Irish Standard
I.S. EN ISO 25745-1:2012

Energy performance of lifts, escalators and moving walks - Part 1: Energy measurement and verification (ISO 25745 -1:2012)

I.S. EN ISO 25745-1:2012

Incorporating amendments/corrigenda/National Annexes issued since publication:

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This document replaces:	*This document is based on:* EN ISO 25745-1:2012	*Published:* 22 October, 2012

This document was published under the authority of the NSAI and comes into effect on: 22 October, 2012	ICS number: 91.140.90

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I.S. EN ISO 25745-1:2012

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN ISO 25745-1

October 2012

ICS 91.140.90

English Version

Energy performance of lifts, escalators and moving walks - Part 1: Energy measurement and verification (ISO 25745-1:2012)

Performance énergétique des ascenseurs, escaliers mécaniques et trottoirs roulants - Partie 1: Mesurage de l'énergie et vérification (ISO 25745-1:2012)

Energieeffizienz von Aufzügen, Fahrtreppen und Fahrsteigen - Teil 1: Energiemessung und Konformität (ISO 25745-1:2012)

This European Standard was approved by CEN on 29 September 2012.

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

Management Centre: Avenue Marnix 17, B-1000 Brussels

Ref. No. EN ISO 25745-1:2012: E

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Foreword

This document (EN ISO 25745-1:2012) has been prepared by Technical Committee ISO/TC 178 "Lifts, escalators and moving walks" in collaboration with 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of an identical text or by endorsement, at the latest by April 2013, and conflicting national standards shall be withdrawn at the latest by April 2013.

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Endorsement notice

The text of ISO 25745-1:2012 has been approved by CEN as a EN ISO 25745-1:2012 without any modification.

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I.S. EN ISO 25745-1:2012

INTERNATIONAL STANDARD

ISO 25745-1

First edition
2012-10-01

Energy performance of lifts, escalators and moving walks —

Part 1: Energy measurement and verification

Performance énergétique des ascenseurs, escaliers mécaniques et trottoirs roulants —

Partie 1: Mesurage de l'énergie et vérification

Reference number
ISO 25745-1:2012(E)

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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.

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 25745-1 was prepared by Technical Committee ISO/TC 178, *Lifts, escalators and moving walks*.

ISO 25745 consists of the following parts, under the general title *Energy performance of lifts, escalators and moving walks*:

— *Part 1: Energy measurement and verification*

Additional parts, dealing with energy calculation and classification for lifts (elevators) and energy calculation and classification for escalators and moving walks, are planned.

Introduction

This International Standard has been prepared in response to the rapidly increasing need to ensure and to support the efficient and effective use of energy. This International Standard provides:

a) a consistent method of measuring actual energy usage of an installed lift, escalator and moving walk;

b) a simple method to periodically verify that energy usage of an installed unit has not changed — this is in support of regulatory periodic energy verification requirements.

This International Standard is intended to be a reference for the following parties:

— building developers or owners determining and confirming the energy consumption of a building;

— building owners and service companies for performing regulatory periodic energy verification;

— the manufacturers, installers and maintenance providers of lifts, escalators and moving walks;

— consultants and architects involved in specification of lifts, escalators and moving walks.

The total energy consumption over the entire life cycle of lifts, escalators and moving walks consists of the energy to manufacture, install, operate, and the disposal of lifts, escalators and moving walks. However, for the purpose of this International Standard, only the power consumption of the lift, escalator or moving walk required for its operation is considered in the assessment of energy consumption and its verification.

This International Standard is suitable for national or regional jurisdictional energy performance purposes, such as European Directive 2010/31/EU.[4]

Energy performance of lifts, escalators and moving walks —

Part 1:
Energy measurement and verification

1 Scope

1.1 General

This part of ISO 25745 specifies:

a) methods of measuring actual energy consumption of lifts, escalators and moving walks on a single unit basis;

b) methods of carrying out periodic energy verification checks on lifts, escalators and moving walks in operation.

This part of ISO 25745 only considers the energy performance during the operational portion of the life cycle of the lifts, escalators or moving walks.

1.2 Lifts

For lifts, this part of ISO 25745 does not cover energy aspects, such as:

a) hoistway lighting;

b) heating and cooling equipment in the lift car;

c) machine room lighting;

d) machine room heating, ventilation and air conditioning;

e) non-lift, display systems, closed circuit television security cameras, etc.;

f) non-lift, monitoring systems (building management systems, etc.);

g) the effect of lift group dispatching on energy consumption;

h) consumption through the power sockets.

1.3 Escalators and moving walks

For escalators and moving walks, this part of ISO 25745 covers energy aspects of the ancillary equipment, such as:

a) lighting with the exception of comb plate lighting and step gap lighting and traffic light;

b) cooling and heating;

c) alarm devices and emergency battery supplies equipment, etc.

2 Terms and definitions

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

2.1
ancillary current
current drawn by the ancillary circuit(s) through the ancillary switch(es)