

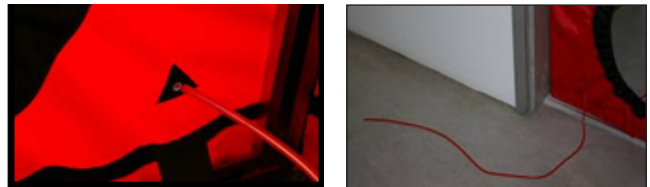
QuickGuide

Blower Door

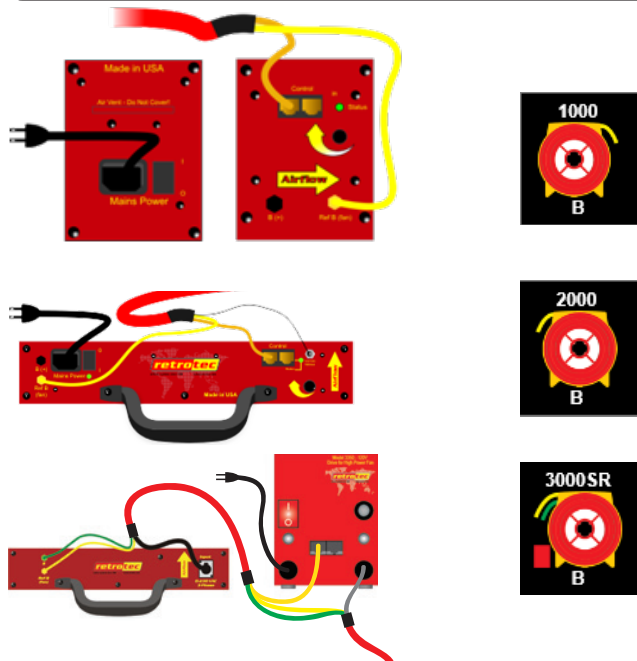
Step 2: Install the system

- Set up the Door Panel.
See: *DoorPanel-Cloth or DoorPanel-Modular QuickGuide*
- Connect the yellow tube between yellow ports marked "Ref B" on fan and gauge. If the fan has a green port ("Input B"), connect the green tube.
- Connect the Speed Control Cable from fan to gauge. Do not connect to the Internet!
- Pass long red tube through the Door Panel and toss the end at least 5 feet away from the fan's airstream.

Water in the tube will result in erroneous readings.



- Install the fan blowing outdoors. Cover fan.
- Connect the fan power plug to a wall outlet.




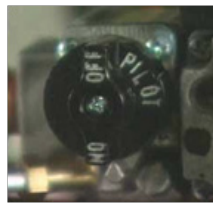

- Place gauge near fan, or attach gauge to Door Panel.



Step 1: Prepare the building

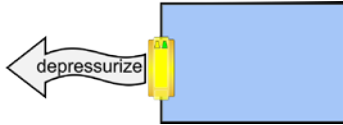
- Close outside doors and windows.
- Open all interior doors leading to conditioned spaces.
- Turn gas, hot water, to Pilot.
- Fireplaces and stoves must be cold with doors closed (cover ashes).
- Shut off HVAC, combustion appliances, exhaust fans, dryers, A/C and furnaces.

See: *Manual-Residential Pressure & Air Leakage Testing* for additional information.

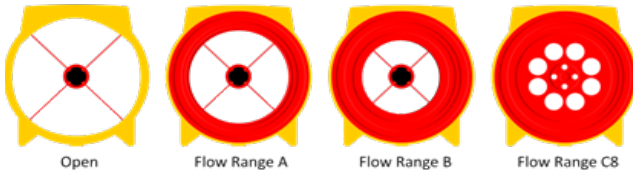
		
Remove or cover ashes.	Turn gas valve to Pilot.	Close all windows and outside doors.



