ft²		0.25	0.6	0 %	
4	W	Exterior	Frame - Wood	Main	1.01	27.0 0	8.0 0	216.0ft²		0.25	0.6	0 %	
DOORS													
#	Ornt	Adjacent To	Door Type	Space	Storms	U-Value	Width Ft In	Height Ft In	Area				
1	N	Exterior	Insulated	Main	None	0.46	3.00 0	6.00 8	20.0ft²				
2	S	Exterior	Insulated	Main	None	0.46	3.00 0	6.00 8	20.0ft²				
WINDOWS													
#	Ornt	Wall ID	Frame	Panes	NFRC	U-Factor	SHGC	Storm	Area	----Overhang----		Interior Shade	Screening
									Depth	Separation			
1	N	1	TIM	Single (Clear)	Yes	1.09	0.70	N	90.0ft²	0.0 ft 0 in	0.0 ft 0 in	None	None
2	S	2	TIM	Single (Clear)	Yes	1.09	0.70	N	90.0ft²	0.0 ft 0 in	0.0 ft 0 in	None	None
3	E	3	TIM	Single (Clear)	Yes	1.09	0.70	N	45.0ft²	0.0 ft 0 in	0.0 ft 0 in	None	None
4	W	4	TIM	Single (Clear)	Yes	1.09	0.70	N	45.0ft²	0.0 ft 0 in	0.0 ft 0 in	None	None
INFILTRATION													
#	Scope	Method	SLA	CFM50	ELA	EqLA	ACH	ACH50	Space(s)				
1	Wholehouse	Proposed ACH	0.00167	6728	369.36	694.64	1.5000	32.8	All				

# Building Input Summary Report

<b>MASS</b>													
#	Mass Type	Area	Thickness	Furniture Fraction	Space								
1	No Added Mass	0 ft²	0 ft	0.00	Main								
<b>HEATING SYSTEM</b>													
#	System Type	Subtype	AHRI #	Efficiency	Capacity kBtu/hr	---Geothermal HeatPump---		Ducts	Block				
1	Electric Strip Heat	None		COP: 1.00	66.4	Entry	Power	Volt	Current	sys#1	1		
<b>COOLING SYSTEM</b>													
#	System Type	Subtype	AHRI #	Efficiency	Capacity kBtu/hr	Air Flow cfm	SHR	Duct	Block				
1	Central Unit	None		SEER:10	106.0	1746	0.75	sys#1	1				
<b>HOT WATER SYSTEM</b>													
#	System Type	Subtype	Location	EF	Cap	Use	SetPnt	Fixture Flow	Pipe Ins.	Pipe length			
	Recirculation System	Recirc Control Type	Loop length	Branch length	Pump power	DWHR	Facilities Connected	Equal Flow	DWHR Eff	Other Credits			
<b>DUCTS</b>													
Duct #	-----Supply-----			-----Return-----			Leakage Type	Air Handler	CFM 25 TOT	CFM 25 OUT	QN	RLF	HVAC # Heat Cool
1	Main	6.0	385 ft²	Main	6.0	77 ft²	Prop. Air Leakage	Main	---	---	0.00	0.60	1 1
<b>MECHANICAL VENTILATION</b>													
Type	Supply CFM	Exhaust CFM	HRV	Fan	Run Time	Heating System	Cooling System						
None	0.0	0.0	0.0	0.0 W	0 %	1 - Electric Strip Heat	1 - Central Unit						
<b>TEMPERATURES</b>													
Programable Thermostat: N						Ceiling Fans: N							
Cooling	<input checked="" type="checkbox"/> Jan	<input checked="" type="checkbox"/> Feb	<input checked="" type="checkbox"/> Mar	<input checked="" type="checkbox"/> Apr	<input checked="" type="checkbox"/> May	<input checked="" type="checkbox"/> Jun	<input checked="" type="checkbox"/> Jul	<input checked="" type="checkbox"/> Aug	<input checked="" type="checkbox"/> Sep	<input checked="" type="checkbox"/> Oct	<input checked="" type="checkbox"/> Nov	<input checked="" type="checkbox"/> Dec	
Heating	<input type="checkbox"/> Jan	<input type="checkbox"/> Feb	<input type="checkbox"/> Mar	<input type="checkbox"/> Apr	<input type="checkbox"/> May	<input type="checkbox"/> Jun	<input type="checkbox"/> Jul	<input type="checkbox"/> Aug	<input type="checkbox"/> Sep	<input type="checkbox"/> Oct	<input type="checkbox"/> Nov	<input type="checkbox"/> Dec	
Venting	<input type="checkbox"/> Jan	<input type="checkbox"/> Feb	<input type="checkbox"/> Mar	<input type="checkbox"/> Apr	<input type="checkbox"/> May	<input type="checkbox"/> Jun	<input type="checkbox"/> Jul	<input type="checkbox"/> Aug	<input type="checkbox"/> Sep	<input type="checkbox"/> Oct	<input type="checkbox"/> Nov	<input type="checkbox"/> Dec	
Thermostat Schedule: BESTEST-cooling													
Schedule Type		1	2	3	4	5	6	7	8	9	10	11	12
Cooling (WD)	AM PM	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78
Cooling (WEH)	AM PM	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78



# Building Input Summary Report

## TEMPERATURES(Continued)

Heating (WD)	AM	68	68	68	68	68	68	68	68	68	68	68	68	68
	PM	68	68	68	68	68	68	68	68	68	68	68	68	68
Heating (WEH)	AM	68	68	68	68	68	68	68	68	68	68	68	68	68
	PM	68	68	68	68	68	68	68	68	68	68	68	68	68

## CLOTHES DRYERS

ID	Type	Screen	Location	Quantity	Fuel Type	Make	Model	Schedule	kWhPerYr
1	Dryers	Default New	Main		Electricity			HERS2011	0

## RANGE OVENS

ID	Type	Screen	Location	Type	Fuel Type	Make	Model	Cooktop	Oven
1	Ranges	Default New	Main	Combo	Elec			Elec Flat Coil	Not Convec

## HARD WIRED LIGHTING

ID	Type	Screen	Location	Total#	Quantity#	Comp FI	All Other FI	Bulb Type	Schedule	Watts per bulb
1	Hard-Wired	By Count - Qualifying	Main	100	10				HERS2011	
2	Hard-Wired	Default New	Exterior						HERS2011	
3	Hard-Wired	Default New	Garage						HERS2011	

## MISC ELECTRICAL LOADS

ID	Type	Screen	Location	Item	Quantity	Catagory	Operating	Schedule	Off Standby
1	Misc Elec Load	Simple Default	Main		1		1	HERS2011	1

## APPLIANCES & LIGHTING SCHEDULES

Appliance Schedule:		HERS2014		Hours											
Schedule Type		1	2	3	4	5	6	7	8	9	10	11	12		
Occupancy peak:	400 Btu	AM	0.930	0.930	0.930	0.930	0.930	0.930	0.930	0.980	0.460	0.270	0.270	0.270	
% Released:	100 %	PM	0.270	0.270	0.270	0.270	0.330	0.610	1.000	1.000	0.930	0.930	0.930	0.930	
refrig peak:	0 W	AM	0.824	0.804	0.784	0.764	0.744	0.734	0.744	0.754	0.764	0.794	0.814	0.854	
% Released:	100 %	PM	0.854	0.864	0.884	0.904	0.925	0.945	0.925	0.915	0.904	0.894	0.874	0.854	
cWash peak:	0 W	AM	0.200	0.100	0.050	0.050	0.050	0.075	0.200	0.375	0.500	0.800	0.950	1.000	
% Released:	30 %	PM	0.875	0.850	0.800	0.625	0.625	0.600	0.575	0.550	0.625	0.700	0.650	0.375	
E-cDry peak:	119 W	AM	0.200	0.100	0.050	0.050	0.050	0.075	0.200	0.375	0.500	0.800	0.950	1.000	
% Released:	15 %	PM	0.875	0.850	0.800	0.625	0.625	0.600	0.575	0.550	0.625	0.700	0.650	0.375	
dWash peak:	0 W	AM	0.139	0.050	0.028	0.024	0.029	0.090	0.169	0.303	0.541	0.594	0.502	0.443	
% Released:	60 %	PM	0.376	0.396	0.334	0.323	0.344	0.448	0.791	1.000	0.800	0.597	0.383	0.281	
E-rOven peak:	122 W	AM	0.057	0.057	0.057	0.057	0.057	0.114	0.171	0.286	0.343	0.343	0.343	0.400	
% Released:	80 %	PM	0.457	0.343	0.286	0.400	0.571	1.000	0.857	0.429	0.286	0.229	0.171	0.114	
TVs peak:	151 W	AM	0.100	0.050	0.050	0.050	0.100	0.200	0.400	0.450	0.400	0.200	0.100	0.100	
% Released:	100 %	PM	0.050	0.050	0.150	0.450	0.850	1.000	0.950	0.800	0.500	0.250	0.150	0.100	

# Building Input Summary Report

## APPLIANCES & LIGHTING SCHEDULES(Continued)

cFan peak:	0 W	AM	0.600	0.600	0.600	0.600	0.600	0.600	0.600	0.250	0.250	0.250	0.250	0.250
% Released:	100 %	PM	0.250	0.250	0.250	0.250	0.250	0.250	0.550	0.600	0.600	0.600	0.600	0.600
lgts-in peak:	545 W	AM	0.160	0.150	0.160	0.180	0.230	0.450	0.420	0.260	0.190	0.160	0.120	0.110
% Released:	100 %	PM	0.160	0.170	0.250	0.270	0.340	0.550	0.600	0.880	1.000	0.880	0.510	0.280
lgts-out peak:	47 W	AM	1.000	1.000	1.000	1.000	1.000	0.750	0.750	0.000	0.000	0.000	0.000	0.000
% Released:	0 %	PM	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.750	0.750	0.750	1.000
lgts-gar peak:	0 W	AM	0.000	0.000	0.000	0.000	0.000	0.500	0.750	1.000	0.750	0.500	0.000	0.000
% Released:	0 %	PM	0.000	0.000	0.500	0.500	0.750	1.000	0.750	0.500	0.000	0.000	0.000	0.000
MEL peak:	184 W	AM	0.500	0.500	0.500	0.750	0.750	0.850	1.000	1.000	1.000	1.000	0.900	0.900
% Released:	90 %	PM	0.900	0.900	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.850	0.750	0.750

# Building Input Summary Report

PROJECT									
Title:	L202AL (low alpha)			Address type:	Y				
Building Type:	User	Bedrooms:	0	Lot #:					
Owner:	FSEC	Conditioned Area:	1539	Block/SubDivision:					
Builder Name:	James Q. Hammer	Total Stories:	1	PlatBook:	111 Anywhere Lane				
Permit Office:		Worst Case:	No	County:					
Jurisdiction:		Rotate Angle:	0	City, State, Zip:	Las Vegas, NV,				
Family Type:	Single-family	Cross Ventilation:							
New/Existing:	New (From Plans)	Whole House Fan:							
Year Construct:		Terrain:	Suburban						
Comment:	HERS BESTEST low-alpha case			Shielding:	Suburban				
CLIMATE									
Design Location	Tmy Site	Design Temp	97.5% 2.5%	Int Design Temp	Winter	Summer	Heating Degree Days	Design Moisture	Daily temp Range
NV, LAS_VEGASTMY1	NV_LAS_VEGASTMY1	32	105	70	75	2300.5	0	High	
UTILITY									
Fuel	Unit	Utility Name		Monthly Fixed Cost	\$/Unit				
Electricity	kWh	EnergyGauge Default		0.00	0.12				
Natural Gas	Therm	EnergyGauge Default		0.00	0.68				
Fuel Oil	Gallon	EnergyGauge Default		0.00	1.10				
Propane	Gallon	EnergyGauge Default		0.00	1.40				
SURROUNDINGS									
Ornt	Type	-----Shade Trees-----			Exist	-----Adjacent Buildings-----			
		Height	Width	Distance		Height	Width	Distance	
N	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
NE	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
E	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
SE	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
S	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
SW	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
W	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
NW	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
BLOCKS									
Number	Name	Area	Volume						
1	Block1	1539	12312						
SPACES									
Number	Name	Area	Volume	Kitchen	Occupants	Bedrooms	Finished	Cooled	Heated
1	Main	1539	12312	Yes	0	0	Yes	Yes	Yes

# Building Input Summary Report

FLOORS													
#	Floor Type	Space	Exposed Perim	Perimeter R-Value	Area	Joist R-Value	Tile	Wood	Carpet				
1	Raised Floor	Main	---	---	1539 ft	0	0	0	1				
ROOF													
#	Type	Materials	Roof Area	Gable Area	Roof Color	Solar Absor.	SA Tested	Emitt	Emitt Tested	Deck Insul.	Pitch (deg)		
1	Gable or shed	Composition shingles	1622 ft²	256 ft²	Medium	0.2	No	0.9	No	0	18.4		
ATTIC													
#	Type	Ventilation	Vent Ratio (1 in)	Area	RBS	IRCC							
1	Full attic	Vented	150	1539 ft²	N	N							
CEILING													
#	Ceiling Type	Space	R-Value	Ins. Type	Area	Framing Fraction	Truss Type						
1	Under Attic(Vented)	Main	9.1	Blown	1539.0ft²	0.11	Wood						
WALLS													
#	Ornt	Adjacent To	Wall Type	Space	Cavity R-Value	Width Ft In	Height Ft In	Sheathing Area	R-Value	Framing Fraction	Solar Absor.	Below Grade	
1	N	Exterior	Frame - Wood	Main	1.01	57.0 0	8.0 0	456.0ft²		0.25	0.2	0 %	
2	S	Exterior	Frame - Wood	Main	1.01	57.0 0	8.0 0	456.0ft²		0.25	0.2	0 %	
3	E	Exterior	Frame - Wood	Main	1.01	27.0 0	8.0 0	216.0ft²		0.25	0.2	0 %	
4	W	Exterior	Frame - Wood	Main	1.01	27.0 0	8.0 0	216.0ft²		0.25	0.2	0 %	
DOORS													
#	Ornt	Adjacent To	Door Type	Space	Storms	U-Value	Width Ft In	Height Ft In	Area				
1	N	Exterior	Insulated	Main	None	0.46	3.00 0	6.00 8	20.0ft²				
2	S	Exterior	Insulated	Main	None	0.46	3.00 0	6.00 8	20.0ft²				
WINDOWS													
#	Ornt	Wall ID	Frame	Panes	NFRC	U-Factor	SHGC	Storm	Area	----Overhang----		Interior Shade	Screening
										Depth	Separation		
1	N	1	TIM	Single (Clear)	Yes	1.09	0.70	N	90.0ft²	0.0 ft 0 in	0.0 ft 0 in	None	None
2	S	2	TIM	Single (Clear)	Yes	1.09	0.70	N	90.0ft²	0.0 ft 0 in	0.0 ft 0 in	None	None
3	E	3	TIM	Single (Clear)	Yes	1.09	0.70	N	45.0ft²	0.0 ft 0 in	0.0 ft 0 in	None	None
4	W	4	TIM	Single (Clear)	Yes	1.09	0.70	N	45.0ft²	0.0 ft 0 in	0.0 ft 0 in	None	None
INFILTRATION													
#	Scope	Method	SLA	CFM50	ELA	EqLA	ACH	ACH50	Space(s)				
1	Wholehouse	Proposed ACH	0.00167	6728	369.36	694.64	1.5000	32.8	All				

# Building Input Summary Report

<b>MASS</b>													
#	Mass Type	Area	Thickness	Furniture Fraction	Space								
1	No Added Mass	0 ft²	0 ft	0.00	Main								
<b>HEATING SYSTEM</b>													
#	System Type	Subtype	AHRI #	Efficiency	Capacity kBtu/hr	---Geothermal HeatPump---		Ducts	Block				
1	Electric Strip Heat	None		COP: 1.00	66.4	Entry	Power	Volt	Current	sys#1	1		
<b>COOLING SYSTEM</b>													
#	System Type	Subtype	AHRI #	Efficiency	Capacity kBtu/hr	Air Flow cfm	SHR	Duct	Block				
1	Central Unit	None		SEER:10	116.0	1746	0.75	sys#1	1				
<b>HOT WATER SYSTEM</b>													
#	System Type	Subtype	Location	EF	Cap	Use	SetPnt	Fixture Flow	Pipe Ins.	Pipe length			
	Recirculation System	Recirc Control Type	Loop length	Branch length	Pump power	DWHR	Facilities Connected	Equal Flow	DWHR Eff	Other Credits			
<b>DUCTS</b>													
Duct #	-----Supply-----			-----Return-----			Leakage Type	Air Handler	CFM 25 TOT	CFM 25 OUT	QN	RLF	HVAC # Heat Cool
1	Main	6.0	385 ft²	Main	6.0	77 ft²	Prop. Air Leakage	Main	---	---	0.00	0.60	1 1
<b>MECHANICAL VENTILATION</b>													
Type	Supply CFM	Exhaust CFM	HRV	Fan	Run Time	Heating System	Cooling System						
None	0.0	0.0	0.0	0.0 W	0 %	1 - Electric Strip Heat	1 - Central Unit						
<b>TEMPERATURES</b>													
Programable Thermostat: N						Ceiling Fans: N							
Cooling	<input checked="" type="checkbox"/> Jan	<input checked="" type="checkbox"/> Feb	<input checked="" type="checkbox"/> Mar	<input checked="" type="checkbox"/> Apr	<input checked="" type="checkbox"/> May	<input checked="" type="checkbox"/> Jun	<input checked="" type="checkbox"/> Jul	<input checked="" type="checkbox"/> Aug	<input checked="" type="checkbox"/> Sep	<input checked="" type="checkbox"/> Oct	<input checked="" type="checkbox"/> Nov	<input checked="" type="checkbox"/> Dec	
Heating	<input type="checkbox"/> Jan	<input type="checkbox"/> Feb	<input type="checkbox"/> Mar	<input type="checkbox"/> Apr	<input type="checkbox"/> May	<input type="checkbox"/> Jun	<input type="checkbox"/> Jul	<input type="checkbox"/> Aug	<input type="checkbox"/> Sep	<input type="checkbox"/> Oct	<input type="checkbox"/> Nov	<input type="checkbox"/> Dec	
Venting	<input type="checkbox"/> Jan	<input type="checkbox"/> Feb	<input type="checkbox"/> Mar	<input type="checkbox"/> Apr	<input type="checkbox"/> May	<input type="checkbox"/> Jun	<input type="checkbox"/> Jul	<input type="checkbox"/> Aug	<input type="checkbox"/> Sep	<input type="checkbox"/> Oct	<input type="checkbox"/> Nov	<input type="checkbox"/> Dec	
Thermostat Schedule: BESTEST-cooling													
Schedule Type		1	2	3	4	5	6	7	8	9	10	11	12
Cooling (WD)		AM 78	78	78	78	78	78	78	78	78	78	78	78
		PM	78	78	78	78	78	78	78	78	78	78	78
Cooling (WEH)		AM 78	78	78	78	78	78	78	78	78	78	78	78
		PM	78	78	78	78	78	78	78	78	78	78	78

# Building Input Summary Report

## TEMPERATURES(Continued)

Heating (WD)	AM PM	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68
Heating (WEH)	AM PM	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68

## CLOTHES DRYERS

ID	Type	Screen	Location	Quantity	Fuel Type	Make	Model	Schedule	kWhPerYr
1	Dryers	Default New	Main		Electricity			HERS2011	0

## RANGE OVENS

ID	Type	Screen	Location	Type	Fuel Type	Make	Model	Cooktop	Oven
1	Ranges	Default New	Main	Combo	Elec			Elec Flat Coil	Not Convec

## HARD WIRED LIGHTING

ID	Type	Screen	Location	Total#	Quantity#	Comp FI	All Other FI	Bulb Type	Schedule	Watts per bulb
1	Hard-Wired	By Count - Qualifying	Main	100	10				HERS2011	
2	Hard-Wired	Default New	Exterior						HERS2011	
3	Hard-Wired	Default New	Garage						HERS2011	

## MISC ELECTRICAL LOADS

ID	Type	Screen	Location	Item	Quantity	Catagory	Operating	Schedule	Off Standby
1	Misc Elec Load	Simple Default	Main		1		1	HERS2011	1

## APPLIANCES & LIGHTING SCHEDULES

Appliance Schedule:		HERS2014		Hours											
Schedule Type		1	2	3	4	5	6	7	8	9	10	11	12		
Occupancy peak:	400 Btu	AM	0.930	0.930	0.930	0.930	0.930	0.930	0.930	0.980	0.460	0.270	0.270	0.270	
% Released:	100 %	PM	0.270	0.270	0.270	0.270	0.330	0.610	1.000	1.000	0.930	0.930	0.930	0.930	
refrig peak:	0 W	AM	0.824	0.804	0.784	0.764	0.744	0.734	0.744	0.754	0.764	0.794	0.814	0.854	
% Released:	100 %	PM	0.854	0.864	0.884	0.904	0.925	0.945	0.925	0.915	0.904	0.894	0.874	0.854	
cWash peak:	0 W	AM	0.200	0.100	0.050	0.050	0.050	0.075	0.200	0.375	0.500	0.800	0.950	1.000	
% Released:	30 %	PM	0.875	0.850	0.800	0.625	0.625	0.600	0.575	0.550	0.625	0.700	0.650	0.375	
E-cDry peak:	119 W	AM	0.200	0.100	0.050	0.050	0.050	0.075	0.200	0.375	0.500	0.800	0.950	1.000	
% Released:	15 %	PM	0.875	0.850	0.800	0.625	0.625	0.600	0.575	0.550	0.625	0.700	0.650	0.375	
dWash peak:	0 W	AM	0.139	0.050	0.028	0.024	0.029	0.090	0.169	0.303	0.541	0.594	0.502	0.443	
% Released:	60 %	PM	0.376	0.396	0.334	0.323	0.344	0.448	0.791	1.000	0.800	0.597	0.383	0.281	
E-rOven peak:	122 W	AM	0.057	0.057	0.057	0.057	0.057	0.114	0.171	0.286	0.343	0.343	0.343	0.400	
% Released:	80 %	PM	0.457	0.343	0.286	0.400	0.571	1.000	0.857	0.429	0.286	0.229	0.171	0.114	
TVs peak:	151 W	AM	0.100	0.050	0.050	0.050	0.100	0.200	0.400	0.450	0.400	0.200	0.100	0.100	
% Released:	100 %	PM	0.050	0.050	0.150	0.450	0.850	1.000	0.950	0.800	0.500	0.250	0.150	0.100	

# Building Input Summary Report

## APPLIANCES & LIGHTING SCHEDULES(Continued)

cFan peak:	0 W	AM	0.600	0.600	0.600	0.600	0.600	0.600	0.600	0.250	0.250	0.250	0.250	0.250
% Released:	100 %	PM	0.250	0.250	0.250	0.250	0.250	0.250	0.550	0.600	0.600	0.600	0.600	0.600
lgts-in peak:	545 W	AM	0.160	0.150	0.160	0.180	0.230	0.450	0.420	0.260	0.190	0.160	0.120	0.110
% Released:	100 %	PM	0.160	0.170	0.250	0.270	0.340	0.550	0.600	0.880	1.000	0.880	0.510	0.280
lgts-out peak:	47 W	AM	1.000	1.000	1.000	1.000	1.000	0.750	0.750	0.000	0.000	0.000	0.000	0.000
% Released:	0 %	PM	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.750	0.750	0.750	1.000
lgts-gar peak:	0 W	AM	0.000	0.000	0.000	0.000	0.000	0.500	0.750	1.000	0.750	0.500	0.000	0.000
% Released:	0 %	PM	0.000	0.000	0.500	0.500	0.750	1.000	0.750	0.500	0.000	0.000	0.000	0.000
MEL peak:	184 W	AM	0.500	0.500	0.500	0.750	0.750	0.850	1.000	1.000	1.000	1.000	0.900	0.900
% Released:	90 %	PM	0.900	0.900	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.850	0.750	0.750

Florida HERS BESTEST results for:

Software Name: EnergyGauge USA 6.0

User input data fields indicated by pale yellow  
 Test result fields indicated by pale green

**Annual Heating Loads: Orlando**

Heating	range max	range min	Result	pass/fail
L100AO	10.56	1.54	5.33	pass
L110AO	14.71	5.54	8.60	pass
L120AO	8.57	-0.44	3.99	pass
L130AO	7.86	-0.48	3.99	pass
L140AO	8.34	-0.05	3.55	pass
L150AO	9.55	0.37	5.52	pass
L155AO	9.95	0.78	5.59	pass
L160AO	10.71	1.74	5.64	pass
L170AO	14.37	4.78	9.76	pass
L200AO	25.55	13.41	17.67	pass
L202AO	26.24	13.87	17.80	pass
L302XO	12.09	-0.04	3.50	pass
L304XO	10.36	-0.97	3.12	pass
L322XO	14.82	-0.25	2.63	pass
L324XO	10.15	-1.87	1.99	pass

**Annual Heating Load deltas: Orlando**

Heating	range max	range min	Result	pass/fail
L110AO-L100AO	8.15	-0.05	3.27	pass
L120AO-L100AO	2.39	-5.99	-1.34	pass
L130AO-L100AO	2.15	-6.70	-1.34	pass
L140AO-L100AO	2.52	-6.22	-1.78	pass
L150AO-L100AO	3.20	-5.17	0.19	pass
L155AO-L100AO	4.41	-3.69	0.07	pass
L160AO-L100AO	4.28	-3.85	0.31	pass
L170AO-L100AO	8.11	-0.81	4.43	pass
L200AO-L100AO	18.99	7.81	12.34	pass
L202AO-L200AO	4.82	-3.53	0.13	pass
L302XO-L100AO	5.60	-6.60	-1.83	pass
L302XO-L304XO	5.73	-3.18	0.38	pass
L322XO-L100AO	8.26	-6.12	-2.70	pass
L322XO-L324XO	8.67	-2.65	0.64	pass

**Annual Cooling Loads: Orlando**

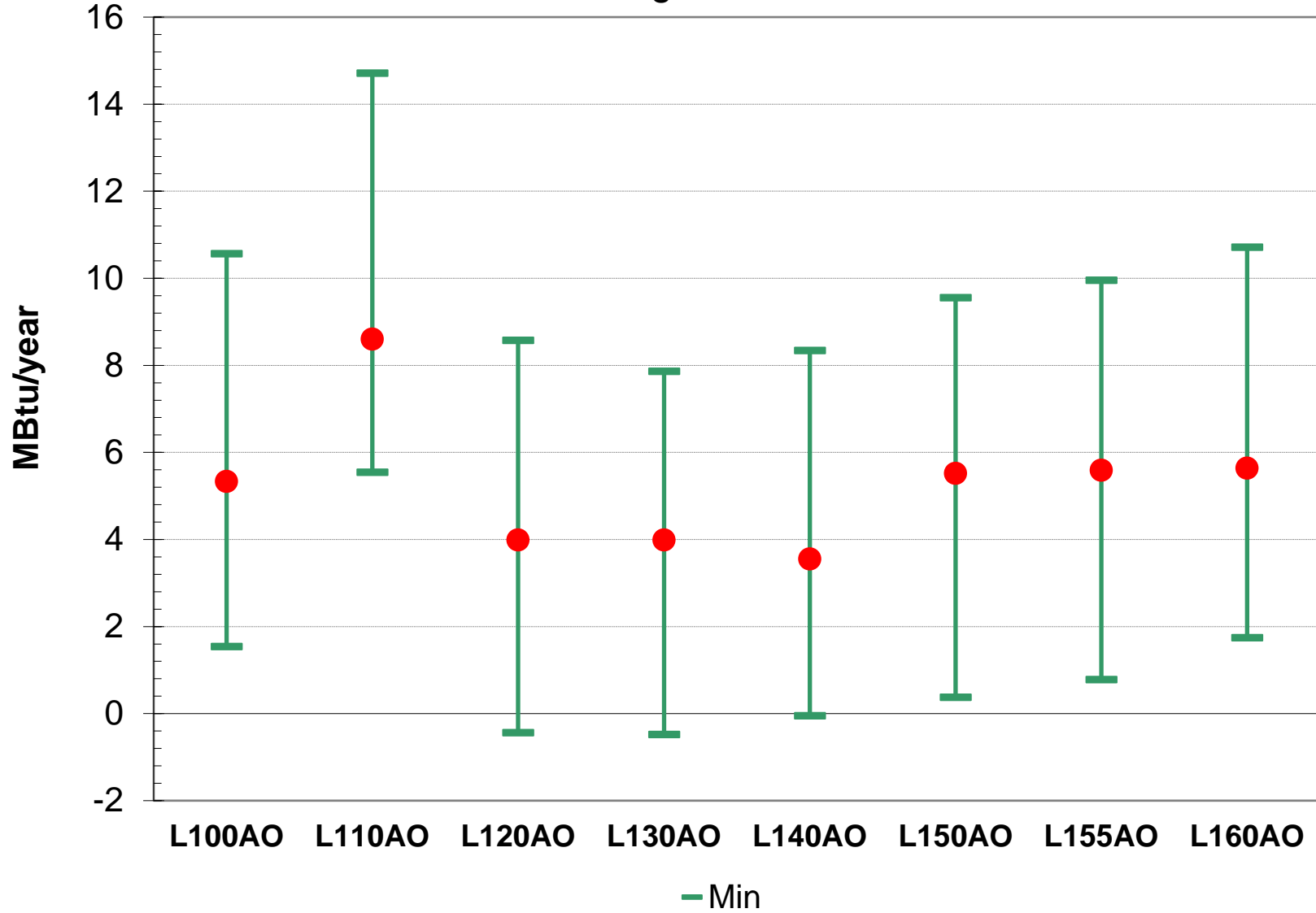
Cooling	range max	range min	Result	pass/fail
L100AO	55.15	39.34	46.42	pass
L110AO	55.65	39.61	46.69	pass
L120AO	51.57	38.11	42.79	pass
L130AO	38.46	25.10	32.42	pass
L140AO	24.75	12.55	19.87	pass
L150AO	65.62	46.54	56.66	pass
L155AO	53.20	39.53	47.12	pass
L160AO	58.90	42.65	50.38	pass
L170AO	40.63	28.95	33.97	pass
L200AO	63.08	40.81	52.13	pass
L202AO	53.11	36.51	39.63	pass

**Annual Cooling Load deltas: Orlando**

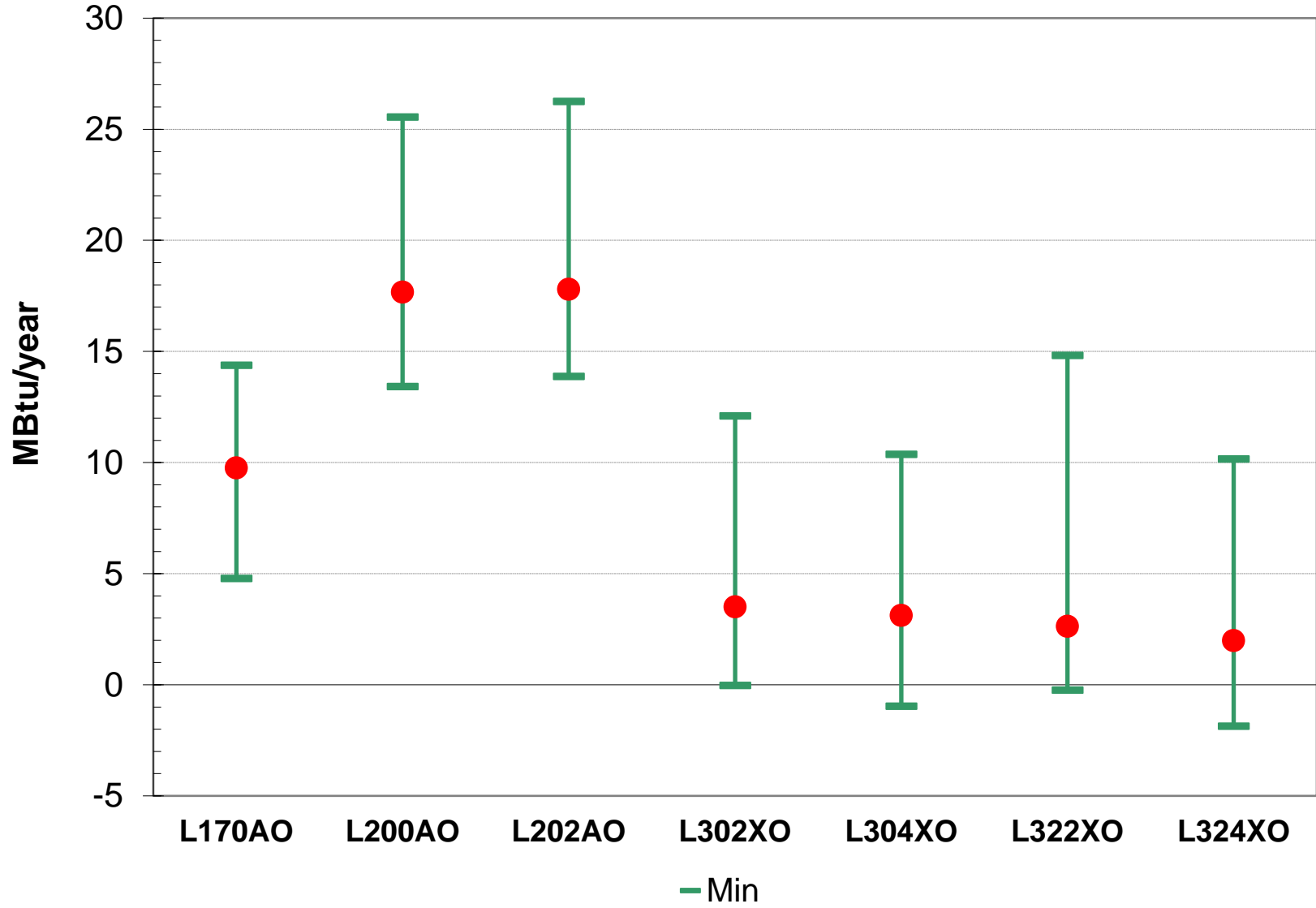
Cooling	range max	range min	Result	pass/fail
L110AO-L100AO	4.49	-3.73	0.27	pass
L120AO-L100AO	2.77	-6.89	-3.63	pass
L130AO-L100AO	-10.24	-20.76	-14.00	pass
L140AO-L100AO	-22.79	-34.56	-26.55	pass
L150AO-L100AO	13.53	3.61	10.24	pass
L155AO-L150AO	-3.42	-16.21	-9.54	pass
L160AO-L100AO	7.68	-0.69	3.96	pass
L170AO-L100AO	-6.39	-17.76	-12.45	pass
L200AO-L100AO	10.77	-1.59	5.71	pass
L202AO-L200AO	13.49	1.06	12.50	pass



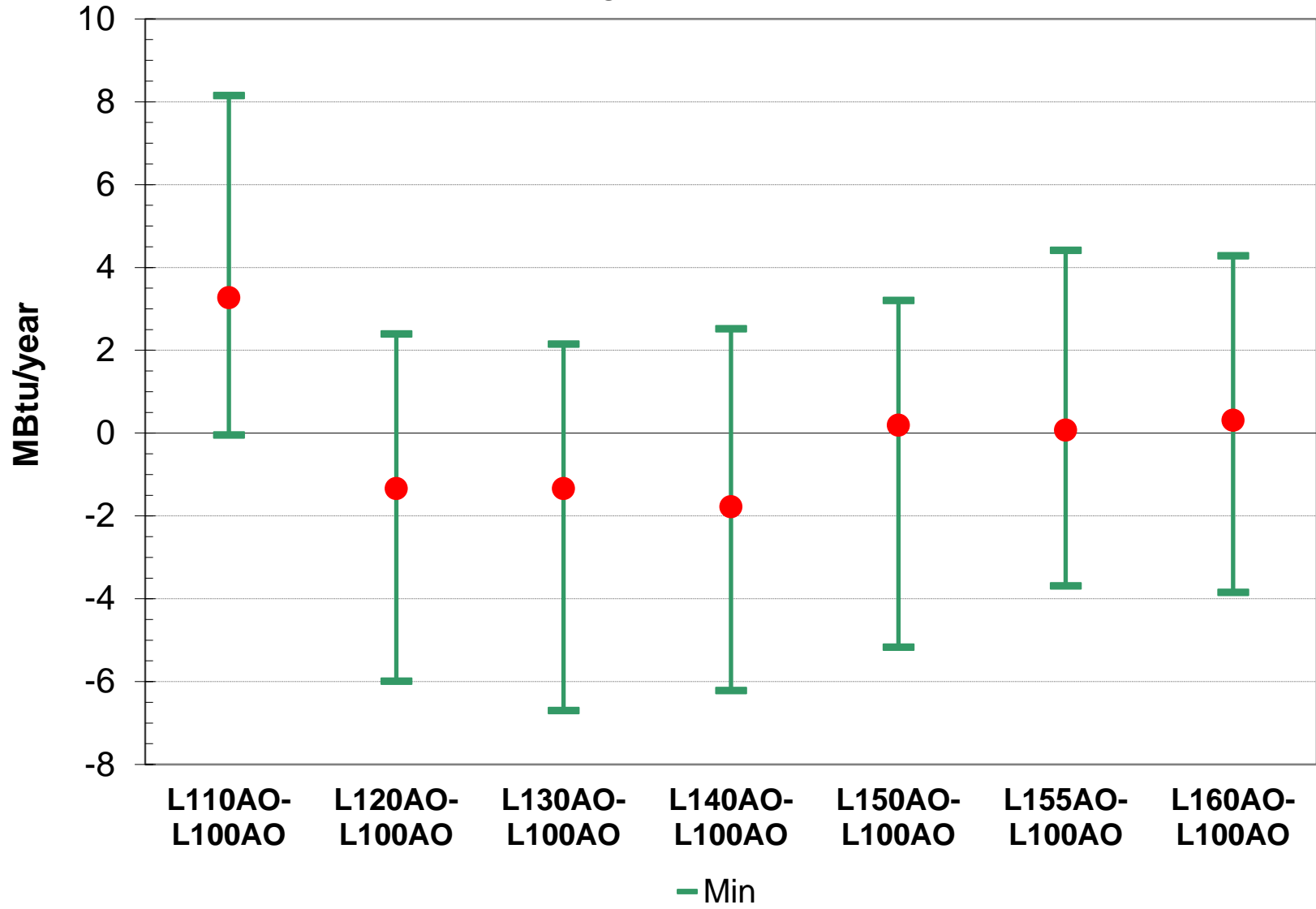
Annual Heating Loads: Orlando, FL



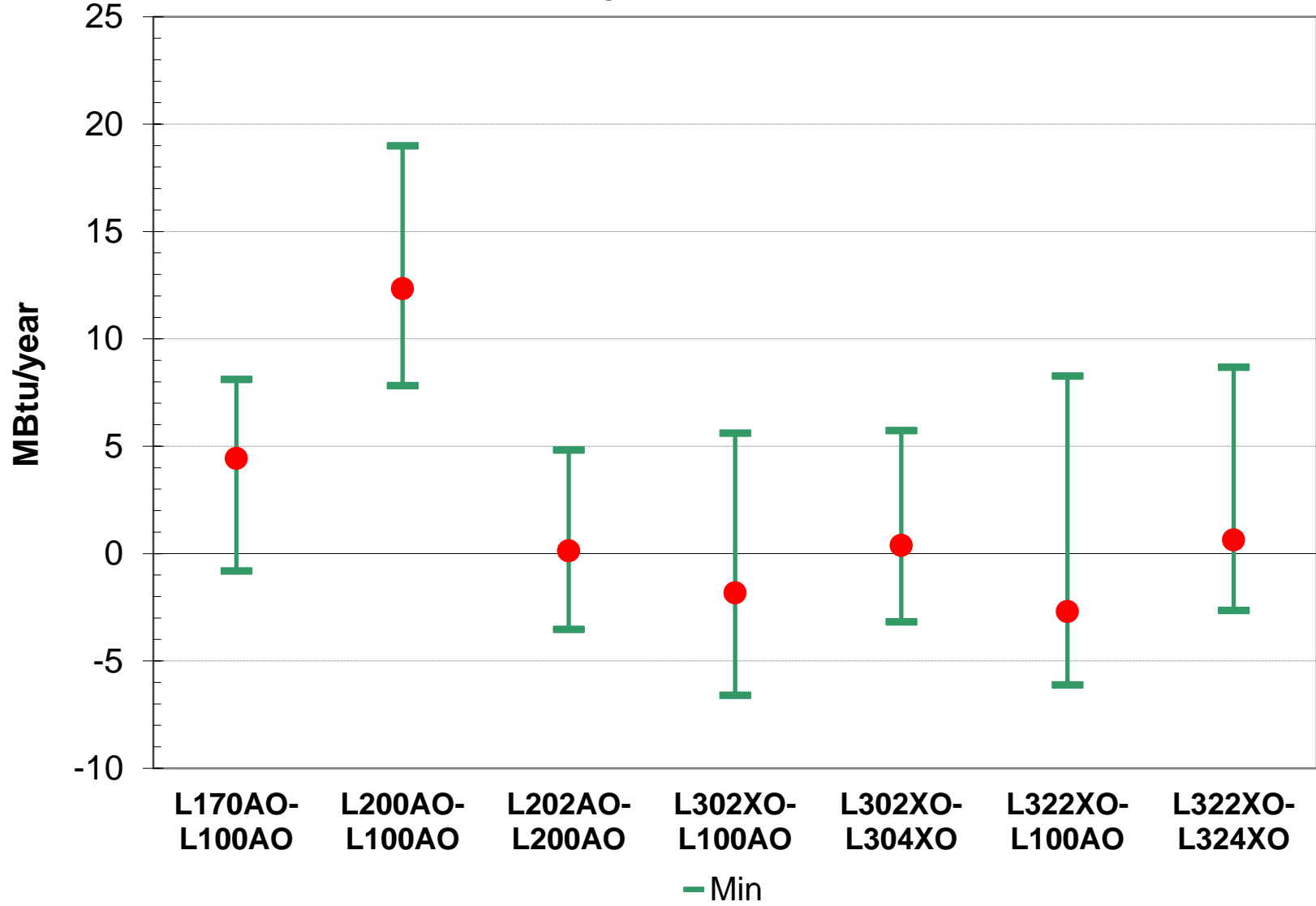
# Annual Heating Loads: Orlando, FL



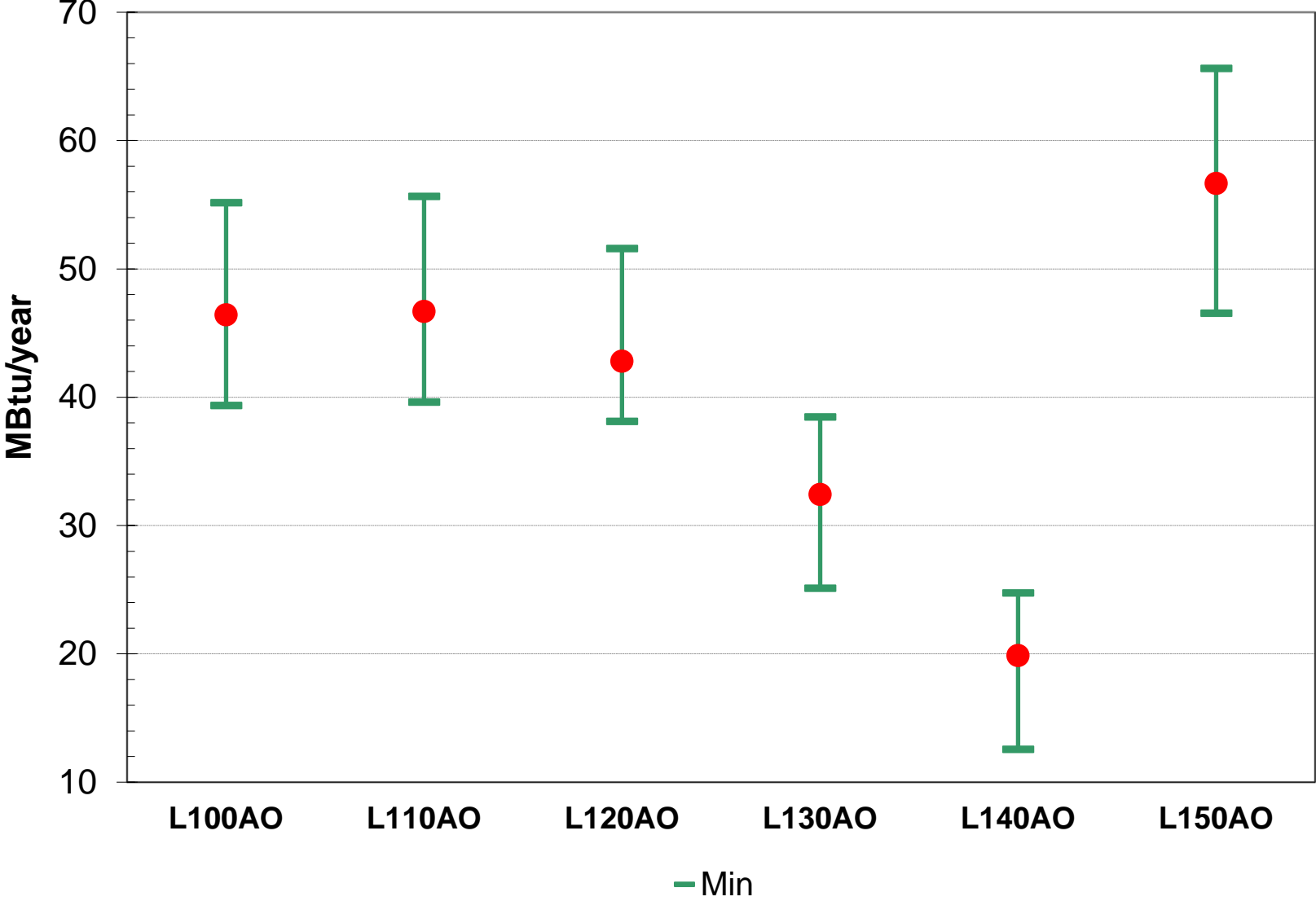
# Annual Heating Load Deltas: Orlando, FL



