Tips for Accurate Readings

1. Assure tight hose seal to pressure taps:
   Every month cut **3/8"** off hose ends.

2. Outside hose end at least 5' from side of fan.

3. Always use wide Velcro strap to hold fan up above bottom of the aluminum frame.

4. Keep DG700 out of fan air stream:
   Velcro DG700 to gauge board & clamp board onto house door or aluminum frame arm.

5. Start test w/ Adjusted Base Line reading (**ADJ**)
   When -45 to -55Pa set **TIME AVG** to **LONG**.

DG-700 Pressure & Flow Gauge

DEVICE	CONFIG
BD3	OPEN
-47.2 ADJ Pa	**3188** CFM@50
PR/ FL@50	LONG

MODE   TIME AVG

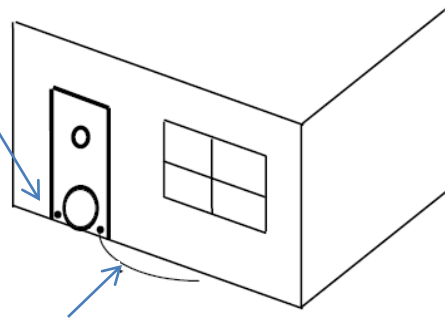**Fan hose to INPUT tap B**

Outside hose to REF tap A

Only Positive Pressure Test:
Add Fan REF hose Outside 1" only **Step 2 next page**

- ✓ House ready for test: No Fires, Mech. Systems Off, Windows/Doors Closed, Interior Doors Open.
- ✓ Outside hose end placed on either side of the fan outlet and a minimum 5' away from the fan.
- ✓ Blower door frame & nylon panel secure in doorway. Fan installed, ring covers on, fan flow to outside.
- ✓ Accurate reading requires DG-700 gauge mounted on door bracket or otherwise out of fan air stream.
- ✓ Hose connections to DG-700: Outside hose to **Channel A REF**, Fan hose to **Channel B INPUT**

1. Press **ON** to start gauge (if **BAT** continues to blink – put in new AA batteries or test readings will be bad)

2. Press **MODE** 2 times (the "box" below Channel A screen to read **PR/FL@50**)

3. Press **BASELINE** 1 time to set gauge to make Adjusted Base Line measurement.

4. Press **START** for baseline measurement on Ch. A (Channel B counts seconds, box below reads **LONG**).

5. Press **ENTER** when the Ch. A number is steady, if windy you may need to wait at least 30 – 45 seconds.
   - Ch. A shows **ADJ**, now DG700 will est. CFM@50 when Ch. A is -45 to -55 Pa with 1% accuracy.

6a. Now take ring cover off. Turn fan speed up between -45 and -55 Pa **OR** go to Step 7 to "**Cruise50".**
   - If CFM@50 "blinks" turn fan off & install next smallest ring & Press **CONFIG** for that new Flow Ring.
   - If CFM@50 reads "LOW" turn fan off & install next larger ring & Press **CONFIG** for new Flow Ring

6b. Turn on fan, set Channel A at -45 to -55 Pa, and the CFM@50 reading does not "blink" or read "LOW"
   - Press **TIME AVG** to read **LONG** (box below Ch. B) to reduce wind effect on CFM50 reading.
   - If door or window opens, or you want to confirm the CFM50 just press **START** to repeat averaging.

6c. Record the CFM50 reading when steady – wait as long as you did in Step 5 above.

7. "Cruise50": normal Cruise setup w/ fan control barely on, press **START,** press **ENTER** to cruise -50 Pa.
   - When near -50Pa set **TIME AVG** to **LONG**, record reading per step 6c. To stop fan press **CLEAR**.

v6   SEE ALSO: Blower Door Quick Guide Part 1: http://www.youtube.com/watch?v=67v_rTaZmOA
         Blower Door Quick Gide Part 2: http://www.youtube.com/watch?v=x-RKcXwB8bQ
         WX TV Part 1 – pre and setup: http://www.youtube.com/watch?v=aaw9zpGTAw4

1. Select exterior door to minimize effect of fan flow into house and potential disruption and/or damage to owner's possessions.
- As needed, confirm with owner relocation of: plants, art, papers, large rugs, etc.

2. <u>Place Channel B reference hose out an open patch in bottom of nylon panel.</u>
- <u>End of hose should be 1" outside - next to side of fan - but not beyond fan inlet</u>

3. Place Channel A Outside Reference hose at least 5' from side of fan (standard set-up).

4. Open fan to the A ring and set the B ring and its cover in the equipment bag.

5. Install fan with inlet side facing outside, exhaust side facing inside the building.
- Secure fan with Velcro strip through fan handle and loop over cross bar.

6. Install <u>red cover</u> (not shown) over exhaust side of fan and remove after base reading.

7. Confirm all hose connections and power supply, and house is set up ready for test.

8. Begin blower door test.
- In cold weather, limit air leak inspection w/ smoke to 2 or 3 representative sites.
- Pre-determine these sites at walk-through, before beginning blower door test.
  - ie: built-in's, can lights, attic access, grilles from attic ducts, wall inspection hole, etc.
- If "Low Flow" reading: Turn fan off, un-do Velcro strap, lift panel hole above fan, reach out, remove A ring and lift inside; re-install fan, Press CONFIG for OPEN and re-start test.

9. Test over, re-install red cover on fan and record the CFM50 reading.