

BUILDING LEAKAGE TEST

Date of Test: 4-21-2011
Test File: Meyer-Bradley

Technician: Donald Jahnke

Customer: Todd Bradley
17472 20th St
Oelwein, Iowa 50662
Phone

Building Address: 17472 20th St

Test Results

- Airflow at 50 Pascals:
(50 Pa = 0.2 w.c.)
1407 CFM (+/- 0.5 %)
1.37 ACH
0.23 CFM per ft² floor area
 - Leakage Areas:
140.8 in² (+/- 4.0 %) Canadian EqLA @ 10 Pa
73.5 in² (+/- 6.2 %) LBL ELA @ 4 Pa
 - Minneapolis Leakage Ratio: 0.13 CFM₅₀ per ft² surface area
 - Building Leakage Curve:
Flow Coefficient (C) = 102.5 (+/- 9.5 %)
Exponent (n) = 0.670 (+/- 0.024)
Correlation Coefficient = 0.99625
 - Test Settings:
Test Standard: = CUSTOM
Test Mode: = Depressurization
Equipment = Model 3 Minneapolis Blower Door
-

Infiltration Estimates

- Estimated Average Annual Infiltration Rate:
87.7 CFM
0.09 ACH
21.9 CFM per person
 - Estimated Design Infiltration Rate:
Winter: 113.0 CFM
0.11 ACH
Summer: 53.1 CFM
0.05 ACH
 - Recommended Whole Building Mechanical
Ventilation Rate: (based on ASHRAE 62.2) 90.2 CFM
-

Cost Estimates

- Estimated Cost of Air Leakage for Heating: \$ 111 per year heating
- Estimated Cost of Air Leakage for Cooling: \$ 4 per year cooling

BUILDING LEAKAGE TEST Page 2

Date of Test: 4-21-2011 Test File: Meyer-Bradley

Building Conditions

Inside Temperature:	65 deg F	Heating Fuel:	Heat Pump
Outside Temperature:	45 deg F	Heating Fuel Cost:	\$0.100/kwh
# of Stories	1.0	HSPF:	9.20
		Heating Degree Days:	7910
Wind Shield:	M	Cooling Fuel Cost:	\$0.100/kwh
# of Occupants	4.0	Cooling SEER:	16.0
		Cooling Degree Days:	267
# of Bedrooms:	3.0		
Volume:	61467 ft3	Ventilation Weather Factor:	1.01
Surface Area:	11010 ft2	Energy Climate Factor:	17.0
Floor Area:	6022 ft2		
Design Winter Wind Speed:	13.0 mph	Design Winter Temp Diff:	81 deg F
Design Summer Wind Speed:	7.0 mph	Design Summer Temp Diff:	13 deg F

Comments

BUILDING LEAKAGE TEST Page 3

Date of Test: 4-21-2011 Test File: Meyer-Bradley

Data Points:

Nominal Building Pressure (Pa)	Fan Pressure (Pa)	Nominal Flow	Temperature Adjusted Flow	% Error	Fan Configuration	Baseline Std Dev (Pa)
-1.2	n/a					+/- 0.12
-36.1	39.6	1143	1121	1.2	Ring A	
-41.2	46.4	1235	1211	-0.0	Ring A	
-45.5	55.0	1341	1315	1.3	Ring A	
-50.4	61.2	1413	1386	-0.5	Ring A	
-55.6	67.8	1485	1457	-2.2	Ring A	
-60.6	77.6	1587	1556	-1.4	Ring A	
-65.9	90.5	1710	1677	0.3	Ring A	
-71.5	103.9	1829	1794	1.4	Ring A	
-1.2	n/a					+/- 0.33