

Technical Bulletin: Blower Door Testing Tips

Residential New Construction Program



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Raters have used the TEC AutoTest App in the RNC Program for over a year, but there are a few things raters don't know about regarding the TEC AutoTest App as well as general testing tips. To further rater's understanding with the app and conduct better quality inspection, the RNC Program has organized a few tips for raters.

TEC AutoTest App tips

- Pausing tests:** Many raters believe they must restart a test when they need to temporarily stop the fan during a multipoint test. However, it is possible to pause the test without restarting. To do this, follow these steps.
 - Start the test.
 - When the test needs to be paused, select the button on the top right of the screen that shows the current fan configuration. The picture to the right has the button highlighted with a red rectangle.
 - Once selected, the fan will stop, and a fan configuration window will appear.
 - Ensure the correct fan configuration is selected and tap the "Ok" button at the bottom of the screen.

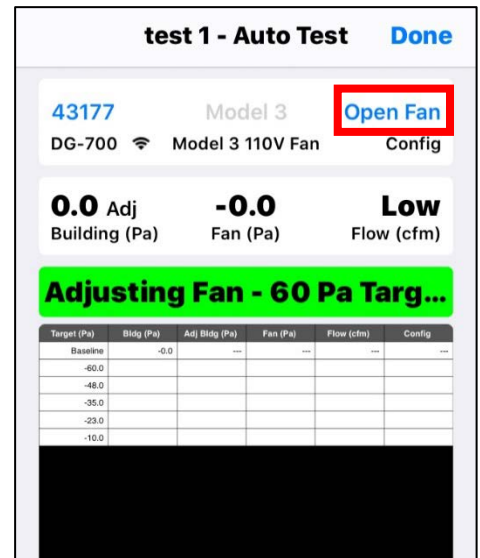
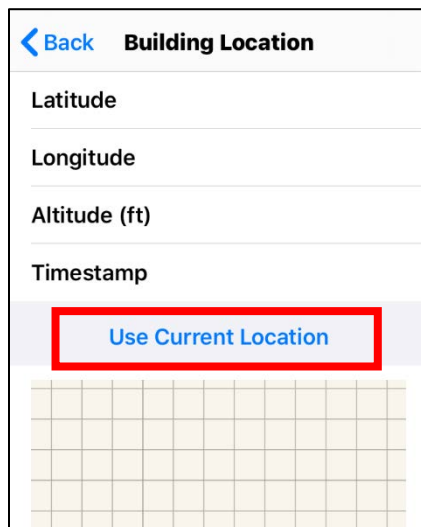


Image displaying the button to pause the fan.



Building location section to determine the home's current location

- Determining your location and altitude:** Raters often use external apps to determine the location and altitude, but the TEC AutoTest app can automatically determine this through the following steps.
 - After a Project ID is entered, select the "Building & Customer" Section found on the main screen under "Project ID".
 - Select the "Determine Location" button at the top of the screen.
 - The screen shown in the image to the right will appear. Select the "Use Current Location" button, and the app will automatically populate the test with the correct longitude, latitude, and altitude.

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- Controlling fan speed and sampling:** As many raters know, the TEC Autotest app may stop controlling the fan properly or won't take samples at times. To overcome this, raters can override the app and control the fan in the following ways.

- Change the fan speed using the dial at the bottom of the testing screen. Refer to the picture on the right for an example.
- Manually control the fan speed by unplugging the fan control cable and adjusting the knob and the fan controller.

Once the fan is at the testing pressure, select the "Sample" button to record the CFM reading.



Image of the dial to control the fan and the sampling button

General tips for testing

- Monitoring the baseline:** Remember to monitor the pressure fluctuations during the baseline to gauge the accuracy of the blower door. The baseline pressure ranges and accuracy levels are as follows:
 - 0-5 Pa - Standard Accuracy
 - 5-10 Pa - Reduced Accuracy
 - 10+ Pa - Invalid testing conditions
- Take out headphones:** While headphones are great for entertainment during inspections, they can be a distraction. Its best practice to take out headphones temporarily while the blower door fan is operating and walk around the house. This allows raters to hear any operating exhaust fans or HVAC systems, as well as hear where air may be leaking.
- Completely turn off HVAC systems:** Many raters simply turn off the HVAC system through the thermostat. While this will turn off the system most of the time, there are instances where the HVAC system is not wired properly and still runs or dampers remain closed. In these instances, the HVAC system can be completely shut off at the breaker box or the shut-off switch near the HVAC unit. Once you complete your inspections, always remember to leave the system on or in the same state it was prior to inspection.