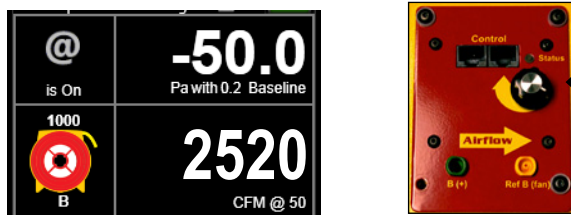
Step 3: Conduct depressurization test, (CFM@50)



- Press **[On]** to power up the gauge.
- Tap **[Settings]** then **[Baseline]**.
- Tap **[Capture Baseline]** and 20 seconds on a calm day or 60 seconds on a windy day, then tap **[End Capture]** then **[On]** to return to the **Home** screen.
- Uncover fan. Install Range Ring B.
- Make sure the gauge shows Range B on **Home** screen.



- Disconnect Speed Control Cable, then adjust Speed Control knob until pressure is about 50 Pa.



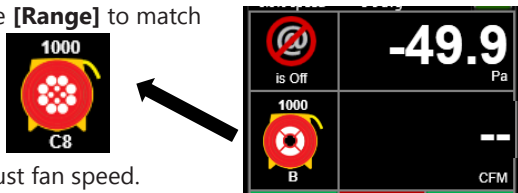
- Tap **[@ Pressure]** to extrapolate results to exactly 50 Pa.
- Record results.

Step 4: Desired results not achieved?

Flow reads "--" at test pressure?

If the test pressure has been reached, but "--" appears, the fan is running too slowly to accurately measure flow.

- Add the next lower Range
- Change **[Range]** to match

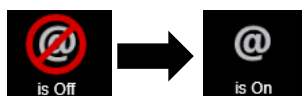


- Re-adjust fan speed.

Cannot achieve test pressure at full speed?

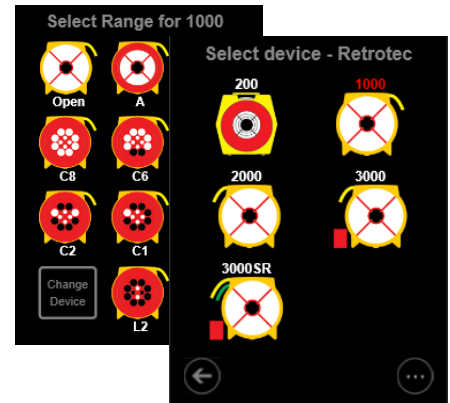
If fan reaches 100% speed before reaching 50 Pa:

- Remove a Range Ring and try again.
- Change **[Range]** on the gauge to match.
- Check seals on all registers. Look for disconnected ducts or ducts open to outdoors.
- Tap **[@ Pressure]** to get the gauge to calculate what the flow would be at exactly 50 Pa.



Gauge set up

Make sure the device shown on the **Home** screen matches what you are using. To change device, tap the fan picture, then the **[Change Device]** key.

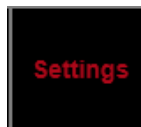


Select the device you are using from the pictures, then choose the Range you are using.

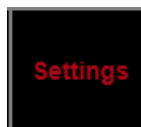
Use Range Ring B for most houses, try "C8" for tighter new houses, or "A" for looser older houses, if required.




Tap on **[Channel B]** to change the type of result or units. Check the *Door Fan Operation Manual* to see the results required for your region.



Tap **[Settings]** then **[Time averaging]** to adjust the time averaging. 5 seconds is OK for a calm day. 10 or 30 seconds can be used on windy days.



Tap **[Settings]** then  Make sure the **[Default @ Pressure]** is set to 50 Pa.



Make sure "n" value is set to 0.65 for House.



Tap to return to the **Home** screen.

Different Results

Tap the **[Channel B]** key to view a different Result, or tap **[Result to be displayed]** on the **[Settings]** menu.

Flow: CFM	Required by many states. Also available in metric units.
Flow/Area: CFM/sq ft Flow normalized by area	Normalized leakage area is used in many standards. All common units are available.
ACH: /h Air changes per hour	Air Changes per hour can be shown directly on the gauge.
EfLA4/area: sq ft/sq ft Normalized EfLA at 4 Pa	Specialized units such as effective leakage area are also available.

