



AIR LEAKAGE REPORT

Date:	June 22, 2009	Rating No.:	10002
Building Name:	4427 Decatur	Rating Org.:	Inhabit
Owner's Name:	5280 Urban Homes	Phone No.:	303-885-6066
Property:	4427 Decatur St.	Rater's Name:	Andy Mazal
Address:	Denver, CO 80211	Rater's No.:	P-54
Builder's Name:	5280 Urban Homes		
Weather Site:	Denver, CO	Rating Type:	Confirmed Rating
File Name:	4427 Decatur Rating 6-19-09.blg	Rating Date:	6/22/09

Whole House Infiltration	Blower door test	
	<i>Heating</i>	<i>Cooling</i>
Natural ACH:	0.19	0.19
ACH @ 50 Pascals:	3.17	4.22
CFM @ 25 Pascals:	1067	1423
CFM @ 50 Pascals:	1674	2232
Eff. Leakage Area:	91.9	122.6
Specific Leakage Area:	0.00019	0.00025
ELA/100 sf shell:	1.40	1.87

Total Duct Leakage to Outside	
CFM @ 25 Pascals:	10
CFM25 / CFMfan:	0.0055
CFM25 / CFA:	0.0029
CFM per Std 152:	N/A
CFM per Std 152 / CFA:	N/A
CFM @ 50 Pascals:	16
Eff. Leakage Area:	0.86
Thermal Efficiency:	N/A

Ventilation	
Mechanical:	None
Sensible Recovery Eff. (%):	0.0
Total Recovery Eff. (%):	0.0
Rate (cfm):	0
Hours/Day:	24.0
Fan Watts:	0.0
Cooling Ventilation:	Natural Ventilation

ASHRAE 62.2 - 2003 Ventilation Requirements

For this home to comply with ASHRAE Standard 62.2 - 2003 Ventilation and Acceptable Indoor Air Quality in Low-Rise Residential minimum of 64 cfm of mechanical ventilation must be provided continuously, 24 hours per day. Alternatively, an intermittently oper ventilation system may be used if the ventilation rate is adjusted accordingly. For example, a 129 cfm mechanical ventilation syste operate 12 hours per day, as long as the system operates to provide required average ventilation once each hour.

REM/Rate - Residential Energy Analysis and Rating Software v12.7

This information does not constitute any warranty of energy cost or savings.
© 1985-2009 Architectural Energy Corporation, Boulder, Colorado.



COMPONENT LOAD SUMMARY

Date:	June 22, 2009	Rating No.:	10002
Building Name:	4427 Decatur	Rating Org.:	Inhabit
Owner's Name:	5280 Urban Homes	Phone No.:	303-885-6066
Property:	4427 Decatur St.	Rater's Name:	Andy Mazal
Address:	Denver, CO 80211	Rater's No.:	P-54
Builder's Name:	5280 Urban Homes		
Weather Site:	Denver, CO	Rating Type:	Confirmed Rating
File Name:	4427 Decatur Rating 6-19-09.blg	Rating Date:	6/22/09

4427 Decatur

HEATING SEASON (MMBtu/yr)

Ceilings/Roofs	3.8
Rim/Band Joists	1.2
Above Grade Walls	20.2
Foundation Walls	7.5
Doors	1.4
Windows/Skylights	28.2
Frame Floors	0.9
Crawl Space/Unht Bsmt	0.0
Slab Floors	2.5
Infiltration	13.3
Mechanical Ventilation	0.0
Ducts	1.4
Active Solar	0.0
Sunspace	0.0
Internal Gains	-20.9
Total	59.7

COMPONENT LOAD SUMMARY

4427 Decatur

Page 2

4427 Decatur

COOLING SEASON (MMBtu/yr)

