



FLORIDA SOLAR ENERGY CENTER®

Creating Energy Independence

2014 Florida Energy Code Software Verification Test Report: EnergyGauge® USA version 4.0

FSEC-RR-544-15

June 2, 2015

Submitted to

Florida Building Commission
1940 North Monroe Street
Tallahassee, FL 32399

Submitted by

Florida Solar Energy Center

Copyright © 2015 University of Central Florida
All rights reserved.

1679 Clearlake Road
Cocoa, Florida 32922, USA
(321) 638-1000

www.floridaenergycenter.org



A Research Institute of the University of Central Florida

Cover sheet for request for approval by the Florida Building Commission as a Compliance Software tool

Date of Submittal: June 2, 2015

Software Company: University of Central Florida

Contact Person: Rob Vieira

Contact email: robin@fsec.ucf.edu

Contact Phone number: 321-638-1404

Name of Product (If marketed under different editions or names list all that apply): **EnergyGauge USA**

Version Number: 4.0

Code Compliance Methods this software calculates:

Commercial Energy Efficiency Code Compliance

- ASHRAE Prescriptive Method
- ASHRAE Energy Cost Budget Method
- ASHRAE Envelope Trade-off Option Method
- IECC Prescriptive Method
- IECC Performance Method

Residential Energy Efficiency Code Compliance

- Prescriptive R-value Method
- Prescriptive U-factor Alternative Method
- Prescriptive Total UA Alternative Method
- Performance Method

As an official of the software company named above, I hereby indicate that the software listed meets the requirements of the Florida Energy Conservation Code for the methods indicated and that this submittal includes the required documentation as given in the Energy Simulation Tool Approval – Technical Assistance Manual or as requested by the Florida Building Commission:

Rob Vieira
Signature

6/2/15
Date

Rob Vieira
Printed Name

Director, Buildings Research Division
Title

2014 Florida Energy Code Software Verification Test Report: EnergyGauge® USA version 4.0

Florida Solar Energy Center
June 2, 2015

Introduction

This report contains results from a series of software verification tests required by the Florida Building Commission for Florida Energy Code compliance tools following the procedures provided in the Technical Assistance Manual (TAM).¹ This includes tests for the performance method and tests for the prescriptive R-value and UA method.

The performance tests consist of FL e-Ratio algorithms, two suites of building load tests, referred to as ASHRAE Standard 140² and Florida HERS BESTEST³ developed by the National Renewable Energy Laboratory, a Standard Reference Design Auto-generation test suite developed by the State of Florida (Appendix R5 of Reference 1) and three test suites developed by RESNET to test Heating, Ventilating and Air Conditioning (HVAC) equipment algorithms,⁴ Distribution System Efficiency (DSE) algorithms,⁵ Domestic Hot Water (DHW) algorithms.⁶

The prescriptive tests consist of results from six buildings specified in the TAM Appendix R2.3.

Test Reports

In addition to the results reported here, this report is accompanied by a compact disk (CD) containing a functional copy of EnergyGauge® USA, version 4.0, the software tool that performed the tests. Also contained on the CD are all of the input, output and spreadsheet report, and procedures files used to conduct the tests. The segment of the CD containing these files is arranged as sub directories named in accordance with their contents as follows:

¹ 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.

² 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>

³ 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>

⁴ 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

⁵ *ibid*

⁶ *ibid*

- Performance Tests
 - ASHRAE Standard 140FL-BESTEST
 - FL-AutoGen
 - HVAC-tests
 - DSE-tests
 - DHW-tests
 - FL e-Ratio Method tests
- Prescriptive Tests
 - Results
 - Building input files
 - R-value computation reports
 - Total UA alternative reports

Each of the performance 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.

[Because the prescriptive tests use the same input files for the tests and the spreadsheet has tabs for all prescriptive methods, the arrangement of files is different for the prescriptive than performance.]

Re-Running the Verification Tests

The test results reported here may be verified by others using EnergyGauge USA v.4.0 and the following instructions.

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

The ASHRAE Standard 140 and 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 > Florida Baseline (2014)
- 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 > Florida Baseline (2014)
- Then select
- Calculate > Florida Code Compliance 2014 > Performance Method
- Then select
- Reports > Florida Code Summary 2014

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) FL e-Ratio Method tests:

The FL e-Ratio test cases are named in the format eRatio-xxxxx-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 2014 > e-Ratio Test

Then select

- Reports > Florida Code Summary 2014

The e-Ratios are given on this report.

g) Prescriptive R-value computation tests:

Load each of the six houses labeled TO1.enb, TO2.enb, TO3.enb, MO1.enb, MO2.enb, MO3.enb.

Select the Florida Code 2014 Prescriptive R value computation from the Calculate menu.

The results shown on the report can be compared to the values shown under the tab for the house in the spreadsheet. The R-value computation is at the top of the spreadsheet page with a tab marked with the prefix “V” for verification, such as “V_TO1.”

h) Prescriptive Total UA Alternative computation tests:

Load each of the six houses labeled TO1.enb, TO2.enb, TO3.enb, MO1.enb, MO2.enb, MO3.enb.

Select the Florida Code 2014 Prescriptive Total UA Alternative selection from the Calculate menu.

The results shown on the report can be compared to the values shown under the tab for the house in the spreadsheet. The Total UA Alternative section is at the bottom of the spreadsheet page with a tab marked with the prefix “V” for verification, such as “V_TO1.”

Test Results

The results from all software performance 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.4.0 are included in a set of appendices to this report.

The performance 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
- FL e-Ratio Method tests

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

The test reports for the prescriptive tests are provided in a separate attachment (part 2) and a completed spreadsheet. There is no R value method report for the M02 house as the software will not run RValue method for houses with steel frame walls as they are not covered by the Florida code RValue table. The TAM requests a mandatory checklist for each house, but the mandatory checklist does not change by house so it is only provided for the first test home.

ASHRAE Std. 140 results for:

Software Name:

EnergyGauge USA v4.0

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	-3.30	-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

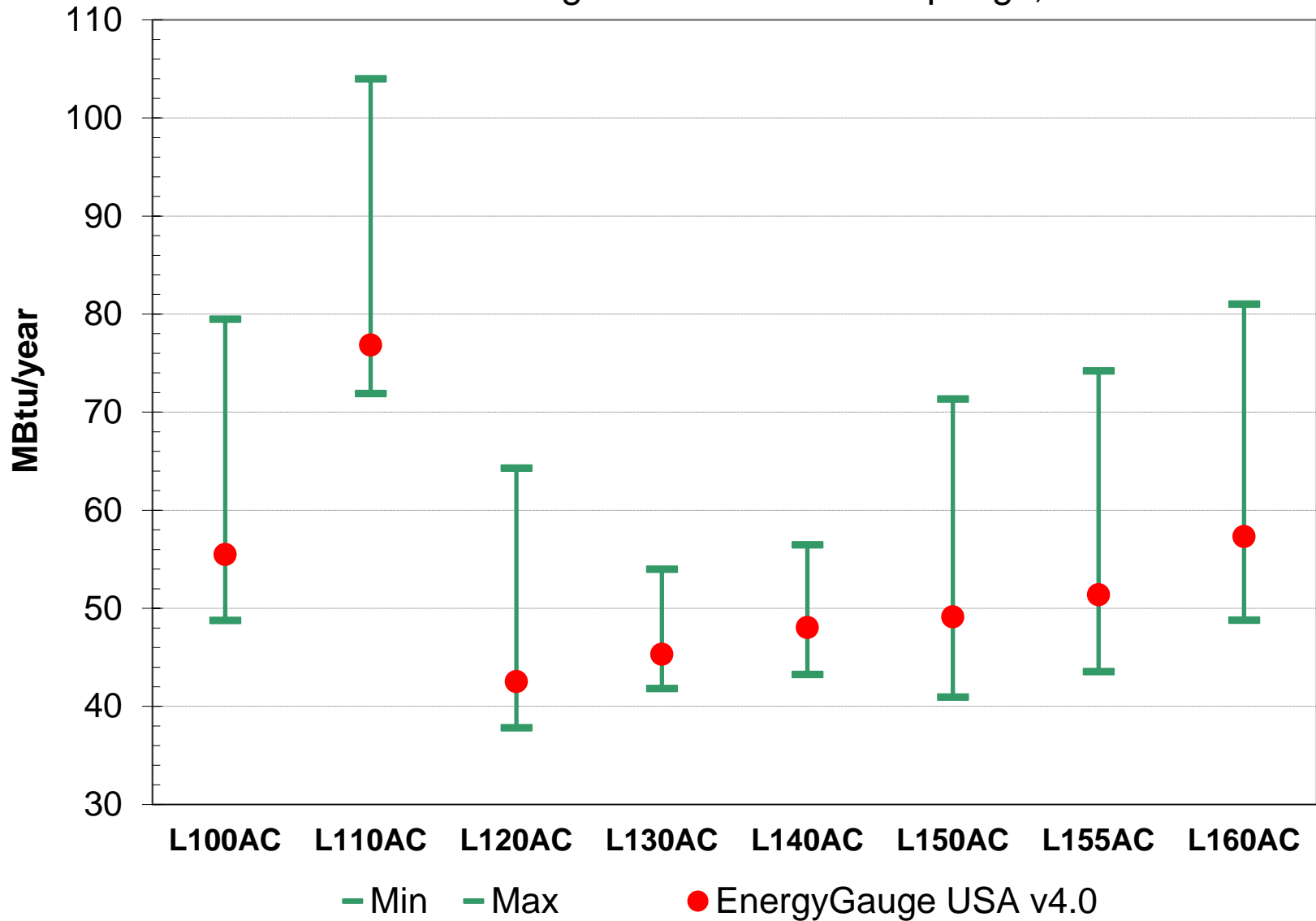
Annual Cooling Loads: Las Vegas, NV

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

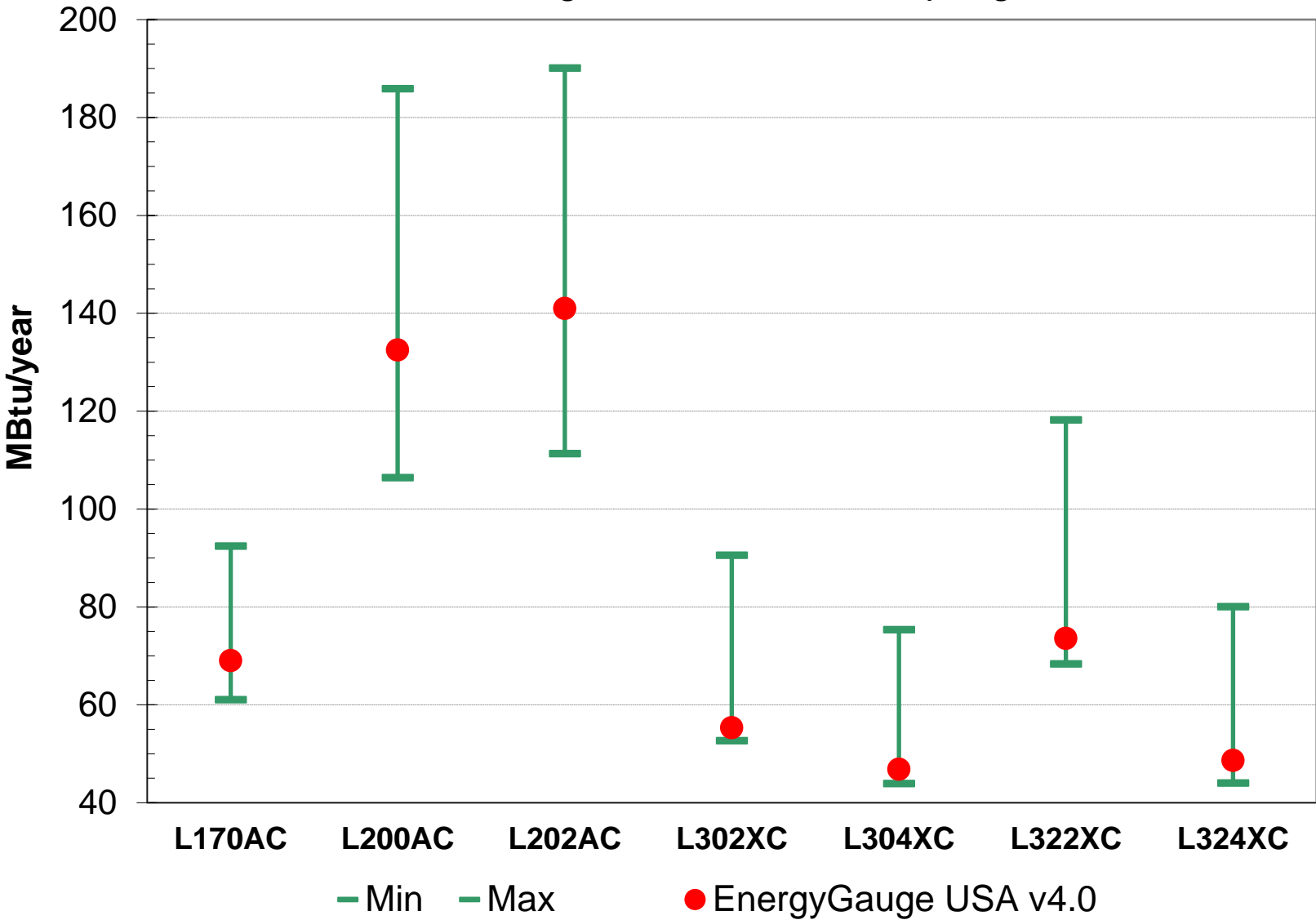
Annual Cooling Load deltas: Las Vegas, NV

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

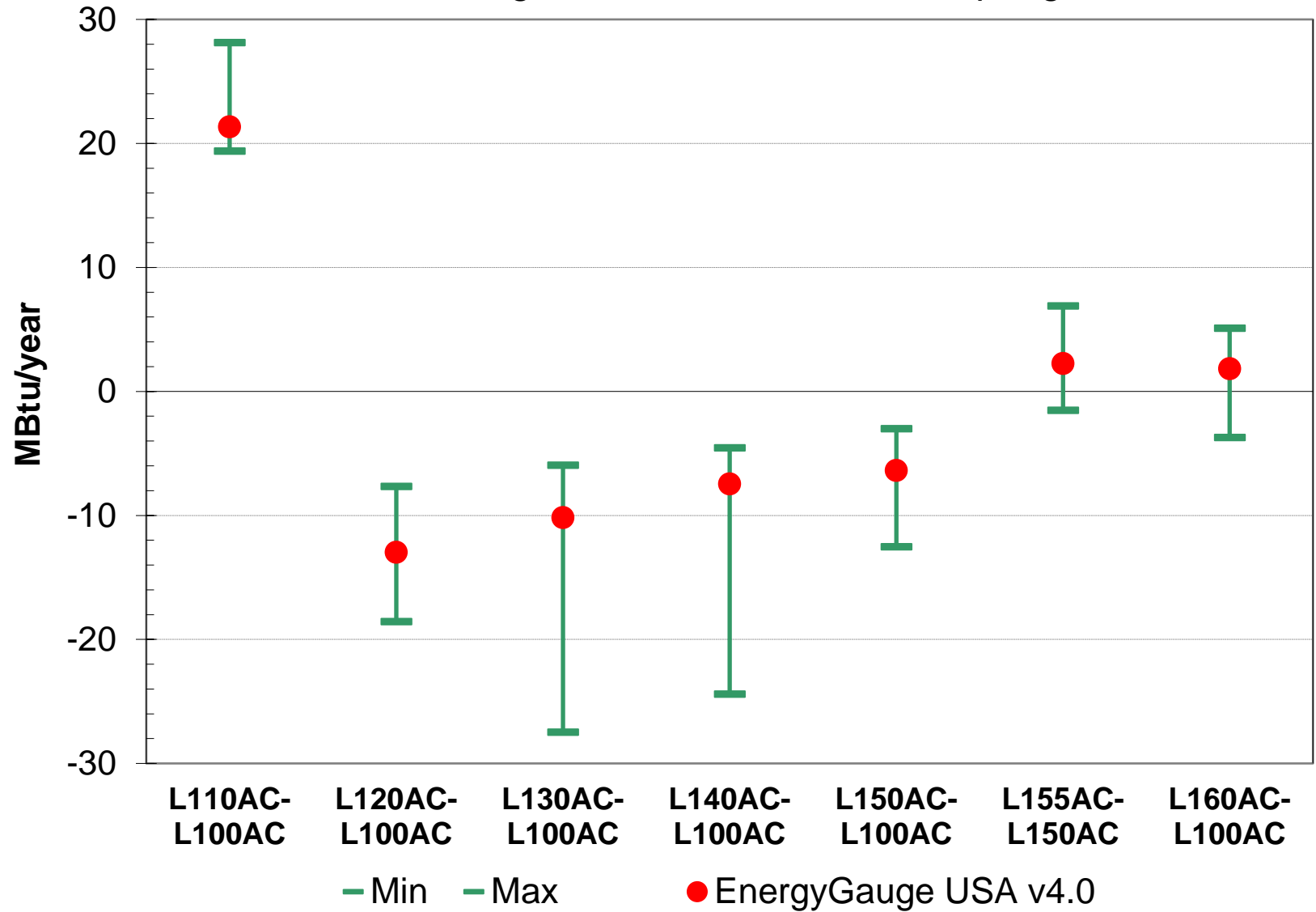
Annual Heating Loads: Colorado Springs, CO



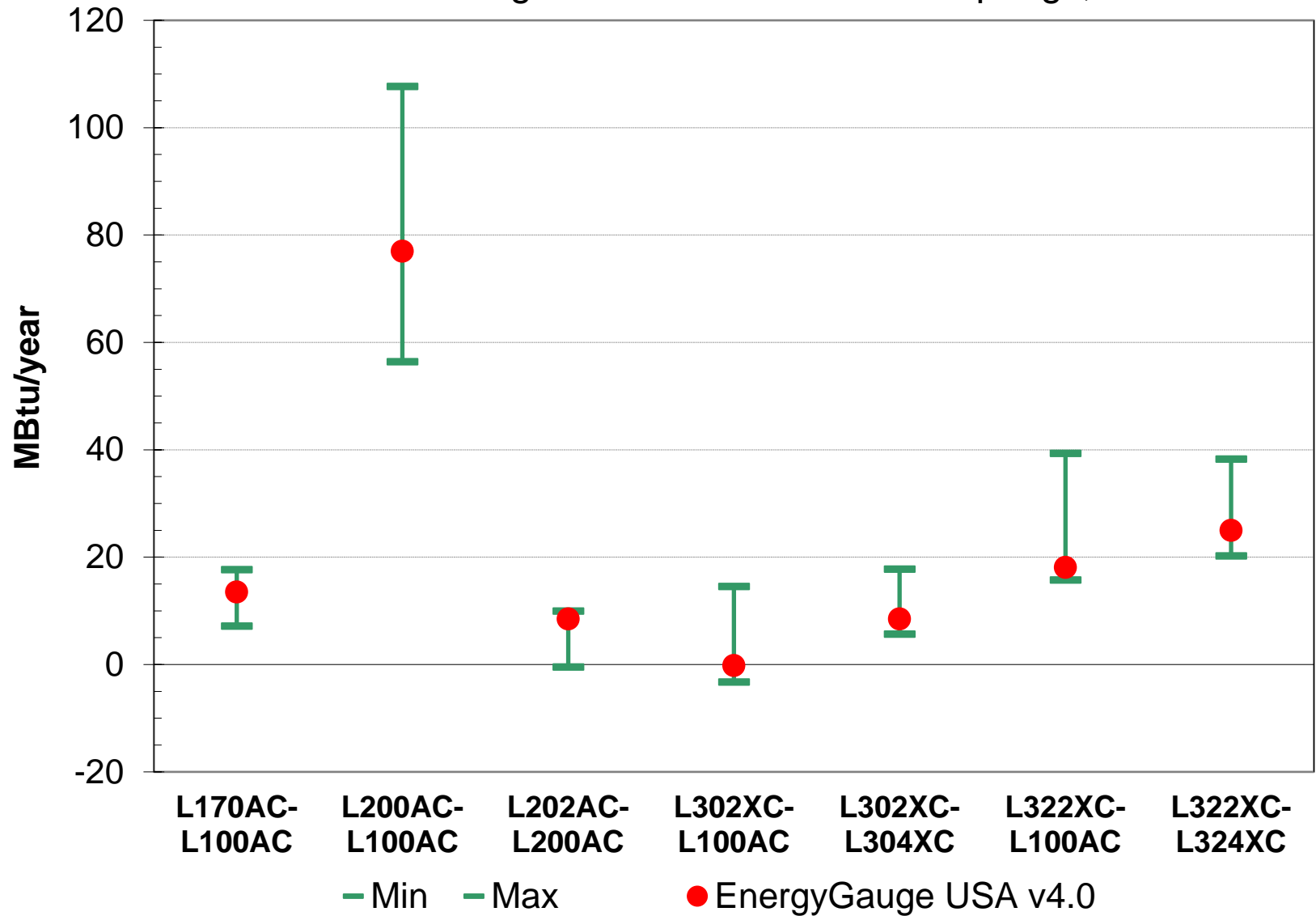
Annual Heating Loads: Colorado Springs, CO