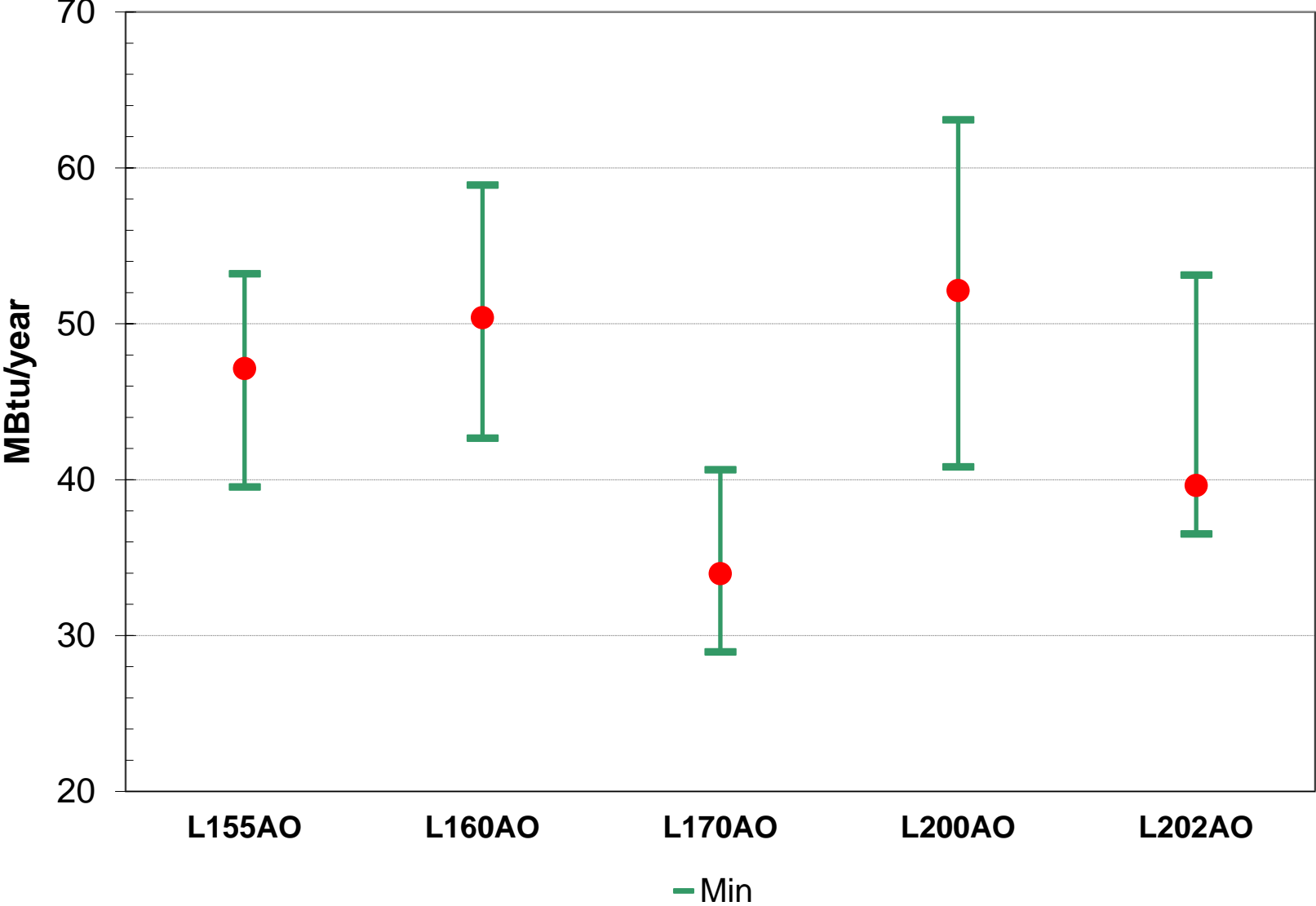
Annual Heating Load Deltas: Orlando, FL



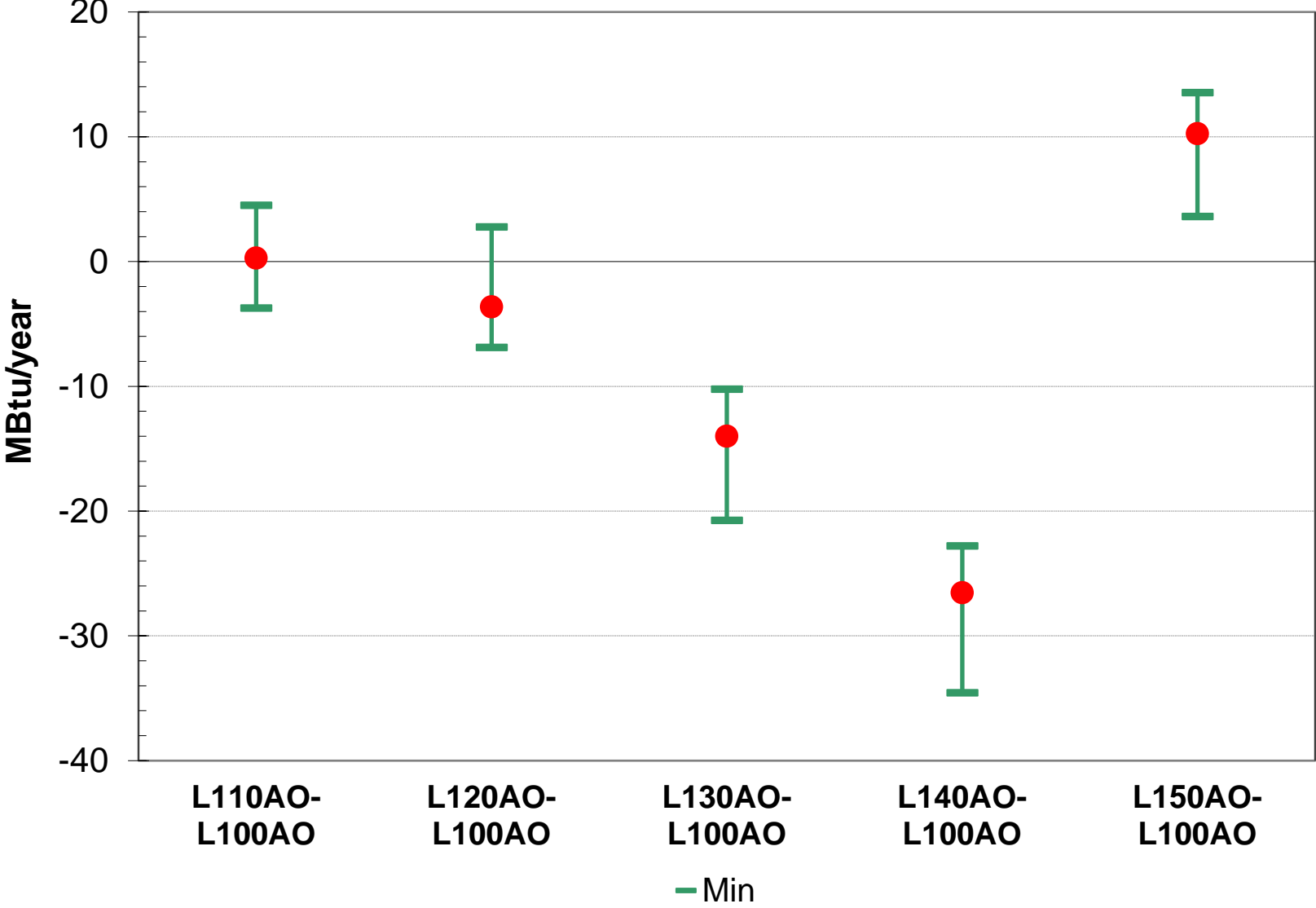
# Annual Cooling Loads: Orlando, FL



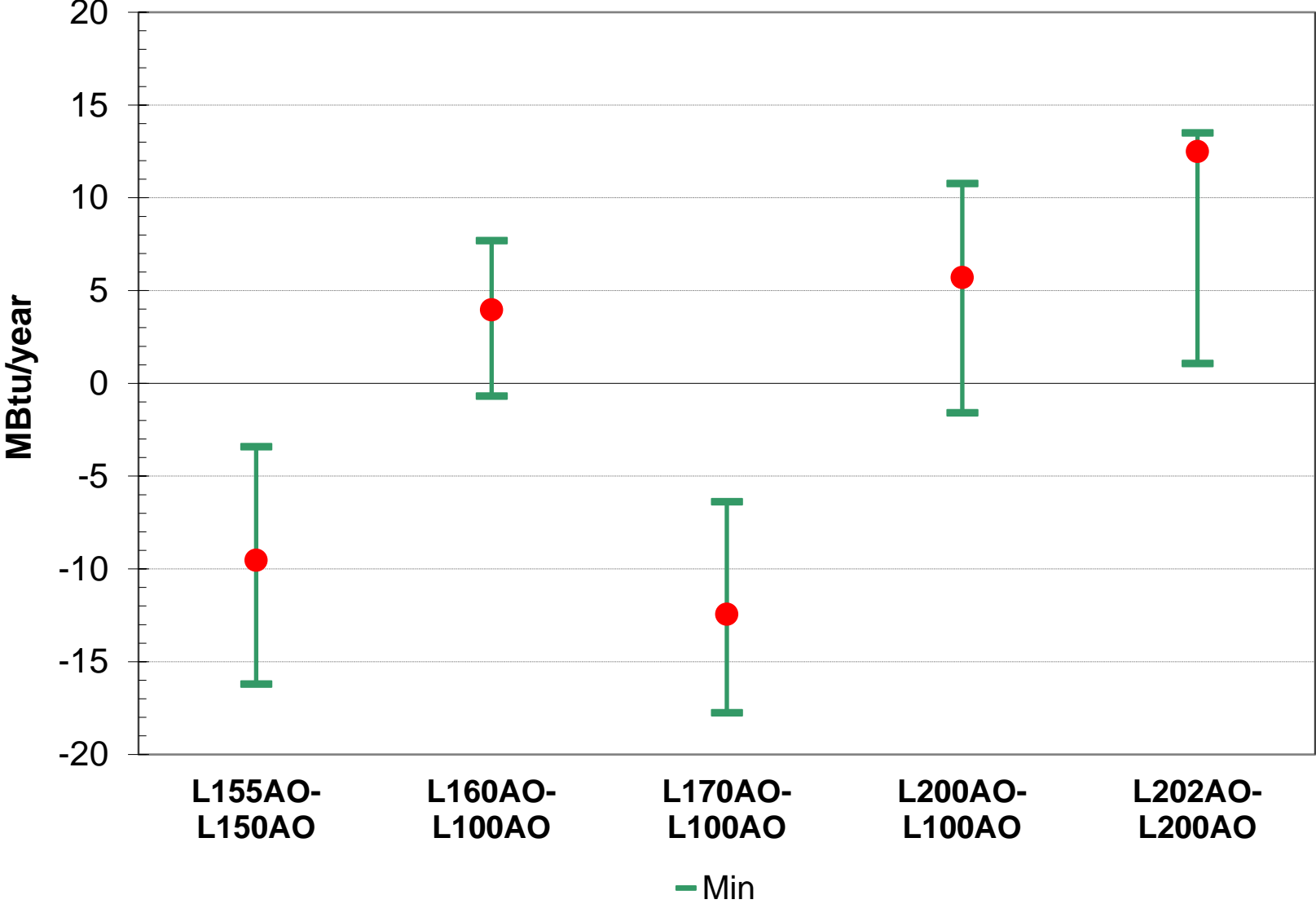
Annual Cooling Loads: Orlando, FL



# Annual Cooling Load Deltas: Orlando, FL



# Annual Cooling Load Deltas: Orlando, FL





**Appendix B**  
**BESTEST Florida Orlando Heating and Cooling Load Reports**

## FL BESTEST LOADS - Orlando

L100AO (base case)

CoolingLoad = 46.42 HeatingLoad = -5.33

L110AO (high infiltration)

CoolingLoad = 46.69 HeatingLoad = -8.60

L120AO (improved insulation)

CoolingLoad = 42.79 HeatingLoad = -3.99

L130AO (low-e windows)

CoolingLoad = 32.42 HeatingLoad = -3.99

L140AO (zero windows)

CoolingLoad = 19.87 HeatingLoad = -3.55

L150AO (all south glass)

CoolingLoad = 56.66 HeatingLoad = -5.52

L155AO (south glass with OH)

CoolingLoad = 47.12 HeatingLoad = -5.59

L160AO (east-west windows)

CoolingLoad = 50.38 HeatingLoad = -5.64

L170AO (no internal gains)

CoolingLoad = 33.97 HeatingLoad = -9.76

L200AO (inefficient)

CoolingLoad = 52.13 HeatingLoad = -17.67

L202AO (low alpha)

CoolingLoad = 39.63 HeatingLoad = -17.80

L302AO (slab case)

CoolingLoad = 40.88 HeatingLoad = -3.50

L304AO (slab with insul)

CoolingLoad = 41.96 HeatingLoad = -3.12

L322AO (basement)

CoolingLoad = 41.76 HeatingLoad = -2.63

L324AO (basement-insulated)

CoolingLoad = 42.31 HeatingLoad = -1.99

# Building Input Summary Report

PROJECT										
Title:	L100AO (base case)				Address type:	Y				
Building Type:	User	Bedrooms:	0			Lot #:				
Owner:	FSEC	Conditioned Area:	1539			Block/SubDivision:				
Builder Name:	James Q. Hammer	Total Stories:	1			PlatBook:	111 Anywhere Lane			
Permit Office:		Worst Case:	No			County:				
Jurisdiction:		Rotate Angle:	0			City, State, Zip:	Orlando, FL,			
Family Type:	Single-family	Cross Ventilation:								
New/Existing:	New (From Plans)	Whole House Fan:								
Year Construct:		Terrain:	Suburban							
Comment:	HERS BESTEST basecase home									
CLIMATE										
Design Location	Tmy Site	Design Temp 97.5%	Design Temp 2.5%	Int Design Temp Winter	Int Design Temp Summer	Heating Degree Days	Design Moisture	Daily temp Range		
FL, OrlandoTMY1	FL_ORLANDOTMY1	41	91	70	75	293	44	Medium		
UTILITY										
Fuel	Unit	Utility Name				Monthly Fixed Cost	\$/Unit			
Electricity	kWh	EnergyGauge Default				0.00	0.12			
Natural Gas	Therm	EnergyGauge Default				0.00	0.68			
Fuel Oil	Gallon	EnergyGauge Default				0.00	1.10			
Propane	Gallon	EnergyGauge Default				0.00	1.40			
SURROUNDINGS										
Ornt	Type	-----Shade Trees-----			Exist	-----Adjacent Buildings-----				
		Height	Width	Distance		Height	Width	Distance		
N	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
NE	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
E	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
SE	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
S	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
SW	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
W	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
NW	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
BLOCKS										
Number	Name	Area	Volume							
1	Block1	1539	12312							
SPACES										
Number	Name	Area	Volume	Kitchen	Occupants	Bedrooms	Finished	Cooled	Heated	
1	Main	1539	12312	Yes	1	0	Yes	Yes	Yes	

# Building Input Summary Report

FLOORS													
#	Floor Type	Space	Exposed Perim	Perimeter R-Value	Area	Joist R-Value	Tile	Wood	Carpet				
1	Raised Floor	Main	---	---	1539 ft	10.4	0	0	1				
ROOF													
#	Type	Materials	Roof Area	Gable Area	Roof Color	Solar Absor.	SA Tested	Emitt	Emitt Tested	Deck Insul.	Pitch (deg)		
1	Gable or shed	Composition shingles	1622 ft²	256 ft²	Medium	0.6	No	0.9	No	0	18.4		
ATTIC													
#	Type	Ventilation	Vent Ratio (1 in)	Area	RBS	IRCC							
1	Full attic	Vented	150	1539 ft²	N	N							
CEILING													
#	Ceiling Type	Space	R-Value	Ins. Type	Area	Framing Fraction	Truss Type						
1	Under Attic(Vented)	Main	16.7	Blown	1539.0ft²	0.11	Wood						
WALLS													
#	Ornt	Adjacent To	Wall Type	Space	Cavity R-Value	Width Ft In	Height Ft In	Sheathing Area	R-Value	Framing Fraction	Solar Absor.	Below Grade	
1	N	Exterior	Frame - Wood	Main	11	57.0 0	8.0 0	456.0ft²		0.25	0.6	0 %	
2	S	Exterior	Frame - Wood	Main	11	57.0 0	8.0 0	456.0ft²		0.25	0.6	0 %	
3	E	Exterior	Frame - Wood	Main	11	27.0 0	8.0 0	216.0ft²		0.25	0.6	0 %	
4	W	Exterior	Frame - Wood	Main	11	27.0 0	8.0 0	216.0ft²		0.25	0.6	0 %	
DOORS													
#	Ornt	Adjacent To	Door Type	Space	Storms	U-Value	Width Ft In	Height Ft In	Area				
1	N	Exterior	Insulated	Main	None	0.46	3.00 0	6.00 8	20.0ft²				
2	S	Exterior	Insulated	Main	None	0.46	3.00 0	6.00 8	20.0ft²				
WINDOWS													
#	Ornt	Wall ID	Frame	Panes	NFRC	U-Factor	SHGC	Storm	Area	----Overhang----		Interior Shade	Screening
1	N	1	TIM	Single (Clear)	Yes	1.09	0.70	N	90.0ft²	0.0 ft 0 in	0.0 ft 0 in	None	None
2	S	2	TIM	Single (Clear)	Yes	1.09	0.70	N	90.0ft²	0.0 ft 0 in	0.0 ft 0 in	None	None
3	E	3	TIM	Single (Clear)	Yes	1.09	0.70	N	45.0ft²	0.0 ft 0 in	0.0 ft 0 in	None	None
4	W	4	TIM	Single (Clear)	Yes	1.09	0.70	N	45.0ft²	0.0 ft 0 in	0.0 ft 0 in	None	None
INFILTRATION													
#	Scope	Method	SLA	CFM50	ELA	EqLA	ACH	ACH50	Space(s)				
1	Wholehouse	Proposed ACH	0.00092	3705	203.40	382.53	0.6700	18.1	All				

# Building Input Summary Report

<b>MASS</b>													
#	Mass Type	Area	Thickness	Furniture Fraction	Space								
1	No Added Mass	0 ft²	0 ft	0.00	Main								
<b>HEATING SYSTEM</b>													
#	System Type	Subtype	AHRI #	Efficiency	Capacity kBtu/hr	---Geothermal HeatPump---		Ducts	Block				
1	Electric Strip Heat	None		COP: 1.00	112.0	Entry	Power	Volt	Current	sys#1	1		
<b>COOLING SYSTEM</b>													
#	System Type	Subtype	AHRI #	Efficiency	Capacity kBtu/hr	Air Flow cfm	SHR	Duct	Block				
1	Central Unit	None		SEER:10	24.8	750	0.75	sys#1	1				
<b>HOT WATER SYSTEM</b>													
#	System Type	Subtype	Location	EF	Cap	Use	SetPnt	Fixture Flow	Pipe Ins.	Pipe length			
	Recirculation System	Recirc Control Type	Loop length	Branch length	Pump power	DWHR	Facilities Connected	Equal Flow	DWHR Eff	Other Credits			
<b>DUCTS</b>													
Duct #	-----Supply-----			-----Return-----			Leakage Type	Air Handler	CFM 25 TOT	CFM 25 OUT	QN	RLF	HVAC # Heat Cool
1	Main	6.0	385 ft²	Main	6.0	77 ft²	Prop. Air Leakage	Main	---	---	0.00	0.60	1 1
<b>MECHANICAL VENTILATION</b>													
Type	Supply CFM	Exhaust CFM	HRV	Fan	Run Time	Heating System	Cooling System						
None	0.0	0.0	0.0	0.0 W	0 %	1 - Electric Strip Heat	1 - Central Unit						
<b>TEMPERATURES</b>													
Programable Thermostat: N						Ceiling Fans: N							
Cooling	[X] Jan	[X] Feb	[X] Mar	[X] Apr	[X] May	[X] Jun	[X] Jul	[X] Aug	[X] Sep	[X] Oct	[X] Nov	[X] Dec	
Heating	[X] Jan	[X] Feb	[X] Mar	[X] Apr	[X] May	[X] Jun	[X] Jul	[X] Aug	[X] Sep	[X] Oct	[X] Nov	[X] Dec	
Venting	[X] Jan	[X] Feb	[X] Mar	[X] Apr	[X] May	[X] Jun	[X] Jul	[X] Aug	[X] Sep	[X] Oct	[X] Nov	[X] Dec	
Thermostat Schedule: BESTEST-heating													
Schedule Type		1	2	3	4	5	6	7	8	9	10	11	12
Cooling (WD)	AM PM	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78
Cooling (WEH)	AM PM	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78

# Building Input Summary Report

## TEMPERATURES(Continued)

Heating (WD)	AM PM	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68
Heating (WEH)	AM PM	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68

## CLOTHES DRYERS

ID	Type	Screen	Location	Quantity	Fuel Type	Make	Model	Schedule	kWhPerYr
1	Dryers	Default New	Main		Electricity			HERS2011	0

## RANGE OVENS

ID	Type	Screen	Location	Type	Fuel Type	Make	Model	Cooktop	Oven
1	Ranges	Default New	Main	Combo	Elec			Elec Flat Coil	Not Convec

## HARD WIRED LIGHTING

ID	Type	Screen	Location	Total#	Quantity#	Comp FI	All Other FI	Bulb Type	Schedule	Watts per bulb
1	Hard-Wired	By Count - Qualifying	Main	100	10				HERS2011	
2	Hard-Wired	Default New	Exterior						HERS2011	
3	Hard-Wired	Default New	Garage						HERS2011	

## MISC ELECTRICAL LOADS

ID	Type	Screen	Location	Item	Quantity	Catagory	Operating	Schedule	Off Standby
1	Misc Elec Load	Simple Default	Main		1		1	HERS2011	1

## APPLIANCES & LIGHTING SCHEDULES

Appliance Schedule:		HERS2014		Hours											
Schedule Type		1	2	3	4	5	6	7	8	9	10	11	12		
Occupancy peak:	400 Btu	AM	0.930	0.930	0.930	0.930	0.930	0.930	0.930	0.980	0.460	0.270	0.270	0.270	
% Released:	100 %	PM	0.270	0.270	0.270	0.270	0.330	0.610	1.000	1.000	0.930	0.930	0.930	0.930	
refrig peak:	0 W	AM	0.824	0.804	0.784	0.764	0.744	0.734	0.744	0.754	0.764	0.794	0.814	0.854	
% Released:	100 %	PM	0.854	0.864	0.884	0.904	0.925	0.945	0.925	0.915	0.904	0.894	0.874	0.854	
cWash peak:	0 W	AM	0.200	0.100	0.050	0.050	0.050	0.075	0.200	0.375	0.500	0.800	0.950	1.000	
% Released:	30 %	PM	0.875	0.850	0.800	0.625	0.625	0.600	0.575	0.550	0.625	0.700	0.650	0.375	
E-cDry peak:	119 W	AM	0.200	0.100	0.050	0.050	0.050	0.075	0.200	0.375	0.500	0.800	0.950	1.000	
% Released:	15 %	PM	0.875	0.850	0.800	0.625	0.625	0.600	0.575	0.550	0.625	0.700	0.650	0.375	
dWash peak:	0 W	AM	0.139	0.050	0.028	0.024	0.029	0.090	0.169	0.303	0.541	0.594	0.502	0.443	
% Released:	60 %	PM	0.376	0.396	0.334	0.323	0.344	0.448	0.791	1.000	0.800	0.597	0.383	0.281	
E-rOven peak:	122 W	AM	0.057	0.057	0.057	0.057	0.057	0.114	0.171	0.286	0.343	0.343	0.343	0.400	
% Released:	80 %	PM	0.457	0.343	0.286	0.400	0.571	1.000	0.857	0.429	0.286	0.229	0.171	0.114	
TVs peak:	151 W	AM	0.100	0.050	0.050	0.050	0.100	0.200	0.400	0.450	0.400	0.200	0.100	0.100	
% Released:	100 %	PM	0.050	0.050	0.150	0.450	0.850	1.000	0.950	0.800	0.500	0.250	0.150	0.100	

# Building Input Summary Report

## APPLIANCES & LIGHTING SCHEDULES(Continued)

cFan peak:	0 W	AM	0.600	0.600	0.600	0.600	0.600	0.600	0.600	0.250	0.250	0.250	0.250	0.250
% Released:	100 %	PM	0.250	0.250	0.250	0.250	0.250	0.250	0.550	0.600	0.600	0.600	0.600	0.600
lgts-in peak:	545 W	AM	0.160	0.150	0.160	0.180	0.230	0.450	0.420	0.260	0.190	0.160	0.120	0.110
% Released:	100 %	PM	0.160	0.170	0.250	0.270	0.340	0.550	0.600	0.880	1.000	0.880	0.510	0.280
lgts-out peak:	47 W	AM	1.000	1.000	1.000	1.000	1.000	0.750	0.750	0.000	0.000	0.000	0.000	0.000
% Released:	0 %	PM	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.750	0.750	0.750	1.000
lgts-gar peak:	0 W	AM	0.000	0.000	0.000	0.000	0.000	0.500	0.750	1.000	0.750	0.500	0.000	0.000
% Released:	0 %	PM	0.000	0.000	0.500	0.500	0.750	1.000	0.750	0.500	0.000	0.000	0.000	0.000
MEL peak:	184 W	AM	0.500	0.500	0.500	0.750	0.750	0.850	1.000	1.000	1.000	1.000	0.900	0.900
% Released:	90 %	PM	0.900	0.900	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.850	0.750	0.750



# Building Input Summary Report

PROJECT									
Title:	L110AO (high infiltration)				Address type: Y				
Building Type:	User	Bedrooms:	0		Lot #:				
Owner:	FSEC	Conditioned Area:	1539		Block/SubDivision:				
Builder Name:	James Q. Hammer	Total Stories:	1		PlatBook:				
Permit Office:		Worst Case:	No		Street: 111 Anywhere Lane				
Jurisdiction:		Rotate Angle:	0		County:				
Family Type:	Single-family	Cross Ventilation:			City, State, Zip: Orlando, FL,				
New/Existing:	New (From Plans)	Whole House Fan:							
Year Construct:		Terrain:	Suburban						
Comment:	HERS BESTEST high infiltration case				Shielding: Suburban				
CLIMATE									
Design Location	Tmy Site	Design Temp	97.5%	2.5%	Int Design Temp	Heating Degree Days	Design Moisture	Daily temp Range	
FL, OrlandoTMY1	FL_ORLANDOTMY1	41	91		70 75	293	44	Medium	
UTILITY									
Fuel	Unit	Utility Name				Monthly Fixed Cost	\$/Unit		
Electricity	kWh	EnergyGauge Default				0.00	0.12		
Natural Gas	Therm	EnergyGauge Default				0.00	0.68		
Fuel Oil	Gallon	EnergyGauge Default				0.00	1.10		
Propane	Gallon	EnergyGauge Default				0.00	1.40		
SURROUNDINGS									
Ornt	Type	-----Shade Trees-----			Exist	-----Adjacent Buildings-----			
		Height	Width	Distance		Height	Width	Distance	
N	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
NE	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
E	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
SE	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
S	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
SW	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
W	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
NW	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
BLOCKS									
Number	Name	Area	Volume						
1	Block1	1539	12312						
SPACES									
Number	Name	Area	Volume	Kitchen	Occupants	Bedrooms	Finished	Cooled	Heated
1	Main	1539	12312	Yes	1	0	Yes	Yes	Yes

# Building Input Summary Report

FLOORS														
#	Floor Type	Space	Exposed Perim	Perimeter R-Value	Area	Joist R-Value	Tile	Wood	Carpet					
1	Raised Floor	Main	---	---	1539 ft	10.4	0	0	1					
ROOF														
#	Type	Materials	Roof Area	Gable Area	Roof Color	Solar Absor.	SA Tested	Emitt	Emitt Tested	Deck Insul.	Pitch (deg)			
1	Gable or shed	Composition shingles	1622 ft²	256 ft²	Medium	0.6	No	0.9	No	0	18.4			
ATTIC														
#	Type	Ventilation	Vent Ratio (1 in)	Area	RBS	IRCC								
1	Full attic	Vented	150	1539 ft²	N	N								
CEILING														
#	Ceiling Type	Space	R-Value	Ins. Type	Area	Framing Fraction	Truss Type							
1	Under Attic(Vented)	Main	16.7	Blown	1539.0ft²	0.11	Wood							
WALLS														
#	Ornt	Adjacent To	Wall Type	Space	Cavity R-Value	Width Ft	In	Height Ft	In	Sheathing Area	R-Value	Framing Fraction	Solar Absor.	Below Grade
1	N	Exterior	Frame - Wood	Main	11	57.0	0	8.0	0	456.0ft²		0.25	0.6	0 %
2	S	Exterior	Frame - Wood	Main	11	57.0	0	8.0	0	456.0ft²		0.25	0.6	0 %
3	E	Exterior	Frame - Wood	Main	11	27.0	0	8.0	0	216.0ft²		0.25	0.6	0 %
4	W	Exterior	Frame - Wood	Main	11	27.0	0	8.0	0	216.0ft²		0.25	0.6	0 %
DOORS														
#	Ornt	Adjacent To	Door Type	Space	Storms	U-Value	Width Ft	In	Height Ft	In	Area			
1	N	Exterior	Insulated	Main	None	0.46	3.00	0	6.00	8	20.0ft²			
2	S	Exterior	Insulated	Main	None	0.46	3.00	0	6.00	8	20.0ft²			
WINDOWS														
#	Ornt	Wall ID	Frame	Panes	NFRC	U-Factor	SHGC	Storm	Area	----Overhang----		Interior Shade	Screening	
1	N	1	TIM	Single (Clear)	Yes	1.09	0.70	N	90.0ft²	0.0 ft 0 in	0.0 ft 0 in	None	None	
2	S	2	TIM	Single (Clear)	Yes	1.09	0.70	N	90.0ft²	0.0 ft 0 in	0.0 ft 0 in	None	None	
3	E	3	TIM	Single (Clear)	Yes	1.09	0.70	N	45.0ft²	0.0 ft 0 in	0.0 ft 0 in	None	None	
4	W	4	TIM	Single (Clear)	Yes	1.09	0.70	N	45.0ft²	0.0 ft 0 in	0.0 ft 0 in	None	None	
INFILTRATION														
#	Scope	Method	SLA	CFM50	ELA	EqLA	ACH	ACH50	Space(s)					
1	Wholehouse	Proposed ACH	0.00205	8295	455.38	856.40	1.5000	40.4	All					

# Building Input Summary Report

MASS													
#	Mass Type	Area	Thickness	Furniture Fraction	Space								
1	No Added Mass	0 ft²	0 ft	0.00	Main								
HEATING SYSTEM													
#	System Type	Subtype	AHRI #	Efficiency	Capacity kBtu/hr	---Geothermal HeatPump---		Ducts	Block				
1	Electric Strip Heat	None		COP: 1.00	150.0	Entry	Power	Volt	Current	sys#1	1		
COOLING SYSTEM													
#	System Type	Subtype	AHRI #	Efficiency	Capacity kBtu/hr	Air Flow cfm	SHR	Duct	Block				
1	Central Unit	None		SEER:10	27.7	831	0.75	sys#1	1				
HOT WATER SYSTEM													
#	System Type	Subtype	Location	EF	Cap	Use	SetPnt	Fixture Flow	Pipe Ins.	Pipe length			
	Recirculation System	Recirc Control Type	Loop length	Branch length	Pump power	DWHR	Facilities Connected	Equal Flow	DWHR Eff	Other Credits			
DUCTS													
Duct #	-----Supply-----			-----Return-----			Leakage Type	Air Handler	CFM 25 TOT	CFM 25 OUT	QN	RLF	HVAC # Heat Cool
1	Main	6.0	385 ft²	Main	6.0	77 ft²	Prop. Air Leakage	Main	---	---	0.00	0.60	1 1
MECHANICAL VENTILATION													
Type	Supply CFM	Exhaust CFM	HRV	Fan	Run Time	Heating System	Cooling System						
None	0.0	0.0	0.0	0.0 W	0 %	1 - Electric Strip Heat	1 - Central Unit						
TEMPERATURES													
Programable Thermostat: N						Ceiling Fans: N							
Cooling	[X] Jan	[X] Feb	[X] Mar	[X] Apr	[X] May	[X] Jun	[X] Jul	[X] Aug	[X] Sep	[X] Oct	[X] Nov	[X] Dec	
Heating	[X] Jan	[X] Feb	[X] Mar	[X] Apr	[X] May	[X] Jun	[X] Jul	[X] Aug	[X] Sep	[X] Oct	[X] Nov	[X] Dec	
Venting	[X] Jan	[X] Feb	[X] Mar	[X] Apr	[X] May	[X] Jun	[X] Jul	[X] Aug	[X] Sep	[X] Oct	[X] Nov	[X] Dec	
Thermostat Schedule: BESTEST-heating													
Schedule Type		1	2	3	4	5	6	7	8	9	10	11	12
Cooling (WD)	AM PM	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78
Cooling (WEH)	AM PM	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78

# Building Input Summary Report

## TEMPERATURES(Continued)

Heating (WD)	AM PM	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68
Heating (WEH)	AM PM	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68

## CLOTHES DRYERS

ID	Type	Screen	Location	Quantity	Fuel Type	Make	Model	Schedule	kWhPerYr
1	Dryers	Default New	Main		Electricity			HERS2011	0

## RANGE OVENS

ID	Type	Screen	Location	Type	Fuel Type	Make	Model	Cooktop	Oven
1	Ranges	Default New	Main	Combo	Elec			Elec Flat Coil	Not Convec

## HARD WIRED LIGHTING

ID	Type	Screen	Location	Total#	Quantity#	Comp FI	All Other FI	Bulb Type	Schedule	Watts per bulb
1	Hard-Wired	By Count - Qualifying	Main	100	10				HERS2011	
2	Hard-Wired	Default New	Exterior						HERS2011	
3	Hard-Wired	Default New	Garage						HERS2011	

## MISC ELECTRICAL LOADS

ID	Type	Screen	Location	Item	Quantity	Catagory	Operating	Schedule	Off Standby
1	Misc Elec Load	Simple Default	Main		1		1	HERS2011	1

## APPLIANCES & LIGHTING SCHEDULES

Appliance Schedule:		HERS2014		Hours											
Schedule Type		1	2	3	4	5	6	7	8	9	10	11	12		
Occupancy peak:	400 Btu	AM	0.930	0.930	0.930	0.930	0.930	0.930	0.930	0.980	0.460	0.270	0.270	0.270	
% Released:	100 %	PM	0.270	0.270	0.270	0.270	0.330	0.610	1.000	1.000	0.930	0.930	0.930	0.930	
refrig peak:	0 W	AM	0.824	0.804	0.784	0.764	0.744	0.734	0.744	0.754	0.764	0.794	0.814	0.854	
% Released:	100 %	PM	0.854	0.864	0.884	0.904	0.925	0.945	0.925	0.915	0.904	0.894	0.874	0.854	
cWash peak:	0 W	AM	0.200	0.100	0.050	0.050	0.050	0.075	0.200	0.375	0.500	0.800	0.950	1.000	
% Released:	30 %	PM	0.875	0.850	0.800	0.625	0.625	0.600	0.575	0.550	0.625	0.700	0.650	0.375	
E-cDry peak:	119 W	AM	0.200	0.100	0.050	0.050	0.050	0.075	0.200	0.375	0.500	0.800	0.950	1.000	
% Released:	15 %	PM	0.875	0.850	0.800	0.625	0.625	0.600	0.575	0.550	0.625	0.700	0.650	0.375	
dWash peak:	0 W	AM	0.139	0.050	0.028	0.024	0.029	0.090	0.169	0.303	0.541	0.594	0.502	0.443	
% Released:	60 %	PM	0.376	0.396	0.334	0.323	0.344	0.448	0.791	1.000	0.800	0.597	0.383	0.281	
E-rOven peak:	122 W	AM	0.057	0.057	0.057	0.057	0.057	0.114	0.171	0.286	0.343	0.343	0.343	0.400	
% Released:	80 %	PM	0.457	0.343	0.286	0.400	0.571	1.000	0.857	0.429	0.286	0.229	0.171	0.114	
TVs peak:	151 W	AM	0.100	0.050	0.050	0.050	0.100	0.200	0.400	0.450	0.400	0.200	0.100	0.100	
% Released:	100 %	PM	0.050	0.050	0.150	0.450	0.850	1.000	0.950	0.800	0.500	0.250	0.150	0.100	

# Building Input Summary Report

## APPLIANCES & LIGHTING SCHEDULES(Continued)

cFan peak:	0 W	AM	0.600	0.600	0.600	0.600	0.600	0.600	0.600	0.250	0.250	0.250	0.250	0.250
% Released:	100 %	PM	0.250	0.250	0.250	0.250	0.250	0.250	0.550	0.600	0.600	0.600	0.600	0.600
lgts-in peak:	545 W	AM	0.160	0.150	0.160	0.180	0.230	0.450	0.420	0.260	0.190	0.160	0.120	0.110
% Released:	100 %	PM	0.160	0.170	0.250	0.270	0.340	0.550	0.600	0.880	1.000	0.880	0.510	0.280
lgts-out peak:	47 W	AM	1.000	1.000	1.000	1.000	1.000	0.750	0.750	0.000	0.000	0.000	0.000	0.000
% Released:	0 %	PM	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.750	0.750	0.750	1.000
lgts-gar peak:	0 W	AM	0.000	0.000	0.000	0.000	0.000	0.500	0.750	1.000	0.750	0.500	0.000	0.000
% Released:	0 %	PM	0.000	0.000	0.500	0.500	0.750	1.000	0.750	0.500	0.000	0.000	0.000	0.000
MEL peak:	184 W	AM	0.500	0.500	0.500	0.750	0.750	0.850	1.000	1.000	1.000	1.000	0.900	0.900
% Released:	90 %	PM	0.900	0.900	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.850	0.750	0.750