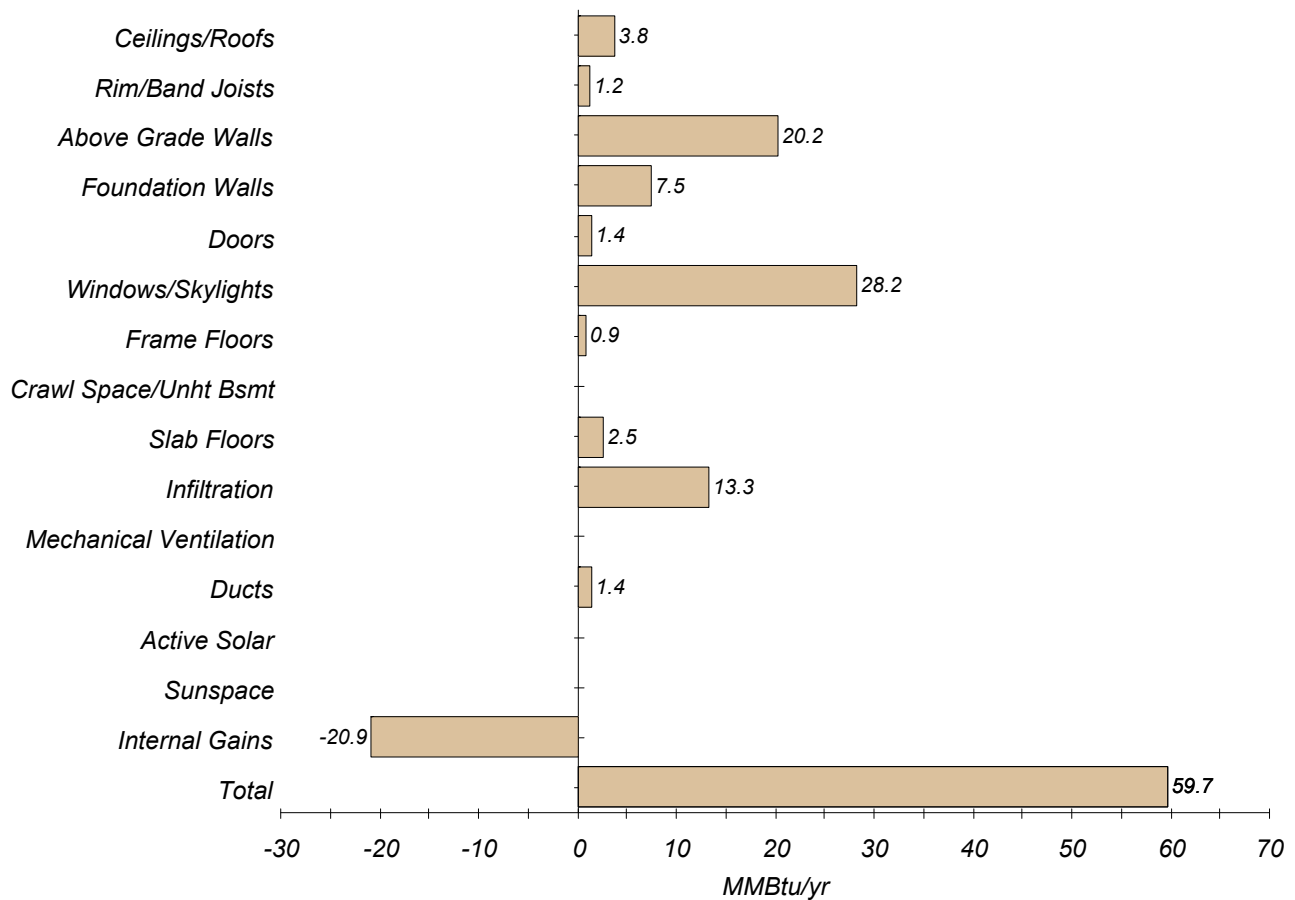
Ceilings/Roofs	0.5
Rim/Band Joists	-0.1
Above Grade Walls	0.9
Foundation Walls	-0.6
Doors	-0.1
Windows/Skylights	3.4
Frame Floors	-0.1
Crawl Space/Unht Bsmt	0.0
Slab Floors	-1.5
Infiltration	-0.6
Mechanical Ventilation	0.0
Ducts	0.8
Active Solar	0.0
Sunspace	0.0
Internal Gains	16.1
Whole House Ventilation	-4.8
Total	13.7



