

Office Locations

Devon - Humberside - Leicestershire - Nottinghamshire

Peterborough - Sussex - Wessex - Worcestershire

Acoustic Associates



Acoustic Services

Room/Building Acoustics

Auditoriums, Concert Halls and Cinemas
Sound Insulation Testing/ADE/PCT
Sound System Design
Acoustic Modelling/CATT Acoustics

Legal/Planning/Assessment

Aircraft Engine Test Cells
Aircraft Noise
Road Noise
Rail Noise
Industrial/Workplace
Planning & Assessment
IMMI Noise Mapping & Prediction P1
Expert Witness/Court Appeals/Legal

Vibration

Environmental Vibration
Human Vibration

bb93 - Design for Schools

School Acoustics

Energy Services

Air Tightness Testing
Display Energy Certificates
Domestic Energy Performance Certificates
Non-Domestic Energy Performance Certificates
SAP Calculations

IMMI Noise Mapping and Prediction

There are circumstances when it is helpful to have detailed information regarding noise propagation. At Acoustic Associates we use the computer based environmental modelling software IMMI from Wolfel. IMMI is used in the generation of noise maps which can map the propagation of multiple noise sources simultaneously to provide an accurate representation of the noise throughout a site. With appropriate site information and drawings (such as Ordinance Survey Maps) accurate 3D models can be generated. The advantage of noise models is that complex noise environments can be realised from multiple sources (road, rail, aircraft and industrial/commercial plant).

Noise maps are often used in the assessment such as:

- + Residential planning under Planning Policy Guidance 24: Planning & Noise (PPG24).
- + Assessment of noise from industrial/commercial plant on residential properties under.
- + BS4142: Rating Industrial Noise affecting mixed residential and industrial areas and other projects.

Benefits of Using Noise Modelling

As IMMI is a 3D acoustic modelling package, representations of noise impact at different heights can be generated, from this; specific glazing solutions can be provided which can differ due to greater distance from the source of noise.

Some circumstances where there is a desire for assessing the introduction of noise mitigation measures; noise modelling is the most cost effective solution. Alternative mitigation measures such as noise barriers (fencing and bunds) and controlling noise at source using enclosures and attenuators, can all be investigated comparatively quickly and low cost.

