Flow Method: Hole Added from Zone to Outside

Start Press		Ending Pressure After Making Hole from Zone to Outside																							Uncertainty based on 1 Pa Errors
H/Z		6	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40	42	44	46	48	50	
	Z/O	44	42	40	38	36	34	32	30	28	26	24	22	20	18	16	14	12	10	8	6	4	2	0	
0	50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10%
1	49		0.35	0.29	0.25	0.22	0.20	0.18	0.17	0.15	0.15	0.14	0.13	0.12	0.12	0.11	0.11	0.10	0.10	0.10	0.09	0.09	0.09	0.09	15%
2	48		0.68	0.54	0.45	0.39	0.35	0.32	0.29	0.27	0.25	0.23	0.22	0.21	0.20	0.19	0.18	0.17	0.17	0.16	0.15	0.15	0.15	0.14	20%
3	47			0.84	0.68	0.58	0.51	0.45	0.41	0.38	0.35	0.33	0.31	0.29	0.27	0.26	0.25	0.24	0.23	0.22	0.21	0.20	0.20	0.19	25%
4	46			1.23	0.96	0.80	0.68	0.60	0.54	0.49	0.45	0.42	0.39	0.37	0.35	0.33	0.32	0.30	0.29	0.28	0.27	0.26	0.25	0.24	>26%
5	45				1.30	1.05	0.89	0.77	0.68	0.62	0.56	0.52	0.48	0.45	0.43	0.40	0.38	0.37	0.35	0.33	0.32	0.31	0.30	0.29	
6	44				1.76	1.36	1.12	0.96	0.84	0.75	0.68	0.63	0.58	0.54	0.51	0.48	0.45	0.43	0.41	0.39	0.38	0.36	0.35	0.34	
7	43					1.76	1.41	1.18	1.02	0.90	0.81	0.74	0.68	0.63	0.59	0.56	0.53	0.50	0.48	0.45	0.43	0.42	0.40	0.39	
8	42					2.28	1.76	1.44	1.23	1.08	0.96	0.87	0.80	0.73	0.68	0.64	0.60	0.57	0.54	0.52	0.49	0.47	0.45	0.44	
9	41						2.20	1.76	1.47	1.27	1.12	1.01	0.92	0.84	0.78	0.73	0.68	0.65	0.61	0.58	0.55	0.53	0.51	0.49	
10	40						2.80	2.15	1.76	1.49	1.30	1.16	1.05	0.96	0.89	0.82	0.77	0.72	0.68	0.65	0.62	0.59	0.56	0.54	
11	39							2.65	2.11	1.76	1.51	1.33	1.20	1.09	1.00	0.92	0.86	0.81	0.76	0.72	0.68	0.65	0.62	0.60	
12	38							3.32	2.54	2.07	1.76	1.53	1.36	1.23	1.12	1.03	0.96	0.90	0.84	0.80	0.75	0.72	0.68	0.65	
13	37								3.09	2.45	2.04	1.76	1.55	1.38	1.26	1.15	1.07	0.99	0.93	0.87	0.83	0.79	0.75	0.71	
14	36								3.83	2.93	2.38	2.02	1.76	1.56	1.41	1.28	1.18	1.09	1.02	0.96	0.90	0.86	0.81	0.78	
15	35									3.54	2.80	2.33	2.00	1.76	1.57	1.42	1.30	1.21	1.12	1.05	0.99	0.93	0.89	0.84	
16	34									4.35	3.32	2.70	2.28	1.98	1.76	1.58	1.44	1.33	1.23	1.15	1.08	1.01	0.96	0.91	
17	33										3.98	3.14	2.61	2.24	1.97	1.76	1.59	1.46	1.34	1.25	1.17	1.10	1.04	0.98	
18	32										4.86	3.70	3.01	2.54	2.20	1.95	1.76	1.60	1.47	1.36	1.27	1.19	1.12	1.06	
19	31											4.42	3.49	2.89	2.48	2.18	1.94	1.76	1.61	1.48	1.38	1.29	1.21	1.14	
20	30											5.38	4.09	3.32	2.80	2.43	2.15	1.93	1.76	1.61	1.49	1.39	1.30	1.23	
21	29												4.86	3.83	3.18	2.72	2.38	2.13	1.92	1.76	1.62	1.50	1.41	1.32	
22	28												5.89	4.48	3.63	3.06	2.65	2.34	2.11	1.91	1.76	1.63	1.51	1.42	
23	27													5.30	4.18	3.46	2.96	2.59	2.31	2.09	1.91	1.76	1.63	1.52	
24	26													6.41	4.86	3.94	3.32	2.87	2.54	2.28	2.07	1.90	1.76	1.64	
25	25														5.75	4.52	3.74	3.20	2.80	2.49	2.25	2.06	1.89	1.76	
26	24														6.92	5.25	4.25	3.57	3.09	2.73	2.45	2.23	2.04	1.89	
27	23															6.19	4.86	4.02	3.44	3.01	2.68	2.42	2.20	2.03	
28	22															7.43	5.64	4.55	3.83	3.32	2.93	2.63	2.38	2.18	
29	21																6.63	5.21	4.30	3.67	3.21	2.86	2.58	2.35	
30	20																7.95	6.02	4.86	4.09	3.54	3.12	2.80	2.54	
31	19																	7.07	5.55	4.58	3.91	3.42	3.04	2.74	
32	18																	8.46	6.41	5.17	4.35	3.76	3.32	2.97	
33	17																		7.51	5.89	4.86	4.15	3.63	3.23	
34	16																		8.98	6.79	5.48	4.61	3.98	3.51	
35	15																			7.95	6.24	5.14	4.39	3.83	
36	14																			9.49	7.18	5.79	4.86	4.20	
37	13																				8.39	6.58	5.42	4.63	
38	12																				10.00	7.56	6.10	5.12	
39	11																					8.83	6.92	5.71	
40	10																					10.52	7.95	6.41	
41	9																						9.27	7.26	
42	8																						11.03	8.33	
43	7																							9.71	
44	6																							11.54	

Crawlspace Example (House in Winter Mode)

Crawlspace Closed with Hose Running to Blower Door

Measure House CFM 50 (example: 2800 CFM50)

Measure House to Crawlspace Pressure

(Verify with Crawlspace to Outside)

(example: 14 PA House to Crawlspace)

Make Opening From Crawlspace to Outside

(enough for at least 6 PA Change)

Measure House CFM 50 (example: 3600 CFM50)

Measure House to Crawlspace Pressure

(Verify with Crawlspace to Outside)

(example: 38 PA House to Crawlspace)

Take 2nd Blower Door Reading (3600) - First Blower Reading (2800) = 800

Look in Row with 14 H/Z and move over to Column with 38 H/Z to Find Multiplier=1.09

Take 800 X 1.09 = 872

(This is Maximum CFM50 REDUCTION AVAILABLE by sealing all holes from house to crawlspace)

To Determine Uncertainty Range multiply Answer by percentage in Uncertainty Table

To Determine Approximate Hole Size Divide Answer by 10 (872 / 10 = 87 sq in)

Anthony Cox and Collin Olson, 2006

Before Hole

CFM50

H/Z

After Hole

CFM50

H/Z

ANSWER

CFM50 Diff

Multiplier

Maximum Reduction

(total path CFM50)

ext exponent =0.65

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