# Building Input Summary Report

PROJECT										
Title:	L120AO (improved insulation)				Address type:	Y				
Building Type:	User	Bedrooms:	0			Lot #:				
Owner:	FSEC	Conditioned Area:	1539			Block/SubDivision:				
Builder Name:	James Q. Hammer	Total Stories:	1			PlatBook:				
Permit Office:		Worst Case:	No			Street:	111 Anywhere Lane			
Jurisdiction:		Rotate Angle:	0			County:				
Family Type:	Single-family	Cross Ventilation:				City, State, Zip:	Orlando, FL,			
New/Existing:	New (From Plans)	Whole House Fan:								
Year Construct:		Terrain:	Suburban							
Comment:	HERS BESTEST improved insulation case									
CLIMATE										
Design Location	Tmy Site	Design Temp	97.5%	2.5%	Int Design Temp	Winter	Summer	Heating Degree Days	Design Moisture	Daily temp Range
FL, OrlandoTMY1	FL_ORLANDOTMY1	41	91		70	75	293	44	Medium	
UTILITY										
Fuel	Unit	Utility Name					Monthly Fixed Cost	\$/Unit		
Electricity	kWh	EnergyGauge Default					0.00	0.12		
Natural Gas	Therm	EnergyGauge Default					0.00	0.68		
Fuel Oil	Gallon	EnergyGauge Default					0.00	1.10		
Propane	Gallon	EnergyGauge Default					0.00	1.40		
SURROUNDINGS										
Ornt	Type	-----Shade Trees-----			Exist	-----Adjacent Buildings-----				
		Height	Width	Distance		Height	Width	Distance		
N	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
NE	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
E	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
SE	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
S	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
SW	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
W	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
NW	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
BLOCKS										
Number	Name	Area	Volume							
1	Block1	1539	12312							
SPACES										
Number	Name	Area	Volume	Kitchen	Occupants	Bedrooms	Finished	Cooled	Heated	
1	Main	1539	12312	Yes	0	0		Yes	Yes	

# Building Input Summary Report

FLOORS														
#	Floor Type		Space	Exposed Perim	Perimeter R-Value	Area	Joist R-Value	Tile	Wood	Carpet				
1	Raised Floor		Main	---	---	1539 ft	10.4	0	0	1				
ROOF														
#	Type	Materials		Roof Area	Gable Area	Roof Color	Solar Absor.	SA Tested	Emitt	Emitt Tested	Deck Insul.	Pitch (deg)		
1	Gable or shed	Composition shingles		1622 ft²	256 ft²	Medium	0.6	No	0.9	No	0	18.4		
ATTIC														
#	Type	Ventilation		Vent Ratio (1 in)	Area	RBS	IRCC							
1	Full attic	Vented		150	1539 ft²	N	N							
CEILING														
#	Ceiling Type		Space	R-Value	Ins. Type	Area	Framing Fraction	Truss Type						
1	Under Attic(Vented)		Main	54.3	Blown	1539.0ft²	0.11	Wood						
WALLS														
#	Ornt	Adjacent To	Wall Type	Space	Cavity R-Value	Width Ft	In	Height Ft	In	Sheathing Area	R-Value	Framing Fraction	Solar Absor.	Below Grade
1	N	Exterior	Frame - Wood	Main	18	57.0	0	8.0	0	456.0ft²	7.2	0.22	0.6	0 %
2	S	Exterior	Frame - Wood	Main	18	57.0	0	8.0	0	456.0ft²	7.2	0.22	0.6	0 %
3	E	Exterior	Frame - Wood	Main	18	27.0	0	8.0	0	216.0ft²	7.2	0.22	0.6	0 %
4	W	Exterior	Frame - Wood	Main	18	27.0	0	8.0	0	216.0ft²	7.2	0.22	0.6	0 %
DOORS														
#	Ornt	Adjacent To	Door Type	Space	Storms	U-Value	Width Ft	In	Height Ft	In	Area			
1	N	Exterior	Insulated	Main	None	0.46	3.00	0	6.00	8	20.0ft²			
2	S	Exterior	Insulated	Main	None	0.46	3.00	0	6.00	8	20.0ft²			
WINDOWS														
#	Ornt	Wall ID	Frame	Panes	NFRC	U-Factor	SHGC	Storm	Area	----Overhang----		Interior Shade	Screening	
1	N	1	TIM	Single (Clear)	Yes	1.09	0.70	N	90.0ft²	0.0 ft 0 in	0.0 ft 0 in	None	None	
2	S	2	TIM	Single (Clear)	Yes	1.09	0.70	N	90.0ft²	0.0 ft 0 in	0.0 ft 0 in	None	None	
3	E	3	TIM	Single (Clear)	Yes	1.09	0.70	N	45.0ft²	0.0 ft 0 in	0.0 ft 0 in	None	None	
4	W	4	TIM	Single (Clear)	Yes	1.09	0.70	N	45.0ft²	0.0 ft 0 in	0.0 ft 0 in	None	None	
INFILTRATION														
#	Scope	Method	SLA	CFM50	ELA	EqLA	ACH	ACH50	Space(s)					
1	Wholehouse	Proposed ACH	0.00092	3705	203.40	382.53	0.6700	18.1	All					

# Building Input Summary Report

<b>MASS</b>													
#	Mass Type	Area	Thickness	Furniture Fraction	Space								
1	No Added Mass	0 ft²	0 ft	0.00	Main								
<b>HEATING SYSTEM</b>													
#	System Type	Subtype	AHRI #	Efficiency	Capacity kBtu/hr	---Geothermal HeatPump---		Ducts	Block				
1	Electric Strip Heat	None		COP: 1.00	30.4	Entry	Power	Volt	Current	sys#1	1		
<b>COOLING SYSTEM</b>													
#	System Type	Subtype	AHRI #	Efficiency	Capacity kBtu/hr	Air Flow cfm	SHR	Duct	Block				
1	Central Unit	None		SEER:10	70.0	1026	0.75	sys#1	1				
<b>HOT WATER SYSTEM</b>													
#	System Type	Subtype	Location	EF	Cap	Use	SetPnt	Fixture Flow	Pipe Ins.	Pipe length			
	Recirculation System	Recirc Control Type	Loop length	Branch length	Pump power	DWHR	Facilities Connected	Equal Flow	DWHR Eff	Other Credits			
<b>DUCTS</b>													
Duct #	-----Supply-----			-----Return-----			Leakage Type	Air Handler	CFM 25 TOT	CFM 25 OUT	QN	RLF	HVAC # Heat Cool
1	Main	6.0	385 ft²	Main	6.0	77 ft²	Prop. Air Leakage	Main	---	---	0.00	0.60	1 1
<b>MECHANICAL VENTILATION</b>													
Type	Supply CFM	Exhaust CFM	HRV	Fan	Run Time	Heating System	Cooling System						
None	0.0	0.0	0.0	0.0 W	0 %	1 - Electric Strip Heat	1 - Central Unit						
<b>TEMPERATURES</b>													
Programable Thermostat: N						Ceiling Fans: N							
Cooling	[X] Jan	[X] Feb	[X] Mar	[X] Apr	[X] May	[X] Jun	[X] Jul	[X] Aug	[X] Sep	[X] Oct	[X] Nov	[X] Dec	
Heating	[X] Jan	[X] Feb	[X] Mar	[X] Apr	[X] May	[X] Jun	[X] Jul	[X] Aug	[X] Sep	[X] Oct	[X] Nov	[X] Dec	
Venting	[X] Jan	[X] Feb	[X] Mar	[X] Apr	[X] May	[X] Jun	[X] Jul	[X] Aug	[X] Sep	[X] Oct	[X] Nov	[X] Dec	
Thermostat Schedule: BESTEST-cooling													
Schedule Type		1	2	3	4	5	6	7	8	9	10	11	12
Cooling (WD)		AM 78	78	78	78	78	78	78	78	78	78	78	78
Cooling (WEH)		AM 78	78	78	78	78	78	78	78	78	78	78	78



# Building Input Summary Report

## TEMPERATURES(Continued)

Heating (WD)	AM PM	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68
Heating (WEH)	AM PM	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68

## CLOTHES DRYERS

ID	Type	Screen	Location	Quantity	Fuel Type	Make	Model	Schedule	kWhPerYr
1	Dryers	Default New	Main		Electricity			HERS2011	0

## RANGE OVENS

ID	Type	Screen	Location	Type	Fuel Type	Make	Model	Cooktop	Oven
1	Ranges	Default New	Main	Combo	Elec			Elec Flat Coil	Not Convec

## HARD WIRED LIGHTING

ID	Type	Screen	Location	Total#	Quantity#	Comp FI	All Other FI	Bulb Type	Schedule	Watts per bulb
1	Hard-Wired	By Count - Qualifying	Main	100	10				HERS2011	
2	Hard-Wired	Default New	Exterior						HERS2011	
3	Hard-Wired	Default New	Garage						HERS2011	

## MISC ELECTRICAL LOADS

ID	Type	Screen	Location	Item	Quantity	Catagory	Operating	Schedule	Off Standby
1	Misc Elec Load	Simple Default	Main		1		1	HERS2011	1

## APPLIANCES & LIGHTING SCHEDULES

Appliance Schedule:		HERS2014		Hours											
Schedule Type		1	2	3	4	5	6	7	8	9	10	11	12		
Occupancy peak:	400 Btu	AM	0.930	0.930	0.930	0.930	0.930	0.930	0.930	0.980	0.460	0.270	0.270	0.270	
% Released:	100 %	PM	0.270	0.270	0.270	0.270	0.330	0.610	1.000	1.000	0.930	0.930	0.930	0.930	
refrig peak:	0 W	AM	0.824	0.804	0.784	0.764	0.744	0.734	0.744	0.754	0.764	0.794	0.814	0.854	
% Released:	100 %	PM	0.854	0.864	0.884	0.904	0.925	0.945	0.925	0.915	0.904	0.894	0.874	0.854	
cWash peak:	0 W	AM	0.200	0.100	0.050	0.050	0.050	0.075	0.200	0.375	0.500	0.800	0.950	1.000	
% Released:	30 %	PM	0.875	0.850	0.800	0.625	0.625	0.600	0.575	0.550	0.625	0.700	0.650	0.375	
E-cDry peak:	119 W	AM	0.200	0.100	0.050	0.050	0.050	0.075	0.200	0.375	0.500	0.800	0.950	1.000	
% Released:	15 %	PM	0.875	0.850	0.800	0.625	0.625	0.600	0.575	0.550	0.625	0.700	0.650	0.375	
dWash peak:	0 W	AM	0.139	0.050	0.028	0.024	0.029	0.090	0.169	0.303	0.541	0.594	0.502	0.443	
% Released:	60 %	PM	0.376	0.396	0.334	0.323	0.344	0.448	0.791	1.000	0.800	0.597	0.383	0.281	
E-rOven peak:	122 W	AM	0.057	0.057	0.057	0.057	0.057	0.114	0.171	0.286	0.343	0.343	0.343	0.400	
% Released:	80 %	PM	0.457	0.343	0.286	0.400	0.571	1.000	0.857	0.429	0.286	0.229	0.171	0.114	
TVs peak:	151 W	AM	0.100	0.050	0.050	0.050	0.100	0.200	0.400	0.450	0.400	0.200	0.100	0.100	
% Released:	100 %	PM	0.050	0.050	0.150	0.450	0.850	1.000	0.950	0.800	0.500	0.250	0.150	0.100	

# Building Input Summary Report

## APPLIANCES & LIGHTING SCHEDULES(Continued)

cFan peak:	0 W	AM	0.600	0.600	0.600	0.600	0.600	0.600	0.600	0.250	0.250	0.250	0.250	0.250
% Released:	100 %	PM	0.250	0.250	0.250	0.250	0.250	0.250	0.550	0.600	0.600	0.600	0.600	0.600
lgts-in peak:	545 W	AM	0.160	0.150	0.160	0.180	0.230	0.450	0.420	0.260	0.190	0.160	0.120	0.110
% Released:	100 %	PM	0.160	0.170	0.250	0.270	0.340	0.550	0.600	0.880	1.000	0.880	0.510	0.280
lgts-out peak:	47 W	AM	1.000	1.000	1.000	1.000	1.000	0.750	0.750	0.000	0.000	0.000	0.000	0.000
% Released:	0 %	PM	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.750	0.750	0.750	1.000
lgts-gar peak:	0 W	AM	0.000	0.000	0.000	0.000	0.000	0.500	0.750	1.000	0.750	0.500	0.000	0.000
% Released:	0 %	PM	0.000	0.000	0.500	0.500	0.750	1.000	0.750	0.500	0.000	0.000	0.000	0.000
MEL peak:	184 W	AM	0.500	0.500	0.500	0.750	0.750	0.850	1.000	1.000	1.000	1.000	0.900	0.900
% Released:	90 %	PM	0.900	0.900	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.850	0.750	0.750

# Building Input Summary Report

PROJECT									
Title:	L130AO (low-e windows)			Address type:	Y				
Building Type:	User	Bedrooms:	0	Lot #:					
Owner:	FSEC	Conditioned Area:	1539	Block/SubDivision:					
Builder Name:	James Q. Hammer	Total Stories:	1	PlatBook:	111 Anywhere Lane				
Permit Office:		Worst Case:	No	County:					
Jurisdiction:		Rotate Angle:	0	City, State, Zip:	Orlando, FL,				
Family Type:	Single-family	Cross Ventilation:							
New/Existing:	New (From Plans)	Whole House Fan:							
Year Construct:		Terrain:	Suburban						
Comment:	HERS BESTEST low-e windows case			Shielding:	Suburban				
CLIMATE									
Design Location	Tmy Site	Design Temp 97.5%	2.5%	Int Design Temp Winter	Summer	Heating Degree Days	Design Moisture	Daily temp Range	
FL, OrlandoTMY1	FL_ORLANDOTMY1	41	91	70	75	293	44	Medium	
UTILITY									
Fuel	Unit	Utility Name				Monthly Fixed Cost	\$/Unit		
Electricity	kWh	EnergyGauge Default				0.00	0.12		
Natural Gas	Therm	EnergyGauge Default				0.00	0.68		
Fuel Oil	Gallon	EnergyGauge Default				0.00	1.10		
Propane	Gallon	EnergyGauge Default				0.00	1.40		
SURROUNDINGS									
Ornt	Type	-----Shade Trees-----			Exist	-----Adjacent Buildings-----			
		Height	Width	Distance		Height	Width	Distance	
N	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
NE	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
E	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
SE	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
S	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
SW	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
W	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
NW	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
BLOCKS									
Number	Name	Area	Volume						
1	Block1	1539	12312						
SPACES									
Number	Name	Area	Volume	Kitchen	Occupants	Bedrooms	Finished	Cooled	Heated
1	Main	1539	12312	Yes	0	0		Yes	Yes

# Building Input Summary Report

FLOORS														
#	Floor Type	Space	Exposed Perim	Perimeter R-Value	Area	Joist R-Value	Tile	Wood	Carpet					
1	Raised Floor	Main	---	---	1539 ft	10.4	0	0	1					
ROOF														
#	Type	Materials	Roof Area	Gable Area	Roof Color	Solar Absor.	SA Tested	Emitt	Emitt Tested	Deck Insul.	Pitch (deg)			
1	Gable or shed	Composition shingles	1622 ft²	256 ft²	Medium	0.6	No	0.9	No	0	18.4			
ATTIC														
#	Type	Ventilation	Vent Ratio (1 in)	Area	RBS	IRCC								
1	Full attic	Vented	150	1539 ft²	N	N								
CEILING														
#	Ceiling Type	Space	R-Value	Ins. Type	Area	Framing Fraction	Truss Type							
1	Under Attic(Vented)	Main	16.7	Blown	1539.0ft²	0.11	Wood							
WALLS														
#	Ornt	Adjacent To	Wall Type	Space	Cavity R-Value	Width Ft	In	Height Ft	In	Sheathing Area	R-Value	Framing Fraction	Solar Absor.	Below Grade
1	N	Exterior	Frame - Wood	Main	11	57.0	0	8.0	0	456.0ft²		0.25	0.6	0 %
2	S	Exterior	Frame - Wood	Main	11	57.0	0	8.0	0	456.0ft²		0.25	0.6	0 %
3	E	Exterior	Frame - Wood	Main	11	27.0	0	8.0	0	216.0ft²		0.25	0.6	0 %
4	W	Exterior	Frame - Wood	Main	11	27.0	0	8.0	0	216.0ft²		0.25	0.6	0 %
DOORS														
#	Ornt	Adjacent To	Door Type	Space	Storms	U-Value	Width Ft	In	Height Ft	In	Area			
1	N	Exterior	Insulated	Main	None	0.46	3.00	0	6.00	8	20.0ft²			
2	S	Exterior	Insulated	Main	None	0.46	3.00	0	6.00	8	20.0ft²			
WINDOWS														
#	Ornt	Wall ID	Frame	Panes	NFRC	U-Factor	SHGC	Storm	Area	----Overhang----		Interior Shade	Screening	
1	N	1	Wood	Low-E Double	Yes	0.30	0.34	N	90.0ft²	0.0 ft 0 in	0.0 ft 0 in	None	None	
2	S	2	Wood	Low-E Double	Yes	0.30	0.34	N	90.0ft²	0.0 ft 0 in	0.0 ft 0 in	None	None	
3	E	3	Wood	Low-E Double	Yes	0.30	0.34	N	45.0ft²	0.0 ft 0 in	0.0 ft 0 in	None	None	
4	W	4	Wood	Low-E Double	Yes	0.30	0.34	N	45.0ft²	0.0 ft 0 in	0.0 ft 0 in	None	None	
INFILTRATION														
#	Scope	Method	SLA	CFM50	ELA	EqLA	ACH	ACH50	Space(s)					
1	Wholehouse	Proposed ACH	0.00092	3705	203.40	382.53	0.6700	18.1	All					

# Building Input Summary Report

MASS													
#	Mass Type	Area	Thickness	Furniture Fraction	Space								
1	No Added Mass	0 ft²	0 ft	0.00	Main								
HEATING SYSTEM													
#	System Type	Subtype	AHRI #	Efficiency	Capacity kBtu/hr	---Geothermal HeatPump---		Ducts	Block				
1	Electric Strip Heat	None		COP: 1.00	140.0	Entry	Power	Volt	Current	sys#1	1		
COOLING SYSTEM													
#	System Type	Subtype	AHRI #	Efficiency	Capacity kBtu/hr	Air Flow cfm	SHR	Duct	Block				
1	Central Unit	None		SEER:10	50.0	777	0.75	sys#1	1				
HOT WATER SYSTEM													
#	System Type	Subtype	Location	EF	Cap	Use	SetPnt	Fixture Flow	Pipe Ins.	Pipe length			
	Recirculation System	Recirc Control Type	Loop length	Branch length	Pump power	DWHR	Facilities Connected	Equal Flow	DWHR Eff	Other Credits			
DUCTS													
Duct #	-----Supply-----		-----Return-----			Leakage Type	Air Handler	CFM 25 TOT	CFM 25 OUT	QN	RLF	HVAC # Heat Cool	
1	Main	6.0 385 ft²	Main	6.0	77 ft²	Prop. Air Leakage	Main	---	---	0.00	0.60	1	1
MECHANICAL VENTILATION													
Type	Supply CFM	Exhaust CFM	HRV	Fan	Run Time	Heating System	Cooling System						
None	0.0	0.0	0.0	0.0 W	0 %	1 - Electric Strip Heat	1 - Central Unit						
TEMPERATURES													
Programable Thermostat: N						Ceiling Fans: N							
Cooling	[X] Jan	[X] Feb	[X] Mar	[X] Apr	[X] May	[X] Jun	[X] Jul	[X] Aug	[X] Sep	[X] Oct	[X] Nov	[X] Dec	
Heating	[X] Jan	[X] Feb	[X] Mar	[X] Apr	[X] May	[X] Jun	[X] Jul	[X] Aug	[X] Sep	[X] Oct	[X] Nov	[X] Dec	
Venting	[X] Jan	[X] Feb	[X] Mar	[X] Apr	[X] May	[X] Jun	[X] Jul	[X] Aug	[X] Sep	[X] Oct	[X] Nov	[X] Dec	
Thermostat Schedule: BESTEST-cooling													
Schedule Type		1	2	3	4	5	6	7	8	9	10	11	12
Cooling (WD)		AM PM	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78
Cooling (WEH)		AM PM	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78

# Building Input Summary Report

## TEMPERATURES(Continued)

Heating (WD)	AM PM	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68
Heating (WEH)	AM PM	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68

## CLOTHES DRYERS

ID	Type	Screen	Location	Quantity	Fuel Type	Make	Model	Schedule	kWhPerYr
1	Dryers	Default New	Main		Electricity			HERS2011	0

## RANGE OVENS

ID	Type	Screen	Location	Type	Fuel Type	Make	Model	Cooktop	Oven
1	Ranges	Default New	Main	Combo	Elec			Elec Flat Coil	Not Convec

## HARD WIRED LIGHTING

ID	Type	Screen	Location	Total#	Quantity#	Comp FI	All Other FI	Bulb Type	Schedule	Watts per bulb
1	Hard-Wired	By Count - Qualifying	Main	100	10				HERS2011	
2	Hard-Wired	Default New	Exterior						HERS2011	
3	Hard-Wired	Default New	Garage						HERS2011	

## MISC ELECTRICAL LOADS

ID	Type	Screen	Location	Item	Quantity	Catagory	Operating	Schedule	Off Standby
1	Misc Elec Load	Simple Default	Main		1		1	HERS2011	1

## APPLIANCES & LIGHTING SCHEDULES

Appliance Schedule:		HERS2014		Hours											
Schedule Type		1	2	3	4	5	6	7	8	9	10	11	12		
Occupancy peak:	400 Btu	AM	0.930	0.930	0.930	0.930	0.930	0.930	0.930	0.980	0.460	0.270	0.270	0.270	
% Released:	100 %	PM	0.270	0.270	0.270	0.270	0.330	0.610	1.000	1.000	0.930	0.930	0.930	0.930	
refrig peak:	0 W	AM	0.824	0.804	0.784	0.764	0.744	0.734	0.744	0.754	0.764	0.794	0.814	0.854	
% Released:	100 %	PM	0.854	0.864	0.884	0.904	0.925	0.945	0.925	0.915	0.904	0.894	0.874	0.854	
cWash peak:	0 W	AM	0.200	0.100	0.050	0.050	0.050	0.075	0.200	0.375	0.500	0.800	0.950	1.000	
% Released:	30 %	PM	0.875	0.850	0.800	0.625	0.625	0.600	0.575	0.550	0.625	0.700	0.650	0.375	
E-cDry peak:	119 W	AM	0.200	0.100	0.050	0.050	0.050	0.075	0.200	0.375	0.500	0.800	0.950	1.000	
% Released:	15 %	PM	0.875	0.850	0.800	0.625	0.625	0.600	0.575	0.550	0.625	0.700	0.650	0.375	
dWash peak:	0 W	AM	0.139	0.050	0.028	0.024	0.029	0.090	0.169	0.303	0.541	0.594	0.502	0.443	
% Released:	60 %	PM	0.376	0.396	0.334	0.323	0.344	0.448	0.791	1.000	0.800	0.597	0.383	0.281	
E-rOven peak:	122 W	AM	0.057	0.057	0.057	0.057	0.057	0.114	0.171	0.286	0.343	0.343	0.343	0.400	
% Released:	80 %	PM	0.457	0.343	0.286	0.400	0.571	1.000	0.857	0.429	0.286	0.229	0.171	0.114	
TVs peak:	151 W	AM	0.100	0.050	0.050	0.050	0.100	0.200	0.400	0.450	0.400	0.200	0.100	0.100	
% Released:	100 %	PM	0.050	0.050	0.150	0.450	0.850	1.000	0.950	0.800	0.500	0.250	0.150	0.100	

# Building Input Summary Report

## APPLIANCES & LIGHTING SCHEDULES(Continued)

cFan peak:	0 W	AM	0.600	0.600	0.600	0.600	0.600	0.600	0.600	0.250	0.250	0.250	0.250	0.250
% Released:	100 %	PM	0.250	0.250	0.250	0.250	0.250	0.250	0.550	0.600	0.600	0.600	0.600	0.600
lgts-in peak:	545 W	AM	0.160	0.150	0.160	0.180	0.230	0.450	0.420	0.260	0.190	0.160	0.120	0.110
% Released:	100 %	PM	0.160	0.170	0.250	0.270	0.340	0.550	0.600	0.880	1.000	0.880	0.510	0.280
lgts-out peak:	47 W	AM	1.000	1.000	1.000	1.000	1.000	0.750	0.750	0.000	0.000	0.000	0.000	0.000
% Released:	0 %	PM	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.750	0.750	0.750	1.000
lgts-gar peak:	0 W	AM	0.000	0.000	0.000	0.000	0.000	0.500	0.750	1.000	0.750	0.500	0.000	0.000
% Released:	0 %	PM	0.000	0.000	0.500	0.500	0.750	1.000	0.750	0.500	0.000	0.000	0.000	0.000
MEL peak:	184 W	AM	0.500	0.500	0.500	0.750	0.750	0.850	1.000	1.000	1.000	1.000	0.900	0.900
% Released:	90 %	PM	0.900	0.900	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.850	0.750	0.750

# Building Input Summary Report

PROJECT									
Title:	L140AO (zero windows)			Address type:	Y				
Building Type:	User	Bedrooms:	0	Lot #:					
Owner:	FSEC	Conditioned Area:	1539	Block/SubDivision:					
Builder Name:	James Q. Hammer	Total Stories:	1	PlatBook:	111 Anywhere Lane				
Permit Office:		Worst Case:	No	County:					
Jurisdiction:		Rotate Angle:	0	City, State, Zip:	Orlando, FL,				
Family Type:	Single-family	Cross Ventilation:							
New/Existing:	New (From Plans)	Whole House Fan:							
Year Construct:		Terrain:	Suburban						
Comment:	HERS BESTEST zero windows case			Shielding:	Suburban				
CLIMATE									
Design Location	Tmy Site	Design Temp 97.5%	Design Temp 2.5%	Int Design Temp Winter	Int Design Temp Summer	Heating Degree Days	Design Moisture	Daily temp Range	
FL, OrlandoTMY1	FL_ORLANDOTMY1	41	91	70	75	293	44	Medium	
UTILITY									
Fuel	Unit	Utility Name				Monthly Fixed Cost	\$/Unit		
Electricity	kWh	EnergyGauge Default				0.00	0.12		
Natural Gas	Therm	EnergyGauge Default				0.00	0.68		
Fuel Oil	Gallon	EnergyGauge Default				0.00	1.10		
Propane	Gallon	EnergyGauge Default				0.00	1.40		
SURROUNDINGS									
Ornt	Type	-----Shade Trees-----			Exist	-----Adjacent Buildings-----			
		Height	Width	Distance		Height	Width	Distance	
N	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
NE	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
E	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
SE	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
S	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
SW	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
W	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
NW	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
BLOCKS									
Number	Name	Area	Volume						
1	Block1	1539	12312						
SPACES									
Number	Name	Area	Volume	Kitchen	Occupants	Bedrooms	Finished	Cooled	Heated
1	Main	1539	12312	Yes	0	0		Yes	Yes



# Building Input Summary Report

FLOORS												
#	Floor Type	Space	Exposed Perim	Perimeter R-Value	Area	Joist R-Value	Tile	Wood	Carpet			
1	Raised Floor	Main	---	---	1539 ft	10.4	0	0	1			
ROOF												
#	Type	Materials	Roof Area	Gable Area	Roof Color	Solar Absor.	SA Tested	Emitt	Emitt Tested	Deck Insul.	Pitch (deg)	
1	Gable or shed	Composition shingles	1622 ft²	256 ft²	Medium	0.6	No	0.9	No	0	18.4	
ATTIC												
#	Type	Ventilation	Vent Ratio (1 in)	Area	RBS	IRCC						
1	Full attic	Vented	150	1539 ft²	N	N						
CEILING												
#	Ceiling Type	Space	R-Value	Ins. Type	Area	Framing Fraction	Truss Type					
1	Under Attic(Vented)	Main	16.7	Blown	1539.0ft²	0.11	Wood					
WALLS												
#	Ornt	Adjacent To	Wall Type	Space	Cavity R-Value	Width Ft In	Height Ft In	Sheathing Area	R-Value	Framing Fraction	Solar Absor.	Below Grade
1	N	Exterior	Frame - Wood	Main	11	57.0 0	8.0 0	456.0ft²		0.25	0.6	0 %
2	S	Exterior	Frame - Wood	Main	11	57.0 0	8.0 0	456.0ft²		0.25	0.6	0 %
3	E	Exterior	Frame - Wood	Main	11	27.0 0	8.0 0	216.0ft²		0.25	0.6	0 %
4	W	Exterior	Frame - Wood	Main	11	27.0 0	8.0 0	216.0ft²		0.25	0.6	0 %
DOORS												
#	Ornt	Adjacent To	Door Type	Space	Storms	U-Value	Width Ft In	Height Ft In	Area			
1	N	Exterior	Insulated	Main	None	0.46	3.00 0	6.00 8	20.0ft²			
2	S	Exterior	Insulated	Main	None	0.46	3.00 0	6.00 8	20.0ft²			
WINDOWS												
#	Ornt	Wall ID	Frame	Panes	NFRC	U-Factor	SHGC	Storm	Area	-----Overhang----- Depth Separation	Interior Shade	Screening
1	N	1	Vinyl	Low-E Double	Yes	0.09	0.01	N	0.0ft²	0.0 ft 0 in 0.0 ft 0 in	None	None
INFILTRATION												
#	Scope	Method	SLA	CFM50	ELA	EqLA	ACH	ACH50	Space(s)			
1	Wholehouse	Proposed ACH	0.00092	3705	203.40	382.53	0.6700	18.1	All			

# Building Input Summary Report

<b>MASS</b>													
#	Mass Type	Area	Thickness	Furniture Fraction	Space								
1	No Added Mass	0 ft²	0 ft	0.10	Main								
<b>HEATING SYSTEM</b>													
#	System Type	Subtype	AHRI #	Efficiency	Capacity kBtu/hr	---Geothermal HeatPump---		Ducts	Block				
1	Electric Strip Heat	None		COP: 1.00	140.0	Entry	Power	Volt	Current	sys#1	1		
<b>COOLING SYSTEM</b>													
#	System Type	Subtype	AHRI #	Efficiency	Capacity kBtu/hr	Air Flow cfm	SHR	Duct	Block				
1	Central Unit	None		SEER:10	54.0	1620	0.75	sys#1	1				
<b>HOT WATER SYSTEM</b>													
#	System Type	Subtype	Location	EF	Cap	Use	SetPnt	Fixture Flow	Pipe Ins.	Pipe length			
	Recirculation System	Recirc Control Type	Loop length	Branch length	Pump power	DWHR	Facilities Connected	Equal Flow	DWHR Eff	Other Credits			
<b>DUCTS</b>													
Duct #	-----Supply-----			-----Return-----			Leakage Type	Air Handler	CFM 25 TOT	CFM 25 OUT	QN	RLF	HVAC # Heat Cool
1	Main	6.0	385 ft²	Main	6.0	77 ft²	Prop. Air Leakage	Main	---	---	0.00	0.60	1 1
<b>MECHANICAL VENTILATION</b>													
Type	Supply CFM	Exhaust CFM	HRV	Fan	Run Time	Heating System	Cooling System						
None	0.0	0.0	0.0	0.0 W	0 %	1 - Electric Strip Heat	1 - Central Unit						
<b>TEMPERATURES</b>													
Programable Thermostat: N						Ceiling Fans: N							
Cooling	[X] Jan	[X] Feb	[X] Mar	[X] Apr	[X] May	[X] Jun	[X] Jul	[X] Aug	[X] Sep	[X] Oct	[X] Nov	[X] Dec	
Heating	[X] Jan	[X] Feb	[X] Mar	[X] Apr	[X] May	[X] Jun	[X] Jul	[X] Aug	[X] Sep	[X] Oct	[X] Nov	[X] Dec	
Venting	[X] Jan	[X] Feb	[X] Mar	[X] Apr	[X] May	[X] Jun	[X] Jul	[X] Aug	[X] Sep	[X] Oct	[X] Nov	[X] Dec	
Thermostat Schedule: BESTEST-cooling													
Schedule Type		1	2	3	4	5	6	7	8	9	10	11	12
Cooling (WD)		AM 78	78	78	78	78	78	78	78	78	78	78	78
Cooling (WEH)		AM 78	78	78	78	78	78	78	78	78	78	78	78

# Building Input Summary Report

## TEMPERATURES(Continued)

Heating (WD)	AM	68	68	68	68	68	68	68	68	68	68	68	68	68
	PM	68	68	68	68	68	68	68	68	68	68	68	68	68
Heating (WEH)	AM	68	68	68	68	68	68	68	68	68	68	68	68	68
	PM	68	68	68	68	68	68	68	68	68	68	68	68	68

## CLOTHES DRYERS

ID	Type	Screen	Location	Quantity	Fuel Type	Make	Model	Schedule	kWhPerYr
1	Dryers	Default New	Main		Electricity			HERS2011	0

## RANGE OVENS

ID	Type	Screen	Location	Type	Fuel Type	Make	Model	Cooktop	Oven
1	Ranges	Default New	Main	Combo	Elec			Elec Flat Coil	Not Convec

## HARD WIRED LIGHTING

ID	Type	Screen	Location	Total#	Quantity#	Comp FI	All Other FI	Bulb Type	Schedule	Watts per bulb
1	Hard-Wired	By Count - Qualifying	Main	100	10				HERS2011	
2	Hard-Wired	Default New	Exterior						HERS2011	
3	Hard-Wired	Default New	Garage						HERS2011	

## MISC ELECTRICAL LOADS

ID	Type	Screen	Location	Item	Quantity	Catagory	Operating	Schedule	Off Standby
1	Misc Elec Load	Simple Default	Main		1		1	HERS2011	1

## APPLIANCES & LIGHTING SCHEDULES

Appliance Schedule:		HERS2014		Hours											
Schedule Type		1	2	3	4	5	6	7	8	9	10	11	12		
Occupancy peak:	400 Btu	AM	0.930	0.930	0.930	0.930	0.930	0.930	0.930	0.980	0.460	0.270	0.270	0.270	
% Released:	100 %	PM	0.270	0.270	0.270	0.270	0.330	0.610	1.000	1.000	0.930	0.930	0.930	0.930	
refrig peak:	0 W	AM	0.824	0.804	0.784	0.764	0.744	0.734	0.744	0.754	0.764	0.794	0.814	0.854	
% Released:	100 %	PM	0.854	0.864	0.884	0.904	0.925	0.945	0.925	0.915	0.904	0.894	0.874	0.854	
cWash peak:	0 W	AM	0.200	0.100	0.050	0.050	0.050	0.075	0.200	0.375	0.500	0.800	0.950	1.000	
% Released:	30 %	PM	0.875	0.850	0.800	0.625	0.625	0.600	0.575	0.550	0.625	0.700	0.650	0.375	
E-cDry peak:	119 W	AM	0.200	0.100	0.050	0.050	0.050	0.075	0.200	0.375	0.500	0.800	0.950	1.000	
% Released:	15 %	PM	0.875	0.850	0.800	0.625	0.625	0.600	0.575	0.550	0.625	0.700	0.650	0.375	
dWash peak:	0 W	AM	0.139	0.050	0.028	0.024	0.029	0.090	0.169	0.303	0.541	0.594	0.502	0.443	
% Released:	60 %	PM	0.376	0.396	0.334	0.323	0.344	0.448	0.791	1.000	0.800	0.597	0.383	0.281	
E-rOven peak:	122 W	AM	0.057	0.057	0.057	0.057	0.057	0.114	0.171	0.286	0.343	0.343	0.343	0.400	
% Released:	80 %	PM	0.457	0.343	0.286	0.400	0.571	1.000	0.857	0.429	0.286	0.229	0.171	0.114	
TVs peak:	151 W	AM	0.100	0.050	0.050	0.050	0.100	0.200	0.400	0.450	0.400	0.200	0.100	0.100	
% Released:	100 %	PM	0.050	0.050	0.150	0.450	0.850	1.000	0.950	0.800	0.500	0.250	0.150	0.100	

# Building Input Summary Report

## APPLIANCES & LIGHTING SCHEDULES(Continued)

cFan peak:	0 W	AM	0.600	0.600	0.600	0.600	0.600	0.600	0.600	0.250	0.250	0.250	0.250	0.250
% Released:	100 %	PM	0.250	0.250	0.250	0.250	0.250	0.250	0.550	0.600	0.600	0.600	0.600	0.600
lgts-in peak:	545 W	AM	0.160	0.150	0.160	0.180	0.230	0.450	0.420	0.260	0.190	0.160	0.120	0.110
% Released:	100 %	PM	0.160	0.170	0.250	0.270	0.340	0.550	0.600	0.880	1.000	0.880	0.510	0.280
lgts-out peak:	47 W	AM	1.000	1.000	1.000	1.000	1.000	0.750	0.750	0.000	0.000	0.000	0.000	0.000
% Released:	0 %	PM	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.750	0.750	0.750	1.000
lgts-gar peak:	0 W	AM	0.000	0.000	0.000	0.000	0.000	0.500	0.750	1.000	0.750	0.500	0.000	0.000
% Released:	0 %	PM	0.000	0.000	0.500	0.500	0.750	1.000	0.750	0.500	0.000	0.000	0.000	0.000
MEL peak:	184 W	AM	0.500	0.500	0.500	0.750	0.750	0.850	1.000	1.000	1.000	1.000	0.900	0.900
% Released:	90 %	PM	0.900	0.900	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.850	0.750	0.750

# Building Input Summary Report

PROJECT									
Title:	L150AO (all south glass)			Address type:	Y				
Building Type:	User	Bedrooms:	0	Lot #:					
Owner:	FSEC	Conditioned Area:	1539	Block/SubDivision:					
Builder Name:	James Q. Hammer	Total Stories:	1	PlatBook:	111 Anywhere Lane				
Permit Office:		Worst Case:	No	County:					
Jurisdiction:		Rotate Angle:	0	City, State, Zip:	Orlando, FL,				
Family Type:	Single-family	Cross Ventilation:							
New/Existing:	New (From Plans)	Whole House Fan:							
Year Construct:		Terrain:	Suburban						
Comment:	HERS BESTEST all south glass case			Shielding:	Suburban				
CLIMATE									
Design Location	Tmy Site	Design Temp 97.5%	Design Temp 2.5%	Int Design Temp Winter	Int Design Temp Summer	Heating Degree Days	Design Moisture	Daily temp Range	
FL, OrlandoTMY1	FL_ORLANDOTMY1	41	91	70	75	293	44	Medium	
UTILITY									
Fuel	Unit	Utility Name				Monthly Fixed Cost	\$/Unit		
Electricity	kWh	EnergyGauge Default				0.00	0.12		
Natural Gas	Therm	EnergyGauge Default				0.00	0.68		
Fuel Oil	Gallon	EnergyGauge Default				0.00	1.10		
Propane	Gallon	EnergyGauge Default				0.00	1.40		
SURROUNDINGS									
Ornt	Type	-----Shade Trees-----			Exist	-----Adjacent Buildings-----			
		Height	Width	Distance		Height	Width	Distance	
N	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
NE	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
E	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
SE	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
S	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
SW	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
W	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
NW	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
BLOCKS									
Number	Name	Area	Volume						
1	Block1	1539	12312						
SPACES									
Number	Name	Area	Volume	Kitchen	Occupants	Bedrooms	Finished	Cooled	Heated
1	Main	1539	12312	Yes	0	0		Yes	Yes

# Building Input Summary Report

FLOORS												
#	Floor Type	Space	Exposed Perim	Perimeter R-Value	Area	Joist R-Value	Tile	Wood	Carpet			
1	Raised Floor	Main	---	---	1539 ft	10.4	0	0	1			
ROOF												
#	Type	Materials	Roof Area	Gable Area	Roof Color	Solar Absor.	SA Tested	Emitt	Emitt Tested	Deck Insul.	Pitch (deg)	
1	Gable or shed	Composition shingles	1622 ft²	256 ft²	Medium	0.6	No	0.9	No	0	18.4	
ATTIC												
#	Type	Ventilation	Vent Ratio (1 in)	Area	RBS	IRCC						
1	Full attic	Vented	150	1539 ft²	N	N						
CEILING												
#	Ceiling Type	Space	R-Value	Ins. Type	Area	Framing Fraction	Truss Type					
1	Under Attic(Vented)	Main	16.7	Blown	1539.0ft²	0.11	Wood					
WALLS												
#	Ornt	Adjacent To	Wall Type	Space	Cavity R-Value	Width Ft In	Height Ft In	Sheathing Area	R-Value	Framing Fraction	Solar Absor.	Below Grade
1	N	Exterior	Frame - Wood	Main	11	57.0 0	8.0 0	456.0ft²		0.25	0.6	0 %
2	S	Exterior	Frame - Wood	Main	11	57.0 0	8.0 0	456.0ft²		0.25	0.6	0 %
3	E	Exterior	Frame - Wood	Main	11	27.0 0	8.0 0	216.0ft²		0.25	0.6	0 %
4	W	Exterior	Frame - Wood	Main	11	27.0 0	8.0 0	216.0ft²		0.25	0.6	0 %
DOORS												
#	Ornt	Adjacent To	Door Type	Space	Storms	U-Value	Width Ft In	Height Ft In	Area			
1	N	Exterior	Insulated	Main	None	0.46	3.00 0	6.00 8	20.0ft²			
2	S	Exterior	Insulated	Main	None	0.46	3.00 0	6.00 8	20.0ft²			
WINDOWS												
#	Ornt	Wall ID	Frame	Panes	NFRC	U-Factor	SHGC	Storm	Area	-----Overhang----- Depth Separation	Interior Shade	Screening
1	S	2	TIM	Single (Clear)	Yes	1.09	0.70	N	270.0ft²	0.0 ft 0 in 0.0 ft 0 in	None	None
INFILTRATION												
#	Scope	Method	SLA	CFM50	ELA	EqLA	ACH	ACH50	Space(s)			
1	Wholehouse	Proposed ACH	0.00092	3705	203.40	382.53	0.6700	18.1	All			

