

AS 7720:2017



Signalling Equipment Enclosure and Wiring



Train Control Systems Standard



This Australian Standard® AS 7720 Signalling Equipment Enclosure and Wiring was prepared by a Rail Industry Safety and Standards Board (RISSB) Development Group consisting of representatives from the following organisations:

Metro Trains Melbourne
Pivot Electronics

Public Transport Authority of WA

Queensland Rail

The Standard was approved by the Development Group and the Train Control Systems Standing Committee in May, 2017. On June 22, 2017 the RISSB Board approved the Standard for release.

This standard was issued for public consultation and was independently validated 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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AS 7720:2017

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Document details

First published as: AS 7720:2017

ISBN 978-1-76035-805-1

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PO Box 4271, Kingston ACT 2604, Australia

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Document control

Document identification

Designation / Title
AS 7720:2017 Signalling Equipment Enclosure and Wiring

Document history

Publication Version	Effective Date	Reason for and Extent of Change(s)
2017	June 22, 2017	First Published

Approval

Name	Date
Rail Industry Safety and Standards Board	22/06/2017

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1 Introduction

1.1 Purpose

The main purpose of this Standard is to provide a framework that describes the requirements for the design, construction, commissioning, monitoring, maintenance and decommissioning of signalling equipment enclosures and wiring in Australian railway corridors.

The Standard is intended to outline requirements that govern signalling equipment enclosures and their wiring on a whole-of-life approach.

The Standard covers a set of requirements to manage the identified industry hazards by identifying risks associated with the signalling equipment enclosures and wiring. This standard only applies if enclosures are assessed as the only practical option for equipment protection at the particular site.

1.2 Scope

Where a signalling enclosure is selected as the preferred enclosure for a location, this Standard provides design requirements for types of free standing enclosures and their wiring for rail signalling equipment. The Standard covers –

- (a) materials and configuration for signalling equipment enclosure,
- (b) siting the enclosure,
- (c) principles for locating equipment therein, and
- (d) processes for installation of equipment and wiring.

This Standard is intended to be used by RIMs, Operators and Suppliers of signalling equipment enclosures.

The Standard is intended to be applied for new installations and upgrades.

This Standard applies to all railways in Australia.

This Standard specifies the accepted criteria that should be employed when designing, procuring or installing signalling equipment enclosures and their wiring on the Australian Railway Network.

The Standard does not apply to the following:

- (a) Signalling wayside (trackside) termination boxes, and
- (b) Buildings or huts of brick construction, pre-cast concrete construction and pre-fabricated panel construction.

1.3 Compliance

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

- (a) Mandatory requirements.
- (b) Recommended requirements.

Each of these types of control address hazards that are deemed to require controls based on existing Australian and international Codes of Practice and Standards.

A mandatory requirement is a requirement that the Standard provides as the only way of treating the hazard.

Mandatory requirements are identified within the text by the term 'shall'.