

Housing Case Study

Background

Building regulations contain the rules for building work in new and altered buildings to make them safe and accessible and limit waste and environmental damage. People carrying out building work must usually arrange for their work to be checked by an independent third party to make sure it meets the required standards. In some cases the installer can certify their own work to demonstrate compliance. Building practices, technology and construction techniques are constantly evolving and updated directives need to make sure that building regulations are fair, efficient, up to date and effective.



Opportunity

With the ongoing demand for more housing in both the private and social sectors the need for testing continues to increase. Economic pressure on house builders also means they are looking at building on noisy or previously unacceptable sites and they have to resort to innovative design solutions for development to take place. Costs of construction are also being squeezed so value engineered solutions are being proposed that still allow Building Regulations to be met.



Solution

SRL are currently working a development that consists of a collection of derelict buildings that are situated above a London Overground station. Because of the location of the development there were concerns about train vibration and noise being transmitted to the residents. Planning conditions were imposed for noise break-in and the need to consider noise through the slab as well as the façade and any regenerated noise from passing trains. Vibration assessments were conducted and from this data we were able to predict noise levels within each room. The design used this information to include slab isolation and wall linings in the final construction. During the construction phase we made Section 61 applications to the Local Authority to allow for out of hours construction to take place. We also conducted site inspections to check for build quality prior to final pre-completion testing to satisfy Part E requirements of the Building Regulations.