

BUILDING LEAKAGE TEST

Date of Test: 12/22/21
Test File: 58-1825 Houston

Technician: Justin Cowen

Customer: Ultimate / Huston

Building Address: 2316 Uphoff Road
Cottage Grove, WI 53527

Phone

Test Results

- Airflow at 50 Pascals:
(50 Pa = 0.2 w.c.)
1983 CFM (+/- 0.4 %)
0.87 ACH
0.18 CFM per ft2 floor area
 - Leakage Areas:
174.7 in2 (+/- 3.5 %) Canadian EqLA @ 10 Pa
84.9 in2 (+/- 5.4 %) LBL ELA @ 4 Pa
 - Minneapolis Leakage Ratio: 0.09 CFM50 per ft2 surface area
 - Building Leakage Curve:
Flow Coefficient (C) = 106.0 (+/- 8.4 %)
Exponent (n) = 0.749 (+/- 0.022)
Correlation Coefficient = 0.99833
 - 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:
108.7 CFM
0.05 ACH
18.1 CFM per person
(using bedrooms + 1)
 - Estimated Design Infiltration Rate:
Winter: 111.5 CFM
0.05 ACH
Summer: 61.3 CFM
0.03 ACH
 - Recommended Whole Building Mechanical
Ventilation Rate: (based on ASHRAE 62.2-2003) 157.9 CFM
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Cost Estimates

- Estimated Cost of Air Leakage for Heating: \$ 161 per year heating
- Estimated Cost of Air Leakage for Cooling: \$ 42 per year cooling

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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: | 137289 ft3 | Ventilation Weather Factor: | 0.91 |
| Surface Area: | 23315 ft2 | Energy Climate Factor: | 18.0 |
| Floor Area: | 11290 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 |

Comments

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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 |
| -33.8 | 74.7 | 1527 | 1465 | -1.0 | Ring A | |
| -41.4 | 105.7 | 1813 | 1739 | 1.0 | Ring A | |
| -44.6 | 114.2 | 1884 | 1807 | -0.7 | Ring A | |
| -49.0 | 136.6 | 2059 | 1975 | 1.1 | Ring A | |
| -54.9 | 158.2 | 2214 | 2124 | -0.1 | Ring A | |
| -59.8 | 179.1 | 2354 | 2258 | -0.4 | Ring A | |
| 0.0 | n/a | | | | | +/- 0.00 |