

MEASURING AIRTIGHTNESS WITH THE ATT

How simple it can be!

1. Place the ATT in the home

- Out of the sun and not near other heat sources, to acclimate. The ATT may be set up in any of the rooms in the house (living room, kitchen, bedroom, attic, etc).
- Turn on the ATT and turn off the ventilation system

2. Prepare the property

- Close grilles, windows and exterior doors
- Hood masking
- Mailboxes masking
- Filling siphons

3. Prepare the ventilation system

- The system must be able to be turned on and off
- In case of a balanced ventilation system: disconnect the outside air intake duct or the inside return air duct from the balancing unit
- Then tape the disconnected duct. Depending on the disconnected duct, the airtightness is measured at negative or positive pressure.

4. Measure the volume flow

- Set the ventilation unit to the highest setting and use the FlowFinder or the Ventiflow to measure all supply/exhaust grilles (overpressure/underpressure)

5. Measure with the ATT

- Launch the app on the tablet and fill in the required fields
- Connect to device (the pressure vessel) via WiFi
- Start measurement
- Turn ventilation system on and off 5 times
- View and save the measurement

Testing multiple homes? Divide the tasks. The ATT is easy to carry around!

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ATT system (patented)

- Pressure vessel with differential pressure sensor, faucet, capillary, Wifi host and Li-ion battery
- Android Tablet with software.
- WiFi connection between pressure vessel and tablet
- The home's ventilation system is used to pressurize the home

ATT system (patented) Pressure

vessel open / Venting system off:

$$Q = 0 \text{ (dm}^3/\text{s)}$$

$$P_{\text{vessel}} = P_{\text{house}} = P_{\text{outside}}$$

(apart from minor differences due to wind and temperature)

