

AS 7643:2018



Track stability



Infrastructure Standard



This Australian Standard® AS 7643 Track stability was prepared by a Rail Industry Safety and Standards Board (RISSB) Development Group consisting of representatives from the following organisations:

ARTC

Pacific National

Queensland Rail

Aurizon

Transport for NSW

Public Transport Victoria

John Holland Rail

KiwiRail

Arc Infrastructure

Metro Trains Melbourne

The Standard was approved by the Development Group and the Infrastructure Standing Committee in September, 2018. On September 18, 2018 the RISSB Board approved the Standard for release.

This Standard was issued for public consultation before being approved.

Development of the Standard was undertaken in accordance with RISSB's accredited process. As part of the approval process, the Standing Committee verified that proper process was followed in developing the Standard.

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 comment 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.



Paul Daly

Chief Executive Officer

Rail Industry Safety and Standards Board

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Contents

1	Introduction.....	6
1.1	Purpose	6
1.2	Scope	6
1.3	Compliance.....	6
1.4	Referenced documents.....	6
1.4.1	Normative references.....	6
1.5	Definitions & Abbreviations	7
2	Temperature management	8
2.1	Temperature gauge calibration	8
2.2	Tolerance of temperature requirements	8
2.3	Type and appropriate use of temperature measurement devices	8
3	Outline of the life cycle for managing track stability.....	8
4	Track design.....	10
4.1	General.....	10
4.2	Design stress free temperature	10
4.3	Ballast characteristics and profile.....	11
4.4	Sleepers and fastening systems	12
4.5	Rails.....	12
5	Track construction and maintenance	12
5.1	General.....	12
5.2	Temperature stress control	12
5.3	Welded track.....	13
5.3.1	General.....	13
5.3.2	Checking rail movement during adjustment.....	13
5.3.3	Use of rollers for stress adjustment.....	14
5.3.4	Stress retention during minor rail works in CWR or LWR	14
5.4	Verification of rail adjustment.	14
5.5	Jointed track	14
5.5.1	General.....	14
5.5.2	Rail gap calculation	14
5.6	Maintenance	15
6	Commissioning track stability.....	15
7	Monitoring processes	15
7.1	General.....	15
7.2	Rail creep monitoring process.....	16
7.3	Measurement of SFT	16
7.3.1	General.....	16
7.3.2	Destructive methods:	17

7.3.3	Partly destructive methods:.....	17
7.4	Conditions for stress re-adjustment.....	17
7.5	Procedures for train operations following track disturbance	17
8	Operation.....	18
8.1	Longitudinal and lateral forces from trains.....	18
8.2	Precautionary restrictions due to weather conditions	18
8.3	Dealing with track after a buckling incident.....	18
8.4	Stress adjustment of affected track	18
Appendix A	Track stability hazards	20

Track Stability
Preview

1 Introduction

1.1 Purpose

This Standard sets out the requirements for managing the stability of tracks for train operations in Australia.

1.2 Scope

Track stability refers to the capacity of track to resist push out and buckling from compressive forces, curve pull-in and rail breaking from tension forces in the rails, due mainly to changes in rail temperature.

This Standard examines factors affecting track stability for the design and maintenance of jointed, long and continuously welded rail.

This Standard covers rail networks classified in AS 7630.

Tram tracks, cane railway and monorail networks are not included.

1.3 Compliance

There are two types of control contained within Australian Standards developed by RISSB:

- (a) Requirements.
- (b) Recommendations.

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 recognise that there could be limitations to the universal application of the control, i.e. the identified control cannot be applied, or other controls could be appropriate or better.

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.

Controls in RISSB standards address known railway hazards as included in an appendix.

1.4 Referenced documents

1.4.1 Normative references

The following referenced documents are indispensable for the application of this Standard:

- (a) AS 7630 Track classification.