

Draft Indian Standard

Lifts for the Transport of Persons and Goods

Part 4 Specifications for Control Devices, Buttons, Signals, Indicators, and Other Fittings

व्यक्तियों और वस्तुओं के परिवहन के लिए लिफ्ट

नियंत्रण उपकरणों, बटनों, सिग्नलों, संकेतकों और अन्य फिटिंग्स के लिए भाग 4 विशिष्टताएँ

FOREWORD

This draft Indian Standard (Part 4) will be adopted by the Bureau of Indian Standards, after the draft finalized by the Lifts, Escalators and Moving Walks Sectional Committee will be approved by the Electrotechnical Division Council.

This Indian Standard is a part of series of Indian Standards on 'Lifts for the transport of persons and goods'. Other parts of this series of standards cover various requirements like specifications for planning and selection, guide for inspection and maintenance of lifts, lifts for special applications, dumbwaiters etc. Parts 1, 2 and 6 of this series of standards are being published as Indian Standards and other parts of this series are under development.

This draft Indian Standard (Part 4) specifies the control devices, buttons and indicators to be provided when a lift is constructed and installed, taking into account the type of control intended for the lift. For ease of access for persons with disabilities (motor and/or sensory), IS 17900 Part 4 Section 7 may be referred to. The description of the controls is given only in order to define the buttons and indicators. It does not constitute a complete description of these controls nor does it attempt to standardize them.

For the purpose of deciding whether a particular requirement of this standard is complied with, the final value, observed or calculated expressing the result of a test, shall be rounded off in accordance with IS 2: 1960 'Rules for rounding off numerical values (revised)'. The number of significant places retained in the rounded off value should be the same as that of the specified value in this standard.

*Draft Indian Standard***Lifts for the Transport of Persons and Goods****Part 4 Specifications for Control Devices, Buttons, Signals, Indicators, and Other Fittings****1 SCOPE**

This draft Indian Standard (Part 4) specifies the control devices, buttons and indicators to be provided when a lift is constructed and installed, taking into account the type of control intended for the lift. For ease of access for persons with disabilities (motor and/or sensory), IS 17900 Part 4 Section 7 may be referred to. The description of the controls is given only in order to define the buttons and indicators. It does not constitute a complete description of these controls nor does it attempt to standardize them.

This part of IS 17900 is applicable to passenger lifts, service lifts, hospital/stretcher lifts, and goods lifts as defined in IS 17900 (Part 1), IS 17900 (Part 2) and National Building Code of India. Group collective lifts have common controls and are electrically interconnected so as to provide a better service and for reasons of economy. The system can be more or less complex according to the number of lifts and the expected traffic. Consequently, this part of IS 17900 does not deal with supplementary signals which the manufacturer may consider useful (for example, “next car”, “stand clear of the doors”).

The following are not dealt with in this part of IS 17900:

- a) special features (and their corresponding signals), such as certain features for improving the service of bed lifts, touch screens or voice activators;
- b) any devices for speeding the traffic in the case of automatic doors (variable time delays according to different criteria, closing button, light ray, etc.).

The requirements of this part of IS 17900 are intended to be followed in all cases where the controls and the basic signals are concerned, and can also be used as a guide in developing supplementary signals.

2 REFERENCES

The standards listed below contain provisions which, through reference in this text, constitute provisions of this standard. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this standard are encouraged to investigate the possibility of applying the most recent editions of these standards.

IS No./ISO publications	Title
SP 7 : 2016	National Building Code of India

17900 (Part 1): 2022	Lifts for the Transport of Persons and Goods: Part 1 Safety Rules
17900 (Part 2): 2022	Lifts for the Transport of Persons and Goods : Part 2 Design Rules, Calculations, Examinations and Tests of Lift Components
IS 17900 (Part 4 , Section 7 :2023)	Requirements of lifts for persons with disabilities (<i>First Revision</i>)
ISO 4196:1984 ISO 80416-2:2001	Graphical symbols — Use of arrows
ISO 7000 : 2019	Graphical symbols for use on equipment — Registered symbols
ISO 7001 : 2023	Graphical symbols — Public information symbols

3 SPECIFICATIONS RELATING TO CONTROLS

3.1 Types of Control Systems

3.1.1 *Down Collective Control (DC)*

With the down collective control (DC), landing calls can be registered whether the car is available.