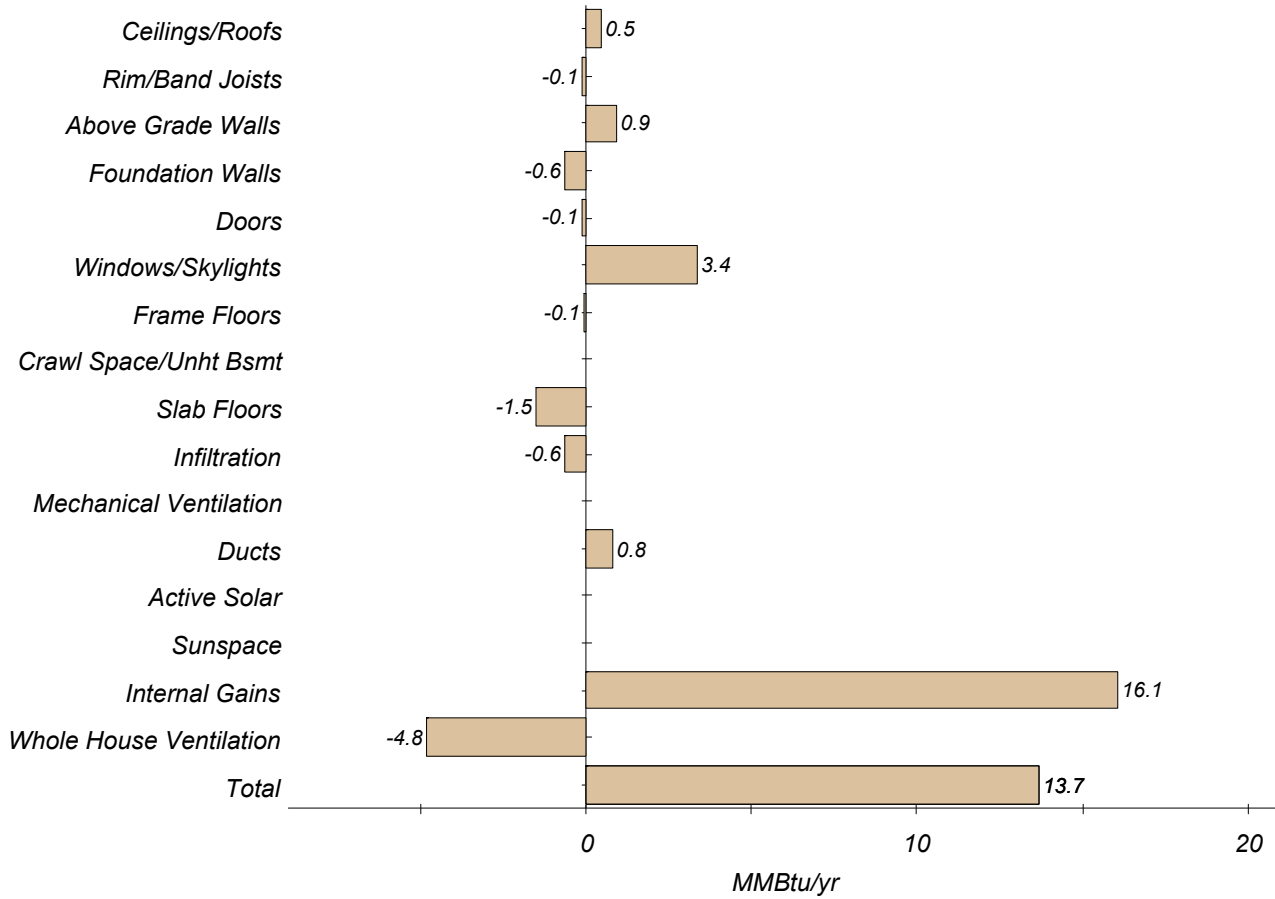
COMPONENT LOAD SUMMARY

Date:	June 22, 2009	Rating No.:	10002
Building Name:	4427 Decatur	Rating Org.:	Inhabit
Owner's Name:	5280 Urban Homes	Phone No.:	303-885-6066
Property:	4427 Decatur St.	Rater's Name:	Andy Mazal
Address:	Denver, CO 80211	Rater's No.:	P-54
Builder's Name:	5280 Urban Homes		
Weather Site:	Denver, CO	Rating Type:	Confirmed Rating
File Name:	4427 Decatur Rating 6-19-09.blg	Rating Date:	6/22/09

Heating Season



Cooling Season





FUEL SUMMARY

Date:	June 22, 2009	Rating No.:	10002
Building Name:	4427 Decatur	Rating Org.:	Inhabit
Owner's Name:	5280 Urban Homes	Phone No.:	303-885-6066
Property:	4427 Decatur St.	Rater's Name:	Andy Mazal
Address:	Denver, CO 80211	Rater's No.:	P-54
Builder's Name:	5280 Urban Homes		
Weather Site:	Denver, CO	Rating Type:	Confirmed Rating
File Name:	4427 Decatur Rating 6-19-09.blg	Rating Date:	6/22/09

4427 Decatur

FUEL SUMMARY

4427 Decatur

Page 2

Annual Energy Cost (\$/yr)

Natural gas	\$	619
Electric	\$	542

Annual End-Use Cost (\$/yr)

Heating	\$	497
Cooling	\$	108
Water Heating	\$	102
Lights & Appliances	\$	858
Photovoltaics	\$	-404
Service Charges	\$	209
Total	\$	1370

Annual End-Use Consumption

Heating (Therms)	638
Heating (kWh)	474
Cooling (kWh)	1144
Water Heating (Therms)	143
Lights & Appliances (Therms)	89
Lights & Appliances (kWh)	8599
Photovoltaics (kWh)	-4373

Annual Energy Demands (kW)

Heating	0.2
Cooling	1.6
Water Heating (Winter Peak)	0.0
Water Heating (Summer Peak)	0.0
Lights & Appliances (Winter Peak)	0.8
Lights & Appliances (Summer Peak)	1.7
Total Winter Peak	1.0
Total Summer Peak	3.3

Utility Rates:

Electricity:	Xcel Energy EI 2/09
Gas:	Xcel Energy NG 2/09



ENERGY COST AND FEATURE REPORT

Date:	June 22, 2009	Rating No.:	10002
Building Name:	4427 Decatur	Rating Org.:	Inhabit
Owner's Name:	5280 Urban Homes	Phone No.:	303-885-6066
Property:	4427 Decatur St.	Rater's Name:	Andy Mazal
Address:	Denver, CO 80211	Rater's No.:	P-54
Builder's Name:	5280 Urban Homes		
Weather Site:	Denver, CO	Rating Type:	Confirmed Rating
File Name:	4427 Decatur Rating 6-19-09.blg	Rating Date:	6/22/09

4427 Decatur

ANNUAL ENERGY COSTS

Heating	\$	497
Cooling	\$	108
Water Heating	\$	102
Lights & Appliances	\$	858
Photovoltaics	\$	-404
Service Charges	\$	209
Total	\$	1370
Average Monthly	\$	114

