



Neighborhood Energy Connection
tools for energy-efficient living



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AIR LEAKAGE REPORT

Date:	July 27, 2010	Rating No.:	71-1077
Building Name:	Spear Residence	Rating Org.:	NEC
Owner's Name:	Mary Spear	Phone No.:	651-221-4462
Property:	40790 Waring RD	Rater's Name:	Jimmie Sparks
Address:	St Peter, MN 56082	Rater's No.:	71
Builder's Name:	L. Swenson Const.		
Weather Site:	Rochester, MN	Rating Type:	Confirmed Rating
File Name:	71-1077.blg	Rating Date:	6/16/10

Whole House Infiltration

	Blower door test	
	Heating	Cooling
Natural ACH:	0.04	0.03
ACH @ 50 Pascals:	0.74	0.74
CFM @ 25 Pascals:	232	232
CFM @ 50 Pascals:	364	364
Eff. Leakage Area:	20.0	20.0
Specific Leakage Area:	0.00005	0.00005
ELA/100 sf shell:	0.27	0.27

Total Duct Leakage to Outside

CFM @ 25 Pascals:	N/A
CFM25 / CFMfan:	N/A
CFM25 / CFA:	N/A
CFM per Std 152:	N/A
CFM per Std 152 / CFA:	N/A
CFM @ 50 Pascals:	N/A
Eff. Leakage Area:	N/A
Thermal Efficiency:	0.00

Ventilation

Mechanical:	Balanced
Sensible Recovery Eff. (%):	84.0
Total Recovery Eff. (%):	44.0
Rate (cfm):	150
Hours/Day:	12.0
Fan Watts:	200.0
Cooling Ventilation:	Natural Ventilation

ASHRAE 62.2 - 2007 Ventilation Requirements

For this home to comply with ASHRAE Standard 62.2 - 2007 Ventilation and Acceptable Indoor Air Quality in Low-Rise Residential Buildings, a minimum of 52 cfm of mechanical ventilation must be provided continuously, 24 hours per day. Alternatively, an intermittent operating mechanical ventilation system may be used if the ventilation rate is adjusted accordingly. For example, a 103 cfm mechanical ventilation system would need to operate 12 hours per day, as long as the system operates to provide required average ventilation each hour.

Home Energy Rating Certificate

Spear Residence
40790 Waring RD
St Peter, MN 56082



**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

HERS Index: 42

General Information

Conditioned Area: 2912 sq. ft.
Conditioned Volume: 29577 cubic ft.
Bedrooms: 2
HouseType: Single-family detached
Foundation: More than one type

Mechanical Systems Features

Integrated Htg/DHW: Electric, Htg eff 0.99 CAafue. DHW eff 0.91 CAef.

Duct Leakage to Outside: NA
Ventilation System: Balanced: ERV, 150 cfm, 200.0 watts.
Programmable Thermostat: Heating: Yes Cooling: No

Building Shell Features

Ceiling Flat: NA
Vaulted Ceiling: U-0.021w/RB
Above Grade Walls: U-0.049
Foundation Walls: R-31.0
Slab: R-10.0 Edge, R-15.0 Under
Exposed Floor: NA
Window Type: NFRC .23 / .40
Infiltration:
Rate: Htg: 364 Clg: 364 CFM50
Method: Blower door test

Lights and Appliance Features

Percent Fluorescent Pin-Based: 30.00
Percent Fluorescent CFL: 70.00
Refrigerator (kWh/yr): 285.00
Dishwasher Energy Factor: 0.46
Clothes Dryer Fuel: Electric
Range/Oven Fuel: Electric
Ceiling Fan (cfm/Watt): 70.40

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

REM/Rate - Residential Energy Analysis and Rating Software v12.85

This information does not constitute any warranty of energy cost or savings.
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Rating Number: 71-1077

Certified Energy Rater: Jimmie Sparks

Rating Date: 6/16/10

Rating Ordered For: Mary Spear

Estimated Annual Energy Cost

Confirmed Rating

Use	MMBtu	Cost	Percent
Heating	15.1	\$336	31%
Cooling	0	\$0	0%
Hot Water	0.0	\$0	0%
Lights/Appliances	28.7	\$662	60%
Photovoltaics	-0.0	\$-0	-0%
Service Charges		\$102	9%
Total		\$1100	100%

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

EPA ENERGY STAR Home
2006 International Energy Conservation Code

Neighborhood Energy Connection

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Phone # 651-221-4462
Fax # 651-221-9831

Certified Energy Rater