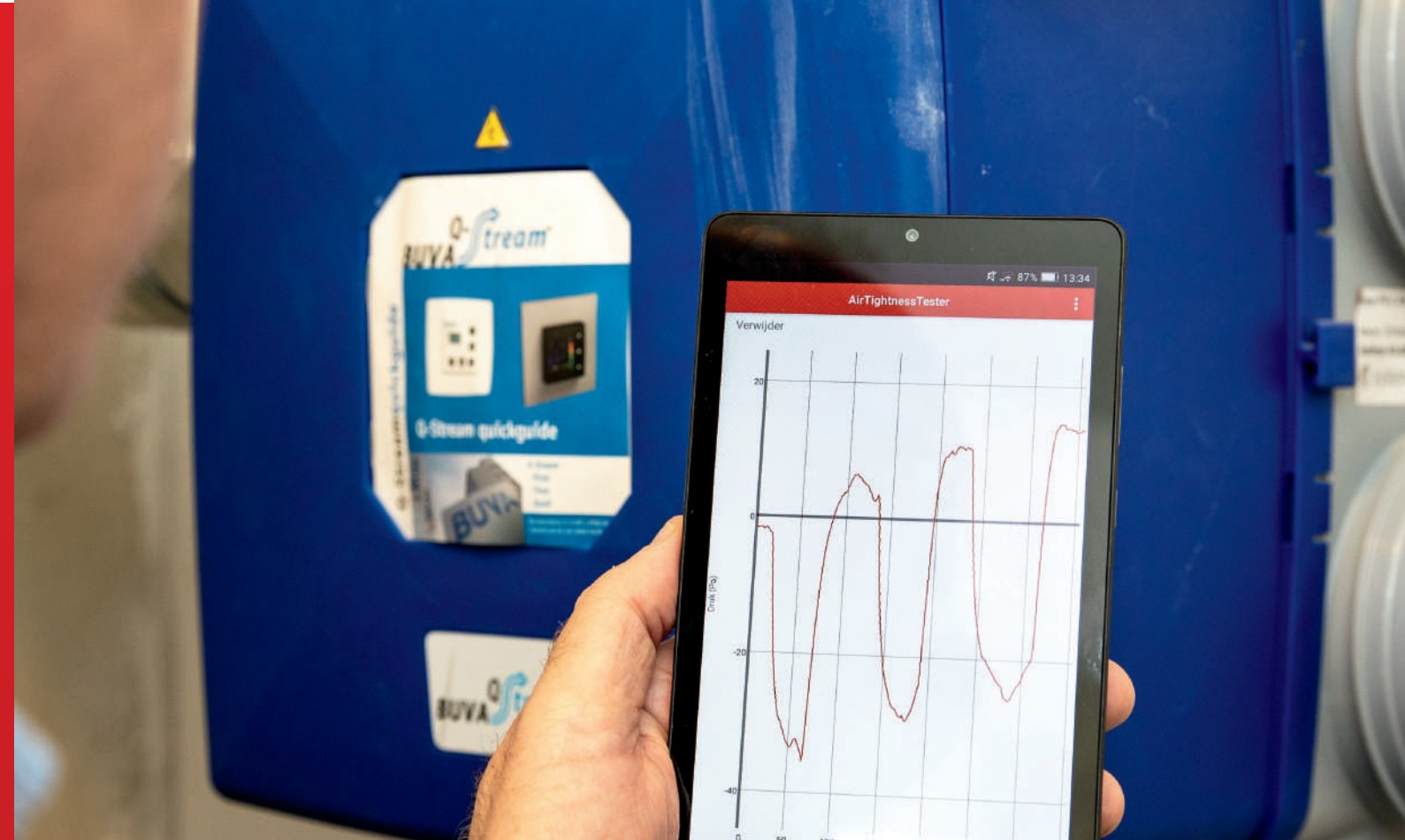
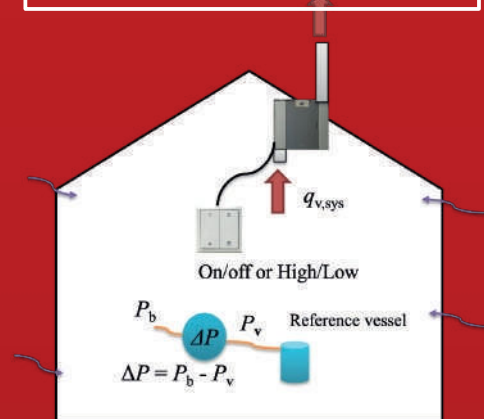
Pressure vessel closed / Ventilation system on:

The $Q_{v,10}$

$$Q_{v,10} = Q_{v,dP} (10 / dP)^n$$

ATT: fixed, chosen value for n (0.66)

Blowerdoor: n is calculated from the measurements



Air Tightness Tester

Measuring airtightness quickly and easily

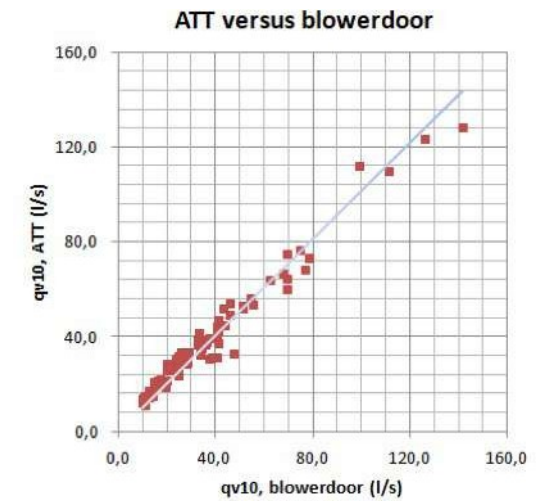


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instruments

Air Tightness Tester

The *A(ir)T(ightness)T(ester)* allows the airtightness of buildings to be measured quickly and easily.



Without going into the details, we can safely say that the ATT method performs well as shown in the graph.

TNO innovation for life

Advantages

- The measurement is very quick and easy to perform
- New and unique measurement method to determine the airtightness of buildings
- Compact design
- Installation and operation by 1 man
- Residents do not have to leave their homes
- Low purchase value (short payback period)

