

# Lifts and service lifts —

## Part 7: Specification for manual control devices, indicators and additional fittings

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## Foreword

This Part of BS 5655 has been prepared under the direction of the Mechanical Engineering Standards Committee.

It is the seventh Part of a British Standard relating to lifts and service lifts, which will be progressively published to supersede portions of BS 2655. The complete standard will comprise the following Parts.

- *Part 1: Safety rules for the construction and installation of electric lifts (implementing EN 81/1), together with PD 6500, “Explanatory supplement to BS 5655-1”;*
- *Part 2: Specification for hydraulic lifts;*
- *Part 3<sup>1)</sup>: Safety rules for the construction and installation of electric service lifts (will implement EN 81/3);*
- *Part 4<sup>1)</sup>: Safety rules for the construction and installation of hydraulic service lifts (will implement EN 81/4, if published);*
- *Part 5: Specification for dimensions of standard electric lift arrangements (implementing ISO 4190/1 and ISO 4190/3);*
- *Part 6<sup>2)</sup>: Code of practice for lifts;*
- *Part 7: Specification for manual control devices, indicators and additional fittings (implementing ISO 4190/5);*
- *Part 8: Specification for eyebolts for lift suspension;*
- *Part 9<sup>2)</sup>: Specification for guide rails (will implement ISO 7465).*

Subsequent Parts will deal with testing, inspection, etc;

This Part implements the technical requirements of ISO 4190/5-1983 “Passenger lifts and service lifts” — Part 5: “Control devices, signals and additional fittings”, published by the International Organization for Standardization (ISO).

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### Summary of pages

This document comprises a front cover, an inside front cover, pages i and ii, pages 1 to 6, an inside back cover and a back cover.

This standard has been updated (see copyright date) and may have had amendments incorporated. This will be indicated in the amendment table on the inside front cover.

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<sup>1)</sup> Not yet in course of preparation.

<sup>2)</sup> In course of preparation.

## 1 Scope

This Part of BS 5655 specifies essential features for manual control devices and indicators to be provided when lifts are constructed and installed, taking into account the type of control system adopted. The requirements for three basic types of control system are specified; guidance on the provision of additional manual controls and indicators for these and other control systems is given in appendix A.

The standard also specifies minimum requirements for handrails and for the identification of telephones installed in lift cars.

NOTE The titles of the publications referred to in this standard are listed on the inside back cover.

## 2 Control devices and indicators

The various devices to be provided for users to operate the lift and the indicators to indicate to users the functioning of the lift shall be as specified in the following tables.

Table 1 for lifts under single push button control

Table 2 for lifts under down collective control

Table 3 for lifts under full collective control

NOTE 1 The three types of control systems mentioned above are described in detail in BS 5655-6<sup>3)</sup>.

NOTE 2 The requirements listed in Table 1, Table 2 and Table 3 are basic to the control system employed. Additional manual controls or supplementary indicators may be installed according to the complexities of grouped installations etc. Appendix A briefly describes a few of these special features.

## 3 Symbols

**3.1 Alarm.** The image content of the alarm symbol shall be a bell in side view, similar to that shown in Figure 1.

NOTE Symbol number 417-IEC-5013-a in BS 6217 meets this requirement.

**3.2 Door re-open.** The image content of the door re-open symbol shall be two isosceles triangles arranged with their bases adjacent to a vertical line, similar to that shown in Figure 2.

NOTE The included angle at the apex of the triangle should be  $\geq 45^\circ$  and  $\leq 60^\circ$ .

**3.3 Telephone or intercom.** The image content of the symbol to indicate presence of telephone, etc. shall be a telephone receiver in profile, similar to that shown in Figure 3.

NOTE Symbol number 417-IEC-5090-a in BS 6217 or sheet number 008 in BS 6034 meets this requirement.

**3.4 Down and up direction.** The image content of the symbol to indicate direction of lift movement shall be an isosceles triangle with its acute apex pointing in direction of travel, similar to those shown in Figure 4 and Figure 5.

NOTE The included angle at the apex of the triangle should be  $\geq 45^\circ$  and  $\leq 60^\circ$ .

## 4 Dimensions of legends

**4.1 Symbols.** The size of the symbols used on the control devices and indicators shall be such that the symbol is clear and legible.

