Quick Guide 1
One Point Depressurization Test
Using the Minneapolis Blower Door™ and DG-3 Digital Gauge

1. Install the Blower Door system.

a) Install the aluminum frame and nylon panel in an exterior doorway of a large open room.

b) Attach the gauge mounting board and fan speed controller to a door, or to the aluminum frame gauge hanger bar, using the C-clamp on the back of the mounting board.

c) Place the DG-3 pressure gauge onto the mounting board (using the Velcro strips) and connect tubing to the DG-3 as shown below.

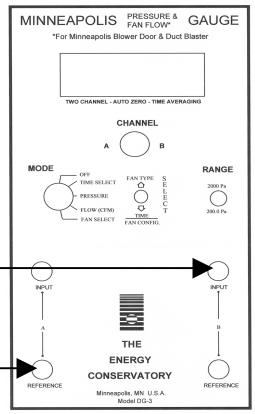
d) Once the tubing has been attached, turn the **CHANNEL** knob to "***A***", turn the **MODE** switch to ***Pressure***, and put the **RANGE** switch in the ***200.0 Pa*** *setting* (***Low Range).***

e) Run approximately 3 - 5 feet of the remaining end of the **Green** tubing outside through one of the patches in the bottom corners of the nylon panel. Be sure the outside end of the tubing is well away from the exhaust flow of the Blower Door fan.

f) Install the Blower Door fan, with the flow rings and no-flow plate installed, into the large hole in the nylon panel. The exhaust side of the fan should be outside, and the inlet side of the fan (the side with the flow rings) should be inside the building.

Connect the **Red** tubing to the Channel B Input tap. ***Channel B is used to measure fan pressure and flow.***

Connect the **Green** tubing to the Channel A Reference tap. ***Channel A is used to measure building pressure with reference to outside.***



g) Insert the female plug from the fan speed controller into the receptacle located on the fan electrical box. The remaining cord (power cord) should be plugged into a power outlet that is compatible with the voltage/frequency of the fan motor and speed controller.

h) Check that the fan direction switch is set to exhaust air out of the building.

i) The remaining end of the **Red** tubing should now be connected to the pressure tap on the Blower Door fan electrical box.

2. Prepare the building for the test.

a) Close all exterior doors and windows, and open all interior doors. Because few house basements can be completely sealed from the house and usually some conditioning of the basement is desirable, they are typically included as conditioned space.

b) Adjust all combustion appliances so that they do not turn on during the test.

c) Be sure all fires are out in fireplaces and woodstoves. Close all fireplace and wood stove doors to prevent scattering of ashes.

d) Turn off any exhaust fans, vented dryers, and room air conditioners.

3. Conducting the Test.

a) With the fan sealed off, record the baseline building pressure, including the sign of the reading (i.e. negative or positive reading). Baseline building pressure is read from ***Channel A.*** If the pressure is fluctuating too much to determine the reading, try changing the Time Averaging setting on the gauge by turning the **MODE** Switch to ***Time Select***, choosing the ***5*** or ***10*** second or ***Long-term*** average, and then return the **MODE** Switch to the ***Pressure*** setting.

b) Remove the No-Flow Plate and install the Flow Ring which you think best matches the needed fan flow.

c) Turn the **MODE** switch on the DG-3 to the ***Fan Select*** position and choose the Blower Door fan and current Flow Ring configuration. To select the Model 3 fan, toggle the **SELECT** switch up once.

Fan Configuration	Flow Range (cfm) for Model 3 Fan
Open (no Flow Ring)	6,300 - 2,430
Ring A	2,800 - 915
Ring B	1,100 - 300

-3-0 This indicates that you have chosen the Model 3 fan, and that the fan is in the "Open" inlet configuration.

To change the Flow Ring configuration for the chosen fan, toggle the **SELECT** switch down.

-3-1 Model 3 fan with Ring A installed. -3-2 Model 3 fan with Ring B installed.

d) Turn the **MODE** knob back to ***Pressure***, and then flip the **RANGE** switch to the ***2000*** setting (***High Range***).

e) With the **CHANNEL** knob set to "***A***", turn on the Blower Door fan by slowly turning the fan controller clockwise. As the fan speed increases, building pressure indicated on ***Channel A*** should also increase. Increase fan speed until the building is depressurized by 50 Pascals from the baseline pressure measured in **3(a)** above (i.e. change the building pressure by 50 Pa from the baseline).

f) While leaving the fan speed unchanged from **3e)** above, turn the **CHANNEL** knob to "***B***", and turn the **MODE** switch to ***Flow***. The gauge will now display the CFM50 reading for the building.

If the CFM leakage reading displayed on the gauge is blinking, install the next smaller Flow Ring. If you change Flow Rings, be sure to use the **Fan Select** feature to update the gauge with the new Flow Ring installed before reconducting the test. **Note:** Never monitor ***Channel A*** (building pressure) with the **MODE** switch in the ***Flow*** position, because the readings will be invalid.