

What is Acoustic Testing?

The current edition of Building Regulations Part E came into force in 2003 and introduced pre-completion testing (PCT) as a means of demonstrating acoustic insulation compliance for all residential developments. LABC NHW is able to provide fully UKAS accredited acoustic testing.

Who can carry out the test?

The pre-completion testing can only be carried out by a fully accredited person.

What does the test involve?

Acoustic testing through walls requires an airborne test only. Testing through floors requires both an airborne and an impact test. This means that houses require an airborne test only and a flat requires both.

1) Airborne

The loudspeaker in the Source Room emits a loud noise, over a range of frequencies, which is known as pink noise. The microphone in the Source and Receiving Room measures the sound pressure level. Using specialist equipment, the technician can then calculate the airborne sound insulation. What is being measured is the difference in sound level between the Source Room and the Receiving Room, so the higher the value, the better the acoustic performance.

2) Impact

In the Source Room, a tapping machine impacts repeatedly directly onto the floor structure. A microphone in the Receiving Room measures the sound pressure level and the recorded level produces the impact result. The lower this figure is, the better the acoustic performance.

Why is it needed?

This is needed to demonstrate compliance with Building Regulation's Approved Document E. This outlines the minimum required standards for the structure to resist the passage of sound.

Credits for the Code for Sustainable Homes assessment are awarded for achieving higher standards of sound insulation than those given in Approved Document E of the Building Regulations and demonstrating it by using pre-completion testing or Robust Details as follows:

| Criteria to be met | Number of Credits |
|--|-------------------|
| • airborne/impact sound insulation values are improved by at least 3dB | 1 |
| • airborne/impact sound insulation values are improved by at least 5dB | 3 |
| • airborne/impact sound insulation values are improved by at least 8dB | 4 |

Do you need to test all properties within the development?

No. You only need to test 10% of each construction type. A construction type refers to a particular group of properties that are built to a similar size and using the same construction materials and techniques. The final decision on what constitutes a similar construction type is made by Building Control. **If in doubt, you should refer to Building Control.**

How is the test result communicated?

The test confirms if regulations have been met or if the test has failed. The technician will provide a full written report on the results of the testing and will give indications as to why failure may have occurred.

What happens if the result is a failure?

The technician will identify this in a report and it will be communicated to the site management staff where appropriate. A re-test will need to be booked with LABC NHW.

How do I get a quote?

Contact our friendly services team on **0151 650 4308** or visit us online for more information.

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