The calls are registered by pressing the call button provided on each landing. If the car is free or coming down, it will answer the landing call from the highest landing and then the other calls in succession as it approaches the main floor.

The calls registered in the car will be retained at any time and answered in logical sequence according to the direction of travel.

This control can be used when there is no passenger traffic between upper floors — passengers make use of the lift from the main floor to the required floor or vice versa — and when there is no level served below the main floor. It requires one call button per landing. It can be used with a single or group collective lift (*see 1*) and where one or more levels below the main floor level are to be served.

The control shall be DC for the levels above the main floor, but up collective for the levels below the main floor. The precise name for this type of control is *up-distributive/down-collective*.

3.1.2 *Directional (Full) Collective Control (FC)*

This control requires two call buttons on each intermediate landing — one for ascent and another for descent — so that the passengers can indicate the direction in which they wish to travel, with a single button at the terminal landings.

Both landing and car calls registered are answered in logical sequence according to the direction

of travel of the car.

This system is installed when inter-floor traffic is expected during upward and downward travel. It can be used with a single lift or in group collective lifts (*see 1*).

3.1.3 Destination Control Systems (DCS)

For DCS, *see* 8.2.2.2 h) of Part 8/Section 5A of SP 7 and *see* Annex A.

Hybrid destination control (HDCS) combines features of the DCS and conventional control system. For HDCS, *see* 8.2.2.2 h) of Part 8 Section 5A of SP 7.

3.1.4 Lift Group

A lift group is formed of lifts having the management of landing calls in common. Group operation can be provided for DC, FC or DCS controls.

For destination controls using a keypad, *see* 8.2.2.2 h) of Part 8/Section 5A of SP 7 and *see* Annex A.

3.1.5 Other types of controls may include Automatic push button operation, Single push button collective control and Group supervisory control. *See* 8.2.2.2 of Part 8 Section 5A of SP 7.

3.1.6 For additional features of operation systems that may be considered, *see* 8.2.2.3 of Part 8/Section 5A of SP 7.

3.2 Control Devices

3.2.1 On Landings

3.2.1.1 Down collective control

Each landing station shall be provided with at least one call button (no marking required).

If the lift serves floors above and below the main floor, the main floor shall be provided with two call buttons marked with the symbols ▲ and ▼ (*see* Table B.1, 6).

3.2.1.2 Directional full collective control in the two directions of operation

At each intermediate floor, the landing station shall be provided with at least two call buttons, one marked with symbol ▲ and the other with symbol ▼ (*see* Table B.1, 6).

At each terminal landing, the landing station shall be provided with one call button, marked with symbol ▲ or ▼, as appropriate.

For all types of control, if a special device is used to improve accessibility, the international symbol of accessibility shall be used (*see* Table B.1, 10).

3.2.1.3 *Lift group*

Every floor shall be equipped with landing stations having one or two call buttons. The minimum quantity of landing stations shall be:

- a) At least one per face for lifts facing on another (opposite lift),
- b) At least two for a maximum of four adjacent lifts (if the landing station is located between two lifts).


Lift groups containing only one wheelchair-accessible lift shall be equipped with a special button marked with the wheelchair symbol, used to call the wheelchair-accessible lift (*see* Table B.1, 10).

This lift shall be identified by the standard symbol of accessibility (*see* Table B.1, 10).

3.2.1.4 *Buttons* (not applicable to keypads, *see* Annex A)

The following is applicable to landing buttons other than those on keypads.

- a) For call registration, the necessary operating force on the active part of the button shall be not less than 1 N and not more than 5 N, with an operating force of between 2.5 N and 5 N recommended.
- b) The dimension of the active part shall be as follows:
 - 1) the minimum area shall be not less than 280 mm², with a minimum area of not less than 490 mm² recommended;
 - 2) the minimum dimensions shall allow the inscribing of a circle with a diameter not less than 19 mm, with a minimum diameter of 20 mm recommended.