# Building Input Summary Report

<b>MASS</b>													
#	Mass Type	Area	Thickness	Furniture Fraction	Space								
1	No Added Mass	0 ft²	0 ft	0.00	Main								
<b>HEATING SYSTEM</b>													
#	System Type	Subtype	AHRI #	Efficiency	Capacity kBtu/hr	---Geothermal HeatPump---		Ducts	Block				
1	Electric Strip Heat	None		COP: 1.00	140.0	Entry	Power	Volt	Current	sys#1	1		
<b>COOLING SYSTEM</b>													
#	System Type	Subtype	AHRI #	Efficiency	Capacity kBtu/hr	Air Flow cfm	SHR	Duct	Block				
1	Central Unit	None		SEER:10	100.0	1470	0.75	sys#1	1				
<b>HOT WATER SYSTEM</b>													
#	System Type	Subtype	Location	EF	Cap	Use	SetPnt	Fixture Flow	Pipe Ins.	Pipe length			
	Recirculation System	Recirc Control Type	Loop length	Branch length	Pump power	DWHR	Facilities Connected	Equal Flow	DWHR Eff	Other Credits			
<b>DUCTS</b>													
Duct #	-----Supply-----			-----Return-----			Leakage Type	Air Handler	CFM 25 TOT	CFM 25 OUT	QN	RLF	HVAC # Heat Cool
1	Main	6.0	385 ft²	Main	6.0	77 ft²	Prop. Air Leakage	Main	---	---	0.00	0.60	1 1
<b>MECHANICAL VENTILATION</b>													
Type	Supply CFM	Exhaust CFM	HRV	Fan	Run Time	Heating System	Cooling System						
None	0.0	0.0	0.0	0.0 W	0 %	1 - Electric Strip Heat	1 - Central Unit						
<b>TEMPERATURES</b>													
Programable Thermostat: N						Ceiling Fans: N							
Cooling	[X] Jan	[X] Feb	[X] Mar	[X] Apr	[X] May	[X] Jun	[X] Jul	[X] Aug	[X] Sep	[X] Oct	[X] Nov	[X] Dec	
Heating	[X] Jan	[X] Feb	[X] Mar	[X] Apr	[X] May	[X] Jun	[X] Jul	[X] Aug	[X] Sep	[X] Oct	[X] Nov	[X] Dec	
Venting	[X] Jan	[X] Feb	[X] Mar	[X] Apr	[X] May	[X] Jun	[X] Jul	[X] Aug	[X] Sep	[X] Oct	[X] Nov	[X] Dec	
Thermostat Schedule: BESTEST-cooling													
Schedule Type		1	2	3	4	5	6	7	8	9	10	11	12
Cooling (WD)		AM 78	78	78	78	78	78	78	78	78	78	78	78
Cooling (WEH)		AM 78	78	78	78	78	78	78	78	78	78	78	78

# Building Input Summary Report

## TEMPERATURES(Continued)

Heating (WD)	AM	68	68	68	68	68	68	68	68	68	68	68	68	68
	PM	68	68	68	68	68	68	68	68	68	68	68	68	68
Heating (WEH)	AM	68	68	68	68	68	68	68	68	68	68	68	68	68
	PM	68	68	68	68	68	68	68	68	68	68	68	68	68

## CLOTHES DRYERS

ID	Type	Screen	Location	Quantity	Fuel Type	Make	Model	Schedule	kWhPerYr
1	Dryers	Default New	Main		Electricity			HERS2011	0

## RANGE OVENS

ID	Type	Screen	Location	Type	Fuel Type	Make	Model	Cooktop	Oven
1	Ranges	Default New	Main	Combo	Elec			Elec Flat Coil	Not Convec

## HARD WIRED LIGHTING

ID	Type	Screen	Location	Total#	Quantity#	Comp FI	All Other FI	Bulb Type	Schedule	Watts per bulb
1	Hard-Wired	By Count - Qualifying	Main	100	10				HERS2011	
2	Hard-Wired	Default New	Exterior						HERS2011	
3	Hard-Wired	Default New	Garage						HERS2011	

## MISC ELECTRICAL LOADS

ID	Type	Screen	Location	Item	Quantity	Catagory	Operating	Schedule	Off Standby
1	Misc Elec Load	Simple Default	Main		1		1	HERS2011	1

## APPLIANCES & LIGHTING SCHEDULES

Appliance Schedule:		HERS2014		Hours											
Schedule Type		1	2	3	4	5	6	7	8	9	10	11	12		
Occupancy peak:	400 Btu	AM	0.930	0.930	0.930	0.930	0.930	0.930	0.930	0.980	0.460	0.270	0.270	0.270	
% Released:	100 %	PM	0.270	0.270	0.270	0.270	0.330	0.610	1.000	1.000	0.930	0.930	0.930	0.930	
refrig peak:	0 W	AM	0.824	0.804	0.784	0.764	0.744	0.734	0.744	0.754	0.764	0.794	0.814	0.854	
% Released:	100 %	PM	0.854	0.864	0.884	0.904	0.925	0.945	0.925	0.915	0.904	0.894	0.874	0.854	
cWash peak:	0 W	AM	0.200	0.100	0.050	0.050	0.050	0.075	0.200	0.375	0.500	0.800	0.950	1.000	
% Released:	30 %	PM	0.875	0.850	0.800	0.625	0.625	0.600	0.575	0.550	0.625	0.700	0.650	0.375	
E-cDry peak:	119 W	AM	0.200	0.100	0.050	0.050	0.050	0.075	0.200	0.375	0.500	0.800	0.950	1.000	
% Released:	15 %	PM	0.875	0.850	0.800	0.625	0.625	0.600	0.575	0.550	0.625	0.700	0.650	0.375	
dWash peak:	0 W	AM	0.139	0.050	0.028	0.024	0.029	0.090	0.169	0.303	0.541	0.594	0.502	0.443	
% Released:	60 %	PM	0.376	0.396	0.334	0.323	0.344	0.448	0.791	1.000	0.800	0.597	0.383	0.281	
E-rOven peak:	122 W	AM	0.057	0.057	0.057	0.057	0.057	0.114	0.171	0.286	0.343	0.343	0.343	0.400	
% Released:	80 %	PM	0.457	0.343	0.286	0.400	0.571	1.000	0.857	0.429	0.286	0.229	0.171	0.114	
TVs peak:	151 W	AM	0.100	0.050	0.050	0.050	0.100	0.200	0.400	0.450	0.400	0.200	0.100	0.100	
% Released:	100 %	PM	0.050	0.050	0.150	0.450	0.850	1.000	0.950	0.800	0.500	0.250	0.150	0.100	



# Building Input Summary Report

## APPLIANCES & LIGHTING SCHEDULES(Continued)

cFan peak:	0 W	AM	0.600	0.600	0.600	0.600	0.600	0.600	0.600	0.250	0.250	0.250	0.250	0.250
% Released:	100 %	PM	0.250	0.250	0.250	0.250	0.250	0.250	0.550	0.600	0.600	0.600	0.600	0.600
lgts-in peak:	545 W	AM	0.160	0.150	0.160	0.180	0.230	0.450	0.420	0.260	0.190	0.160	0.120	0.110
% Released:	100 %	PM	0.160	0.170	0.250	0.270	0.340	0.550	0.600	0.880	1.000	0.880	0.510	0.280
lgts-out peak:	47 W	AM	1.000	1.000	1.000	1.000	1.000	0.750	0.750	0.000	0.000	0.000	0.000	0.000
% Released:	0 %	PM	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.750	0.750	0.750	1.000
lgts-gar peak:	0 W	AM	0.000	0.000	0.000	0.000	0.000	0.500	0.750	1.000	0.750	0.500	0.000	0.000
% Released:	0 %	PM	0.000	0.000	0.500	0.500	0.750	1.000	0.750	0.500	0.000	0.000	0.000	0.000
MEL peak:	184 W	AM	0.500	0.500	0.500	0.750	0.750	0.850	1.000	1.000	1.000	1.000	0.900	0.900
% Released:	90 %	PM	0.900	0.900	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.850	0.750	0.750

# Building Input Summary Report

PROJECT										
Title:	L155AO (south glass with OH)				Address type:	Y				
Building Type:	User	Bedrooms:	0			Lot #:				
Owner:	FSEC	Conditioned Area:	1539			Block/SubDivision:				
Builder Name:	James Q. Hammer	Total Stories:	1			PlatBook:				
Permit Office:		Worst Case:	No			Street:	111 Anywhere Lane			
Jurisdiction:		Rotate Angle:	0			County:				
Family Type:	Single-family	Cross Ventilation:				City, State, Zip:	Orlando, FL,			
New/Existing:	New (From Plans)	Whole House Fan:								
Year Construct:		Terrain:	Suburban							
Comment:	HERS BESTEST south glass w/ overhang case									
CLIMATE										
Design Location	Tmy Site	Design Temp 97.5%	Design Temp 2.5%	Int Design Temp Winter	Int Design Temp Summer	Heating Degree Days	Design Moisture	Daily temp Range		
FL, OrlandoTMY1	FL_ORLANDOTMY1	41	91	70	75	293	44	Medium		
UTILITY										
Fuel	Unit	Utility Name				Monthly Fixed Cost	\$/Unit			
Electricity	kWh	EnergyGauge Default				0.00	0.12			
Natural Gas	Therm	EnergyGauge Default				0.00	0.68			
Fuel Oil	Gallon	EnergyGauge Default				0.00	1.10			
Propane	Gallon	EnergyGauge Default				0.00	1.40			
SURROUNDINGS										
Ornt	Type	-----Shade Trees-----			Exist	-----Adjacent Buildings-----				
		Height	Width	Distance		Height	Width	Distance		
N	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
NE	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
E	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
SE	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
S	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
SW	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
W	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
NW	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
BLOCKS										
Number	Name	Area	Volume							
1	Block1	1539	12312							
SPACES										
Number	Name	Area	Volume	Kitchen	Occupants	Bedrooms	Finished	Cooled	Heated	
1	Main	1539	12312	Yes	0	0		Yes	Yes	

# Building Input Summary Report

FLOORS														
#	Floor Type	Space	Exposed Perim	Perimeter R-Value	Area	Joist R-Value	Tile	Wood	Carpet					
1	Raised Floor	Main	---	---	1539 ft	10.4	0	0	1					
ROOF														
#	Type	Materials	Roof Area	Gable Area	Roof Color	Solar Absor.	SA Tested	Emitt	Emitt Tested	Deck Insul.	Pitch (deg)			
1	Gable or shed	Composition shingles	1622 ft²	256 ft²	Medium	0.6	No	0.9	No	0	18.4			
ATTIC														
#	Type	Ventilation	Vent Ratio (1 in)	Area	RBS	IRCC								
1	Full attic	Vented	150	1539 ft²	N	N								
CEILING														
#	Ceiling Type	Space	R-Value	Ins. Type	Area	Framing Fraction	Truss Type							
1	Under Attic(Vented)	Main	16.7	Blown	1539.0ft²	0.11	Wood							
WALLS														
#	Ornt	Adjacent To	Wall Type	Space	Cavity R-Value	Width Ft	In	Height Ft	In	Sheathing Area	R-Value	Framing Fraction	Solar Absor.	Below Grade
1	N	Exterior	Frame - Wood	Main	11	57.0	0	8.0	0	456.0ft²		0.25	0.6	0 %
2	S	Exterior	Frame - Wood	Main	11	57.0	0	8.0	0	456.0ft²		0.25	0.6	0 %
3	E	Exterior	Frame - Wood	Main	11	27.0	0	8.0	0	216.0ft²		0.25	0.6	0 %
4	W	Exterior	Frame - Wood	Main	11	27.0	0	8.0	0	216.0ft²		0.25	0.6	0 %
DOORS														
#	Ornt	Adjacent To	Door Type	Space	Storms	U-Value	Width Ft	In	Height Ft	In	Area			
1	N	Exterior	Insulated	Main	None	0.46	3.00	0	6.00	8	20.0ft²			
2	S	Exterior	Insulated	Main	None	0.46	3.00	0	6.00	8	20.0ft²			
WINDOWS														
#	Ornt	Wall ID	Frame	Panes	NFRC	U-Factor	SHGC	Storm	Area	-----Overhang----- Depth	Separation	Interior Shade	Screening	
1	S	2	TIM	Single (Clear)	Yes	1.09	0.70	N	270.0ft²	2.0 ft 6 in	1.0 ft 0 in	None	None	
INFILTRATION														
#	Scope	Method	SLA	CFM50	ELA	EqLA	ACH	ACH50	Space(s)					
1	Wholehouse	Proposed ACH	0.00092	3705	203.40	382.53	0.6700	18.1	All					

# Building Input Summary Report

<b>MASS</b>													
#	Mass Type	Area	Thickness	Furniture Fraction	Space								
1	No Added Mass	0 ft²	0 ft	0.00	Main								
<b>HEATING SYSTEM</b>													
#	System Type	Subtype	AHRI #	Efficiency	Capacity kBtu/hr	---Geothermal HeatPump---		Ducts	Block				
1	Electric Strip Heat	None		COP: 1.00	140.0	Entry	Power	Volt	Current	sys#1	1		
<b>COOLING SYSTEM</b>													
#	System Type	Subtype	AHRI #	Efficiency	Capacity kBtu/hr	Air Flow cfm	SHR	Duct	Block				
1	Central Unit	None		SEER:10	84.0	1260	0.75	sys#1	1				
<b>HOT WATER SYSTEM</b>													
#	System Type	Subtype	Location	EF	Cap	Use	SetPnt	Fixture Flow	Pipe Ins.	Pipe length			
	Recirculation System	Recirc Control Type	Loop length	Branch length	Pump power	DWHR	Facilities Connected	Equal Flow	DWHR Eff	Other Credits			
<b>DUCTS</b>													
Duct #	-----Supply-----			-----Return-----			Leakage Type	Air Handler	CFM 25 TOT	CFM 25 OUT	QN	RLF	HVAC # Heat Cool
1	Main	6.0	385 ft²	Main	6.0	77 ft²	Prop. Air Leakage	Main	---	---	0.00	0.60	1 1
<b>MECHANICAL VENTILATION</b>													
Type	Supply CFM	Exhaust CFM	HRV	Fan	Run Time	Heating System	Cooling System						
None	0.0	0.0	0.0	0.0 W	0 %	1 - Electric Strip Heat	1 - Central Unit						
<b>TEMPERATURES</b>													
Programable Thermostat: N						Ceiling Fans: N							
Cooling	[X] Jan	[X] Feb	[X] Mar	[X] Apr	[X] May	[X] Jun	[X] Jul	[X] Aug	[X] Sep	[X] Oct	[X] Nov	[X] Dec	
Heating	[X] Jan	[X] Feb	[X] Mar	[X] Apr	[X] May	[X] Jun	[X] Jul	[X] Aug	[X] Sep	[X] Oct	[X] Nov	[X] Dec	
Venting	[X] Jan	[X] Feb	[X] Mar	[X] Apr	[X] May	[X] Jun	[X] Jul	[X] Aug	[X] Sep	[X] Oct	[X] Nov	[X] Dec	
Thermostat Schedule: BESTEST-cooling													
Schedule Type		1	2	3	4	5	6	7	8	9	10	11	12
Cooling (WD)	AM PM	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78
Cooling (WEH)	AM PM	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78

# Building Input Summary Report

## TEMPERATURES(Continued)

Heating (WD)	AM PM	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68
Heating (WEH)	AM PM	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68

## CLOTHES DRYERS

ID	Type	Screen	Location	Quantity	Fuel Type	Make	Model	Schedule	kWhPerYr
1	Dryers	Default New	Main		Electricity			HERS2011	0

## RANGE OVENS

ID	Type	Screen	Location	Type	Fuel Type	Make	Model	Cooktop	Oven
1	Ranges	Default New	Main	Combo	Elec			Elec Flat Coil	Not Convec

## HARD WIRED LIGHTING

ID	Type	Screen	Location	Total#	Quantity#	Comp FI	All Other FI	Bulb Type	Schedule	Watts per bulb
1	Hard-Wired	By Count - Qualifying	Main	100	10				HERS2011	
2	Hard-Wired	Default New	Exterior						HERS2011	
3	Hard-Wired	Default New	Garage						HERS2011	

## MISC ELECTRICAL LOADS

ID	Type	Screen	Location	Item	Quantity	Catagory	Operating	Schedule	Off Standby
1	Misc Elec Load	Simple Default	Main		1		1	HERS2011	1

## APPLIANCES & LIGHTING SCHEDULES

Appliance Schedule:		HERS2014		Hours											
Schedule Type		1	2	3	4	5	6	7	8	9	10	11	12		
Occupancy peak:	400 Btu	AM	0.930	0.930	0.930	0.930	0.930	0.930	0.930	0.980	0.460	0.270	0.270	0.270	
% Released:	100 %	PM	0.270	0.270	0.270	0.270	0.330	0.610	1.000	1.000	0.930	0.930	0.930	0.930	
refrig peak:	0 W	AM	0.824	0.804	0.784	0.764	0.744	0.734	0.744	0.754	0.764	0.794	0.814	0.854	
% Released:	100 %	PM	0.854	0.864	0.884	0.904	0.925	0.945	0.925	0.915	0.904	0.894	0.874	0.854	
cWash peak:	0 W	AM	0.200	0.100	0.050	0.050	0.050	0.075	0.200	0.375	0.500	0.800	0.950	1.000	
% Released:	30 %	PM	0.875	0.850	0.800	0.625	0.625	0.600	0.575	0.550	0.625	0.700	0.650	0.375	
E-cDry peak:	119 W	AM	0.200	0.100	0.050	0.050	0.050	0.075	0.200	0.375	0.500	0.800	0.950	1.000	
% Released:	15 %	PM	0.875	0.850	0.800	0.625	0.625	0.600	0.575	0.550	0.625	0.700	0.650	0.375	
dWash peak:	0 W	AM	0.139	0.050	0.028	0.024	0.029	0.090	0.169	0.303	0.541	0.594	0.502	0.443	
% Released:	60 %	PM	0.376	0.396	0.334	0.323	0.344	0.448	0.791	1.000	0.800	0.597	0.383	0.281	
E-rOven peak:	122 W	AM	0.057	0.057	0.057	0.057	0.057	0.114	0.171	0.286	0.343	0.343	0.343	0.400	
% Released:	80 %	PM	0.457	0.343	0.286	0.400	0.571	1.000	0.857	0.429	0.286	0.229	0.171	0.114	
TVs peak:	151 W	AM	0.100	0.050	0.050	0.050	0.100	0.200	0.400	0.450	0.400	0.200	0.100	0.100	
% Released:	100 %	PM	0.050	0.050	0.150	0.450	0.850	1.000	0.950	0.800	0.500	0.250	0.150	0.100	

# Building Input Summary Report

## APPLIANCES & LIGHTING SCHEDULES(Continued)

cFan peak:	0 W	AM	0.600	0.600	0.600	0.600	0.600	0.600	0.600	0.250	0.250	0.250	0.250	0.250
% Released:	100 %	PM	0.250	0.250	0.250	0.250	0.250	0.250	0.550	0.600	0.600	0.600	0.600	0.600
lgts-in peak:	545 W	AM	0.160	0.150	0.160	0.180	0.230	0.450	0.420	0.260	0.190	0.160	0.120	0.110
% Released:	100 %	PM	0.160	0.170	0.250	0.270	0.340	0.550	0.600	0.880	1.000	0.880	0.510	0.280
lgts-out peak:	47 W	AM	1.000	1.000	1.000	1.000	1.000	0.750	0.750	0.000	0.000	0.000	0.000	0.000
% Released:	0 %	PM	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.750	0.750	0.750	1.000
lgts-gar peak:	0 W	AM	0.000	0.000	0.000	0.000	0.000	0.500	0.750	1.000	0.750	0.500	0.000	0.000
% Released:	0 %	PM	0.000	0.000	0.500	0.500	0.750	1.000	0.750	0.500	0.000	0.000	0.000	0.000
MEL peak:	184 W	AM	0.500	0.500	0.500	0.750	0.750	0.850	1.000	1.000	1.000	1.000	0.900	0.900
% Released:	90 %	PM	0.900	0.900	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.850	0.750	0.750

# Building Input Summary Report

PROJECT										
Title:	L160AO (east-west windows)				Address type:	Y				
Building Type:	User	Bedrooms:	0			Lot #:				
Owner:	FSEC	Conditioned Area:	1539			Block/SubDivision:				
Builder Name:	James Q. Hammer	Total Stories:	1			PlatBook:				
Permit Office:		Worst Case:	No			Street:	111 Anywhere Lane			
Jurisdiction:		Rotate Angle:	0			County:				
Family Type:	Single-family	Cross Ventilation:				City, State, Zip:	Orlando, FL,			
New/Existing:	New (From Plans)	Whole House Fan:								
Year Construct:		Terrain:	Suburban							
Comment:	HERS BESTEST east-west windows case									
CLIMATE										
Design Location	Tmy Site	Design Temp	97.5%	2.5%	Int Design Temp	Winter	Summer	Heating Degree Days	Design Moisture	Daily temp Range
FL, OrlandoTMY1	FL_ORLANDOTMY1	41	91		70	75	293	44	Medium	
UTILITY										
Fuel	Unit	Utility Name					Monthly Fixed Cost	\$/Unit		
Electricity	kWh	EnergyGauge Default					0.00	0.12		
Natural Gas	Therm	EnergyGauge Default					0.00	0.68		
Fuel Oil	Gallon	EnergyGauge Default					0.00	1.10		
Propane	Gallon	EnergyGauge Default					0.00	1.40		
SURROUNDINGS										
Ornt	Type	-----Shade Trees-----			Exist	-----Adjacent Buildings-----				
		Height	Width	Distance		Height	Width	Distance		
N	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
NE	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
E	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
SE	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
S	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
SW	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
W	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
NW	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
BLOCKS										
Number	Name	Area	Volume							
1	Block1	1539	12312							
SPACES										
Number	Name	Area	Volume	Kitchen	Occupants	Bedrooms	Finished	Cooled	Heated	
1	Main	1539	12312	Yes	0	0	Yes	Yes	Yes	

# Building Input Summary Report

FLOORS														
#	Floor Type		Space	Exposed Perim	Perimeter R-Value	Area	Joist R-Value	Tile	Wood	Carpet				
1	Raised Floor		Main	---	---	1539 ft	10.4	0	0	1				
ROOF														
#	Type	Materials		Roof Area	Gable Area	Roof Color	Solar Absor.	SA Tested	Emitt	Emitt Tested	Deck Insul.	Pitch (deg)		
1	Gable or shed	Composition shingles		1622 ft²	256 ft²	Medium	0.6	No	0.9	No	0	18.4		
ATTIC														
#	Type	Ventilation		Vent Ratio (1 in)	Area	RBS	IRCC							
1	Full attic	Vented		150	1539 ft²	N	N							
CEILING														
#	Ceiling Type		Space	R-Value	Ins. Type	Area	Framing Fraction	Truss Type						
1	Under Attic(Vented)		Main	16.7	Blown	1539.0ft²	0.11	Wood						
WALLS														
#	Adjacent Ornt	To	Wall Type	Space	Cavity R-Value	Width Ft	In	Height Ft	In	Sheathing Area	R-Value	Framing Fraction	Solar Absor.	Below Grade
1	N	Exterior	Frame - Wood	Main	11	57.0	0	8.0	0	456.0ft²		0.25	0.6	0 %
2	S	Exterior	Frame - Wood	Main	11	57.0	0	8.0	0	456.0ft²		0.25	0.6	0 %
3	E	Exterior	Frame - Wood	Main	11	28.0	0	8.0	0	224.0ft²		0.25	0.6	0 %
4	W	Exterior	Frame - Wood	Main	11	28.0	0	8.0	0	224.0ft²		0.25	0.6	0 %
DOORS														
#	Ornt	Adjacent To	Door Type	Space	Storms	U-Value	Width Ft	In	Height Ft	In	Area			
1	N	Exterior	Insulated	Main	None	0.46	3.00	0	6.00	8	20.0ft²			
2	S	Exterior	Insulated	Main	None	0.46	3.00	0	6.00	8	20.0ft²			
WINDOWS														
#	Wall Ornt	ID	Frame	Panes	NFRC	U-Factor	SHGC	Storm	Area	-----Overhang----- Depth Separation		Interior Shade	Screening	
1	E	3	TIM	Single (Clear)	Yes	1.09	0.70	N	135.0ft²	0.0 ft 0 in	0.0 ft 0 in	None	None	
2	W	4	TIM	Single (Clear)	Yes	1.09	0.70	N	135.0ft²	0.0 ft 0 in	0.0 ft 0 in	None	None	
INFILTRATION														
#	Scope	Method	SLA	CFM50	ELA	EqLA	ACH	ACH50	Space(s)					
1	Wholehouse	Proposed ACH	0.00092	3705	203.40	382.53	0.6700	18.1	All					



# Building Input Summary Report

<b>MASS</b>													
#	Mass Type	Area	Thickness	Furniture Fraction	Space								
1	No Added Mass	0 ft²	0 ft	0.00	Main								
<b>HEATING SYSTEM</b>													
#	System Type	Subtype	AHRI #	Efficiency	Capacity kBtu/hr	---Geothermal HeatPump---		Ducts	Block				
1	Electric Strip Heat	None		COP: 1.00	140.0	Entry	Power	Volt	Current	sys#1	1		
<b>COOLING SYSTEM</b>													
#	System Type	Subtype	AHRI #	Efficiency	Capacity kBtu/hr	Air Flow cfm	SHR	Duct	Block				
1	Central Unit	None		SEER:10	90.0	1365	0.75	sys#1	1				
<b>HOT WATER SYSTEM</b>													
#	System Type	Subtype	Location	EF	Cap	Use	SetPnt	Fixture Flow	Pipe Ins.	Pipe length			
	Recirculation System	Recirc Control Type	Loop length	Branch length	Pump power	DWHR	Facilities Connected	Equal Flow	DWHR Eff	Other Credits			
<b>DUCTS</b>													
Duct #	-----Supply-----			-----Return-----			Leakage Type	Air Handler	CFM 25 TOT	CFM 25 OUT	QN	RLF	HVAC # Heat Cool
1	Main	6.0	385 ft²	Main	6.0	77 ft²	Prop. Air Leakage	Main	---	---	0.00	0.60	1 1
<b>MECHANICAL VENTILATION</b>													
Type	Supply CFM	Exhaust CFM	HRV	Fan	Run Time	Heating System	Cooling System						
None	0.0	0.0	0.0	0.0 W	0 %	1 - Electric Strip Heat	1 - Central Unit						
<b>TEMPERATURES</b>													
Programable Thermostat: N						Ceiling Fans: N							
Cooling	[X] Jan	[X] Feb	[X] Mar	[X] Apr	[X] May	[X] Jun	[X] Jul	[X] Aug	[X] Sep	[X] Oct	[X] Nov	[X] Dec	
Heating	[X] Jan	[X] Feb	[X] Mar	[X] Apr	[X] May	[X] Jun	[X] Jul	[X] Aug	[X] Sep	[X] Oct	[X] Nov	[X] Dec	
Venting	[X] Jan	[X] Feb	[X] Mar	[X] Apr	[X] May	[X] Jun	[X] Jul	[X] Aug	[X] Sep	[X] Oct	[X] Nov	[X] Dec	
Thermostat Schedule: BESTEST-cooling													
Schedule Type		1	2	3	4	5	6	7	8	9	10	11	12
Cooling (WD)	AM PM	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78
Cooling (WEH)	AM PM	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78

# Building Input Summary Report

## TEMPERATURES(Continued)

Heating (WD)	AM	68	68	68	68	68	68	68	68	68	68	68	68	68
	PM	68	68	68	68	68	68	68	68	68	68	68	68	68
Heating (WEH)	AM	68	68	68	68	68	68	68	68	68	68	68	68	68
	PM	68	68	68	68	68	68	68	68	68	68	68	68	68

## CLOTHES DRYERS

ID	Type	Screen	Location	Quantity	Fuel Type	Make	Model	Schedule	kWhPerYr
1	Dryers	Default New	Main		Electricity			HERS2011	0

## RANGE OVENS

ID	Type	Screen	Location	Type	Fuel Type	Make	Model	Cooktop	Oven
1	Ranges	Default New	Main	Combo	Elec			Elec Flat Coil	Not Convec

## HARD WIRED LIGHTING

ID	Type	Screen	Location	Total#	Quantity#	Comp FI	All Other FI	Bulb Type	Schedule	Watts per bulb
1	Hard-Wired	By Count - Qualifying	Main	100	10				HERS2011	
2	Hard-Wired	Default New	Exterior						HERS2011	
3	Hard-Wired	Default New	Garage						HERS2011	

## MISC ELECTRICAL LOADS

ID	Type	Screen	Location	Item	Quantity	Catagory	Operating	Schedule	Off Standby
1	Misc Elec Load	Simple Default	Main		1		1	HERS2011	1

## APPLIANCES & LIGHTING SCHEDULES

Appliance Schedule:		HERS2014		Hours											
Schedule Type		1	2	3	4	5	6	7	8	9	10	11	12		
Occupancy peak:	400 Btu	AM	0.930	0.930	0.930	0.930	0.930	0.930	0.930	0.980	0.460	0.270	0.270	0.270	
% Released:	100 %	PM	0.270	0.270	0.270	0.270	0.330	0.610	1.000	1.000	0.930	0.930	0.930	0.930	
refrig peak:	0 W	AM	0.824	0.804	0.784	0.764	0.744	0.734	0.744	0.754	0.764	0.794	0.814	0.854	
% Released:	100 %	PM	0.854	0.864	0.884	0.904	0.925	0.945	0.925	0.915	0.904	0.894	0.874	0.854	
cWash peak:	0 W	AM	0.200	0.100	0.050	0.050	0.050	0.075	0.200	0.375	0.500	0.800	0.950	1.000	
% Released:	30 %	PM	0.875	0.850	0.800	0.625	0.625	0.600	0.575	0.550	0.625	0.700	0.650	0.375	
E-cDry peak:	119 W	AM	0.200	0.100	0.050	0.050	0.050	0.075	0.200	0.375	0.500	0.800	0.950	1.000	
% Released:	15 %	PM	0.875	0.850	0.800	0.625	0.625	0.600	0.575	0.550	0.625	0.700	0.650	0.375	
dWash peak:	0 W	AM	0.139	0.050	0.028	0.024	0.029	0.090	0.169	0.303	0.541	0.594	0.502	0.443	
% Released:	60 %	PM	0.376	0.396	0.334	0.323	0.344	0.448	0.791	1.000	0.800	0.597	0.383	0.281	
E-rOven peak:	122 W	AM	0.057	0.057	0.057	0.057	0.057	0.114	0.171	0.286	0.343	0.343	0.343	0.400	
% Released:	80 %	PM	0.457	0.343	0.286	0.400	0.571	1.000	0.857	0.429	0.286	0.229	0.171	0.114	
TVs peak:	151 W	AM	0.100	0.050	0.050	0.050	0.100	0.200	0.400	0.450	0.400	0.200	0.100	0.100	
% Released:	100 %	PM	0.050	0.050	0.150	0.450	0.850	1.000	0.950	0.800	0.500	0.250	0.150	0.100	

# Building Input Summary Report

## APPLIANCES & LIGHTING SCHEDULES(Continued)

cFan peak:	0 W	AM	0.600	0.600	0.600	0.600	0.600	0.600	0.600	0.250	0.250	0.250	0.250	0.250
% Released:	100 %	PM	0.250	0.250	0.250	0.250	0.250	0.250	0.550	0.600	0.600	0.600	0.600	0.600
lgts-in peak:	545 W	AM	0.160	0.150	0.160	0.180	0.230	0.450	0.420	0.260	0.190	0.160	0.120	0.110
% Released:	100 %	PM	0.160	0.170	0.250	0.270	0.340	0.550	0.600	0.880	1.000	0.880	0.510	0.280
lgts-out peak:	47 W	AM	1.000	1.000	1.000	1.000	1.000	0.750	0.750	0.000	0.000	0.000	0.000	0.000
% Released:	0 %	PM	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.750	0.750	0.750	1.000
lgts-gar peak:	0 W	AM	0.000	0.000	0.000	0.000	0.000	0.500	0.750	1.000	0.750	0.500	0.000	0.000
% Released:	0 %	PM	0.000	0.000	0.500	0.500	0.750	1.000	0.750	0.500	0.000	0.000	0.000	0.000
MEL peak:	184 W	AM	0.500	0.500	0.500	0.750	0.750	0.850	1.000	1.000	1.000	1.000	0.900	0.900
% Released:	90 %	PM	0.900	0.900	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.850	0.750	0.750

# Building Input Summary Report

PROJECT										
Title:	L170AO (no internal gains)				Address type:	Y				
Building Type:	User	Bedrooms:	0			Lot #:				
Owner:	FSEC	Conditioned Area:	1539			Block/SubDivision:				
Builder Name:	James Q. Hammer	Total Stories:	1			PlatBook:	111 Anywhere Lane			
Permit Office:		Worst Case:	No			County:				
Jurisdiction:		Rotate Angle:	0			City, State, Zip:	Orlando, FL,			
Family Type:	Single-family	Cross Ventilation:								
New/Existing:	New (From Plans)	Whole House Fan:								
Year Construct:		Terrain:	Suburban							
Comment:	HERS BESTEST no internal gains case				Shielding:	Suburban				
CLIMATE										
Design Location	Tmy Site	Design Temp 97.5%	Design Temp 2.5%	Int Design Temp Winter	Int Design Temp Summer	Heating Degree Days	Design Moisture	Daily temp Range		
FL, OrlandoTMY1	FL_ORLANDOTMY1	41	91	70	75	293	44	Medium		
UTILITY										
Fuel	Unit	Utility Name				Monthly Fixed Cost	\$/Unit			
Electricity	kWh	EnergyGauge Default				0.00	0.12			
Natural Gas	Therm	EnergyGauge Default				0.00	0.68			
Fuel Oil	Gallon	EnergyGauge Default				0.00	1.10			
Propane	Gallon	EnergyGauge Default				0.00	1.40			
SURROUNDINGS										
Ornt	Type	-----Shade Trees-----			Exist	-----Adjacent Buildings-----				
		Height	Width	Distance		Height	Width	Distance		
N	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
NE	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
E	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
SE	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
S	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
SW	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
W	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
NW	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
BLOCKS										
Number	Name	Area	Volume							
1	Block1	1539	12312							
SPACES										
Number	Name	Area	Volume	Kitchen	Occupants	Bedrooms	Finished	Cooled	Heated	
1	Main	1539	12312	Yes	0	0		Yes	Yes	

# Building Input Summary Report

FLOORS														
#	Floor Type	Space	Exposed Perim	Perimeter R-Value	Area	Joist R-Value	Tile	Wood	Carpet					
1	Raised Floor	Main	---	---	1539 ft	10.4	0	0	1					
ROOF														
#	Type	Materials	Roof Area	Gable Area	Roof Color	Solar Absor.	SA Tested	Emitt	Emitt Tested	Deck Insul.	Pitch (deg)			
1	Gable or shed	Composition shingles	1622 ft²	256 ft²	Medium	0.6	No	0.9	No	0	18.4			
ATTIC														
#	Type	Ventilation	Vent Ratio (1 in)	Area	RBS	IRCC								
1	Full attic	Vented	150	1539 ft²	N	N								
CEILING														
#	Ceiling Type	Space	R-Value	Ins. Type	Area	Framing Fraction	Truss Type							
1	Under Attic(Vented)	Main	16.7	Blown	1539.0ft²	0.11	Wood							
WALLS														
#	Ornt	Adjacent To	Wall Type	Space	Cavity R-Value	Width Ft	In	Height Ft	In	Sheathing Area	R-Value	Framing Fraction	Solar Absor.	Below Grade
1	N	Exterior	Frame - Wood	Main	11	57.0	0	8.0	0	456.0ft²		0.25	0.6	0 %
2	S	Exterior	Frame - Wood	Main	11	57.0	0	8.0	0	456.0ft²		0.25	0.6	0 %
3	E	Exterior	Frame - Wood	Main	11	27.0	0	8.0	0	216.0ft²		0.25	0.6	0 %
4	W	Exterior	Frame - Wood	Main	11	27.0	0	8.0	0	216.0ft²		0.25	0.6	0 %
DOORS														
#	Ornt	Adjacent To	Door Type	Space	Storms	U-Value	Width Ft	In	Height Ft	In	Area			
1	N	Exterior	Insulated	Main	None	0.46	3.00	0	6.00	8	20.0ft²			
2	S	Exterior	Insulated	Main	None	0.46	3.00	0	6.00	8	20.0ft²			
WINDOWS														
#	Ornt	Wall ID	Frame	Panes	NFRC	U-Factor	SHGC	Storm	Area	-----Overhang----- Depth	Separation	Interior Shade	Screening	
1	N	1	TIM	Single (Clear)	Yes	1.09	0.70	N	90.0ft²	0.0 ft 0 in	0.0 ft 0 in	None	None	
2	S	2	TIM	Single (Clear)	Yes	1.09	0.70	N	90.0ft²	0.0 ft 0 in	0.0 ft 0 in	None	None	
3	E	3	TIM	Single (Clear)	Yes	1.09	0.70	N	45.0ft²	0.0 ft 0 in	0.0 ft 0 in	None	None	
4	W	4	TIM	Single (Clear)	Yes	1.09	0.70	N	45.0ft²	0.0 ft 0 in	0.0 ft 0 in	None	None	
INFILTRATION														
#	Scope	Method	SLA	CFM50	ELA	EqLA	ACH	ACH50	Space(s)					
1	Wholehouse	Proposed ACH	0.00092	3705	203.40	382.53	0.6700	18.1	All					

# Building Input Summary Report

<b>MASS</b>													
#	Mass Type	Area	Thickness	Furniture Fraction	Space								
1	No Added Mass	0 ft²	0 ft	0.00	Main								
<b>HEATING SYSTEM</b>													
#	System Type	Subtype	AHRI #	Efficiency	Capacity kBtu/hr	---Geothermal HeatPump---		Ducts	Block				
1	Electric Strip Heat	None		COP: 1.00	140.0	Entry	Power	Volt	Current	sys#1	1		
<b>COOLING SYSTEM</b>													
#	System Type	Subtype	AHRI #	Efficiency	Capacity kBtu/hr	Air Flow cfm	SHR	Duct	Block				
1	Central Unit	None		SEER:10	76.0	1149	0.75	sys#1	1				
<b>HOT WATER SYSTEM</b>													
#	System Type	Subtype	Location	EF	Cap	Use	SetPnt	Fixture Flow	Pipe Ins.	Pipe length			
	Recirculation System	Recirc Control Type	Loop length	Branch length	Pump power	DWHR	Facilities Connected	Equal Flow	DWHR Eff	Other Credits			
<b>DUCTS</b>													
Duct #	-----Supply-----			-----Return-----			Leakage Type	Air Handler	CFM 25 TOT	CFM 25 OUT	QN	RLF	HVAC # Heat Cool
1	Main	6.0	385 ft²	Main	6.0	77 ft²	Prop. Air Leakage	Main	---	---	0.00	0.60	1 1
<b>MECHANICAL VENTILATION</b>													
Type	Supply CFM	Exhaust CFM	HRV	Fan	Run Time	Heating System	Cooling System						
None	0.0	0.0	0.0	0.0 W	0 %	1 - Electric Strip Heat	1 - Central Unit						
<b>TEMPERATURES</b>													
Programable Thermostat: N						Ceiling Fans: N							
Cooling	[X] Jan	[X] Feb	[X] Mar	[X] Apr	[X] May	[X] Jun	[X] Jul	[X] Aug	[X] Sep	[X] Oct	[X] Nov	[X] Dec	
Heating	[X] Jan	[X] Feb	[X] Mar	[X] Apr	[X] May	[X] Jun	[X] Jul	[X] Aug	[X] Sep	[X] Oct	[X] Nov	[X] Dec	
Venting	[X] Jan	[X] Feb	[X] Mar	[X] Apr	[X] May	[X] Jun	[X] Jul	[X] Aug	[X] Sep	[X] Oct	[X] Nov	[X] Dec	
Thermostat Schedule: BESTEST-cooling													
Schedule Type		Hours											
		1	2	3	4	5	6	7	8	9	10	11	12
Cooling (WD)	AM	78	78	78	78	78	78	78	78	78	78	78	78
	PM	78	78	78	78	78	78	78	78	78	78	78	78
Cooling (WEH)	AM	78	78	78	78	78	78	78	78	78	78	78	78
	PM	78	78	78	78	78	78	78	78	78	78	78	78

# Building Input Summary Report

## TEMPERATURES(Continued)

Heating (WD)	AM	68	68	68	68	68	68	68	68	68	68	68	68	68
	PM	68	68	68	68	68	68	68	68	68	68	68	68	68
Heating (WEH)	AM	68	68	68	68	68	68	68	68	68	68	68	68	68
	PM	68	68	68	68	68	68	68	68	68	68	68	68	68

## CLOTHES DRYERS

ID	Type	Screen	Location	Quantity	Fuel Type	Make	Model	Schedule	kWhPerYr
1	Dryers	Default New	Main		Electricity			HERS2011	0

## RANGE OVENS

ID	Type	Screen	Location	Type	Fuel Type	Make	Model	Cooktop	Oven
1	Ranges	Default New	Main	Combo	Elec			Elec Flat Coil	Not Convec

## HARD WIRED LIGHTING

ID	Type	Screen	Location	Total#	Quantity#	Comp FI	All Other FI	Bulb Type	Schedule	Watts per bulb
1	Hard-Wired	By Count - Qualifying	Main	100	10				HERS2011	
2	Hard-Wired	Default New	Exterior						HERS2011	
3	Hard-Wired	Default New	Garage						HERS2011	

## MISC ELECTRICAL LOADS

ID	Type	Screen	Location	Item	Quantity	Catagory	Operating	Schedule	Off Standby
1	Misc Elec Load	Simple Default	Main		1		1	HERS2011	1

