AS/NZS 2107:2016

Australian/New Zealand Standard™

Acoustics—Recommended design sound levels and reverberation times for building interiors

This Joint Australian/New Zealand Standard was prepared by Joint Technical Committee AV-004, Acoustics Architectural. It was approved on behalf of the Council of Standards Australia on 25 August 2016 and by the New Zealand Standards Approval Board on 6 September 2016.
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The following are represented on Committee AV-004:

Acoustical Society of New Zealand
Association of Australian Acoustical Consultants
Australian Acoustical Society
Australian Building Codes Board
Australian Chamber of Commerce and Industry
Curtin University of Technology
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This Standard was issued in draft form for comment as DR AS/NZS 2107:2014.

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PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee AV-004, Acoustics Architectural, to supersede AS/NZS 2107:2000.

The objective of this Standard is to provide methods for the measurement of compliance in terms of background noise and reverberation times. It recommends design criteria for conditions affecting the acoustic environment within occupied spaces.

This revision updates and expands guidance on design sound levels and provides more extensive recommendations regarding reverberation times.

In this Standard, the recommended design sound levels are provided as a range with a recommended lower level and upper level. In previous editions of this Standard the design sound levels were established in terms of a ‘satisfactory’ and ‘maximum’ level. This could be interpreted to suggest that sound levels below ‘satisfactory’ were desirable. But in fact the opposite may be the case and levels below those which were listed as ‘satisfactory’ can lead to inadequate acoustic masking resulting in loss of acoustic isolation and speech privacy.

In this edition the use of the L_{Aeq} level is maintained as it is considered the most appropriate descriptor for establishing a criterion for background noise and for compliance measurements. However, where the background noise appears to be unbalanced, this Standard provides direction in terms of suitable diagnostic tools that can be used to assess the spectrum distribution of the background noise.

In this edition, the list of occupancy/activity spaces has been increased to include spaces used in modern buildings and to delete those no longer used.

For the purposes of this Standard, the word ‘shall’ refers to practices which are mandatory for compliance with this Standard. The word ‘should’ refers to practices which are advised or recommended.

The term ‘informative’ has been used in this Standard to define the application of the appendices to which it applies. An ‘informative’ appendix is only for information and guidance.

Similarly, the notes in this Standard are of an advisory nature only to give explanation or guidance on recommended design considerations or technical procedures, or to provide an informative cross-reference to other documents or publications. Notes to clauses in this Standard do not form a mandatory part for compliance with this Standard.

Where the number of an IEC, ISO or New Zealand Standard is provided in brackets after an Australian Standard number, the IEC, ISO or New Zealand Standard applies to New Zealand only and the Australian Standard applies to Australia only.

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