



Indoor Air Quality Testing Checklist

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to speak with an adviser or visit
aptsoundtesting.co.uk

The following document explains the required site conditions to allow us to undertake BREEAM Post-Construction Testing for Formaldehyde and TVOC

THE REQUIRED CONDITIONS ON SITE

This section explains the conditions we need to encounter when we arrive on site to conduct Indoor Air Quality sampling. Our quotation will include information regarding the sampling locations specified. If unsure, this information is always readily available from us.

Certain activities will have a negative effect on the results of the assessment and if not completed prior to the assessment will likely result in the failure of the test. We would strongly recommend that the following activities are completed at least three (3) days prior to the assessment.

- 1. Building flush out:** Air out the inside of the building with as much outside air as possible. This step can be accomplished by simply opening natural ventilation windows and/or running the HVAC systems. The building should be ventilated with 100% outside air. The building should be thoroughly ventilated for 24-48 hours prior to our attendance.
- 2. Restrict construction:** Is possible, at least 24 hours before air quality evaluation only minimal construction efforts should be taking place and no new volatiles should be introduced. (Application of all decorative finishes including water based coatings, silicon seals, adhesives and others sealants)
- 3. Finishes:** All interior finishes should be installed, including but not limited carpeting, doors, paint, files. Movable furnishings such work stations and partitions are not required but should be in place.
- 4. Restrict cleaning:** All activities likely to introduce volatiles into the indoor environment should be restricted. This applies to cleaning, the use of air fresheners, window, surface or other cleaners, polishes, waxes and other surface treatments.

PROCEDURES FOR PRE-OCCUPANCY FLUSH-OUT

After completion of construction and application of decorations and finishes (and ideally again after the installation of furnishings), the air in the building should be flushed out; and:

1. Windows and doors should be opened for as long as is reasonably practicable to maximise the release of any build-up of pollutants in the atmosphere. This should be for at least one working day and preferably for 24 hours.
2. The flushing out procedure can be enhanced by subsequently operating any mechanical ventilation systems installed with minimal re-circulation (i.e. maximising the introduction of fresh air and the exhausting of circulated air).
3. A record should be kept by the contractor of these events, including the length of flushing out time. This information will help in the event of any of the subsequent air sample tests showing a raised result.
4. If potential pollutants (e.g. sealants) are introduced after the flushing out procedure has taken place, consideration should be given to sealing off those areas so as not to affect air quality test results in any other locations. This should include isolating any re-circulating ventilation systems. If these areas cannot be isolated, the presence of these additional pollutants should be noted.

Testing for VOCs and Formaldehyde should whenever possible take place prior to occupation. Ideally, this should take place after the pre-occupancy flush-out as described above;

1. It is usually best for VOC and Formaldehyde testing to take place during the week leading up to handover.
2. The use of sealants / adhesives must not be applied within five days of testing, as these generate concentrated and relatively high levels of VOCs.
3. Indoor air quality testing should not take place at the same time as air tightness testing due to materials used in that process.

4. Prior to measurements being taken, the ventilation and heating systems should be operating for a period of time to ensure the relevant spaces in the building reach equilibrium in terms of their internal environmental conditions. Typically, this may take 12-24 hours.
5. If new finishes, fittings or furnishings that are likely to emit VOCs are installed after flush-out and equilibrium has been achieved (and assuming it is not practical to achieve equilibrium again before testing), the presence of any such materials should be noted at testing, so far as is practicable.
6. If new decorations / finishes, fittings or furnishings that are likely to emit VOCs are installed after testing, then the testing procedure should be repeated.
7. We require a 240v Mains Electric socket in each of the properties/rooms being tested. We cannot use temporary power or generators.
8. On our quotation a time is allowed for the test. If, due to the site not being prepared adequately or the test over runs due to reasons beyond our control, our extra hourly charges will be applied.
9. Have a competent member of your staff available on the test day to stay in attendance with our engineer to ensure that the above items remain in place during the testing period.
10. We require a parking space for a transit van within 10 metres of the test location on site.
11. 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.

If you have any questions about the air quality testing methodology, please ring our office to discuss them.