

Proper multi-point blower door testing is more important than ever with RESNET Standard 380 coming into effect. This technical bulletin offers guidance multi-point blower door testing using the TEC DG-700 manometer paired with the TEC Wi-Fi link. (Note that this is not an endorsement of one brand of testing equipment over another).

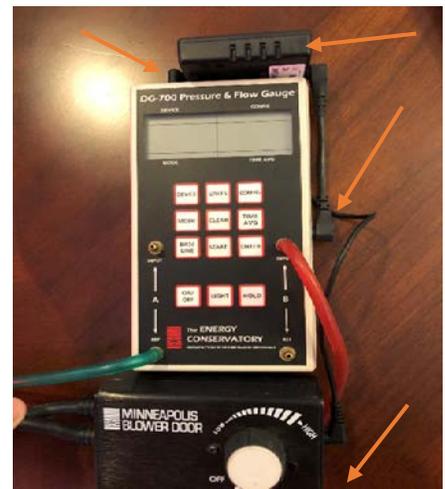
Using the TEC Wi-Fi Link and TEC Autotest

1. *Equipment needed (in addition to standard Minneapolis Blower Door setup with DG-700):*

- a. TEC Wi-fi Link
- b. Fan Control Cable
- c. Wi-fi enabled smartphone or tablet with TEC Autotest installed (available for iOS and Android)

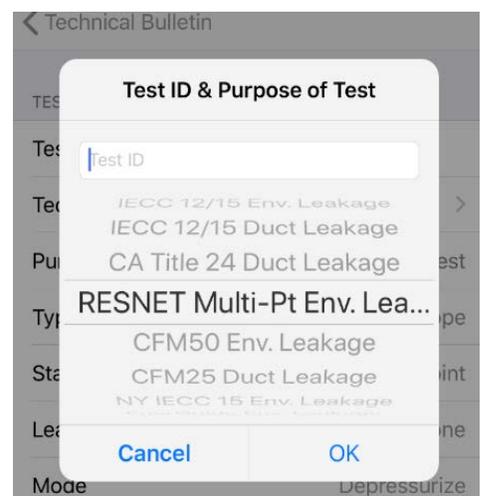
2. *Hardware setup:*

- a. After setting up the usual blower door configuration, connect the Wi-Fi Link to the top of the manometer and connect fan control cable between manometer and fan controller. A solid blue light on the Wi-Fi Link should appear after connecting to the manometer. After you turn on the connected manometer, it will be creating a Wi-Fi signal. NOTE: After testing, disconnect the Wi-Fi link. It will drain the battery.



3. *Software setup:*

- a. Disconnect all wi-fi connections from the phone or tablet and connect to the DG700 Wi-fi Link (default password is "tecwifi12").
- b. Open TEC Autotest on phone or tablet. Tap the "+" symbol in the bottom right corner to add a new project. The next screens will ask for project ID.
- c. Go to the Building & Customer section and input all the relevant information such as the location and the address of the house.
- d. Go back to the main project page and tap the "+" on the right side of the screen. It will prompt you for a Test ID and the type of test. As illustrated in the example to the right, Select "RESNET Multi-PT Env. Leakage Test" to conduct the RESNET 380 Multi-Point Blower Door Test.
- e. Tap "Run Test" at the bottom left of the screen. The app will automatically connect to the DG-700 and prompt the user for more information such as indoor and outdoor temperature, and altitude (Altitude can be completed in the Building & Customer section).



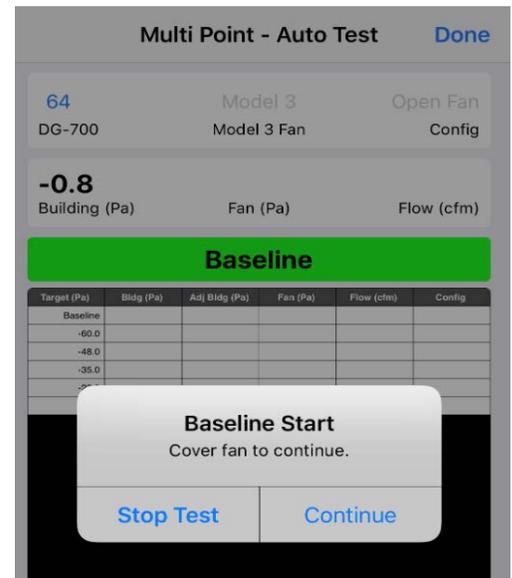
Technical Bulletin:
 Conducting an Automated Multi-Point Blower Door Test
 August 2018



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4. Testing

- a. After tapping “Start Test” at the bottom left, a window prompts to start the baseline. The app provides on screen instructions to cover the fan (shown to the right). After installing the fan cover, tap continue and the app will automatically baseline.
- b. When completed, the app will ask for the flow device configuration (fan ring size). After selecting the flow device configuration, click “Start Test” on the bottom left of the screen. The test will automatically control fan speed and take about 5 flow readings at different pressure points. If the app detects airflow that is too low or too high (refer to picture to the right), the ring adjustments must be made to complete the test.
- c. When the test is complete, data will be recorded and a report of the findings generated. Please refer to sample report shown below.



Building Information:		Customer Information:	
Project ID:	Technical Bulletin	Name:	
Address:	1234 Skip Road Silver Spring , MD	Address:	1234 Skip Road Silver Spring , MD
Geo-Tag Data:	Latitude: Longitude: Timestamp:		
Test Results: Measured Leakage: 3,109.8 CFM50 ←			
Test ID:	Multi Point		
Purpose of Test:	RESNET Multi-Pt Env. Leakage		
Measured ACH50:	0.00 (+/- 4.4%)	Effective Leakage Area:	169.3 in ²
Building Volume:	0.0 ft ³	Enclosure Surface Area:	0.0 ft ²
Flow Coefficient (C):	241.1 (+/- 18.9%)	Exponent (n):	0.654 (+/- 0.055)
Correlation Coefficient:	0.99895		
Test Standard:	RESNET 380 Multi-Point	Test Mode:	Depressurize
Test Characteristics:	Indoor Temp: 75 °F Altitude: 341.0 ft	Outdoor Temp:	81 °F
Test Date and Time:	2018-07-21 09:08:50	Time Average Period:	10 seconds