

NEBB Air Movement Method

Depressurization

Pass

Fail

Pressurization

Pass

Fail

Combined

Pass

Fail

Required Values Needed Prior to Running Calculations	
5286	Allowable Leakage (CFM/ft2) @ Reference pressure (inH2O)
13215	Building Enclosure (ft ²)
0.4	Acceptable Leakage Rate (CFM/ft ²)
5286	Acceptable CFM
902	E = Altitude Above Sea Level (Ft)

Constants	
0.07517	ρ_e (Standard Air Density) lbm/ft ³
0.002629	b (lbm/(ft ² *h*F ^{0.5}))
198.7	s (F)
0.04359	μ_e (Reference air viscosity)
1Pa = 0.00401" H2O	
1" H2O = 249 Pa	

Required Field Measurements	
66.2	T _{in} = Inside Temperature (F)
44.3	T _{out} = Outside Temperature (F)
0	P _{baseline1} (Average of pre-test baseline readings)
0	P _{baseline2} (Average of post-test baseline readings)

Air Density	
0.0730	ρ_{in} - Inside (lbm/ft ³)
0.0762	ρ_{out} - Outside (lbm/ft ³)

Air Dynamic Viscosity	
0.0438	μ_{in} (lbm/ft*hr)
0.0423	μ_{out} (lbm/ft*hr)

Depressurization						
Reading #	Pressure	Pavg	Penc	Airflow (CFM)	Qavg	Qenc
1	0.0198	0.0201	0.0201	2795	2826	2708
2	0.0194			2800		
3	0.0220			2888		
4	0.0196			2830		
5	0.0199			2815		
1	0.0065	0.0064	0.0064	1229	1244	1298
2	0.0077			1254		
3	0.0059			1245		
4	0.0054			1239		
5	0.0066			1252		

n = 0.64
0.45 ≤ n ≤ 0.80

C (Flow Coefficient)	33221
Qenc	15393
P _{ref}	0.3
Eff Leakage Area	1005.349422

Pressurization						
Reading #	Pressure	Pavg	Penc	Airflow (CFM)	Qavg	Qenc
1	0.2110	0.2054	0.205	9862	9839	10266
2	0.2080			9741		
3	0.2010			9882		
4	0.2050			9799		
5	0.2020			9910		
1	0.0710	0.0704	0.070	5059	4978	5195
2	0.0710			5133		
3	0.0710			4550		
4	0.0690			5149		
5	0.0700			5001		

n = 0.64
0.45 ≤ n ≤ 0.80

C (Flow Coefficient)	27790
Qenc	13064
P _{ref}	0.3
Eff Leakage Area	848.2484488