

Australian Standard<sup>®</sup>

**Passenger ropeways and passenger conveyors**



This Australian Standard® was prepared by Committee ME-051, Amusement Rides and Devices. It was approved on behalf of the Council of Standards Australia on 4 August 2009. This Standard was published on 31 August 2009.

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The following are represented on Committee ME-051:

- Australian Amusement Leisure and Recreation Association
  - Australian Chamber of Commerce and Industry
  - Australian Ski Areas Association
  - Department of Employment and Industrial Relations, Queensland
  - Engineers Australia
  - Manufacturing Interests
  - WorkCover New South Wales
  - WorkSafe Victoria
  - Worksafe Western Australia
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Standards Australia wishes to acknowledge the participation of the expert individuals that contributed to the development of this Standard through their representation on the Committee and through the public comment period.

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Australian Standard<sup>®</sup>

## Passenger ropeways and passenger conveyors

Originated as part of AS 3533—1988.  
Previous edition in part as part of AS 3533.1—1997 and AS 3533.2—1997.  
Revised in part, amalgamated and redesignated as AS 4722—2009.

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## PREFACE

This Standard was prepared by Standards Australia Constituted Subcommittee, ME-051-01, Amusement Rides and Devices—Passenger Ropeways and Conveyors, formed under Committee ME-051, Amusement Rides and Devices. It was prepared to provide a Standard that addressed both ropeways used for transport at snowfields and those used as amusement rides.

The contents of this Standard were drafted to incorporate the relevant requirements of AS 3533.1—1997, *Amusement rides and devices, Part 1: Design and construction* and AS 3533.2—1997, *Amusement rides and devices, Part 2: Operation and maintenance*. The 1997 editions of those Standards have subsequently been superseded and the new editions do not apply to passenger ropeways and passenger conveyors. Therefore this Standard replaces those Standards for passenger ropeways and passenger conveyors.

The objective of this Standard is to provide designers, manufacturers, proprietors and operating staff with requirements and guidance specific to the design, construction, operation and maintenance of passenger ropeways and passenger conveyors that will protect the health and safety of both operating staff and patrons of these devices.

This Standard references and modifies the requirements of Canadian Standards Association publication CSA Z98-07, *Passenger ropeways and passenger conveyors*. The Canadian Standard has traditionally been used for requirements for passenger ropeways in Australia. The Subcommittee has kept Australian variations to this standard to a minimum and has informed the relevant Canadian committee of these so they can be considered for incorporation in a future edition of CSA Z98.

It should be noted that compliance with this Standard alone does not necessarily ensure that all legal obligations are being fulfilled.

Statements expressed in mandatory terms in notes to tables are deemed to be requirements of this Standard.

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## FOREWORD

At present, various persons have been assigned a duty of care in the general occupational health and safety (OHS) legislation in Australia. This Foreword indicates how these duties can generally be interpreted and may provide an understanding of the basis for the requirements in this Standard.

Under OHS legislation, employers have a duty to ensure the safety of their employees and other people at the workplace. The operator of a passenger ropeway or conveyor has a duty to ensure that participants and others present are not exposed to risks arising from the activities. This duty includes conducting a risk assessment of the facility and its operation to consider foreseeable risks to employees, participants and others, and to implement measures to eliminate or control such risks.

Designers, manufacturers and suppliers of the structure and equipment also have duties to ensure the plant and equipment is safe and without risk when used. Additionally they need to provide information that is necessary to enable the plant to be properly used and maintained.

While this is a broad summary of the applicable legislation, readers should make themselves aware of the legislation in their jurisdiction.

## STANDARDS AUSTRALIA

### Australian Standard Passenger ropeways and passenger conveyors

#### 1 SCOPE

This Standard sets out requirements and guidance for the design, construction, operation, inspection, testing and maintenance of passenger ropeways and passenger conveyors within the scope of CSA Z98-07.

#### 2 REFERENCED DOCUMENTS

The following documents are referred to in this Standard:

##### AS

- |        |   |
|--------|---|
| 1012   | Methods of testing concrete (series)  |
| 1065   | Non-destructive testing—Ultrasonic testing of carbon and low alloy steel forgings   |
| 1171   | Non-destructive testing—Magnetic particle testing of ferromagnetic products, components and structures  |
| 1394   | Round steel wire for ropes  |
| 1403   | Design of rotating steel shafts   |
| 1657   | Fixed platforms, walkways, stairways and ladders—Design, construction and installation  |
| 1710   | Non-destructive testing—Ultrasonic testing of carbon and low alloy steel plate and universal sections—Test methods and quality classification |
| 1796   | Certification of welders and welding supervisors  |
| 1940   | The storage and handling of flammable and combustible liquids   |
| 2062   | Non-destructive testing—Penetrant testing of products and components  |
| 2076   | Wire-rope grips for non-lifting applications  |
| 2084   | Non-destructive testing—Eddy current testing of metal tubes   |
| 2177   | Non-destructive testing—Radiography of welded butt joints in metal  |
| 2207   | Non-destructive testing—Ultrasonic testing of fusion welded joints in carbon and low alloy steel  |
| 2214   | Certification of welding supervisors—Structural steel welding   |
| 2321   | Short-link chain for lifting purposes   |
| 2342   | Development, testing and implementation of information and safety symbols and symbolic signs  |
| 2452   | Non-destructive testing—Determination of thickness  |
| 2452.1 | Part 1: Determination of wall thickness of pipe by the use of radiography   |
| 2452.3 | Part 3: Use of ultrasonic testing   |
| 2671   | Hydraulic fluid power—General requirements for systems (ISO 4413:1998, MOD)   |