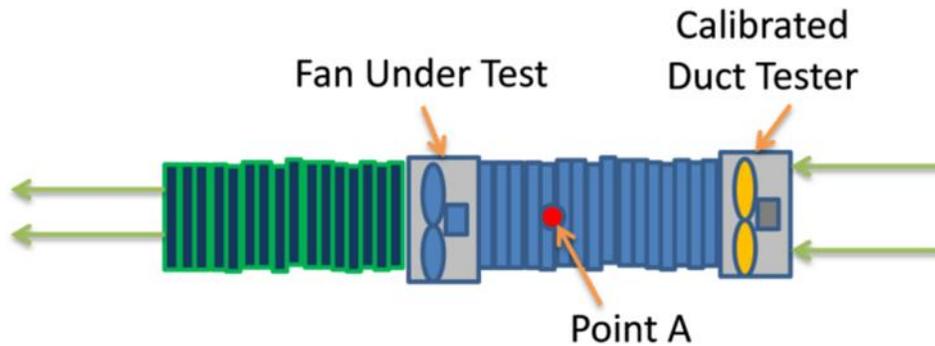


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Using duct tester as a powered flow hood for measuring the flow through a range hood is an accurate way to measure range hood flows in excess of 100 cfm without the difficulties of getting to the hood on the exterior of the building or dealing with local wind conditions.

1. Create a baffle to cover the opening of the range hood with an opening for the duct tester fitting.
2. Attach the baffle to range hood. (This is sometimes difficult due to grease which won't allow the tape to stick well.) The duct tester's ducting adds weight to the baffle, trying to pull it off.
3. Attach the duct tester's ducting (snorkel) to the fitting on the baffle.
4. Connect the manometer and fan:
  - a. DG700
    - i. Green hose to Input Tap on Channel A. Insert the other end into the range hood cavity.
    - ii. Red hose to Input Tap on Channel B. Connect the other end to the brass tap in middle of the DB fan housing.
  - b. DM2A
    - i. Blue hose to Input Tap on Channel A. Insert the other end into the range hood cavity.
    - ii. Yellow hose to Reference Tap on Channel B. Connect the other end to the Ref B tap on the duct tester fan.
    - iii. Green hose to the Input Tap on Channel B. Connect the other end to the "B" tap on the duct tester fan.





When the pressure at Point A = 0 pa, the flow through the Duct Tester fan = the flow through the fan under test.

5. Turn on the range hood to full speed. Pressure reading on Channel A of the manometer should drop, moving increasingly negative as the duct of the duct tester goes negative.
6. Turn on the duct tester fan, increasing the flow until the pressure on Channel A becomes 0 Pascals. At that point the flow through the duct tester fan will be equal to the flow through the range hood fan and the flow reading can be made on Channel B.
7. Repeat the test for other fan speeds.



The same process can be used to test bathroom fans. The duct tester can be connected a box that covers the fan or grille. Because of the powered flow into the fan being tested, the measuring device (duct tester) is essentially invisible to the fan being tested, offering no resistance or impediment to the flow.