

Retrotec Door Fan Test Report



Tester Information

Rachel Simpkins
 South West Air Energy
 5 Kel Avon Close
 Truro, Cornwall
 United Kingdom, TR1 1AN
 Telefon: 01872 275186

Customer

Group Name Example
 Contact Person
 Customer Phone

Building Under Test

Details Example
 Address
 City
 State
 ATTMA Building Type Dwelling – naturally ventilated
 Air Permeability Targets Best Practice : 3 , Normal : 9
 Temporary Air Sealing extracts to kitchen, bathroom & en-suite sealed, water traps intact, trickle vents shut

Test

Test #: 1
 Performed On 2009/10/08
 Operator In the Room
 Direction Depressurize
 Standard ATTMA: TS-1
 Notes: No deviations from standard test conditions

Equipment Used

System	Certificate # 4490		
Fan Serial #	H00576	expires	2010-08-07
Room Gauge Serial #	101251A	expires	2010-08-07
Flow Gauge Serial #	101251B	expires	2010-08-07
External Temp Probe #		expires	2010-08-07
Internal Temp Probe #		expires	2010-08-07

Environmental Conditions

	<u>Before</u>	<u>After</u>
Barometric Pressure	100800 Pa	100700 Pa
Wind Speed	2m/s	1m/s
Inside Temperature	16 °C	17 °C
Outside Temperature	16 °C	15 °C
Static Pressure	P01+ 0.07 Pa	P02+ 0.25 Pa
	P01- -0.19 Pa	P02- -0.23 Pa
	P01 -0.1 Pa	P02 0.09 Pa

Baseline static pressure measured before test.

-.37	-.21	0.13	-.14	0.02	-.03
------	------	------	------	------	------

Depressurize

Fan Range - C4

Room Pressure (Pa):	-10	-15.80	-21	-31.30	-36.50	-41.60	-46.80	-51.90	-57.10	
Corrected Room Pr (Pa):	9.94	15.74	20.94	31.24	36.44	41.54	46.74	51.84	57.04	
Flow Pressure (Pa):	22.30	41	61.40	100.50	124.50	145.50	168	185.50	214.50	
Corrected Flow Pr (Pa):	22.3	41	61.4	100.5	124.5	145.5	168	185.5	214.5	
Measured Flow (m ³ /h):	86.3	118.4	146.0	188.4	210.6	228.3	246.0	258.9	279.2	
Best Fit Flow (m ³ /h):	314.4	427.5	517.4	675.9	749.2	817.8	884.8	948.3	1010.8	
Error (%):	-1.2	-3	1.6	.4	1.2	.5	.1	-1.8	-6	

Baseline static pressure measured after test.

0.02	-0.29	-0.17	0.07	0.64	0.28
------	-------	-------	------	------	------

Data Analysis

Best Fit: Least Squares	Slope (n)	Intercept (C)	Correlation (r ²)
Depressurize	0.6684	(m ³ /h) 67.741	99.96

Zone Dimensions

Net Floor Area	44	m ²
Envelope Area	220	m ²
Internal Volume	214	m ³

Results

	Units	Depressurize
Air Flow Coefficient,CL	(m ³ /h)	67.741
Air Flow Coefficient,Cenv	(m ³ /h)	67.784
Air flow Exponent		0.6684
Correlation Coefficient,r ²	(%)	99.96
Flow@ 50 Pa	(m ³ /h)	925.63
Air Changes/Hour @ 50 Pa	(/hr)	4.325
Air Permeability@ 50 Pa	(m ³ /h/m ²)	4.21
Specific Leakage Rate @ 50 Pa	(m ³ /h/m ²)	21.04

Door Fan 3.0 Enclosure Leakage Analysis Software (Version 3.233)
By: Retrotec Energy Innovations Ltd (Canada).
Copyright 2006-2007, Retrotec Energy Innovations Ltd
This software conforms to the ATTMA: TS-1 Issue 2 BS EN 13829 method B testing standard