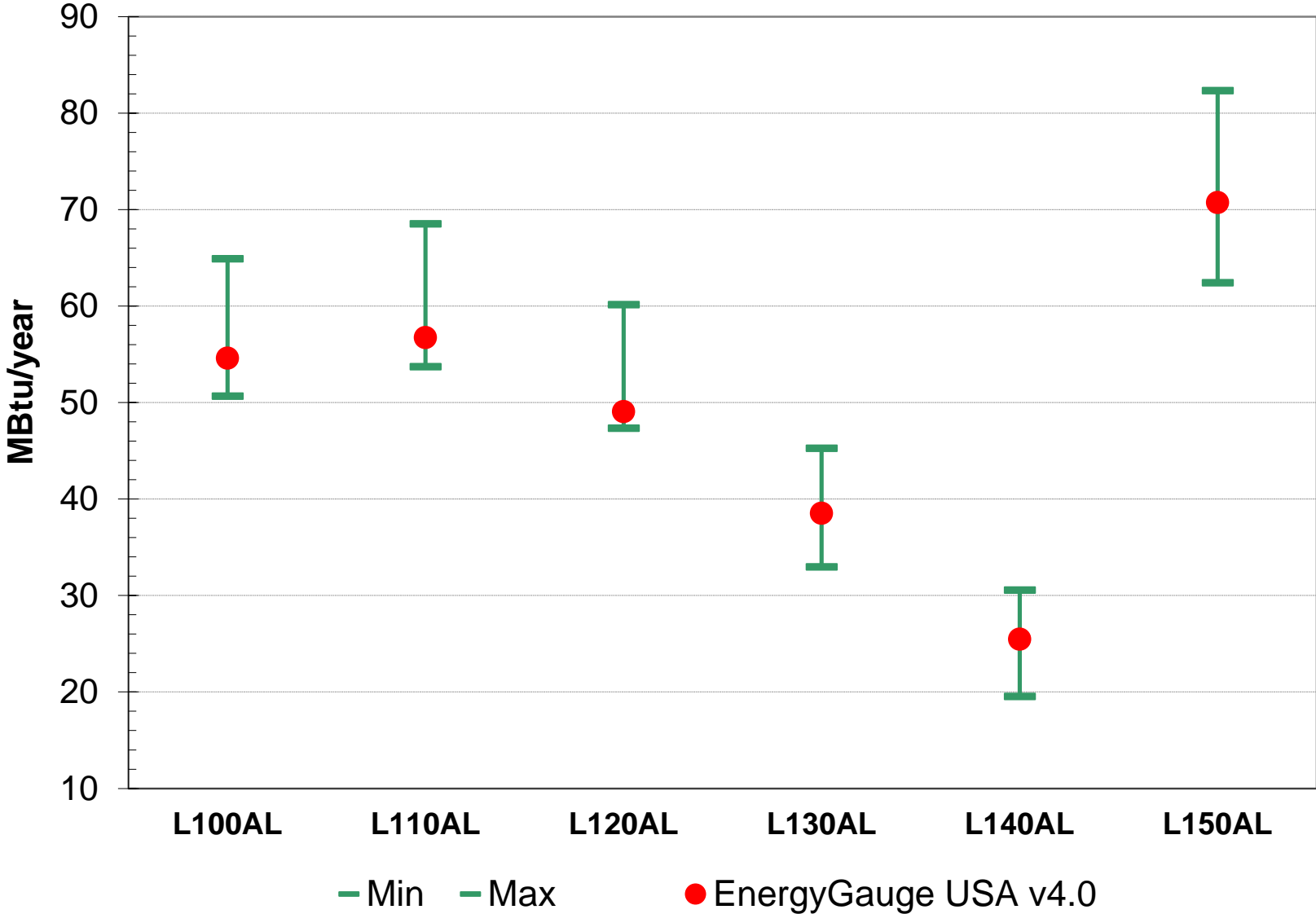
Annual Heating Load Deltas: Colorado Springs, CO



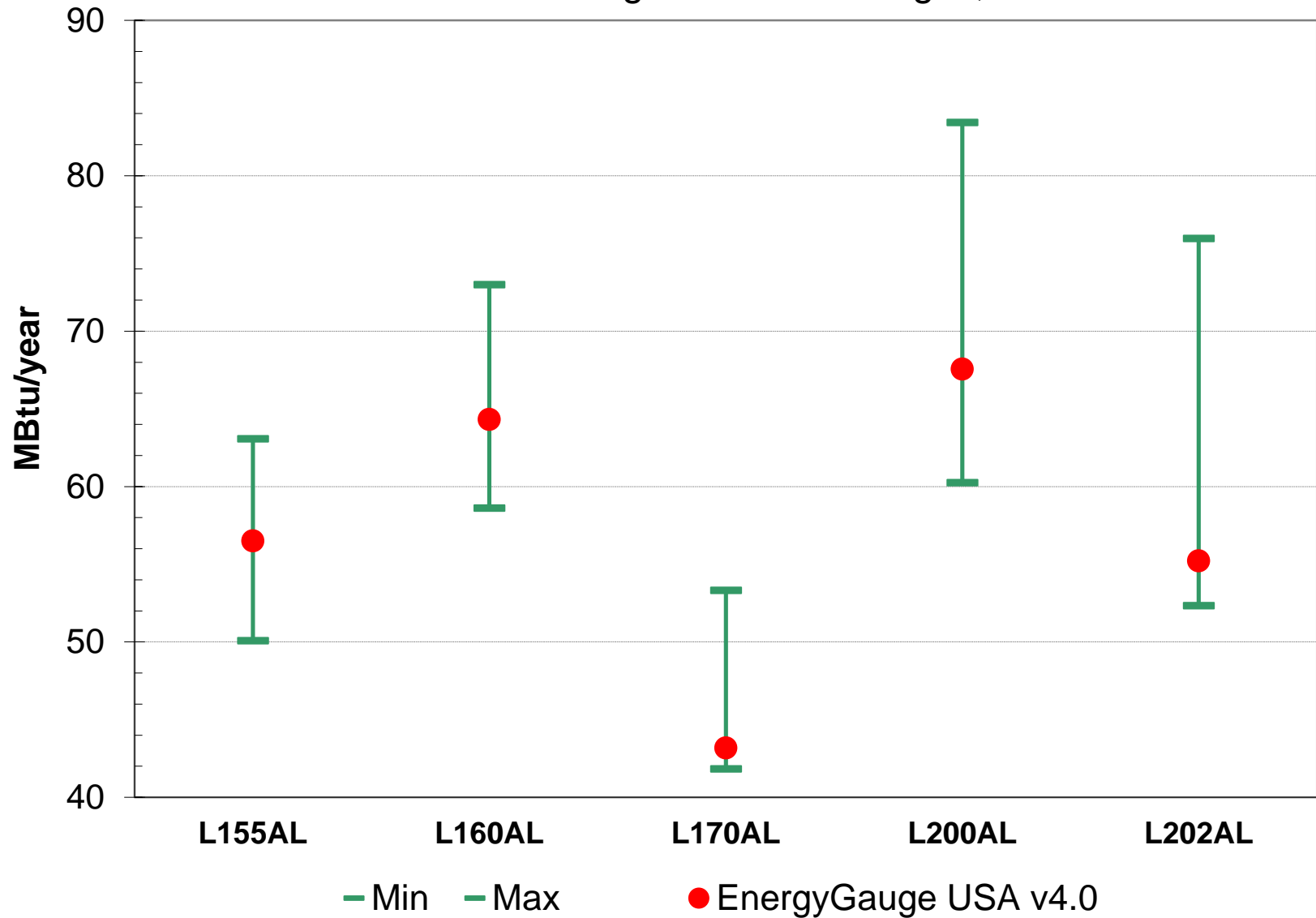
Annual Heating Load Deltas: Colorado Springs, CO



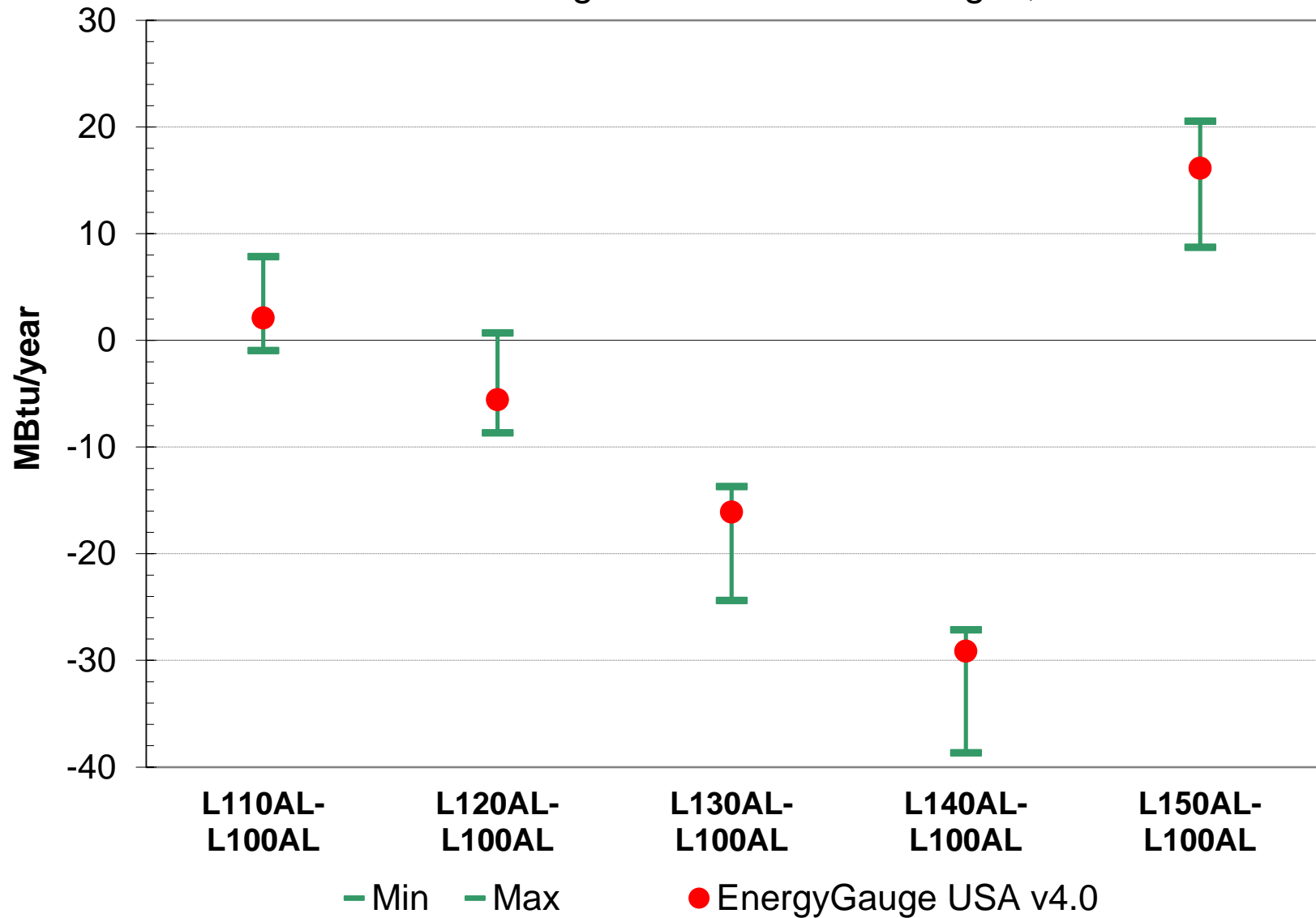
Annual Cooling Loads: Las Vegas, NV



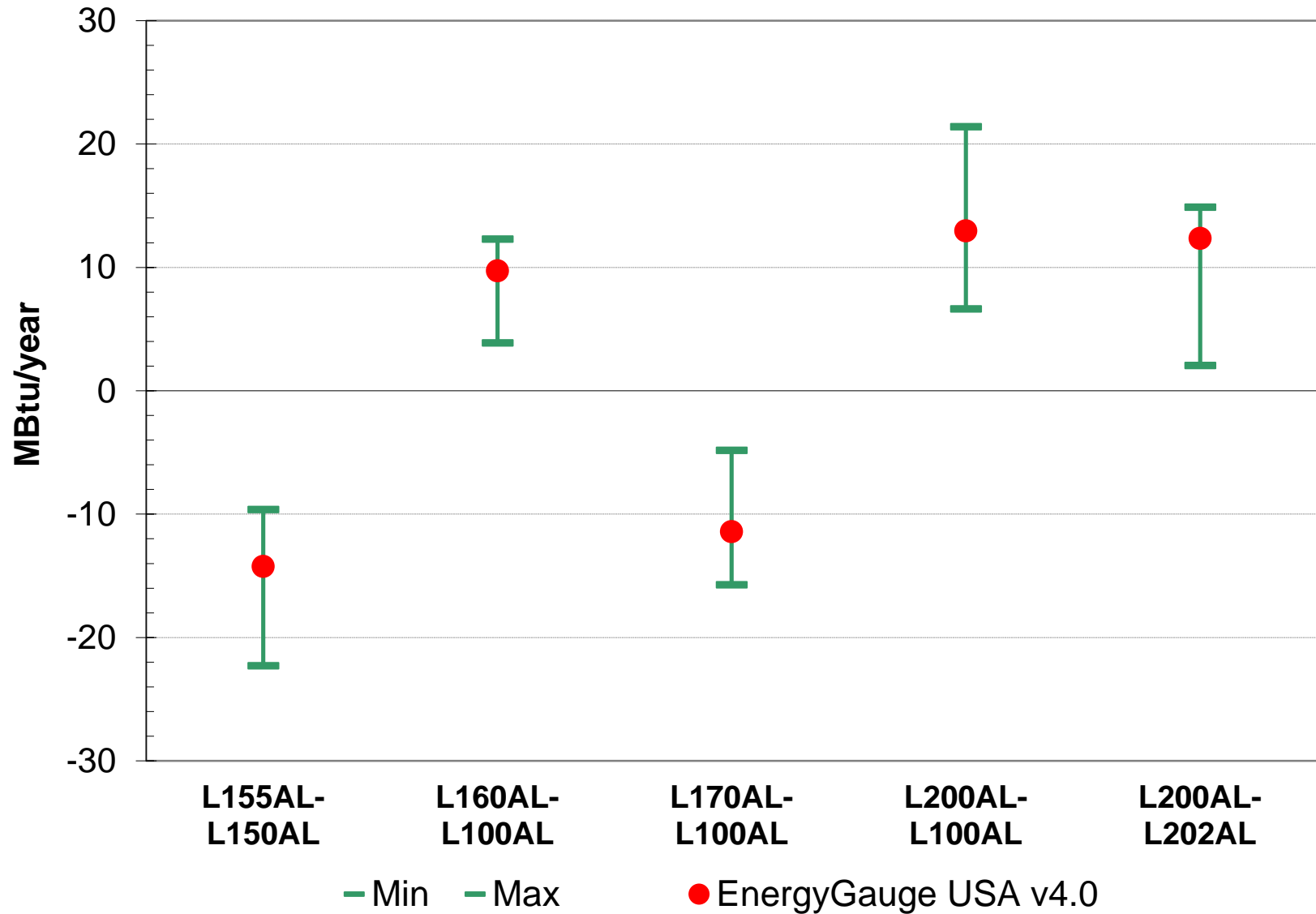
Annual Cooling Loads: Las Vegas, NV



Annual Cooling Load Deltas: Las Vegas, NV



Annual Cooling Load Deltas: Las Vegas, NV



Florida HERS BESTEST results for:

