

RISSB

RAIL INDUSTRY SAFETY AND STANDARDS BOARD

STANDARDS

AS 1085.3

Railway Track Material Part 3: Sleeper Plates



Australian
STANDARD

Document details

First published as: AS E1a—1926T, AS 1085.9—1979 and AS 1085.16—1995

ISBN: 978 1 76139 918 3

Document history

Publication Version	Effective Date	Reason for and Extent of Change(s)
2024	10 December 2024	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	25 November 2024

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

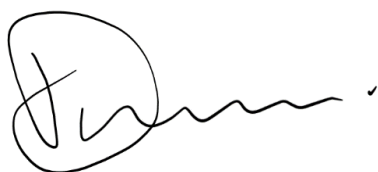
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The Infrastructure Standing Committee verified that RISSB's accredited process was followed in developing the product, before the RISSB Board approved the document for publication.

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.



Damien White
Chief Executive Officer
Rail Industry Safety and Standards Board

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Preface

This standard was prepared by the Railway Track Material – Part 3: Sleeper Plates Development Group, overseen by the RISSB Infrastructure Standing Committee.

Objective

The objective of this Standard is to provide manufacturers and purchasers with materials, dimensions and performance requirements for rolled or cast sleeper plates of clip-fastening and double shoulder type intended for use with timber sleepers in railway track.

Changes to the previous edition are as follows:

- (a) Change of title of the AS 1085 series (previously Railway permanent way material).
- (b) The referenced documents list has been revised.
- (c) The most recent version of the informative Appendix 'Means of demonstrating compliance with this Standard' has been included.

This Standard covers cast iron sleeper plates and alloyed carbon steel sleeper plates within the limits for chemical composition. In the area of unalloyed carbon steel baseplates it is based on ISO 6305-2-1983, Railway components - Technical delivery requirements – Part 2: Unalloyed carbon steel baseplates, but differs from it as follows:

- (d) This Standard contains no requirements covering working gauges, acceptance conditions or statistical quality level criteria for product.
- (e) Materials for rolling are specified by chemical analysis.
- (f) Tolerances are specified for more dimensions and are in some cases different.
- (g) A bend test has been included.
- (h) Marking includes more detail.

Appendix C and Appendix D include full development profiles and section properties for sleeper plates.

The Standard now requires that the datum side of rolled steel sleeper plates be clearly marked and the chemical composition has been brought in line with other recently published steel Standards.

This Standard does not preclude the adoption, by agreement between the purchaser and the manufacturer, of requirements other than those specified herein. The drawings in the Appendices show typical hole positions only; alternative arrangements can possibly be negotiated with respect to hole configurations, dimensions and tolerances.

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.

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.

Table of Contents

Section 1	Scope and general	7
1.1	Scope	7
1.2	Normative references	7
1.3	Defined terms and abbreviations.....	8
Section 2	Purpose and context of use.....	9
2.1	Function.....	9
2.2	Action	9
Section 3	Rounding of numbers	9
Section 4	Designation	9
Section 5	Dimensions and tolerances	9
Section 6	Materials.....	11
6.1	Rolled steel	11
6.2	Cast iron	11
Section 7	Holes	11
Section 8	Finish.....	12
8.1	Rolled steel sleeper plates	12
8.2	Cast sleeper plates	12
Section 9	Testing	12
9.1	Bend test for rolled sleeper plates.....	12
9.2	Mechanical tests for cast sleeper plates	12
9.3	Visual inspections of cast sleeper plates.....	12
Section 10	Marking.....	13
Appendix A	Information to be supplied by the purchaser (Informative)	14
Appendix B	Means of demonstrating compliance with this standard (Informative)	15
B.1	Scope	15
B.2	Statistical sampling.....	15
B.3	Product certification.....	15
B.4	Supplier's quality management system	15
B.5	Other means of assessment	16
Appendix C	Cast sleeper plate profiles and section properties (Normative).....	17
C.1	Scope	17
C.2	Hole patterns.....	17
C.3	Clip-fastening sleeper plate.....	17
C.4	Double-shoulder sleeper plate.....	23
Appendix D	Rolled steel sleeper plate profiles and section properties (Normative)	27
D.1	Scope	27
D.2	Hole patterns.....	27