**4.2 Characters.** The size of the characters used on the control devices and indicators shall be as follows:

- a) capital letters and numerals: not less than 10 mm;
- b) lower case letters: not less than 7 mm.

## 5 Position of manual control devices

NOTE Within the limits specified below, the arrangement of the controls is at the discretion of the lift manufacturer. However, it is recommended that the alarm button in the car should always be situated at the top.

**5.1** The highest control device shall be located no higher than 1 800 mm above floor level.

**5.2** When control devices are installed for independent use by disabled persons in wheelchairs these devices shall be located between 900 mm and 1 200 mm above floor level. Such devices in the car, including alarm button, shall be placed on a side wall at a distance of at least 400 mm from the front and back walls. If the doors are side opening, the controls shall be placed on the wall adjacent to that onto which the doors close.

## 6 Hand rail

**6.1** When hand rails are provided in the car at least one shall be mounted on a side wall. If the doors are side opening the handrail shall be placed on the wall adjacent to that onto which the doors close.

**6.2** The top of the handrails shall be approximately 900 mm above floor level and shall be spaced not less than 20 mm from the wall.

NOTE Further guidance on the provision of handrails for ambulant disabled persons is given in BS 5810.

<sup>3)</sup> In course of preparation.

**Table 1 — Single push button control: summary of control devices and indicators**

	Requirement	Legend
1) Control devices on landings	a) one call button on each landing	—
2) Indicators on landings	a) a sign which is illuminated when lift is in use b) a sign which remains illuminated when car is about to stop, and has stopped, at landing (see note 1)	— —
3) Control devices in car	a) one button for each floor b) one alarm button c) one “door re-open” button (see note 2) d) one stop device coloured red (see note 3)	– 2, – 1, 0, 1, 2, 3 etc. Symbol in accordance with <b>3.1</b> Symbol in accordance with <b>3.2</b> “STOP”
4) Indicators in car	a) an illuminated position indicator (see note 4) b) a sign to indicate presence of an enclosed telephone or intercom (see note 3)	– 2, – 1, 0, 1, 2, 3 etc. Symbol in accordance with <b>3.3</b>
NOTE 1 Applicable only to lifts with manually operated doors without vision panels.		
NOTE 2 Applicable only to lifts with automatically operated doors.		
NOTE 3 Applicable only to lifts which do not have imperforate doors.		

