

Along with supporting evidence for the planning application, we also provided detailed acoustic and sound insulation advice in relation to the mixed uses within this exciting development, including a gym, amenity spaces and a retail unit on the ground floor.

Investigation

Long-term noise monitoring was carried out at various heights at the existing student accommodation. Measurements considered noise from the nearby railway line and other sources. Vibration measurements were undertaken within the basement of the existing building. Extensive calculations to determine noise ingress from the façade of the building were necessary to achieve Manchester City Council's internal noise criteria. A noise model was established, which was then validated against measured results to determine noise levels for the new facades of the towers within the building. We also carried out computer modelling of the proposed plant and commercial activities.

Miler Goodall also undertook sound insulation detailing advice as part of RIBA stages 3 and 4 for all internal sound insulation detailing, to comply with Building Control Part E.

Action and outcome

Predicted noise levels were shown to achieve the council's internal noise criteria, with the use of sound insulation measures through the façade and outline planning permission was granted. Sound insulation detailed design has been incorporated into the project, to ensure compliance with Building Regulations.



Background

The iQ Student Accommodation (iQ) project in Echo Street, Manchester, is one of the first purpose-built co-living schemes in the UK and the first of its kind in the city. An existing student accommodation block will be demolished and replaced with a single-structure building, rising from 13 to 25 storeys. The development will include up to 863 bedrooms in a mix of studios, shared or co-living apartments and student accommodation, designed to attract undergraduates, recent graduates and urban professionals who are often priced out of the area.

Proposition

Miller Goodall was brought in by iQ to carry out the noise and air quality aspects of a full environmental impact assessment, looking at the impact of current air quality and noise on future users of the site as well as the impact the development may have on existing receptors around the site. The assessments were complex because of the location and size of the site and the position of plant servicing the development.

IQ Student
Accommodation

Noise assessment
and sound
insulation testing