In the case of two buttons, the vertical gap between the active parts shall be not less than 10 mm. The buttons shall be arranged one above the other, with the  button at the top.

- c) The call registration shall be visible and may be audible adjustable between 35 dB(A) and 80 dB(A), with a recommended maximum value of 65 dB(A). In addition, it is permitted to provide a mechanical operating feedback of call registration. The audible signal shall be given on every individual operation of the button even if the call is already registered. It shall be different from other audible signals (for example, hall lanterns) and have its origin located close to the button.
- d) The height from the floor to the centre line of any button shall be between 800 mm and 1 220 mm, with a height of between 800 mm and 1000 mm recommended.
- e) The active part of the button shall be identifiable both visually and by touch from the faceplate.
- f) The faceplate of a landing push button is recommended to be in contrast to its surrounding

background.

- g) For passenger lifts accessible to wheelchair users, the minimal dimension to the vertical axis of the button from any corner, shall be minimum 500 mm.
- h) If markings exist, the size of any symbol shall be 16 mm at the minimum and 40 mm at the maximum, and they shall be in raised relief, have a thickness not less than 1 mm, and be contrasted to their background.



Symbol(s) shall be in either of the two following positions:

- 1) preferably, on the active part of the button;
- 2) on the left of the active part of the button at a distance between 10 mm and 15 mm.

3.2.2 In The Car

3.2.2.1 Operating panel (not applicable to keypads, see Annex A)

The operating panel(s) shall be provided with the following:

- a) One button for each floor (marked -2, -1, 0, 1, 2, etc.);
- b) One alarm button, yellow in colour and with a bell-shaped symbol, or one button with a yellow bell-shaped symbol (see Table B.1, 1) or a HELP button marked with a phone symbol (see Table B.1, 4), with the alarm button being recommended;
- c) One door “re-opening” button (for automatic doors) marked with the symbol  (see Table B.1, 2);
 - Not used---
- d) If required, one door “closing” button (for automatic doors) marked with the symbol  (see Table B.1, 3).

3.2.2.2 Buttons (not applicable to keypads, see Annex A)

The following is applicable to in-car buttons other than those on keypads.

- a) The requirements of 3.2.1.4 a), the first sentence only of b), and c) and e) shall apply;
- b) The minimum gap between two active parts of two floor buttons shall be not less than 10 mm;
- c) The centre line of alarm and door “re-open” buttons shall be located from the floor between 800mm-900mm.
- d) The lowest floor button shall be located above the alarm and “re-open” door button. The vertical gap between alarm, door “re-open” and call buttons shall be not less than twice the distance defined at b).
- e) The highest floor button shall be located at maximum 1 220 mm above the floor. If possible, the upper limit shall be no more than 1 100 mm.

Where car control buttons are provided more than 1 220 mm above the car floor, lift car call sequential step scanning as specified below shall be provided.

Car call sequential step scanning:

Floor selection recommended to be accomplished by applying momentary or constant pressure to one of the two special buttons (up and down scan button).

- The up-scan button shall sequentially select floors above the current floor.
- The down-scan button shall sequentially select floors below the current floor.

When pressure is removed from the up or down scan button for more than 2 s, the last floor selected shall be registered as a car call.

The up and down scan button shall be located adjacent to, or immediately above, the emergency control buttons.

- f) The size of any symbol shall be 16 mm at the minimum and 40 mm at the maximum. It shall be in raised relief, have a thickness not less than 1mm and be contrasted to its surrounding background.

Symbols shall be in either of the two following positions:

- 1) preferably, on the active part of the button;
- 2) on the left of the active part of the button, at a distance between 10 mm and 15 mm.

- g) Exit button (main floor), whose identification shall be provided by either

- 1) a raised relief star on or beside the button at a distance from 10 mm to 15 mm from the button (*see* Table B.1, 11), or
- 2) a green button, raised 5 mm \pm 1 mm above the other buttons, in which case the floor shall be marked.

- h) The order of call buttons shall be

- 1) for a horizontal single row, from left to right,
- 2) for a vertical single column, from the bottom to the top, and
- 3) for multiple rows, from left to right and from the bottom to top.