**Table 2 — Down collective control: summary of control devices and indicators**

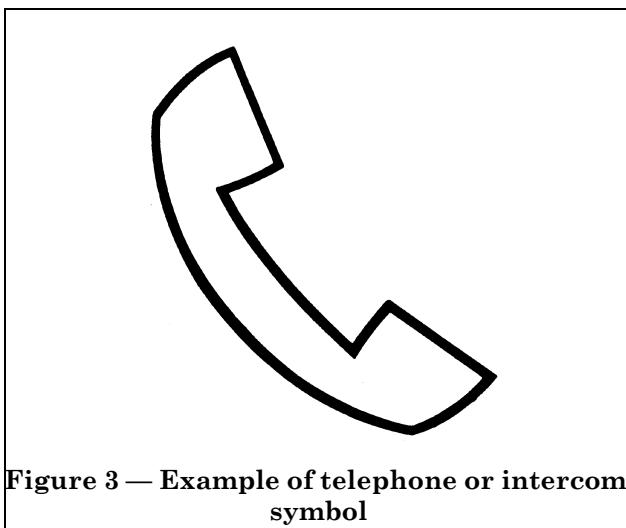
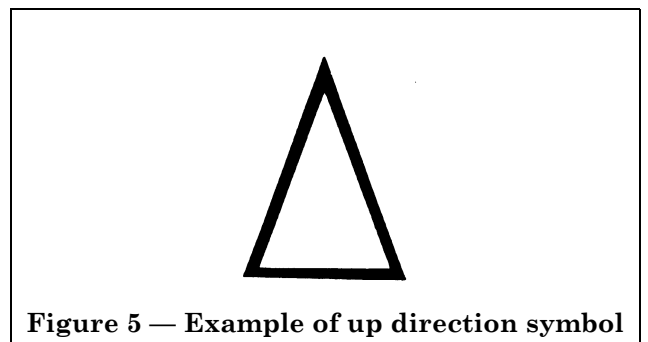
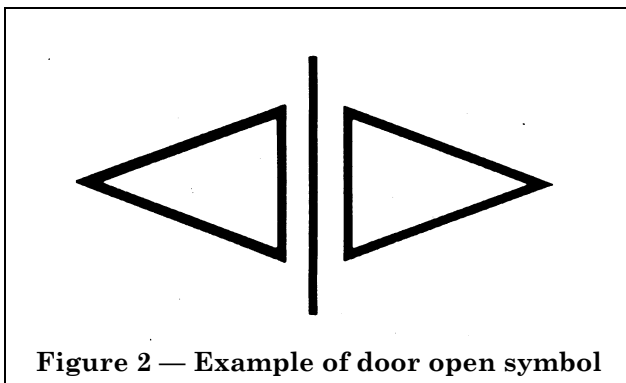
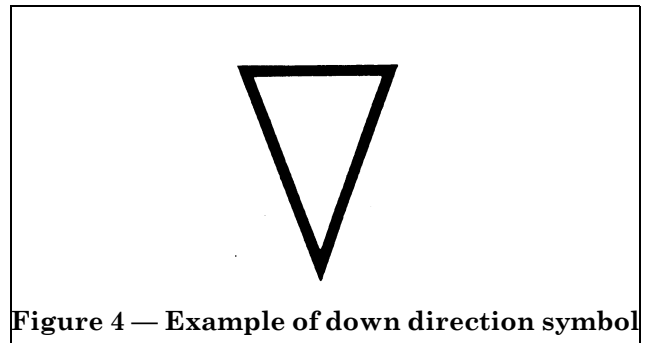
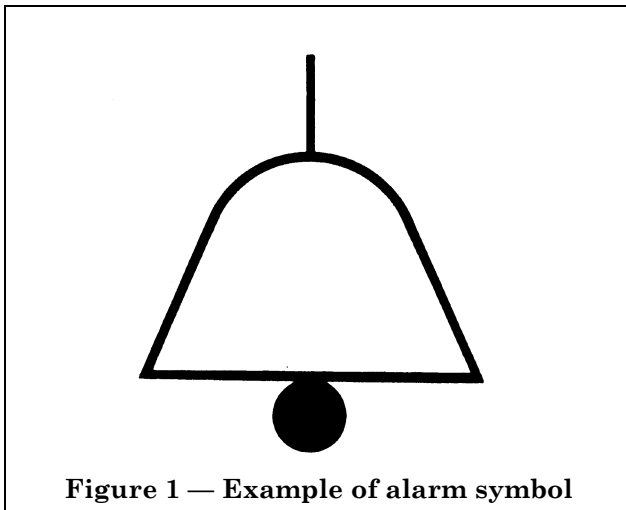
	Requirement	Legend
1) Control devices on landings	a) one call button on all landings above main floor level b) on main landing, either: i) one call button, or ii) two call buttons (see note 1) c) one call button on all landings below main floor level (see note 2)	∇ symbol in accordance with 3.4  Δ symbol in accordance with 3.4 ∇ and Δ symbols in accordance with 3.4 Δ symbols in accordance with 3.4
2) Indicators on landing	a) an illuminated sign to indicate that call has been registered and will be answered b) two illuminated signs to indicate next departure direction (only one at terminal landings) (see note 3) c) a sound signal to accompany lighting of signs (b) above (except where such sound would cause major inconvenience) d) a sign which remains illuminated when car is about to stop, and has stopped, at landing (see note 4)	∇ and Δ symbols in accordance with 3.4
3) Control devices in car	a) one push button for each floor b) one alarm button c) one “door re-open” button (see note 5) d) one stop device coloured red (see note 6)	– 2, – 1, 0, 1, 2, 3 etc. Symbol in accordance with 3.1 Symbol in accordance with 3.2 “STOP”
4) Indicators in car	a) an illuminated sign to indicate the car calls registered b) an illuminated position indicator c) two illuminated signs to indicate next departure direction (see note 7) d) a sign to indicate the presence of an enclosed telephone or intercom (if fitted)	– 2, – 1, 0, 1, 2, 3 etc. ∇ and Δ symbol in accordance with 3.4 Symbol in accordance with 3.3

- NOTE 1 Applicable only if there is access to lower floors, e.g. basement garage.  
 NOTE 2 Applicable only if there is access from lower floors.  
 NOTE 3 These signs may be omitted when automatic doors are fitted, provided the signs 4c are fitted in the car.  
 NOTE 4 Applicable only to lifts with manually operated doors without vision panels.  
 NOTE 5 Applicable only to lifts with automatically operated doors.  
 NOTE 6 Applicable only to lifts which do not have imperforate doors.  
 NOTE 7 If the option suggested in note 3 is adopted these signs should be located in such a position that they are visible from the landing.