Software Name: EnergyGauge USA v.4.0

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

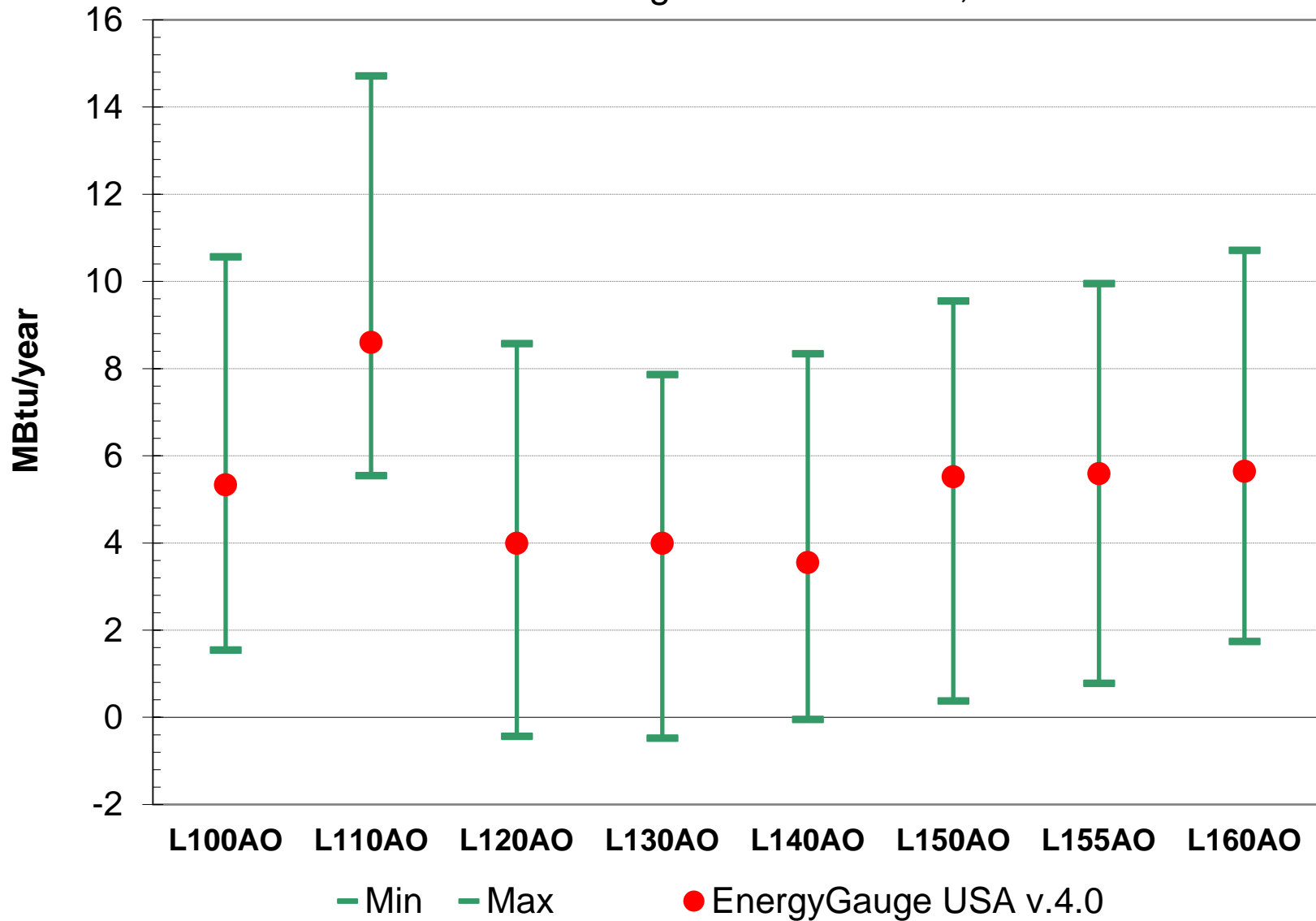
Annual Cooling Loads: Orlando

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

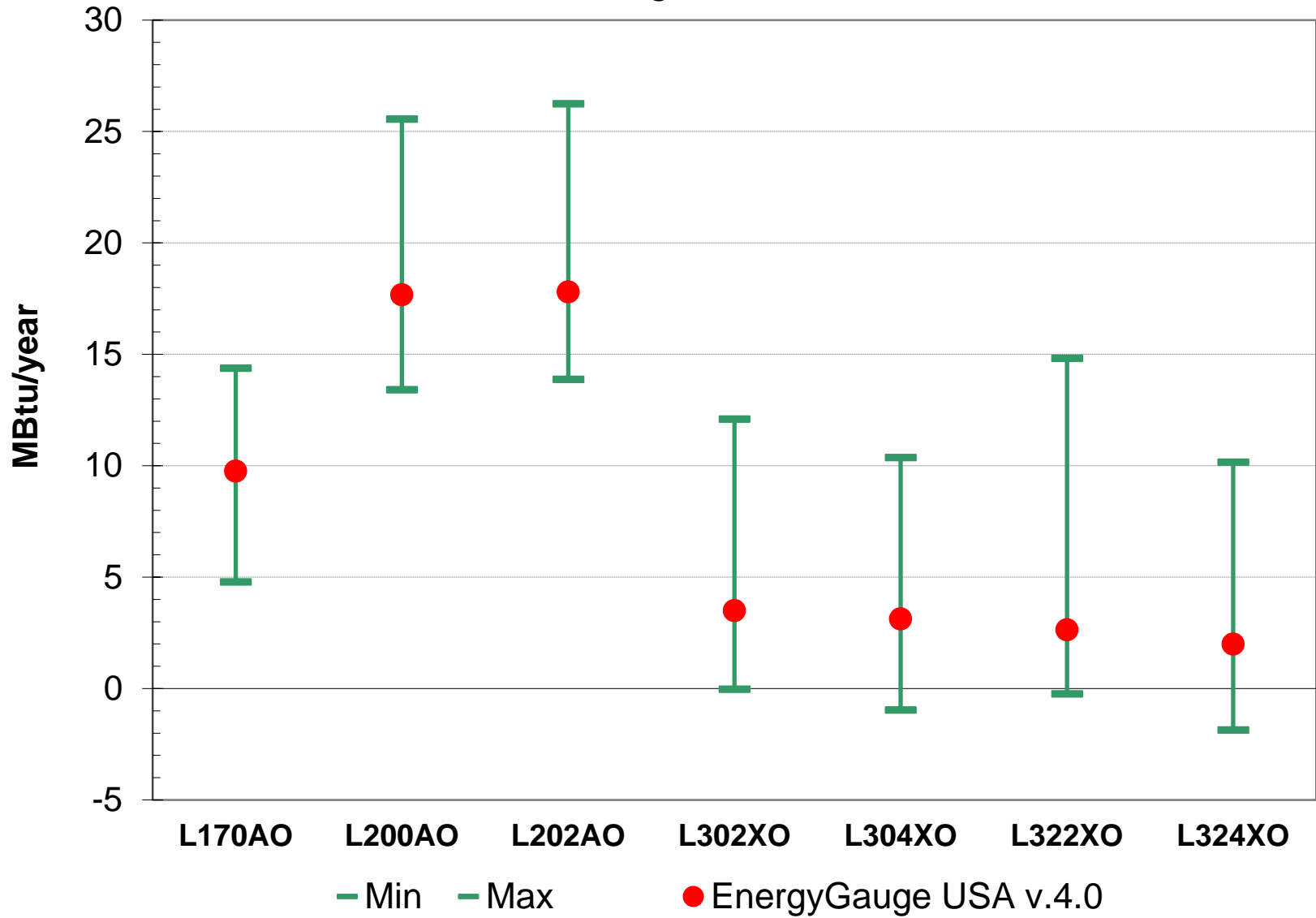
Annual Cooling Load deltas: Orlando

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

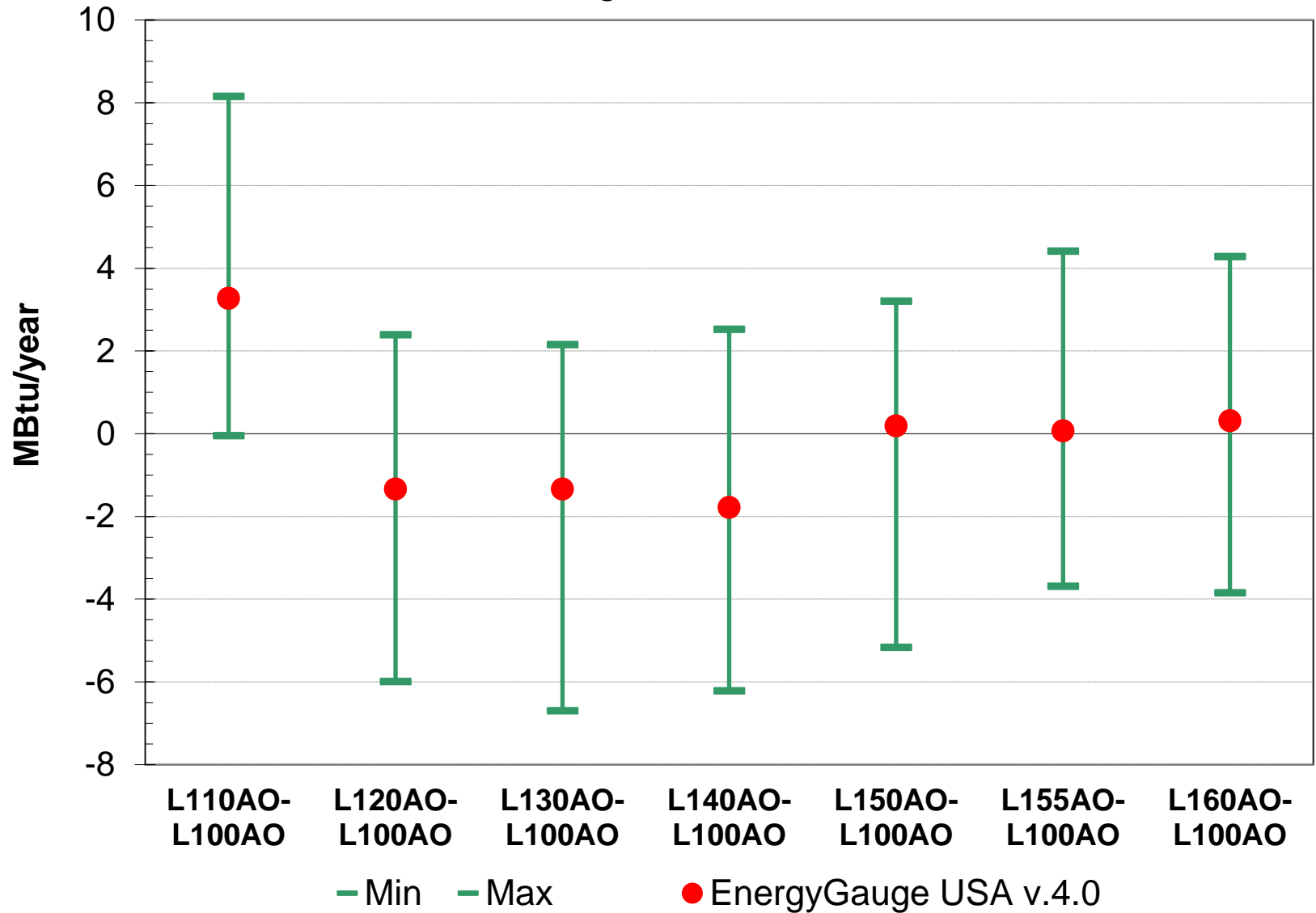
Annual Heating Loads: Orlando, FL



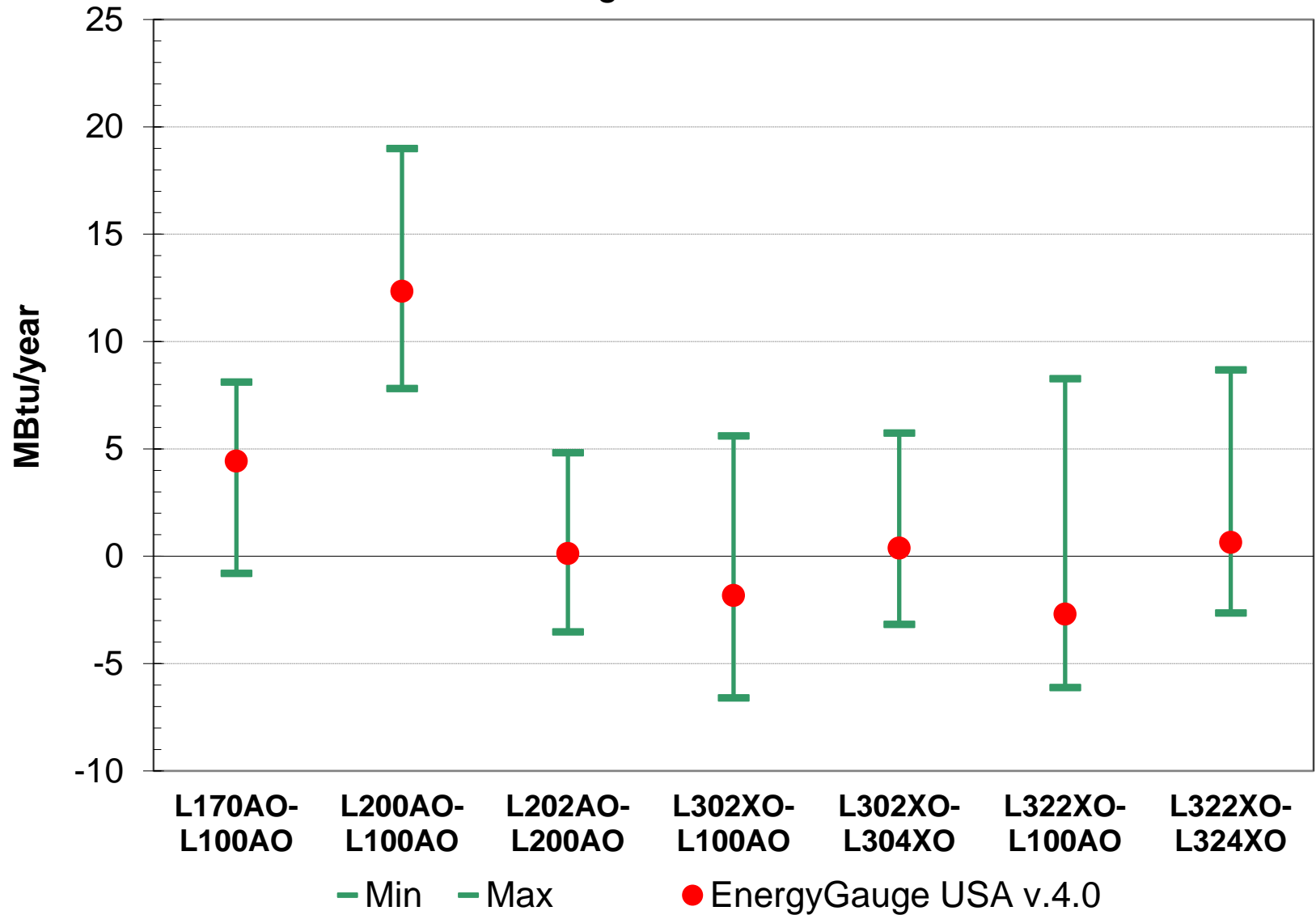
Annual Heating Loads: Orlando, FL



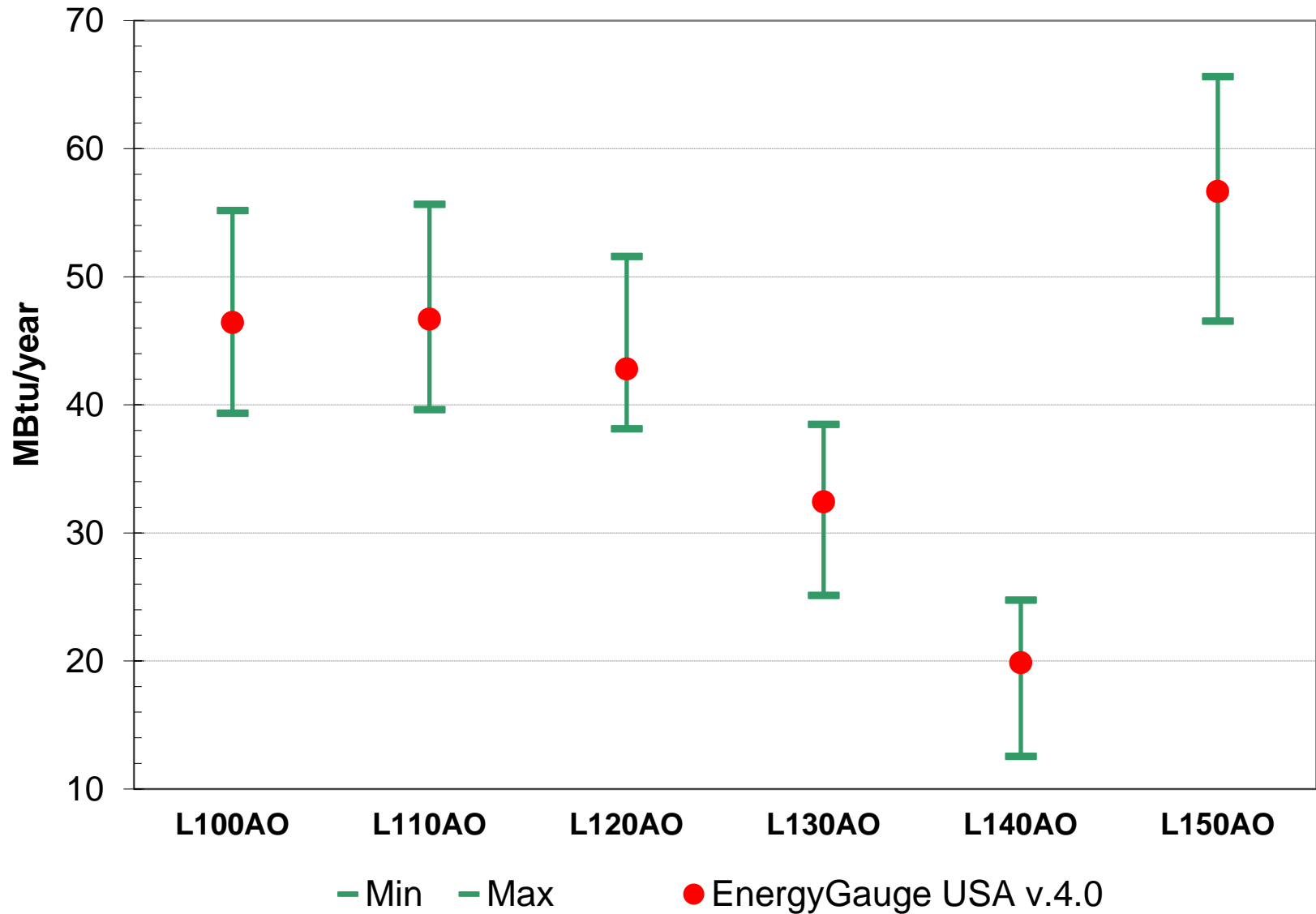
Annual Heating Load Deltas: Orlando, FL



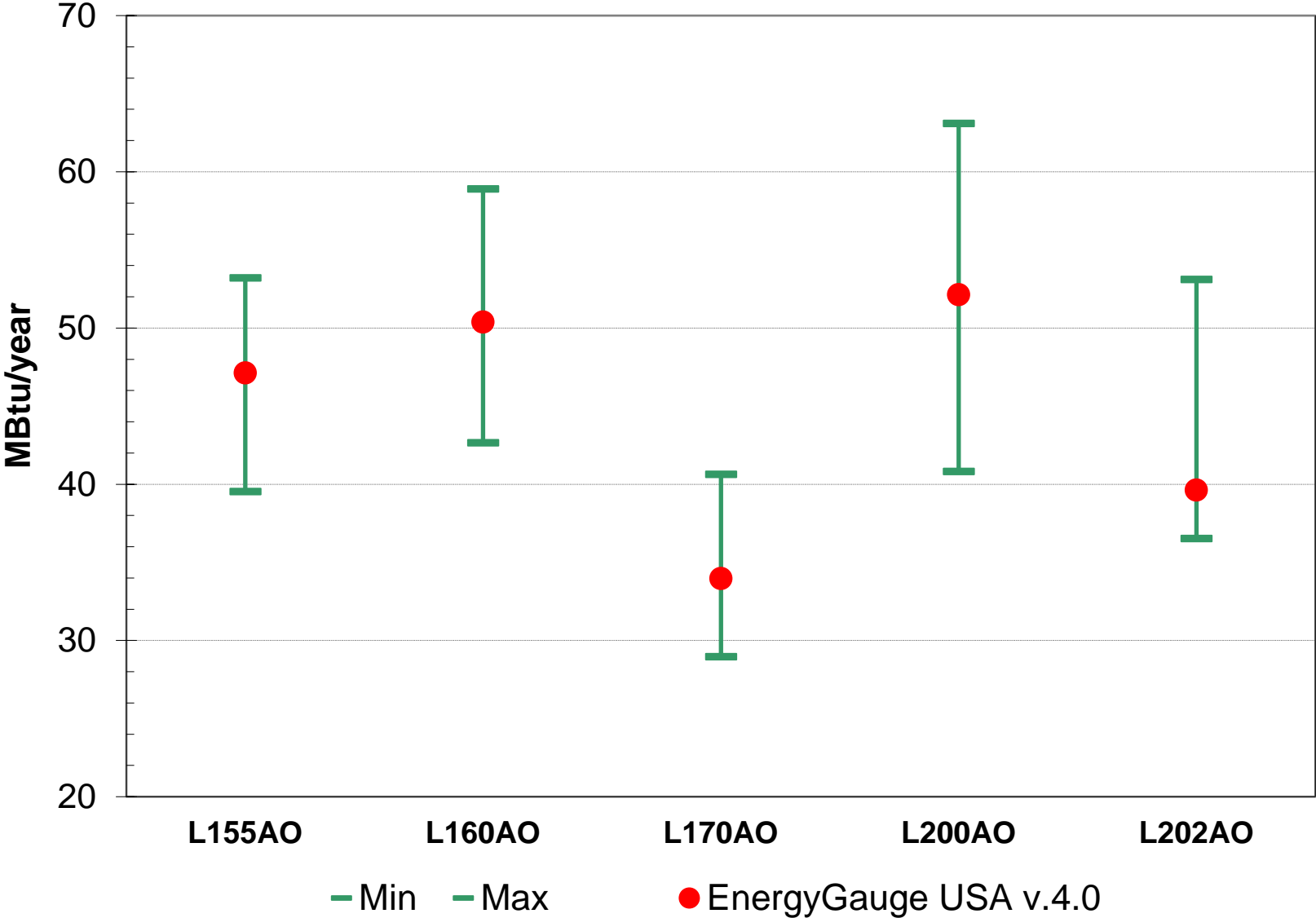
Annual Heating Load Deltas: Orlando, FL



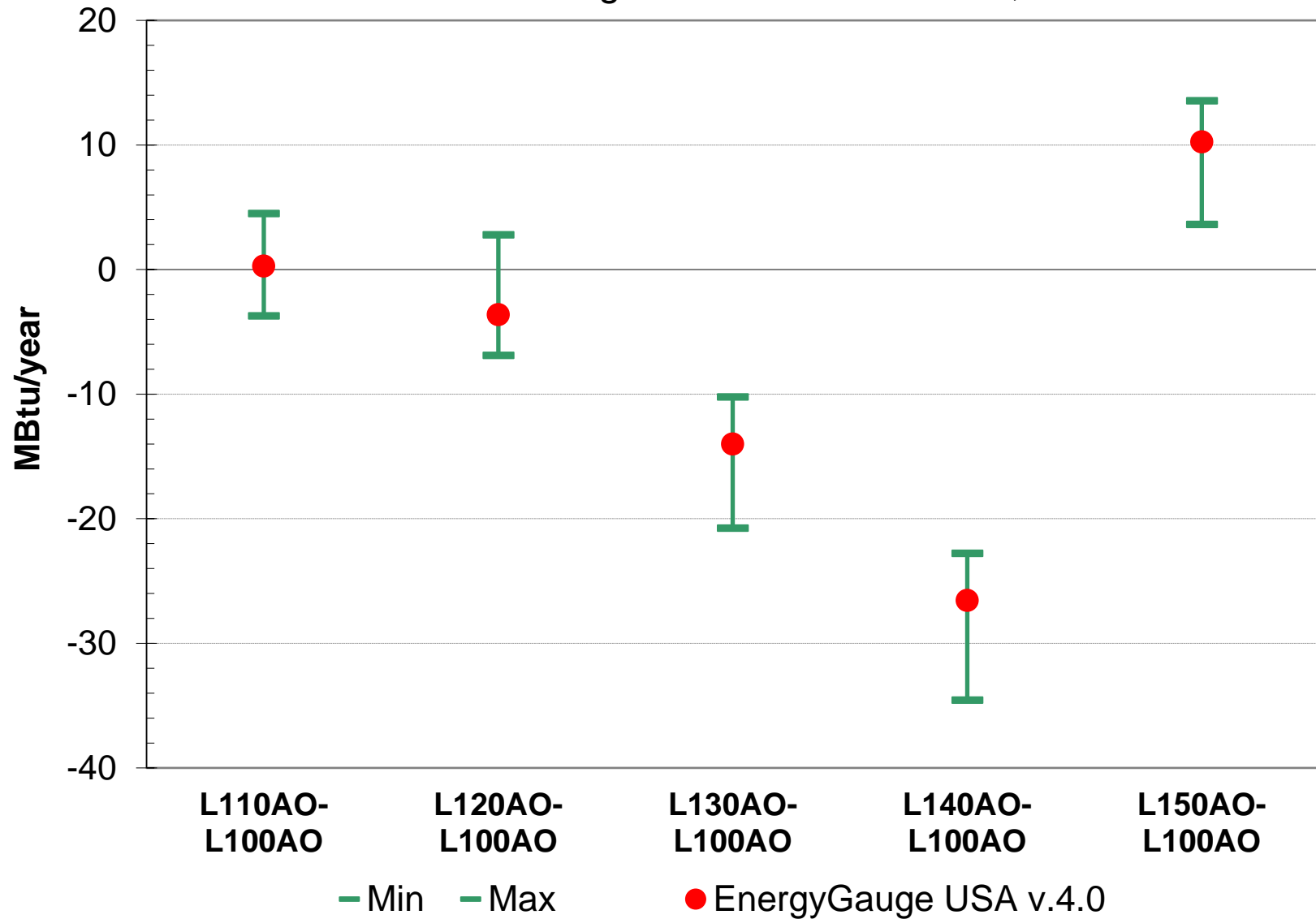
Annual Cooling Loads: Orlando, FL



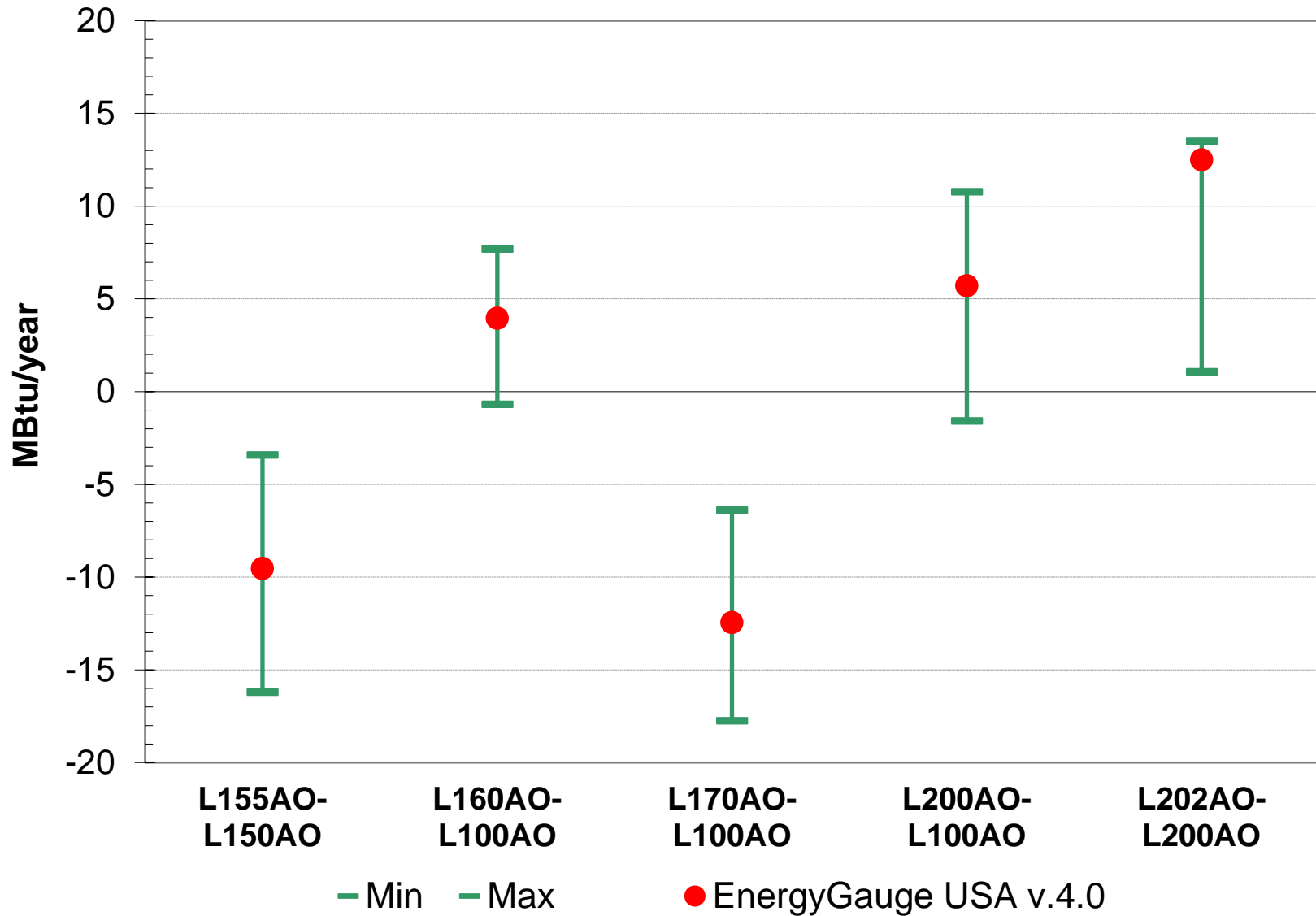
Annual Cooling Loads: Orlando, FL



Annual Cooling Load Deltas: Orlando, FL



Annual Cooling Load Deltas: Orlando, FL



Florida Auto Generation Test Results:

Software Name: EnergyGauge v.4.0

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 _o)	0.082	0.082	0.082	0.082	0.082	0.082	0.082	0.082
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 _o)	n/a	n/a	n/a	n/a	n/a	n/a	0.36	0.36
Above-grade floors (U _o)	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 _o)	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 ²)	5.13	5.13	5.13	5.13	5.13	5.13	5.13	5.13
Crawlspace vent area* (ft ²)	n/a	n/a	10.26	1.026	n/a	n/a	n/a	n/a
Exposed masonry floor area * (ft ²)	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 ²)	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 ²)	57.71	57.71	57.71	57.71	57.71	57.71	50.02	50.02
South window area* (ft ²)	57.71	57.71	57.71	57.71	57.71	57.71	50.02	50.02
East window area* (ft ²)	57.71	57.71	57.71	57.71	57.71	57.71	50.02	50.02
West window area* (ft ²)	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 _o (heating)	0.217	0.217	0.217	0.217	0.217	0.217	0.217	0.217
Window SHGC _o (cooling)	0.217	0.217	0.217	0.217	0.217	0.217	0.217	0.217
