# International Standard



INTERNATIONAL ORGANIZATION FOR STANDARDIZATION●MEЖДУНАРОДНАЯ ОРГАНИЗАЦИЯ ПО СТАНДАРТИЗАЦИИ●ORGANISATION INTERNATIONALE DE NORMALISATION

# Lifts and service lifts (USA: elevators and dumbwaiters) — Part 6: Passenger lifts to be installed in residential buildings — Planning and selection

Ascenseurs et monte-charge - Partie 6: Ascenseurs à installer dans les immeubles à usage d'habitation - Critères de sélection

First edition - 1984-10-01

UDC 621.876.113

Descriptors: lifts, installation, buildings, selection, characteristics.

Ref. No. ISO 4190/6-1984 (E)

O 4190/6-1984 (E)

# **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 SO technical committees. Every 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.

Draft International Standards adopted by the technical committees are circulated to the member bodies for approval before their acceptance is International Standards by the ISO Council. They are approved in accordance with ISO procedures requiring at least 75 % approval by the member bodies voting.

International Standard ISO 4190/6 was prepared ISO/TC 178, *Lifts, escalators, passenger conveyors.* 

by Pechnical Committee

# Lifts and service lifts (USA: elevators and dumbwaiters) — Part 6: Passenger lifts to be installed in residential buildings — Rianning and selection

# 1 Scope and field of application

This part of ISO 4190 lays down rules relating to the planning and selection of lift installations for use in residential buildings, in order to ensure adequate service.

It permits, in particular, the number of lifts and their main characteristics to be defined at the very beginning of building design.

Three quality levels are specified for the lift service, based on 60 s, 80 s and 100 s intervals at the main floor, and designated as follows:

- programme 60;
- programme 80;
- programme 100.

This part of ISO 4190 is applicable to standardized lifts of class I for installation in residential buildings.

#### 2 References

ISO 4190/1, Passenger lift installations — Part 1: Lifts of classes I, II and III.

ISO 4190/5, Passenger lifts and service lifts — Part 5: Control devices, signals and additional fittings.

### 3 Definitions

For the purpose of this part of ISO 4190, the definitions given in ISO 4190/1 and ISO 4190/5, together with the following, apply.

**3.1** main floor: Level to which pedestrians normally have access from street level.

If such access to the same lift exists at different levels, the main floor is then the lowest level.

- **3.2 interval at the main floor**: The average time, at the main floor, between two consecutive departures of a car.
- **3.3** handling capacity (of a lift or of a group of lifts): Percentage of the building population that the lift or the group of lifts can transport within a given period of time.
- **3.4 theoretical time of travel**: Theoretical time for the car to make the full journey between the two extreme levels (travel divided by the rated speed).
- up-peak (incoming traffic): Period of the day during which the lifts are used exclusively for the transportation of persons from the main floor to upper floors.

#### 4 General rules

### 4.1 Number of lifts and their characteristics

It is recommended that lift installations be provided in residential buildings having more than three levels above the main floor or if the distance between the main floor and the floor of the highest apartment is greater than 8 m.

The number of lifts and their characteristics should be determined using the diagrams given in annexes A to F. These diagrams have been elaborated on the basis of the following criteria and those given in tables 1, 2 and 3:

- a) period of day: up-peak (incoming traffic);
- b) if only one lift is planned, its rated load has to be at least 630 kg and its rated speed at least 0.63 m/s (see ISO 4190/1, subclause 3.2.2);
- c) in each group of lifts:
  - the rated speed of all lifts has to be at least 1,00 m/s,
  - the rated load of at least one lift has to be 1 000 kg.