Irish Standard
I.S. EN ISO 14798:2013

Lifts (elevators), escalators and moving walks - Risk assessment and reduction methodology (ISO 14798:2009)

I.S. EN ISO 14798:2013

Incorporating amendments/corrigenda/National Annexes issued since publication:

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SWiFT xxx: A rapidly developed recommendatory document based on the consensus of the participants of an NSAI workshop.

This document replaces:

This document is based on:
EN ISO 14798:2013

Published:
31 January, 2013

This document was published under the authority of the NSAI and comes into effect on:
31 January, 2013

ICS number:
91.140.90

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Údarás um Chaighdeáin Náisiúnta na hÉireann

I.S. EN ISO 14798:2013

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN ISO 14798

January 2013

ICS 91.140.90

English Version

Lifts (elevators), escalators and moving walks - Risk assessment and reduction methodology (ISO 14798:2009)

Ascenseurs, escaliers mécaniques et trottoirs roulants - Méthodologie de l'appréciation et de la réduction du risque (ISO 14798:2009)

Aufzüge, Fahrtreppen und Fahrsteige - Verfahren zur Risikobeurteilung und -minderung (ISO 14798:2009)

This European Standard was approved by CEN on 24 November 2012.

EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

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Ref. No. EN ISO 14798:2013: E

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Foreword

The text of ISO 14798:2009 has been prepared by Technical Committee ISO/TC 178 “Lifts, escalators and moving walks” of the International Organization for Standardization (ISO) and has been taken over as EN ISO 14798:2013 by Technical Committee CEN/TC 10 “Lifts, escalators and moving walks” the secretariat of which is held by AFNOR.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by July 2013, and conflicting national standards shall be withdrawn at the latest by July 2013.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

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Endorsement notice

The text of ISO 14798:2009 has been approved by CEN as a EN ISO 14798:2013 without any modification.

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I.S. EN ISO 14798:2013

INTERNATIONAL STANDARD

ISO 14798

First edition
2009-03-01

Lifts (elevators), escalators and moving walks — Risk assessment and reduction methodology

Ascenseurs, escaliers mécaniques et trottoirs roulants — Méthodologie de l'appréciation et de la réduction du risque

Reference number
ISO 14798:2009(E)

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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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

ISO 14798 was prepared by Technical Committee ISO/TC 178, *Lifts, escalators and moving walks*.

This first edition of ISO 14798 cancels and replaces ISO/TS 14798:2006, which has been technically revised.

Introduction

The objective of this International Standard is to describe principles and set procedures for a consistent and systematic risk assessment methodology relevant to lifts (elevators), escalators, moving walks (“lifts”, for short). The risk analysis and assessment principles and process described in this International Standard may, however, be used for assessment of risk relevant to equipment other than lifts.

This risk assessment methodology is a tool used to identify risk of harm resulting from various hazards, hazardous situations and harmful events. Knowledge and experience of the design, use, installation, maintenance, incidents, accidents and related harm are brought together in order to assess the risk during all phases of the life of lifts[1)] (elevators), escalators and moving walks (hereafter referred to as “lifts”), from design and construction up to decommissioning. The users of the methodology do not make medical judgements but, rather, evaluate events that can possibly lead to levels of harm defined in this International Standard. By itself, this International Standard does not provide a presumption of conformity to any safety requirements for lifts, including those noted in Clause 1.

NOTE Risk assessment is not an exact science, as there is a certain degree of subjectivity in the process.

It is recommended that this International Standard be incorporated into training courses and manuals so as to provide basic instructions on safety aspects to those involved in

a) assessing designs, operations, testing and use of lift equipment, and

b) writing of specifications or standards incorporating safety requirements for lifts.

This International Standard describes a qualitative methodology for risk assessment that relies very much on the judgement and deliberations of the members of the risk assessment team who carry out the assessment. To ensure the most realistic and consistent assessment, it is essential that the methodology be followed faithfully. Aids such as numeric methods of assessment that follow the format described in this International Standard are not precluded from use. It should, however, be recognized that numeric aids to qualitative methods may still retain some of the subjectivity inherent in the qualitative process.

Clause 3 describes the concepts of safety and risk assessment. Clause 4 describes the procedure of risk analysis, including risk estimation. The procedure for risk evaluation is set out in Clause 5 and assessment in Clause 6. Clause 7 deals with protective measures. Clause 8 specifies relevant documentation.

1) Hereafter in this International Standard, the term “lift” is used instead of the term “elevator”. In addition, the term “lift” is also used instead of the terms “lifts, escalators and moving walks”.

Lifts (elevators), escalators and moving walks — Risk assessment and reduction methodology

1 Scope

This International Standard establishes general principles and specific procedures for assessing risk.

The purpose of this International Standard is to provide a process for making decisions relevant to the safety of lifts during the

a) design, construction, installation and servicing of lifts, lift components and systems,

b) development of generic procedures for the use, operation, testing, compliance verification and servicing of lifts, and

c) development of technical specifications and standards affecting the safety of lifts.

While examples in this International Standard refer primarily to risks of harm to persons, the risk assessment procedure set out in this International Standard can be equally effective for assessing other types of risk relevant to lifts, such as the risk of damage to property and environment.

2 Terms and definitions

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

2.1
cause
circumstance, condition, event or action that in a hazardous situation contributes to the production of an effect

2.2
effect
result of a cause in the presence of a hazardous situation

2.3
harm
physical injury or damage to the health of people, or damage to property or the environment

[ISO/IEC Guide 51:1999, 3.3]

2.4
harmful event
occurrence in which a hazardous situation results in harm

[ISO/IEC Guide 51:1999, 3.4]

NOTE In this International Standard, the term “harmful event” is interpreted as a combination of cause and effect.