3.2.2.3 Location of car operating panel

- a) Passenger lift with nominal load < 408 kg

The panel shall be located on the side wall:

- 1) for a centre-opening door, on the either side wall (On right hand side while entering the car recommended);

2) for a side-opening door, on the closing side.

b) Passenger lift with nominal load ≥ 408 kg

The panel shall be located:

for a centre-opening door, on the either side wall (On right hand side while entering the car recommended);

1) for a side-opening door, on the closing side;

2) on the front wall;

3) For passenger lifts accessible to wheelchair users, the minimal dimension to the vertical axis of the button from any corner of the car shall be 400 mm; and

4) For capacities equal to or greater than 1 088 kg and / or car width greater than 1 600 mm, two car operating panels may be provided.

c) Special case for two car entrances

The specifications of 3.2.2.3.1 and 3.2.2.3.2 shall apply for both car entrances.

d) Additional car operating panel

A second car operating panel may be added in accordance with 3.2.2.2 a), b), g) and h).

3.3 Indicators

3.3.1 *On landings*

3.3.1.1 *Destination-Oriented Lift Systems*

For requirements applicable to destination-oriented lift systems, *see* Annex A.

3.3.1.2 *Types of indicators*

Two illuminated indicator arrows giving advanced information on the next departure direction of the car (only one at the terminal landings) shall be placed above or near the doors in a visible position to indicate the direction in which the car will subsequently move.

An audible signal shall accompany the lighting of the arrow.

In the case of a single lift, these requirements can be satisfied by a device in the car visible and audible from the landing.

For a manually operated landing door, an illuminated and audible signal shall inform waiting users that the car is at the floor or is about to stop. The illuminated signal may be assured by one or more transparent vision panels so that the waiting users can see that the car is at the

floor (car permanently illuminated). The audible signal need not be given if a landing call is not registered.

3.3.1.3 *Indicator requirements*

- a) Audible signals where provided, shall have a sound level between 35 dB(A) and 80 dB(A), with a recommended range of 35dB(A) - 55 dB(A), preferably adjustable to the site conditions. The means of the adjustment shall not be accessible to users.
- b) Different audible signals shall be used to indicate *up* and *down* in the case of down collective and directional collective in the two directions:
 - 1) a single sound for *up*;
 - 2) two sounds for *down*.
- c) When landing indicator arrows are used, they shall be located between 1.80 m and 2.50 m above the floor with an angle of vision $140^\circ \pm 10^\circ$.

The minimum height of the arrows shall be 40 mm.

3.3.2 *In the car*

3.3.2.1 *General*

The following shall be provided:

- a) a visible (illuminated) and may be audible position indicator;
- b) an alarm device
- c) an intercom or telephone or similar device when travel exceeds 15m.

With collective control systems there shall be an illuminated indicator to show that the car calls have been registered.

3.3.2.2 *Indicator requirements*

- a) The illuminated signal shall be located above the car-operating panel, and the centre of the indicator shall be positioned between 1.6 m and 1.8 m from the car floor.

The height of the floor number shall be a minimum of 13 mm, with a minimum height of 30 mm recommended, and a maximum of 60 mm, and the indicator shall be of a colour contrasting with its surrounding background.

- b) A second indicator, if required, may be placed above the car door, or on a second car-operating panel.

As an alternative, the indicator in the car-operating panel may be moved to below 1.6 m if an additional indicator is provided at a high level (for example, above the door).

- c) When the car stops, a voice shall indicate in English or / and the local language(s) the car position. The audible signals shall have a sound level between 35 dB(A) and 80 dB(A), with the recommended value of 50 dB(A), adjustable to suit the site conditions.

For the lift with a maximum of six stops and a maximum speed of 1 m/s, as an alternative, voice announcements may be replaced by sounds as the car passes or stops at a floor served by the lift; however, this is less convenient.

- d) The car shall have one alarm device (two-way communication system) permanently connected to a safety organization according to the following.

- 1) The device shall ensure voice communication in both directions with an organization in charge of passenger rescue or the person in charge of the safety of the building.