ACH50	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
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	0.62	EF = 0.94	0.94	EF = 0.95	0.95	EF = 0.62	0.62
Labeled heating system rating	AFUE = 78%	78%	HSPF = 8.2	8.2	HSPF = 8.2	8.2	AFUE = 78%	78%
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	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

RESNET HVAC Test Suite Results:

Software Name: EnergyGauge USA v4.0

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

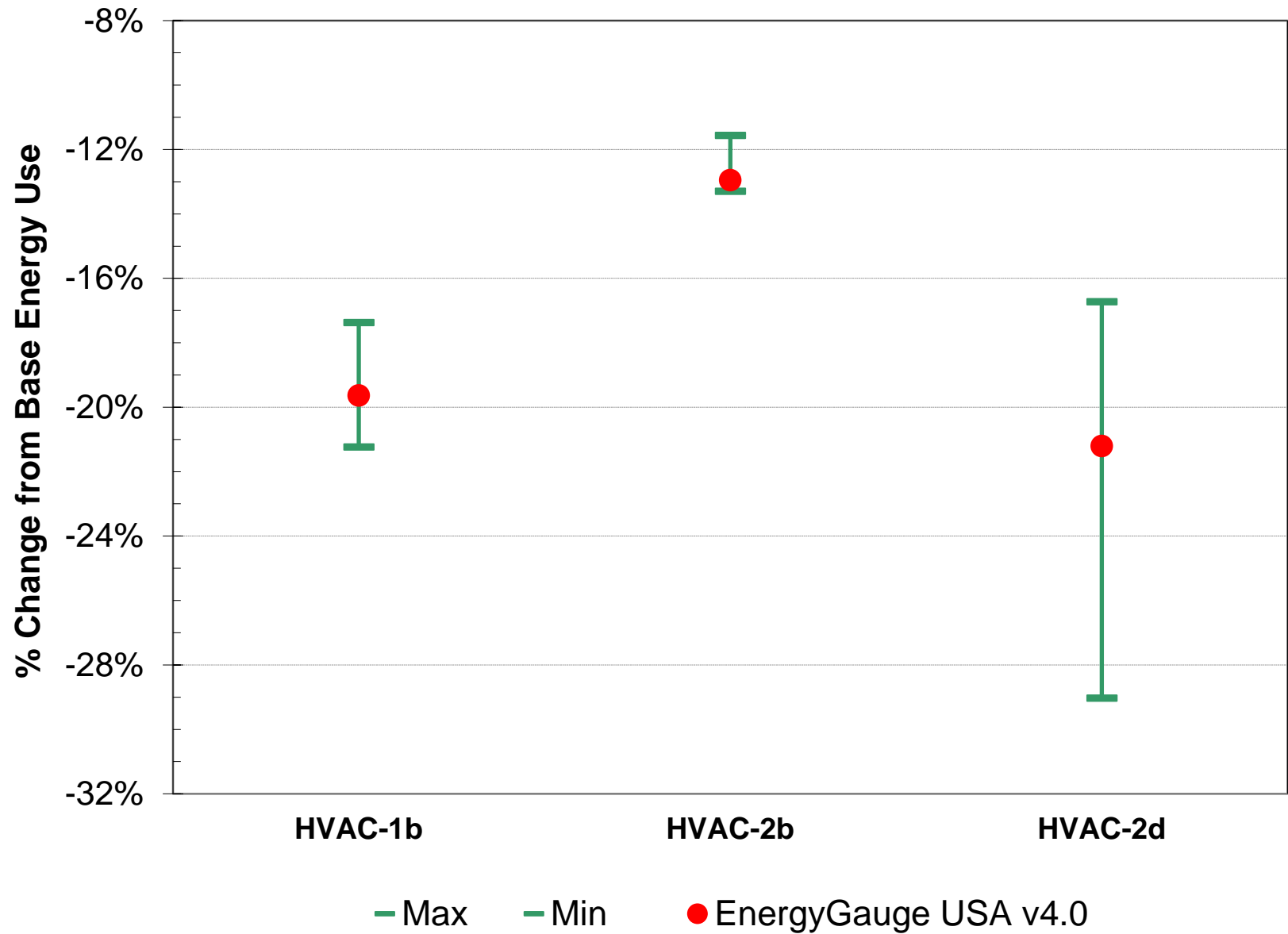
Results

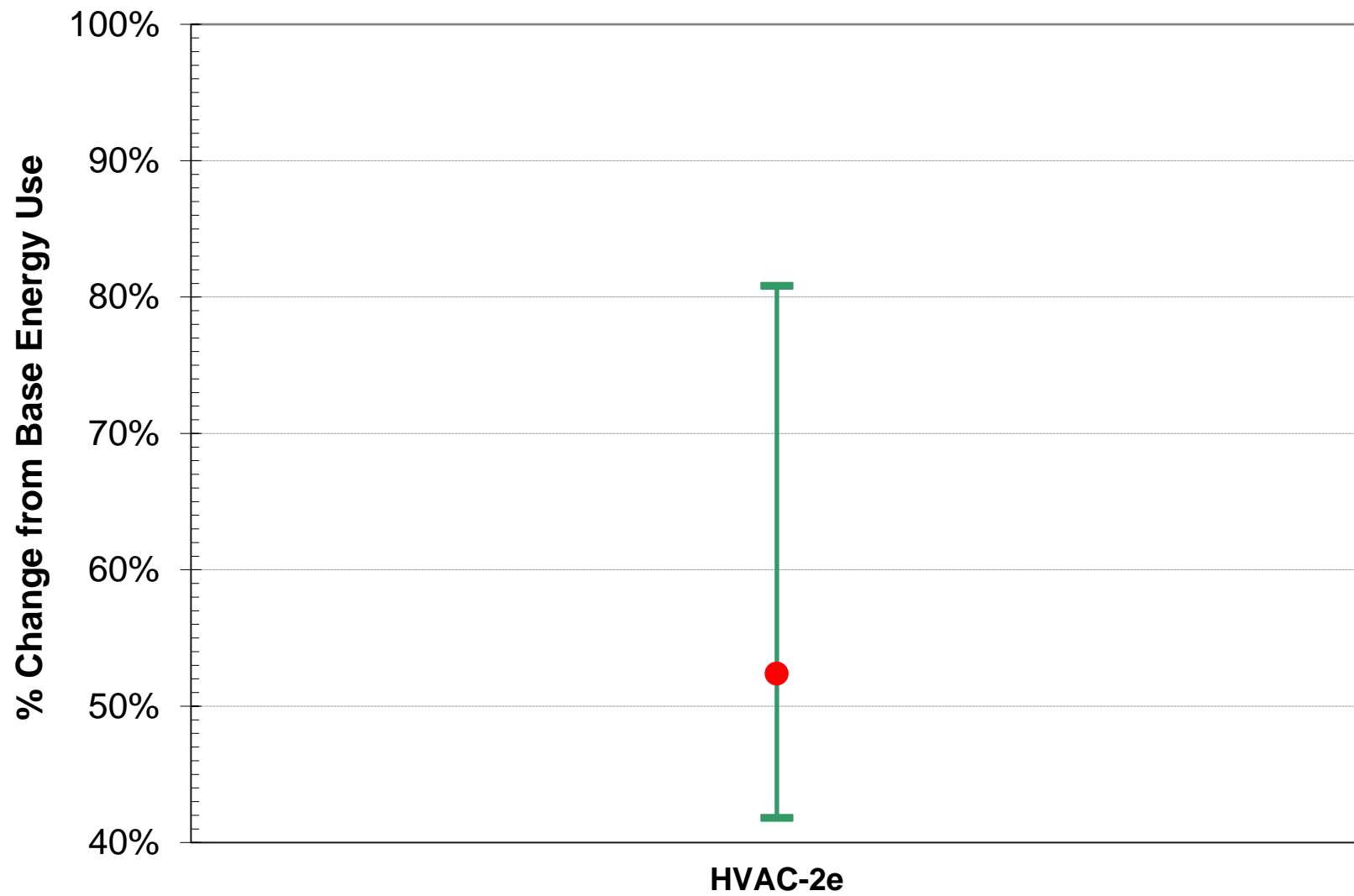
Cooling tests:

Case	Cool	Cool Fan	Cool Tot	% change	Criteria		
					min	max	
HVAC-1a	5424	957	6381	---			
HVAC-1b	4171	957	5128	-19.64%	-21.24%	-17.38%	pass

Heating tests:

Case	Heat	Heat Fan	Heat Tot	% change	Criteria		
					min	max	
HVAC-2a	857	668	87.98	---			
HVAC-2b	743	668	76.58	-12.96%	-13.30%	-11.57%	pass
HVAC-2c	10114	1424	11538	---			
HVAC-2d	8002	1089	9091	-21.21%	-29.03%	-16.73%	pass
HVAC-2e	16670	912	17582	52.38%	41.81%	80.81%	pass





— Max — Min ● EnergyGauge USA v4.0

DSE Test Suite Results

Software Name: EnergyGauge USA v.4.0

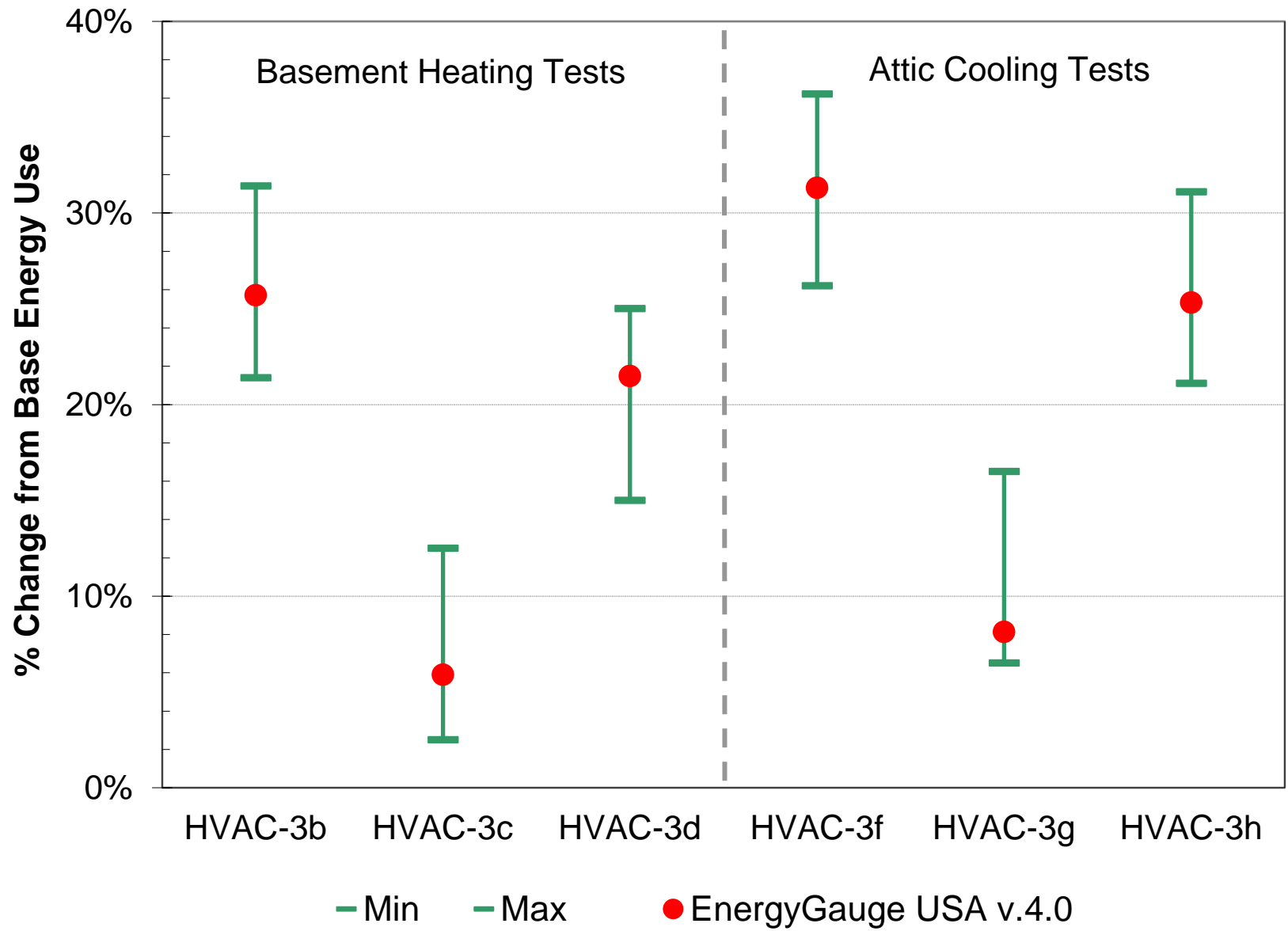
User input data fields indicated by pale yellow
 Test result fields indicated by pale green

Results:

Base Cases	Heat/cool	Fan	Total	% change	
HVAC-3a	837	656	85.94	---	base for cases 3b - 3d
HVAC-3e	5485	968	6453	---	base for cases 3f - 3h

Criteria:

Test Cases	Heat/cool	Fan	Total	% change	max	avg	min	Pass/Fail
HVAC-3b	1059	624	108.03	25.7%	31.4%	26.4%	21.4%	pass
HVAC-3c	888	646	91.00	5.9%	12.5%	7.5%	2.5%	pass
HVAC-3d	1020	706	104.41	21.5%	25.0%	20.0%	15.0%	pass
HVAC-3f	7199	1275	8474	31.3%	36.2%	31.2%	26.2%	pass
HVAC-3g	5931	1047	6978	8.1%	16.5%	11.5%	6.5%	pass
HVAC-3h	6881	1206	8087	25.3%	31.1%	26.1%	21.1%	pass



DHW Test Results:

Software Name: EnergyGauge v.4.0

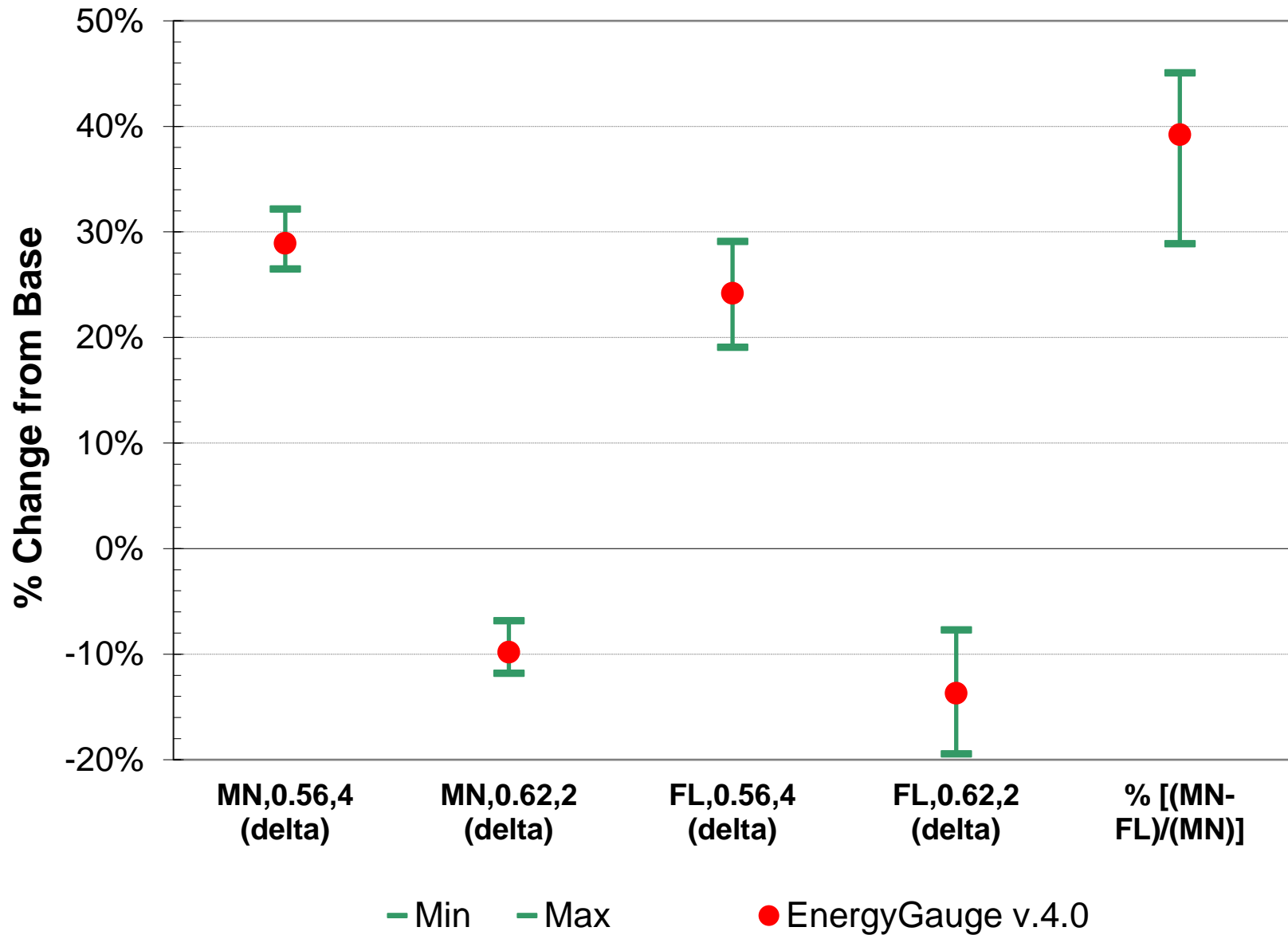
User input data fields indicated by pale yellow
 Test result fields indicated by pale green