ENERGY FEATURES

Ceiling w/Attic:	R-40 Blown Attic G1 U=0.025
Vaulted Ceiling:	None
Above Grade Walls:	x6 16oc FB/R19 G3 U=0.074
Foundation Walls (Cond):	R-13 Draped Full R=13.0
Found. Walls (Uncond):	None
Doors:	1-3/4 Wd solid core U=0.329
Windows:	U-Vals 43 / 32 U=0.430
Frame Floors:	9.5" R-19 Grade 3 U=0.066
Slab Floors:	Uninsulated U=0.365
Infiltration:	Htg: 0.19 Clg: 0.19 ACHnat
Infil. Measure:	Blower door test
Mechanical Ventilation:	None
Interior Mass:	None
Mech Equip List:	Heating: Fuel-fired air distribution, 84.0 kBtuh, 93.5 Water Heating: Instant water heater, Gas, 0.82 EF. Cooling: Air conditioner, 36.0 kBtuh, 13.0 SEER.
Programmable Thermostat:	Heat=Yes; Cool=Yes
Ducts:	Uninsulated Conditioned space

REM/Rate - Residential Energy Analysis and Rating Software v12.7

This information does not constitute any warranty of energy cost or savings.
© 1985-2009 Architectural Energy Corporation, Boulder, Colorado.

ENERGY COST AND FEATURE REPORT

4427 Decatur

Page 2

Duct Leakage: 10.00 CFM @ 25 Pascals
Lights/Appliances: Defaults
Active Solar: None
Photovoltaics: 2772 DC Watts
Sunspace: No

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



EQUIPMENT SIZING SUMMARY

Date:	June 22, 2009	Rating No.:	10002
Building Name:	4427 Decatur	Rating Org.:	Inhabit
Owner's Name:	5280 Urban Homes	Phone No.:	303-885-6066
Property:	4427 Decatur St.	Rater's Name:	Andy Mazal
Address:	Denver, CO 80211	Rater's No.:	P-54
Builder's Name:	5280 Urban Homes		
Weather Site:	Denver, CO	Rating Type:	Confirmed Rating
File Name:	4427 Decatur Rating 6-19-09.blg	Rating Date:	6/22/09

4427 Decatur

HEATING

Calculated Peak Load (kBtu/hr)	41.7
Sizing Factor (%)	100.0

HEATING EQUIPMENT CAPACITY (kBtu/hr)

Required	41.7
Specified	84.0

COOLING

Calculated Peak Load (kBtu/hr)	19.9
Sensible	19.7
Latent	0.2
Sizing Factor (%)	100.0

COOLING EQUIPMENT CAPACITY (kBtu/hr)

Required Total	19.9
Specified Total	36.0

Required Sensible	19.74
Specified Sensible	25.20

Required Latent	0.19
Specified Latent	10.80



PERFORMANCE SUMMARY

Date:	June 22, 2009	Rating No.:	10002
Building Name:	4427 Decatur	Rating Org.:	Inhabit
Owner's Name:	5280 Urban Homes	Phone No.:	303-885-6066
Property:	4427 Decatur St.	Rater's Name:	Andy Mazal
Address:	Denver, CO 80211	Rater's No.:	P-54
Builder's Name:	5280 Urban Homes		
Weather Site:	Denver, CO	Rating Type:	Confirmed Rating
File Name:	4427 Decatur Rating 6-19-09.blg	Rating Date:	6/22/09

4427 Decatur

Annual Load (MMBtu/yr)

Heating	59.7
Cooling	13.7
Water Heating	11.7

Annual Consumption (MMBtu/yr)

Heating	65.4
Cooling	3.9
Water Heating	14.3
Lights & Appliances	38.2
Photovoltaics	-14.9
Total	106.9

Annual Energy Cost (\$/yr)

Heating	\$	497
Cooling	\$	108
Water Heating	\$	102
Lights & Appliances	\$	858
Photovoltaics	\$	-404
Service Charges	\$	209
Total	\$	1370

Design Loads (kBtu/hr)

Space Heating	41.7
Space Cooling	19.9

Utility Rates:

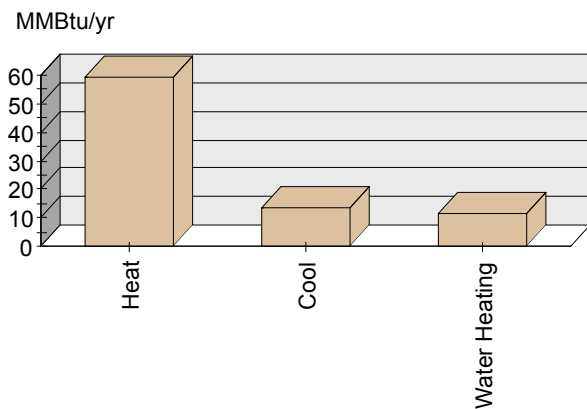
Electricity:	Xcel Energy EI 2/09
Gas:	Xcel Energy NG 2/09