NOTE — As an aid to communication, an induction loop can assist people with impaired hearing. In this case, the availability of the induction loop is shown in the car by the symbol “induction loop” — audio frequency induction loop system (AFILS). *See* Table B.1, 9.

- 2) A permanent operating force shall not be necessary to send the alarm.
- 3) The device shall provide visual and audible information feedback for passengers confirming:
- I. alarm sent, using a “bell” symbol (*see* Table B.1, 1), and
 - II. alarm received, voice communication established, using the “communication established” symbol (*see* Table B.1, 8).

3.3.3 Optional indicators

On the landings, an illuminated “out of use” signal of minimum diameter 25 mm (*see* Table B.1, 5) and in the car an illuminated “overload” signal (*see* Table B.1, 7) may be provided.

4.0 Handrail

It is recommended to provide handrails in the lift as per below specifications.

On both sides and rear of the lift car, handrails may be installed which are slip resistant & with round ends. The gripping of the handrail shall have a circular section with minimum circumscribed diameter of 38 mm and a maximum of 50 mm. The free space between the wall and the gripping part shall be 40-60 mm from the walls; 40 min. for smooth wall surfaces and 60 min. for rough wall surfaces. Handrail surface should be free of any sharp or abrasive elements. The height of the top edge of the gripping part should be within 800 to 900 mm from the finished car floor level. It should have

continuous gripping surface without interruptions or obstructions. The handrail may be interrupted where the car operating panel is located in order to avoid obstructing buttons or controls and be allowed to have a gap of 150 mm or less if it is not continuous.

Annex A

(Normative)

(Clauses 3.1.3, 3.1.4, 3.2.1.4, 3.2.2.1, 3.2.2.2, 3.3.1.1 and Annex B)

Special systems

A-1 GENERAL

If a lift is in a location where the user can be instructed in the method of use, for example, in an office building, a special system may be provided:

- a) the keypad system;
- b) the destination-oriented lift system.

This annex gives the requirements applicable only to these systems, replacing or additional to those given in 3.2.1.4, 3.2.2.1, 3.2.2.2, and 3.3.1, except where noted.

A-2 KEYPAD SYSTEMS

A-2.1 General

The following replace the requirements given in 3.2.1.4.

- a) The arrangement of the numbered keys shall be according to the standard telephone type, *see* Fig. A.1;
- b) The operating force for the button shall be not less than 1 N and not more than 5 N, with an operating force of not less than 2.5 N and not more than 5 N recommended;
- c) The minimum dimension of the active part shall be as follows;
 - 1) a minimum area of not less than 280 mm², with a minimum area of not less than 490 mm² recommended;
 - 2) the minimum dimension of the active part of the button shall allow the inscribing of a circle with a diameter not less than 19 mm, with a minimum dimension of 20 mm recommended.

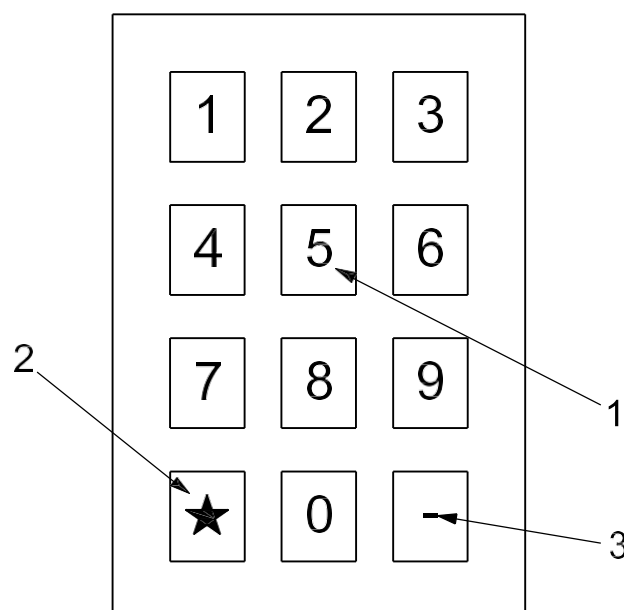
The vertical and horizontal distance between the active parts shall be not less than 10 mm. For inclined keypads the distance may be reduced to 5 mm.

