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An examination of some aspects of the use of ISO 140 Part 4 and 7 in field measurements.

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3. Reproducibility

The calculation of the Reproducibility Value ◊R◊ is detailed in ISO 140 Part 2 and is defined at 3.16 of that standard as the value below which the absolute difference between two single test results, obtained under reproducibility conditions, may be expected to lie with a probability of 95%. Reproducibility conditions refer to tests using the same method, ISO 140 in this case, on an identical wall or floor by different testers using different equipment.

In Section 4.1 of ISO 140 Part 2 we see the following equation:

Reproducibility Value $R = 2.8 \times S_R^2$ where S_R^2 is the reproducibility variance.

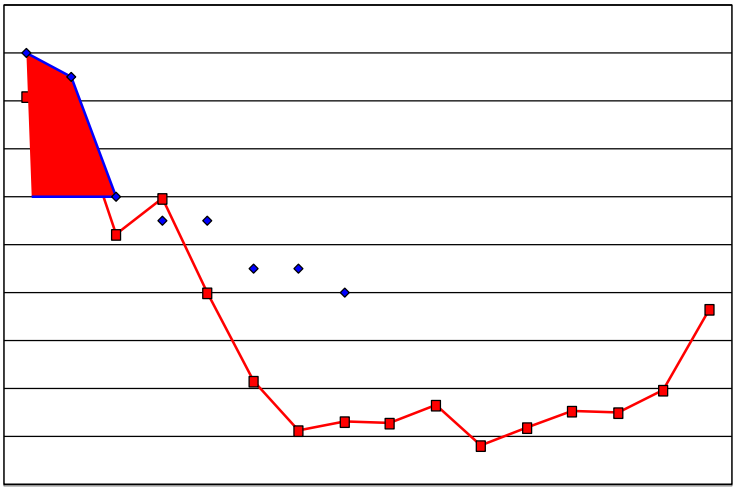
repeatable results in rooms of 30m

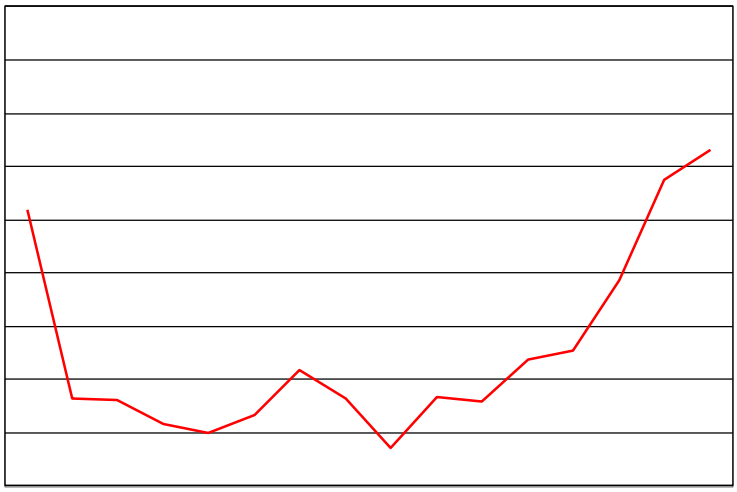
in the UK and may simply be better at doing sound insulation tests than those with less experience. Clearly these effects cannot be quantified or disaggregated at this time.

5. Diffusers

In ISO 140 Part 4, Section 5, it says:

ñ*Measurements between empty rooms with identical shape and equal dimensions should preferably be made with diffusers in each room (e.g. pieces of furniture, building boards).*





6. CONCLUSIONS

This investigation has produced some interesting conclusions .

1. The manually moving microphone technique