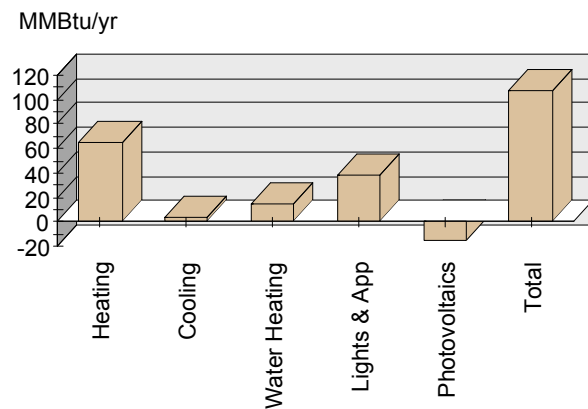
PERFORMANCE SUMMARY

Date:	June 22, 2009	Rating No.:	10002
Building Name:	4427 Decatur	Rating Org.:	Inhabit
Owner's Name:	5280 Urban Homes	Phone No.:	303-885-6066
Property:	4427 Decatur St.	Rater's Name:	Andy Mazal
Address:	Denver, CO 80211	Rater's No.:	P-54
Builder's Name:	5280 Urban Homes		
Weather Site:	Denver, CO	Rating Type:	Confirmed Rating
File Name:	4427 Decatur Rating 6-19-09.blg	Rating Date:	6/22/09

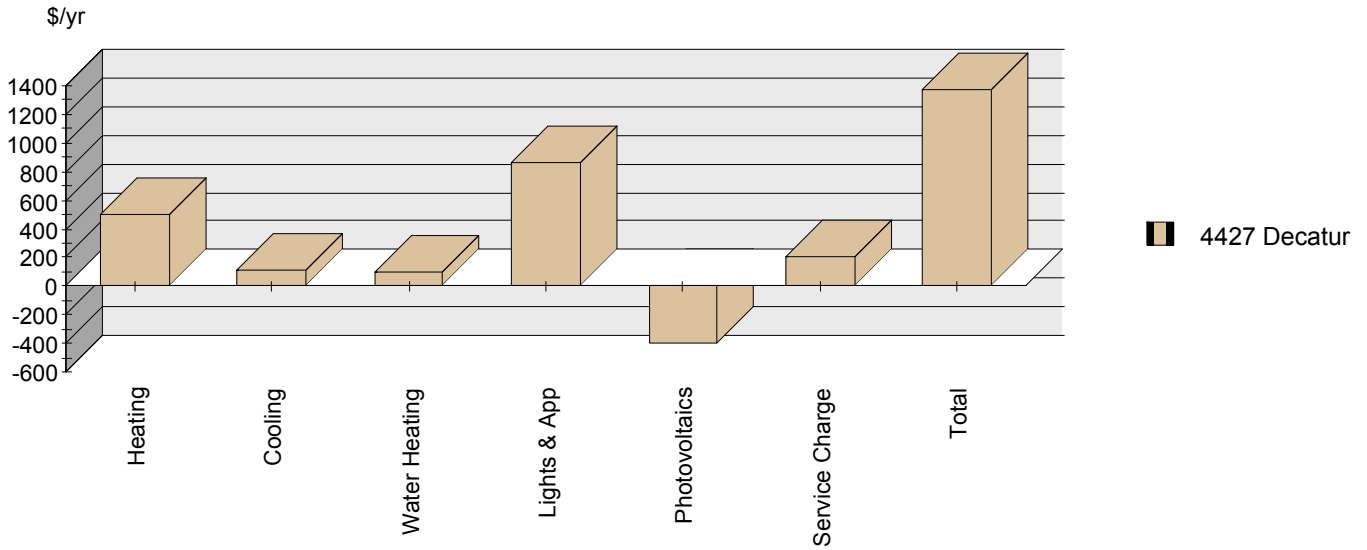
Annual Load



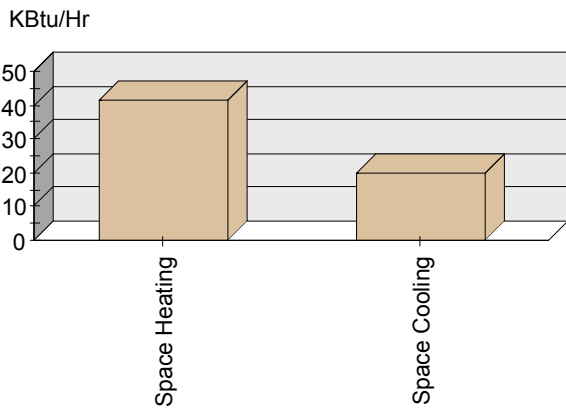
Annual Consumption



Annual Energy Cost



Design Loads



Utility Rates:

Electricity: Xcel Energy EI 2/09
Gas: Xcel Energy NG 2/09



PERFORMANCE FACTORS

Date:	June 22, 2009	Rating No.:	10002
Building Name:	4427 Decatur	Rating Org.:	Inhabit
Owner's Name:	5280 Urban Homes	Phone No.:	303-885-6066
Property:	4427 Decatur St.	Rater's Name:	Andy Mazal
Address:	Denver, CO 80211	Rater's No.:	P-54
Builder's Name:	5280 Urban Homes		
Weather Site:	Denver, CO	Rating Type:	Confirmed Rating
File Name:	4427 Decatur Rating 6-19-09.blg	Rating Date:	6/22/09

