BS ISO 8100-30:2019
Incorporating corrigendum December 2020

BSI Standards Publication

Lifts for the transport of persons and goods

Part 30: Class I, II, III and VI lifts installation

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National foreword

This British Standard is the UK implementation of ISO 8100-30:2019. It supersedes BS ISO 4190-1:2010, which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee MHE/4, Lifts, hoists and escalators.

A list of organizations represented on this committee can be obtained on request to its committee manager.

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

© The British Standards Institution 2020
Published by BSI Standards Limited 2020

ISBN 978 0 539 16419 0

ICS 91.140.90

Compliance with a British Standard cannot confer immunity from legal obligations.

This British Standard was published under the authority of the Standards Policy and Strategy Committee on 30 November 2019.

Amendments/corrigenda issued since publication

Date	Text affected
31 December 2020	Implementation of ISO corrected text 21 August 2020: see ISO foreword for details

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INTERNATIONAL STANDARD

ISO 8100-30

First edition
2019-11

Corrected version
2020-08

Lifts for the transport of persons and goods —

Part 30: Class I, II, III and VI lifts installation

Ascenseurs pour le transport des personnes et des charges —

Partie 30: Installation d'ascenseurs des classes I, II, III et VI

Reference number
ISO 8100-30:2019(E)

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CP 401 • Ch. de Blandonnet 8
CH-1214 Vernier, Geneva
Phone: +41 22 749 01 11
Email: copyright@iso.org
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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).

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. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

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 and moving walks*.

This first edition of ISO 8100-30 cancels and replaces ISO 4190-1:2010, which has been technically revised. It also incorporates the Amendment ISO 4190-1:2010/Amd.1:2011. The main changes compared to the previous document are as follows:

— a reference to machine room-less lifts has been added and additional dimensions have been included to cope with common machine room-less lift configurations;

— Figure 7 has been changed to include sizes and dimensions of general-purpose lifts with counterweight to side;

— some new and revised car sizes have been included to provide for access by persons including persons with disability.

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

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.

NOTE 1 In certain instances, harmonization is not possible and these sizes are shown in Figures 10 to 13.

NOTE 2 National regulations can require greater dimensions in some instances.

This corrected version of ISO 8100-30:2019 incorporates the following corrections:

— Figure 2 has been corrected;

— references to Figures 10 to 13 have been corrected;

— the duplicated Subclause 5.2.5 has been removed.

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Introduction

This document reflects the requirements of the global marketplace and includes:

— the special needs, access and full manoeuvrability of persons including persons with physical disabilities;

— appropriate use of stretchers, beds and ancillary medical equipment in hospitals and nursing homes;

— a range of intensive-use lifts[1)] typically used for high-rise buildings for rated speeds of 2,5 m/s to 6,0 m/s;

— rated speeds mainly based on the Renard series for speeds of up to 2,5 m/s;

— improved utilization of building space by reducing well (hoistway) sizes where practicable.

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

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Lifts for the transport of persons and goods —

Part 30:
Class I, II, III and VI lifts installation

1 Scope

This document specifies the necessary dimensions to permit the installation of passenger lifts of class I, II, III and VI.

These dimensions reflect the requirements for the apparatus.

This document is applicable to all new lift installations, irrespective of drive systems, including a car with one entrance, to be installed in a new building. However, for arrangements with counterweight at the side, a through-entrance configuration is possible. Where relevant, this document is also applicable to an installation in an existing building.

This document is not applicable to lifts of rated speed greater than 6,0 m/s.

NOTE It is the responsibility of the user to consult the manufacturer for such installations.

2 Normative references

There are no normative references in this document.

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

— IEC Electropedia: available at http://www.electropedia.org/

3.1 General

3.1.1
car
part of the *lift* (3.1.6) which carries the passenger and/or other loads

3.1.2
headroom
part of the *well* (3.1.8) situated above the highest landing served by the *car* (3.1.1)

3.1.3
landing
area providing access to the *car* (3.1.1) at each level of use

3.1.4
machine room
room in which the machine or machines and/or the associated equipment are placed

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3.1.5
machine room-less lift
lift (3.1.6) whose machinery spaces, e.g. control cabinet(s) and drive system, lift machine, main switch(es), and means for emergency operations, are inside the *well* (3.1.8) or on the *landing(s)* (3.1.3)

3.1.6
lift, GB
elevator, US
permanent lifting appliance serving defined landing levels, comprising a *car* (3.1.1), the dimensions and means of construction of which, clearly permit the access of persons

3.1.7
pit
part of the *well* (3.1.8) situated below the lowest *landing* (3.1.3) served by the *car* (3.1.1)

3.1.8
well, GB
hoistway, US
space in which the *car* (3.1.1), the counterweight or the balancing weight travels

Note 1 to entry: This space is usually bounded by the bottom of the *pit* (3.1.7), the walls and the ceiling of the well.

3.2 Terms related to lift classes

3.2.1
class I
lift (3.1.6) designed for the transport of persons

3.2.2
class II
lift (3.1.6) designed mainly for the transport of persons, but in which goods can be carried

Note 1 to entry: This differs from a class I, III and VI lift, essentially, by the inner fittings of the *car* (3.1.1) and by the strength of the car floor, etc.

