



## **Safety requirements for lifts (elevators)**

### **Part 2: Safety parameters meeting the global essential safety requirements (GESRs)**

This Australian Standard® was prepared by Committee ME-004, Lift Installations. It was approved on behalf of the Council of Standards Australia on 30 November 2015. This Standard was published on 21 December 2015.

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  - Australian Chamber of Commerce and Industry
  - Australian Elevator Association
  - Australian Industry Group
  - Australian Institute of Building Surveyors
  - Communications, Electrical and Plumbing Union—Electrical Division
  - Engineers Australia
  - Lift Engineering Society of Australia
  - Property Council of Australia
  - Safe Work 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>

**Safety requirements for lifts (elevators)**

**Part 2: Safety parameters meeting the  
global essential safety requirements  
(GESRs)**

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## PREFACE

This Standard was prepared by the Standards Australia Committee ME-004, Lift Installations.

The objective of this Standard is to provide safety requirements of GESRs by specifying global safety parameters (GSPs) for use where applicable, however GSPs are not mandatory.

This Standard is identical with, and has been reproduced from ISO/TS 22559-2:2010, *Safety requirements for lifts (elevators)*, Part 2: *Safety parameters meeting the global essential safety requirements (GESRs)*.

As this Standard is reproduced from an International Standard, the following applies:

- (a) In the source text ‘this part of ISO/TS 22559’ should read ‘this Australian Standard’.
- (b) A full point substitutes for a comma when referring to a decimal marker.

This Standard is recommended to be read in conjunction with the following:

AS ISO 22559.1, *Safety requirements for lifts (elevators)*, Part 1: *Global essential safety requirements (GESRs)*.

AS ISO 22559.3, *Safety requirements for lifts (elevators)*, Part 3: *Global conformity assessment procedures (GCAP)—Prerequisites for certification of conformity of lift systems, lift components and lift functions*.

ISO/TS 22559.4, *Safety requirements for lifts (elevators)*, Part 4: *Global conformity assessment procedures (GCAP)—Certification and accreditation requirements*.

ISO 14798 *Lifts (elevators), escalators and moving walks—Risk assessment and reduction methodology*.

References to International Standards should be replaced by references to Australian or Australian/New Zealand Standards, as follows:

<i>Reference to International Standard</i>		<i>Australian/New Zealand Standard</i>	
ISO		AS/NZS	
13857	Safety of machinery—Safety distances to prevent hazard zones being reached by upper and lower limbs	4024	Safety of machinery
		4024.1801	Part 1801: Safety distances to prevent danger zones being reached by the upper and lower limbs
14119	Safety of machinery—Interlocking devices associated with guards—Principles for design and selection	4024.1602	Part 1602: Interlocking devices associated with guards—Principles for design and selection
ISO/TS		AS ISO	
22559	Safety requirements for lifts (elevators)	22559	Safety requirements for lifts (elevators)
22559.1	Part 1: Global essential safety requirements (GESRs)	22559.1	Part 1: Global essential safety requirements (GESRs)

Only normative references that have been adopted as Australian or Australian/New Zealand Standard have been listed.

The term ‘informative’ has been used in this Standard to define the application of the annex to which it applies. An ‘informative’ annex is only for information and guidance.

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## INTRODUCTION

This part of ISO/TS 22559 was prepared in response to the need to set global safety parameters for lifts (elevators).

The objective of ISO/TS 22559 (all parts) is to:

- a) define a common global level of safety for all people using, or associated with, lifts (elevators);
- b) facilitate innovation of lifts (elevators) not designed according to existing local, national or regional safety standards, while maintaining equivalent levels of safety. If such innovations become state of the art, they can be integrated into the detailed local safety standard at a later date;
- c) help remove trade barriers.

ISO/TS 22559-1 establishes global essential safety requirements (GESRs) for lifts (elevators) by addressing hazards and risks that can be encountered on a lift (elevator). The GESRs, however, state only the safety objectives of a lift (elevator).

This part of ISO/TS 22559 provides guidance and criteria for achieving conformance with safety requirements of GESRs by specifying global safety parameters (GSPs) for use and implementation, where applicable, in a lift (elevator) to eliminate hazards or mitigate safety risks addressed in the GESRs. However, GSPs are not mandatory.

Clause 4 describes the approach and methodology used in the development of this part of ISO/TS 22559. Clause 5 gives instructions for the use and implementation of GSPs. The GSPs are presented in Clause 6 in the sequence of GESRs in ISO/TS 22559-1.

This part of ISO/TS 22559 is a product safety standard in accordance with ISO/IEC Guide 51.

## AUSTRALIAN STANDARD

**Safety requirements for lifts (elevators)**

## Part 2:

## Safety parameters meeting the global essential safety requirements (GESRs)

**1 Scope**

**1.1** This part of ISO/TS 22559:

- a) specifies global safety parameters (GSPs) for lifts (elevators), their components and their functions;
- b) complements the system and methods specified in ISO/TS 22559-1 for mitigating safety risks that can arise in the course of the operation and use of, or work on, lifts (elevators).

NOTE Hereinafter, the term “lift” is used instead of the term “elevator”.

**1.2** This part of ISO/TS 22559 is applicable to lifts that can

- a) be located in any permanent and fixed structure within or attached to a building, except lifts located in
  - 1) private residences (single family units), or
  - 2) means of transport, e.g. ships,
- b) have any
  - 3) rated load, size of load-carrying unit (LCU) and speed, and
  - 4) travel distance and number of landings,
- c) be affected by fire in the load-carrying unit, earthquakes, weather or floods,
- d) be foreseeably misused (e.g. overloaded) but not vandalized.

**1.3** This part of ISO/TS 22559 does not specifically cover

- a) all the needs of users with disabilities<sup>1)</sup>, or
- b) risks arising from
  - 1) work on lifts under construction, during testing, or during alterations and dismantling,
  - 2) use of lifts for firefighting and emergency evacuation,
  - 3) vandalism,
  - 4) fire outside the LCU,
  - 5) explosive atmosphere,
  - 6) transportation of dangerous goods.

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1) Although the GESRs mentioned in this part of ISO/TS 22559 have been identified and evaluated by risk assessment, not all disabilities or combinations of disabilities of users have necessarily been addressed.