4427 Decatur

Normalized Loads

(Btu/sf shell area/DD)

Heating:	1.51
Cooling:	8.49

Normalized Consumption

(kBtu/sf floor area/yr)

Heating:	19.0
Cooling:	1.1
Lighting:	3.4
Appliances:	7.7
Photovoltaics:	-4.3

(Btu/sf floor area/DD)

Heating:	3.2
Cooling:	4.6

Normalized Costs

(\$/sf floor area/yr)

Heating:	\$	0.144
Cooling:	\$	0.031
Water Heating:	\$	0.030
Lighting:	\$	0.092
Appliances:	\$	0.157
Photovoltaics:	\$	-0.117
Total:	\$	0.337

Normalized Design Loads

(Btuh/sf shell area/DD)

Heating:	0.0011
Cooling:	0.0123

PERFORMANCE FACTORS

4427 Decatur

Page 2

Normalization Factors

Floor Area:	3447
Shell Area:	6559
Heating Degree Days (B65):	6023
Cooling Degree Days (B74):	246



SOURCE ENERGY & EMISSIONS REPORT

Date:	June 22, 2009	Rating No.:	10002
Building Name:	4427 Decatur	Rating Org.:	Inhabit
Owner's Name:	5280 Urban Homes	Phone No.:	303-885-6066
Property:	4427 Decatur St.	Rater's Name:	Andy Mazal
Address:	Denver, CO 80211	Rater's No.:	P-54
Builder's Name:	5280 Urban Homes		
Weather Site:	Denver, CO	Rating Type:	Confirmed Rating
File Name:	4427 Decatur Rating 6-19-09.blg	Rating Date:	6/22/09

Source Energy Consumption (MMBtu/year)

All Electric

	<i>Reference Home</i>	<i>As Designed</i>	<i>Difference</i>	<i>% Difference</i>
Heating:	111.2	81.2	-30.0	-27.0%
Cooling:	28.7	14.1	-14.6	-50.9%
Water heating:	21.9	15.8	-6.1	-28.0%
Lights & Appliances:	110.3	107.1	-3.2	-2.9%
Photovoltaics:	0.0	-50.7	-50.7	
Total:	272.1	167.4	-104.7	-38.5%

Total Emissions

All Electric

<i>Type of Emissions</i>	<i>Reference Home</i>	<i>As Designed</i>	<i>Difference</i>	<i>% Difference</i>
Carbon Dioxide (CO ₂) - tons/year	18.5	10.9	-7.6	-41.0%
Sulfur Dioxide (SO ₂) - lbs/year	29.8	14.6	-15.2	-50.9%
Nitrogen Oxides (NO _x) - lbs/year	52.8	30.5	-22.3	-42.2%

Emissions By End-Use

(All Electric Reference Home versus As Designed)

	CO ₂ -tons/yr		SO ₂ -lbs/yr		NO _x -lbs/yr	
	<i>Ref</i>	<i>Des</i>	<i>Ref</i>	<i>Des</i>	<i>Ref</i>	<i>Des</i>
Heating	6.3	4.6	1.6	1.4	16.0	11.8
Cooling	2.3	1.2	6.3	3.1	7.2	3.5
Water Heating	1.2	0.9	0.0	0.0	3.0	2.1
Lights & Appliances	8.7	8.5	21.9	21.2	26.6	25.8
Photovoltaics	0.0	-4.1	0.0	-11.1	0.0	-12.8

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



EMISSIONS REPORT

Date:	June 22, 2009	Rating No.:	10002
Building Name:	4427 Decatur	Rating Org.:	Inhabit
Owner's Name:	5280 Urban Homes	Phone No.:	303-885-6066
Property:	4427 Decatur St.	Rater's Name:	Andy Mazal
Address:	Denver, CO 80211	Rater's No.:	P-54
Builder's Name:	5280 Urban Homes		
Weather Site:	Denver, CO	Rating Type:	Confirmed Rating
File Name:	4427 Decatur Rating 6-19-09.blg	Rating Date:	6/22/09

Total Emissions

4427 Decatur

Type of Emissions

Carbon Dioxide (CO ₂) - tons/year	10.8
Sulfur Dioxide (SO ₂) - lbs/year	14.8
Nitrogen Oxides (NO _x) - lbs/year	30.1

Emissions By End-Use

4427 Decatur

Carbon Dioxide (CO₂) - tons/year

Heating	4.3
Cooling	1.1
Water Heating	0.9
Lights & Appliances	8.7
Photovoltaics	-4.1

Sulfur Dioxide (SO₂) - lbs/year

Heating	1.2
Cooling	2.9
Water Heating	0.0
Lights & Appliances	21.8
Photovoltaics	-11.1

