

AS 2670.1—2001  
ISO 2631-1:1997  
(Incorporating Amendment No. 1)

AS 2670.1—2001

Australian Standard<sup>®</sup>

**Evaluation of human exposure to whole-body vibration**

**Part : General requirements**



This Australian Standard® was prepared by Committee AV-010, Mechanical Vibration and Shock Human Effects. It was approved on behalf of the Council of Standards Australia on 30 September 2001.

This Standard was published on 6 November 2001.

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The following are represented on Committee AV-010:

- Association of Australian Acoustical Consultants
  - Australasian Railway Association
  - Australian Chamber of Commerce and Industry
  - CSIRO—Division of Telecommunications and Industrial Physics
  - Department of Mineral Resources NSW
  - Federal Chamber of Automotive Industries
  - National Occupational Health & Safety Commission
  - Royal Institution of Naval Architects
  - University of Newcastle
  - WorkCover New South Wales
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This Standard was issued in draft form for comment as DR 01140.

Standards Australia wishes to acknowledge the participation of the expert individuals that contributed to the development of this Standard through their representation on the Committee and through the public comment period.

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## **Evaluation of human exposure to whole-body vibration**

### **Part : General requirements**

Originated as part of AS 2670—1983.  
Previous editions AS 2670.1—1990 and AS 2670.3—1990.  
AS 2670.1—1990 and AS 2670.3—1990 revised and  
amalgamated as AS 2670.1—2001.  
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## PREFACE

This Standard was prepared by the Standards Australia Committee AV-010, Mechanical vibration and Shock Human Effects to supersede—

AS

2670 Evaluation of human exposure to whole-body vibration

2670.1—1990 Part 1: General requirements

2670.3—1990 Part 3: Evaluation of exposure to whole-body Z-axis vertical vibration in the frequency range 0.1 to 0.63 Hz

*This Standard incorporates Amendment No. 1 (June 2013). The changes required by the Amendment are indicated in the text by a marginal bar and amendment number against the clause, note, table, figure or part thereof affected.*

The objective of this Standard is to provide designers, operators and relevant authorities with methods for the measurement of periodic, random and transient vibration transmitted to the human body as a whole from the supporting surfaces and to provide guidance on the possible effects of the vibration on health, comfort and perception and motion sickness.

This Standard is one of a series dealing with the evaluation of human exposure to whole-body vibration, the series being arranged as follows:

Part 1: General requirements (this Standard)

Part 2: Continuous and shock-induced vibration in buildings (1 to 80 Hz)

Part 4: Guidelines for the evaluation of the effects of vibration and rotational motion on passenger and crew comfort in fixed-guideway transport systems

This edition incorporates new experience and research results reported in the literature which made it desirable to—

- (a) reorganize the Parts of the series;
- (b) change the method of measurement and analysis of the vibration environment; and
- (c) change the approach to the application of the results.

This Standard is identical with and has been reproduced from ISO 2631-1:1997, *Mechanical vibration and shock—Evaluation of human exposure to whole-body vibration, Part 1: General requirements*, and its Amendment 1 (2010), which has been added at the end of the document.

A1

**‘text deleted’**

The term ‘normative’ and ‘informative’ have been used in this Standard to define the application of the annex to which they apply. A ‘normative’ annex is an integral part of a Standard, whereas an ‘informative’ annex is only for information and guidance.

As this Standard is reproduced from an International Standard, the following applies:

- (i) Its number appears on the cover and title page while the International Standard number appears only on the cover.
- (ii) In the source text, ‘this part of ISO 2631’ should read ‘this Australian Standard’.
- (iii) A full point substitutes for a comma when referring to decimal mark.

None of the documents referenced in this Standard has been adopted as an Australian Standard.

A1

Of the Standards referenced in this document, ISO 2041:1990, ISO 5805:1997 and ISO 8041:1990 have not been adopted as Australian Standards. IEC 61260:1995 has been adopted as AS/NZS 4476:1997, *Acoustics—Octave-band and fractional-octave-band filters*, but it does not include amendments from IEC 61260:2001 and subsequent to that.

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