

Air Tightness Testing Checklist for Residential Dwellings

January 2018



Call us today on 01525 303 905 to speak with an adviser or visit aptsoundtesting.co.uk



Most Common Areas of Air Leakage in Dwellings

1. Seal all ducts and penetrations where the main services enter the building - we have encountered many tests where a water pipe duct has been left unsealed underneath kitchen units. After services have been installed in the duct, seal the rest of the duct.

2. Seal behind kitchen units at the wall/floor junction.

3. Seal all SVP and waste pipe penetrations passing through external walls and ceilings.

4. Make sure that the tops, sides & ends of all pipe/SVP boxing's are sealed to prevent air leaking into the boxing, and escaping through SVP/waste pipe penetrations. This is particularly important for SVP boxing's behind kitchen unit. Often the bottom of the SVP boxing is not sealed to the bottom of the floor so the air can escape straight out.

5. Bath and shower tray panels should be fitted and fully sealed.

6. All penetrations through floors & ceilings should be sealed.

7. The boiler flue must be sealed where it penetrates walls or ceilings.

8. Make sure all external door/window seals (if applicable) are installed.

9. In some houses, storage cupboards have been built into the roof space. The doors when closed should seal the room from the roof space. Fit draught excluder if necessary to top, bottom & sides of door/frame.

10. In houses constructed from Timber Frame or where DOT & DAB plasterboard has been fixed to the inside face of block work perimeter walls, the gap.

11. In between the bottom of the plasterboard and floors needs to be sealed at every floor level. Alternatively the gap between the bottom of the skirting board and floor can be sealed with mastic. This prevents air leaking behind the wall board and passing above the ceiling board, into the roof space. attempt.



Items to be completed prior to our arrival on site

13. We will require the Design Air Leakage Rate or Air Permeability for the building. This is generally detailed in the Design Stage SAP report. If you do not advise of a figure we will assume the maximum allowable figure for Part L1 of 10m3/hour/m2.

14. For multiple tests we will require the latest revision floors plans for the building at least 1 week prior to the test date. For single tests we can have the drawings on the day of the test.

15. We require ONE 240v MAINS powered electrical sockets within 5 metres of EACH of our testing equipment set up. We cannot use temporary power or generators. 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. Please note that the temporary sealing of items with tape should be limited to only those items detailed in item 16 below. All other items should be in their finished everyday use condition.

16. Seal with tape or cardboard any trickle vents, duct work and mechanical vents to the outside. Pay particular attention to the air conditioning system.

17. Ensure that all toilets and U bends in sinks have water in them.

18. Ensure all external doors and windows are closed fully and make sure all trickle vents are closed and sealed where required. Internal doors should be wedged open.

19. 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. A good supply of mastic/decorators caulk and board material etc. would be useful in case areas need to be sealed.

20. If the door chosen for the test has a larger opening than 1.100m x 2.200m high, you will need to modify the opening to suit our template. (Please call us for advice should this be required)

21. Ideally all the units to be tested should be in a completely finished condition.



22. 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 hour)

23. We require a parking space for a transit van within 10 metres of the test location on site.

24. 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.