Nitrogen Oxide (NO_x) - lbs/year

Heating	11.0
Cooling	3.3
Water Heating	2.1
Lights & Appliances	26.4
Photovoltaics	-12.8

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



ENERGY STAR HOME REPORT

Date: June 22, 2009 Rating No.: 10002
Building Name: 4427 Decatur Rating Org.: Inhabit
Owner's Name: 5280 Urban Homes Phone No.: 303-885-6066
Property: 4427 Decatur St. Rater's Name: Andy Mazal
Address: Denver, CO 80211 Rater's No.: P-54
Builder's Name: 5280 Urban Homes
Weather Site: Denver, CO Rating Type: Confirmed Rating
File Name: 4427 Decatur Rating 6-19-09.blg Rating Date: 6/22/09

Normalized, Modified End-Use Loads (MMBtu/year)

Table with 3 columns: Category, ENERGY STAR, As Designed. Rows include Heating, Cooling, Water heating, Lighting & Appliances, Total, and HERS Index.

ENERGY STAR Mandatory Requirements

Form with checkboxes for Thermal Bypass Inspection Checklist, Ductwork Requirements, ENERGY STAR Products, and ENERGY STAR Scoring Exceptions.

* Thermal Bypass Checklist and ENERGY STAR Products are not checked in REM/Rate at this time.

This home MEETS OR EXCEEDS the energy efficiency requirements for designation as an EPA ENERGY STAR Qualified Home.

Table with 2 main sections: Pollution Prevented and Energy Cost Savings (\$/year). Rows include Carbon Dioxide, Sulfur Dioxide, Nitrogen Oxides, Heating, Cooling, Water Heating, Lights & Appliances, and Total.

The energy savings and pollution prevented are calculated by comparing the Rated Home to the Reference Home as defined in the "Mortgage Industry National Home Energy Rating Systems Standards" as promulgated by the Residential Energy Services Network (RESNET).

REM/Rate - Residential Energy Analysis and Rating Software v12.7

This information does not constitute any warranty of energy cost or savings. © 1985-2009 Architectural Energy Corporation, Boulder, Colorado.



An ENERGY STAR[®] Qualified Home

This home built at

4427 Decatur St., Denver, CO

by 5280 Urban Homes

has been verified by Inhabit, an independent professional or organization,
to meet or exceed strict energy efficiency guidelines
set by the U.S. Environmental Protection Agency.

HERS Index: 56

6/22/09

A handwritten signature in black ink, appearing to read "David Lee".

David Lee
Chief
ENERGY STAR Residential Branch

A handwritten signature in black ink, appearing to read "Sam Rashkin".

Sam Rashkin
National Director
ENERGY STAR for Homes

www.energystar.gov



Home Energy Rating Certificate

4427 Decatur St.
Denver, CO 80211



**5 Stars Plus
Confirmed Rating**

Uniform Energy Rating System

1 Star	1 Star Plus	2 Stars	2 Stars Plus	3 Stars	3 Stars Plus	4 Stars	4 Stars Plus	5 Stars	5 Stars Plus
500-401	400-301	300-251	250-201	200-151	150-101	100-91	90-86	85-71	70 or Less

Energy Efficient

HERS Index: **56**

General Information

Conditioned Area:	3447 sq. ft.	HouseType:	Single-family detached
Conditioned Volume:	31727 cubic ft.	Foundation:	Conditioned basement
Bedrooms:	3		

Mechanical Systems Features

Heating:	Fuel-fired air distribution, Natural gas, 93.5 AFUE.		
Water Heating:	Instant water heater, Natural gas, 0.82 EF, 0.0 Gal.		
Cooling:	Air conditioner, Electric, 13.0 SEER.		
Duct Leakage to Outside:	10.00 CFM.		
Ventilation System:	None		
Programmable Thermostat:	Heating: Yes	Cooling: Yes	

Building Shell Features

Ceiling Flat:	R-40	Exposed Floor:	R-19
Vaulted Ceiling:	NA	Window Type:	U-Vals 43 / 32
Above Grade Walls:	R-19	Infiltration:	
Foundation Walls:	R-13.0	Rate:	Htg: 0.19 Clg: 0.19 ACHnat
Slab:	R-0.0 Edge, R-0.0 Under	Method:	Blower door test

Lights and Appliance Features

Percent Fluorescent Pin-Based:	0.00	Clothes Dryer Fuel:	Natural gas
Percent Fluorescent CFL:	0.00	Range/Oven Fuel:	Natural gas
Refrigerator (kWh/yr):	542.00	Ceiling Fan (cfm/Watt):	0.00
Dishwasher Energy Factor:	0.65		

The Home Energy Rating Standard Disclosure for this home is available from the rating provider.

REM/Rate - Residential Energy Analysis and Rating Software v12.7

This information does not constitute any warranty of energy cost or savings.
© 1985-2009 Architectural Energy Corporation, Boulder, Colorado.