## APPLIANCES & LIGHTING SCHEDULES

Appliance Schedule:		HERS2014		Hours											
Schedule Type		1	2	3	4	5	6	7	8	9	10	11	12		
Occupancy peak:	400 Btu	AM	0.930	0.930	0.930	0.930	0.930	0.930	0.930	0.980	0.460	0.270	0.270	0.270	
% Released:	100 %	PM	0.270	0.270	0.270	0.270	0.330	0.610	1.000	1.000	0.930	0.930	0.930	0.930	
refrig peak:	0 W	AM	0.824	0.804	0.784	0.764	0.744	0.734	0.744	0.754	0.764	0.794	0.814	0.854	
% Released:	100 %	PM	0.854	0.864	0.884	0.904	0.925	0.945	0.925	0.915	0.904	0.894	0.874	0.854	
cWash peak:	0 W	AM	0.200	0.100	0.050	0.050	0.050	0.075	0.200	0.375	0.500	0.800	0.950	1.000	
% Released:	30 %	PM	0.875	0.850	0.800	0.625	0.625	0.600	0.575	0.550	0.625	0.700	0.650	0.375	
E-cDry peak:	119 W	AM	0.200	0.100	0.050	0.050	0.050	0.075	0.200	0.375	0.500	0.800	0.950	1.000	
% Released:	15 %	PM	0.875	0.850	0.800	0.625	0.625	0.600	0.575	0.550	0.625	0.700	0.650	0.375	
dWash peak:	0 W	AM	0.139	0.050	0.028	0.024	0.029	0.090	0.169	0.303	0.541	0.594	0.502	0.443	
% Released:	60 %	PM	0.376	0.396	0.334	0.323	0.344	0.448	0.791	1.000	0.800	0.597	0.383	0.281	
E-rOven peak:	122 W	AM	0.057	0.057	0.057	0.057	0.057	0.114	0.171	0.286	0.343	0.343	0.343	0.400	
% Released:	80 %	PM	0.457	0.343	0.286	0.400	0.571	1.000	0.857	0.429	0.286	0.229	0.171	0.114	
TVs peak:	151 W	AM	0.100	0.050	0.050	0.050	0.100	0.200	0.400	0.450	0.400	0.200	0.100	0.100	
% Released:	100 %	PM	0.050	0.050	0.150	0.450	0.850	1.000	0.950	0.800	0.500	0.250	0.150	0.100	

# Building Input Summary Report

## APPLIANCES & LIGHTING SCHEDULES(Continued)

cFan peak:	0 W	AM	0.600	0.600	0.600	0.600	0.600	0.600	0.600	0.250	0.250	0.250	0.250	0.250
% Released:	100 %	PM	0.250	0.250	0.250	0.250	0.250	0.250	0.550	0.600	0.600	0.600	0.600	0.600
lgts-in peak:	545 W	AM	0.160	0.150	0.160	0.180	0.230	0.450	0.420	0.260	0.190	0.160	0.120	0.110
% Released:	100 %	PM	0.160	0.170	0.250	0.270	0.340	0.550	0.600	0.880	1.000	0.880	0.510	0.280
lgts-out peak:	47 W	AM	1.000	1.000	1.000	1.000	1.000	0.750	0.750	0.000	0.000	0.000	0.000	0.000
% Released:	0 %	PM	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.750	0.750	0.750	1.000
lgts-gar peak:	0 W	AM	0.000	0.000	0.000	0.000	0.000	0.500	0.750	1.000	0.750	0.500	0.000	0.000
% Released:	0 %	PM	0.000	0.000	0.500	0.500	0.750	1.000	0.750	0.500	0.000	0.000	0.000	0.000
MEL peak:	184 W	AM	0.500	0.500	0.500	0.750	0.750	0.850	1.000	1.000	1.000	1.000	0.900	0.900
% Released:	90 %	PM	0.900	0.900	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.850	0.750	0.750



# Building Input Summary Report

PROJECT										
Title:	L200AO (inefficient)			Address type:			Y			
Building Type:	User	Bedrooms:	0		Lot #:					
Owner:	FSEC	Conditioned Area:	1539		Block/SubDivision:					
Builder Name:	James Q. Hammer	Total Stories:	1		PlatBook:					
Permit Office:		Worst Case:	No		Street:		111 Anywhere Lane			
Jurisdiction:		Rotate Angle:	0		County:					
Family Type:	Single-family	Cross Ventilation:			City, State, Zip:		Orlando, FL,			
New/Existing:	New (From Plans)	Whole House Fan:			Terrain:		Suburban			
Year Construct:		Shielding:	Suburban		Shielding:		Suburban			
Comment:	HERS BESTEST inefficient case									
CLIMATE										
Design Location	Tmy Site	Design Temp	97.5%	2.5%	Int Design Temp	Winter	Summer	Heating Degree Days	Design Moisture	Daily temp Range
FL, OrlandoTMY1	FL_ORLANDOTMY1	41	91		70	75	293	44	Medium	
UTILITY										
Fuel	Unit	Utility Name					Monthly Fixed Cost	\$/Unit		
Electricity	kWh	EnergyGauge Default					0.00	0.12		
Natural Gas	Therm	EnergyGauge Default					0.00	0.68		
Fuel Oil	Gallon	EnergyGauge Default					0.00	1.10		
Propane	Gallon	EnergyGauge Default					0.00	1.40		
SURROUNDINGS										
Ornt	Type	-----Shade Trees-----			Exist	-----Adjacent Buildings-----				
		Height	Width	Distance		Height	Width	Distance	Distance	
N	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	0 ft	
NE	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	0 ft	
E	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	0 ft	
SE	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	0 ft	
S	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	0 ft	
SW	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	0 ft	
W	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	0 ft	
NW	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	0 ft	
BLOCKS										
Number	Name	Area	Volume							
1	Block1	1539	12312							
SPACES										
Number	Name	Area	Volume	Kitchen	Occupants	Bedrooms	Finished	Cooled	Heated	
1	Main	1539	12312	Yes	0	0		Yes	Yes	

# Building Input Summary Report

FLOORS													
#	Floor Type	Space	Exposed Perim	Perimeter R-Value	Area	Joist R-Value	Tile	Wood	Carpet				
1	Raised Floor	Main	---	---	1539 ft	0	0	0	1				
ROOF													
#	Type	Materials	Roof Area	Gable Area	Roof Color	Solar Absor.	SA Tested	Emitt	Emitt Tested	Deck Insul.	Pitch (deg)		
1	Gable or shed	Composition shingles	1622 ft²	256 ft²	Medium	0.6	No	0.9	No	0	18.4		
ATTIC													
#	Type	Ventilation	Vent Ratio (1 in)	Area	RBS	IRCC							
1	Full attic	Vented	150	1539 ft²	N	N							
CEILING													
#	Ceiling Type	Space	R-Value	Ins. Type	Area	Framing Fraction	Truss Type						
1	Under Attic(Vented)	Main	11.0	Blown	1539.0ft²	0.10	Wood						
WALLS													
#	Ornt	Adjacent To	Wall Type	Space	Cavity R-Value	Width Ft In	Height Ft In	Sheathing Area	R-Value	Framing Fraction	Solar Absor.	Below Grade	
1	N	Exterior	Frame - Wood	Main	1.01	57.0 0	8.0 0	456.0ft²		0.25	0.6	0 %	
2	S	Exterior	Frame - Wood	Main	1.01	57.0 0	8.0 0	456.0ft²		0.25	0.6	0 %	
3	E	Exterior	Frame - Wood	Main	1.01	27.0 0	8.0 0	216.0ft²		0.25	0.6	0 %	
4	W	Exterior	Frame - Wood	Main	1.01	27.0 0	8.0 0	216.0ft²		0.25	0.6	0 %	
DOORS													
#	Ornt	Adjacent To	Door Type	Space	Storms	U-Value	Width Ft In	Height Ft In	Area				
1	N	Exterior	Insulated	Main	None	0.46	3.00 0	6.00 8	20.0ft²				
2	S	Exterior	Insulated	Main	None	0.46	3.00 0	6.00 8	20.0ft²				
WINDOWS													
#	Ornt	Wall ID	Frame	Panes	NFRC	U-Factor	SHGC	Storm	Area	-----Overhang----- Depth Separation		Interior Shade	Screening
1	N	1	TIM	Single (Clear)	Yes	1.09	0.70	N	90.0ft²	0.0 ft 0 in	0.0 ft 0 in	None	None
2	S	2	TIM	Single (Clear)	Yes	1.09	0.70	N	90.0ft²	0.0 ft 0 in	0.0 ft 0 in	None	None
3	E	3	TIM	Single (Clear)	Yes	1.09	0.70	N	45.0ft²	0.0 ft 0 in	0.0 ft 0 in	None	None
4	W	4	TIM	Single (Clear)	Yes	1.09	0.70	N	45.0ft²	0.0 ft 0 in	0.0 ft 0 in	None	None
INFILTRATION													
#	Scope	Method	SLA	CFM50	ELA	EqLA	ACH	ACH50	Space(s)				
1	Wholehouse	Proposed ACH	0.00205	8295	455.38	856.40	1.5000	40.4	All				

# Building Input Summary Report

<b>MASS</b>														
#	Mass Type	Area	Thickness	Furniture Fraction	Space									
1	No Added Mass	0 ft²	0 ft	0.00	Main									
<b>HEATING SYSTEM</b>														
#	System Type	Subtype	AHRI #	Efficiency	Capacity kBtu/hr	---Geothermal HeatPump---		Ducts	Block					
1	Electric Strip Heat	None		COP: 1.00	61.0	Entry	Power	Volt	Current	sys#1	1			
<b>COOLING SYSTEM</b>														
#	System Type	Subtype	AHRI #	Efficiency	Capacity kBtu/hr	Air Flow cfm	SHR	Duct	Block					
1	Central Unit	None		SEER:10	61.0	1830	0.75	sys#1	1					
<b>HOT WATER SYSTEM</b>														
#	System Type	Subtype	Location	EF	Cap	Use	SetPnt	Fixture Flow	Pipe Ins.	Pipe length				
	Recirculation System	Recirc Control Type	Loop length	Branch length	Pump power	DWHR	Facilities Connected	Equal Flow	DWHR Eff	Other Credits				
<b>DUCTS</b>														
Duct #	-----Supply-----		-----Return-----			Leakage Type	Air Handler	CFM 25 TOT	CFM 25 OUT	QN	RLF	HVAC # Heat Cool		
1	Main	6.0 385 ft²	Main	6.0	77 ft²	Prop. Air Leakage	Main	---	---	0.00	0.60	1	1	
<b>MECHANICAL VENTILATION</b>														
Type	Supply CFM	Exhaust CFM	HRV	Fan	Run Time	Heating System			Cooling System					
None	0.0	0.0	0.0	0.0 W	0 %	1 - Electric Strip Heat			1 - Central Unit					
<b>TEMPERATURES</b>														
Programable Thermostat: N						Ceiling Fans: N								
Cooling	[X] Jan	[X] Feb	[X] Mar	[X] Apr	[X] May	[X] Jun	[X] Jul	[X] Aug	[X] Sep	[X] Oct	[X] Nov	[X] Dec		
Heating	[X] Jan	[X] Feb	[X] Mar	[X] Apr	[X] May	[X] Jun	[X] Jul	[X] Aug	[X] Sep	[X] Oct	[X] Nov	[X] Dec		
Venting	[X] Jan	[X] Feb	[X] Mar	[X] Apr	[X] May	[X] Jun	[X] Jul	[X] Aug	[X] Sep	[X] Oct	[X] Nov	[X] Dec		
Thermostat Schedule: BESTEST-cooling														
Schedule Type		Hours												
		1	2	3	4	5	6	7	8	9	10	11	12	
Cooling (WD)	AM PM	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78
Cooling (WEH)	AM PM	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78

# Building Input Summary Report

## TEMPERATURES(Continued)

Heating (WD)	AM	68	68	68	68	68	68	68	68	68	68	68	68	68
	PM	68	68	68	68	68	68	68	68	68	68	68	68	68
Heating (WEH)	AM	68	68	68	68	68	68	68	68	68	68	68	68	68
	PM	68	68	68	68	68	68	68	68	68	68	68	68	68

## CLOTHES DRYERS

ID	Type	Screen	Location	Quantity	Fuel Type	Make	Model	Schedule	kWhPerYr
1	Dryers	Default New	Main		Electricity			HERS2011	0

## RANGE OVENS

ID	Type	Screen	Location	Type	Fuel Type	Make	Model	Cooktop	Oven
1	Ranges	Default New	Main	Combo	Elec			Elec Flat Coil	Not Convec

## HARD WIRED LIGHTING

ID	Type	Screen	Location	Total#	Quantity#	Comp FI	All Other FI	Bulb Type	Schedule	Watts per bulb
1	Hard-Wired	By Count - Qualifying	Main	100	10				HERS2011	
2	Hard-Wired	Default New	Exterior						HERS2011	
3	Hard-Wired	Default New	Garage						HERS2011	

## MISC ELECTRICAL LOADS

ID	Type	Screen	Location	Item	Quantity	Catagory	Operating	Schedule	Off Standby
1	Misc Elec Load	Simple Default	Main		1		1	HERS2011	1

## APPLIANCES & LIGHTING SCHEDULES

Appliance Schedule:		HERS2014		Hours											
Schedule Type		1	2	3	4	5	6	7	8	9	10	11	12		
Occupancy peak:	400 Btu	AM	0.930	0.930	0.930	0.930	0.930	0.930	0.930	0.980	0.460	0.270	0.270	0.270	
% Released:	100 %	PM	0.270	0.270	0.270	0.270	0.330	0.610	1.000	1.000	0.930	0.930	0.930	0.930	
refrig peak:	0 W	AM	0.824	0.804	0.784	0.764	0.744	0.734	0.744	0.754	0.764	0.794	0.814	0.854	
% Released:	100 %	PM	0.854	0.864	0.884	0.904	0.925	0.945	0.925	0.915	0.904	0.894	0.874	0.854	
cWash peak:	0 W	AM	0.200	0.100	0.050	0.050	0.050	0.075	0.200	0.375	0.500	0.800	0.950	1.000	
% Released:	30 %	PM	0.875	0.850	0.800	0.625	0.625	0.600	0.575	0.550	0.625	0.700	0.650	0.375	
E-cDry peak:	119 W	AM	0.200	0.100	0.050	0.050	0.050	0.075	0.200	0.375	0.500	0.800	0.950	1.000	
% Released:	15 %	PM	0.875	0.850	0.800	0.625	0.625	0.600	0.575	0.550	0.625	0.700	0.650	0.375	
dWash peak:	0 W	AM	0.139	0.050	0.028	0.024	0.029	0.090	0.169	0.303	0.541	0.594	0.502	0.443	
% Released:	60 %	PM	0.376	0.396	0.334	0.323	0.344	0.448	0.791	1.000	0.800	0.597	0.383	0.281	
E-rOven peak:	122 W	AM	0.057	0.057	0.057	0.057	0.057	0.114	0.171	0.286	0.343	0.343	0.343	0.400	
% Released:	80 %	PM	0.457	0.343	0.286	0.400	0.571	1.000	0.857	0.429	0.286	0.229	0.171	0.114	
TVs peak:	151 W	AM	0.100	0.050	0.050	0.050	0.100	0.200	0.400	0.450	0.400	0.200	0.100	0.100	
% Released:	100 %	PM	0.050	0.050	0.150	0.450	0.850	1.000	0.950	0.800	0.500	0.250	0.150	0.100	

# Building Input Summary Report

## APPLIANCES & LIGHTING SCHEDULES(Continued)

cFan peak:	0 W	AM	0.600	0.600	0.600	0.600	0.600	0.600	0.600	0.250	0.250	0.250	0.250	0.250
% Released:	100 %	PM	0.250	0.250	0.250	0.250	0.250	0.250	0.550	0.600	0.600	0.600	0.600	0.600
lgts-in peak:	545 W	AM	0.160	0.150	0.160	0.180	0.230	0.450	0.420	0.260	0.190	0.160	0.120	0.110
% Released:	100 %	PM	0.160	0.170	0.250	0.270	0.340	0.550	0.600	0.880	1.000	0.880	0.510	0.280
lgts-out peak:	47 W	AM	1.000	1.000	1.000	1.000	1.000	0.750	0.750	0.000	0.000	0.000	0.000	0.000
% Released:	0 %	PM	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.750	0.750	0.750	1.000
lgts-gar peak:	0 W	AM	0.000	0.000	0.000	0.000	0.000	0.500	0.750	1.000	0.750	0.500	0.000	0.000
% Released:	0 %	PM	0.000	0.000	0.500	0.500	0.750	1.000	0.750	0.500	0.000	0.000	0.000	0.000
MEL peak:	184 W	AM	0.500	0.500	0.500	0.750	0.750	0.850	1.000	1.000	1.000	1.000	0.900	0.900
% Released:	90 %	PM	0.900	0.900	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.850	0.750	0.750

# Building Input Summary Report

PROJECT										
Title:	L202AO (low alpha)			Address type:			Y			
Building Type:	User	Bedrooms:	0		Lot #:					
Owner:	FSEC	Conditioned Area:	1539		Block/SubDivision:					
Builder Name:	James Q. Hammer	Total Stories:	1		PlatBook:					
Permit Office:		Worst Case:	No		Street:		111 Anywhere Lane			
Jurisdiction:		Rotate Angle:	0		County:					
Family Type:	Single-family	Cross Ventilation:			City, State, Zip:		Orlando, FL,			
New/Existing:	New (From Plans)	Whole House Fan:			Terrain:		Suburban			
Year Construct:		Terrain:	Suburban		Shielding:		Suburban			
Comment:	HERS BESTEST low-alpha case									
CLIMATE										
Design Location	Tmy Site	Design Temp	97.5%	2.5%	Int Design Temp	Winter	Summer	Heating Degree Days	Design Moisture	Daily temp Range
FL, OrlandoTMY1	FL_ORLANDOTMY1	41	91		70	75	293	44		Medium
UTILITY										
Fuel	Unit	Utility Name					Monthly Fixed Cost	\$/Unit		
Electricity	kWh	EnergyGauge Default					0.00	0.12		
Natural Gas	Therm	EnergyGauge Default					0.00	0.68		
Fuel Oil	Gallon	EnergyGauge Default					0.00	1.10		
Propane	Gallon	EnergyGauge Default					0.00	1.40		
SURROUNDINGS										
Ornt	Type	-----Shade Trees-----			Exist	-----Adjacent Buildings-----				
		Height	Width	Distance		Height	Width	Distance		
N	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
NE	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
E	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
SE	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
S	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
SW	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
W	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
NW	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft		
BLOCKS										
Number	Name	Area	Volume							
1	Block1	1539	12312							
SPACES										
Number	Name	Area	Volume	Kitchen	Occupants	Bedrooms	Finished	Cooled	Heated	
1	Main	1539	12312	Yes	0	0	Yes	Yes	Yes	

# Building Input Summary Report

FLOORS														
#	Floor Type	Space	Exposed Perim	Perimeter R-Value	Area	Joist R-Value	Tile	Wood	Carpet					
1	Raised Floor	Main	---	---	1539 ft	0	0	0	1					
ROOF														
#	Type	Materials	Roof Area	Gable Area	Roof Color	Solar Absor.	SA Tested	Emitt	Emitt Tested	Deck Insul.	Pitch (deg)			
1	Gable or shed	Composition shingles	1622 ft²	256 ft²	Medium	0.2	No	0.9	No	0	18.4			
ATTIC														
#	Type	Ventilation	Vent Ratio (1 in)	Area	RBS	IRCC								
1	Full attic	Vented	150	1539 ft²	N	N								
CEILING														
#	Ceiling Type	Space	R-Value	Ins. Type	Area	Framing Fraction	Truss Type							
1	Under Attic(Vented)	Main	11.0	Blown	1539.0ft²	0.10	Wood							
WALLS														
#	Ornt	Adjacent To	Wall Type	Space	Cavity R-Value	Width Ft	In	Height Ft	In	Sheathing Area	R-Value	Framing Fraction	Solar Absor.	Below Grade
1	N	Exterior	Frame - Wood	Main	1.01	57.0	0	8.0	0	456.0ft²		0.25	0.2	0 %
2	S	Exterior	Frame - Wood	Main	1.01	57.0	0	8.0	0	456.0ft²		0.25	0.2	0 %
3	E	Exterior	Frame - Wood	Main	1.01	27.0	0	8.0	0	216.0ft²		0.25	0.2	0 %
4	W	Exterior	Frame - Wood	Main	1.01	27.0	0	8.0	0	216.0ft²		0.25	0.2	0 %
DOORS														
#	Ornt	Adjacent To	Door Type	Space	Storms	U-Value	Width Ft	In	Height Ft	In	Area			
1	N	Exterior	Insulated	Main	None	0.46	3.00	0	6.00	8	20.0ft²			
2	S	Exterior	Insulated	Main	None	0.46	3.00	0	6.00	8	20.0ft²			
WINDOWS														
#	Ornt	Wall ID	Frame	Panes	NFRC	U-Factor	SHGC	Storm	Area	----Overhang----		Interior Shade	Screening	
1	N	1	TIM	Single (Clear)	Yes	1.09	0.70	N	90.0ft²	0.0 ft 0 in	0.0 ft 0 in	None	None	
2	S	2	TIM	Single (Clear)	Yes	1.09	0.70	N	90.0ft²	0.0 ft 0 in	0.0 ft 0 in	None	None	
3	E	3	TIM	Single (Clear)	Yes	1.09	0.70	N	45.0ft²	0.0 ft 0 in	0.0 ft 0 in	None	None	
4	W	4	TIM	Single (Clear)	Yes	1.09	0.70	N	45.0ft²	0.0 ft 0 in	0.0 ft 0 in	None	None	
INFILTRATION														
#	Scope	Method	SLA	CFM50	ELA	EqLA	ACH	ACH50	Space(s)					
1	Wholehouse	Proposed ACH	0.00205	8295	455.38	856.40	1.5000	40.4	All					

# Building Input Summary Report

<b>MASS</b>													
#	Mass Type	Area	Thickness	Furniture Fraction	Space								
1	No Added Mass	0 ft²	0 ft	0.00	Main								
<b>HEATING SYSTEM</b>													
#	System Type	Subtype	AHRI #	Efficiency	Capacity kBtu/hr	---Geothermal HeatPump---		Ducts	Block				
1	Electric Strip Heat	None		COP: 1.00	61.0	Entry	Power	Volt	Current	sys#1	1		
<b>COOLING SYSTEM</b>													
#	System Type	Subtype	AHRI #	Efficiency	Capacity kBtu/hr	Air Flow cfm	SHR	Duct	Block				
1	Central Unit	None		SEER:10	61.0	1830	0.75	sys#1	1				
<b>HOT WATER SYSTEM</b>													
#	System Type	Subtype	Location	EF	Cap	Use	SetPnt	Fixture Flow	Pipe Ins.	Pipe length			
	Recirculation System	Recirc Control Type	Loop length	Branch length	Pump power	DWHR	Facilities Connected	Equal Flow	DWHR Eff	Other Credits			
<b>DUCTS</b>													
Duct #	-----Supply-----			-----Return-----			Leakage Type	Air Handler	CFM 25 TOT	CFM 25 OUT	QN	RLF	HVAC # Heat Cool
1	Main	6.0	385 ft²	Main	6.0	77 ft²	Prop. Air Leakage	Main	---	---	0.00	0.60	1 1
<b>MECHANICAL VENTILATION</b>													
Type	Supply CFM	Exhaust CFM	HRV	Fan	Run Time	Heating System	Cooling System						
None	0.0	0.0	0.0	0.0 W	0 %	1 - Electric Strip Heat	1 - Central Unit						
<b>TEMPERATURES</b>													
Programable Thermostat: N						Ceiling Fans: N							
Cooling	[X] Jan	[X] Feb	[X] Mar	[X] Apr	[X] May	[X] Jun	[X] Jul	[X] Aug	[X] Sep	[X] Oct	[X] Nov	[X] Dec	
Heating	[X] Jan	[X] Feb	[X] Mar	[X] Apr	[X] May	[X] Jun	[X] Jul	[X] Aug	[X] Sep	[X] Oct	[X] Nov	[X] Dec	
Venting	[X] Jan	[X] Feb	[X] Mar	[X] Apr	[X] May	[X] Jun	[X] Jul	[X] Aug	[X] Sep	[X] Oct	[X] Nov	[X] Dec	
Thermostat Schedule: BESTEST-cooling													
Schedule Type		1	2	3	4	5	6	7	8	9	10	11	12
Cooling (WD)		AM 78	78	78	78	78	78	78	78	78	78	78	78
Cooling (WEH)		AM 78	78	78	78	78	78	78	78	78	78	78	78



# Building Input Summary Report

## TEMPERATURES(Continued)

Heating (WD)	AM	68	68	68	68	68	68	68	68	68	68	68	68	68
	PM	68	68	68	68	68	68	68	68	68	68	68	68	68
Heating (WEH)	AM	68	68	68	68	68	68	68	68	68	68	68	68	68
	PM	68	68	68	68	68	68	68	68	68	68	68	68	68

## CLOTHES DRYERS

ID	Type	Screen	Location	Quantity	Fuel Type	Make	Model	Schedule	kWhPerYr
1	Dryers	Default New	Main		Electricity			HERS2011	0

## RANGE OVENS

ID	Type	Screen	Location	Type	Fuel Type	Make	Model	Cooktop	Oven
1	Ranges	Default New	Main	Combo	Elec			Elec Flat Coil	Not Convec

## HARD WIRED LIGHTING

ID	Type	Screen	Location	Total#	Quantity#	Comp FI	All Other FI	Bulb Type	Schedule	Watts per bulb
1	Hard-Wired	By Count - Qualifying	Main	100	10				HERS2011	
2	Hard-Wired	Default New	Exterior						HERS2011	
3	Hard-Wired	Default New	Garage						HERS2011	

## MISC ELECTRICAL LOADS

ID	Type	Screen	Location	Item	Quantity	Catagory	Operating	Schedule	Off Standby
1	Misc Elec Load	Simple Default	Main		1		1	HERS2011	1

## APPLIANCES & LIGHTING SCHEDULES

Appliance Schedule:		HERS2014		Hours											
Schedule Type		1	2	3	4	5	6	7	8	9	10	11	12		
Occupancy peak:	400 Btu	AM	0.930	0.930	0.930	0.930	0.930	0.930	0.930	0.980	0.460	0.270	0.270	0.270	
% Released:	100 %	PM	0.270	0.270	0.270	0.270	0.330	0.610	1.000	1.000	0.930	0.930	0.930	0.930	
refrig peak:	0 W	AM	0.824	0.804	0.784	0.764	0.744	0.734	0.744	0.754	0.764	0.794	0.814	0.854	
% Released:	100 %	PM	0.854	0.864	0.884	0.904	0.925	0.945	0.925	0.915	0.904	0.894	0.874	0.854	
cWash peak:	0 W	AM	0.200	0.100	0.050	0.050	0.050	0.075	0.200	0.375	0.500	0.800	0.950	1.000	
% Released:	30 %	PM	0.875	0.850	0.800	0.625	0.625	0.600	0.575	0.550	0.625	0.700	0.650	0.375	
E-cDry peak:	119 W	AM	0.200	0.100	0.050	0.050	0.050	0.075	0.200	0.375	0.500	0.800	0.950	1.000	
% Released:	15 %	PM	0.875	0.850	0.800	0.625	0.625	0.600	0.575	0.550	0.625	0.700	0.650	0.375	
dWash peak:	0 W	AM	0.139	0.050	0.028	0.024	0.029	0.090	0.169	0.303	0.541	0.594	0.502	0.443	
% Released:	60 %	PM	0.376	0.396	0.334	0.323	0.344	0.448	0.791	1.000	0.800	0.597	0.383	0.281	
E-rOven peak:	122 W	AM	0.057	0.057	0.057	0.057	0.057	0.114	0.171	0.286	0.343	0.343	0.343	0.400	
% Released:	80 %	PM	0.457	0.343	0.286	0.400	0.571	1.000	0.857	0.429	0.286	0.229	0.171	0.114	
TVs peak:	151 W	AM	0.100	0.050	0.050	0.050	0.100	0.200	0.400	0.450	0.400	0.200	0.100	0.100	
% Released:	100 %	PM	0.050	0.050	0.150	0.450	0.850	1.000	0.950	0.800	0.500	0.250	0.150	0.100	

# Building Input Summary Report

## APPLIANCES & LIGHTING SCHEDULES(Continued)

cFan peak:	0 W	AM	0.600	0.600	0.600	0.600	0.600	0.600	0.600	0.250	0.250	0.250	0.250	0.250
% Released:	100 %	PM	0.250	0.250	0.250	0.250	0.250	0.250	0.550	0.600	0.600	0.600	0.600	0.600
lgts-in peak:	545 W	AM	0.160	0.150	0.160	0.180	0.230	0.450	0.420	0.260	0.190	0.160	0.120	0.110
% Released:	100 %	PM	0.160	0.170	0.250	0.270	0.340	0.550	0.600	0.880	1.000	0.880	0.510	0.280
lgts-out peak:	47 W	AM	1.000	1.000	1.000	1.000	1.000	0.750	0.750	0.000	0.000	0.000	0.000	0.000
% Released:	0 %	PM	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.750	0.750	0.750	1.000
lgts-gar peak:	0 W	AM	0.000	0.000	0.000	0.000	0.000	0.500	0.750	1.000	0.750	0.500	0.000	0.000
% Released:	0 %	PM	0.000	0.000	0.500	0.500	0.750	1.000	0.750	0.500	0.000	0.000	0.000	0.000
MEL peak:	184 W	AM	0.500	0.500	0.500	0.750	0.750	0.850	1.000	1.000	1.000	1.000	0.900	0.900
% Released:	90 %	PM	0.900	0.900	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.850	0.750	0.750

# Building Input Summary Report

PROJECT									
Title:	L302AO (slab case)			Address type:	Y				
Building Type:	User	Bedrooms:	0	Lot #:					
Owner:	FSEC	Conditioned Area:	1539	Block/SubDivision:					
Builder Name:	James Q. Hammer	Total Stories:	1	PlatBook:	111 Anywhere Lane				
Permit Office:		Worst Case:	No	County:					
Jurisdiction:		Rotate Angle:	0	City, State, Zip:	Orlando, FL,				
Family Type:	Single-family	Cross Ventilation:							
New/Existing:	New (From Plans)	Whole House Fan:							
Year Construct:		Terrain:	Suburban						
Comment:	HERS BESTEST slab case			Shielding:	Suburban				
CLIMATE									
Design Location	Tmy Site	Design Temp 97.5%	Design Temp 2.5%	Int Design Temp Winter	Int Design Temp Summer	Heating Degree Days	Design Moisture	Daily temp Range	
FL, OrlandoTMY1	FL_ORLANDOTMY1	41	91	70	75	293	44	Medium	
UTILITY									
Fuel	Unit	Utility Name				Monthly Fixed Cost	\$/Unit		
Electricity	kWh	EnergyGauge Default				0.00	0.12		
Natural Gas	Therm	EnergyGauge Default				0.00	0.68		
Fuel Oil	Gallon	EnergyGauge Default				0.00	1.10		
Propane	Gallon	EnergyGauge Default				0.00	1.40		
SURROUNDINGS									
Ornt	Type	-----Shade Trees-----			Exist	-----Adjacent Buildings-----			
		Height	Width	Distance		Height	Width	Distance	
N	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
NE	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
E	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
SE	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
S	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
SW	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
W	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
NW	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
BLOCKS									
Number	Name	Area	Volume						
1	Block1	1539	12312						
SPACES									
Number	Name	Area	Volume	Kitchen	Occupants	Bedrooms	Finished	Cooled	Heated
1	Main	1539	12312	Yes	0	0		Yes	Yes

# Building Input Summary Report

FLOORS														
#	Floor Type	Space	Exposed Perim	Perimeter R-Value	Area	Joist R-Value	Tile	Wood	Carpet					
1	Slab-On-Grade Edge Ins	Main	168	0	1539 ft	---	0	0	1					
ROOF														
#	Type	Materials	Roof Area	Gable Area	Roof Color	Solar Absor.	SA Tested	Emitt	Emitt Tested	Deck Insul.	Pitch (deg)			
1	Gable or shed	Composition shingles	1622 ft²	256 ft²	Medium	0.6	No	0.9	No	0	18.4			
ATTIC														
#	Type	Ventilation	Vent Ratio (1 in)	Area	RBS	IRCC								
1	Full attic	Vented	150	1539 ft²	N	N								
CEILING														
#	Ceiling Type	Space	R-Value	Ins. Type	Area	Framing Fraction	Truss Type							
1	Under Attic(Vented)	Main	16.7	Blown	1539.0ft²	0.11	Wood							
WALLS														
#	Ornt	Adjacent To	Wall Type	Space	Cavity R-Value	Width Ft	In	Height Ft	In	Sheathing Area	R-Value	Framing Fraction	Solar Absor.	Below Grade
1	N	Exterior	Frame - Wood	Main	11	57.0	0	8.0	0	456.0ft²		0.25	0.6	0 %
2	S	Exterior	Frame - Wood	Main	11	57.0	0	8.0	0	456.0ft²		0.25	0.6	0 %
3	E	Exterior	Frame - Wood	Main	11	27.0	0	8.0	0	216.0ft²		0.25	0.6	0 %
4	W	Exterior	Frame - Wood	Main	11	27.0	0	8.0	0	216.0ft²		0.25	0.6	0 %
DOORS														
#	Ornt	Adjacent To	Door Type	Space	Storms	U-Value	Width Ft	In	Height Ft	In	Area			
1	N	Exterior	Insulated	Main	None	0.46	3.00	0	6.00	8	20.0ft²			
2	S	Exterior	Insulated	Main	None	0.46	3.00	0	6.00	8	20.0ft²			
WINDOWS														
#	Ornt	Wall ID	Frame	Panes	NFRC	U-Factor	SHGC	Storm	Area	----Overhang----		Interior Shade	Screening	
1	N	1	TIM	Single (Clear)	Yes	1.09	0.70	N	90.0ft²	0.0 ft 0 in	0.0 ft 0 in	None	None	
2	S	2	TIM	Single (Clear)	Yes	1.09	0.70	N	90.0ft²	0.0 ft 0 in	0.0 ft 0 in	None	None	
3	E	3	TIM	Single (Clear)	Yes	1.09	0.70	N	45.0ft²	0.0 ft 0 in	0.0 ft 0 in	None	None	
4	W	4	TIM	Single (Clear)	Yes	1.09	0.70	N	45.0ft²	0.0 ft 0 in	0.0 ft 0 in	None	None	
INFILTRATION														
#	Scope	Method	SLA	CFM50	ELA	EqLA	ACH	ACH50	Space(s)					
1	Wholehouse	Proposed ACH	0.00092	3705	203.40	382.53	0.6700	18.1	All					

# Building Input Summary Report

<b>MASS</b>													
#	Mass Type	Area	Thickness	Furniture Fraction	Space								
1	No Added Mass	0 ft²	0 ft	0.00	Main								
<b>HEATING SYSTEM</b>													
#	System Type	Subtype	AHRI #	Efficiency	Capacity kBtu/hr	---Geothermal HeatPump---		Ducts	Block				
1	Electric Strip Heat	None		COP: 1.00	116.0	Entry	Power	Volt	Current	sys#1	1		
<b>COOLING SYSTEM</b>													
#	System Type	Subtype	AHRI #	Efficiency	Capacity kBtu/hr	Air Flow cfm	SHR	Duct	Block				
1	Central Unit	None		SEER:10	24.4	732	0.75	sys#1	1				
<b>HOT WATER SYSTEM</b>													
#	System Type	Subtype	Location	EF	Cap	Use	SetPnt	Fixture Flow	Pipe Ins.	Pipe length			
	Recirculation System	Recirc Control Type	Loop length	Branch length	Pump power	DWHR	Facilities Connected	Equal Flow	DWHR Eff	Other Credits			
<b>DUCTS</b>													
Duct #	-----Supply-----			-----Return-----			Air Handler	CFM 25 TOT	CFM 25 OUT	QN	RLF	HVAC #	
1	Main	6.0	385 ft²	Main	6.0	77 ft²	Prop. Air Leakage	Main	---	---	0.00	0.60	1 1
<b>MECHANICAL VENTILATION</b>													
Type	Supply CFM	Exhaust CFM	HRV	Fan	Run Time	Heating System			Cooling System				
None	0.0	0.0	0.0	0.0 W	0 %	1 - Electric Strip Heat			1 - Central Unit				
<b>TEMPERATURES</b>													
Programable Thermostat: N						Ceiling Fans: N							
Cooling	[X] Jan	[X] Feb	[X] Mar	[X] Apr	[X] May	[X] Jun	[X] Jul	[X] Aug	[X] Sep	[X] Oct	[X] Nov	[X] Dec	
Heating	[X] Jan	[X] Feb	[X] Mar	[X] Apr	[X] May	[X] Jun	[X] Jul	[X] Aug	[X] Sep	[X] Oct	[X] Nov	[X] Dec	
Venting	[X] Jan	[X] Feb	[X] Mar	[X] Apr	[X] May	[X] Jun	[X] Jul	[X] Aug	[X] Sep	[X] Oct	[X] Nov	[X] Dec	
Thermostat Schedule: BESTEST-heating													
Schedule Type		1	2	3	4	5	6	7	8	9	10	11	12
Cooling (WD)		AM PM	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78
Cooling (WEH)		AM PM	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78

# Building Input Summary Report

## TEMPERATURES(Continued)

Heating (WD)	AM	68	68	68	68	68	68	68	68	68	68	68	68	68
	PM	68	68	68	68	68	68	68	68	68	68	68	68	68
Heating (WEH)	AM	68	68	68	68	68	68	68	68	68	68	68	68	68
	PM	68	68	68	68	68	68	68	68	68	68	68	68	68

## CLOTHES DRYERS

ID	Type	Screen	Location	Quantity	Fuel Type	Make	Model	Schedule	kWhPerYr
1	Dryers	Default New	Main		Electricity			HERS2011	0

## RANGE OVENS

ID	Type	Screen	Location	Type	Fuel Type	Make	Model	Cooktop	Oven
1	Ranges	Default New	Main	Combo	Elec			Elec Flat Coil	Not Convec

## HARD WIRED LIGHTING

ID	Type	Screen	Location	Total#	Quantity#	Comp FI	All Other FI	Bulb Type	Schedule	Watts per bulb
1	Hard-Wired	By Count - Qualifying	Main	100	10				HERS2011	
2	Hard-Wired	Default New	Exterior						HERS2011	
3	Hard-Wired	Default New	Garage						HERS2011	

## MISC ELECTRICAL LOADS

ID	Type	Screen	Location	Item	Quantity	Catagory	Operating	Schedule	Off Standby
1	Misc Elec Load	Simple Default	Main		1		1	HERS2011	1

## APPLIANCES & LIGHTING SCHEDULES

Appliance Schedule:		HERS2014		Hours											
Schedule Type		1	2	3	4	5	6	7	8	9	10	11	12		
Occupancy peak:	400 Btu	AM	0.930	0.930	0.930	0.930	0.930	0.930	0.930	0.980	0.460	0.270	0.270	0.270	
% Released:	100 %	PM	0.270	0.270	0.270	0.270	0.330	0.610	1.000	1.000	0.930	0.930	0.930	0.930	
refrig peak:	0 W	AM	0.824	0.804	0.784	0.764	0.744	0.734	0.744	0.754	0.764	0.794	0.814	0.854	
% Released:	100 %	PM	0.854	0.864	0.884	0.904	0.925	0.945	0.925	0.915	0.904	0.894	0.874	0.854	
cWash peak:	0 W	AM	0.200	0.100	0.050	0.050	0.050	0.075	0.200	0.375	0.500	0.800	0.950	1.000	
% Released:	30 %	PM	0.875	0.850	0.800	0.625	0.625	0.600	0.575	0.550	0.625	0.700	0.650	0.375	
E-cDry peak:	119 W	AM	0.200	0.100	0.050	0.050	0.050	0.075	0.200	0.375	0.500	0.800	0.950	1.000	
% Released:	15 %	PM	0.875	0.850	0.800	0.625	0.625	0.600	0.575	0.550	0.625	0.700	0.650	0.375	
dWash peak:	0 W	AM	0.139	0.050	0.028	0.024	0.029	0.090	0.169	0.303	0.541	0.594	0.502	0.443	
% Released:	60 %	PM	0.376	0.396	0.334	0.323	0.344	0.448	0.791	1.000	0.800	0.597	0.383	0.281	
E-rOven peak:	122 W	AM	0.057	0.057	0.057	0.057	0.057	0.114	0.171	0.286	0.343	0.343	0.343	0.400	
% Released:	80 %	PM	0.457	0.343	0.286	0.400	0.571	1.000	0.857	0.429	0.286	0.229	0.171	0.114	
TVs peak:	151 W	AM	0.100	0.050	0.050	0.050	0.100	0.200	0.400	0.450	0.400	0.200	0.100	0.100	
% Released:	100 %	PM	0.050	0.050	0.150	0.450	0.850	1.000	0.950	0.800	0.500	0.250	0.150	0.100	

# Building Input Summary Report

## APPLIANCES & LIGHTING SCHEDULES(Continued)

cFan peak:	0 W	AM	0.600	0.600	0.600	0.600	0.600	0.600	0.600	0.250	0.250	0.250	0.250	0.250
% Released:	100 %	PM	0.250	0.250	0.250	0.250	0.250	0.250	0.550	0.600	0.600	0.600	0.600	0.600
lgts-in peak:	545 W	AM	0.160	0.150	0.160	0.180	0.230	0.450	0.420	0.260	0.190	0.160	0.120	0.110
% Released:	100 %	PM	0.160	0.170	0.250	0.270	0.340	0.550	0.600	0.880	1.000	0.880	0.510	0.280
lgts-out peak:	47 W	AM	1.000	1.000	1.000	1.000	1.000	0.750	0.750	0.000	0.000	0.000	0.000	0.000
% Released:	0 %	PM	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.750	0.750	0.750	1.000
lgts-gar peak:	0 W	AM	0.000	0.000	0.000	0.000	0.000	0.500	0.750	1.000	0.750	0.500	0.000	0.000
% Released:	0 %	PM	0.000	0.000	0.500	0.500	0.750	1.000	0.750	0.500	0.000	0.000	0.000	0.000
MEL peak:	184 W	AM	0.500	0.500	0.500	0.750	0.750	0.850	1.000	1.000	1.000	1.000	0.900	0.900
% Released:	90 %	PM	0.900	0.900	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.850	0.750	0.750

