

Using TECTITE to automatically collect Blower Door test data when manually adjusting the Blower Door fan speed.

If you are using a DG-700 gauge or an APT Data Acquisition Box (DAB), you can use TECTITE to automatically collect Blower Door test data, even though you are manually adjusting the Blower Door fan speed. In order to do this, you will need the following items:

- A copy of the TECTITE software. **Note:** If you are using a DG-700 gauge, you will need TECTITE Ver. 3.0 or higher – for an APT DAB, any version of TECTITE will work.
- A 9-pin serial cable to connect the DG-700 or APT DAB to your computer. **Note:** If your computer does not have a serial port, but does have a USB port, you will need to purchase an after-market USB to Serial adapter (contact TEC for adapter recommendations).

Instruction Summary

1. Install the TECTITE software onto your computer.
2. Install the Blower Door system as described in the Blower Door operation manual.
3. Connect the DG-700 or APT DAB to your computer using the 9-pin serial cable. The male end of the cable should be plugged into the serial communication port located on the DG-700 or APT DAB, and the female end of the cable should be plugged into an open serial communication port on your computer. Turn on the DG-700 or APT DAB.
4. Run the TECTITE program and begin a new test. **Note:** The TECTITE Manual is available directly from the program's Help Menu. Refer to this manual on how to operate the TECTITE software.
5. In the TECTITE Test Settings Screen, be sure to select *Auto* in the **Method** box. In addition, enter a *Fan Adjust Rate* of *0.0* in the **Auto Test Parameters** box.
6. When you get to the Test Graph Screen, the Status box should be colored green and display the message "Idle – Monitoring". This signifies that TECTITE has established a communication link with the DG-700 or APT DAB.

If a communication link has not been established, the message "DATA BOX NOT CONNECTED" appears in the Status box. Click on the **Data Box Info** button (or look in the TECTITE manual) for more information and instructions on how to establish a communication link.

7. Once a communication link has been established, click on the **Start Test** button to initiate a test sequence. Follow the TECTITE instructions for taking the starting baseline pressure measurements. The operator is then prompted to install the appropriate flow ring on the fan for the beginning of the test. After entering the selected flow ring and clicking on **Proceed with Test**, the Status box will display a message telling you that TECTITE is adjusting the fan to the first Target Pressure.

8. Manually turn on and adjust the fan speed using the knob on the speed controller. The current fan flow and building pressure reading will be indicated on the graph by the moving square cursor. When the square cursor is near the first Target Pressure line (50 Pa for a CGSB test procedure), click on the **Sample** button to initiate data collection for that Target Pressure. During data collection, the Status box displays the message “Sampling Data”. Each individual test reading is displayed as a small black dot on the graph as it is collected. Once TECTITE is finished collecting readings for the first target pressure (the default number of readings is 100), the average value of all readings for that Target Pressure is displayed as a colored circle.
9. The Status box will now display a message that TECTITE is adjusting the fan to the next Target Pressure. Manually re-adjust the fan speed so that the square cursor is close to the next Target Pressure line and then click on the **Sample** button.
10. Continue manually adjusting the fan and clicking the **Sample** button until data has been collected for all Target Pressures. Turn off the fan and follow the instructions for conducting the ending building baseline measurement. The test is complete. Proceed to the Test Results Screen for a summary of the test results.