



Case Study: Air & Acoustic Testing & Consultancy



Client: Barratt London / Wilson Bowden Developments
Location: Hounslow High Street Quarter
Sector: Mixed Use Development

Background:

Hounslow High Street Quarter is an exciting mixed use scheme in the centre of Hounslow, designed to spark the regeneration of the surrounding area.

Brief:

Stroma were requested to provide air and acoustic testing and consultancy to both the 527 residential units and commercial spaced (Cineworld and 19 retail units).

Services Provided:

Acoustic testing and consultancy:

- ✓ Review the Cineworld UK Ltd outline performance specification documentation.
- ✓ Undertake design team meetings and site inspections to review and provide input into the critical acoustic elements of this project.
- ✓ Undertake a background vibration assessment to determine the requirement/extent of structural isolation to meet the requirements of the Cineworld performance brief.
- ✓ Take ambient external noise measurements to supplement the data already presented by the Environmental Statement.

- ✓ Provide detailed design advice to assist with meeting the shell acoustic performance requirements.
- ✓ Pre handover acoustic testing to be undertaken on all inter-auditoria walls and floors. Measurements of internal noise levels presented in compliance with the performance brief.

Air testing and consultancy:

- ✓ Residential testing—100% testing in accordance with Part L1a guidance and ATTMA TSL1 version 1.
- ✓ Commercial testing - Cineworld and 19 retail units in accordance with Part L2a guidance and ATTMA TSL2 version 1.
- ✓ Envelope calculations carried out to facilitate the above.
- ✓ Checking the readiness of the building to be tested—temporarily sealing the mechanical ventilation systems (only to resi), comprehensive post-test air leakage diagnosis using handheld smoke guns.
- ✓ Undertake design team meetings and site inspections to review the overarching air tightness strategy, air barrier design, key details, and potential weaknesses and risk areas.