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Acoustics — Sound-scattering properties of surfaces —

Part 1: Measurement of the random- incidence scattering coefficient in a reverberation room

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Acoustique — Propriétés de dispersion du son par les surfaces —

*Partie 1: Mesurage du coefficient de dispersion sous incidence
aléatoire en salle réverbérante*

AMENDEMENT 1



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The committee responsible for this document is ISO/TC 43, *Acoustics*, Subcommittee SC 2, *Building acoustics*.

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Acoustics — Sound-scattering properties of surfaces —

Part 1:

Measurement of the random-incidence scattering coefficient in a reverberation room

AMENDMENT 1

Page 1, Normative references

Add the following reference following ISO 9613-1:

ISO 18233, *Acoustics — Application of new measurement methods in building and room acoustics*

Page 6, 6.3.3

Replace the first paragraph with the following:

The surface of the perimeter of the test sample should be covered with a smooth and rigid border the height of which is at least the structural depth h and at most $d/16$, where d is the diameter of the turntable.

Page 6, 6.3.4

Replace the subclause with the following:

If sound absorption is part of the sound-scattering structure, this absorption shall be present in the test sample.

The random-incidence absorption coefficient of the test sample should not exceed a value of $\alpha_S = 0,50$.

NOTE The measurement method will not produce reliable results for samples with a high absorption coefficient, see Annex A.

Page 6, 7.1

Replace the second paragraph with the following:

It is recommended to use periodic signals such as sweeps or MLS in order to obtain the impulse response. For other requirements concerning the test signal (e.g. sine sweep, period length, spectral energy density, filtering), proceed as required in ISO 18233.

Page 7, 7.3

Replace the second paragraph with the following:

For each combination of source and receiver positions, a multiple of a periodic pseudo-random signal is continuously radiated and received while the turntable is rotating. The total measurement duration should be equal to the time of one revolution of the turntable. The number of periods of a periodic pseudo-random signal n should be in the interval of $60 \leq n \leq 120$. For example, with a period of 5 s and a revolution speed of 360 s per revolution, it is necessary to continuously radiate 72 signal periods.

Page 11, Annex A

Replace all occurrences of “ δ ” by “ u ”.

Replace in the first sentence “the standard deviation” with “the standard uncertainty”.

Replace in the second sentence “uncertainties” with “combined uncertainties”.

Replace the third sentence “Finally, the standard deviation in the scattering coefficient is” with “Finally, the combined standard uncertainty in the scattering coefficient of Formula (5) is”.

Replace the fourth sentence by “Expanded uncertainty in the scattering coefficient with the 95 % confidence level may be estimated as two times its combined standard uncertainty.”

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