Raw Results:

Minnesota	Energy Use (therms)	Florida	Energy Use (therms)
DHW-MN-56-2	204	DHW-FL-56-2	124
DHW-MN-56-4	263	DHW-FL-56-4	154
DHW-MN-62-2	184	DHW-FL-62-2	107

Test Cases:	% Change	Average	Range Min	Range Max	Pass/Fail
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)	24.2%	24.1%	19.1%	29.1%	pass
FL,0.62,2 (delta)	-13.7%	-13.6%	-19.5%	-7.7%	pass
% [(MN-FL)/(MN)]	39.2%	37.0%	28.9%	45.1%	pass

	MBtu	Average	Range Min	Range Max	Pass/Fail
MN,0.56,2 (MBtu)	20.4	20.1	18.2	22.0	pass
FL,0.56,2 (MBtu)	12.4	12.7	10.9	14.4	pass
MN-FL (MBtu)	8	7.4	5.5	9.4	pass



Florida eRatio test

Software Name: **EnergyGauge USA v4.0**

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	152.37	6.18	29.83	3.88	2.31	9.35	4.32	3.37	14.67	5.52	PASS	elec	7.70	elec	13.00	elec	0.92
L130AO-02	142.07	6.18	29.83	3.88	2.31	9.35	13.18	3.37	14.67	4.73	PASS	elec	7.70	elec	13.00	gas	0.82
L130AO-03	151.52	6.18	29.83	3.88	9.73	9.35	4.32	13.63	14.67	5.52	PASS	gas	78%	elec	13.00	elec	0.92
L130AO-04	118.53	6.18	29.83	3.88	2.31	9.35	4.32	2.67	11.03	5.52	PASS	elec	10.00	elec	17.00	elec	0.92
L130AO-05	145.88	6.18	29.83	3.88	9.73	9.35	4.32	11.14	14.67	5.52	PASS	gas	96%	elec	13.00	elec	0.92
REUL Tests:		PASS	PASS	PASS													

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 ²	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 ft ²	256 ft ²	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 ²	N	N							
CEILING													
#	Ceiling Type	Space	R-Value	Area	Framing Fraction	Truss Type							
1	Under Attic ()	Main	16.7	1539 ft ²	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 ²		0.25	0.6	0	
2	S	Exterior	Frame - Wood	Main	11	57	8	456.0 ft ²		0.25	0.6	0	
3	E	Exterior	Frame - Wood	Main	11	27	8	216.0 ft ²		0.25	0.6	0	
4	W	Exterior	Frame - Wood	Main	11	27	8	216.0 ft ²		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 ft ²				
2	S	Insulated	Main	None	.46	3	6	8	20 ft ²				
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 ft ²	0 ft 0 in	0 ft 0 in	None	None
2	S	2	TIM	Single (Clear)	Yes	1.09	0.7	N	90.0 ft ²	0 ft 0 in	0 ft 0 in	None	None
3	E	3	TIM	Single (Clear)	Yes	1.09	0.7	N	45.0 ft ²	0 ft 0 in	0 ft 0 in	None	None
4	W	4	TIM	Single (Clear)	Yes	1.09	0.7	N	45.0 ft ²	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 ft ²	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 #			
		R-Value	Area	Location	Area	Number		TOT	OUT	QN	RLF	Heat	Cool		
1	Main	6	384.75 ft²	Main	77 ft²		Prop. Air Leakage	---	cfm	---	cfm	0.00	0.60	1	1
TEMPERATURES															
Programable Thermostat: N						Ceiling Fans: N									
Cooling	<input checked="" type="checkbox"/> Jan	<input checked="" 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 type="checkbox"/> Jan	<input 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

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 ,			
Family Type:	Single-family		Whole House Fan:			CO ,			
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 %	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_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	
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 ²	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						Heat	Cool	
		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 checked="" type="checkbox"/> Jan	<input checked="" 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 type="checkbox"/> Jan	<input 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

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 ,				
Family Type:	Single-family			Whole House Fan:		CO ,				
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 %	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_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	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		
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 ²	10.4	0	0	1		

Building Input Summary Report

ROOF													
#	Type	Materials		Roof Area	Gable Area	Roof Color	Solar Absor.	SA Tested	Emitt Tested	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 #												
		R-Value	Area	Location	Area	Number						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 checked="" type="checkbox"/>	Jan	<input checked="" type="checkbox"/>	Feb	<input 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 checked="" type="checkbox"/>	Jan	<input checked="" type="checkbox"/>	Feb	<input 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

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:	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 %	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_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 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
FLOORS									
#	Floor Type	Space	R-Value	Area	Tile	Wood	Carpet		
1	Raised Floor	Main	----	1539 ft ²	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 ft ²	256 ft ²	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 ²	N	N							
CEILING													
#	Ceiling Type	Space	R-Value	Area	Framing Fraction	Truss Type							
1	Under Attic ()	Main	16.7	1539 ft ²	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 ²		0.25	0.6	0	
2	S	Exterior	Frame - Wood	Main	11	57	8	456.0 ft ²		0.25	0.6	0	
3	E	Exterior	Frame - Wood	Main	11	27	8	216.0 ft ²		0.25	0.6	0	
4	W	Exterior	Frame - Wood	Main	11	27	8	216.0 ft ²		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 ft ²				
2	S	Insulated	Main	None	.46	3	6	8	20 ft ²				
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 ft ²	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 ft ²	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 ft ²	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 ft ²	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 ft ²	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	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 -----		----- Return -----		Leakage Type	Air Handler	CFM 25 TOT	CFM25 OUT	QN	RLF	HVAC #		
		R-Value	Area	Location	Area	Number						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 checked="" type="checkbox"/> Jan	<input checked="" type="checkbox"/> Feb	<input 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 checked="" 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-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:	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 %	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_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 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
FLOORS									
#	Floor Type	Space	R-Value	Area	Tile	Wood	Carpet		
1	Raised Floor	Main	----	1539 ft ²	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 ft ²	256 ft ²	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 ²	N	N							
CEILING													
#	Ceiling Type	Space	R-Value	Area	Framing Fraction	Truss Type							
1	Under Attic ()	Main	16.7	1539 ft ²	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 ²		0.25	0.6	0	
2	S	Exterior	Frame - Wood	Main	11	57	8	456.0 ft ²		0.25	0.6	0	
3	E	Exterior	Frame - Wood	Main	11	27	8	216.0 ft ²		0.25	0.6	0	
4	W	Exterior	Frame - Wood	Main	11	27	8	216.0 ft ²		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	20 ft ²					
2	S	Insulated	Main	None	.46	3	6	20 ft ²					
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	0.0 ft ²	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 ft ²	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 #		
		R-Value	Area	Location	Area	Number						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 checked="" type="checkbox"/> Jan	<input checked="" 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 type="checkbox"/> Jan	<input 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

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 ,			
Family Type:	Single-family			Whole House Fan:			CO ,			
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_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		
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 ft²	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 ft ²	256 ft ²	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 ²	N	N							
CEILING													
#	Ceiling Type	Space	R-Value	Area	Framing Fraction	Truss Type							
1	Under Attic ()	Main	16.7	1539 ft ²	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 ²		0.25	0.6	0	
2	S	Exterior	Frame - Wood	Main	11	57	8	456.0 ft ²		0.25	0.6	0	
3	E	Exterior	Frame - Wood	Main	11	27	8	216.0 ft ²		0.25	0.6	0	
4	W	Exterior	Frame - Wood	Main	11	27	8	216.0 ft ²		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 ft ²				
2	S	Insulated	Main	None	.46	3	6	8	20 ft ²				
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	0.7	N	270.0 ft ²	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 ft ²	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	31.5 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 -----		----- Return -----		Leakage Type	Air Handler	CFM 25 TOT	CFM25 OUT	QN	RLF	HVAC #		
		R-Value	Area	Location	Area	Number						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 checked="" type="checkbox"/> Jan	<input checked="" 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 type="checkbox"/> Jan	<input 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	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:	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 ,			
Family Type:	Single-family			Whole House Fan:		CO ,			
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 %	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			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 ²	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	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 checked="" type="checkbox"/> Jan	<input checked="" type="checkbox"/> Feb	<input 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 checked="" 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-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

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 ,				
Family Type:	Single-family		Whole House Fan:			CO ,				
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 %	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			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 ²	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 #		
		R-Value	Area	Location	Area	Number						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 checked="" type="checkbox"/> Jan	<input checked="" type="checkbox"/> Feb	<input 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 checked="" 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-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 ,			
Family Type:	Single-family			Whole House Fan:		CO ,			
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 %	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_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	
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 ²	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 ft ²	256 ft ²	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 ²	N	N							
CEILING													
#	Ceiling Type	Space	R-Value	Area	Framing Fraction	Truss Type							
1	Under Attic ()	Main	16.7	1539 ft ²	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 ²		0.25	0.6	0	
2	S	Exterior	Frame - Wood	Main	11	57	8	456.0 ft ²		0.25	0.6	0	
3	E	Exterior	Frame - Wood	Main	11	27	8	216.0 ft ²		0.25	0.6	0	
4	W	Exterior	Frame - Wood	Main	11	27	8	216.0 ft ²		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 ft ²				
2	S	Insulated	Main	None	.46	3	6	8	20 ft ²				
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 ft ²	0 ft 0 in	0 ft 0 in	None	None
2	S	2	TIM	Single (Clear)	Yes	1.09	0.7	N	90.0 ft ²	0 ft 0 in	0 ft 0 in	None	None
3	E	3	TIM	Single (Clear)	Yes	1.09	0.7	N	45.0 ft ²	0 ft 0 in	0 ft 0 in	None	None
4	W	4	TIM	Single (Clear)	Yes	1.09	0.7	N	45.0 ft ²	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 ft ²	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	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 -----		Leakage Type	Air Handler	CFM 25 TOT	CFM25 OUT	QN	RLF	HVAC #		
		R-Value	Area	Location	Area	Number						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 checked="" type="checkbox"/> Jan	<input checked="" type="checkbox"/> Feb	<input 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 checked="" 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-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-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

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:	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 %	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_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		
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 ²	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 #		
		R-Value	Area	Location	Area	Number						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 checked="" type="checkbox"/> Jan	<input checked="" 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 type="checkbox"/> Jan	<input 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

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 %	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_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	
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 ²	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 ft ²	256 ft ²	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 ft ²	N	N							
CEILING													
#	Ceiling Type	Space	R-Value	Area	Framing Fraction	Truss Type							
1	Under Attic ()	Main	9.1	1539 ft ²	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 ft ²		0.25	0.2	0	
2	S	Exterior	Frame - Wood	Main	1.01	57	8	456.0 ft ²		0.25	0.2	0	
3	E	Exterior	Frame - Wood	Main	1.01	27	8	216.0 ft ²		0.25	0.2	0	
4	W	Exterior	Frame - Wood	Main	1.01	27	8	216.0 ft ²		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 ft ²				
2	S	Insulated	Main	None	.46	3	6	8	20 ft ²				
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 ft ²	0 ft 0 in	0 ft 0 in	None	None
2	S	2	TIM	Single (Clear)	Yes	1.09	0.7	N	90.0 ft ²	0 ft 0 in	0 ft 0 in	None	None
3	E	3	TIM	Single (Clear)	Yes	1.09	0.7	N	45.0 ft ²	0 ft 0 in	0 ft 0 in	None	None
4	W	4	TIM	Single (Clear)	Yes	1.09	0.7	N	45.0 ft ²	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 ft ²	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 #		
		R-Value	Area	Location	Area	Number						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 checked="" type="checkbox"/> Jan	<input checked="" 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 type="checkbox"/> Jan	<input 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	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:	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 , CO ,				
Family Type:	Single-family	Whole House Fan:							
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 %	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_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 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
FLOORS									
#	Floor Type	Space	Perimeter	R-Value	Area		Tile	Wood	Carpet
1	Slab-On-Grade Edge Insulation	Main	168 ft	0	1539 ft²	----	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 #	----- Supply -----		----- Return -----		Leakage Type	Air Handler	CFM 25 TOT	CFM25 OUT	QN	RLF	HVAC #													
	Location	R-Value	Area	Location	Area	Number					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 checked="" type="checkbox"/>	Jan	<input checked="" type="checkbox"/>	Feb	<input 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 checked="" type="checkbox"/>	Jan	<input checked="" type="checkbox"/>	Feb	<input 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 checked="" type="checkbox"/>	Jan	<input checked="" type="checkbox"/>	Feb	<input 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
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											

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 %	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_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		
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					
1	Slab-On-Grade Edge Insulation	Main	168 ft	5.4	1539 ft²	----	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 #		
		R-Value	Area	Location	Area	Number						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 checked="" type="checkbox"/> Jan	<input checked="" type="checkbox"/> Feb	<input 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 checked="" 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-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:	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 %	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_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 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	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 Tested	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													
#	Ornt	Wall		Panels	NFRC	U-Factor	SHGC	Storm	Area	Overhang		Interior Shade	Screening
		ID	Frame							Depth	Separation		
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	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 #	----- Supply -----				----- Return -----				Air Handler	CFM 25 TOT	CFM25 OUT	QN	RLF	HVAC #	
	Location	R-Value	Area	Location	Area	Number	Leakage Type	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 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 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 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

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 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
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 %	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			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	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 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	12.87	57		9		42.8 ft²		0.1	0.6	0
6	S	Exterior	Frame - Wood	BSMT-2	12.87	57		9		42.8 ft²		0.1	0.6	0
7	E	Exterior	Frame - Wood	BSMT-2	12.87	27		9		20.3 ft²		0.1	0.6	0
8	W	Exterior	Frame - Wood	BSMT-2	12.87	27		9		20.3 ft²		0.1	0.6	0
9	N	Exterior	Concrete - 6 inch	BSMT-2	11	57	0 7.25	0		413.3 ft²	0	0	0.75	90.80413
10	S	Exterior	Concrete - 6 inch	BSMT-2	11	57	0 7.25	0		413.3 ft²	0	0	0.75	90.80413
11	E	Exterior	Concrete - 6 inch	BSMT-2	11	27	0 7.25	0		195.8 ft²	0	0	0.75	90.80413
12	W	Exterior	Concrete - 6 inch	BSMT-2	11	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													
#	Ornt	Wall		Panels	NFRC	U-Factor	SHGC	Storm	Area	Overhang		Interior Shade	Screening
		ID	Frame							Depth	Separation		
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	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 #	----- Supply -----				----- Return -----				Air Handler	CFM 25 TOT	CFM25 OUT	QN	RLF	HVAC #	
	Location	R-Value	Area	Location	Area	Number	Leakage Type	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 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 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 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

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 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
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						

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)	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:	Las Vegas ,				
Family Type:	Single-family	Whole House Fan:			NV ,				
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	
NV, LAS_VEGASTMY1	NV_LAS_VEGASTMY1	32	105	70	75	2300.5	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 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	1	0	Yes	Yes	Yes
FLOORS									
#	Floor Type	Space	R-Value	Area	Tile	Wood	Carpet		
1	Raised Floor	Main	----	1539 ft ²	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	.000744	3005.2	164.98	310.27	.67	14.645	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	33.2 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	76 kBtu/hr	1149 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 #		
		R-Value	Area	Location	Area	Number						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 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		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

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:	L110AL (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:	Las Vegas ,		
Family Type:	Single-family		Whole House Fan:				NV ,		
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 %	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 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 ²	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	.001667	6728	369.36	694.64	1.5	32.787	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	140 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	90 kBtu/hr	2700 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 TOT	CFM25 OUT	QN	RLF	HVAC #	
		R-Value	Area	Location	Area								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 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		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:	L120AL (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: Las Vegas ,			
Family Type:	Single-family		Whole House Fan:			NV ,			
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 %	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 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 ²	10.4	0	0	1	

Building Input Summary Report

ROOF													
#	Type	Materials		Roof Area	Gable Area	Roof Color	Solar Absor.	SA Tested	Emitt Tested	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		.000744	3005.2	164.98	310.27	.67	14.645	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	30.4 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	70 kBtu/hr	1026 cfm	0.75	sys#1	1					
HOT WATER SYSTEM														
#	System Type	SubType	Location	EF	Cap	Use	SetPnt	Credits						
					gal	gal	deg							
DUCTS														
DUCT #	----- Supply -----			----- Return -----			Air Handler	CFM 25 TOT	CFM25 OUT	QN	RLF	HVAC #		
	Location	R-Value	Area	Location	Area	Number	Leakage Type					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 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		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
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
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

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:	L130AL (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:	Las Vegas ,		
Family Type:	Single-family		Whole House Fan:				NV ,		
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 %	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 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
FLOORS									
#	Floor Type	Space	R-Value	Area	Tile	Wood	Carpet		
1	Raised Floor	Main	----	1539 ft ²	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	.000744	3005.2	164.98	310.27	.67	14.645	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	140 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	50 kBtu/hr	777 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 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		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

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:	L140AL (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:	Las Vegas ,		
Family Type:	Single-family		Whole House Fan:				NV ,		
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 %	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 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
FLOORS									
#	Floor Type	Space	R-Value	Area	Tile	Wood	Carpet		
1	Raised Floor	Main	----	1539 ft ²	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	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	None	None	
INFILTRATION														
#	Scope	Method		SLA	CFM 50	ELA	EqLA	ACH	ACH 50	Space(s)				
1	Wholehouse	Proposed ACH		.000744	3005.2	164.98	310.27	.67	14.645	All				
MASS														
Mass Type		Area		Thickness		Furniture Fraction		Space						
No Added Mass		0 ft²		0 ft		0.1		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	140 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	1620 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 #		
		R-Value	Area	Location	Area	Number						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 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		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	
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	
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	
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	

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:	L150AL (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:	Las Vegas ,		
Family Type:	Single-family		Whole House Fan:				NV ,		
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 %	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 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
FLOORS									
#	Floor Type	Space	R-Value	Area	Tile	Wood	Carpet		
1	Raised Floor	Main	----	1539 ft ²	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	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	.000744	3005.2	164.98	310.27	.67	14.645	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	140 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	100 kBtu/hr	1470 cfm	0.75	sys#1	1					
HOT WATER SYSTEM														
#	System Type	SubType	Location	EF	Cap	Use	SetPnt	Credits						
					gal	gal	deg							
DUCTS														
DUCT #	----- Supply -----			----- Return -----			Air Handler	CFM 25 TOT	CFM25 OUT	QN	RLF	HVAC #		
	Location	R-Value	Area	Location	Area	Number	Leakage Type					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 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		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:	L155AL (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: Las Vegas ,			
Family Type:	Single-family			Whole House Fan:		NV ,			
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 %	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 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 ²	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	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		.000744	3005.2	164.98	310.27	.67	14.645	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	140 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	84 kBtu/hr	1260 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						Heat	Cool	
		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 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		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