- d) The user shall be able to know that the button has been operated by perceivable movement of the button and an audible signal that shall be given on every individual operation of a

button. The call registration shall be confirmed by a visible and verbal signal, adjustable between 35 dB(A) and 80 dB(A), with a maximum of 65 dB(A) recommended, even if the call is already registered;

- e) The height from floor level to the centre line of any button shall be between 800 mm and 1 220 mm, with a height of between 800 mm and 1 100 mm recommended;
- f) The active part of the button shall be easily identifiable visually and by touch;
- g) The face plate of a keypad shall be in contrast to its surrounding background;
- h) For passenger lifts accessible to wheelchair users, the buttons shall be accessible by parallel approach of the wheelchair travel. The recommended distance to the centre line of any of the buttons from any wall or door at right angles is 500 mm minimum;
- j) The height of the symbol shall be a minimum of 13 mm, with a height of 15 mm recommended, a maximum 40 mm, and shall be contrasted to the background;
- k) The number 5 key shall have a single raised dot. The dot shall have a base diameter of $3^{+0.5}$ mm and a dot height of between 0.6 mm and 0.9 mm;
- m) Any additional symbol shall be in raised relief with a thickness of not less than 0.8 mm and contrasted to its surrounding background;
- n) Numbers and symbols shall be on the active part of the button; and
- p) The button for the exit floor (lowest row, left column) shall be a green button raised above the other buttons $5 \text{ mm} \pm 1$ or marked with a raised relief star (*see* Table B.1, 11).

Key





- a) dot
- b) green button raised above the other buttons $5 \text{ mm} \pm 1 \text{ mm}$ or marked with a raised relief star
- c) minus sign in raised relief

Fig. A.1 — Keypad arrangement

A-2.2 Keypads Used in Operating Panels (replaces 3.2.2.2)

A-2.2.1 When a keypad system is used in the car, the car-operating panel shall include the following:

- a) keypad;
- b) one alarm button, yellow in colour and with a bell-shaped symbol, or one button with a yellow bell-shaped symbol (*see* Table B.1, 1) or a HELP button marked with a phone symbol (*see* Table B.1, 4), with the alarm button being recommended;
- c) one door “re-opening” button (for automatic doors) marked with the symbol  (*see* Table B.1, 2);
- d) one stopping device (if required by the safety standards in force), red and marked with the word “STOP”, (*see* Table B.1, 12);
- e) If required, one door “closing” button (for automatic doors) marked with the symbol  (*see* Table B.1, 3).

A-2.2.2 Keypads located within the car shall meet the following requirements.

- a) The requirements of A.2.1 a), b), c), d) e), f), g), j), k), m), n) and p) apply.
- b) The centre line of alarm and door open buttons shall be located from the floor between 800mm – 900mm. This also applies to a door-closing button where such a button is provided.
- c) The exit button shall be raised $5 \text{ mm} \pm 1 \text{ mm}$ more than the other buttons and shall preferably be green or marked with a raised relief star (*see* Table B.1, 11).

A-2.2.3 The keypad, the alarm button and door re-open buttons shall normally be placed on the side wall.

If the car dimensions do not allow a wheelchair user to turn, they shall be located as follows:

- a) for centre-opening doors, on the right hand side when entering the car;
- b) for side-opening doors, on the closing side.

However, if the car dimensions *do* allow a wheelchair user to turn, the keypad, the alarm button and door re-open buttons may be placed on the front wall.

Lateral space between the centre line of any buttons to a corner in the car shall be a minimum of 400 mm.

A-3 DESTINATION-ORIENTED LIFT SYSTEM

A-3.1 General

This is a lift system that provides landing controls for selecting destination floors, lobby indicators designating which elevator to board, and a car indicator designating the floors at which the car will stop.

