

RISSB

RAIL INDUSTRY SAFETY AND STANDARDS BOARD

STANDARDS

AS 7532

Audible Warning Devices



**Australian
STANDARD**

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Development of this Standard was prepared by a Rail Industry Safety and Standards Board (RISSB) Development Group consisting of representatives from the following organisations:

Transport for NSW, Rail Tram and Bus Union, Pacific National, Fortescue, Metro Trains Melbourne and Queensland Rail

The Rolling Stock Standing Committee verified that RISSB's accredited process was followed in developing the product, before the RISSB Board approved the document for publication.

RISSB wishes to acknowledge the positive contribution of subject matter experts in the development of this Standard. Their efforts ranged from membership of the Development Group through to individuals providing comments on a draft of the Standard during the open review.

I commend this Standard to the Australasian rail industry as it represents industry good practice and has been developed through a rigorous process.



Alan Fedda
Chief Executive Officer
Rail Industry Safety and Standards Board

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Document details

First published as: AS 7532:2016

ISBN: 978 1 76175 201 8

Document history

Publication Version	Effective Date	Reason for and Extent of Change(s)
2025	27 June 2025	This document has been reviewed to ensure it remains relevant and applicable. The latest review assessed the content, confirming that while updates were made to align with current industry practices, technologies, and regulatory requirements, the original authorship and copyright have been acknowledged as required.

Approval

Name	Date
Rail Industry Safety and Standards Board	27 June 2025

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Published by the Rail Industry Safety and Standards Board, PO Box 518 Spring Hill Qld 4004, Australia.

Preface

This standard was prepared by the Audible Warning Devices Development Group, overseen by the RISSB Rolling Stock Standing Committee.

Objective

The objective of this Standard is to describe the requirements for audible warning devices for the following types of rolling stock:

- (a) locomotives
- (b) self-propelled passenger rolling stock driving vehicles including driving vehicles on a push/pull set
- (c) infrastructure maintenance rolling stock vehicles
- (d) light rail vehicles and trams
- (e) road/rail vehicles

The main purpose of the requirements is to ensure that the design is suitable to allow the audible warning device to operate as an effective safety system and, where possible, minimize adverse impacts of noise to nearby communities.

This Standard is intended to compliment the rolling stock compliance certification process outlined in AS 7501, including all vehicle types such as new, modified and heritage rolling stock.

Compliance

There are four types of provisions contained within Australian Standards developed by RISSB:

- (a) Requirements.
- (b) Recommendations.
- (c) Permissions.
- (d) Constraints.

Requirements – it is mandatory to follow all requirements to claim full compliance with the Standard. Requirements are identified within the text by the term ‘shall’.

Recommendations – do not mention or exclude other possibilities but do offer the one that is preferred. Recommendations are identified within the text by the term ‘should’.

Recommendations recognize that there could be limitations to the universal application of the control, i.e. the identified control is not able to be applied or other controls are more appropriate or better.

Permissions – conveys consent by providing an allowable option. Permissions are identified within the text by the term ‘may’.

Constraints – provided by an external source such as legislation. Constraints are identified within the text by the term ‘must’.

For compliance purposes, where a recommended control is not applied as written in the standard it could be incumbent on the adopter of the standard to demonstrate their actual method of controlling the risk as part of their WHS or Rail Safety National Law obligations. Similarly, it could also be incumbent on an adopter of the standard to demonstrate their method of controlling the risk to contracting entities or interfacing organisations where the risk may be shared.

RISSB Standards address known hazards within the railway industry. Hazards, and clauses within this Standard that address those hazards, are listed in Appendix A.

Appendices in RISSB Standards may be designated either “normative” or “informative”. A “normative” appendix is an integral part of a Standard and compliance with it is a requirement, whereas an “informative” appendix is only for information and guidance.

Commentary

Commentary *C Preface*

This Standard includes a commentary on some of the clauses. The commentary directly follows the relevant clause, is designated by ‘C’ preceding the clause number and is printed in italics in a box. The commentary is for information and guidance and does not form part of the Standard.

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Section 1 Scope and general

1.1 Scope

This document applies to new and modified rolling stock.

The document covers the design, construction and maintenance of rolling stock.

Operation of rolling stock regarding network safe working rules, procedures and route standards is not covered.

Commentary C1.1

The RISRB Code of Practice – Rail traffic horn use, provides guidance on the use of the audible warning devices.

This Standard is not specifically intended to cover rolling stock used on cane railways and automatic train operations but items from this Standard may be applied to such systems as deemed appropriate by the relevant RTO.

This Standard excludes door warning alarms, rolling stock initiated automated alarms and messages, crew mouth operated whistles and bell messages between crew members.

1.2 Normative references

The following documents are referred to in the text in such a way that *some* or all of their content constitutes requirements of this document:

- AS 2377, *Acoustics – Methods for the measurement of rail bound vehicle noise*
- AS 7501, *Railway Rolling Stock Compliance Certification*
- AS 7513 Series, *Railway Rolling Stock – Interior Environment*
- AS 7520 Series, *Rolling stock – Body structural requirements*
- ISO 9533, *Earth-moving machinery – Machine-mounted audible travel alarms and forward horns – Test methods and performance criteria*
- EN 15153-4, *Railway applications – External visible and audible warning devices – Part 4: Audible warning devices for urban rail*
- Australian Design Rule ADR 42/05 – *General safety requirements*
- Australian Design Rule ADR 94/00 – *Audible warning*

NOTE:

Documents for informative purposes are listed in a Bibliography at the back of the Standard.

1.3 Defined terms and abbreviations

For the purposes of this document, the following terms and definitions apply:

1.3.1

acoustic startle response

largely unconscious defensive response to a sudden loud sound

1.3.2

ADR

Australian design rules applied to road vehicles

1.3.3

ARL

above rail level