

Table 2: Can't Reach Fifty Factors

Building Pressure (Pa)	CRF Factor	Building Pressure (Pa)	CRF Factor
48	1.03	28	1.46
46	1.06	26	1.53
44	1.09	24	1.61
42	1.12	22	1.71
40	1.16	20	1.81
38	1.20	18	1.94
36	1.24	16	2.10
34	1.28	14	2.29
32	1.34	12	2.53
30	1.39	10	2.85

*Example:* With the fan running full speed, you are able to achieve a building pressure of 28 Pascals with a measured fan flow of 5,600 cfm. The corresponding CRF Factor for a building pressure of 28 Pascals is 1.46. The estimated flow needed to achieve the target pressure of 50 Pascals is 5,600 x 1.46 = 8,176 cfm.

$$\text{Can't Reach Fifty Factor} = \left\{ \frac{50}{\text{Current Test Pressure (Pa) (Channel A)}} \right\}^{0.65}$$

**Note:** The TECTITE program automatically applies the CRF Factors to *One-Point Test* data.

**5.4.a Potential Errors In One-Point CFM50 Estimate from Using the CRF Factors:**

Table 3 below show the potential errors in the *One-Point* CFM50 leakage estimates from using the CRF factors. There are two main sources of error:

- The actual test pressure (**Channel A**) not being equal to the target pressure of 50 Pascals.
- The actual exponent of the leaks being measured differing from the assumed exponent of 0.65.

**Table 3: Error in One-Point Leakage Estimate from CRF factors**

Test Pressure in Pa (Channel A)		Actual exponent "n"					
		0.5	0.55	0.6	0.65	0.7	0.75
10		21.4%	14.9%	7.7%	0.0%	-8.4%	-17.5%
15		16.5%	11.3%	5.8%	0.0%	-6.2%	-12.8%
20		12.8%	8.8%	4.5%	0.0%	-4.7%	-9.6%
25		9.9%	6.7%	3.4%	0.0%	-3.5%	-7.2%
30		7.4%	5.0%	2.5%	0.0%	-2.6%	-5.2%
35		5.2%	3.5%	1.8%	0.0%	-1.8%	-3.6%
40		3.3%	2.2%	1.1%	0.0%	-1.1%	-2.3%
45		1.6%	1.0%	0.5%	0.0%	-0.5%	-1.1%
50		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
55		-1.4%	-1.0%	-0.5%	0.0%	0.5%	0.9%
60		-2.8%	-1.8%	-0.9%	0.0%	0.9%	1.8%
65		-4.0%	-2.7%	-1.3%	0.0%	1.3%	2.6%