

# RISSB

RAIL INDUSTRY SAFETY AND STANDARDS BOARD

**STANDARDS**

## **AS 7523**

### Rolling Stock Emergency Equipment



Australian  
**STANDARD**

## Notice to users

This RISSB product has been developed using input from rail experts from across the rail industry and represents good practice for the industry. The reliance upon or manner of use of this RISSB product is the sole responsibility of the user who is to assess whether it meets their organisation's operational environment and risk profile.

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

Taylor Airey, Newton Rail, Lockeley, Aurizon, Pacific National, Egis, Qube, TfNSW, Sydney Metro, Fortescue, Rio Tinto, ALSTOM

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

---

## Keeping RISSB products up-to-date

Products developed by RISSB are living documents that reflect progress in science, technology and systems. To maintain their currency, RISSB products are periodically reviewed, and new editions published when required. Between editions, amendments may be issued. Products developed by RISSB could also be withdrawn.

It is important that readers assure themselves that the RISSB product they are using is current, including any amendments that have been issued since the product was published. Information about RISSB products, including amendments, can be found by visiting [www.rissb.com.au](http://www.rissb.com.au).

RISSB welcomes suggestions for improvements and asks readers to notify us immediately of any apparent inaccuracies or ambiguities. Members are encouraged to use the change request feature of the RISSB website at: <http://www.rissb.com.au/products/>. Otherwise, please contact us via email at [info@rissb.com.au](mailto:info@rissb.com.au) or write to Rail Industry Safety and Standards Board, GPO Box 1267, Brisbane QLD 4001, Australia.

## Document details

First published as: AS 7523.1:2013; AS 7523.3:2013; AS 7523.4:2013

ISBN: 978 1 76175 364 0

## 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, and to integrate three previous Standards into one document, the original authorship and copyright have been acknowledged as required.

## Approval

Name	Date
Rail Industry Safety and Standards Board	17 September 2025

## Copyright

© RISSB

All rights are reserved. No part of this work can be reproduced or copied in any form or by any means, electronic or mechanical, including photocopying, without the written permission of RISSB, unless otherwise permitted under the Copyright Act 1968.

Published by the Rail Industry Safety and Standards Board, GPO Box 1267, Brisbane QLD 4001, Australia.

## Preface

This Standard was prepared by the Rolling Stock Emergency Equipment Development Group, overseen by the RISSB Rolling Stock Standing Committee.

## Objective

The objective of this Standard is to describe the requirements for the portable emergency equipment that are to be carried by locomotives, self-propelled passenger rolling stock and infrastructure rolling stock.

The main purpose of the requirements is to:

- (a) define the types of portable emergency equipment to be carried by locomotives, passenger rolling stock and infrastructure rolling stock.
- (b) define the requirements for emergency equipment (where applicable);
- (c) define quantities of emergency equipment;
- (d) define the documentation that is to be carried relating to emergency equipment; and
- (e) define maintenance requirements for the emergency equipment.

This Standard combines three previous Standards (AS 7523.1, AS 7523.3, and AS 7523.4) into one document. This integration eliminates overlaps and makes the Standard more user-accessible and simpler to apply.

## 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.

## Table of Contents

<b>Section 1</b>	<b>Scope and general</b>	<b>7</b>
1.1	Scope	7
1.2	Normative references	7
1.3	Defined terms and abbreviations	8
<b>Section 2</b>	<b>Protection when stopped</b>	<b>9</b>
2.1	Visible protection devices	9
2.1.1	Flags	9
2.1.2	Hand signal lamps	9
2.1.3	Hand torches	9
2.1.4	Reflective triangles	10
2.2	Railway track signals	10
2.2.1	Quantity	10
2.2.2	Design	10
2.2.3	Storage	10
2.2.4	Performance	11
2.3	Track circuit shorting devices	12
2.4	Protection at turnouts	12
2.5	Train immobilisation	13
<b>Section 3</b>	<b>End-of-train markers</b>	<b>14</b>
<b>Section 4</b>	<b>First aid equipment</b>	<b>14</b>
<b>Section 5</b>	<b>Zero or low emission (ZE) traction and ZE power sources</b>	<b>14</b>
<b>Section 6</b>	<b>Fire</b>	<b>14</b>
<b>Section 7</b>	<b>Evacuation</b>	<b>14</b>
<b>Section 8</b>	<b>Recovery</b>	<b>15</b>
<b>Section 9</b>	<b>Emergency alert beacons</b>	<b>15</b>
<b>Section 10</b>	<b>Communication</b>	<b>15</b>
<b>Section 11</b>	<b>Maintenance and testing</b>	<b>15</b>
<b>Section 12</b>	<b>Tools required on referenced rolling stock</b>	<b>16</b>
12.1	Typical tools required on a locomotive	16
12.2	Tools required on self-propelled passenger rolling stock	17
12.3	Tools required on infrastructure maintenance rolling stock	18
<b>Section 13</b>	<b>Spares and repair items</b>	<b>19</b>
13.1	General	19
13.2	Spares and repair items required on a locomotive	19
13.3	Spares and repair items required on self-propelled passenger rolling stock	20
13.4	Spares and repair items required on infrastructure maintenance rolling stock	20

Section 14	Documents .....	21
Section 15	Storage and maintenance.....	21
Appendix A	Hazard Register (Informative).....	22
	Bibliography (Informative) .....	23

## Figures

Figure 1	Example railway track signal design.....	10
Figure 2	Testing arrangement for a railway track signal.....	11
Figure 3	Example track circuit shorting device .....	12
Figure 4	Example chock wheel design .....	13
Figure 5	Brake pipe dump device .....	17

## Section 1 Scope and general

### 1.1 Scope

This document applies to locomotives, self-propelled passenger rolling stock and infrastructure rolling stock operating on open access networks. For the purposes of this document this is known collectively as the referenced rolling stock.

For the purpose of this document, zero or low emissions systems refers to the use of batteries, hydrogen or ammonia use in energy storage systems for traction or auxiliary power supply.

Rolling stock not operating on open access networks can apply parts of this document based on the safe working systems in use and the operational environment.

This document is relevant to the design and operation lifecycle phases of rolling stock.

This document sets the requirements for the portable emergency equipment carried on rolling stock.

Operation of rolling stock, network safe working rules and route standards are not covered.

Rolling stock used on light rail, cane railway and monorail networks are not covered.

### 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 1319, *Safety signs for the occupational environment*
- AS 2187.1, *Explosives - Storage, transport and use, Part 1: Storage*
- AS 2700, *Colour standards for general purposes*
- AS 3790, *Portable warning triangles for motor vehicles*
- AS 7495, *Rolling Stock Communications Equipment*
- AS 7522, *Access and Egress*
- AS 7524, *Coupler and Draw Gear*
- AS 7529, *Railway Rolling Stock – Fire Safety*
- AS 7531, *Railway rolling stock lighting and visibility*
- AS/NZS 4280.1, *Global maritime distress and safety system (GMDSS), Part 1: Cospas-Sarsat EPIRB - Emergency position indicating radio beacon operating on 406 MHz - Operational and performance requirements, methods of testing and required test results (IEC 61097-2 (Ed.4.0) MOD)*
- AS/NZS 4280.2, *406 MHz satellite distress beacons, Part 2: Personal locator beacons (PLBs)*
- Safe Work Australia – First aid in the workplace. Code of Practice