

# Sound Insulation Testing

The need to assess and report sound insulation performance by testing has become increasingly important in order to demonstrate that a building's intended performance is achieved when constructed.

Incorrect detailing or poor assembly of components can have a significant impact on the overall performance of building elements and the building as a whole. Post completion performance testing provides greater certainty that designed performances are actually being achieved and therefore is now an integral part of supporting the completion certificate process throughout the UK and Ireland.

In order to ensure that testing is undertaken within a robust regime which controls the reliability of test results, government guidance is in place which describes restrictions on those who should carry out such tests and report on the results. Such restrictions vary throughout the UK and Ireland. The applicable regulations in each of the various jurisdictions within UK and Ireland are listed directly below, followed by details of the Institute of Acoustics [IOA] Scheme for Scotland, and then links to other Accreditation and Registration Schemes known to be available. The table at the end then summarises the IOA's understanding of those schemes that are relevant in the various jurisdictions within UK and Ireland.

## Applicable Regulations

### England and Wales

Building Regulations - *Resistance to the passage of sound: Approved Document E [ADE]* requires that:

*"The person carrying out the building work should arrange for sound insulation testing to be carried out by a test body with appropriate third party accreditation"* and is downloadable at:

<https://www.gov.uk/government/publications/resistance-to-sound-approved-document-e>

### Scotland

Building Standards Division - *Sound and airtightness testing* requires that:

*"testing should be carried out by persons who can demonstrate relevant, recognised expertise in acoustics for sound insulation testing of buildings"* and is downloadable at:

<http://www.gov.scot/Resource/0046/00469878.pdf>

### Northern Ireland

*Technical Booklet G of the Building Regulations (Northern Ireland) 2012* is comparable to the ADE Document, and is downloadable from Northern Ireland's Department of Finance at:

<https://www.finance-ni.gov.uk/publications/technical-booklet-g>

### Republic of Ireland

Department of Environment, Community and Local Government document - *Technical Guidance Document E – Sound 2014 (TGD E 2014)*, requires that:

*"persons are competent in the measurement of sound insulation in buildings, possess sufficient training, experience and knowledge appropriate to the nature of the work he or she is required to perform, having particular regard to the size and complexity of such works; and that*

*Sound insulation tests carried out by a person certified by an independent third party to carry out this work offers a way of ensuring that such certification can be relied upon"* and is downloadable at: <http://www.housing.gov.ie/housing/building-standards/tgd-part-e-sound/technical-guidance-document-e-sound-2014>

## **The Institute of Acoustics Registration Scheme**

This scheme only applies to testing in Scotland.

In order to introduce a pathway to testing by an individual with the appropriate technical knowledge and skills, the IOA introduced a registration scheme which assesses, an individual's professional competences to both carry out testing and report/verify the results.

As the IOA Scheme is a personal certification scheme, the competence is entirely judged on the skills and knowledge of the individual. For this reason, IOA Registration is not available to Technician grade members. Such Members can, of course, be part of testing regimes within organisations which additionally rely on the competences and supervision of other staff and management systems, as part of their assurance. Registration, therefore, is only available to members who have Associate Member grade or higher, but with the expectation that the members listed in the register will normally hold a Corporate Member grade. Therefore, although it may be possible on evidence supplied for an Associate grade member to be registered, this would not normally be the case and such a registration would be conditional on applying for Corporate Membership within one year of registration.

Please contact the Institute of Acoustics office with enquiries regarding how to apply for IOA Registration to test in Scotland.

## **Links to other Accreditation and Registration Schemes**

The Association of Noise Consultants [ANC] –  
<http://www.association-of-noise-consultants.co.uk/services/sound-insulation-testing/>

United Kingdom Accreditation Service [UKAS] –  
<https://www.ukas.com/the-route-to-accreditation/>

Irish National Accreditation Board [INAB] –  
<http://www.inab.ie/About-Accreditation/Accreditation-Schemes/>

Sound Insulation Testing Register (Ireland) [SITRI] - <http://www.soundtestingireland.com/>

## Summary of Testing Schemes

	Scotland	Northern Ireland	Wales	England	Republic of Ireland
IOA Registration	Yes	No	No	No	No
ANC Registration Scheme	Yes	Yes	Yes	Yes	No
UKAS Accreditation *	Yes	Yes	Yes	Yes	Yes
INAB Accreditation *	Yes	Yes	Yes	Yes	Yes
SITRI	No	No	No	No	Yes

\* Subject to an Organisation holding the appropriate UKAS Schedule of Accreditation, or INAB activity / adaptation, for the relevant reporting in respect of the applicable Building Regulation in the jurisdiction that the test is to be performed. In relation to UKAS and INAB, they are only applicable if the test body has accreditation / activity / adaptation for testing to the Regulations in that specific jurisdiction.