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# Lift (US: Elevator) installation —

## Part 2: Class IV lifts

ICS 91.140.90

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This British Standard reproduces verbatim ISO 4190-2:2001 and implements it as the UK national standard. Combined with BS ISO 4190-1:1999 it supersedes BS 5655-5:1989 which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee MHE/4, Lifts, hoists and escalators, which has the responsibility to:

- aid enquirers to understand the text;
- present to the responsible international/European committee any enquiries on the interpretation, or proposals for change, and keep the UK interests informed;
- monitor related international and European developments and promulgate them in the UK.

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

#### Cross-references

The British Standards which implement international publications referred to in this document may be found in the *BSI Catalogue* under the section entitled "International Standards Correspondence Index", or by using the "Search" facility of the *BSI Electronic Catalogue* or of British Standards Online.

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

**Compliance with a British Standard does not of itself confer immunity from legal obligations.**

This British Standard, having been prepared under the direction of the Engineering Sector Policy and Strategy Committee, was published under the authority of the Standards Policy and Strategy Committee on 8 October 2002

#### Summary of pages

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STANDARD

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**Lift (US: Elevator) installation —**  
**Part 2:**  
**Class IV lifts**

*Installation d'ascenseurs —*

*Partie 2: Ascenseurs de classe IV*



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 3.

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 part of ISO 4190 may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

International Standard ISO 4190-2 was prepared by Technical Committee ISO/TC 178, *Lifts, escalators, passenger conveyors*.

This second edition cancels and replaces the first edition (ISO 4190-2:1982), which has been technically revised. It reflects the requirements of the global marketplace. A range of goods (freight) lifts typically used for rated speeds of 0,25 m/s to 2,5 m/s and loads of 630 kg to 5 000 kg has been incorporated.

The dimensions on the car are related to the loads which have been based on the R10 series of numbers but, due to the predominance of hydraulic drives, some have been based on other considerations.

The range of loads has been extended up to 5 000 kg and includes both the car and landing entrance configuration.

Two classes of loading related to car floor area have been addressed to reflect different safety code requirements.

Additional loads incurred whilst loading/unloading the car are not part of the rated load.

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

- *Part 1: Class I, II, III and VI lifts*
- *Part 2: Class IV lifts*
- *Part 3: Service lifts class V*
- *Part 5: Control devices, signals and additional fittings*
- *Part 6: Passenger lifts to be installed in residential buildings — Planning and selection*

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# Lift (US: Elevator) installation —

## Part 2: Class IV lifts

### 1 Scope

This part of ISO 4190 specifies the necessary dimensions to permit the installation of Class IV lifts, as defined in 3.2.4, generally used for the transport of goods (freight).

It deals with electric and hydraulic lifts. The horizontal dimensions of the wells (US: hoistways) are generally defined by the entrance and drive configurations. It covers lifts with either horizontal or vertical power-operated sliding doors [see Figures 1 a) and 1 b)].

For other characteristics, the manufacturers should be consulted.

This part of ISO 4190 is applicable to new lift installations, with a car with one or two entrances, to be installed in a new building. Where relevant, it may be used as a basis for an installation in an existing building.

Two types of loading (load per unit area) are addressed:

**Series A:** passenger and goods (freight) lifts with loading conforming to EN 81-1 or EN 81-2;

**Series B:** lifts for goods (freight) only, which have a different floor loading in countries which allow this by virtue of their safety codes.

### 2 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this part of ISO 4190. For dated references, subsequent amendments to, or revisions of, any of these publications do not apply. However, parties to agreements based on this part of ISO 4190 are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. For undated references, the latest edition of the normative document referred to applies. Members of ISO and IEC maintain registers of currently valid International Standards.

EN 81-1:1998, *Safety rules for the construction and installation of lifts — Part 1: Electric lifts.*

EN 81-2:1998, *Safety rules for the construction and installation of lifts — Part 2: Hydraulic lifts.*

### 3 Terms and definitions

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

#### 3.1 General

##### 3.1.1

##### **car**

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