



## BUILDING LEAKAGE TEST

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Date of Test: 11/06/14

Test File: 625 Unit 109\_06NOVEMBER14

Customer: SWMHP  
2401 Broadway Ave  
Slayton, MN 56172  
Phone: 507-836-1613

Technician: Katherine Teiken

Project Number:

Building Address: Building 625  
Unit 109  
St. Peter, MN

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### Test Results

- Airflow at 50 Pascals:  
(50 Pa = 0.2 w.c.)  
641 CFM50 ( +/- 0.9 %)  
2.95 ACH50  
0.4170 CFM50/ft<sup>2</sup> floor area  
0.1536 CFM50/ft<sup>2</sup> surface area
  - Leakage Areas:  
63.2 in<sup>2</sup> ( +/- 2.4 %) Canadian EqLA @ 10 Pa  
32.8 in<sup>2</sup> ( +/- 4.1 %) LBL ELA @ 4 Pa
  - Building Leakage Curve:  
Flow Coefficient (C) = 45.1 ( +/- 6.6 %)  
Exponent (n) = 0.678 ( +/- 0.019 )  
Correlation Coefficient = 0.99777
  - Test Settings:  
Test Standard: CGSB  
Test Mode: Depressurization
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### Infiltration Estimates

- Estimated Average Annual Infiltration Rate:  
37.4 CFM  
0.17 ACH
  - Estimated Design Infiltration Rate:  
Winter: 53.5 CFM  
0.25 ACH  
Summer: 24.5 CFM  
0.11 ACH
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### Cost Estimates

- Estimated Cost of Air Leakage for Heating: \$ 48 per year heating
- Estimated Cost of Air Leakage for Cooling: \$ 3 per year cooling

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**Building Information**

Volume	<b>13053</b>
Surface Area	<b>4177</b>
Floor Area	<b>1538</b>
Height	<b>16</b>
# of Bedrooms	<b>2</b>
# of Occupants	
Year of Construction	<b>2014</b>
Wind Shield	<b>H</b>

**Location Climate Information**

Ventilation Weather Factor	<b>1.00</b>
Energy Climate Factor	<b>16.00</b>
Heating Degree Days	<b>7809</b>
Cooling Degree Days	<b>380</b>
Design Winter Wind Speed	<b>9.0 mph</b>
Design Summer Wind Speed	<b>7.0 mph</b>
Design Winter Temp Diff	<b>81 deg F</b>
Design Summer Temp Diff	<b>16 deg F</b>

**Heating and Cooling Cost and Efficiency Information**

Heating Fuel	<b>Gas</b>
Heating Fuel Cost	<b>\$0.90/ccf</b>
Heating Efficiency %	<b>95.00</b>
Cooling Fuel Cost	<b>\$0.090/kwh</b>
Cooling SEER	<b>14.5</b>

**Equipment Information**

<b>Type</b>	<b>Manufacturer</b>	<b>Model</b>	<b>Serial Number</b>	<b>Custom Calibration Date</b>
<b>Fan</b>	Energy Conservatory	Model 3 (110V)		-
<b>Micromanometer</b>	Energy Conservatory	DG700	37299-7	6/17/2013

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**Depressurization Test:****Environmental Data**

<b>Indoor Temperature (°F)</b>	<b>Outdoor Temperature (°F)</b>
71.0	42.0

**Data Points**

<b>Nominal Building Pressure (Pa)</b>	<b>Baseline Adjusted Building Pressure (Pa)</b>	<b>Fan Pressure (Pa)</b>	<b>Nominal Flow (cfm)</b>	<b>Adjusted Flow (cfm)</b>	<b>% Error</b>	<b>Fan Configuration</b>
-4.3	n/a	n/a				
-53.8	-48.8	118.4	646	628	-0.4	Ring B
-49.4	-44.5	104.3	607	590	-0.4	Ring B
-43.8	-38.8	92.0	570	554	2.6	Ring B
-39.2	-34.2	73.4	510	496	-0.0	Ring B
-34.5	-29.6	58.6	456	443	-1.3	Ring B
-29.1	-24.2	43.8	395	384	-2.1	Ring B
-23.9	-19.0	32.0	338	328	-1.1	Ring B
-19.3	-14.3	23.8	292	284	3.1	Ring B
-5.6	n/a	n/a				

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**Deviations from Standard CGSB - Test Parameters****None**

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**Comments**

Interior multi family unit

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