A-3.2 On the landing

The device or input terminal used to register the destination floor shall be in accordance with 3.2.1.4 and 3.2.2.2 g) and h). With a keypad system, it shall be in accordance with A.2.1. The location of the registering destination system shall be easily identifiable by all users. The minimum quantity of devices per floor shall be as per the expected peak traffic and the permissible queue or subject to a minimum as follows:

- a) one per face for lifts facing each other (opposite lifts);
- b) one for a maximum of four adjacent lifts, if the control device is located between two lifts.

NOTE— Placing the DCS input terminal at the conventional location impacts the effectiveness of DCS and should be avoided at the main entry floors and if possible, on other floors

A-3.3 Assigned Car Device

A-3.3.1 *Near device registering destination floor*

The selected floor number shall be confirmed with a visible and audible signal, automatically or manually activated.

This indicator shall be close to the registering destination device, the height of the information shall be between 30 mm and 60 mm, and it shall be of a colour contrasting to its surrounding background.

The audible signal shall indicate in English or/and the local language(s) the car designation and the direction of the car. The sound level of the information shall be adjustable and adjusted to site conditions, between 35 dB(A) and 80 dB(A), with a maximum of 65 dB(A) recommended.

The audible signal may be activated by pressing the function button identified by the symbol of accessibility (*see* Table B.1, 10). This symbol shall be in raised relief not less than 0.8 mm

or have a tactile indication by means of three raised dots (0.6 mm to 0.9 mm height, diameter 0.8 mm), spaced 6 mm at base diameter, in the form of an equilateral triangle. The function button shall be located immediately below the keypad arrangement or floor buttons.

A-3.3.2 At each landing door level

Visible and audible information shall be provided on each lift of the bank to indicate the car designation and direction of the car.

- The visible information shall be located between 1.80 m and 2.50 m above the floor with an angle of vision $140^\circ \pm 10^\circ$. The height of the information shall be a minimum of 40 mm.
- Audible signals shall have a sound level between 35 dB(A) and 80 dB(A), with a maximum of 65 dB(A) recommended, adjustable to the site conditions. The means of the adjustment shall not be accessible to users. The audible tone and verbal announcement shall be the same as those given at the call button or call button keypad, if provided.
- In addition, a tactile and visible lift car and level identification shall be provided on both sides of the landing frame, centred at 1 500 mm above the floor measured from the centre line of the characters.
- The upper character shall give the floor number, with a raised star for the main floor; the lower character, the car identification.
- The characters shall be 50 mm high with raised relief marking, of width $6 \text{ mm} \pm 1 \text{ mm}$ and thickness $1^{+0.5}$ mm, and shall be contrasted with the background.
See Figure A.2.

NOTE— This tactile and visible lift level identification can also be used for lifts according to 3.1.1, 3.1.2 and 3.1.3.

