RISSB
RAIL INDUSTRY SAFETY AND STANDARDS BOARD

STANDARDS

AS 7721

Lineside Signals, Indicators and Signage

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:

Aurizon, ARC Infrastructure, ARTC, Blue Tongue Skills, Downer Rail, and Rio Tinto.

The Train Control Systems 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 history

Publication Version	Effective Date	Reason for and Extent of Change(s)
2025	17 September 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	17 September 2025

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Preface

This standard was prepared by the Lineside Signals, Indicators and Signal Signage Development Group, overseen by the RISSB Train Control Systems Standing Committee.

The major changes in this edition are as follows:

(a) Updated to reflect changes in technology.

(b) Requirements relating to signal sighting and signage covered by AS 7631 and AS 7632 have been removed.

Objective

The objective of this Standard is to seek to achieve a common level of safety and performance across all operators, encourage good practice in human factors issues and achieve economies of scale by encouraging a reduction in the differences between the signalling equipment and materials used in the various rail networks in Australia.

Compliance

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

(c) Requirements.

(d) Recommendations.

(e) Permissions.

(f) 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.

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Section 1 Scope and general

1.1 Scope

This document applies to new and modified lineside signals, indicators and signal signage.

The document covers materials, design, construction, testing, commissioning and maintenance of lineside signals, indicators and signal signage.

Temporary signage (e.g., for speed restrictions) is not covered by this document.

Interfacing systems such as cab signalling, train protection, and electric traction infrastructure, as well as level crossing requirements, are not covered by this document unless specifically related to lineside signals.

This document does not intend to cover heritage railways but items from this document may be applied to such networks as deemed appropriate by the relevant rail infrastructure manager (RIM).

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 1397, *Continuous Hot-Dip Metallic Coated Steel Sheet and Strip-Coatings of Zinc and Zinc alloyed with Aluminium and Magnesium*
- AS 1657, *Fixed Platforms, Walkways, Stairways and Ladders - Design, Construction and Installation*
- AS 1744, *Standard Alphabets for Road Signs*
- AS 1768, *Lightning Protection*
- AS 1874, *Aluminium and Aluminium Alloys - Ingots and Castings*
- AS 4791, *Hot-Dip Galvanized (zinc) Coatings on Ferrous Open Sections, Applied by an In-Line Process*
- AS 4792, *Hot-Dip Galvanized (zinc) Coatings on Ferrous Hollow Sections, Applied by a Continuous or a Specialized Process*
- AS 7507, *Rolling Stock Outlines*
- AS 7631, *Railway Infrastructure – Sighting*
- AS 7632, *Railway Infrastructure – Signage*
- AS 7717, *Signal Testing and Commissioning Management*
- AS 60529, *Degrees of Protection Provided by Enclosures (IP Code)*
- AS/NZS 1170.2:2021, *Structural Design Actions – Part 2: Wind actions*
- AS/NZS 2144, *Traffic Signal Lanterns*
- AS/NZS 3000, *Wiring Rules*
- BS EN 50121-4:2006/IEC 62236-4:2008, *Railway applications - Electromagnetic compatibility – Part 4: Emission and immunity of the signalling and telecommunications apparatus*
- BS 1376:1974, *Specification for Colour of Light Signals*
- AREMA *Communications & Signals Manual – Part: 7.1.10*

NOTE:

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