

COMMERCIAL BUILDINGS AIR TEST

Checklist of Items to be completed prior to our arrival on Site

- 1. Prior to attending site we require accurately calculated values for the Floor Area, External Wall Area, Roof or Top Floor Ceiling Area & Volume of the building. We need these to calculate the EXTERNAL SURFACE AREA of the building, and cannot confirm a test result without the values.**
2. We will require a set of floor plans and elevations to mark up areas of leakage in the event of a test failure.
- 3. We will require the Design Air Leakage Rate or Air Permeability for the building. For commercial buildings this is generally 10 m³/hour/m², but can be lower, if requested in SBEM calculations.**
4. We require TWO 240v MAINS powered electrical sockets within 25 metres of EACH of our testing equipment set up.
5. Ensure that the completed building envelope is finished. All doors, windows, and cladding must be installed, or if items, such as glazing are missing, they should be sealed up to prevent air leakage.
6. Seal with tape or cardboard any duct work and mechanical vents to the outside. Pay particular attention to the air conditioning system.
7. Seal all ducts and penetrations where the main services enter the building.
- 8. Seal all SVP and waste pipe penetrations passing through external walls and ceilings. Make sure that the tops, sides & ends of all pipe boxing's are sealed to prevent air leaking into the boxing and escaping through SVP/waste pipe penetrations.**
9. Ensure that all toilets and U bends in sinks have water in them.
10. Turn off all pilot lights and combustion equipment. Seal all flues.
11. Decide which personnel door/s are to be used for the test. Make sure that there are no obstructions within 3 meters of the inside and outside of the door/s chosen for the test. In some cases the door/s may need to be removed, if so you will need to supply an attendance to remove the door/s.

12. Ensure all external doors and windows are closed fully and make sure all trickle vents closed but NOT SEALED. Internal doors should be wedged open.
13. Smoke vents are to be closed but NOT SEALED.
14. Lift shaft vents are to be left open, with lift doors closed.
15. Remove 1% of ceiling or floor tiles, if applicable, that are adjacent to the external envelope.
- 16. The most common areas of leakage are either at junctions where walls meet each floor and the roof or junctions between different materials. Check gaps between tops of walls & roof are sealed.**
17. Have a competent member of your staff available on the test day to modify and/or seal any further areas that we identify as requiring extra work.
18. If the door/s chosen for the test have a larger opening larger than 1.200m x 2.100m high, you will need to modify the opening to suit our standard template.
(Please call us for advice should this be required.)
19. Whilst we would prefer to have the building empty during the test duration, people can stay in the building whilst the test is in progress. They may not however enter or leave during the test period. (Approx 1- 2 hours)
20. The customer must confirm the test date in writing at least 72hrs before the programmed test date, if this doesn't happen APT reserve the right to cancel the Air Leakage Test until written confirmation is received.
21. We require a parking space for a transit van type vehicle within 10 metres of the test location on site.
22. Testing cannot take place in high winds or if significant temperature differences persist, particularly for high buildings. You should inform us immediately if on the day of the test high winds in excess of 6 m/s are experienced, and a personnel door in a sheltered area cannot be utilised. If we arrive on site to carryout the test and have to abort the test due to windspeeds in excess of 6 m/s the full test fee will be payable.
- 23. If we arrive on site and are delayed due to the site not being prepared adequately, or the items in this checklist not being completed prior to our arrival, we reserve the right to cancel the test. The full test fee will be payable.**

IF YOU HAVE ANY QUESTIONS ABOUT THE PREPARATION OR THE ACTUAL TEST, THEN PLEASE RING OUR OFFICE TO DISCUSS THEM. WE ARE HERE TO HELP YOU ACHIEVE A PASS AT THE FIRST ATTEMPT.