# Building Input Summary Report

PROJECT									
Title:	L304AO (slab with insul)			Address type:	Y				
Building Type:	User	Bedrooms:	0	Lot #:					
Owner:	FSEC	Conditioned Area:	1539	Block/SubDivision:					
Builder Name:	James Q. Hammer	Total Stories:	1	PlatBook:	111 Anywhere Lane				
Permit Office:		Worst Case:	No	County:					
Jurisdiction:		Rotate Angle:	0	City, State, Zip:	Orlando, FL,				
Family Type:	Single-family	Cross Ventilation:							
New/Existing:	New (From Plans)	Whole House Fan:							
Year Construct:		Terrain:	Suburban						
Comment:	HERS BESTEST insulated slab case			Shielding:	Suburban				
CLIMATE									
Design Location	Tmy Site	Design Temp 97.5%	2.5%	Int Design Temp Winter	Summer	Heating Degree Days	Design Moisture	Daily temp Range	
FL, OrlandoTMY1	FL_ORLANDOTMY1	41	91	70	75	293	44	Medium	
UTILITY									
Fuel	Unit	Utility Name				Monthly Fixed Cost	\$/Unit		
Electricity	kWh	EnergyGauge Default				0.00	0.12		
Natural Gas	Therm	EnergyGauge Default				0.00	0.68		
Fuel Oil	Gallon	EnergyGauge Default				0.00	1.10		
Propane	Gallon	EnergyGauge Default				0.00	1.40		
SURROUNDINGS									
Ornt	Type	-----Shade Trees-----			Exist	-----Adjacent Buildings-----			
		Height	Width	Distance		Height	Width	Distance	
N	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
NE	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
E	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
SE	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
S	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
SW	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
W	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
NW	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
BLOCKS									
Number	Name	Area	Volume						
1	Block1	1539	12312						
SPACES									
Number	Name	Area	Volume	Kitchen	Occupants	Bedrooms	Finished	Cooled	Heated
1	Main	1539	12312	Yes	0	0		Yes	Yes



# Building Input Summary Report

FLOORS														
#	Floor Type	Space	Exposed Perim	Perimeter R-Value	Area	Joist R-Value	Tile	Wood	Carpet					
1	Slab-On-Grade Edge Ins	Main	168	5.4	1539 ft	---	0	0	1					
ROOF														
#	Type	Materials	Roof Area	Gable Area	Roof Color	Solar Absor.	SA Tested	Emitt	Emitt Tested	Deck Insul.	Pitch (deg)			
1	Gable or shed	Composition shingles	1622 ft²	256 ft²	Medium	0.6	No	0.9	No	0	18.4			
ATTIC														
#	Type	Ventilation	Vent Ratio (1 in)	Area	RBS	IRCC								
1	Full attic	Vented	150	1539 ft²	N	N								
CEILING														
#	Ceiling Type	Space	R-Value	Ins. Type	Area	Framing Fraction	Truss Type							
1	Under Attic(Vented)	Main	16.7	Blown	1539.0ft²	0.11	Wood							
WALLS														
#	Ornt	Adjacent To	Wall Type	Space	Cavity R-Value	Width Ft	In	Height Ft	In	Sheathing Area	R-Value	Framing Fraction	Solar Absor.	Below Grade
1	N	Exterior	Frame - Wood	Main	11	57.0	0	8.0	0	456.0ft²		0.25	0.6	0 %
2	S	Exterior	Frame - Wood	Main	11	57.0	0	8.0	0	456.0ft²		0.25	0.6	0 %
3	E	Exterior	Frame - Wood	Main	11	27.0	0	8.0	0	216.0ft²		0.25	0.6	0 %
4	W	Exterior	Frame - Wood	Main	11	27.0	0	8.0	0	216.0ft²		0.25	0.6	0 %
DOORS														
#	Ornt	Adjacent To	Door Type	Space	Storms	U-Value	Width Ft	In	Height Ft	In	Area			
1	N	Exterior	Insulated	Main	None	0.46	3.00	0	6.00	8	20.0ft²			
2	S	Exterior	Insulated	Main	None	0.46	3.00	0	6.00	8	20.0ft²			
WINDOWS														
#	Ornt	Wall ID	Frame	Panes	NFRC	U-Factor	SHGC	Storm	Area	----Overhang----		Interior Shade	Screening	
									Depth	Separation				
1	N	1	TIM	Single (Clear)	Yes	1.09	0.70	N	90.0ft²	0.0 ft 0 in	0.0 ft 0 in	None	None	
2	S	2	TIM	Single (Clear)	Yes	1.09	0.70	N	90.0ft²	0.0 ft 0 in	0.0 ft 0 in	None	None	
3	E	3	TIM	Single (Clear)	Yes	1.09	0.70	N	45.0ft²	0.0 ft 0 in	0.0 ft 0 in	None	None	
4	W	4	TIM	Single (Clear)	Yes	1.09	0.70	N	45.0ft²	0.0 ft 0 in	0.0 ft 0 in	None	None	
INFILTRATION														
#	Scope	Method	SLA	CFM50	ELA	EqLA	ACH	ACH50	Space(s)					
1	Wholehouse	Proposed ACH	0.00092	3705	203.40	382.53	0.6700	18.1	All					

# Building Input Summary Report

<b>MASS</b>													
#	Mass Type	Area	Thickness	Furniture Fraction	Space								
1	No Added Mass	0 ft²	0 ft	0.00	Main								
<b>HEATING SYSTEM</b>													
#	System Type	Subtype	AHRI #	Efficiency	Capacity kBtu/hr	---Geothermal HeatPump---		Ducts	Block				
1	Electric Strip Heat	None		COP: 1.00	106.0	Entry	Power	Volt	Current	sys#1	1		
<b>COOLING SYSTEM</b>													
#	System Type	Subtype	AHRI #	Efficiency	Capacity kBtu/hr	Air Flow cfm	SHR	Duct	Block				
1	Central Unit	None		SEER:10	24.4	732	0.75	sys#1	1				
<b>HOT WATER SYSTEM</b>													
#	System Type	Subtype	Location	EF	Cap	Use	SetPnt	Fixture Flow	Pipe Ins.	Pipe length			
	Recirculation System	Recirc Control Type	Loop length	Branch length	Pump power	DWHR	Facilities Connected	Equal Flow	DWHR Eff	Other Credits			
<b>DUCTS</b>													
Duct #	-----Supply-----			-----Return-----			Leakage Type	Air Handler	CFM 25 TOT	CFM 25 OUT	QN	RLF	HVAC # Heat Cool
1	Main	6.0	385 ft²	Main	6.0	77 ft²	Prop. Air Leakage	Main	---	---	0.00	0.60	1 1
<b>MECHANICAL VENTILATION</b>													
Type	Supply CFM	Exhaust CFM	HRV	Fan	Run Time	Heating System	Cooling System						
None	0.0	0.0	0.0	0.0 W	0 %	1 - Electric Strip Heat	1 - Central Unit						
<b>TEMPERATURES</b>													
Programable Thermostat: N						Ceiling Fans: N							
Cooling	[X] Jan	[X] Feb	[X] Mar	[X] Apr	[X] May	[X] Jun	[X] Jul	[X] Aug	[X] Sep	[X] Oct	[X] Nov	[X] Dec	
Heating	[X] Jan	[X] Feb	[X] Mar	[X] Apr	[X] May	[X] Jun	[X] Jul	[X] Aug	[X] Sep	[X] Oct	[X] Nov	[X] Dec	
Venting	[X] Jan	[X] Feb	[X] Mar	[X] Apr	[X] May	[X] Jun	[X] Jul	[X] Aug	[X] Sep	[X] Oct	[X] Nov	[X] Dec	
Thermostat Schedule: BESTEST-heating													
Schedule Type		1	2	3	4	5	6	7	8	9	10	11	12
Cooling (WD)	AM PM	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78
Cooling (WEH)	AM PM	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78

# Building Input Summary Report

## TEMPERATURES(Continued)

Heating (WD)	AM PM	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68
Heating (WEH)	AM PM	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68

## CLOTHES DRYERS

ID	Type	Screen	Location	Quantity	Fuel Type	Make	Model	Schedule	kWhPerYr
1	Dryers	Default New	Main		Electricity			HERS2011	0

## RANGE OVENS

ID	Type	Screen	Location	Type	Fuel Type	Make	Model	Cooktop	Oven
1	Ranges	Default New	Main	Combo	Elec			Elec Flat Coil	Not Convec

## HARD WIRED LIGHTING

ID	Type	Screen	Location	Total#	Quantity#	Comp FI	All Other FI	Bulb Type	Schedule	Watts per bulb
1	Hard-Wired	By Count - Qualifying	Main	100	10				HERS2011	
2	Hard-Wired	Default New	Exterior						HERS2011	
3	Hard-Wired	Default New	Garage						HERS2011	

## MISC ELECTRICAL LOADS

ID	Type	Screen	Location	Item	Quantity	Catagory	Operating	Schedule	Off Standby
1	Misc Elec Load	Simple Default	Main		1		1	HERS2011	1

## APPLIANCES & LIGHTING SCHEDULES

Appliance Schedule:		HERS2014		Hours											
Schedule Type		1	2	3	4	5	6	7	8	9	10	11	12		
Occupancy peak:	400 Btu	AM	0.930	0.930	0.930	0.930	0.930	0.930	0.930	0.980	0.460	0.270	0.270	0.270	
% Released:	100 %	PM	0.270	0.270	0.270	0.270	0.330	0.610	1.000	1.000	0.930	0.930	0.930	0.930	
refrig peak:	0 W	AM	0.824	0.804	0.784	0.764	0.744	0.734	0.744	0.754	0.764	0.794	0.814	0.854	
% Released:	100 %	PM	0.854	0.864	0.884	0.904	0.925	0.945	0.925	0.915	0.904	0.894	0.874	0.854	
cWash peak:	0 W	AM	0.200	0.100	0.050	0.050	0.050	0.075	0.200	0.375	0.500	0.800	0.950	1.000	
% Released:	30 %	PM	0.875	0.850	0.800	0.625	0.625	0.600	0.575	0.550	0.625	0.700	0.650	0.375	
E-cDry peak:	119 W	AM	0.200	0.100	0.050	0.050	0.050	0.075	0.200	0.375	0.500	0.800	0.950	1.000	
% Released:	15 %	PM	0.875	0.850	0.800	0.625	0.625	0.600	0.575	0.550	0.625	0.700	0.650	0.375	
dWash peak:	0 W	AM	0.139	0.050	0.028	0.024	0.029	0.090	0.169	0.303	0.541	0.594	0.502	0.443	
% Released:	60 %	PM	0.376	0.396	0.334	0.323	0.344	0.448	0.791	1.000	0.800	0.597	0.383	0.281	
E-rOven peak:	122 W	AM	0.057	0.057	0.057	0.057	0.057	0.114	0.171	0.286	0.343	0.343	0.343	0.400	
% Released:	80 %	PM	0.457	0.343	0.286	0.400	0.571	1.000	0.857	0.429	0.286	0.229	0.171	0.114	
TVs peak:	151 W	AM	0.100	0.050	0.050	0.050	0.100	0.200	0.400	0.450	0.400	0.200	0.100	0.100	
% Released:	100 %	PM	0.050	0.050	0.150	0.450	0.850	1.000	0.950	0.800	0.500	0.250	0.150	0.100	

# Building Input Summary Report

## APPLIANCES & LIGHTING SCHEDULES(Continued)

cFan peak:	0 W	AM	0.600	0.600	0.600	0.600	0.600	0.600	0.600	0.250	0.250	0.250	0.250	0.250
% Released:	100 %	PM	0.250	0.250	0.250	0.250	0.250	0.250	0.550	0.600	0.600	0.600	0.600	0.600
lgts-in peak:	545 W	AM	0.160	0.150	0.160	0.180	0.230	0.450	0.420	0.260	0.190	0.160	0.120	0.110
% Released:	100 %	PM	0.160	0.170	0.250	0.270	0.340	0.550	0.600	0.880	1.000	0.880	0.510	0.280
lgts-out peak:	47 W	AM	1.000	1.000	1.000	1.000	1.000	0.750	0.750	0.000	0.000	0.000	0.000	0.000
% Released:	0 %	PM	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.750	0.750	0.750	1.000
lgts-gar peak:	0 W	AM	0.000	0.000	0.000	0.000	0.000	0.500	0.750	1.000	0.750	0.500	0.000	0.000
% Released:	0 %	PM	0.000	0.000	0.500	0.500	0.750	1.000	0.750	0.500	0.000	0.000	0.000	0.000
MEL peak:	184 W	AM	0.500	0.500	0.500	0.750	0.750	0.850	1.000	1.000	1.000	1.000	0.900	0.900
% Released:	90 %	PM	0.900	0.900	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.850	0.750	0.750

# Building Input Summary Report

PROJECT									
Title:	L322AO (basement)			Address type:	Y				
Building Type:	User	Bedrooms:	0	Lot #:					
Owner:	FSEC	Conditioned Area:	3078	Block/SubDivision:					
Builder Name:	James Q. Hammer	Total Stories:	1	PlatBook:	111 Anywhere Lane				
Permit Office:		Worst Case:	No	County:					
Jurisdiction:		Rotate Angle:	0	City, State, Zip:	Orlando, FL,				
Family Type:	Single-family	Cross Ventilation:							
New/Existing:	New (From Plans)	Whole House Fan:							
Year Construct:		Terrain:	Suburban						
Comment:	HERS BESTEST basement case			Shielding:	Suburban				
CLIMATE									
Design Location	Tmy Site	Design Temp 97.5%	Design Temp 2.5%	Int Design Temp Winter	Int Design Temp Summer	Heating Degree Days	Design Moisture	Daily temp Range	
FL, OrlandoTMY1	FL_ORLANDOTMY1	41	91	70	75	293	44	Medium	
UTILITY									
Fuel	Unit	Utility Name				Monthly Fixed Cost	\$/Unit		
Electricity	kWh	EnergyGauge Default				0.00	0.12		
Natural Gas	Therm	EnergyGauge Default				0.00	0.68		
Fuel Oil	Gallon	EnergyGauge Default				0.00	1.10		
Propane	Gallon	EnergyGauge Default				0.00	1.40		
SURROUNDINGS									
Ornt	Type	-----Shade Trees-----			Exist	-----Adjacent Buildings-----			
		Height	Width	Distance		Height	Width	Distance	
N	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
NE	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
E	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
SE	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
S	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
SW	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
W	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
NW	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	
BLOCKS									
Number	Name	Area	Volume						
1	Block1	3078	23469.75						
SPACES									
Number	Name	Area	Volume	Kitchen	Occupants	Bedrooms	Finished	Cooled	Heated
1	Main	1539	12312	Yes	0	0	Yes	Yes	Yes
2	BSMT-2	1539	11157.75	No	0	0	No	Yes	Yes

# Building Input Summary Report

FLOORS														
#	Floor Type		Space	Exposed Perim	Perimeter R-Value	Area	Joist R-Value	Tile	Wood	Carpet				
1	Floor Over Other Space		Main	---	---	1539 ft		1	0	0				
2	Slab-Below-Grade		BSMT-2	---	---	1539 ft		1	0	0				
ROOF														
#	Type	Materials		Roof Area	Gable Area	Roof Color	Solar Absor.	SA Tested	Emitt	Emitt Tested	Deck Insul.	Pitch (deg)		
1	Gable or shed	Composition shingles		1622 ft²	256 ft²	Medium	0.6	No	0.9	No	0	18.4		
ATTIC														
#	Type	Ventilation		Vent Ratio (1 in)	Area	RBS	IRCC							
1	Full attic	Vented		150	1539 ft²	N	N							
CEILING														
#	Ceiling Type		Space	R-Value	Ins. Type	Area	Framing Fraction	Truss Type						
1	Under Attic(Vented)		Main	16.7	Blown	1539.0ft²	0.11	Wood						
WALLS														
#	Adjacent Ornt	To	Wall Type	Space	Cavity R-Value	Width Ft	In	Height Ft	In	Sheathing Area	R-Value	Framing Fraction	Solar Absor.	Below Grade
1	N	Exterior	Frame - Wood	Main	11	57.0	0	8.0	0	456.0ft²		0.25	0.6	0 %
2	S	Exterior	Frame - Wood	Main	11	57.0	0	8.0	0	456.0ft²		0.25	0.6	0 %
3	E	Exterior	Frame - Wood	Main	11	27.0	0	8.0	0	216.0ft²		0.25	0.6	0 %
4	W	Exterior	Frame - Wood	Main	11	27.0	0	8.0	0	216.0ft²		0.25	0.6	0 %
5	N	Exterior	Frame - Wood	Main	1.87	57.0	0	0.0	9	42.8ft²		0	0.6	0 %
6	S	Exterior	Frame - Wood	Main	1.87	57.0	0	0.0	9	42.8ft²		0	0.6	0 %
7	E	Exterior	Frame - Wood	Main	1.87	27.0	0	0.0	9	20.3ft²		0	0.6	0 %
8	W	Exterior	Frame - Wood	Main	1.87	27.0	0	0.0	9	20.3ft²		0	0.6	0 %
9	N	Exterior	Concrete - 6 inch	BSMT-2	0	42.0	0	7.3	0	304.5ft²		90.80	0.41380835	938 %
10	S	Exterior	Concrete - 6 inch	BSMT-2	0	42.0	0	7.3	0	304.5ft²		90.80	0.41380835	938 %
11	E	Exterior	Concrete - 6 inch	BSMT-2	0	42.0	0	7.3	0	304.5ft²		90.80	0.41380835	938 %
12	W	Exterior	Concrete - 6 inch	BSMT-2	0	42.0	0	7.3	0	304.5ft²		90.80	0.41380835	938 %
DOORS														
#	Ornt	Adjacent To	Door Type	Space	Storms	U-Value	Width Ft	In	Height Ft	In	Area			
1	N	Exterior	Insulated	Main	None	0.46	3.00	0	6.00	8	20.0ft²			
2	S	Exterior	Insulated	Main	None	0.46	3.00	0	6.00	8	20.0ft²			
WINDOWS														
#	Wall Ornt	ID	Frame	Panes	NFRC	U-Factor	SHGC	Storm	Area	-----Overhang----- Depth	Separation	Interior Shade	Screening	
1	N	1	TIM	Single (Clear)	Yes	1.09	0.70	N	90.0ft²	0.0 ft 0 in	0.0 ft 0 in	None	None	
2	S	2	TIM	Single (Clear)	Yes	1.09	0.70	N	90.0ft²	0.0 ft 0 in	0.0 ft 0 in	None	None	
3	E	3	TIM	Single (Clear)	Yes	1.09	0.70	N	45.0ft²	0.0 ft 0 in	0.0 ft 0 in	None	None	

# Building Input Summary Report

## WINDOWS(Continued)

4	W	4	TIM	Single (Clear)	Yes	1.09	0.70	N	45.0ft²	0.0 ft 0 in	0.0 ft 0 in	None	None
---	---	---	-----	----------------	-----	------	------	---	---------	-------------	-------------	------	------

## INFILTRATION

#	Scope	Method	SLA	CFM50	ELA	EqLA	ACH	ACH50	Space(s)
1	Wholehouse	Proposed ACH	0.00046	3705	203.40	382.53	0.3350	9.5	All

## MASS

#	Mass Type	Area	Thickness	Furniture Fraction	Space
1	No Added Mass	0 ft²	0 ft	0.00	Main
2	No Added Mass	0 ft²	0 ft	0.00	BSMT-2

## HEATING SYSTEM

#	System Type	Subtype	AHRI #	Efficiency	Capacity kBtu/hr	----Geothermal HeatPump---- Entry Power Volt Current			Ducts	Block
1	Electric Strip Heat	None		COP: 1.00	140.0	0.00	0.00	0.00	sys#1	1

## COOLING SYSTEM

#	System Type	Subtype	AHRI #	Efficiency	Capacity kBtu/hr	Air Flow cfm	SHR	Duct	Block
1	Central Unit	None		SEER:10	25.0	750	0.75	sys#1	1

## HOT WATER SYSTEM

#	System Type	Subtype	Location	EF	Cap	Use	SetPnt	Fixture Flow	Pipe Ins.	Pipe length
	Recirculation System	Recirc Control Type	Loop length	Branch length	Pump power	DWHR	Facilities Connected	Equal Flow	DWHR Eff	Other Credits

## DUCTS

Duct #	-----Supply-----			-----Return-----			Air Handler	CFM 25 TOT	CFM 25 OUT	QN	RLF	HVAC # Heat Cool		
1	Main	6.0	385 ft²	Main	6.0	77 ft²	Prop. Air Leakage	Main	---	---	0.00	0.60	1	1

## MECHANICAL VENTILATION

Type	Supply CFM	Exhaust CFM	HRV	Fan	Run Time	Heating System	Cooling System
None	0.0	0.0	0.0	0.0 W	0 %	1 - Electric Strip Heat	1 - Central Unit

# Building Input Summary Report

TEMPERATURES													
Programable Thermostat: N				Ceiling Fans: N									
Cooling	[X] Jan	[X] Feb	[X] Mar	[X] Apr	[X] May	[X] Jun	[X] Jul	[X] Aug	[X] Sep	[X] Oct	[X] Nov	[X] Dec	
Heating	[X] Jan	[X] Feb	[X] Mar	[X] Apr	[X] May	[X] Jun	[X] Jul	[X] Aug	[X] Sep	[X] Oct	[X] Nov	[X] Dec	
Venting	[X] Jan	[X] Feb	[X] Mar	[X] Apr	[X] May	[X] Jun	[X] Jul	[X] Aug	[X] Sep	[X] Oct	[X] Nov	[X] Dec	
Thermostat Schedule: BESTEST-heating													
Schedule Type		Hours											
		1	2	3	4	5	6	7	8	9	10	11	12
Cooling (WD)	AM	78	78	78	78	78	78	78	78	78	78	78	78
	PM	78	78	78	78	78	78	78	78	78	78	78	78
Cooling (WEH)	AM	78	78	78	78	78	78	78	78	78	78	78	78
	PM	78	78	78	78	78	78	78	78	78	78	78	78
Heating (WD)	AM	68	68	68	68	68	68	68	68	68	68	68	68
	PM	68	68	68	68	68	68	68	68	68	68	68	68
Heating (WEH)	AM	68	68	68	68	68	68	68	68	68	68	68	68
	PM	68	68	68	68	68	68	68	68	68	68	68	68
CLOTHES DRYERS													
ID	Type	Screen	Location	Quantity	Fuel Type	Make	Model	Schedule	kWhPerYr				
1	Dryers	Default New	Main		Electricity			HERS2011	0				
RANGE OVENS													
ID	Type	Screen	Location	Type	Fuel Type	Make	Model	Cooktop	Oven				
1	Ranges	Default New	Main	Combo	Elec			Elec Flat Coil	Not Convec				
HARD WIRED LIGHTING													
ID	Type	Screen	Location	Total#	Quantity#	Comp FI	All Other FI	Bulb Type	Schedule	Watts per bulb			
1	Hard-Wired	By Count - Qualifying	Main	100	10				HERS2011				
2	Hard-Wired	Default New	Exterior						HERS2011				
3	Hard-Wired	Default New	Garage						HERS2011				
MISC ELECTRICAL LOADS													
ID	Type	Screen	Location	Item	Quantity	Catagory	Operating	Schedule	Off Standby				
1	Misc Elec Load	Simple Default	Main		1		1	HERS2011	1				



# Building Input Summary Report

APPLIANCES & LIGHTING SCHEDULES														
Appliance Schedule: HERS2014			Hours											
Schedule Type			1	2	3	4	5	6	7	8	9	10	11	12
Occupancy peak:	400 Btu	AM	0.930	0.930	0.930	0.930	0.930	0.930	0.930	0.980	0.460	0.270	0.270	0.270
% Released:	100 %	PM	0.270	0.270	0.270	0.270	0.330	0.610	1.000	1.000	0.930	0.930	0.930	0.930
refrig peak:	0 W	AM	0.824	0.804	0.784	0.764	0.744	0.734	0.744	0.754	0.764	0.794	0.814	0.854
% Released:	100 %	PM	0.854	0.864	0.884	0.904	0.925	0.945	0.925	0.915	0.904	0.894	0.874	0.854
cWash peak:	0 W	AM	0.200	0.100	0.050	0.050	0.050	0.075	0.200	0.375	0.500	0.800	0.950	1.000
% Released:	30 %	PM	0.875	0.850	0.800	0.625	0.625	0.600	0.575	0.550	0.625	0.700	0.650	0.375
E-cDry peak:	119 W	AM	0.200	0.100	0.050	0.050	0.050	0.075	0.200	0.375	0.500	0.800	0.950	1.000
% Released:	15 %	PM	0.875	0.850	0.800	0.625	0.625	0.600	0.575	0.550	0.625	0.700	0.650	0.375
dWash peak:	0 W	AM	0.139	0.050	0.028	0.024	0.029	0.090	0.169	0.303	0.541	0.594	0.502	0.443
% Released:	60 %	PM	0.376	0.396	0.334	0.323	0.344	0.448	0.791	1.000	0.800	0.597	0.383	0.281
E-rOven peak:	122 W	AM	0.057	0.057	0.057	0.057	0.057	0.114	0.171	0.286	0.343	0.343	0.343	0.400
% Released:	80 %	PM	0.457	0.343	0.286	0.400	0.571	1.000	0.857	0.429	0.286	0.229	0.171	0.114
TVs peak:	151 W	AM	0.100	0.050	0.050	0.050	0.100	0.200	0.400	0.450	0.400	0.200	0.100	0.100
% Released:	100 %	PM	0.050	0.050	0.150	0.450	0.850	1.000	0.950	0.800	0.500	0.250	0.150	0.100
cFan peak:	0 W	AM	0.600	0.600	0.600	0.600	0.600	0.600	0.600	0.250	0.250	0.250	0.250	0.250
% Released:	100 %	PM	0.250	0.250	0.250	0.250	0.250	0.250	0.550	0.600	0.600	0.600	0.600	0.600
Igts-in peak:	943 W	AM	0.160	0.150	0.160	0.180	0.230	0.450	0.420	0.260	0.190	0.160	0.120	0.110
% Released:	100 %	PM	0.160	0.170	0.250	0.270	0.340	0.550	0.600	0.880	1.000	0.880	0.510	0.280
Igts-out peak:	68 W	AM	1.000	1.000	1.000	1.000	1.000	0.750	0.750	0.000	0.000	0.000	0.000	0.000
% Released:	0 %	PM	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.750	0.750	0.750	1.000
Igts-gar peak:	0 W	AM	0.000	0.000	0.000	0.000	0.000	0.500	0.750	1.000	0.750	0.500	0.000	0.000
% Released:	0 %	PM	0.000	0.000	0.500	0.500	0.750	1.000	0.750	0.500	0.000	0.000	0.000	0.000
MEL peak:	369 W	AM	0.500	0.500	0.500	0.750	0.750	0.850	1.000	1.000	1.000	1.000	0.900	0.900
% Released:	90 %	PM	0.900	0.900	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.850	0.750	0.750

# Building Input Summary Report

PROJECT										
Title:	L324AO (basement-insulated)				Address type:	Y				
Building Type:	User	Bedrooms:	0			Lot #:				
Owner:	FSEC	Conditioned Area:	3078			Block/SubDivision:				
Builder Name:	James Q. Hammer	Total Stories:	1			PlatBook:	111 Anywhere Lane			
Permit Office:		Worst Case:	No			County:				
Jurisdiction:		Rotate Angle:	0			City, State, Zip:	Orlando, FL,			
Family Type:	Single-family	Cross Ventilation:								
New/Existing:	New (From Plans)	Whole House Fan:								
Year Construct:		Terrain:	Suburban							
Comment:	HERS BESTEST insulated basement case				Shielding:	Suburban				
CLIMATE										
Design Location	Tmy Site	Design Temp 97.5%	Design Temp 2.5%	Int Design Temp Winter	Int Design Temp Summer	Heating Degree Days	Design Moisture	Daily temp Range		
FL, OrlandoTMY1	FL_ORLANDOTMY1	41	91	70	75	293	44	Medium		
UTILITY										
Fuel	Unit	Utility Name					Monthly Fixed Cost	\$/Unit		
Electricity	kWh	EnergyGauge Default					0.00	0.12		
Natural Gas	Therm	EnergyGauge Default					0.00	0.68		
Fuel Oil	Gallon	EnergyGauge Default					0.00	1.10		
Propane	Gallon	EnergyGauge Default					0.00	1.40		
SURROUNDINGS										
Ornt	Type	-----Shade Trees-----			Exist	-----Adjacent Buildings-----				
		Height	Width	Distance		Height	Width	Distance	Distance	
N	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	0 ft	
NE	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	0 ft	
E	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	0 ft	
SE	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	0 ft	
S	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	0 ft	
SW	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	0 ft	
W	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	0 ft	
NW	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft	0 ft	
BLOCKS										
Number	Name	Area	Volume							
1	Block1	3078	23469.75							
SPACES										
Number	Name	Area	Volume	Kitchen	Occupants	Bedrooms	Finished	Cooled	Heated	
1	Main	1539	12312	Yes	0	0	Yes	Yes	Yes	
2	BSMT-2	1539	11157.75	No	0	0	Yes	Yes	Yes	

# Building Input Summary Report

FLOORS													
#	Floor Type		Space	Exposed Perim	Perimeter R-Value	Area	Joist R-Value	Tile	Wood	Carpet			
1	Floor Over Other Space		Main	---	---	1539 ft		1	0	0			
2	Slab-Below-Grade		BSMT-2	---	---	1539 ft		1	0	0			

ROOF											
#	Type	Materials	Roof Area	Gable Area	Roof Color	Solar Absor.	SA Tested	Emitt	Emitt Tested	Deck Insul.	Pitch (deg)
1	Gable or shed	Composition shingles	1622 ft²	256 ft²	Medium	0.6	No	0.9	No	0	18.4

ATTIC						
#	Type	Ventilation	Vent Ratio (1 in)	Area	RBS	IRCC
1	Full attic	Vented	150	1539 ft²	N	N

CEILING							
#	Ceiling Type	Space	R-Value	Ins. Type	Area	Framing Fraction	Truss Type
1	Under Attic(Vented)	Main	16.7	Blown	1539.0ft²	0.11	Wood

WALLS														
#	Adjacent Ornt	To	Wall Type	Space	Cavity R-Value	Width Ft	In	Height Ft	In	Sheathing Area	R-Value	Framing Fraction	Solar Absor.	Below Grade
1	N	Exterior	Frame - Wood	Main	11	57.0	0	8.0	0	456.0ft²		0.25	0.6	0 %
2	S	Exterior	Frame - Wood	Main	11	57.0	0	8.0	0	456.0ft²		0.25	0.6	0 %
3	E	Exterior	Frame - Wood	Main	11	27.0	0	8.0	0	216.0ft²		0.25	0.6	0 %
4	W	Exterior	Frame - Wood	Main	11	27.0	0	8.0	0	216.0ft²		0.25	0.6	0 %
5	N	Exterior	Frame - Wood	Main	11	57.0	0	0.0	9	42.8ft²		0.1	0.6	0 %
6	S	Exterior	Frame - Wood	Main	11	57.0	0	0.0	9	42.8ft²		0.1	0.6	0 %
7	E	Exterior	Frame - Wood	Main	11	27.0	0	0.0	9	20.3ft²		0.1	0.6	0 %
8	W	Exterior	Frame - Wood	Main	11	27.0	0	0.0	9	20.3ft²		0.1	0.6	0 %
9	N	Exterior	Concrete - 6 inch	BSMT-2	10.3	42.0	0	7.3	0	304.5ft²		90.8041380835	93.5938 %	
10	S	Exterior	Concrete - 6 inch	BSMT-2	10.3	42.0	0	7.3	0	304.5ft²		90.8041380835	93.5938 %	
11	E	Exterior	Concrete - 6 inch	BSMT-2	10.3	42.0	0	7.3	0	304.5ft²		90.8041380835	93.5938 %	
12	W	Exterior	Concrete - 6 inch	BSMT-2	10.3	42.0	0	7.3	0	304.5ft²		90.8041380835	93.5938 %	

DOORS											
#	Ornt	Adjacent To	Door Type	Space	Storms	U-Value	Width Ft	In	Height Ft	In	Area
1	N	Exterior	Insulated	Main	None	0.46	3.00	0	6.00	8	20.0ft²
2	S	Exterior	Insulated	Main	None	0.46	3.00	0	6.00	8	20.0ft²

WINDOWS													
#	Wall Ornt	ID	Frame	Panes	NFRC	U-Factor	SHGC	Storm	Area	-----Overhang----- Depth	Separation	Interior Shade	Screening
1	N	1	TIM	Single (Clear)	Yes	1.09	0.70	N	90.0ft²	0.0 ft 0 in	0.0 ft 0 in	None	None
2	S	2	TIM	Single (Clear)	Yes	1.09	0.70	N	90.0ft²	0.0 ft 0 in	0.0 ft 0 in	None	None
3	E	3	TIM	Single (Clear)	Yes	1.09	0.70	N	45.0ft²	0.0 ft 0 in	0.0 ft 0 in	None	None

# Building Input Summary Report

## WINDOWS(Continued)

4	W	4	TIM	Single (Clear)	Yes	1.09	0.70	N	45.0ft²	0.0 ft 0 in	0.0 ft 0 in	None	None
---	---	---	-----	----------------	-----	------	------	---	---------	-------------	-------------	------	------

## INFILTRATION

#	Scope	Method	SLA	CFM50	ELA	EqLA	ACH	ACH50	Space(s)
1	Wholehouse	Proposed ACH	0.00046	3705	203.40	382.53	0.3350	9.5	All

## MASS

#	Mass Type	Area	Thickness	Furniture Fraction	Space
1	No Added Mass	0 ft²	0 ft	0.00	Main
2	No Added Mass	0 ft²	0 ft	0.00	BSMT-2

## HEATING SYSTEM

#	System Type	Subtype	AHRI #	Efficiency	Capacity kBtu/hr	---Geothermal HeatPump---			Ducts	Block
						Entry	Power	Volt	Current	
1	Electric Strip Heat	None		COP: 1.00	130.0		0.00	0.00	0.00	sys#1 1

## COOLING SYSTEM

#	System Type	Subtype	AHRI #	Efficiency	Capacity kBtu/hr	Air Flow cfm	SHR	Duct	Block
1	Central Unit	None		SEER:10	24.8	744	0.75	sys#1	1

## HOT WATER SYSTEM

#	System Type	Subtype	Location	EF	Cap	Use	SetPnt	Fixture Flow	Pipe Ins.	Pipe length
	Recirculation System	Recirc Control Type	Loop length	Branch length	Pump power	DWHR	Facilities Connected	Equal Flow	DWHR Eff	Other Credits

## DUCTS

Duct #	-----Supply-----			-----Return-----			Leakage Type	Air Handler	CFM 25 TOT	CFM 25 OUT	QN	RLF	HVAC # Heat Cool	
1	Main	6.0	385 ft²	Main	6.0	77 ft²	Prop. Air Leakage	Main	---	---	0.00	0.60	1	1

## MECHANICAL VENTILATION

Type	Supply CFM	Exhaust CFM	HRV	Fan	Run Time	Heating System	Cooling System
None	0.0	0.0	0.0	0.0 W	0 %	1 - Electric Strip Heat	1 - Central Unit

# Building Input Summary Report

TEMPERATURES													
Programable Thermostat: N				Ceiling Fans: N									
Cooling	[X] Jan	[X] Feb	[X] Mar	[X] Apr	[X] May	[X] Jun	[X] Jul	[X] Aug	[X] Sep	[X] Oct	[X] Nov	[X] Dec	
Heating	[X] Jan	[X] Feb	[X] Mar	[X] Apr	[X] May	[X] Jun	[X] Jul	[X] Aug	[X] Sep	[X] Oct	[X] Nov	[X] Dec	
Venting	[X] Jan	[X] Feb	[X] Mar	[X] Apr	[X] May	[X] Jun	[X] Jul	[X] Aug	[X] Sep	[X] Oct	[X] Nov	[X] Dec	
Thermostat Schedule: BESTEST-heating													
Schedule Type		Hours											
		1	2	3	4	5	6	7	8	9	10	11	12
Cooling (WD)	AM	78	78	78	78	78	78	78	78	78	78	78	78
	PM	78	78	78	78	78	78	78	78	78	78	78	78
Cooling (WEH)	AM	78	78	78	78	78	78	78	78	78	78	78	78
	PM	78	78	78	78	78	78	78	78	78	78	78	78
Heating (WD)	AM	68	68	68	68	68	68	68	68	68	68	68	68
	PM	68	68	68	68	68	68	68	68	68	68	68	68
Heating (WEH)	AM	68	68	68	68	68	68	68	68	68	68	68	68
	PM	68	68	68	68	68	68	68	68	68	68	68	68
CLOTHES DRYERS													
ID	Type	Screen	Location	Quantity	Fuel Type	Make	Model	Schedule	kWhPerYr				
1	Dryers	Default New	Main		Electricity			HERS2011	0				
RANGE OVENS													
ID	Type	Screen	Location	Type	Fuel Type	Make	Model	Cooktop	Oven				
1	Ranges	Default New	Main	Combo	Elec			Elec Flat Coil	Not Convec				
HARD WIRED LIGHTING													
ID	Type	Screen	Location	Total#	Quantity#	Comp FI	All Other FI	Bulb Type	Schedule	Watts per bulb			
1	Hard-Wired	By Count - Qualifying	Main	100	10				HERS2011				
2	Hard-Wired	Default New	Exterior						HERS2011				
3	Hard-Wired	Default New	Garage						HERS2011				
MISC ELECTRICAL LOADS													
ID	Type	Screen	Location	Item	Quantity	Catagory	Operating	Schedule	Off Standby				
1	Misc Elec Load	Simple Default	Main		1		1	HERS2011	1				

# Building Input Summary Report

<b>APPLIANCES &amp; LIGHTING SCHEDULES</b>														
Appliance Schedule: HERS2014			Hours											
Schedule Type			1	2	3	4	5	6	7	8	9	10	11	12
Occupancy peak:	400 Btu	AM	0.930	0.930	0.930	0.930	0.930	0.930	0.930	0.980	0.460	0.270	0.270	0.270
% Released:	100 %	PM	0.270	0.270	0.270	0.270	0.330	0.610	1.000	1.000	0.930	0.930	0.930	0.930
refrig peak:	0 W	AM	0.824	0.804	0.784	0.764	0.744	0.734	0.744	0.754	0.764	0.794	0.814	0.854
% Released:	100 %	PM	0.854	0.864	0.884	0.904	0.925	0.945	0.925	0.915	0.904	0.894	0.874	0.854
cWash peak:	0 W	AM	0.200	0.100	0.050	0.050	0.050	0.075	0.200	0.375	0.500	0.800	0.950	1.000
% Released:	30 %	PM	0.875	0.850	0.800	0.625	0.625	0.600	0.575	0.550	0.625	0.700	0.650	0.375
E-cDry peak:	119 W	AM	0.200	0.100	0.050	0.050	0.050	0.075	0.200	0.375	0.500	0.800	0.950	1.000
% Released:	15 %	PM	0.875	0.850	0.800	0.625	0.625	0.600	0.575	0.550	0.625	0.700	0.650	0.375
dWash peak:	0 W	AM	0.139	0.050	0.028	0.024	0.029	0.090	0.169	0.303	0.541	0.594	0.502	0.443
% Released:	60 %	PM	0.376	0.396	0.334	0.323	0.344	0.448	0.791	1.000	0.800	0.597	0.383	0.281
E-rOven peak:	122 W	AM	0.057	0.057	0.057	0.057	0.057	0.114	0.171	0.286	0.343	0.343	0.343	0.400
% Released:	80 %	PM	0.457	0.343	0.286	0.400	0.571	1.000	0.857	0.429	0.286	0.229	0.171	0.114
TVs peak:	151 W	AM	0.100	0.050	0.050	0.050	0.100	0.200	0.400	0.450	0.400	0.200	0.100	0.100
% Released:	100 %	PM	0.050	0.050	0.150	0.450	0.850	1.000	0.950	0.800	0.500	0.250	0.150	0.100
cFan peak:	0 W	AM	0.600	0.600	0.600	0.600	0.600	0.600	0.600	0.250	0.250	0.250	0.250	0.250
% Released:	100 %	PM	0.250	0.250	0.250	0.250	0.250	0.250	0.550	0.600	0.600	0.600	0.600	0.600
Igts-in peak:	943 W	AM	0.160	0.150	0.160	0.180	0.230	0.450	0.420	0.260	0.190	0.160	0.120	0.110
% Released:	100 %	PM	0.160	0.170	0.250	0.270	0.340	0.550	0.600	0.880	1.000	0.880	0.510	0.280
Igts-out peak:	68 W	AM	1.000	1.000	1.000	1.000	1.000	0.750	0.750	0.000	0.000	0.000	0.000	0.000
% Released:	0 %	PM	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.750	0.750	0.750	1.000
Igts-gar peak:	0 W	AM	0.000	0.000	0.000	0.000	0.000	0.500	0.750	1.000	0.750	0.500	0.000	0.000
% Released:	0 %	PM	0.000	0.000	0.500	0.500	0.750	1.000	0.750	0.500	0.000	0.000	0.000	0.000
MEL peak:	369 W	AM	0.500	0.500	0.500	0.750	0.750	0.850	1.000	1.000	1.000	1.000	0.900	0.900
% Released:	90 %	PM	0.900	0.900	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.850	0.750	0.750

