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ISO 22559-1:2014

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Australian STANDARD

Safety requirements for lifts (elevators)

Part 1: Global essential safety requirements (GESRs)

STANDARDS Australia

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- Australian Building Codes Board
- Australian Chamber of Commerce and Industry
- Australian Elevator Association
- Australian Industry Group
- 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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Australian Standard®

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Part 1: 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 methods for minimizing significant hazards and risks associated with lift design by providing overall design objectives.

This Standard is identical with and has been reproduced from ISO 22559-1:2014, *Safety requirement for lifts (elevators)*, Part 1: *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 22559' should read 'this Australian Standard'.

(b) A full point substitutes for a comma when referring to a decimal marker.

None of the normative references in the source document have been adopted as Australian or Australian/New Zealand Standards.

It is recommended that this Standard be read with the following:

(a) AS ISO 22559-2, *Safety requirement for lifts (elevators)*, Part 2: Safety *parameters meeting the global essential safety requirements (GESRs)*.

(b) AS ISO 22559-3, *Safety requirement for lifts (elevators)*, Part 3: *Global conformity assessment procedures (GCAP)—Prerequisites for certification of conformity of lift systems, lift components and lift functions*.

(c) AS ISO 22559-4, *Safety requirement for lifts (elevators)*, Part 4: *Global conformity assessment procedures (GCAP)—Certification and accreditation requirements*.

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

The terms 'normative' and 'informative' have been used in this Standard to define the application of the annex to which they apply. A 'normative' annex is an integral part of a Standard, whereas an 'informative' annex is only for information and guidance.

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INTRODUCTION

0.1 After the publication of ISO/TR 11071-1 and ISO/TR 11071-2, discrepancies were noted in the lift safety standards, and it was agreed that there was a need for an ISO publication that would set global essential safety requirements for lifts (elevators). The work, however, could start only after ISO 14798 was completed. This methodology was a critical tool in the development of this part of ISO 22559 on safety requirements for lifts.

0.2 The objective of the ISO 22559 series of documents 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; and

c) help remove trade barriers.

NOTE ISO/TS 22559-2 contains global safety parameters (GSPs) for lifts (elevators) that should further assist in the use and implementation of the global essential safety requirements (GESRs) specified in this part of ISO 22559.

0.3 Clause 4 describes the approach and methodology used in the development of this part of ISO 22559. Clause 5 gives instructions for the use and implementation of GESRs. The GESRs are presented in Clause 6. Each GESR specifies a safety objective, i.e. what is to be achieved, not how to do it. This allows innovation and development of future technologies. Annex A gives an overview of GESRs in relation to lift subsystems.

0.4 This part of ISO 22559 does not supersede National Regulations. Users of this part of ISO 22559 should comply with the National Regulations. This part of ISO 22559 is intended to support national regulations on safety assessment of new lifts.

0.5 The hazards associated with lifts are similar worldwide. For achieving an appropriate uniform safety level, the requirements in this part of ISO 22559 should be considered in any safety assessment of new lifts.

0.6 ISO 22559-1 GESRs or the EU Lifts Directive 95/16/EC essential health and safety requirements (EHSRs), as well as those EHSRs of the Machinery Directive 2006/42/EC applicable to lifts, when complied with, give an appropriate level of safety for lifts. See Annex B for application of European legislation.

0.7 The ISO 22559 series of documents provides a process for assessment of conformity of lift systems, lift components or lift functions with the safety requirements specified in ISO 22559-1. It includes a structured methodology for establishing, documenting and demonstrating that necessary and appropriate protective measures are taken to eliminate hazards or sufficiently mitigate risks. This process is particularly useful for establishing safety of lift systems, lift components or lift functions involving innovative design or new technologies.

NOTE If one is using the process, parts 1 to 4 of the ISO 22559 series should be used.

0.8 ISO/IEC Guide 51 has been taken into account as far as practicable at the time of drafting of this part of ISO 22559. The process of risk reduction described in ISO/IEC Guide 51 is accomplished using ISO 14798.

AUSTRALIAN STANDARD

Safety requirements for lifts (elevators)

Part 1:
Global essential safety requirements (GESRs)

1 Scope

This part of ISO 22559

— specifies GESRs for lifts (elevators), their components and functions, and

— establishes a system and provides methods for minimizing safety risks that may arise in the course of, the operation and use of, or work on, lifts (elevators).

NOTE 1 Hereinafter in this part of ISO 22559, the term “lift” is used instead of the term “elevator”.

NOTE 2 See Clause 5 regarding the use and application of this part of ISO 22559.

This part of ISO 22559 is applicable to lifts that are intended to carry persons or persons and goods that can

a) be located in any permanent and fixed structure or building, except lifts located in means of transport, (e.g. ships);

b) have any

   1) rated load, size of load carrying unit and speed, and

   2) travel distance and number of landings;

c) be affected by fire in the load-carrying unit (LCU), earthquake, weather, or flood;

d) be foreseeably misused (e.g. overloaded) but not vandalized.

This part of ISO 22559 does not cover

a) all needs of users with disabilities[1)], or

b) risks arising from

   1) work on lifts under construction, testing, or during alterations and dismantling,

   2) use of lifts for fire fighting and emergency evacuation,

   3) vandalism, and

   4) fire outside the LCU.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

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

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