
**Lifts for the transport of persons and
goods —**

**Part 2:
Design rules, calculations,
examinations and tests of lift
components**

Elévateurs pour le transport de personnes et d'objets —

*Partie 2: Règles de conception, calculs, examens et essais des
composants pour élévateurs*



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Published in Switzerland

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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 178, *Lifts, escalators, passenger conveyors*.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

A list of all parts in the ISO 8100 series can be found on the ISO website.

Introduction

The content of this document was already published in EN 81-50:2014. This document contains only editorial changes and update of references.

The object of this document is to define safety rules related to lifts with a view to safeguarding persons and objects against the risk of accidents associated with the use, maintenance and emergency operations of lifts.

Reference is made to the respective introductions of the standards (e.g. ISO 8100-1:2019) calling for the use of this document with regard to persons and objects to be safeguarded, assumptions, principles, etc.

Lifts for the transport of persons and goods —

Part 2:

Design rules, calculations, examinations and tests of lift components

1 Scope

This document specifies the design rules, calculations, examinations and tests of lift components which are referred to by other standards used for the design of passenger lifts, goods passenger lifts, goods only lifts, and other similar types of lifting appliances.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 4344, *Steel wire ropes for lifts — Minimum requirements*

ISO 8100-1:2019, *Safety rules for the construction and installation of lifts — Lifts for the transport of persons and goods — Passenger and goods passenger lifts*

ISO/TS 8100-3, *Requirements from Other Standards (ASME A17.1/CSA B44 and JIS A 4307-1/ JIS A 4307-2) not included in ISO 8100-1 or ISO 8100-2*

IEC 60068-2-6, *Environmental testing — Part 2: Tests — Test Fc: Vibration (sinusoidal)*

IEC 60068-2-27, *Environmental testing — Part 2-27: Tests — Test Ea and guidance: Shock*

IEC 60112, *Method for the determination of the proof and the comparative tracking indices of solid insulating materials*

IEC 60664-1, *Insulation coordination for equipment within low-voltage systems — Part 1: Principles, requirements and tests*

IEC 60947-4-1, *Low-voltage switchgear and control gear — Part 4-1: Contactors and motor-starters — Electromechanical contactors and motor-starters*

IEC 60947-5-1, *Low-voltage switchgear and control gear — Part 5-1: Control circuit devices and switching elements — Electromechanical control circuit devices*

EN 10025 (all parts), *Hot rolled products of non-alloy structural steels — Technical delivery conditions*

EN 12385-5, *Steel wire ropes — Safety — Part 5: Stranded ropes for lifts*

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

— ISO Online browsing platform: available at <https://www.iso.org/obp>