2017 Florida Auto Generation Test Results:

Software Name: EnergyGauge USA 6.0

User input data fields indicated by pale yellow

Reference Home Building Component	Test 1	Results	Test 2	Results	Test 3	Results	Test 4	Results
Above-grade walls (U <sub>o</sub> )	0.084	0.084	0.084	0.084	0.084	0.084	0.084	0.084
Above-grade wall solar absorptance (α)	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75
Above-grade wall infrared emittance (ε)	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Basement walls (U <sub>o</sub> )	n/a	n/a	n/a	n/a	n/a	n/a	0.36	0.36
Above-grade floors (U <sub>o</sub> )	0.064	0.064	0.064	0.064	n/a	n/a	n/a	n/a
Slab insulation R-Value	n/a	n/a	n/a	n/a	0	0	0	0
Ceilings (U <sub>o</sub> )	0.030	0.030	0.030	0.030	0.035	0.035	0.030	0.030
Roof solar absorptance (α)	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75
Roof infrared emittance (ε)	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Attic vent area* (ft <sup>2</sup> )	5.13	5.13	5.13	5.13	5.13	5.13	5.13	5.13
Crawlspace vent area* (ft <sup>2</sup> )	n/a	n/a	10.26	n/a	n/a	n/a	n/a	n/a
Exposed masonry floor area * (ft <sup>2</sup> )	n/a	n/a	n/a	n/a	307.8	307.8	307.8	307.8
Carpet & pad R-Value	n/a	n/a	n/a	n/a	2.0	2.0	2.0	2.0
Door Area (ft <sup>2</sup> )	40	40	40	40	40	40	40	40
Door U-Factor	0.40	0.4	0.40	0.4	0.50	0.5	0.40	0.40
North window area* (ft <sup>2</sup> )	57.71	57.71	57.71	57.71	57.71	57.71	50.02	50.02
South window area* (ft <sup>2</sup> )	57.71	57.71	57.71	57.71	57.71	57.71	50.02	50.02
East window area* (ft <sup>2</sup> )	57.71	57.71	57.71	57.71	57.71	57.71	50.02	50.02
West window area* (ft <sup>2</sup> )	57.71	57.71	57.71	57.71	57.71	57.71	50.02	50.02
Window U-Factor	0.40	0.4	0.40	0.4	0.50	0.5	0.40	0.4
Window SHGC <sub>o</sub> (heating)	0.217	0.217	0.217	0.217	0.217	0.217	0.217	0.217
Window SHGC <sub>o</sub> (cooling)	0.217	0.217	0.217	0.217	0.217	0.217	0.217	0.217
ACH50	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Internal gains* (Btu/day)	66,840	66,840	66,840	66,840	62,736	62,736	107,572	107,572
Water heater gallons per day	60	60	60	60	50	50	70	70
Water heater set point temperature	120 F	120	120 F	120	120 F	120	120 F	120
Water heater efficiency	EF = 0.62	1	EF = 0.94	0.94	EF = 0.95	1	EF = 0.62	0.62
Labeled heating system rating	AFUE = 80%	80%	HSPF = 8.2	8.2	HSPF = 8.2	8.2	AFUE = 80%	80%
Labeled cooling system rating	SEER = 14	14	SEER = 14	14	SEER = 14	14	SEER = 14	14
Air Distribution System Efficiency	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Thermostat Type	Manual	Manual	Manual	Manual	Manual	Manual	Manual	Manual
Heating thermostat settings	72 F (all hours)	72	72 F (all hours)	72 F (all hours)	72 F (all hours)	72	72 F (all hours)	72
Cooling thermostat settings	75 F (all hours)	75	75 F (all hours)	75	75 F (all hours)	75	75 F (all hours)	75
e-Ratio	1.00	1.000	1.00	1.000	1.00	1.000	1.00	1.000

# Reference Home Characteristics

FSEC  
111 Anywhere Lane  
Tallahassee, FL,  
Registration #:

Title: FL-AutoGen\_case1  
FLBase2017

TMY City: FL\_TALLAHASSEE\_  
Elec Util: EnergyGauge Default  
Gas Util: EnergyGauge Default  
Run Date:

HERS BESTEST basecase home

Above-grade Walls (Uo)	0.084
Above-grade Wall Solar Absorptance	0.75
Above-grade Wall Infrared Emittance	0.90
Basement Walls (Uo)	n/a
Above-grade Floors (Uo)	0.064
Slab Insulation R-Value	n/a
Ceilings (Uo)	0.030
Roof Solar Absorptance	0.75
Roof Infrared Emittance	0.90
Attic Vent Area (ft <sup>2</sup> )	5.13
Crawlspace Vent Area (ft <sup>2</sup> )	n/a
Exposed Masonry Floor Area (ft <sup>2</sup> )	n/a
Carpet & Pad R-Value	n/a
Door Area (ft <sup>2</sup> )	40
Door U-Factor	0.40
North Window Area (ft <sup>2</sup> )	57.71
South Window Area (ft <sup>2</sup> )	57.71
East Window Area (ft <sup>2</sup> )	57.71
West Window Area (ft <sup>2</sup> )	57.71
Window U-Factor	0.40
Window SHGC (Heating)	0.2169
Window SHGC (Cooling)	0.217
ACH50	7.00
Internal Gains * (Btu/day)	66840
Water heater gallons per day	60.00
Water heater set point temperature	120.00
Water heater efficiency rating	0.62
Labeled Heating System Rating and Efficiency	AFUE = 80%
Labeled Cooling System Rating and Efficiency	SEER = 14.0
Air Distribution System Efficiency	0.88
Thermostat Type	Manual
Heating Thermostat Settings	72.0, 72.0, 72.0, 72.0, 72.0, 72.0, 72.0, 72.0
	72.0, 72.0, 72.0, 72.0, 72.0, 72.0, 72.0, 72.0
	72.0, 72.0, 72.0, 72.0, 72.0, 72.0, 72.0, 72.0
Cooling Thermostat Settings	75.0, 75.0, 75.0, 75.0, 75.0, 75.0, 75.0, 75.0
	75.0, 75.0, 75.0, 75.0, 75.0, 75.0, 75.0, 75.0
	75.0, 75.0, 75.0, 75.0, 75.0, 75.0, 75.0, 75.0



# Reference Home Characteristics

FSEC  
111 Anywhere Lane  
Orlando, FL,  
Registration #:

Title: FL-AutoGen\_case2  
FLBase2017

TMY City: FL\_ORLANDO\_INTL  
Elec Util: EnergyGauge Default  
Gas Util: EnergyGauge Default  
Run Date: 09/21/2017 16:20:22

HERS BESTEST basecase home

Above-grade Walls (Uo)	0.084
Above-grade Wall Solar Absorptance	0.75
Above-grade Wall Infrared Emittance	0.90
Basement Walls (Uo)	n/a
Above-grade Floors (Uo)	0.064
Slab Insulation R-Value	n/a
Ceilings (Uo)	0.030
Roof Solar Absorptance	0.75
Roof Infrared Emittance	0.90
Attic Vent Area (ft²)	5.13
Crawlspace Vent Area (ft²)	n/a
Exposed Masonry Floor Area (ft²)	n/a
Carpet & Pad R-Value	n/a
Door Area (ft²)	40
Door U-Factor	0.40
North Window Area (ft²)	57.71
South Window Area (ft²)	57.71
East Window Area (ft²)	57.71
West Window Area (ft²)	57.71
Window U-Factor	0.40
Window SHGC (Heating)	0.2169
Window SHGC (Cooling)	0.217
ACH50	7.00
Internal Gains * (Btu/day)	66840
Water heater gallons per day	60.00
Water heater set point temperature	120.00
Water heater efficiency rating	0.94
Labeled Heating System Rating and Efficiency	HSPF = 8.2
Labeled Cooling System Rating and Efficiency	SEER = 14.0
Air Distribution System Efficiency	0.88
Thermostat Type	Manual
Heating Thermostat Settings	72.0, 72.0, 72.0, 72.0, 72.0, 72.0, 72.0, 72.0
	72.0, 72.0, 72.0, 72.0, 72.0, 72.0, 72.0, 72.0
	72.0, 72.0, 72.0, 72.0, 72.0, 72.0, 72.0, 72.0
Cooling Thermostat Settings	75.0, 75.0, 75.0, 75.0, 75.0, 75.0, 75.0, 75.0
	75.0, 75.0, 75.0, 75.0, 75.0, 75.0, 75.0, 75.0
	75.0, 75.0, 75.0, 75.0, 75.0, 75.0, 75.0, 75.0

# Reference Home Characteristics

FSEC  
111 Anywhere Lane  
Miami, FL,  
Registration #:

Title: FL-AutoGen\_case3  
FLBase2017

TMY City: FL\_MIAMI\_INTL\_AP  
Elec Util: EnergyGauge Default  
Gas Util: EnergyGauge Default  
Run Date:

HERS BESTEST insulated slab case

Above-grade Walls (Uo)	0.084
Above-grade Wall Solar Absorptance	0.75
Above-grade Wall Infrared Emittance	0.90
Basement Walls (Uo)	n/a
Above-grade Floors (Uo)	n/a
Slab Insulation R-Value	0
Ceilings (Uo)	0.035
Roof Solar Absorptance	0.75
Roof Infrared Emittance	0.90
Attic Vent Area (ft <sup>2</sup> )	5.13
Crawlspace Vent Area (ft <sup>2</sup> )	n/a
Exposed Masonry Floor Area (ft <sup>2</sup> )	307.8
Carpet & Pad R-Value	2.0
Door Area (ft <sup>2</sup> )	40
Door U-Factor	0.50
North Window Area (ft <sup>2</sup> )	57.71
South Window Area (ft <sup>2</sup> )	57.71
East Window Area (ft <sup>2</sup> )	57.71
West Window Area (ft <sup>2</sup> )	57.71
Window U-Factor	0.50
Window SHGC (Heating)	0.2169
Window SHGC (Cooling)	0.217
ACH50	7.00
Internal Gains * (Btu/day)	62736
Water heater gallons per day	50.00
Water heater set point temperature	120.00
Water heater efficiency rating	0.95
Labeled Heating System Rating and Efficiency	HSPF = 8.2
Labeled Cooling System Rating and Efficiency	SEER = 14.0
Air Distribution System Efficiency	0.88
Thermostat Type	Manual
Heating Thermostat Settings	72.0, 72.0, 72.0, 72.0, 72.0, 72.0, 72.0, 72.0
	72.0, 72.0, 72.0, 72.0, 72.0, 72.0, 72.0, 72.0
	72.0, 72.0, 72.0, 72.0, 72.0, 72.0, 72.0, 72.0
Cooling Thermostat Settings	75.0, 75.0, 75.0, 75.0, 75.0, 75.0, 75.0, 75.0
	75.0, 75.0, 75.0, 75.0, 75.0, 75.0, 75.0, 75.0
	75.0, 75.0, 75.0, 75.0, 75.0, 75.0, 75.0, 75.0

# Reference Home Characteristics

FSEC  
111 Anywhere Lane  
Jacksonville, FL,  
Registration #:

Title: FL-AutoGen\_case4  
FLBase2017

TMY City: FL\_JACKSONVILLE\_  
Elec Util: EnergyGauge Default  
Gas Util: EnergyGauge Default  
Run Date:

HERS BESTEST insulated basement case

Above-grade Walls (Uo)	0.084
Above-grade Wall Solar Absorptance	0.75
Above-grade Wall Infrared Emittance	0.90
Basement Walls (Uo)	0.360
Above-grade Floors (Uo)	n/a
Slab Insulation R-Value	0
Ceilings (Uo)	0.030
Roof Solar Absorptance	0.75
Roof Infrared Emittance	0.90
Attic Vent Area (ft <sup>2</sup> )	5.13
Crawlspace Vent Area (ft <sup>2</sup> )	n/a
Exposed Masonry Floor Area (ft <sup>2</sup> )	307.8
Carpet & Pad R-Value	2.0
Door Area (ft <sup>2</sup> )	40
Door U-Factor	0.40
North Window Area (ft <sup>2</sup> )	50.02
South Window Area (ft <sup>2</sup> )	50.02
East Window Area (ft <sup>2</sup> )	50.02
West Window Area (ft <sup>2</sup> )	50.02
Window U-Factor	0.40
Window SHGC (Heating)	0.2169
Window SHGC (Cooling)	0.217
ACH50	7.00
Internal Gains * (Btu/day)	107572
Water heater gallons per day	70.00
Water heater set point temperature	120.00
Water heater efficiency rating	0.62
Labeled Heating System Rating and Efficiency	AFUE = 80%
Labeled Cooling System Rating and Efficiency	SEER = 14.0
Air Distribution System Efficiency	0.88
Thermostat Type	Manual
Heating Thermostat Settings	72.0, 72.0, 72.0, 72.0, 72.0, 72.0, 72.0, 72.0
	72.0, 72.0, 72.0, 72.0, 72.0, 72.0, 72.0, 72.0
	72.0, 72.0, 72.0, 72.0, 72.0, 72.0, 72.0, 72.0
Cooling Thermostat Settings	75.0, 75.0, 75.0, 75.0, 75.0, 75.0, 75.0, 75.0
	75.0, 75.0, 75.0, 75.0, 75.0, 75.0, 75.0, 75.0
	75.0, 75.0, 75.0, 75.0, 75.0, 75.0, 75.0, 75.0

## Results

### Cooling tests:

Case	Cool	Cool Fan	Cool Tot	% change
HVAC-1a	5422	956	6378	---
HVAC-1b	4169	956	5125	-19.65%

### Criteria

min	max	
-21.24%	-17.38%	pass

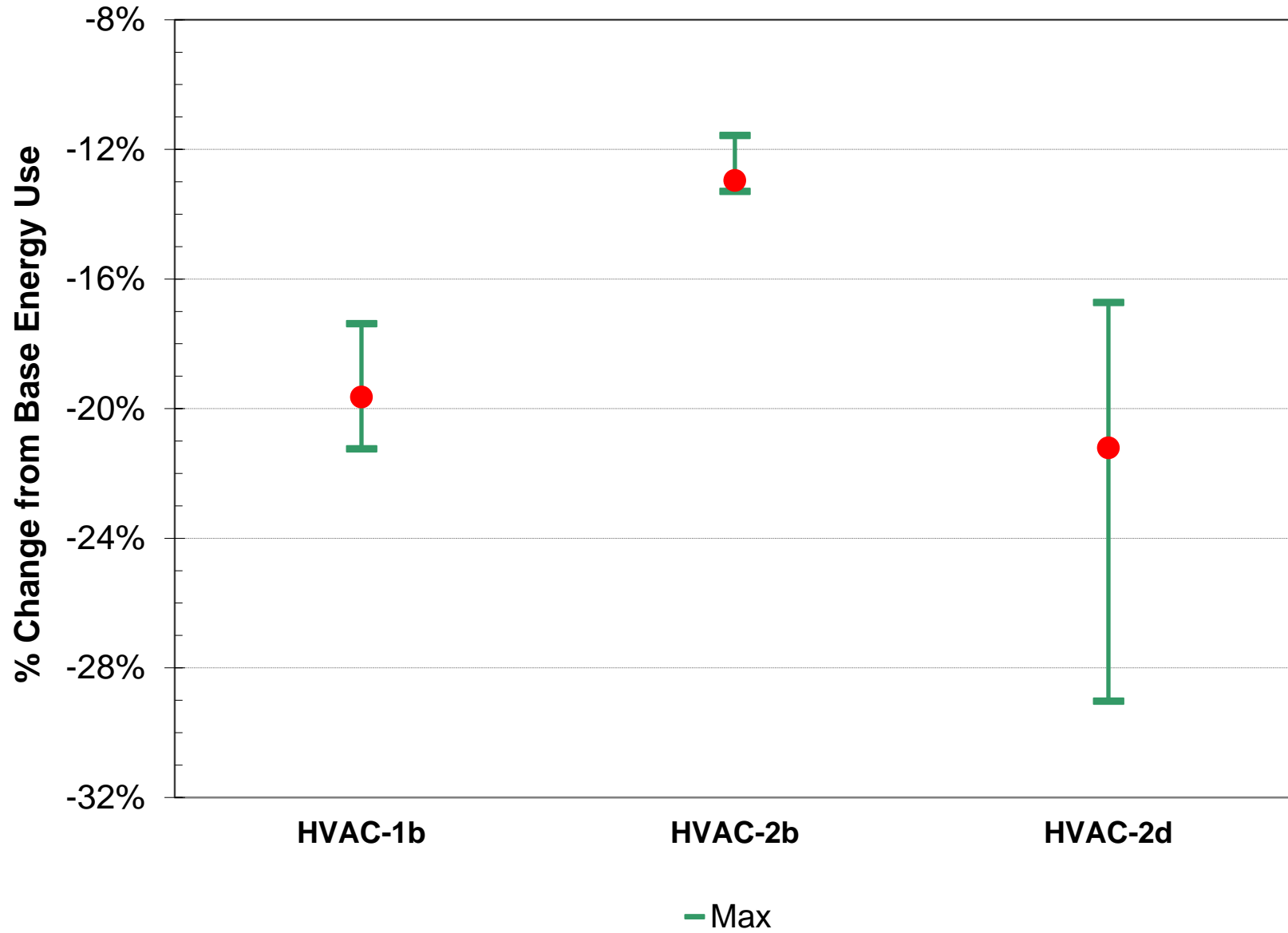
### Heating tests:

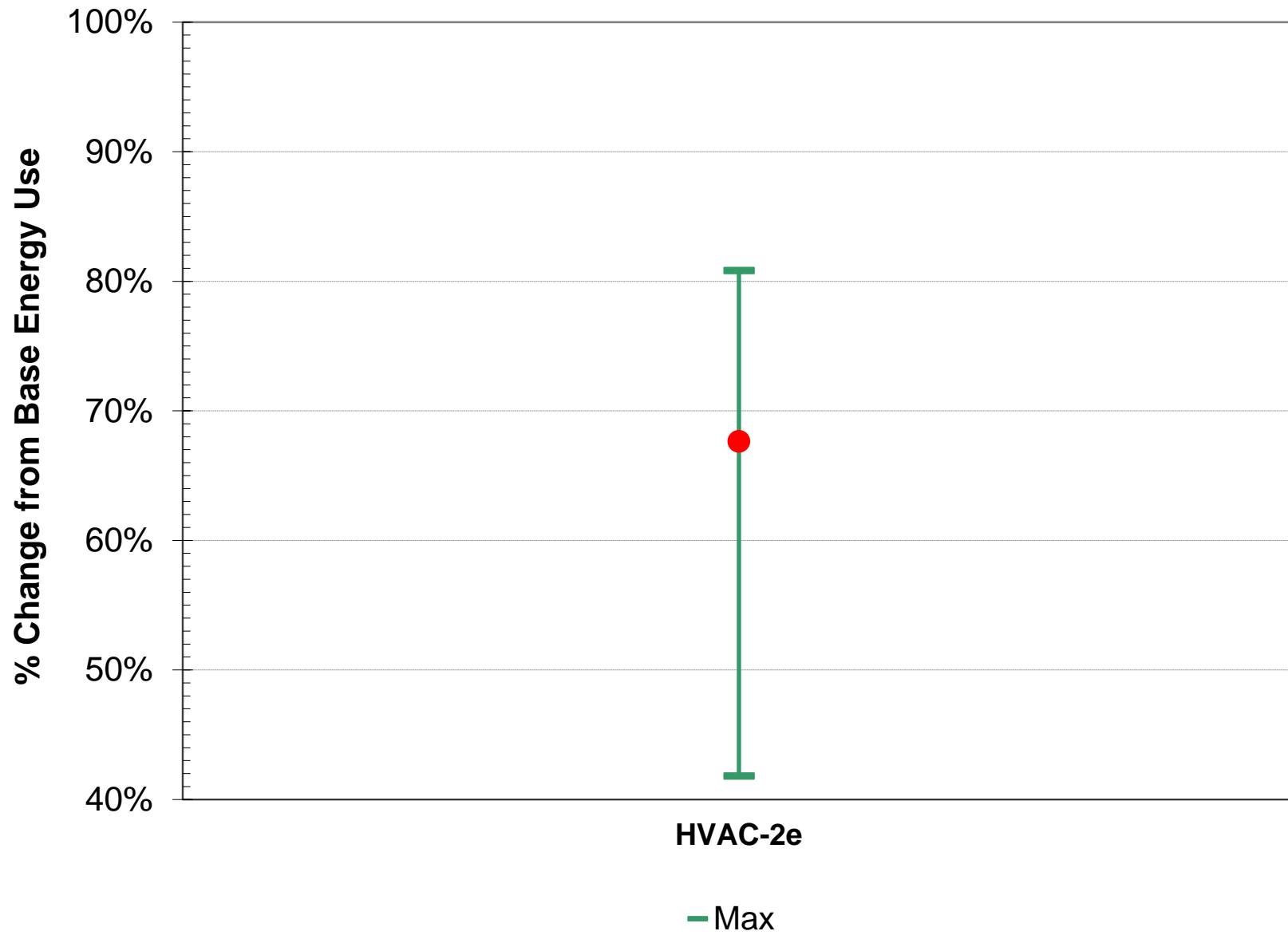
Case	Heat	Heat Fan	Heat Tot	% change
HVAC-2a	857	668	87.98	---
HVAC-2b	743	668	76.58	-12.96%

-13.30%	-11.57%	pass
---------	---------	------

Case	Heat	Heat Fan	Heat Tot	% change
HVAC-2c	10118	1424	11542	---
HVAC-2d	8005	1089	9094	-21.21%
HVAC-2e	18345	1003	19348	67.63%

-29.03%	-16.73%	pass
41.81%	80.81%	pass





Appendix D  
**RESNET HVAC Test Reports**

# Annual Energy Summary

## Wholehouse Summary

FSEC  
111 Anywhere Lane  
Las Vegas, NV

Project Title:  
HVAC\_TestCase-1a  
Building Type: User  
RESNET HVAC test suite

TMY\_City:NV\_LASVEGAS  
Elec Util: EnergyGauge Default  
Gas Util: Florida 2012  
9/19/2017

End-Use	Energy Consumption	Annual Cost
Cooling Electric	5422 kWh	\$644
Cooling Fan	956 kWh	\$114
Mechanical Vent Fan	0 kWh	\$0
<b>Total Cooling</b>	<b>6378 kWh</b>	<b>\$758</b>
Heating		
Heating Fan/Pump	0 kWh	\$0
Mechanical Vent Fan	0 kWh	\$0
<b>Total Heating</b>	<b>0 kWh</b>	<b>\$0</b>
Hot Water	0 kWh	\$0
Hot Water Pump	0 kWh	\$0
<b>Total Hot Water</b>	<b>0 kWh</b>	<b>\$0</b>
Ceiling Fans	0 kWh	\$0
Clothes Washer	66 kWh	\$8
Dehumidifier	0 kWh	\$0
Dishwasher	0 kWh	\$0
Dryer Electric	354 kWh	\$42
Lighting	1863 kWh	\$221
Miscellaneous	1401 kWh	\$166
Pool Pump	0 kWh	\$0
Range Electric	331 kWh	\$39
Refrigerator	0 kWh	\$0
Television	413 kWh	\$49
Total (kWh)	10805 kWh	\$1284
Total (Therms)	0 Therms	\$0
Total (Oil Gallons)	0 Gallons	\$0
Total (Propane Gallons)	0 Gallons	\$0
PV Produced (kWh)	0 kWh	\$0
Assumes net metering		
Total Cost		\$1284

**Emissions** (Calculated as Total - PV Produced)  
SO2 = 4.64 Lbs    NOX = 8.90 Lbs    CO2 = 5.73 Tons



# Annual Energy Summary

## Wholehouse Summary

FSEC  
111 Anywhere Lane  
Las Vegas, NV

Project Title:  
HVAC\_TestCase-1b  
Building Type: User  
RESNET HVAC test suite

TMY\_City:NV\_LASVEGAS  
Elec Util: EnergyGauge Default  
Gas Util: Florida 2012  
9/19/2017

End-Use	Energy Consumption	Annual Cost
Cooling Electric	4169 kWh	\$495
Cooling Fan	956 kWh	\$114
Mechanical Vent Fan	0 kWh	\$0
<b>Total Cooling</b>	<b>5125 kWh</b>	<b>\$609</b>
Heating		
Heating Fan/Pump	0 kWh	\$0
Mechanical Vent Fan	0 kWh	\$0
<b>Total Heating</b>	<b>0 kWh</b>	<b>\$0</b>
Hot Water	0 kWh	\$0
Hot Water Pump	0 kWh	\$0
<b>Total Hot Water</b>	<b>0 kWh</b>	<b>\$0</b>
Ceiling Fans	0 kWh	\$0
Clothes Washer	66 kWh	\$8
Dehumidifier	0 kWh	\$0
Dishwasher	0 kWh	\$0
Dryer Electric	354 kWh	\$42
Lighting	1863 kWh	\$221
Miscellaneous	1401 kWh	\$166
Pool Pump	0 kWh	\$0
Range Electric	331 kWh	\$39
Refrigerator	0 kWh	\$0
Television	413 kWh	\$49
Total (kWh)	9552 kWh	\$1135
Total (Therms)	0 Therms	\$0
Total (Oil Gallons)	0 Gallons	\$0
Total (Propane Gallons)	0 Gallons	\$0
PV Produced (kWh)	0 kWh	\$0
Assumes net metering		
Total Cost		\$1135

**Emissions** (Calculated as Total - PV Produced)  
SO2 = 4.10 Lbs    NOX = 7.87 Lbs    CO2 = 5.07 Tons

# Annual Energy Summary

## Wholehouse Summary

FSEC  
111 Anywhere Lane  
Colorado Springs, CO

Project Title:  
HVAC\_TestCase-2a  
Building Type: User  
HERS BESTEST basecase home

TMY\_City:CO\_COLORADOSPRINGS  
Elec Util: EnergyGauge Default  
Gas Util: Florida 2012  
9/19/2017

End-Use	Energy Consumption	Annual Cost
<b>Cooling</b>		
Cooling Fan	0 kWh	\$0
Mechanical Vent Fan	0 kWh	\$0
<b>Total Cooling</b>	<b>0 kWh</b>	<b>\$0</b>
<b>Heating</b>		
Therms	857 Therms	\$1457
Heating Fan/Pump	668 kWh	\$79
Mechanical Vent Fan	0 kWh	\$0
<b>Total Heating</b>		<b>\$1537</b>
<b>Hot Water</b>		
Hot Water	0 kWh	\$0
Hot Water Pump	0 kWh	\$0
<b>Total Hot Water</b>	<b>0 kWh</b>	<b>\$0</b>
Ceiling Fans	0 kWh	\$0
Clothes Washer	66 kWh	\$8
Dehumidifier	0 kWh	\$0
Dishwasher	0 kWh	\$0
Dryer Electric	354 kWh	\$42
Lighting	1863 kWh	\$221
Miscellaneous	1401 kWh	\$166
Pool Pump	0 kWh	\$0
Range Electric	331 kWh	\$39
Refrigerator	0 kWh	\$0
Television	413 kWh	\$49
<hr/>		
Total (kWh)	5095 kWh	\$605
Total (Therms)	857 Therms	\$1457
Total (Oil Gallons)	0 Gallons	\$0
Total (Propane Gallons)	0 Gallons	\$0
PV Produced (kWh)	0 kWh	\$0
Assumes net metering		
<b>Total Cost</b>		<b>\$2063</b>

**Emissions** (Calculated as Total - PV Produced)  
SO2 = 9.70 Lbs    NOX = 7985.79 Lbs    CO2 = 9.47 Tons

# Annual Energy Summary

## Wholehouse Summary

FSEC  
111 Anywhere Lane  
Colorado Springs, CO

Project Title: HVAC\_TestCase-2b  
Building Type: User  
HERS BESTEST basecase home

TMY\_City:CO\_COLORADOSPRINGS  
Elec Util: EnergyGauge Default  
Gas Util: Florida 2012  
9/19/2017

End-Use	Energy Consumption	Annual Cost
<b>Cooling</b>		
Cooling Fan	0 kWh	\$0
Mechanical Vent Fan	0 kWh	\$0
<b>Total Cooling</b>	<b>0 kWh</b>	<b>\$0</b>
<b>Heating</b>		
Therms	743 Therms	\$1263
Heating Fan/Pump	668 kWh	\$79
Mechanical Vent Fan	0 kWh	\$0
<b>Total Heating</b>		<b>\$1342</b>
<b>Hot Water</b>		
Hot Water	0 kWh	\$0
Hot Water Pump	0 kWh	\$0
<b>Total Hot Water</b>	<b>0 kWh</b>	<b>\$0</b>
Ceiling Fans	0 kWh	\$0
Clothes Washer	66 kWh	\$8
Dehumidifier	0 kWh	\$0
Dishwasher	0 kWh	\$0
Dryer Electric	354 kWh	\$42
Lighting	1863 kWh	\$221
Miscellaneous	1401 kWh	\$166
Pool Pump	0 kWh	\$0
Range Electric	331 kWh	\$39
Refrigerator	0 kWh	\$0
Television	413 kWh	\$49
<hr/>		
Total (kWh)	5095 kWh	\$605
Total (Therms)	743 Therms	\$1263
Total (Oil Gallons)	0 Gallons	\$0
Total (Propane Gallons)	0 Gallons	\$0
PV Produced (kWh)	0 kWh	\$0
Assumes net metering		
<hr/>		
Total Cost		\$1868

**Emissions** (Calculated as Total - PV Produced)  
SO2 = 9.70 Lbs NOX = 6922.80 Lbs CO2 = 8.79 Tons

# Annual Energy Summary

## Wholehouse Summary

FSEC  
111 Anywhere Lane  
Colorado Springs, CO

Project Title: HVAC\_TestCase-2c  
Building Type: User  
HERS BESTEST basecase home

TMY\_City:CO\_COLORADOSPRINGS  
Elec Util: EnergyGauge Default  
Gas Util: Florida 2012  
9/19/2017

End-Use	Energy Consumption	Annual Cost
<b>Cooling</b>		
Cooling Fan	0 kWh	\$0
Mechanical Vent Fan	0 kWh	\$0
<b>Total Cooling</b>	<b>0 kWh</b>	<b>\$0</b>
<b>Heating</b>		
Heating Electric	10118 kWh	\$1202
Heating Fan/Pump	1424 kWh	\$169
Mechanical Vent Fan	0 kWh	\$0
<b>Total Heating</b>	<b>11542 kWh</b>	<b>\$1371</b>
<b>Hot Water</b>		
Hot Water	0 kWh	\$0
Hot Water Pump	0 kWh	\$0
<b>Total Hot Water</b>	<b>0 kWh</b>	<b>\$0</b>
Ceiling Fans	0 kWh	\$0
Clothes Washer	66 kWh	\$8
Dehumidifier	0 kWh	\$0
Dishwasher	0 kWh	\$0
Dryer Electric	354 kWh	\$42
Lighting	1863 kWh	\$221
Miscellaneous	1401 kWh	\$166
Pool Pump	0 kWh	\$0
Range Electric	331 kWh	\$39
Refrigerator	0 kWh	\$0
Television	413 kWh	\$49
<hr/>		
Total (kWh)	15969 kWh	\$1897
Total (Therms)	0 Therms	\$0
Total (Oil Gallons)	0 Gallons	\$0
Total (Propane Gallons)	0 Gallons	\$0
PV Produced (kWh)	0 kWh	\$0
Assumes net metering		
<hr/>		
Total Cost		\$1897

**Emissions** (Calculated as Total - PV Produced)  
SO2 = 30.40 Lbs NOX = 40.43 Lbs CO2 = 13.87 Tons

# Annual Energy Summary

## Wholehouse Summary

FSEC  
111 Anywhere Lane  
Colorado Springs, CO

Project Title: TMY\_City:CO\_COLORADOSPRINGS  
HVAC\_TestCase-2d  
Building Type: User  
HERS BESTEST basecase home

Elec Util: EnergyGauge Default  
Gas Util: Florida 2012  
9/19/2017

End-Use	Energy Consumption	Annual Cost
<b>Cooling</b>		
Cooling Fan	0 kWh	\$0
Mechanical Vent Fan	0 kWh	\$0
<b>Total Cooling</b>	<b>0 kWh</b>	<b>\$0</b>
<b>Heating</b>		
Heating Electric	8005 kWh	\$951
Heating Fan/Pump	1089 kWh	\$129
Mechanical Vent Fan	0 kWh	\$0
<b>Total Heating</b>	<b>9094 kWh</b>	<b>\$1080</b>
<b>Hot Water</b>		
Hot Water	0 kWh	\$0
Hot Water Pump	0 kWh	\$0
<b>Total Hot Water</b>	<b>0 kWh</b>	<b>\$0</b>
Ceiling Fans	0 kWh	\$0
Clothes Washer	66 kWh	\$8
Dehumidifier	0 kWh	\$0
Dishwasher	0 kWh	\$0
Dryer Electric	354 kWh	\$42
Lighting	1863 kWh	\$221
Miscellaneous	1401 kWh	\$166
Pool Pump	0 kWh	\$0
Range Electric	331 kWh	\$39
Refrigerator	0 kWh	\$0
Television	413 kWh	\$49
<hr/>		
Total (kWh)	13521 kWh	\$1606
Total (Therms)	0 Therms	\$0
Total (Oil Gallons)	0 Gallons	\$0
Total (Propane Gallons)	0 Gallons	\$0
PV Produced (kWh)	0 kWh	\$0
Assumes net metering		
<hr/>		
Total Cost		\$1606

**Emissions** (Calculated as Total - PV Produced)  
SO2 = 25.74 Lbs    NOX = 34.23 Lbs    CO2 = 11.74 Tons

# Annual Energy Summary

## Wholehouse Summary

FSEC  
111 Anywhere Lane  
Colorado Springs, CO

Project Title: HVAC\_TestCase-2e  
Building Type: User  
HERS BESTEST basecase home

TMY\_City:CO\_COLORADOSPRINGS  
Elec Util: EnergyGauge Default  
Gas Util: Florida 2012  
9/19/2017

End-Use	Energy Consumption	Annual Cost
<b>Cooling</b>		
Cooling Fan	0 kWh	\$0
Mechanical Vent Fan	0 kWh	\$0
<b>Total Cooling</b>	<b>0 kWh</b>	<b>\$0</b>
<b>Heating</b>		
Heating Electric	18345 kWh	\$2179
Heating Fan/Pump	1003 kWh	\$119
Mechanical Vent Fan	0 kWh	\$0
<b>Total Heating</b>	<b>19348 kWh</b>	<b>\$2299</b>
<b>Hot Water</b>		
Hot Water	0 kWh	\$0
Hot Water Pump	0 kWh	\$0
<b>Total Hot Water</b>	<b>0 kWh</b>	<b>\$0</b>
Ceiling Fans	0 kWh	\$0
Clothes Washer	66 kWh	\$8
Dehumidifier	0 kWh	\$0
Dishwasher	0 kWh	\$0
Dryer Electric	354 kWh	\$42
Lighting	1863 kWh	\$221
Miscellaneous	1401 kWh	\$166
Pool Pump	0 kWh	\$0
Range Electric	331 kWh	\$39
Refrigerator	0 kWh	\$0
Television	413 kWh	\$49
<b>Total (kWh)</b>	<b>23775 kWh</b>	<b>\$2824</b>
Total (Therms)	0 Therms	\$0
Total (Oil Gallons)	0 Gallons	\$0
Total (Propane Gallons)	0 Gallons	\$0
PV Produced (kWh)	0 kWh	\$0
Assumes net metering		
<b>Total Cost</b>		<b>\$2824</b>

**Emissions** (Calculated as Total - PV Produced)  
SO2 = 45.27 Lbs NOX = 60.19 Lbs CO2 = 20.65 Tons

**DSE Test Suite Results**

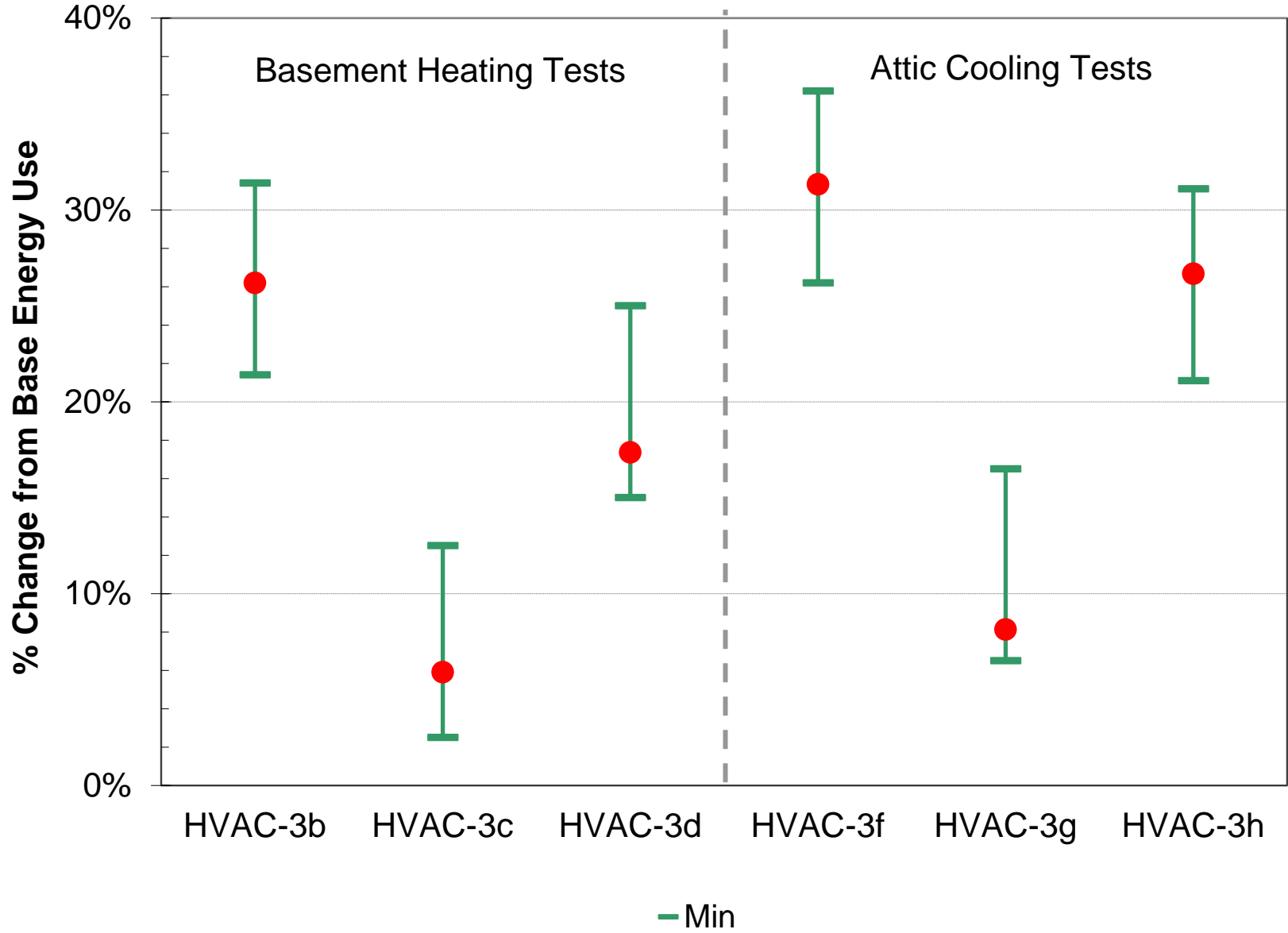
**Software Name:** EnergyGauge USA 6.0

User input data fields indicated by pale yellow  
 Test result fields indicated by pale green

**Results:**

Base Cases	Heat/cool	Fan	Total	% change	
HVAC-3a	755	591	77.52	---	base for cases 3b - 3d
HVAC-3e	5482	968	6450	---	base for cases 3f - 3h

Test Cases	Heat/cool	Fan	Total	% change	Criteria:			Pass/Fail
					max	avg	min	
HVAC-3b	959	562	97.82	26.2%	31.4%	26.4%	21.4%	pass
HVAC-3c	801	583	82.09	5.9%	12.5%	7.5%	2.5%	pass
HVAC-3d	888	636	90.97	17.4%	25.0%	20.0%	15.0%	pass
HVAC-3f	7196	1275	8471	31.3%	36.2%	31.2%	26.2%	pass
HVAC-3g	5928	1046	6974	8.1%	16.5%	11.5%	6.5%	pass
HVAC-3h	6951	1219	8170	26.7%	31.1%	26.1%	21.1%	pass





Appendix E  
**RESNET DSE Test Reports**

# Annual Energy Summary

## Wholehouse Summary

FSEC  
111 Anywhere Lane  
Colorado Springs, CO

Project Title: TMY\_City:CO\_COLORADOSPRINGS  
DSE\_HVAC-3a  
Building Type: User  
HERS BESTEST basement case

Elec Util: EnergyGauge Default  
Gas Util: Florida 2012  
9/19/2017

End-Use	Energy Consumption	Annual Cost
<b>Cooling</b>		
Cooling Fan	0 kWh	\$0
Mechanical Vent Fan	0 kWh	\$0
<b>Total Cooling</b>	<b>0 kWh</b>	<b>\$0</b>
<b>Heating</b>		
Therms	755 Therms	\$1283
Heating Fan/Pump	591 kWh	\$70
Mechanical Vent Fan	0 kWh	\$0
<b>Total Heating</b>		<b>\$1353</b>
<b>Hot Water</b>		
Hot Water	0 kWh	\$0
Hot Water Pump	0 kWh	\$0
<b>Total Hot Water</b>	<b>0 kWh</b>	<b>\$0</b>
Ceiling Fans	0 kWh	\$0
Clothes Washer	66 kWh	\$8
Dehumidifier	0 kWh	\$0
Dishwasher	0 kWh	\$0
Dryer Electric	354 kWh	\$42
Lighting	1863 kWh	\$221
Miscellaneous	1401 kWh	\$166
Pool Pump	0 kWh	\$0
Range Electric	331 kWh	\$39
Refrigerator	0 kWh	\$0
Television	413 kWh	\$49
<hr/>		
Total (kWh)	5018 kWh	\$596
Total (Therms)	754 Therms	\$1283
Total (Oil Gallons)	0 Gallons	\$0
Total (Propane Gallons)	0 Gallons	\$0
PV Produced (kWh)	0 kWh	\$0
Assumes net metering		
<b>Total Cost</b>		<b>\$1879</b>

**Emissions** (Calculated as Total - PV Produced)  
SO2 = 9.55 Lbs NOX = 7029.55 Lbs CO2 = 8.79 Tons

# Annual Energy Summary

## Wholehouse Summary

FSEC  
111 Anywhere Lane  
Colorado Springs, CO

Project Title: TMY\_City:CO\_COLORADOSPRINGS  
DSE\_HVAC-3b  
Building Type: User  
HERS BESTEST basement case