3.2.3
class III
lift (3.1.6) designed for health-care purposes, e.g. hospitals and nursing homes

3.2.4
class VI
lift (3.1.6) especially designed to suit buildings with intensive traffic, i.e. lifts with speeds of 2,5 m/s and above

3.3 Terms related to dimensions

3.3.1
car width
b_1
horizontal distance between the inner surface of the car walls measured parallel to the front entrance side

Note 1 to entry: This dimension is measured as indicated in Figure 1, 1 m above the floor. In certain regions, e.g. Asia-Pacific and North American regions, the car width, b_1, is measured between the finished panels, whereas in Europe, the car width is measured excluding decorative or protective panels.

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3.3.2
car depth
d_1
horizontal distance between the internal walls of the *car* (3.1.1), measured perpendicular to the front entrance side

Note 1 to entry: This dimension is measured as indicated in Figure 1, 1 m above the floor. In certain regions, e.g. Asia-Pacific and North American regions, the car depth, d_1, is measured between the finished panels, whereas in Europe, the car depth is measured excluding decorative or protective panels.

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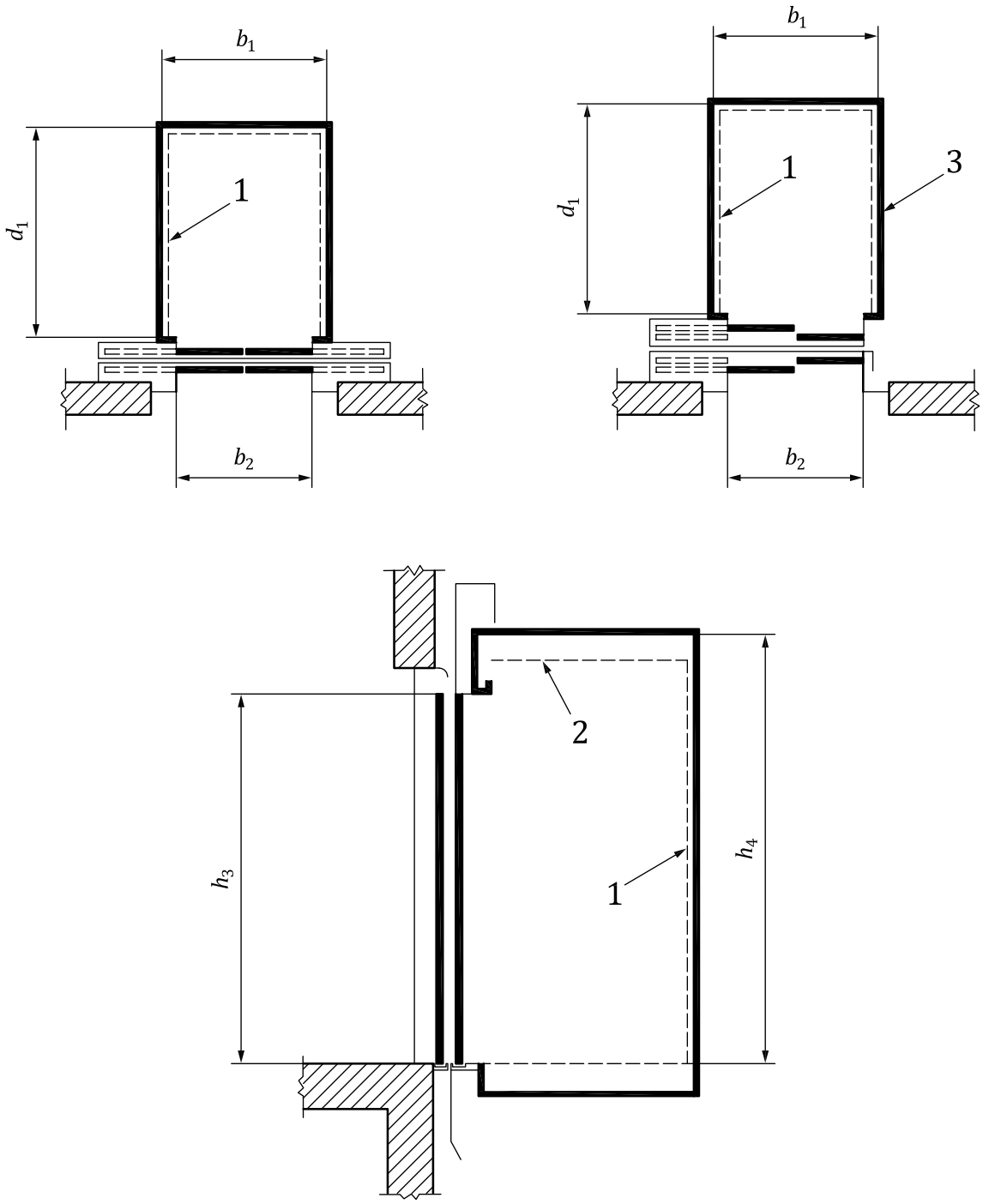

Key

1 decorative panels
2 false ceiling
3 car wall
b_1 car width
b_2 entrance width
d_1 car depth
h_3 entrance height
h_4 car height

Figure 1 — Car and entrance dimensions

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