

Checklist: Test reports of airtightness measurements

- O Is all general information included?
 - Tester: name, address and signature
 - Object
 - Date of test
 - Device
 - Measurement standard (norm)
 - Inside and outdoor temperatures
 - Wind velocity
 - Flow coefficient Cenv
 - Leakage coefficient CL
- O Is the airtightness measurement performed in accordance with ISO 9972 (Method 1)?
- O Is room-by-room calculation of the air volume of the building included? Is the calculation correct?
- O Has the installation location of the fan been documented?
- O Has temporary sealing of the building envelope been recorded (sealing of outdoor air and exhaust air ducts at least)?
- O Has a series of measurements at positive pressure AND negative pressure been performed?
- O For each series of measurements, were 5 measuring points used at different pressure differences (highest value ± 50 Pa at least)?
- O Is the flow exponent "n" between 0.5 and 1.0 (otherwise indicates measurement error due to a change in the envelope e.g. window opening)?
- Is the average value of the natural pressure difference between -5 and 5 Pa (measurement of the pressure difference before and after each measurement series)?
 Note: If the wind speed is greater than 6 m/s (21.6 km/h) OR the wind force is higher than 3 Beaufort, the stated limiting values for the pressure difference will usually be exceeded.

In general, the positive and negative pressure values n_{50} are relatively close to each other. If there are significant differences between the two results, a plausible explanation should be given in the measurement report.

Recommendation: leakage detection at negative pressure should be carried out before the measurements, and any large leaks should be rectified and this should be documented.

Exception: For the measurement of tall buildings (e.g. high-rise buildings) special boundary conditions apply. Please contact your certifier or <u>building.certification@passiv.de</u>