Elec Util: EnergyGauge Default  
Gas Util: Florida 2012  
9/19/2017

End-Use	Energy Consumption	Annual Cost
<b>Cooling</b>		
Cooling Fan	0 kWh	\$0
Mechanical Vent Fan	0 kWh	\$0
<b>Total Cooling</b>	<b>0 kWh</b>	<b>\$0</b>
<b>Heating</b>		
Therms	959 Therms	\$1631
Heating Fan/Pump	562 kWh	\$67
Mechanical Vent Fan	0 kWh	\$0
<b>Total Heating</b>		<b>\$1697</b>
<b>Hot Water</b>		
Hot Water	0 kWh	\$0
Hot Water Pump	0 kWh	\$0
<b>Total Hot Water</b>	<b>0 kWh</b>	<b>\$0</b>
Ceiling Fans	0 kWh	\$0
Clothes Washer	66 kWh	\$8
Dehumidifier	0 kWh	\$0
Dishwasher	0 kWh	\$0
Dryer Electric	354 kWh	\$42
Lighting	1863 kWh	\$221
Miscellaneous	1401 kWh	\$166
Pool Pump	0 kWh	\$0
Range Electric	331 kWh	\$39
Refrigerator	0 kWh	\$0
Television	413 kWh	\$49
<hr/>		
Total (kWh)	4989 kWh	\$593
Total (Therms)	959 Therms	\$1631
Total (Oil Gallons)	0 Gallons	\$0
Total (Propane Gallons)	0 Gallons	\$0
PV Produced (kWh)	0 kWh	\$0
Assumes net metering		
<b>Total Cost</b>		<b>\$2223</b>

**Emissions** (Calculated as Total - PV Produced)  
SO2 = 9.50 Lbs NOX = 8933.19 Lbs CO2 = 9.97 Tons

# Annual Energy Summary

## Wholehouse Summary

FSEC  
111 Anywhere Lane  
Colorado Springs, CO

Project Title: TMY\_City:CO\_COLORADOSPRINGS  
DSE\_HVAC-3c  
Building Type: User  
HERS BESTEST basement case

Elec Util: EnergyGauge Default  
Gas Util: Florida 2012  
9/19/2017

End-Use	Energy Consumption	Annual Cost
<b>Cooling</b>		
Cooling Fan	0 kWh	\$0
Mechanical Vent Fan	0 kWh	\$0
<b>Total Cooling</b>	<b>0 kWh</b>	<b>\$0</b>
<b>Heating</b>		
Therms	801 Therms	\$1361
Heating Fan/Pump	583 kWh	\$69
Mechanical Vent Fan	0 kWh	\$0
<b>Total Heating</b>		<b>\$1431</b>
<b>Hot Water</b>		
Hot Water	0 kWh	\$0
Hot Water Pump	0 kWh	\$0
<b>Total Hot Water</b>	<b>0 kWh</b>	<b>\$0</b>
Ceiling Fans	0 kWh	\$0
Clothes Washer	66 kWh	\$8
Dehumidifier	0 kWh	\$0
Dishwasher	0 kWh	\$0
Dryer Electric	354 kWh	\$42
Lighting	1863 kWh	\$221
Miscellaneous	1401 kWh	\$166
Pool Pump	0 kWh	\$0
Range Electric	331 kWh	\$39
Refrigerator	0 kWh	\$0
Television	413 kWh	\$49
<hr/>		
Total (kWh)	5010 kWh	\$595
Total (Therms)	801 Therms	\$1361
Total (Oil Gallons)	0 Gallons	\$0
Total (Propane Gallons)	0 Gallons	\$0
PV Produced (kWh)	0 kWh	\$0
Assumes net metering		
<b>Total Cost</b>		<b>\$1957</b>

**Emissions** (Calculated as Total - PV Produced)  
SO2 = 9.54 Lbs NOX = 7460.12 Lbs CO2 = 9.06 Tons

# Annual Energy Summary

## Wholehouse Summary

FSEC  
111 Anywhere Lane  
Colorado Springs, CO

Project Title: TMY\_City:CO\_COLORADOSPRINGS  
DSE\_HVAC-3d  
Building Type: User  
HERS BESTEST basement case

Elec Util: EnergyGauge Default  
Gas Util: Florida 2012  
9/19/2017

End-Use	Energy Consumption	Annual Cost
<b>Cooling</b>		
Cooling Fan	0 kWh	\$0
Mechanical Vent Fan	0 kWh	\$0
<b>Total Cooling</b>	<b>0 kWh</b>	<b>\$0</b>
<b>Heating</b>		
Therms	888 Therms	\$1509
Heating Fan/Pump	636 kWh	\$76
Mechanical Vent Fan	0 kWh	\$0
<b>Total Heating</b>		<b>\$1584</b>
<b>Hot Water</b>		
Hot Water	0 kWh	\$0
Hot Water Pump	0 kWh	\$0
<b>Total Hot Water</b>	<b>0 kWh</b>	<b>\$0</b>
Ceiling Fans	0 kWh	\$0
Clothes Washer	66 kWh	\$8
Dehumidifier	0 kWh	\$0
Dishwasher	0 kWh	\$0
Dryer Electric	354 kWh	\$42
Lighting	1863 kWh	\$221
Miscellaneous	1401 kWh	\$166
Pool Pump	0 kWh	\$0
Range Electric	331 kWh	\$39
Refrigerator	0 kWh	\$0
Television	413 kWh	\$49
<hr/>		
Total (kWh)	5063 kWh	\$601
Total (Therms)	888 Therms	\$1509
Total (Oil Gallons)	0 Gallons	\$0
Total (Propane Gallons)	0 Gallons	\$0
PV Produced (kWh)	0 kWh	\$0
Assumes net metering		
<b>Total Cost</b>		<b>\$2110</b>

**Emissions** (Calculated as Total - PV Produced)  
SO2 = 9.64 Lbs    NOX = 8267.50 Lbs    CO2 = 9.62 Tons

# Annual Energy Summary

## Wholehouse Summary

FSEC  
111 Anywhere Lane  
Las Vegas, NV

Project Title:  
DSE\_HVAC-3e  
Building Type: User  
HERS BESTEST basecase home

TMY\_City: NV\_LASVEGAS  
Elec Util: EnergyGauge Default  
Gas Util: Florida 2012  
9/19/2017

End-Use	Energy Consumption	Annual Cost
Cooling Electric	5482 kWh	\$651
Cooling Fan	968 kWh	\$115
Mechanical Vent Fan	0 kWh	\$0
<b>Total Cooling</b>	<b>6450 kWh</b>	<b>\$766</b>
Heating		
Heating Fan/Pump	0 kWh	\$0
Mechanical Vent Fan	0 kWh	\$0
<b>Total Heating</b>	<b>0 kWh</b>	<b>\$0</b>
Hot Water	0 kWh	\$0
Hot Water Pump	0 kWh	\$0
<b>Total Hot Water</b>	<b>0 kWh</b>	<b>\$0</b>
Ceiling Fans	0 kWh	\$0
Clothes Washer	66 kWh	\$8
Dehumidifier	0 kWh	\$0
Dishwasher	0 kWh	\$0
Dryer Electric	354 kWh	\$42
Lighting	1863 kWh	\$221
Miscellaneous	1401 kWh	\$166
Pool Pump	0 kWh	\$0
Range Electric	331 kWh	\$39
Refrigerator	0 kWh	\$0
Television	413 kWh	\$49
Total (kWh)	10877 kWh	\$1292
Total (Therms)	0 Therms	\$0
Total (Oil Gallons)	0 Gallons	\$0
Total (Propane Gallons)	0 Gallons	\$0
PV Produced (kWh)	0 kWh	\$0
Assumes net metering		
<b>Total Cost</b>		<b>\$1292</b>

**Emissions** (Calculated as Total - PV Produced)  
SO2 = 4.67 Lbs    NOX = 8.96 Lbs    CO2 = 5.77 Tons

# Annual Energy Summary

## Wholehouse Summary

FSEC  
111 Anywhere Lane  
Las Vegas, NV

Project Title:  
DSE\_HVAC-3f  
Building Type: User  
HERS BESTEST basecase home

TMY\_City: NV\_LASVEGAS  
Elec Util: EnergyGauge Default  
Gas Util: Florida 2012  
9/19/2017

End-Use	Energy Consumption	Annual Cost
Cooling Electric	7196 kWh	\$855
Cooling Fan	1275 kWh	\$151
Mechanical Vent Fan	0 kWh	\$0
<b>Total Cooling</b>	<b>8471 kWh</b>	<b>\$1006</b>
Heating		
Heating Fan/Pump	0 kWh	\$0
Mechanical Vent Fan	0 kWh	\$0
<b>Total Heating</b>	<b>0 kWh</b>	<b>\$0</b>
Hot Water	0 kWh	\$0
Hot Water Pump	0 kWh	\$0
<b>Total Hot Water</b>	<b>0 kWh</b>	<b>\$0</b>
Ceiling Fans	0 kWh	\$0
Clothes Washer	66 kWh	\$8
Dehumidifier	0 kWh	\$0
Dishwasher	0 kWh	\$0
Dryer Electric	354 kWh	\$42
Lighting	1863 kWh	\$221
Miscellaneous	1401 kWh	\$166
Pool Pump	0 kWh	\$0
Range Electric	331 kWh	\$39
Refrigerator	0 kWh	\$0
Television	413 kWh	\$49
Total (kWh)	12898 kWh	\$1532
Total (Therms)	0 Therms	\$0
Total (Oil Gallons)	0 Gallons	\$0
Total (Propane Gallons)	0 Gallons	\$0
PV Produced (kWh)	0 kWh	\$0
Assumes net metering		
Total Cost		\$1532

**Emissions** (Calculated as Total - PV Produced)  
SO2 = 5.53 Lbs    NOX = 10.63 Lbs    CO2 = 6.84 Tons

# Annual Energy Summary

## Wholehouse Summary

FSEC  
111 Anywhere Lane  
Las Vegas, NV

Project Title:  
DSE\_HVAC-3g  
Building Type: User  
HERS BESTEST basecase home

TMY\_City: NV\_LASVEGAS  
Elec Util: EnergyGauge Default  
Gas Util: Florida 2012  
9/19/2017

End-Use	Energy Consumption	Annual Cost
Cooling Electric	5928 kWh	\$704
Cooling Fan	1046 kWh	\$124
Mechanical Vent Fan	0 kWh	\$0
<b>Total Cooling</b>	<b>6974 kWh</b>	<b>\$829</b>
Heating		
Heating Fan/Pump	0 kWh	\$0
Mechanical Vent Fan	0 kWh	\$0
<b>Total Heating</b>	<b>0 kWh</b>	<b>\$0</b>
Hot Water	0 kWh	\$0
Hot Water Pump	0 kWh	\$0
<b>Total Hot Water</b>	<b>0 kWh</b>	<b>\$0</b>
Ceiling Fans	0 kWh	\$0
Clothes Washer	66 kWh	\$8
Dehumidifier	0 kWh	\$0
Dishwasher	0 kWh	\$0
Dryer Electric	354 kWh	\$42
Lighting	1863 kWh	\$221
Miscellaneous	1401 kWh	\$166
Pool Pump	0 kWh	\$0
Range Electric	331 kWh	\$39
Refrigerator	0 kWh	\$0
Television	413 kWh	\$49
Total (kWh)	11401 kWh	\$1354
Total (Therms)	0 Therms	\$0
Total (Oil Gallons)	0 Gallons	\$0
Total (Propane Gallons)	0 Gallons	\$0
PV Produced (kWh)	0 kWh	\$0
Assumes net metering		
<b>Total Cost</b>		<b>\$1354</b>

**Emissions** (Calculated as Total - PV Produced)  
SO2 = 4.89 Lbs    NOX = 9.39 Lbs    CO2 = 6.05 Tons



# Annual Energy Summary

## Wholehouse Summary

FSEC  
111 Anywhere Lane  
Las Vegas, NV

Project Title:  
DSE\_HVAC-3h  
Building Type: User  
HERS BESTEST basecase home

TMY\_City: NV\_LASVEGAS  
Elec Util: EnergyGauge Default  
Gas Util: Florida 2012  
9/19/2017

End-Use	Energy Consumption	Annual Cost
Cooling Electric	6951 kWh	\$826
Cooling Fan	1219 kWh	\$145
Mechanical Vent Fan	0 kWh	\$0
<b>Total Cooling</b>	<b>8170 kWh</b>	<b>\$971</b>
Heating		
Heating Fan/Pump	0 kWh	\$0
Mechanical Vent Fan	0 kWh	\$0
<b>Total Heating</b>	<b>0 kWh</b>	<b>\$0</b>
Hot Water	0 kWh	\$0
Hot Water Pump	0 kWh	\$0
<b>Total Hot Water</b>	<b>0 kWh</b>	<b>\$0</b>
Ceiling Fans	0 kWh	\$0
Clothes Washer	66 kWh	\$8
Dehumidifier	0 kWh	\$0
Dishwasher	0 kWh	\$0
Dryer Electric	354 kWh	\$42
Lighting	1863 kWh	\$221
Miscellaneous	1401 kWh	\$166
Pool Pump	0 kWh	\$0
Range Electric	331 kWh	\$39
Refrigerator	0 kWh	\$0
Television	413 kWh	\$49
Total (kWh)	12597 kWh	\$1497
Total (Therms)	0 Therms	\$0
Total (Oil Gallons)	0 Gallons	\$0
Total (Propane Gallons)	0 Gallons	\$0
PV Produced (kWh)	0 kWh	\$0
Assumes net metering		
Total Cost		\$1497

**Emissions** (Calculated as Total - PV Produced)  
SO2 = 5.41 Lbs    NOX = 10.38 Lbs    CO2 = 6.68 Tons

**DHW Test Results:**

**Software Name:** EnergyGauge USA 6.0

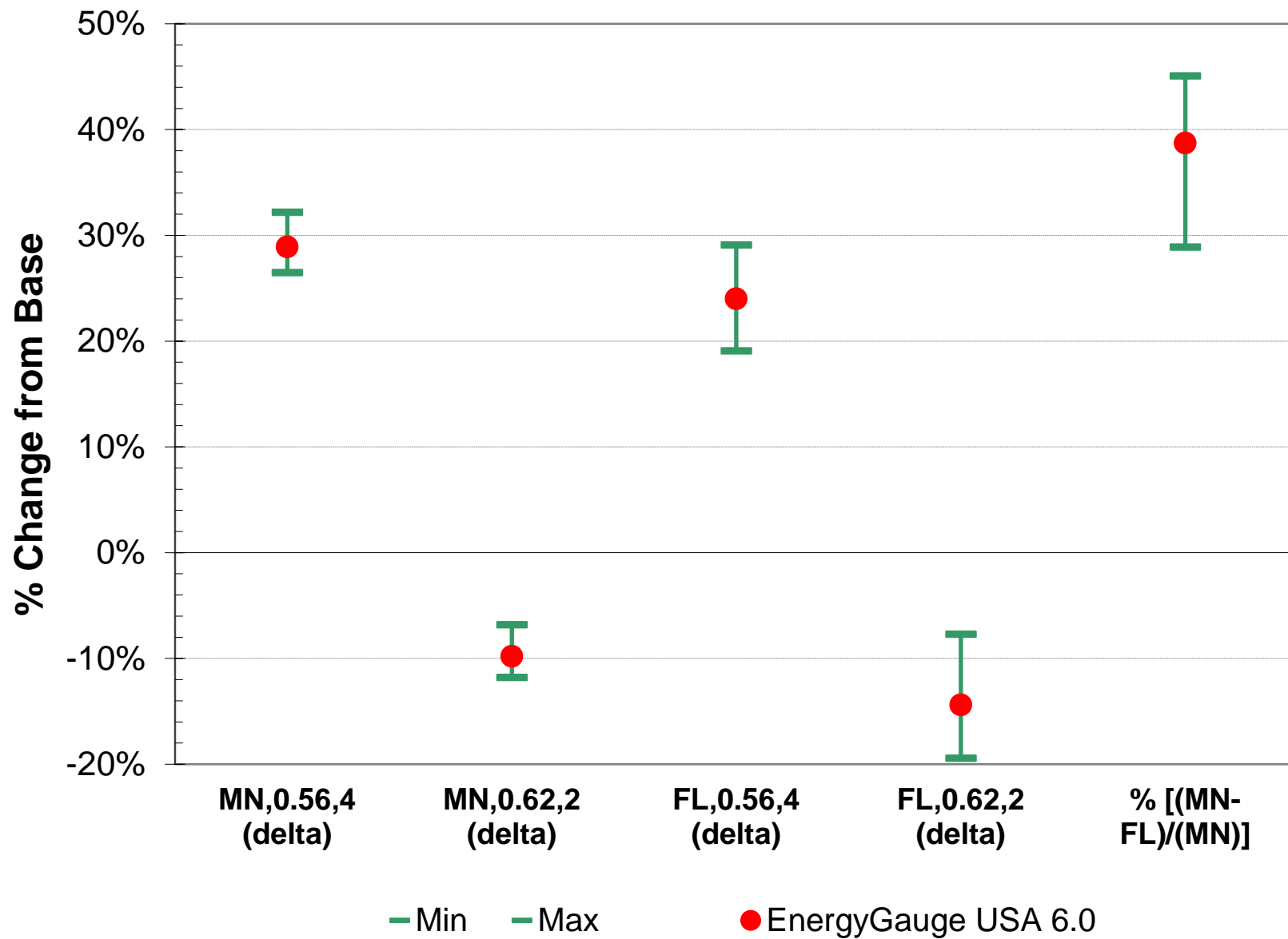
User input data fields indicated by pale yellow  
Test result fields indicated by pale green

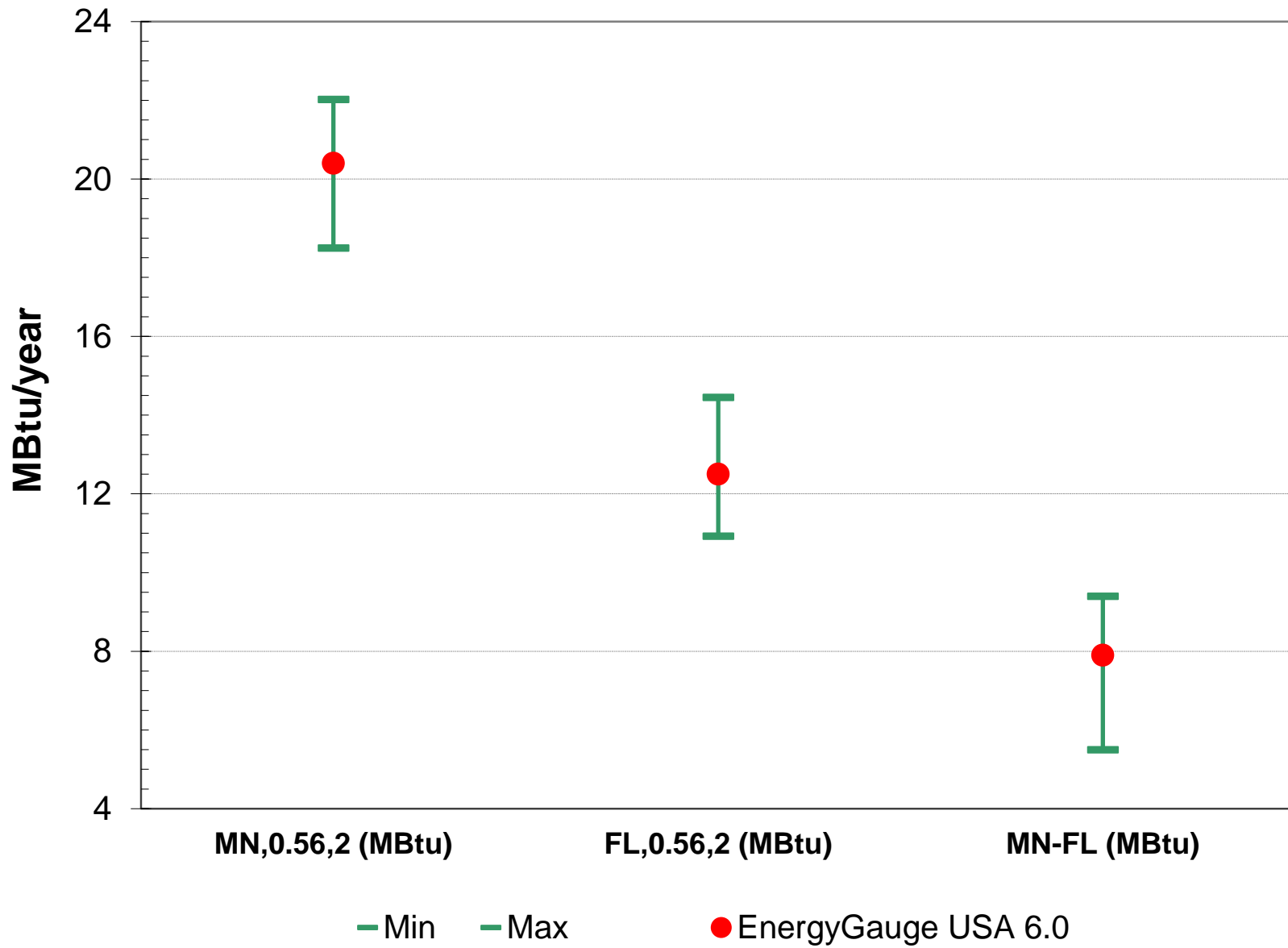
**Raw Results:**

<b>Minnesota</b>	<b>Energy Use (therms)</b>	<b>Florida</b>	<b>Energy Use (therms)</b>
DHW-MN-56-2	204	DHW-FL-56-2	125
DHW-MN-56-4	263	DHW-FL-56-4	155
DHW-MN-62-2	184	DHW-FL-62-2	107

<b>Test Cases:</b>	<b>% Change</b>	<b>Average</b>	<b>Range Min</b>	<b>Range Max</b>	<b>Pass/Fail</b>
MN,0.56,4 (delta)	28.9%	29.3%	26.5%	32.2%	pass
MN,0.62,2 (delta)	-9.8%	-9.3%	-11.8%	-6.8%	pass
FL,0.56,4 (delta)	24.0%	24.1%	19.1%	29.1%	pass
FL,0.62,2 (delta)	-14.4%	-13.6%	-19.5%	-7.7%	pass
% [(MN-FL)/(MN)]	38.7%	37.0%	28.9%	45.1%	pass

	<b>MBtu</b>	<b>Average</b>	<b>Range Min</b>	<b>Range Max</b>	<b>Pass/Fail</b>
MN,0.56,2 (MBtu)	20.4	20.1	18.2	22.0	pass
FL,0.56,2 (MBtu)	12.5	12.7	10.9	14.4	pass
MN-FL (MBtu)	7.9	7.4	5.5	9.4	pass





Appendix F  
**RESNET DHW Test Reports**

# Annual Energy Summary

## Wholehouse Summary

FSEC  
111 Anywhere Lane  
Duluth, MN

Project Title:  
DHW-MN-56-2  
Building Type: User  
HERS BESTEST basecase home

TMY\_City:MN\_DULUTH  
Elec Util: EnergyGauge Default  
Gas Util: Florida 2012  
9/19/2017

End-Use	Energy Consumption	Annual Cost
Cooling Electric	429 kWh	\$51
Cooling Fan	78 kWh	\$9
Mechanical Vent Fan	0 kWh	\$0
<b>Total Cooling</b>	<b>507 kWh</b>	<b>\$60</b>
Heating Electric	33215 kWh	\$3946
Heating Fan/Pump	1816 kWh	\$216
Mechanical Vent Fan	0 kWh	\$0
<b>Total Heating</b>	<b>35031 kWh</b>	<b>\$4162</b>
Hot Water	204 Therms	\$347
Hot Water Pump	0 kWh	\$0
<b>Total Hot Water</b>		<b>\$347</b>
Ceiling Fans	0 kWh	\$0
Clothes Washer	103 kWh	\$12
Dehumidifier	0 kWh	\$0
Dishwasher	0 kWh	\$0
Dryer Electric	554 kWh	\$66
Lighting	1863 kWh	\$221
Miscellaneous	1401 kWh	\$166
Pool Pump	0 kWh	\$0
Range Electric	409 kWh	\$49
Refrigerator	0 kWh	\$0
Television	551 kWh	\$65
Total (kWh)	40419 kWh	\$4802
Total (Therms)	204 Therms	\$347
Total (Oil Gallons)	0 Gallons	\$0
Total (Propane Gallons)	0 Gallons	\$0
PV Produced (kWh)	0 kWh	\$0
Assumes net metering		
<b>Total Cost</b>		<b>\$5148</b>

**Emissions** (Calculated as Total - PV Produced)  
SO2 = 85.57 Lbs    NOX = 1964.41 Lbs    CO2 = 29.43 Tons

# Annual Energy Summary

## Wholehouse Summary

FSEC  
111 Anywhere Lane  
Duluth, MN

Project Title:  
DHW-MN-56-4  
Building Type: User  
HERS BESTEST basecase home

TMY\_City:MN\_DULUTH  
Elec Util: EnergyGauge Default  
Gas Util: Florida 2012  
9/19/2017

End-Use	Energy Consumption	Annual Cost
Cooling Electric	434 kWh	\$52
Cooling Fan	80 kWh	\$10
Mechanical Vent Fan	0 kWh	\$0
<b>Total Cooling</b>	<b>514 kWh</b>	<b>\$61</b>
Heating Electric	33132 kWh	\$3936
Heating Fan/Pump	1812 kWh	\$215
Mechanical Vent Fan	0 kWh	\$0
<b>Total Heating</b>	<b>34944 kWh</b>	<b>\$4151</b>
Hot Water	263 Therms	\$446
Hot Water Pump	0 kWh	\$0
<b>Total Hot Water</b>		<b>\$446</b>
Ceiling Fans	0 kWh	\$0
Clothes Washer	140 kWh	\$17
Dehumidifier	0 kWh	\$0
Dishwasher	0 kWh	\$0
Dryer Electric	754 kWh	\$90
Lighting	1863 kWh	\$221
Miscellaneous	1401 kWh	\$166
Pool Pump	0 kWh	\$0
Range Electric	487 kWh	\$58
Refrigerator	0 kWh	\$0
Television	689 kWh	\$82
Total (kWh)	40792 kWh	\$4846
Total (Therms)	263 Therms	\$446
Total (Oil Gallons)	0 Gallons	\$0
Total (Propane Gallons)	0 Gallons	\$0
PV Produced (kWh)	0 kWh	\$0
Assumes net metering		
<b>Total Cost</b>		<b>\$5293</b>

**Emissions** (Calculated as Total - PV Produced)  
SO2 = 86.36 Lbs    NOX = 2510.95 Lbs    CO2 = 30.03 Tons

# Annual Energy Summary

## Wholehouse Summary

FSEC  
111 Anywhere Lane  
Duluth, MN

Project Title:  
DHW-MN-62-2  
Building Type: User  
HERS BESTEST basecase home

TMY\_City:MN\_DULUTH  
Elec Util: EnergyGauge Default  
Gas Util: Florida 2012  
9/19/2017

End-Use	Energy Consumption	Annual Cost
Cooling Electric	423 kWh	\$50
Cooling Fan	77 kWh	\$9
Mechanical Vent Fan	0 kWh	\$0
<b>Total Cooling</b>	<b>500 kWh</b>	<b>\$59</b>
Heating Electric	33651 kWh	\$3998
Heating Fan/Pump	1840 kWh	\$219
Mechanical Vent Fan	0 kWh	\$0
<b>Total Heating</b>	<b>35491 kWh</b>	<b>\$4216</b>
Hot Water	184 Therms	\$312
Hot Water Pump	0 kWh	\$0
<b>Total Hot Water</b>		<b>\$312</b>
Ceiling Fans	0 kWh	\$0
Clothes Washer	103 kWh	\$12
Dehumidifier	0 kWh	\$0
Dishwasher	0 kWh	\$0
Dryer Electric	554 kWh	\$66
Lighting	1863 kWh	\$221
Miscellaneous	1401 kWh	\$166
Pool Pump	0 kWh	\$0
Range Electric	409 kWh	\$49
Refrigerator	0 kWh	\$0
Television	551 kWh	\$65
Total (kWh)	40872 kWh	\$4856
Total (Therms)	184 Therms	\$312
Total (Oil Gallons)	0 Gallons	\$0
Total (Propane Gallons)	0 Gallons	\$0
PV Produced (kWh)	0 kWh	\$0
Assumes net metering		
<b>Total Cost</b>		<b>\$5167</b>

**Emissions** (Calculated as Total - PV Produced)  
SO2 = 86.53 Lbs    NOX = 1775.46 Lbs    CO2 = 29.62 Tons



# Annual Energy Summary

## Wholehouse Summary

FSEC  
111 Anywhere Lane  
Miami, FL

Project Title:  
DHW-FL-56-2  
Building Type: User  
HERS BESTEST basecase home

TMY\_City:FL\_MIAMI  
Elec Util: EnergyGauge Default  
Gas Util: Florida 2012  
9/19/2017

End-Use	Energy Consumption	Annual Cost
Cooling Electric	5951 kWh	\$707
Cooling Fan	1033 kWh	\$123
Mechanical Vent Fan	0 kWh	\$0
<b>Total Cooling</b>	<b>6984 kWh</b>	<b>\$830</b>
Heating Electric	532 kWh	\$63
Heating Fan/Pump	29 kWh	\$3
Mechanical Vent Fan	0 kWh	\$0
<b>Total Heating</b>	<b>561 kWh</b>	<b>\$67</b>
Hot Water	125 Therms	\$212
Hot Water Pump	0 kWh	\$0
<b>Total Hot Water</b>		<b>\$212</b>
Ceiling Fans	0 kWh	\$0
Clothes Washer	103 kWh	\$12
Dehumidifier	0 kWh	\$0
Dishwasher	0 kWh	\$0
Dryer Electric	554 kWh	\$66
Lighting	1863 kWh	\$221
Miscellaneous	1401 kWh	\$166
Pool Pump	0 kWh	\$0
Range Electric	409 kWh	\$49
Refrigerator	0 kWh	\$0
Television	551 kWh	\$65
Total (kWh)	12426 kWh	\$1476
Total (Therms)	125 Therms	\$212
Total (Oil Gallons)	0 Gallons	\$0
Total (Propane Gallons)	0 Gallons	\$0
PV Produced (kWh)	0 kWh	\$0
Assumes net metering		
<b>Total Cost</b>		<b>\$1688</b>

**Emissions** (Calculated as Total - PV Produced)  
SO2 = 27.26 Lbs    NOX = 1172.42 Lbs    CO2 = 8.14 Tons

# Annual Energy Summary

## Wholehouse Summary

FSEC  
111 Anywhere Lane  
Miami, FL

Project Title:  
DHW-FL-56-4  
Building Type: User  
HERS BESTEST basecase home

TMY\_City:FL\_MIAMI  
Elec Util: EnergyGauge Default  
Gas Util: Florida 2012  
9/19/2017

End-Use	Energy Consumption	Annual Cost
Cooling Electric	5982 kWh	\$711
Cooling Fan	1038 kWh	\$123
Mechanical Vent Fan	0 kWh	\$0
<b>Total Cooling</b>	<b>7020 kWh</b>	<b>\$834</b>
Heating Electric	528 kWh	\$63
Heating Fan/Pump	29 kWh	\$3
Mechanical Vent Fan	0 kWh	\$0
<b>Total Heating</b>	<b>557 kWh</b>	<b>\$66</b>
Hot Water	155 Therms	\$263
Hot Water Pump	0 kWh	\$0
<b>Total Hot Water</b>		<b>\$263</b>
Ceiling Fans	0 kWh	\$0
Clothes Washer	140 kWh	\$17
Dehumidifier	0 kWh	\$0
Dishwasher	0 kWh	\$0
Dryer Electric	754 kWh	\$90
Lighting	1863 kWh	\$221
Miscellaneous	1401 kWh	\$166
Pool Pump	0 kWh	\$0
Range Electric	487 kWh	\$58
Refrigerator	0 kWh	\$0
Television	689 kWh	\$82
Total (kWh)	12911 kWh	\$1534
Total (Therms)	155 Therms	\$263
Total (Oil Gallons)	0 Gallons	\$0
Total (Propane Gallons)	0 Gallons	\$0
PV Produced (kWh)	0 kWh	\$0
Assumes net metering		
<b>Total Cost</b>		<b>\$1797</b>

**Emissions** (Calculated as Total - PV Produced)  
SO2 = 28.33 Lbs    NOX = 1451.92 Lbs    CO2 = 8.61 Tons

# Annual Energy Summary

## Wholehouse Summary

FSEC  
111 Anywhere Lane  
Miami, FL

Project Title:  
DHW-FL-62-2  
Building Type: User  
HERS BESTEST basecase home

TMY\_City:FL\_MIAMI  
Elec Util: EnergyGauge Default  
Gas Util: Florida 2012  
9/19/2017

End-Use	Energy Consumption	Annual Cost
Cooling Electric	5842 kWh	\$694
Cooling Fan	1013 kWh	\$120
Mechanical Vent Fan	0 kWh	\$0
<b>Total Cooling</b>	<b>6855 kWh</b>	<b>\$814</b>
Heating Electric	563 kWh	\$67
Heating Fan/Pump	31 kWh	\$4
Mechanical Vent Fan	0 kWh	\$0
<b>Total Heating</b>	<b>594 kWh</b>	<b>\$71</b>
Hot Water	107 Therms	\$182
Hot Water Pump	0 kWh	\$0
<b>Total Hot Water</b>		<b>\$182</b>
Ceiling Fans	0 kWh	\$0
Clothes Washer	103 kWh	\$12
Dehumidifier	0 kWh	\$0
Dishwasher	0 kWh	\$0
Dryer Electric	554 kWh	\$66
Lighting	1863 kWh	\$221
Miscellaneous	1401 kWh	\$166
Pool Pump	0 kWh	\$0
Range Electric	409 kWh	\$49
Refrigerator	0 kWh	\$0
Television	551 kWh	\$65
Total (kWh)	12330 kWh	\$1465
Total (Therms)	107 Therms	\$182
Total (Oil Gallons)	0 Gallons	\$0
Total (Propane Gallons)	0 Gallons	\$0
PV Produced (kWh)	0 kWh	\$0
Assumes net metering		
<b>Total Cost</b>		<b>\$1647</b>

**Emissions** (Calculated as Total - PV Produced)  
SO2 = 27.05 Lbs    NOX = 1009.57 Lbs    CO2 = 7.98 Tons

Florida eRatio test

Software Name: **EnergyGauge USA 6.0**

User input data fields indicated by pale yellow																	
Test result fields indicated by pale green																	
Test Case	eRatio	Baseline Home End Use Loads (REUL)			Baseline Home End Use Energy Consumption (EC_r)			Proposed Home End Use Energy Consumption (EC_x)			eRatio Tests	Manufacturer's Equipment Performance Rating (MEPR)					
		Winter (MBtu)	Summer (MBtu)	Hot Water (MBtu)	Heating (MBtu)	Cooling (MBtu)	Hot Water (MBtu)	Heating (MBtu)	Cooling (MBtu)	Hot Water (MBtu)		Heating		Cooling		Hot Water	
													Fuel	MEPR	Fuel	MEPR	Fuel
L130AO-01	141.23	6.72	31.52	3.87	2.51	10.02	4.36	3.37	14.67	4.83	PASS	elec	7.70	elec	13.00	elec	0.92
L130AO-02	135.29	6.72	31.52	3.87	2.51	10.02	8.14	3.37	14.67	5.13	PASS	elec	7.70	elec	13.00	gas	0.82
L130AO-03	141.04	6.72	31.52	3.87	10.34	10.02	4.36	13.63	14.67	4.83	PASS	gas	78%	elec	13.00	elec	0.92
L130AO-04	109.55	6.72	31.52	3.87	2.51	10.02	4.36	2.67	11.03	4.83	PASS	elec	10.00	elec	17.00	elec	0.92
L130AO-05	136.02	6.72	31.52	3.87	10.34	10.02	4.36	11.14	14.67	4.83	PASS	gas	96%	elec	13.00	elec	0.92
<b>REUL Tests:</b>		<b>PASS</b>	<b>PASS</b>	<b>PASS</b>													

**Appendix G**  
**eRatio Method Test Reports**

# Florida Code 2017 Summary Report

FSEC  
 111 Anywhere Lane  
 Orlando, FL,  
 Registration #:

Title: eRatio\_L130AO-01  
 FLProp2017

TMY City: FL\_ORLANDO\_INTL  
 Elec Util: EnergyGauge Default  
 Gas Util: Florida 2012  
 Run Date:

HERS BESTEST low-e windows case

Energy Uses	Reference Home	Proposed Home	e-Ratio
Heating	2.51 MBtu	3.37 MBtu	1.34
Cooling	10.02 MBtu	14.67 MBtu	1.46
Hot Water	4.36 MBtu	4.83 MBtu	1.11

Total	16.89 MBtu	22.88 MBtu	1.35
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Building Loads	Reference Home	Proposed Home	e-Ratio
Heating	6.72 MBtu	9.02 MBtu*	1.34
Cooling	31.52 MBtu	46.16 MBtu*	1.46
Hot Water	3.87 MBtu	4.29 MBtu*	1.11

Total	42.11 MBtu	59.47 MBtu	1.41
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\* normalized modified loads

Glass/Floor Area: INF	Total Proposed Modified Loads: 59.47	<b>FAIL</b>
	Total Reference Loads: 42.11	

# Florida Code 2017 Summary Report

FSEC  
111 Anywhere Lane  
Orlando, FL,  
Registration #:

Title: eRatio\_L130AO-02  
FLProp2017

TMY City: FL\_ORLANDO\_INTL  
Elec Util: EnergyGauge Default  
Gas Util: Florida 2012  
Run Date:

HERS BESTEST low-e windows case

Energy Uses	Reference Home	Proposed Home	e-Ratio
Heating	2.51 MBtu	3.37 MBtu	1.34
Cooling	10.02 MBtu	14.67 MBtu	1.46
Hot Water	8.14 MBtu	5.13 MBtu	0.63
Total	20.67 MBtu	23.18 MBtu	1.12

Building Loads	Reference Home	Proposed Home	e-Ratio
Heating	6.72 MBtu	9.02 MBtu*	1.34
Cooling	31.52 MBtu	46.16 MBtu*	1.46
Hot Water	3.87 MBtu	1.79 MBtu*	0.46
Total	42.11 MBtu	56.97 MBtu	1.35

\* normalized modified loads

Glass/Floor Area: INF

Total Proposed Modified Loads: 56.97

Total Reference Loads: 42.11

**FAIL**

# Florida Code 2017 Summary Report

FSEC  
111 Anywhere Lane  
Orlando, FL,  
Registration #:

Title: eRatio\_L130AO-03  
FLProp2017

TMY City: FL\_ORLANDO\_INTL  
Elec Util: EnergyGauge Default  
Gas Util: Florida 2012  
Run Date:

HERS BESTEST low-e windows case

Energy Uses	Reference Home	Proposed Home	e-Ratio
Heating	10.34 MBtu	13.63 MBtu	1.32
Cooling	10.02 MBtu	14.67 MBtu	1.46
Hot Water	4.36 MBtu	4.83 MBtu	1.11
Total	24.71 MBtu	33.13 MBtu	1.34

Building Loads	Reference Home	Proposed Home	e-Ratio
Heating	6.72 MBtu	8.93 MBtu*	1.33
Cooling	31.52 MBtu	46.17 MBtu*	1.46
Hot Water	3.87 MBtu	4.29 MBtu*	1.11
Total	42.11 MBtu	59.39 MBtu	1.41

\* normalized modified loads

Glass/Floor Area: 0.175

Total Proposed Modified Loads: 59.39

Total Reference Loads: 42.11

**FAIL**



# Florida Code 2017 Summary Report

FSEC  
 111 Anywhere Lane  
 Orlando, FL,  
 Registration #:

Title: eRatio\_L130AO-04  
 FLProp2017

TMY City: FL\_ORLANDO\_INTL  
 Elec Util: EnergyGauge Default  
 Gas Util: Florida 2012  
 Run Date:

HERS BESTEST low-e windows case

Energy Uses	Reference Home	Proposed Home	e-Ratio
Heating	2.51 MBtu	2.67 MBtu	1.06
Cooling	10.02 MBtu	11.03 MBtu	1.10
Hot Water	4.36 MBtu	4.83 MBtu	1.11

Total	16.89 MBtu	18.53 MBtu	1.10
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Building Loads	Reference Home	Proposed Home	e-Ratio
Heating	6.72 MBtu	7.15 MBtu*	1.06
Cooling	31.52 MBtu	34.69 MBtu*	1.10
Hot Water	3.87 MBtu	4.29 MBtu*	1.11

Total	42.11 MBtu	46.13 MBtu	1.10
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\* normalized modified loads

Glass/Floor Area: INF	Total Proposed Modified Loads: 46.13	<b>FAIL</b>
	Total Reference Loads: 42.11	

# Florida Code 2017 Summary Report

FSEC  
111 Anywhere Lane  
Orlando, FL,  
Registration #:

Title: eRatio\_L130AO-05  
FLProp2017

TMY City: FL\_ORLANDO\_INTL  
Elec Util: EnergyGauge Default  
Gas Util: Florida 2012  
Run Date:

HERS BESTEST low-e windows case

Energy Uses	Reference Home	Proposed Home	e-Ratio
Heating	10.34 MBtu	11.14 MBtu	1.08
Cooling	10.02 MBtu	14.67 MBtu	1.46
Hot Water	4.36 MBtu	4.83 MBtu	1.11
Total	24.71 MBtu	30.64 MBtu	1.24

Building Loads	Reference Home	Proposed Home	e-Ratio
Heating	6.72 MBtu	6.82 MBtu*	1.01
Cooling	31.52 MBtu	46.17 MBtu*	1.46
Hot Water	3.87 MBtu	4.29 MBtu*	1.11
Total	42.11 MBtu	57.28 MBtu	1.36

\* normalized modified loads

Glass/Floor Area: 0.175

Total Proposed Modified Loads: 57.28

Total Reference Loads: 42.11

**FAIL**