

Sound judgement

28 September 2018

Compliance with Part E of the Building Regulations on sound resistance can be ensured through Robust Details, as Trevor Clements, John Mitchell and John Tebbit explain

To ensure compliance with [Part E](#) of the Building Regulations on resistance to the passage of sound, the applicant or builder has the choice of carrying out [pre-completion sound testing](#) or using [Robust Details](#).

The latter scheme has been operating since 2004, and more than a million homes have been registered to be tested against its criteria in that time. Compliance levels measured during the random testing of new homes stand at around 99%.

When the builder uses the Robust Details option, the building control professional should still check, inspect and approve the work under the Building Regulations in the normal way, as Robust Details Limited (RDL) is not an enforcement body. It should be noted also that the Robust Details scheme is not suitable for conversions or extensions.

Registration certificate

When a builder states they are using Robust Details, the building control surveyor should ask to see a copy of the plot registration certificate. This is issued by RDL to the builder when they register and pay for the land on which they develop. This registration is important ? it ensures that the site is on the RDL database and allows it to be subject to a site audit or test by RDL inspectors. If there is no certificate, the scheme is not registered with RDL and pre-completion sound tests will be needed.

The registration certificate will state which party wall or floor types are being used on the registered plot. Identified in the Robust Details approved handbook, these will be shown by codes such as E-WM-6 masonry ? aircrete blockwork (render and gypsum- based board), or E-FT-2 timber ? solid joists ? and floating floor treatment.

The building control surveyor should check the design and specification to see that it reflects the make-up and components listed for that wall or floor type from the handbook or the RDL website.

The handbook is free to download by registering on the website. If the build on site does not reflect what is registered, then this either needs feeding back to the applicant in the usual way and the design amended to the satisfaction of the plan checker, or the registration amended by the applicant via RDL.

Before issuing the final certificate at completion, building control must be satisfied with the party wall or floor construction on site

RDL operates a free technical helpline (see below), and can advise on issues such as how to re-register to reflect any changes from the original registration discovered in the specification.

No variation should be permitted to the exact components of the chosen wall or floor type, because component substitution or changed specification ? say, wall tie type or block density ? will mean that the wall or floor system has not been subject to an earlier robust testing regime. Any variation to the design or to works on site will mean it is not a Robust Detail, and plots in such cases will need pre-completion sound testing.

Building control inspections

Even if the builder is using the Robust Details scheme, it remains the responsibility of the [building control body \(BCB\)](#) to check and approve the works on site. If there are issues with the quality of work, or the construction is not as the approved Robust Detail wall or floor type, this needs raising as a defect, and remedial works must be carried out to the building control surveyor's satisfaction. This approval by the BCB of work for regulatory purposes should not be confused with the wider quality role of a clerk of works or similar.

At completion, before issuing the final certificate, the surveyor must be satisfied with the party wall or floor construction on site. Under the law, it is the building owner rather than RDL that takes ultimate responsibility for compliance with the Building Regulations, and the building control surveyor has a duty to take reasonable care to ensure compliance.

RDL inspections

Independent of building control checks, RDL's own inspectors carry out a sample check of registrations, at a minimum rate of 3% of all properties. Around two-thirds of these will involve a sound test, and the remainder include a detailed visual inspection of works in progress.

These tests are primarily to assure RDL that the scheme as a whole continues to meet the performance levels set by the government.

RDL performs visual inspections to check the Robust Detail types can be built properly and consistently on site, to pick up any trends or changes in quality and to carry out [CPD](#) activities with builders.

Reports following such inspections are submitted to the RDL office, rating the inspections as red, amber or green.

A red report means that the build differs so much from the Robust Details' requirements that it is unlikely it would comply with Part E.

The builder is notified and the relevant plots are de-registered. The builder and the BCB are jointly informed that the particular plots should now be subject to the provisions of

pre-completion testing.

An amber result means the builder has to undertake remedial actions and confirm their completion to RDL in order to remain in the scheme. This might include re-registering the plot to a new detail if the actual build is different from the original registration. If the required actions are not taken then the plot is de-registered and notification given as for a red report.

...it remains the role of the BCB to make the final call on the approval or otherwise of all building work, although in law the building owner remains ultimately responsible for compliance with the Building Regulations

Green results indicate that the RDL inspector is satisfied that the plot complies with the requirements of the Robust Details scheme, though it is not an approval under the Building Regulations.

Sound tests on completed homes operate the same red, amber and green system. A red result means that the party wall or floor has failed to meet the requirements of Part E1. The RDL inspector will repeat the testing and investigate the likely cause of the failure. Once this is complete, RDL informs the builder and the responsible BCB. From that point onwards the dwelling is outside the Robust Details scheme, and it will be for the BCB to ensure that remedial works are carried out and plots sound-tested as needed to meet the Part E requirements.

If the result is amber, this means that the dwelling fulfils the requirements of Part E but not the higher level of performance expected of the particular Robust Detail. Some Robust Details have significantly higher performance targets than Part E to meet the targets of the [Code for Sustainable Homes](#). The RDL inspector will carry out an investigation to ascertain the likely causes and inform the builder but, in these cases, not the BCB.

A green result shows that the dwelling met the expected targets for the particular Robust Detail, including enhanced performance under the Code.

The final call

The Robust Details scheme is a way for builders to demonstrate compliance to the BCB. RDL does not have enforcement powers and, if registered dwellings do not comply, RDL will de-register them and inform the builder and BCB.

The dwellings then become subject to pre-completion testing. As with all aspects of Building Regulations, it remains the role of the BCB to make the final call on the approval or otherwise of all building work, although in law the building owner remains ultimately responsible for compliance with the Building Regulations.

Trevor Clements is Head of Business Development at the local authority-based [Hertfordshire Building Control](#) , John Mitchell is an associate director at the approved inspectors [Regional Building Control](#) , and John Tebbit is a director at [Robust Details](#)

Further information

- Contact the RDL helpline on 03300 882140 or by [email](#)
- Related competencies include: [Building control inspections](#) , [Construction technology and environmental services](#)
- This feature was taken from the [RICS Building Control journal](#) (September/October 2018)
- Related categories include: [Building control](#)