Rating Number: **10002**

Certified Energy Rater: Andy Mazal

Rating Date: 6/22/09

Rating Ordered For: 5280 Urban Homes

Estimated Annual Energy Cost

Use	Confirmed Rating		
	MMBtu	Cost	Percent
Heating	70.0	\$533	38%
Cooling	4.1	\$115	8%
Hot Water	14.3	\$102	7%
Lights/Appliances	37.5	\$839	60%
Photovoltaics	-14.9	\$-404	-29%
Service Charges		\$209	15%
Total		\$1394	100%

**This home meets or exceeds the minimum
criteria for all of the following:**

EPA Energy Star Home
2003 International Energy Conservation Code
2009 International Energy Conservation Code

EnergyLogic, Inc.

PO Box N

Berthoud, CO 80513

Tel: 970-532-3220 Fax: 970-532-5074

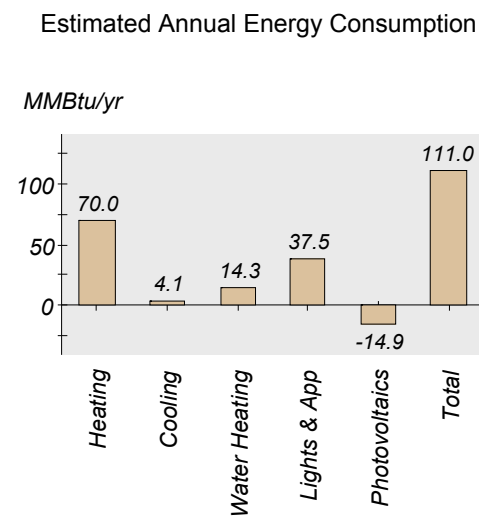
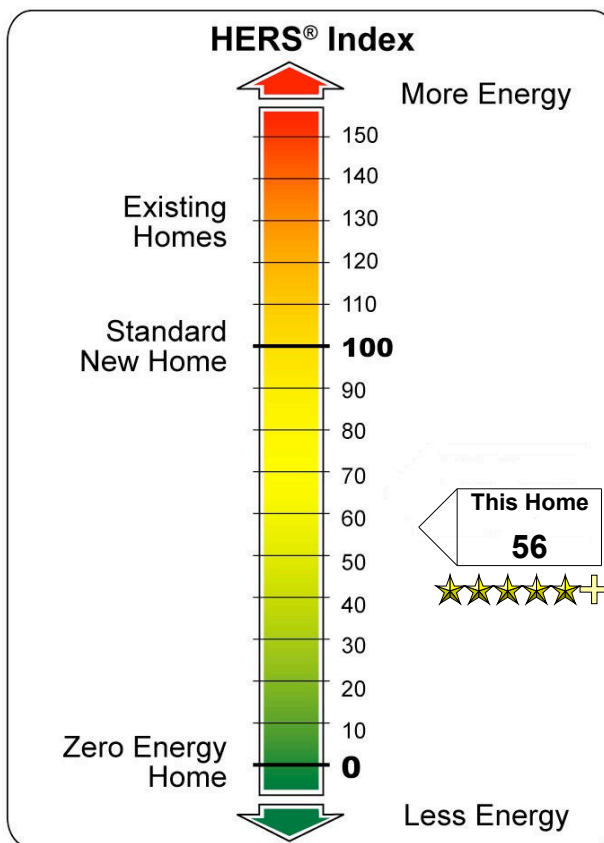
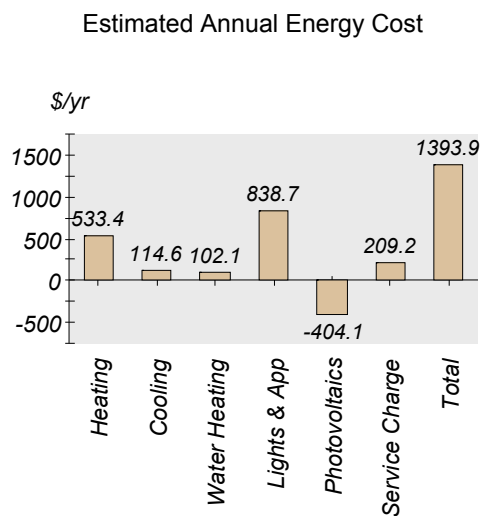
Fax: 970-532-5074

HERS Rater: Inhabit

www.inhabitconsulting.com



HOME PERFORMANCE WITH ENERGY STAR ENERGY RATING CERTIFICATE



Address: 4427 Decatur St.
Denver, CO 80211

House Type: Single-family detached
Cond. Area: 3447 sq. ft.
Rating No.: 10002
Issue Date: June 22, 2009

Annual Estimates*:
Electric(kWh): 5764
Natural gas(Therms): 914
CO2 emissions(Tons): 11

*Based on standard operating conditions

This home meets Energy Star

EnergyLogic, Inc.

PO Box N
Berthoud, CO 80513

Certified Rater: Andy Mazal
Certification No: P-54
Rating Date: 6/22/09



REM/Rate - Residential Energy Analysis and Rating Software v12.7

This information does not constitute any warranty of energy cost or savings. © 1985-2009 Architectural Energy Corporation, Boulder, Colorado.
The Home Energy Rating Standard Disclosure for this home is available from the rating provider.