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:	L160AL (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: Las Vegas ,			
Family Type:	Single-family		Whole House Fan:			NV ,			
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 %	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 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 ²	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 ft ²	256 ft ²	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 ²	N	N							
CEILING													
#	Ceiling Type	Space	R-Value	Area	Framing Fraction	Truss Type							
1	Under Attic ()	Main	16.7	1539 ft ²	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 ²		0.25	0.6	0	
2	S	Exterior	Frame - Wood	Main	11	57	8	456.0 ft ²		0.25	0.6	0	
3	E	Exterior	Frame - Wood	Main	11	28	8	224.0 ft ²		0.25	0.6	0	
4	W	Exterior	Frame - Wood	Main	11	28	8	224.0 ft ²		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 ft ²				
2	S	Insulated	Main	None	.46	3	6	8	20 ft ²				
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 ft ²	0 ft 0 in	0 ft 0 in	None	None
2	W	4	TIM	Single (Clear)	Yes	1.09	0.7	N	135.0 ft ²	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	.000744	3005.2	164.98	310.27	.67	14.645	All				
MASS													
Mass Type	Area	Thickness	Furniture Fraction	Space									
No Added Mass	0 ft ²	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	140 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	90 kBtu/hr	1365 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 #		
		R-Value	Area	Location	Area	Number						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 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	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:	L170AL (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:	Las Vegas ,		
Family Type:	Single-family			Whole House Fan:				NV ,		
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 %	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 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 ²	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 ft ²	256 ft ²	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 ²	N	N							
CEILING													
#	Ceiling Type	Space	R-Value	Area	Framing Fraction	Truss Type							
1	Under Attic ()	Main	16.7	1539 ft ²	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 ²		0.25	0.6	0	
2	S	Exterior	Frame - Wood	Main	11	57	8	456.0 ft ²		0.25	0.6	0	
3	E	Exterior	Frame - Wood	Main	11	27	8	216.0 ft ²		0.25	0.6	0	
4	W	Exterior	Frame - Wood	Main	11	27	8	216.0 ft ²		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 ft ²				
2	S	Insulated	Main	None	.46	3	6	8	20 ft ²				
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 ft ²	0 ft 0 in	0 ft 0 in	None	None
2	S	2	TIM	Single (Clear)	Yes	1.09	0.7	N	90.0 ft ²	0 ft 0 in	0 ft 0 in	None	None
3	E	3	TIM	Single (Clear)	Yes	1.09	0.7	N	45.0 ft ²	0 ft 0 in	0 ft 0 in	None	None
4	W	4	TIM	Single (Clear)	Yes	1.09	0.7	N	45.0 ft ²	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	.000744	3005.2	164.98	310.27	.67	14.645	All				
MASS													
Mass Type	Area	Thickness	Furniture Fraction	Space									
No Added Mass	0 ft ²	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	140 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	76 kBtu/hr	1149 cfm	0.75	sys#1	1					
HOT WATER SYSTEM														
#	System Type	SubType	Location	EF	Cap	Use	SetPnt	Credits						
					gal	gal	deg							
DUCTS														
DUCT #	----- Supply -----			----- Return -----			Air Handler	CFM 25 TOT	CFM25 OUT	QN	RLF	HVAC #		
	Location	R-Value	Area	Location	Area	Number	Leakage Type					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 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		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	
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	
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	
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	

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

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:	L200AL (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:	Las Vegas ,		
Family Type:	Single-family		Whole House Fan:				NV ,		
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 %	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 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 ²	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	.001667	6728	369.36	694.64	1.5	32.787	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	66.4 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	106 kBtu/hr	1746 cfm	0.75	sys#1	1					
HOT WATER SYSTEM														
#	System Type	SubType	Location	EF	Cap	Use	SetPnt	Credits						
					gal	gal	deg							
DUCTS														
DUCT #	----- Supply -----			----- Return -----			Air Handler	CFM 25 TOT	CFM25 OUT	QN	RLF	HVAC #		
	Location	R-Value	Area	Location	Area	Number	Leakage Type					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 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		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:	L202AL (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:	Las Vegas ,				
Family Type:	Single-family	Whole House Fan:			NV ,				
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 %	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 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 ²	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	.001667	6728	369.36	694.64	1.5	32.787	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	66.4 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	116 kBtu/hr	1746 cfm	0.75	sys#1	1					
HOT WATER SYSTEM														
#	System Type	SubType	Location	EF	Cap	Use	SetPnt	Credits						
					gal	gal	deg							
DUCTS														
DUCT #	----- 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 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		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						

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)		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:	Orlando ,		
Family Type:	Single-family		Whole House Fan:				FL ,		
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	
FL, OrlandoTMY1	FL_ORLANDOTMY1	41	91	70	75	293	44	Medium	
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	1	0	Yes	Yes	Yes
FLOORS									
#	Floor Type	Space	R-Value	Area	Tile	Wood	Carpet		
1	Raised Floor	Main	----	1539 ft ²	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	.000918	3705	203.4	382.53	.67	18.055	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						Heat	Cool	
		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 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 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 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		
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

CLOTHES WASHERS

ID	Type	Screen	Location	Capacity	Make	Model	Schedule	LoadsPerYr
1	1 Main	Default New	Main	2.847			HERS201	(invalid)

CLOTHES DRYERS

ID	Type	Screen	Location	Capacity	Fuel Type	Make	Model	Schedule	LoadsPerYr
1	Dryers	Default New	Main		Electricity				

Building Input Summary Report

RANGE OVEN										
ID	Type	Screen	Location	Type	Fueltype	Make	Model	Cooktop	Oven	
1	Ranges	Default New	Main	CooktopOven C	Electric			Electric FI	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	BSMT-2	100	10	0	10			
2	Hard-Wir	By Count - Qualif	Main	100	10					
3	Hard-Wir	Default New	Exterior							
MISC ELECTRICAL LOADS										
ID	Type	Screen	Item	Quantity	Catagory	Operating	Location	Schedule	Off Standby	
1	Misc Elec	Simple Default		1		1	Main	HERS201	1	

Building Input Summary Report

PROJECT										
Title:	L110AO (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: Orlando ,						
Family Type:	Single-family	Whole House Fan:		FL ,						
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 %	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 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	1	0	Yes	Yes	Yes	
FLOORS										
#	Floor Type	Space	R-Value	Area	Tile	Wood	Carpet			
1	Raised Floor	Main	----	1539 ft ²	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	.002055	8294.8	455.38	856.4	1.5	40.423	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						Heat	Cool	
		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 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 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 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		
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	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

CLOTHES WASHERS

ID	Type	Screen	Location	Capacity	Make	Model	Schedule	LoadsPerYr
1	1 Main	Default New	Main	2.847			HERS201	(invalid)

CLOTHES DRYERS

ID	Type	Screen	Location	Capacity	Fuel Type	Make	Model	Schedule	LoadsPerYr
1	Dryers	Default New	Main		Electricity				

Building Input Summary Report

RANGE OVEN										
ID	Type	Screen	Location	Type	Fueltype	Make	Model	Cooktop	Oven	
1	Ranges	Default New	Main	CooktopOven C	Electric			Electric FI	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	BSMT-2	100	10	0	10			
2	Hard-Wir	By Count - Qualif	Main	100	10					
3	Hard-Wir	Default New	Exterior							
MISC ELECTRICAL LOADS										
ID	Type	Screen	Item	Quantity	Catagory	Operating	Location	Schedule	Off Standby	
1	Misc Elec	Simple Default		1		1	Main	HERS201	1	

Building Input Summary Report

PROJECT									
Title:	L120AO (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: Orlando ,			
Family Type:	Single-family			Whole House Fan:		FL ,			
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 %	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 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 ²	10.4	0	0	1	

Building Input Summary Report

ROOF													
#	Type	Materials	Roof Area	Gable Area	Roof Color	Solar Absor.	SA Tested	Emitt Tested	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	20 ft²					
2	S	Insulated	Main	None	.46	3	6	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	.000918	3705	203.4	382.53	.67	18.055	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	30.4 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	70 kBtu/hr	1026 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 #		
		R-Value	Area	Location	Area	Number						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 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 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 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		
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	
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

CLOTHES WASHERS

ID	Type	Screen	Location	Capacity	Make	Model	Schedule	LoadsPerYr
1	1 Main	Default New	Main	2.847			HERS201	(invalid)

CLOTHES DRYERS

ID	Type	Screen	Location	Capacity	Fuel Type	Make	Model	Schedule	LoadsPerYr
1	Dryers	Default New	Main		Electricity				

Building Input Summary Report

RANGE OVEN										
ID	Type	Screen	Location	Type	Fueltype	Make	Model	Cooktop	Oven	
1	Ranges	Default New	Main	CooktopOven C	Electric			Electric FI	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	BSMT-2	100	10	0	10			
2	Hard-Wir	By Count - Qualif	Main	100	10					
3	Hard-Wir	Default New	Exterior							
MISC ELECTRICAL LOADS										
ID	Type	Screen	Item	Quantity	Catagory	Operating	Location	Schedule	Off Standby	
1	Misc Elec	Simple Default		1		1	Main	HERS201	1	

Building Input Summary Report

PROJECT									
Title:	L130AO (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:	Orlando , FL ,				
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 %	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 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
FLOORS									
#	Floor Type	Space	R-Value	Area	Tile	Wood	Carpet		
1	Raised Floor	Main	----	1539 ft ²	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 ft ²	256 ft ²	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 ²	N	N							
CEILING													
#	Ceiling Type	Space	R-Value	Area	Framing Fraction	Truss Type							
1	Under Attic ()	Main	16.7	1539 ft ²	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 ²		0.25	0.6	0	
2	S	Exterior	Frame - Wood	Main	11	57	8	456.0 ft ²		0.25	0.6	0	
3	E	Exterior	Frame - Wood	Main	11	27	8	216.0 ft ²		0.25	0.6	0	
4	W	Exterior	Frame - Wood	Main	11	27	8	216.0 ft ²		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 ft ²				
2	S	Insulated	Main	None	.46	3	6	8	20 ft ²				
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 ft ²	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 ft ²	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 ft ²	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 ft ²	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	.000918	3705	203.4	382.53	.67	18.055	All				
MASS													
Mass Type	Area	Thickness	Furniture Fraction	Space									
No Added Mass	0 ft ²	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	140 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	50 kBtu/hr	777 cfm	0.75	sys#1	1				
HOT WATER SYSTEM														
#	System Type	SubType	Location	EF	Cap	Use	SetPnt	Credits						
					gal	gal	deg							
DUCTS														
DUCT #	----- Supply -----			----- Return -----			Air Handler	CFM 25 TOT	CFM25 OUT	QN	RLF	HVAC #		
	Location	R-Value	Area	Location	Area	Number	Leakage Type					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 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 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 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		
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	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

CLOTHES WASHERS

ID	Type	Screen	Location	Capacity	Make	Model	Schedule	LoadsPerYr
1	1 Main	Default New	Main	2.847			HERS201	(invalid)

CLOTHES DRYERS

ID	Type	Screen	Location	Capacity	Fuel Type	Make	Model	Schedule	LoadsPerYr
1	Dryers	Default New	Main		Electricity				

Building Input Summary Report

RANGE OVEN										
ID	Type	Screen	Location	Type	Fueltype	Make	Model	Cooktop	Oven	
1	Ranges	Default New	Main	CooktopOven C	Electric			Electric FI	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	BSMT-2	100	10	0	10			
2	Hard-Wir	By Count - Qualif	Main	100	10					
3	Hard-Wir	Default New	Exterior							
MISC ELECTRICAL LOADS										
ID	Type	Screen	Item	Quantity	Catagory	Operating	Location	Schedule	Off Standby	
1	Misc Elec	Simple Default		1		1	Main	HERS201	1	

Building Input Summary Report

PROJECT									
Title:	L140AO (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:	Orlando ,		
Family Type:	Single-family		Whole House Fan:				FL ,		
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 %	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 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
FLOORS									
#	Floor Type	Space	R-Value	Area	Tile	Wood	Carpet		
1	Raised Floor	Main	----	1539 ft ²	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	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	None	None
INFILTRATION													
#	Scope	Method	SLA	CFM 50	ELA	EqLA	ACH	ACH 50	Space(s)				
1	Wholehouse	Proposed ACH	.000918	3705	203.4	382.53	.67	18.055	All				
MASS													
Mass Type	Area	Thickness	Furniture Fraction	Space									
No Added Mass	0 ft²	0 ft	0.1	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	140 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	1620 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						Heat	Cool	
		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 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 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 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		
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	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

CLOTHES WASHERS

ID	Type	Screen	Location	Capacity	Make	Model	Schedule	LoadsPerYr
1	1 Main	Default New	Main	2.847			HERS201	(invalid)

CLOTHES DRYERS

ID	Type	Screen	Location	Capacity	Fuel Type	Make	Model	Schedule	LoadsPerYr
1	Dryers	Default New	Main		Electricity				

Building Input Summary Report

RANGE OVEN										
ID	Type	Screen	Location	Type	Fueltype	Make	Model	Cooktop	Oven	
1	Ranges	Default New	Main	CooktopOven C	Electric			Electric FI	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	BSMT-2	100	10	0	10			
2	Hard-Wir	By Count - Qualif	Main	100	10					
3	Hard-Wir	Default New	Exterior							
MISC ELECTRICAL LOADS										
ID	Type	Screen	Item	Quantity	Catagory	Operating	Location	Schedule	Off Standby	
1	Misc Elec	Simple Default		1		1	Main	HERS201	1	

Building Input Summary Report

PROJECT									
Title:	L150AO (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:	Orlando ,		
Family Type:	Single-family		Whole House Fan:				FL ,		
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 %	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 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
FLOORS									
#	Floor Type	Space	R-Value	Area	Tile	Wood	Carpet		
1	Raised Floor	Main	----	1539 ft ²	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	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	.000918	3705	203.4	382.53	.67	18.055	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	140 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	100 kBtu/hr	1470 cfm	0.75	sys#1	1				
HOT WATER SYSTEM														
#	System Type	SubType	Location	EF	Cap	Use	SetPnt	Credits						
					gal	gal	deg							
DUCTS														
DUCT #	----- Supply -----			----- Return -----			Air Handler	CFM 25 TOT	CFM25 OUT	QN	RLF	HVAC #		
	Location	R-Value	Area	Location	Area	Number	Leakage Type					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 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 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 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		
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	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

CLOTHES WASHERS

ID	Type	Screen	Location	Capacity	Make	Model	Schedule	LoadsPerYr
1	1 Main	Default New	Main	2.847			HERS201	(invalid)

CLOTHES DRYERS

ID	Type	Screen	Location	Capacity	Fuel Type	Make	Model	Schedule	LoadsPerYr
1	Dryers	Default New	Main		Electricity				

Building Input Summary Report

RANGE OVEN										
ID	Type	Screen	Location	Type	Fueltype	Make	Model	Cooktop	Oven	
1	Ranges	Default New	Main	CooktopOven C	Electric			Electric FI	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	BSMT-2	100	10	0	10			
2	Hard-Wir	By Count - Qualif	Main	100	10					
3	Hard-Wir	Default New	Exterior							
MISC ELECTRICAL LOADS										
ID	Type	Screen	Item	Quantity	Catagory	Operating	Location	Schedule	Off Standby	
1	Misc Elec	Simple Default		1		1	Main	HERS201	1	

Building Input Summary Report

PROJECT									
Title:	L155AO (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: Orlando ,			
Family Type:	Single-family		Whole House Fan:			FL ,			
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 %	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 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 ²	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	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	.000918	3705	203.4	382.53	.67	18.055	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	140 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	84 kBtu/hr	1260 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						Heat	Cool	
		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 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 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 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		
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	
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

CLOTHES WASHERS

ID	Type	Screen	Location	Capacity	Make	Model	Schedule	LoadsPerYr
1	1 Main	Default New	Main	2.847			HERS201	(invalid)

CLOTHES DRYERS

ID	Type	Screen	Location	Capacity	Fuel Type	Make	Model	Schedule	LoadsPerYr
1	Dryers	Default New	Main		Electricity				

Building Input Summary Report

RANGE OVEN										
ID	Type	Screen	Location	Type	Fueltype	Make	Model	Cooktop	Oven	
1	Ranges	Default New	Main	CooktopOven C	Electric			Electric FI	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	BSMT-2	100	10	0	10			
2	Hard-Wir	By Count - Qualif	Main	100	10					
3	Hard-Wir	Default New	Exterior							
MISC ELECTRICAL LOADS										
ID	Type	Screen	Item	Quantity	Catagory	Operating	Location	Schedule	Off Standby	
1	Misc Elec	Simple Default		1		1	Main	HERS201	1	

Building Input Summary Report

PROJECT										
Title:	L160AO (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: Orlando ,				
Family Type:	Single-family		Whole House Fan:			FL ,				
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	
FL, OrlandoTMY1	FL_ORLANDOTMY1		41	91	70	75	293	44	Medium	
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 ²	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	.000918	3705	203.4	382.53	.67	18.055	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	140 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	90 kBtu/hr	1365 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 #		
		R-Value	Area	Location	Area	Number						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 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 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 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		
Thermostat Schedule:	BESTEST-cooling													
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

CLOTHES WASHERS

ID	Type	Screen	Location	Capacity	Make	Model	Schedule	LoadsPerYr
1	1 Main	Default New	Main	2.847			HERS201	(invalid)

CLOTHES DRYERS

ID	Type	Screen	Location	Capacity	Fuel Type	Make	Model	Schedule	LoadsPerYr
1	Dryers	Default New	Main		Electricity				

Building Input Summary Report

RANGE OVEN										
ID	Type	Screen	Location	Type	Fueltype	Make	Model	Cooktop	Oven	
1	Ranges	Default New	Main	CooktopOven C	Electric			Electric FI	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	BSMT-2	100	10	0	10			
2	Hard-Wir	By Count - Qualif	Main	100	10					
3	Hard-Wir	Default New	Exterior							
MISC ELECTRICAL LOADS										
ID	Type	Screen	Item	Quantity	Catagory	Operating	Location	Schedule	Off Standby	
1	Misc Elec	Simple Default		1		1	Main	HERS201	1	

Building Input Summary Report

PROJECT									
Title:	L170AO (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: Orlando ,		
Family Type:	Single-family			Whole House Fan:			FL ,		
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 %	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 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 ²	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 ft ²	256 ft ²	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 ²	N	N							
CEILING													
#	Ceiling Type	Space	R-Value	Area	Framing Fraction	Truss Type							
1	Under Attic ()	Main	16.7	1539 ft ²	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 ²		0.25	0.6	0	
2	S	Exterior	Frame - Wood	Main	11	57	8	456.0 ft ²		0.25	0.6	0	
3	E	Exterior	Frame - Wood	Main	11	27	8	216.0 ft ²		0.25	0.6	0	
4	W	Exterior	Frame - Wood	Main	11	27	8	216.0 ft ²		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 ft ²				
2	S	Insulated	Main	None	.46	3	6	8	20 ft ²				
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 ft ²	0 ft 0 in	0 ft 0 in	None	None
2	S	2	TIM	Single (Clear)	Yes	1.09	0.7	N	90.0 ft ²	0 ft 0 in	0 ft 0 in	None	None
3	E	3	TIM	Single (Clear)	Yes	1.09	0.7	N	45.0 ft ²	0 ft 0 in	0 ft 0 in	None	None
4	W	4	TIM	Single (Clear)	Yes	1.09	0.7	N	45.0 ft ²	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	.000918	3705	203.4	382.53	.67	18.055	All				
MASS													
Mass Type	Area	Thickness	Furniture Fraction	Space									
No Added Mass	0 ft ²	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	140 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	76 kBtu/hr	1149 cfm	0.75	sys#1	1				
HOT WATER SYSTEM														
#	System Type	SubType	Location	EF	Cap	Use	SetPnt	Credits						
					gal	gal	deg							
DUCTS														
DUCT #	----- Supply -----			----- Return -----			Air Handler	CFM 25 TOT	CFM25 OUT	QN	RLF	HVAC #		
	Location	R-Value	Area	Location	Area	Number	Leakage Type					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 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 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 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		
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	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

CLOTHES WASHERS

ID	Type	Screen	Location	Capacity	Make	Model	Schedule	LoadsPerYr
1	1 Main	Default New	Main	2.847			HERS201	(invalid)

CLOTHES DRYERS

ID	Type	Screen	Location	Capacity	Fuel Type	Make	Model	Schedule	LoadsPerYr
1	Dryers	Default New	Main		Electricity				

RANGE OVEN

ID	Type	Screen	Location	Type	Fueltype	Make	Model	Cooktop	Oven
1	Ranges	Default New	Main	CooktopOven C	Electric			Electric FI	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	BSMT-2	100	10	0	10			
2	Hard-Wir	By Count - Qualif	Main	100	10					
3	Hard-Wir	Default New	Exterior							

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

Building Input Summary Report

PROJECT									
Title:	L200AO (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:	Orlando ,				
Family Type:	Single-family	Whole House Fan:			FL ,				
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 %	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 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
FLOORS									
#	Floor Type	Space	R-Value	Area	Tile	Wood	Carpet		
1	Raised Floor	Main	----	1539 ft ²	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	11	1539 ft²	0.1	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	.002055	8294.8	455.38	856.4	1.5	40.423	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	61 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	61 kBtu/hr	1830 cfm	0.75	sys#1	1				
HOT WATER SYSTEM														
#	System Type	SubType	Location	EF	Cap	Use	SetPnt	Credits						
					gal	gal	deg							
DUCTS														
DUCT #	----- Supply -----			----- Return -----			Air Handler	CFM 25 TOT	CFM25 OUT	QN	RLF	HVAC #		
	Location	R-Value	Area	Location	Area	Number	Leakage Type					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 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 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 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		
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	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

CLOTHES WASHERS

ID	Type	Screen	Location	Capacity	Make	Model	Schedule	LoadsPerYr
1	1 Main	Default New	Main	2.847			HERS201	(invalid)