Area
1,200 sq ft


When a Result is chosen that requires an area or volume, **[Area]** or **[Volume]** will be shown on the **Home** screen.

Volume
22000 cu ft

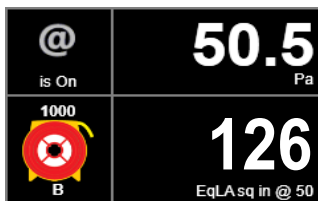
Tap **[Area]** or **[Volume]** to change . The area and volume can also be changed from the **[Settings]** menu.

Show leakage area Result

Equivalent Leakage Area (EqLA) describes the leakage area in terms of one large hole in a flat surface.

Tap the **[Channel B]** key, then , and select "EqLA: sq in"

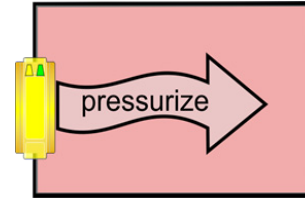
[Channel A] shows the building pressure and **[Channel B]** "EqLA" shows the combined size of all holes in the building.



Leakage area is not a required result, but is a nice way to visualize the size of the hole in the ducts.

Pressurization test

Turn the fan around to blow air into the house.

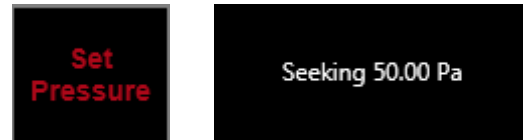


Tubing configuration is the same as for the depressurization test.

Adjust fan with gauge

Connect Speed Control Cable to fan. Solid green Status light indicates gauge is connected.

Tap **[Set Pressure] [50] [Set]** to get gauge to control to a pressure of 25 Pa.



Any test pressure can be entered. High test pressures over 60 Pa are more likely to disturb building contents and cause damage.

Tap **[Set Speed] [50] [Set]** to set speed to 50%.



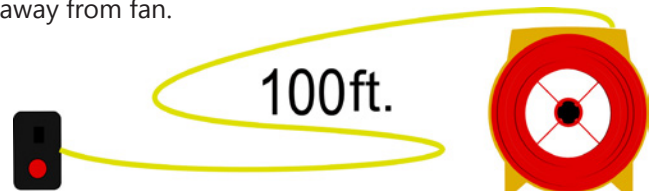
When **[Set Speed]** or **[Set Pressure]** is used, the Jog keys become active on the **Home** screen. Use the **[JogUp]** **[JogDown]** arrow keys to increase or decrease the target by 5 Pa or 5%.



Tap **[Stop]** to turn the fan off.

Adjust fan speed remotely

Use optional remote speed control from up to 300 feet away from fan.



Control fan speed with software

Speed control is handled automatically with FanTestic software, for complete automation.



Field check system monthly

- Perform a Blower Door test on the building and record the EqLA at 50 Pa.
- Install cardboard in upper part of doorway with a 20 x 20 inch hole cut in it.
- Perform a second Blower Door test on the building, record the EqLA at 50 Pa.
- Subtract the first result from the second result and the value should be 400 sq. in. (+/-10%).



Field check gauge weekly

Check gauge operation and check for blocked, leaking or pinched tubes weekly, and anytime results are in question.



To perform the gauge check, you will need the gauge and Umbilical.

- Set **[Time Average]** to 5 seconds in **[Settings]**.
- Tap **[Channel B]** and select "Pressure: Pa".
- Connect the red tube between the red and yellow ports.

If readings on Channel A and Channel B are within 2% and don't drop rapidly, the tube is not blocked or leaking and the gauge is correct.

- Repeat between different ports with each of the tubes you use for testing.

Checking your gauge and tubes regularly will eliminate a common source of error in readings.



Alternatively, use a Verification Plate in an optional double hole Door Panel, or use the optional Flex Duct with a 400 sq. in. hole in a plate on the end.

