INTERNATIONAL STANDARD

ISO 4190-1

Fourth edition
2010-05-15

Lift (Elevator) installation —

Part 1: Class I, II, III and VI lifts

Installation d'ascenseurs —

Partie 1: Ascenseurs des classes I, II, III et VI

Reference number
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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 4190-1 was prepared by Technical Committee ISO/TC 178, *Lifts, escalators and moving walks.*

This fourth edition cancels and replaces the third edition (ISO 4190-1:1999).

This edition reflects the requirements of the global marketplace and includes

a) harmonization, where possible, of Japanese dimensions of car and door sizes, loads and speeds,

b) relocation of the 450 kg lift from Figure 8 to Figure 5,

c) relocation of the 320 kg lift from Figure 4 to Figure 9,

d) introduction of 1 350 kg lift in Figures 6 and 7, and

e) introduction of speeds 0,75 m/s, 1,5 m/s and 1,75 m/s.

NOTE 1 In certain instances, harmonization is not possible and these sizes are shown in Figures 9, 10 a), 10 b), and 10 c).

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

ISO 4190 consists of the following parts, under the general title *Lift (Elevator) installation*:

— *Part 1: Classes I, II, III and VI lifts*

— *Part 2: Class IV lifts*[1)]

— *Part 3: Service lifts class V*[1)]

— *Part 5: Control devices, signals and additional fittings*

— *Part 6: Passenger lifts to be installed in residential buildings — Planning and selection*[1)]

1) It is intended that, upon revision, the introductory element of the title of this part will be harmonized with part 1.

Introduction

This part of ISO 4190 reflects the requirements of the global marketplace and includes:

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

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

— a range of intensive-use lifts[2)] typically used for high-rise buildings for rated speeds of 2,5 m/s to 6,0 m/s; the rated speeds have been mainly based upon the Renard series for speeds of up to 2,5 m/s;

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

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

Lift (Elevator) installation —

Part 1:
Class I, II, III and VI lifts

1 Scope

This part of ISO 4190 specifies the necessary dimensions to permit the installation of passenger lifts of class I, II, III and VI.

The dimensions given reflect the requirements for the apparatus. This part of ISO 4190 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 part of ISO 4190 is also applicable to an installation in an existing building.

This part of ISO 4190 is not applicable to lifts, the speed of which is higher than 6,0 m/s.

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

2 Terms and definitions

For the purposes of this part of ISO 4190, the following terms and definitions apply.

2.1 General

2.1.1
car
part of the lift which carries the passenger and/or other loads

2.1.2
head room
part of the well situated above the highest landing served by the car

2.1.3
landing
area providing access to the car at each level of use

2.1.4
machine room
room in which the machine or machines and/or the associated equipment are placed

2.1.5
lift GB
elevator US
permanent lifting appliance serving defined landing levels, comprising a car, the dimensions and means of construction of which, clearly permit the access of passengers