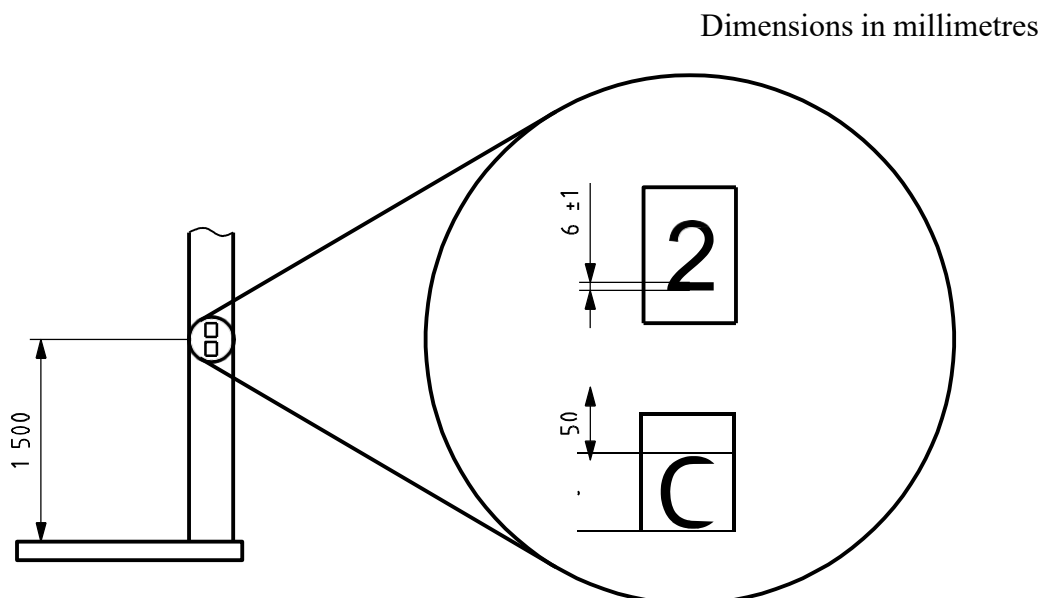




Fig. A.2 — Symbol characteristics

A-3.4 In the car

The following shall be provided.

- a) Car position indicator (audible and visible):
 - 1) The illuminated signal shall be located above the car-operating panel, and the centre of the indicator shall be positioned between 1.60 m and 1.80 m from the car floor;
 - 2) The height of the floor number shall be a minimum of 13 mm, with a minimum height of 30 mm recommended, and at a maximum of 60 mm, and the indicator shall be of a colour contrasting with its surrounding background; and
 - 3) When the car stops, a voice shall indicate in English or /and the local language(s) the car position. The audible signals shall have a sound level between 35 dB(A) and 80 dB(A), with the recommended maximum being 65 dB(A), adjustable to suit the site conditions.
- b) One alarm button, yellow in colour and with a bell-shaped symbol, or one button with a yellow bell-shaped symbol (*see* Table B.1, 1) or a HELP button marked with a phone symbol (*see* Table B.1, 4), with the alarm button being recommended;
- c) One door “re-opening” button (for automatic doors) marked with the symbol ◀▶ (*see* Table B.1, 2); and
- d) A display shall be provided in the car with visible indicators to show registered car destination. It shall be possible for a passenger to verify the registered destinations before entering the car. The visible indication shall extinguish when the car arrives at the designated floor.

A standard five-pointed star (*see* Table B.1, 11), may be used to indicate the main entry floor. A special device may be used to initiate the voice announcement when needed.

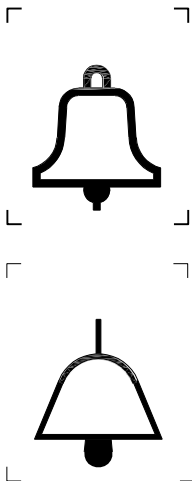
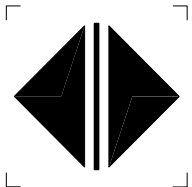
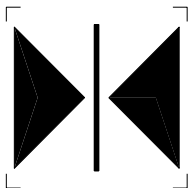
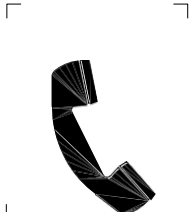
Annex B
(Normative)

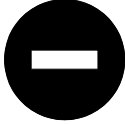






Representative symbols

The symbols used shall be approximately as shown in Table B.1. These are only typical and need not be reproduced exactly.

Table B.1 Representative Symbols

(Clauses 3.2.1.1, 3.2.1.2, 3.2.1.3, 3.2.2.1, 3.2.2.2, 3.3.2.2.4, 3.3.3, Annex A and Annex B)

Sl No.	Term	Description	Symbol
(1)	(2)	(3)	(4)
1	Alarm button	Bell-shaped symbol (ISO 7000) or simple bell	
2	Door re-opening button	Stylized arrows ^a	
3	Door closing button	Stylized arrows ^a	
4	Telephone	Stylized receiver/handset symbol (ISO 7001)	

5	“Not in use” signal	Red disc with white line similar to “Do not enter” sign	
6	Direction indication on call button indicator arrows direction arrows	Stylized arrows ^a	
7	Overload indicator	Stylized balance dial	
8	“Communication established” indicator	Stylized communication in green	
9	“Induction loop” (AFILS) indicator	Standard AFILS symbol in light blue	
10	Accessibility	International symbol of accessibility in blue	
11	Star	Stylized star	

NOTE —

a - Non-stylized arrows or arrow symbols according to ISO 7000 or ISO 4196 may also be used.