

## BUILDING LEAKAGE TEST

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Date of Test: 12/22/21

Technician: Justin Cowen

Test File: 58-1825 Houston with Garage

Customer: Ultimate / Huston with Garage

Building Address: 2316 Uphoff Road  
Cottage Grove, WI 53527

Phone

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### Test Results

- Airflow at 50 Pascals:  
(50 Pa = 0.2 w.c.)  
2208 CFM ( +/- 0.8 %)  
0.86 ACH  
0.17 CFM per ft2 floor area
  - Leakage Areas:  
181.4 in2 ( +/- 7.5 %) Canadian EqLA @ 10 Pa  
84.7 in2 ( +/- 11.7 %) LBL ELA @ 4 Pa
  - Minneapolis Leakage Ratio: 0.09 CFM50 per ft2 surface area
  - Building Leakage Curve:  
Flow Coefficient (C) = 99.6 ( +/- 18.1 %)  
Exponent (n) = 0.792 ( +/- 0.046 )  
Correlation Coefficient = 0.99321
  - Test Settings:  
Test Standard: = CGSB  
Test Mode: = Depressurization  
Equipment = Model 3 Minneapolis Blower Door
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### Infiltration Estimates

- Estimated Average Annual Infiltration Rate:  
107.9 CFM  
0.04 ACH  
18.0 CFM per person  
(using bedrooms + 1)
  - Estimated Design Infiltration Rate:  
Winter: 111.3 CFM  
0.04 ACH  
Summer: 61.1 CFM  
0.02 ACH
  - Recommended Whole Building Mechanical  
Ventilation Rate: (based on ASHRAE 62.2-2003) 173.1 CFM
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### Cost Estimates

- Estimated Cost of Air Leakage for Heating: \$ 179 per year heating
- Estimated Cost of Air Leakage for Cooling: \$ 47 per year cooling

## BUILDING LEAKAGE TEST Page 2

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### Building Conditions

Inside Temperature:	67 deg F	Heating Fuel:	Propane
Outside Temperature:	25 deg F	Heating Fuel Cost:	\$1.10/gallon
# of Stories	1.0	Heating Efficiency:	95.00
		Heating Degree Days:	7673
Wind Shield:	M	Cooling Fuel Cost:	\$0.990/kwh
# of Occupants	5.0	Cooling SEER:	13.0
		Cooling Degree Days:	194
# of Bedrooms:	5.0		
Volume:	154897 ft3	Ventilation Weather Factor:	0.91
Surface Area:	23784 ft2	Energy Climate Factor:	18.0
Floor Area:	12808 ft2		
Design Winter Wind Speed:	9.0 mph	Design Winter Temp Diff:	77 deg F
Design Summer Wind Speed:	7.0 mph	Design Summer Temp Diff:	13 deg F

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### Comments

**BUILDING LEAKAGE TEST Page 3**

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**Data Points: Data Entered Manually**

Nominal Building Pressure (Pa)	Fan Pressure (Pa)	Nominal Flow	Temperature Adjusted Flow	% Error	Fan Configuration	Baseline Std Dev (Pa)
0.0	n/a					+/- 0.00
-36.7	106.4	1819	1745	0.9	Ring A	
-39.1	116.8	1905	1827	0.5	Ring A	
-45.6	147.5	2138	2051	-0.1	Ring A	
-52.9	177.7	2345	2250	-2.6	Ring A	
-54.3	192.3	2438	2339	-0.8	Ring A	
-59.8	31.7	2706	2596	2.0	Open	
0.0	n/a					+/- 0.00