



**Railway Track Material –
Part 7: Spring Washers**

AS 1085.7 PREVIEW ONLY

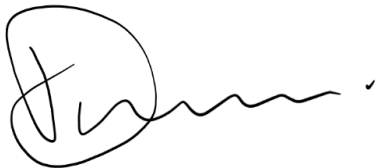
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RISSB wishes to acknowledge the positive contribution of subject matter experts in the development of this Standard. Their efforts ranged from membership of the Development Group through to individuals providing comments on a draft of the Standard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

Name	Date
Rail Industry Safety and Standards Board	2 October 2024

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Preface

The modifications in this edition acknowledge the authorship and copyright of the new updates as per the terms of the agreement

Objective

The objective of this Standard is to provide manufacturers and users of spring washers with performance requirements for spring washers for use in railway track.

The context and purpose of use describes the performance that the requirements and tests of the Standard are intended to verify.

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 Standard sets out the requirements for spring washers for use in railway track.

Type 1 single coil spring washers as per Section 2 are used with fishbolts and nuts as detailed in AS 1085.4. Type 2 single, double and triple coil spring washers as per Section 3 are used with screw spikes as detailed in AS 1085.18.

Double- and triple-turn spring washers are sometimes referred to as 'helical'; however, they are not helical in shape.

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 1085.4, *Railway track materials Part 4: Fishbolts and nuts*
- AS 1085.18, *Railway track materials Part 18: Screw spikes and threaded inserts*
- 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 semifinished products*
- AS 1815, *Metallic materials - Rockwell hardness test*
- AS 1815.1, *Metallic materials - Rockwell hardness test Part 1: Test method scales*
- AS 1815.2, *Metallic materials - Rockwell hardness test Part 2: Verification and calibration of testing machines (scales A, B, C, D, E, F, G, H, K, N, T).*
- AS 1815.3, *Metallic materials - Rockwell hardness test Part 3: Calibration of reference blocks (scales (scales A, B, C, D, E, F, G, H, K, N, T).*
- AS/NZS 4680, *Hot-dip galvanized (zinc) coatings on fabricated ferrous articles*
- 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 scheme for products.*

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

HRC

the C-scale of the Rockwell scale for measuring the indentation hardness of a material

General rail industry terms and definitions are maintained in the RISSB Glossary. Refer to: <https://www.rissb.com.au/products/glossary/>