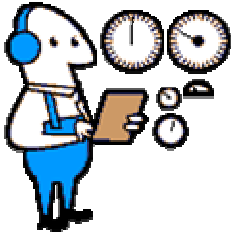


Tip of the Week

December 6, 2004

Is it Leaking?



Most people know that the allowable leak rate in Method 5 is 0.02 cfm. However, it's actually a little more complicated than that.

Section 8.4.4. of Method 5, which deals with post-test leak-check requirements, states:

"If the leakage rate is found to be no greater than 0.00057 m³/min (0.020 cfm) or 4 percent of the average sampling rate (whichever is less), the results are acceptable..."

Most Method 5 and Method 5-type tests are run at a rate of 0.5 cfm or greater (which gives you 30 cubic feet in an hour). Therefore, the 0.02 cfm limit applies most of the time (4% of 0.5 is 0.02). However, there are occasions where you may sample at a rate less than 0.5 cfm. In those circumstances, the 4% rule will apply.

The most common occurrence for this is in running controlled condensation (Modified ASTM Method D3226). Typically, this test is run at a rate of around 0.2 cfm. Although the ASTM method does not specify an allowable leak rate, we at CleanAir feel that it is a "best practice" when a rate is not specified to default to the Method 5 criteria. Therefore, the 4% criteria would apply, which means that your allowable leak rate is 0.008 cfm. In other words, not very much. Back in the old days when I used to test, we called this "dead nuts".