D.3	Clip-fastening sleeper plate.....	27
D.1	Double-shoulder sleeper plate.....	31
Appendix E	Bend test for rolled steel sleeper plates (Normative).....	36
E.1	Preparation of test piece.....	36
E.2	Test procedure	36

Figures

Figure 7-1	Dimensions of D holes	12
Appendix Figure C.4-1	Clip-fastening level base cast sleeper plate for 152 mm rail base	17
Appendix Figure C.4-2	Clip-fastening taper base cast sleeper plate for 152 mm rail base	18
Appendix Figure C.4-3	Clip-fastening level base cast sleeper plate for 146 mm rail base	19
Appendix Figure C.4-4	Clip-fastening taper base cast sleeper plate for 146 mm rail base	20
Appendix Figure C.4-5	Clip-fastening level base cast sleeper plate for 127 mm rail base	21
Appendix Figure C.4-6	Clip-fastening taper base cast sleeper plate for 127 mm rail base	22
Appendix Figure C.4-7	Double-shoulder level base cast sleeper plate for 146 mm rail base	23
Appendix Figure C.4-8	Double-shoulder taper base cast sleeper plate for 146 mm rail base.....	24
Appendix Figure C.4-9	Double-shoulder level base cast sleeper plate for 127 mm rail base	25
Appendix Figure C.4-10	Double-shoulder taper base cast sleeper plate for 127 mm rail base	26
Appendix Figure D.4-1	Clip-fastening level base roller-steel sleeper plate for 146 mm rail base.....	28
Appendix Figure D.4-2	Clip-fastening taper base rolled-steel sleeper plate for 146 mm rail base.....	29
Appendix Figure D.4-3	Clip-fastening taper based rolled-steel sleeper plate for 127 mm rail base.....	30
Appendix Figure D.4-4	Double-shoulder level based rolled-steel sleeper plate for 146 mm rail base ...	32
Appendix Figure D.4-5	Double-shoulder taper base rolled-steel sleeper plate for 146 mm rail base	33
Appendix Figure D.4-6	Double-shoulder level base rolled-steel sleeper plate for 127 mm rail base	34
Appendix Figure D.4-7	Double-shoulder taper base rolled-steel sleeper plate for 127 mm rail base	35
Appendix Figure E.2-1	Test pieces – before and after	36

Tables

Table 5-1	Dimensional Tolerances	10
Table 6-1	Chemical Composition (Cast Analysis)	11

Section 1 Scope and general

1.1 Scope

This Standard specifies requirements for double-shoulder and clip-fastening sleeper plates manufactured from rolled steel or from spheroidal graphite cast iron (cast sleeper plates) for use in conjunction with steel rails rolled in accordance with AS 1085.1.

The sleeper plates may also be used for rail sizes not currently covered in AS 1085.1.

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 1085.1, *Railway Track Material – Part 1: Steel Rails*
- AS 1100, *Technical Drawing*
- AS 1100.101, *Technical drawing – Part 101: General principles*
- AS 1199, *Sampling procedures and tables for inspection by attributes*
- AS 1399, *Guide to AS 1199 - Sampling procedures and tables for inspection by attributes*
- AS 1442, *Carbon steels and carbon-manganese steels - Hot-rolled bars and semi-finished products*
- AS 1831, *Ductile cast iron*
- AS 2706, *Numerical values - Rounding and interpretation of limiting values*
- AS 3978, *Non-destructive testing - Visual inspection of metal products and components*
- ISO 9001, *Quality management systems – Requirements*
- ISO 9004, *Quality management systems – Guidelines for performance improvements*
- HB18, *Guidelines for third-party certification and accreditation*
- HB18.28, *Guidelines for third-party certification and accreditation — Guide 28: General rules for a model third-party certification system for products*

NOTE:

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