CLOTHES DRYERS

ID	Type	Screen	Location	Capacity	Fuel Type	Make	Model	Schedule	LoadsPerYr
1	Dryers	Default New	Main		Electricity				

Building Input Summary Report

RANGE OVEN										
ID	Type	Screen	Location	Type	Fueltype	Make	Model	Cooktop	Oven	
1	Ranges	Default New	Main	CooktopOven C	Electric			Electric FI	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	BSMT-2	100	10	0	10			
2	Hard-Wir	By Count - Qualif	Main	100	10					
3	Hard-Wir	Default New	Exterior							
MISC ELECTRICAL LOADS										
ID	Type	Screen	Item	Quantity	Catagory	Operating	Location	Schedule	Off Standby	
1	Misc Elec	Simple Default		1		1	Main	HERS201	1	

Building Input Summary Report

PROJECT									
Title:	L202AO (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:	Orlando ,				
Family Type:	Single-family	Whole House Fan:			FL ,				
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 %	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 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 ²	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	11	1539 ft²	0.1	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	.002055	8294.8	455.38	856.4	1.5	40.423	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	61 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	61 kBtu/hr	1830 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						Heat	Cool	
		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 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 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 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		
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	
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

CLOTHES WASHERS

ID	Type	Screen	Location	Capacity	Make	Model	Schedule	LoadsPerYr
1	1 Main	Default New	Main	2.847			HERS201	(invalid)

CLOTHES DRYERS

ID	Type	Screen	Location	Capacity	Fuel Type	Make	Model	Schedule	LoadsPerYr
1	Dryers	Default New	Main		Electricity				

Building Input Summary Report

RANGE OVEN										
ID	Type	Screen	Location	Type	Fueltype	Make	Model	Cooktop	Oven	
1	Ranges	Default New	Main	CooktopOven C	Electric			Electric FI	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	BSMT-2	100	10	0	10			
2	Hard-Wir	By Count - Qualif	Main	100	10					
3	Hard-Wir	Default New	Exterior							
MISC ELECTRICAL LOADS										
ID	Type	Screen	Item	Quantity	Catagory	Operating	Location	Schedule	Off Standby	
1	Misc Elec	Simple Default		1		1	Main	HERS201	1	

Building Input Summary Report

PROJECT									
Title:	L302AO (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:	Orlando ,				
Family Type:	Single-family	Whole House Fan:			FL ,				
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 %	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 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
FLOORS									
#	Floor Type	Space	Perimeter	R-Value	Area		Tile	Wood	Carpet
1	Slab-On-Grade Edge Insulation	Main	168 ft	0	1539 ft²	----	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 ft ²	256 ft ²	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 ²	N	N							
CEILING													
#	Ceiling Type	Space	R-Value	Area	Framing Fraction	Truss Type							
1	Under Attic ()	Main	16.7	1539 ft ²	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 ²		0.25	0.6	0	
2	S	Exterior	Frame - Wood	Main	11	57	8	456.0 ft ²		0.25	0.6	0	
3	E	Exterior	Frame - Wood	Main	11	27	8	216.0 ft ²		0.25	0.6	0	
4	W	Exterior	Frame - Wood	Main	11	27	8	216.0 ft ²		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 ft ²				
2	S	Insulated	Main	None	.46	3	6	8	20 ft ²				
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 ft ²	0 ft 0 in	0 ft 0 in	None	None
2	S	2	TIM	Single (Clear)	Yes	1.09	0.7	N	90.0 ft ²	0 ft 0 in	0 ft 0 in	None	None
3	E	3	TIM	Single (Clear)	Yes	1.09	0.7	N	45.0 ft ²	0 ft 0 in	0 ft 0 in	None	None
4	W	4	TIM	Single (Clear)	Yes	1.09	0.7	N	45.0 ft ²	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	.000918	3705	203.4	382.53	.67	18.055	All				
MASS													
Mass Type	Area	Thickness	Furniture Fraction	Space									
No Added Mass	0 ft ²	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 #	----- Supply -----			----- Return -----			Air Handler	CFM 25 TOT	CFM25 OUT	QN	RLF	HVAC #		
	Location	R-Value	Area	Location	Area	Number	Leakage Type					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 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 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 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		
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

CLOTHES WASHERS

ID	Type	Screen	Location	Capacity	Make	Model	Schedule	LoadsPerYr
1	1 Main	Default New	Main	2.847			HERS201	(invalid)

CLOTHES DRYERS

ID	Type	Screen	Location	Capacity	Fuel Type	Make	Model	Schedule	LoadsPerYr
1	Dryers	Default New	Main		Electricity				

Building Input Summary Report

RANGE OVEN										
ID	Type	Screen	Location	Type	Fueltype	Make	Model	Cooktop	Oven	
1	Ranges	Default New	Main	CooktopOven C	Electric			Electric FI	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	BSMT-2	100	10	0	10			
2	Hard-Wir	By Count - Qualif	Main	100	10					
3	Hard-Wir	Default New	Exterior							
MISC ELECTRICAL LOADS										
ID	Type	Screen	Item	Quantity	Catagory	Operating	Location	Schedule	Off Standby	
1	Misc Elec	Simple Default		1		1	Main	HERS201	1	

Building Input Summary Report

PROJECT									
Title:	L304AO (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: Orlando ,			
Family Type:	Single-family		Whole House Fan:			FL ,			
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 %	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 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	5.4	1539 ft²	----	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	.000918	3705	203.4	382.53	.67	18.055	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						Heat	Cool	
		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 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 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 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		
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	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

CLOTHES WASHERS

ID	Type	Screen	Location	Capacity	Make	Model	Schedule	LoadsPerYr
1	1 Main	Default New	Main	2.847			HERS201	(invalid)

CLOTHES DRYERS

ID	Type	Screen	Location	Capacity	Fuel Type	Make	Model	Schedule	LoadsPerYr
1	Dryers	Default New	Main		Electricity				

Building Input Summary Report

RANGE OVEN										
ID	Type	Screen	Location	Type	Fueltype	Make	Model	Cooktop	Oven	
1	Ranges	Default New	Main	CooktopOven C	Electric			Electric FI	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	BSMT-2	100	10	0	10			
2	Hard-Wir	By Count - Qualif	Main	100	10					
3	Hard-Wir	Default New	Exterior							
MISC ELECTRICAL LOADS										
ID	Type	Screen	Item	Quantity	Catagory	Operating	Location	Schedule	Off Standby	
1	Misc Elec	Simple Default		1		1	Main	HERS201	1	

Building Input Summary Report

PROJECT									
Title:	L322AO (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:	Orlando ,				
Family Type:	Single-family	Whole House Fan:			FL ,				
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 %	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 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	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	Main	1.87	57		9		42.8 ft²		0	0.6	0
6	S	Exterior	Frame - Wood	Main	1.87	57		9		42.8 ft²		0	0.6	0
7	E	Exterior	Frame - Wood	Main	1.87	27		9		20.3 ft²		0	0.6	0
8	W	Exterior	Frame - Wood	Main	1.87	27		9		20.3 ft²		0	0.6	0
9	N	Exterior	Concrete - 6 inch	BSMT-2	0	42	0	7.25	0	304.5 ft²		0	0.75	90.80413
10	S	Exterior	Concrete - 6 inch	BSMT-2	0	42	0	7.25	0	304.5 ft²		0	0.75	90.80413
11	E	Exterior	Concrete - 6 inch	BSMT-2	0	42	0	7.25	0	304.5 ft²		0	0.75	90.80413
12	W	Exterior	Concrete - 6 inch	BSMT-2	0	42	0	7.25	0	304.5 ft²		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													
#	Ornt	Wall		Panels	NFRC	U-Factor	SHGC	Storm	Area	Overhang		Interior Shade	Screening
		ID	Frame							Depth	Separation		
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	.000459	3705	203.4	382.53	.335	9.4718	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	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 #	----- Supply -----				----- Return -----				Air Handler	CFM 25 TOT	CFM25 OUT	QN	RLF	HVAC #	
	Location	R-Value	Area	Location	Area	Number	Leakage Type	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 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 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 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

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

CLOTHES DRYERS										
ID	Type	Screen	Location	Capacity	Fuel Type	Make	Model	Schedule	LoadsPerYr	
1	Dryers	Default New	Main		Electricity					
RANGE OVEN										
ID	Type	Screen	Location	Type	Fueltype	Make	Model	Cooktop	Oven	
1	Ranges	Default New	Main	CooktopOven C	Electric			Electric FI	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	BSMT-2	100	10	0	10			
2	Hard-Wir	By Count - Qualif	Main	100	10					
3	Hard-Wir	Default New	Exterior							
MISC ELECTRICAL LOADS										
ID	Type	Screen	Item	Quantity	Catagory	Operating	Location	Schedule	Off Standby	
1	Misc Elec	Simple Default		1		1	Main	HERS201	1	

Building Input Summary Report

PROJECT									
Title:	L324AO (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:	Orlando ,	
Family Type:	Single-family			Whole House Fan:			FL ,		
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 %	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 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	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 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	Main	11	57		9		42.8 ft²		0.1	0.6	0
6	S	Exterior	Frame - Wood	Main	11	57		9		42.8 ft²		0.1	0.6	0
7	E	Exterior	Frame - Wood	Main	11	27		9		20.3 ft²		0.1	0.6	0
8	W	Exterior	Frame - Wood	Main	11	27		9		20.3 ft²		0.1	0.6	0
9	N	Exterior	Concrete - 6 inch	BSMT-2	10.3	42	0	7.25	0	304.5 ft²		0	0.75	90.80413
10	S	Exterior	Concrete - 6 inch	BSMT-2	10.3	42	0	7.25	0	304.5 ft²		0	0.75	90.80413
11	E	Exterior	Concrete - 6 inch	BSMT-2	10.3	42	0	7.25	0	304.5 ft²		0	0.75	90.80413
12	W	Exterior	Concrete - 6 inch	BSMT-2	10.3	42	0	7.25	0	304.5 ft²		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													
#	Ornt	Wall		Panels	NFRC	U-Factor	SHGC	Storm	Area	Overhang		Interior Shade	Screening
		ID	Frame							Depth	Separation		
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	.000459	3705	203.4	382.53	.335	9.4718	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	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 #	----- Supply -----				----- Return -----				Air Handler	CFM 25 TOT	CFM25 OUT	QN	RLF	HVAC #	
	Location	R-Value	Area	Location	Area	Number	Leakage Type	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 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 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 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

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

CLOTHES DRYERS										
ID	Type	Screen	Location	Capacity	Fuel Type	Make	Model	Schedule	LoadsPerYr	
1	Dryers	Default New	Main		Electricity					
RANGE OVEN										
ID	Type	Screen	Location	Type	Fueltype	Make	Model	Cooktop	Oven	
1	Ranges	Default New	Main	CooktopOven C	Electric			Electric FI	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	BSMT-2	100	10	0	10			
2	Hard-Wir	By Count - Qualif	Main	100	10					
3	Hard-Wir	Default New	Exterior							
MISC ELECTRICAL LOADS										
ID	Type	Screen	Item	Quantity	Category	Operating	Location	Schedule	Off Standby	
1	Misc Elec	Simple Default		1		1	Main	HERS201	1	

Appendix C

Florida Standard Reference Design Auto-Generation Reports

Reference Home Characteristics

FSEC
111 Anywhere Lane
Tallahassee, FL,
Registration #:

Title: FL-AutoGen_case1
FLBase2014

TMY City: FL_TALLAHASSEE_
Elec Util: EnergyGauge Default
Gas Util: EnergyGauge Default
Run Date: (invalid) (invalid)

HERS BESTEST basecase home

Above-grade Walls (Uo)	0.082
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	5.00
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 = 78%
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
FLBase2014

TMY City: FL_ORLANDO_INTL
Elec Util: EnergyGauge Default
Gas Util: EnergyGauge Default
Run Date: (invalid) (invalid)

HERS BESTEST basecase home

Above-grade Walls (Uo)	0.082
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)	1.026
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	5.00
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
FLBase2014

TMY City: FL_MIAMI_INTL_AP
Elec Util: EnergyGauge Default
Gas Util: EnergyGauge Default
Run Date: (invalid) (invalid)

HERS BESTEST insulated slab case

Above-grade Walls (Uo)	0.082
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 (ft²)	5.13
Crawlspace Vent Area (ft²)	n/a
Exposed Masonry Floor Area (ft²)	307.8
Carpet & Pad R-Value	2.0
Door Area (ft²)	40
Door U-Factor	0.50
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	0.50
Window SHGC (Heating)	0.2169
Window SHGC (Cooling)	0.217
ACH50	5.00
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
FLBase2014

TMY City: FL_JACKSONVILLE_
Elec Util: EnergyGauge Default
Gas Util: EnergyGauge Default
Run Date: (invalid) (invalid)

HERS BESTEST insulated basement case

Above-grade Walls (Uo)	0.082
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 (ft²)	5.13
Crawlspace Vent Area (ft²)	n/a
Exposed Masonry Floor Area (ft²)	307.8
Carpet & Pad R-Value	2.0
Door Area (ft²)	40
Door U-Factor	0.40
North Window Area (ft²)	50.02
South Window Area (ft²)	50.02
East Window Area (ft²)	50.02
West Window Area (ft²)	50.02
Window U-Factor	0.40
Window SHGC (Heating)	0.2169
Window SHGC (Cooling)	0.217
ACH50	5.00
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 = 78%
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

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
Run Date: 05/28/2015 11:36:09

End-Use	Energy Consumption	Annual Cost
Cooling Electric	5424 kWh	\$644
Cooling Fan	957 kWh	\$114
Mechanical Vent Fan	0 kWh	\$0
Total Cooling	6381 kWh	\$758
Heating		
Heating Fan/Pump	0 kWh	\$0
Mechanical Vent Fan	0 kWh	\$0
Total Heating	\$0	\$0
Hot Water	0 kWh	\$0
Hot Water Pump	0 kWh	\$0
Total Hot Water	0 kWh	\$0
Ceiling Fans	0 kWh	\$0
Clothes Washer	38 kWh	\$4
Dehumidifier	0 kWh	\$0
Dishwasher	0 kWh	\$0
Dryer Electric	524 kWh	\$62
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)	10951 kWh	\$1301
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		\$1301

Emissions (Calculated as Total - PV Produced)
SO2 = 4.70 Lbs NOX = 9.02 Lbs CO2 = 5.81 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
Run Date: 05/28/2015 11:36:48

End-Use	Energy Consumption	Annual Cost
Cooling Electric	4171 kWh	\$496
Cooling Fan	957 kWh	\$114
Mechanical Vent Fan	0 kWh	\$0
Total Cooling	5128 kWh	\$609
Heating		
Heating Fan/Pump	0 kWh	\$0
Mechanical Vent Fan	0 kWh	\$0
Total Heating	\$0	\$0
Hot Water	0 kWh	\$0
Hot Water Pump	0 kWh	\$0
Total Hot Water	0 kWh	\$0
Ceiling Fans	0 kWh	\$0
Clothes Washer	38 kWh	\$4
Dehumidifier	0 kWh	\$0
Dishwasher	0 kWh	\$0
Dryer Electric	524 kWh	\$62
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)	9698 kWh	\$1152
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		\$1152

Emissions (Calculated as Total - PV Produced)
SO2 = 4.16 Lbs NOX = 7.99 Lbs CO2 = 5.14 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
Run Date: 05/28/2015 11:37:15

End-Use	Energy Consumption	Annual Cost
Cooling		
Cooling Fan	0 kWh	\$0
Mechanical Vent Fan	0 kWh	\$0
Total Cooling	0 kWh	\$0
Heating		
Therms	857 Therms	\$1457
Heating Fan/Pump	668 kWh	\$79
Mechanical Vent Fan	0 kWh	\$0
Total Heating		\$1536
Hot Water		
Hot Water	0 kWh	\$0
Hot Water Pump	0 kWh	\$0
Total Hot Water	0 kWh	\$0
Ceiling Fans	0 kWh	\$0
Clothes Washer	38 kWh	\$4
Dehumidifier	0 kWh	\$0
Dishwasher	0 kWh	\$0
Dryer Electric	524 kWh	\$62
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)	5238 kWh	\$622
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		
Total Cost		\$2079

Emissions (Calculated as Total - PV Produced)
SO2 = 9.97 Lbs NOX = 7982.43 Lbs CO2 = 9.59 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
Run Date: 05/28/2015 11:37:47

End-Use	Energy Consumption	Annual Cost
Cooling		
Cooling Fan	0 kWh	\$0
Mechanical Vent Fan	0 kWh	\$0
Total Cooling	0 kWh	\$0
Heating		
Therms	743 Therms	\$1263
Heating Fan/Pump	668 kWh	\$79
Mechanical Vent Fan	0 kWh	\$0
Total Heating		\$1342
Hot Water		
Hot Water	0 kWh	\$0
Hot Water Pump	0 kWh	\$0
Total Hot Water	0 kWh	\$0
Ceiling Fans	0 kWh	\$0
Clothes Washer	38 kWh	\$4
Dehumidifier	0 kWh	\$0
Dishwasher	0 kWh	\$0
Dryer Electric	524 kWh	\$62
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)	5238 kWh	\$622
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		
Total Cost		\$1885

Emissions (Calculated as Total - PV Produced)
SO2 = 9.97 Lbs NOX = 6920.37 Lbs CO2 = 8.92 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
Run Date: 05/28/2015 11:39:13

End-Use	Energy Consumption	Annual Cost
Cooling		
Cooling Fan	0 kWh	\$0
Mechanical Vent Fan	0 kWh	\$0
Total Cooling	0 kWh	\$0
Heating		
Heating Electric	10114 kWh	\$1202
Heating Fan/Pump	1424 kWh	\$169
Mechanical Vent Fan	0 kWh	\$0
Total Heating	11538 kWh	\$1371
Hot Water		
Hot Water	0 kWh	\$0
Hot Water Pump	0 kWh	\$0
Total Hot Water	0 kWh	\$0
Ceiling Fans	0 kWh	\$0
Clothes Washer	38 kWh	\$4
Dehumidifier	0 kWh	\$0
Dishwasher	0 kWh	\$0
Dryer Electric	524 kWh	\$62
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)	16108 kWh	\$1914
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		\$1914

Emissions (Calculated as Total - PV Produced)
SO2 = 30.67 Lbs NOX = 40.78 Lbs CO2 = 13.99 Tons

Annual Energy Summary

Wholehouse Summary

FSEC
111 Anywhere Lane
Colorado Springs, CO

Project Title:
HVAC_TestCase-2d
Building Type: User
HERS BESTEST basecase home

TMY_City:CO_COLORADOSPRINGS
Elec Util: EnergyGauge Default
Gas Util: Florida 2012
Run Date: 05/28/2015 11:39:38

End-Use	Energy Consumption	Annual Cost
Cooling		
Cooling Fan	0 kWh	\$0
Mechanical Vent Fan	0 kWh	\$0
Total Cooling	0 kWh	\$0
Heating		
Heating Electric	8002 kWh	\$951
Heating Fan/Pump	1089 kWh	\$129
Mechanical Vent Fan	0 kWh	\$0
Total Heating	9091 kWh	\$1080
Hot Water		
Hot Water	0 kWh	\$0
Hot Water Pump	0 kWh	\$0
Total Hot Water	0 kWh	\$0
Ceiling Fans	0 kWh	\$0
Clothes Washer	38 kWh	\$4
Dehumidifier	0 kWh	\$0
Dishwasher	0 kWh	\$0
Dryer Electric	524 kWh	\$62
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)	13661 kWh	\$1623
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		\$1623

Emissions (Calculated as Total - PV Produced)
SO2 = 26.01 Lbs NOX = 34.59 Lbs CO2 = 11.86 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
Run Date: 06/01/2015 17:02:16

End-Use	Energy Consumption	Annual Cost
Cooling		
Cooling Fan	0 kWh	\$0
Mechanical Vent Fan	0 kWh	\$0
Total Cooling	0 kWh	\$0
Heating		
Heating Electric	18337 kWh	\$2178
Heating Fan/Pump	1002 kWh	\$119
Mechanical Vent Fan	0 kWh	\$0
Total Heating	19339 kWh	\$2297
Hot Water		
Hot Water	0 kWh	\$0
Hot Water Pump	0 kWh	\$0
Total Hot Water	0 kWh	\$0
Ceiling Fans	0 kWh	\$0
Clothes Washer	38 kWh	\$4
Dehumidifier	0 kWh	\$0
Dishwasher	0 kWh	\$0
Dryer Electric	524 kWh	\$62
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)	23909 kWh	\$2840
Total (Therms)	0 Therms	\$0
Total (Oil Gallons)	0 Gallons	\$0
Total (Propane Gallons)	0 Gallons	\$0
PV Produced (kWh)	0 kWh	\$0
Assumes no metering		
Total Cost		\$2840

Emissions (Calculated as Total - PV Produced)

SO2 = 45.52 Lbs NOX = 60.53 Lbs CO2 = 20.76 Tons

DEMONSTRATION PURPOSES ONLY

Appendix E

RESNET DSE Test Reports

Annual Energy Summary

Wholehouse Summary

FSEC
111 Anywhere Lane
Colorado Springs, CO

Project Title:
DSE_HVAC-3a
Building Type: User
HERS BESTEST basement case

TMY_City:CO_COLORADOSPRINGS
Elec Util: EnergyGauge Default
Gas Util: Florida 2012
Run Date: 05/27/2015 15:51:39