Table 3 — Full collective control: summary of control devices and indicators

	Requirement	Legend
1) Control devices on landings	a) two call buttons (see note 1) on each intermediate landing b) one call button at each terminal level	∇ and Δ symbols in accordance with 3.4 ∇ or Δ symbol in accordance with 3.4
2) Indicators on landings	a) an illuminated sign to indicate that call has been registered and will be answered b) two illuminated signs to indicate next departure direction (one only at terminal landings) (see note 2) c) a sound signal to accompany lighting of sign (b) above (except where such sound would cause major inconvenience) d) a sign which remains illuminated when car is about to stop, and has stopped, at landing (see note 3)	∇ and Δ symbols in accordance with 3.4
3) Control devices in car	a) one button for each floor b) one alarm button c) one “door re-open” button (see note 4) d) one stop device coloured red (see note 5)	– 2, – 1, 0, 1, 2, 3 etc. Symbol in accordance with 3.1 Symbol in accordance with 3.2 “STOP”
4) Indicators in car	a) an illuminated sign to indicate the car call has registered b) an illuminated position indicator c) two illuminated signs to indicate next departure direction (see note 6) d) a sign to indicate the presence of an enclosed telephone or intercom (if fitted)	– 2, – 1, 0, 1, 2, 3 etc. ∇ and Δ symbols in accordance with 3.4 Symbol in accordance with 3.3
NOTE 1 Or two groups in parallel for each group of lifts. NOTE 2 These signs may be omitted when automatic doors are fitted, provided the signs 4c are fitted in the car. NOTE 3 Applicable only to lifts with manually operated doors without vision panels. NOTE 4 Applicable only to lifts with automatically operated doors. NOTE 5 Applicable only to lifts which do not have imperforate doors. NOTE 6 If the option suggested in note 2 is adopted these signs should be located in such a position that they are visible from the landing.		

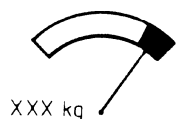




## Appendix A Additional manual controls and supplementary indicators

**A.1 Group collective control.** This British Standard specifies basic requirements for simple collective control lifts. Lifts arranged in groups can be more complex according to the number of lifts and the expected traffic. In such conditions the lift manufacturer may consider it useful to provide additional supplementary signs such as “next car”, “stand clear of the doors”, etc. (see **A.3.2**).

**A.2 Goods lifts.** If it is considered necessary to provide an overload warning on any lift, particularly goods lifts, an illuminated indicator (and even an audible indication also) should be provided. The symbol on the indicator should be similar to that shown below:




## A.3 Other special features

**A.3.1 General.** Some lift installations may require additional special manual controls and corresponding indicators to suit the peculiarities of the control system adopted. Many of the more common control systems and the special control features required are fully described in BS 5655-6<sup>4</sup>.

**A.3.2 Legends.** The legends used on these special features should follow the principles adopted in this standard.

Examples:

- a) if it is required to provide a “close door” button it should be identified with a symbol which is the reverse of that specified in **3.2**, i.e.  $\triangleright|\triangleleft$
- b) if it is required to provide an illuminated indication that a particular lift is not in use the “no entry” road sign should be used, i.e. , a red circular disc with a white horizontal bar.

<sup>4</sup>) In course of preparation.

## Publications referred to

BS 5655, *Lifts and service lifts*.

BS 5655-6, *Code of practice for lifts*<sup>5)</sup>.

BS 5810, *Code of practice for access for the disabled to buildings*.

BS 6034, *Specification for public information symbols*.

BS 6217, *Guide to graphical symbols for use on electrical equipment*.

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<sup>5)</sup> In course of preparation.

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