End-Use	Energy Consumption	Annual Cost
Cooling		
Cooling Fan	0 kWh	\$0
Mechanical Vent Fan	0 kWh	\$0
Total Cooling	0 kWh	\$0
Heating		
Therms	837 Therms	\$1423
Heating Fan/Pump	656 kWh	\$78
Mechanical Vent Fan	0 kWh	\$0
Total Heating		\$1501
Hot Water		
Hot Water	0 kWh	\$0
Hot Water Pump	0 kWh	\$0
Total Hot Water	0 kWh	\$0
Ceiling Fans	0 kWh	\$0
Clothes Washer	38 kWh	\$4
Dehumidifier	0 kWh	\$0
Dishwasher	0 kWh	\$0
Dryer Electric	524 kWh	\$62
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)	5226 kWh	\$621
Total (Therms)	837 Therms	\$1423
Total (Oil Gallons)	0 Gallons	\$0
Total (Propane Gallons)	0 Gallons	\$0
PV Produced (kWh)	0 kWh	\$0
Assumes net metering		
<hr/>		
Total Cost		\$2044

Emissions (Calculated as Total - PV Produced)
SO2 = 9.95 Lbs NOX = 7798.26 Lbs CO2 = 9.46 Tons

Annual Energy Summary

Wholehouse Summary

FSEC
111 Anywhere Lane
Colorado Springs, CO

Project Title:
DSE_HVAC-3b
Building Type: User
HERS BESTEST basement case

TMY_City:CO_COLORADOSPRINGS
Elec Util: EnergyGauge Default
Gas Util: Florida 2012
Run Date: 05/27/2015 15:54:09

End-Use	Energy Consumption	Annual Cost
Cooling		
Cooling Fan	0 kWh	\$0
Mechanical Vent Fan	0 kWh	\$0
Total Cooling	0 kWh	\$0
Heating		
Therms	1059 Therms	\$1800
Heating Fan/Pump	624 kWh	\$74
Mechanical Vent Fan	0 kWh	\$0
Total Heating		\$1874
Hot Water		
Hot Water	0 kWh	\$0
Hot Water Pump	0 kWh	\$0
Total Hot Water	0 kWh	\$0
Ceiling Fans	0 kWh	\$0
Clothes Washer	38 kWh	\$4
Dehumidifier	0 kWh	\$0
Dishwasher	0 kWh	\$0
Dryer Electric	524 kWh	\$62
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)	5194 kWh	\$617
Total (Therms)	1059 Therms	\$1800
Total (Oil Gallons)	0 Gallons	\$0
Total (Propane Gallons)	0 Gallons	\$0
PV Produced (kWh)	0 kWh	\$0
Assumes net metering		
Total Cost		\$2417

Emissions (Calculated as Total - PV Produced)
SO2 = 9.89 Lbs NOX = 9859.06 Lbs CO2 = 10.74 Tons

Annual Energy Summary

Wholehouse Summary

FSEC
111 Anywhere Lane
Colorado Springs, CO

Project Title:
DSE_HVAC-3c
Building Type: User
HERS BESTEST basement case

TMY_City:CO_COLORADOSPRINGS
Elec Util: EnergyGauge Default
Gas Util: Florida 2012
Run Date: 05/27/2015 15:54:52

End-Use	Energy Consumption	Annual Cost
Cooling		
Cooling Fan	0 kWh	\$0
Mechanical Vent Fan	0 kWh	\$0
Total Cooling	0 kWh	\$0
Heating		
Therms	888 Therms	\$1509
Heating Fan/Pump	646 kWh	\$77
Mechanical Vent Fan	0 kWh	\$0
Total Heating		\$1586
Hot Water		
Hot Water	0 kWh	\$0
Hot Water Pump	0 kWh	\$0
Total Hot Water	0 kWh	\$0
Ceiling Fans	0 kWh	\$0
Clothes Washer	38 kWh	\$4
Dehumidifier	0 kWh	\$0
Dishwasher	0 kWh	\$0
Dryer Electric	524 kWh	\$62
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)	5216 kWh	\$620
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		
Total Cost		\$2129

Emissions (Calculated as Total - PV Produced)
SO2 = 9.93 Lbs NOX = 8269.75 Lbs CO2 = 9.75 Tons

Annual Energy Summary

Wholehouse Summary

FSEC
111 Anywhere Lane
Colorado Springs, CO

Project Title:
DSE_HVAC-3d
Building Type: User
HERS BESTEST basement case

TMY_City:CO_COLORADOSPRINGS
Elec Util: EnergyGauge Default
Gas Util: Florida 2012
Run Date: 05/27/2015 15:55:22

End-Use	Energy Consumption	Annual Cost
Cooling		
Cooling Fan	0 kWh	\$0
Mechanical Vent Fan	0 kWh	\$0
Total Cooling	0 kWh	\$0
Heating		
Therms	1020 Therms	\$1734
Heating Fan/Pump	706 kWh	\$84
Mechanical Vent Fan	0 kWh	\$0
Total Heating		\$1818
Hot Water		
Hot Water	0 kWh	\$0
Hot Water Pump	0 kWh	\$0
Total Hot Water	0 kWh	\$0
Ceiling Fans	0 kWh	\$0
Clothes Washer	38 kWh	\$4
Dehumidifier	0 kWh	\$0
Dishwasher	0 kWh	\$0
Dryer Electric	524 kWh	\$62
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)	5276 kWh	\$627
Total (Therms)	1020 Therms	\$1734
Total (Oil Gallons)	0 Gallons	\$0
Total (Propane Gallons)	0 Gallons	\$0
PV Produced (kWh)	0 kWh	\$0
Assumes net metering		
<hr/>		
Total Cost		\$2360

Emissions (Calculated as Total - PV Produced)

SO2 = 10.04 Lbs NOX = 9497.50 Lbs CO2 = 10.58 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
Run Date: 05/27/2015 15:55:51

End-Use	Energy Consumption	Annual Cost
Cooling Electric	5485 kWh	\$652
Cooling Fan	968 kWh	\$115
Mechanical Vent Fan	0 kWh	\$0
Total Cooling	6453 kWh	\$767
Heating		
Heating Fan/Pump	0 kWh	\$0
Mechanical Vent Fan	0 kWh	\$0
Total Heating	\$0	\$0
Hot Water	0 kWh	\$0
Hot Water Pump	0 kWh	\$0
Total Hot Water	0 kWh	\$0
Ceiling Fans	0 kWh	\$0
Clothes Washer	38 kWh	\$4
Dehumidifier	0 kWh	\$0
Dishwasher	0 kWh	\$0
Dryer Electric	524 kWh	\$62
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)	11023 kWh	\$1309
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		\$1309

Emissions (Calculated as Total - PV Produced)
SO2 = 4.73 Lbs NOX = 9.08 Lbs CO2 = 5.85 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
Run Date: 05/27/2015 15:56:20

End-Use	Energy Consumption	Annual Cost
Cooling Electric	7199 kWh	\$855
Cooling Fan	1275 kWh	\$151
Mechanical Vent Fan	0 kWh	\$0
Total Cooling	8474 kWh	\$1007
Heating		
Heating Fan/Pump	0 kWh	\$0
Mechanical Vent Fan	0 kWh	\$0
Total Heating	\$0	
Hot Water	0 kWh	\$0
Hot Water Pump	0 kWh	\$0
Total Hot Water	0 kWh	\$0
Ceiling Fans	0 kWh	\$0
Clothes Washer	38 kWh	\$4
Dehumidifier	0 kWh	\$0
Dishwasher	0 kWh	\$0
Dryer Electric	524 kWh	\$62
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)	13044 kWh	\$1550
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		\$1550

Emissions (Calculated as Total - PV Produced)
SO2 = 5.60 Lbs NOX = 10.75 Lbs CO2 = 6.92 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
Run Date: 05/27/2015 15:56:45

End-Use	Energy Consumption	Annual Cost
Cooling Electric	5931 kWh	\$705
Cooling Fan	1047 kWh	\$124
Mechanical Vent Fan	0 kWh	\$0
Total Cooling	6978 kWh	\$829
Heating		
Heating Fan/Pump	0 kWh	\$0
Mechanical Vent Fan	0 kWh	\$0
Total Heating	\$0	
Hot Water	0 kWh	\$0
Hot Water Pump	0 kWh	\$0
Total Hot Water	0 kWh	\$0
Ceiling Fans	0 kWh	\$0
Clothes Washer	38 kWh	\$4
Dehumidifier	0 kWh	\$0
Dishwasher	0 kWh	\$0
Dryer Electric	524 kWh	\$62
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)	11548 kWh	\$1372
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		\$1372

Emissions (Calculated as Total - PV Produced)
SO2 = 4.96 Lbs NOX = 9.51 Lbs CO2 = 6.13 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
Run Date: 05/27/2015 15:57:09

End-Use	Energy Consumption	Annual Cost
Cooling Electric	6881 kWh	\$817
Cooling Fan	1206 kWh	\$143
Mechanical Vent Fan	0 kWh	\$0
Total Cooling	8087 kWh	\$961
Heating		
Heating Fan/Pump	0 kWh	\$0
Mechanical Vent Fan	0 kWh	\$0
Total Heating	\$0	\$0
Hot Water	0 kWh	\$0
Hot Water Pump	0 kWh	\$0
Total Hot Water	0 kWh	\$0
Ceiling Fans	0 kWh	\$0
Clothes Washer	38 kWh	\$4
Dehumidifier	0 kWh	\$0
Dishwasher	0 kWh	\$0
Dryer Electric	524 kWh	\$62
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)	12657 kWh	\$1504
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		\$1504

Emissions (Calculated as Total - PV Produced)
SO2 = 5.43 Lbs NOX = 10.43 Lbs CO2 = 6.71 Tons

Appendix F
RESNET DHW
Test Reports

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
Run Date: 05/27/2015 15:45:13

End-Use	Energy Consumption	Annual Cost
Cooling Electric	5955 kWh	\$707
Cooling Fan	1033 kWh	\$123
Mechanical Vent Fan	0 kWh	\$0
Total Cooling	6988 kWh	\$830
Heating Electric	531 kWh	\$63
Heating Fan/Pump	29 kWh	\$3
Mechanical Vent Fan	0 kWh	\$0
Total Heating	560 kWh	\$67
Hot Water	124 Therms	\$211
Hot Water Pump	0 kWh	\$0
Total Hot Water		\$211
Ceiling Fans	0 kWh	\$0
Clothes Washer	59 kWh	\$7
Dehumidifier	0 kWh	\$0
Dishwasher	0 kWh	\$0
Dryer Electric	821 kWh	\$98
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)	12652 kWh	\$1503
Total (Therms)	124 Therms	\$211
Total (Oil Gallons)	0 Gallons	\$0
Total (Propane Gallons)	0 Gallons	\$0
PV Produced (kWh)	0 kWh	\$0
Assumes net metering		
Total Cost		\$1714

Emissions (Calculated as Total - PV Produced)
SO₂ = 27.76 Lbs NO_x = 1168.93 Lbs CO₂ = 8.27 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
Run Date: 05/27/2015 15:45:42

End-Use	Energy Consumption	Annual Cost
Cooling Electric	5993 kWh	\$712
Cooling Fan	1040 kWh	\$124
Mechanical Vent Fan	0 kWh	\$0
Total Cooling	7033 kWh	\$836
Heating Electric	527 kWh	\$63
Heating Fan/Pump	29 kWh	\$3
Mechanical Vent Fan	0 kWh	\$0
Total Heating	556 kWh	\$66
Hot Water	154 Therms	\$262
Hot Water Pump	0 kWh	\$0
Total Hot Water		\$262
Ceiling Fans	0 kWh	\$0
Clothes Washer	80 kWh	\$9
Dehumidifier	0 kWh	\$0
Dishwasher	0 kWh	\$0
Dryer Electric	1119 kWh	\$133
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)	13227 kWh	\$1571
Total (Therms)	154 Therms	\$262
Total (Oil Gallons)	0 Gallons	\$0
Total (Propane Gallons)	0 Gallons	\$0
PV Produced (kWh)	0 kWh	\$0
Assumes net metering		
Total Cost		\$1834

Emissions (Calculated as Total - PV Produced)
SO₂ = 29.02 Lbs NO_x = 1447.59 Lbs CO₂ = 8.79 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
Run Date: 05/27/2015 15:46:12

End-Use	Energy Consumption	Annual Cost
Cooling Electric	5847 kWh	\$695
Cooling Fan	1014 kWh	\$120
Mechanical Vent Fan	0 kWh	\$0
Total Cooling	6861 kWh	\$815
Heating Electric	562 kWh	\$67
Heating Fan/Pump	31 kWh	\$4
Mechanical Vent Fan	0 kWh	\$0
Total Heating	593 kWh	\$70
Hot Water	107 Therms	\$182
Hot Water Pump	0 kWh	\$0
Total Hot Water		\$182
Ceiling Fans	0 kWh	\$0
Clothes Washer	59 kWh	\$7
Dehumidifier	0 kWh	\$0
Dishwasher	0 kWh	\$0
Dryer Electric	821 kWh	\$98
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)	12558 kWh	\$1492
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		
Total Cost		\$1673

Emissions (Calculated as Total - PV Produced)
SO₂ = 27.55 Lbs NO_x = 1006.09 Lbs CO₂ = 8.11 Tons

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
Run Date: 05/27/2015 15:46:35

End-Use	Energy Consumption	Annual Cost
Cooling Electric	430 kWh	\$51
Cooling Fan	79 kWh	\$9
Mechanical Vent Fan	0 kWh	\$0
Total Cooling	509 kWh	\$60
Heating Electric	33200 kWh	\$3944
Heating Fan/Pump	1816 kWh	\$216
Mechanical Vent Fan	0 kWh	\$0
Total Heating	35016 kWh	\$4160
Hot Water	204 Therms	\$347
Hot Water Pump	0 kWh	\$0
Total Hot Water		\$347
Ceiling Fans	0 kWh	\$0
Clothes Washer	59 kWh	\$7
Dehumidifier	0 kWh	\$0
Dishwasher	0 kWh	\$0
Dryer Electric	821 kWh	\$98
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)	40629 kWh	\$4827
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		
Total Cost		\$5174

Emissions (Calculated as Total - PV Produced)

SO2 = 86.01 Lbs NOX = 1966.63 Lbs CO2 = 29.58 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
Run Date: 05/27/2015 15:47:03

End-Use	Energy Consumption	Annual Cost
Cooling Electric	435 kWh	\$52
Cooling Fan	80 kWh	\$10
Mechanical Vent Fan	0 kWh	\$0
Total Cooling	515 kWh	\$61
Heating Electric	33113 kWh	\$3934
Heating Fan/Pump	1811 kWh	\$215
Mechanical Vent Fan	0 kWh	\$0
Total Heating	34924 kWh	\$4149
Hot Water	263 Therms	\$446
Hot Water Pump	0 kWh	\$0
Total Hot Water		\$446
Ceiling Fans	0 kWh	\$0
Clothes Washer	80 kWh	\$9
Dehumidifier	0 kWh	\$0
Dishwasher	0 kWh	\$0
Dryer Electric	1119 kWh	\$133
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)	41077 kWh	\$4880
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		
Total Cost		\$5326

Emissions (Calculated as Total - PV Produced)

SO2 = 86.96 Lbs NOX = 2511.43 Lbs CO2 = 30.23 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
Run Date: 05/27/2015 15:47:30

End-Use	Energy Consumption	Annual Cost
Cooling Electric	423 kWh	\$50
Cooling Fan	77 kWh	\$9
Mechanical Vent Fan	0 kWh	\$0
Total Cooling	500 kWh	\$59
Heating Electric	33637 kWh	\$3996
Heating Fan/Pump	1839 kWh	\$218
Mechanical Vent Fan	0 kWh	\$0
Total Heating	35476 kWh	\$4215
Hot Water	184 Therms	\$312
Hot Water Pump	0 kWh	\$0
Total Hot Water		\$312
Ceiling Fans	0 kWh	\$0
Clothes Washer	59 kWh	\$7
Dehumidifier	0 kWh	\$0
Dishwasher	0 kWh	\$0
Dryer Electric	821 kWh	\$98
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)	41080 kWh	\$4880
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		
Total Cost		\$5193

Emissions (Calculated as Total - PV Produced)

SO2 = 86.97 Lbs NOX = 1777.67 Lbs CO2 = 29.77 Tons

Appendix G
FL e-Ratio Method
Test Reports

Florida Code 2014 Summary Report

FSEC
111 Anywhere Lane
Orlando, FL,
Registration #:

Title: eRatio_L130AO-01
FLProp2014

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	2.31 MBtu	3.37 MBtu	1.46
Cooling	9.35 MBtu	14.67 MBtu	1.57
Hot Water	4.32 MBtu	5.52 MBtu	1.28
Total	15.98 MBtu	23.56 MBtu	1.47

Building Loads	Reference Home	Proposed Home	e-Ratio
Heating	6.18 MBtu	9.01 MBtu*	1.46
Cooling	29.83 MBtu	46.82 MBtu*	1.57
Hot Water	3.88 MBtu	4.95 MBtu*	1.28
Total	39.89 MBtu	60.78 MBtu	1.52

* normalized modified loads

Glass/Floor Area: 0.175	Total Proposed Modified Loads: 60.78	FAIL
	Total Reference Loads: 39.89	

Florida Code 2014 Summary Report

FSEC
 111 Anywhere Lane
 Orlando, FL,
 Registration #:

Title: eRatio_L130AO-02
 FLProp2014

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	2.31 MBtu	3.37 MBtu	1.46
Cooling	9.35 MBtu	14.67 MBtu	1.57
Hot Water	12.81 MBtu	4.73 MBtu	0.37
Total	24.47 MBtu	22.77 MBtu	0.93

Building Loads	Reference Home	Proposed Home	e-Ratio
Heating	6.18 MBtu	9.01 MBtu*	1.46
Cooling	29.83 MBtu	46.82 MBtu*	1.57
Hot Water	3.88 MBtu	0.87 MBtu*	0.22
Total	39.89 MBtu	56.70 MBtu	1.42

* normalized modified loads

Glass/Floor Area: 0.175	Total Proposed Modified Loads: 56.70	FAIL
	Total Reference Loads: 39.89	

Florida Code 2014 Summary Report

FSEC
111 Anywhere Lane
Orlando, FL,
Registration #:

Title: eRatio_L130AO-03
FLProp2014

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	9.73 MBtu	13.63 MBtu	1.40
Cooling	9.35 MBtu	14.67 MBtu	1.57
Hot Water	4.32 MBtu	5.52 MBtu	1.28
Total	23.40 MBtu	33.82 MBtu	1.45

Building Loads	Reference Home	Proposed Home	e-Ratio
Heating	6.18 MBtu	8.66 MBtu*	1.40
Cooling	29.83 MBtu	46.82 MBtu*	1.57
Hot Water	3.88 MBtu	4.95 MBtu*	1.28
Total	39.89 MBtu	60.44 MBtu	1.52

* normalized modified loads

Glass/Floor Area: 0.175	Total Proposed Modified Loads: 60.44	FAIL
	Total Reference Loads: 39.89	

Florida Code 2014 Summary Report

FSEC
111 Anywhere Lane
Orlando, FL,
Registration #:

Title: eRatio_L130AO-04
FLProp2014

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	2.31 MBtu	2.67 MBtu	1.15
Cooling	9.35 MBtu	11.03 MBtu	1.18
Hot Water	4.32 MBtu	5.52 MBtu	1.28
Total	15.98 MBtu	19.22 MBtu	1.20

Building Loads	Reference Home	Proposed Home	e-Ratio
Heating	6.18 MBtu	7.14 MBtu*	1.15
Cooling	29.83 MBtu	35.19 MBtu*	1.18
Hot Water	3.88 MBtu	4.95 MBtu*	1.28
Total	39.89 MBtu	47.28 MBtu	1.19

* normalized modified loads

Glass/Floor Area: 0.175	Total Proposed Modified Loads: 47.28	FAIL
	Total Reference Loads: 39.89	

Florida Code 2014 Summary Report

FSEC
111 Anywhere Lane
Orlando, FL,
Registration #:

Title: eRatio_L130AO-05
FLProp2014

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	9.73 MBtu	11.14 MBtu	1.14
Cooling	9.35 MBtu	14.67 MBtu	1.57
Hot Water	4.32 MBtu	5.52 MBtu	1.28
Total	23.40 MBtu	31.33 MBtu	1.34

Building Loads	Reference Home	Proposed Home	e-Ratio
Heating	6.18 MBtu	6.42 MBtu*	1.04
Cooling	29.83 MBtu	46.82 MBtu*	1.57
Hot Water	3.88 MBtu	4.95 MBtu*	1.28
Total	39.89 MBtu	58.19 MBtu	1.46

* normalized modified loads

Glass/Floor Area: 0.175

Total Proposed Modified Loads: 58.19

Total Reference Loads: 39.89

FAIL