

Specification for

Lifts, escalators, passenger conveyors and paternosters —

**Part 6: Building construction
requirements**

Co-operating organizations

The Mechanical Engineering Industry Standards Committee, under whose supervision this British Standard was prepared, consists of representatives from the following Government departments and scientific and industrial organizations:

Associated Offices' Technical Committee*	Gas Council
Association of Consulting Engineers	Institution of Civil Engineers
Association of Mining Electrical and Mechanical Engineers	Institution of Gas Engineers
Board of Trade	Institution of Heating and Ventilating Engineers
British Chemical Plant Manufacturers' Association	Institution of Mechanical Engineers*
British Compressed Air Society	Institution of Mechanical Engineers (Automobile Division)
British Electrical and Allied Manufacturers' Association*	Institution of Production Engineers
British Gear Manufacturers' Association	Locomotive and Allied Manufacturers' Association of Great Britain
British Internal Combustion Engine Manufacturers' Association	London Transport Board*
British Mechanical Engineering Confederation*	Machine Tool Trades Association
British Pump Manufacturers' Association	Ministry of Defence
British Steel Industry	Ministry of Defence, Army Department
Crown Agents for Oversea Governments and Administrations	Ministry of Public Building and Works*
Department of Employment and Productivity (H.M. Factory Inspectorate)*	Ministry of Technology*
Electricity Council, the Central Electricity Generating Board and the Area Boards in England and Wales	Ministry of Technology — National Engineering Laboratory
Engineering Equipment Users' Association*	Ministry of Transport
	National Coal Board
	National Physical Laboratory (Ministry of Technology)
	Royal Institute of British Architects

The Government departments and scientific and industrial organizations marked with an asterisk in the above list, together with the following, were directly represented on the committee entrusted with the preparation of this British Standard:

British Railways Board	Fire Offices' Committee
Department of Health and Social Security	Greater London Council
Draughtsmen's and Allied Technician's Association	Institution of Electrical Engineers
Electrical Trades Union	Institution of Municipal Engineers
Engineers Surveyors' Association	Ministry of Housing and Local Government
Federation of Wire Rope Manufacturers of Great Britain	National Association of Lift Makers
	Post Office
	Retail Trading Standards Association

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Foreword

This British Standard, prepared under the authority of the Mechanical Engineering Industry Standards Committee, is a revision of and supersedes the 1958 edition of BS 2655, which was entitled “*Electric lifts*”.

The new title reflects the extension of the scope of this British Standard. Amendments to Parts 2 and 3 have been published, and implement the change in title. The revised Part 1 and additional new parts are being published separately and, together with Parts 2 and 3, are as follows:

Part 1: General requirements for electric, hydraulic and hand-powered lifts. This part is basically a revision of the 1958 edition of BS 2655-1¹⁾, without the building requirements and list of definitions, and extended to cover the engineering and safety requirements for new hydraulic and hand-powered lifts as well as for new electric lifts.

Part 2: Single speed Polyphase induction motors for driving lifts. This part covers the type of electric motor specially designed for driving lifts. It should be used in conjunction with BS 2613²⁾ and gives additional requirements, including the class of lift rating and special limits of temperature rise.

Part 3: Arrangements of standard electric lifts. This part gives standard dimensions for lift wells and machine rooms in relation to lift capacity and platform sizes, for seven classes of lifts.

Part 4: General requirements for escalators and passenger conveyors. This part specifies engineering and safety requirements for escalators and passenger conveyors. The latter may be described as machines in which the passenger carrying surface remains parallel to the direction of motion and is uninterrupted.

Part 5: General requirements for paternosters. This part specifies engineering and safety requirements for paternosters, which may be described as machines where series of cars are continuously running in closed loops and are characterized by the car floors remaining substantially horizontal when the direction of motion is reversed at the extremities of car travel.

Part 6: Building construction requirements. This part specifies structural and fire resistance requirements for the equipment covered by Parts 1, 4 and 5.

Part 7: Testing and inspection. This part specifies tests, examination and certification of new and modified equipment covered by Parts 1, 4 and 5.

Part 8: Modernization or reconstruction of lifts, escalators and paternosters. This part specifies engineering and safety requirements.

Part 9: Definitions. This part gives definitions of terms used in the remainder of the standard.

Part 10: General requirements for guarding. This part specifies requirements for the guarding of moving parts and protection against hazards from electrical equipment. It relates to equipment covered in Parts 1, 4 and 5.

CP 407:1972. British Standard Code of Practice for electric, hydraulic and hand-powered lifts.

The code gives general information and guidance for planning, purchasing, installation and maintenance of passenger, goods and service lifts.

In case of difficulty in classifying any equipment in accordance with the headings of Parts 1, 4 and 5, reference should be made to the relevant definitions in Part 9.

This Part 6 of the standard applies to the building construction requirements for the equipment covered by Parts 1, 4 and 5. Those clauses of the text which relate to powered lifts are based on Appendix B of the 1958 edition of BS 2655-1, with the following broad change. The requirements for top clearances and bottom overtravel, formerly part of Appendix B, are now transferred to the main body of Part 1 of the standard.

¹⁾ BS 2655, “*Electric lifts*” — Part 1: “*General Requirements*”.

²⁾ BS 2613, “*The electrical performance of rotating electrical machinery*”.

The building requirements for the equipment covered by the standard have been brought together under one cover because of their interest to the architect or other person responsible for specifying the details of building construction. This last mentioned function is not, of course, the prime responsibility of the equipment manufacturer.

In covering the building construction requirements for escalators it has been borne in mind that, apart from their use by public transport undertakings, they are finding increasing application in shops and department stores. In the latter case they are frequently supplied by the manufacturers as complete units, with such items as machinery and control compartments forming an integral part of the escalator. This contrasts with the former case in which a machine room is provided.

Throughout this standard the metric and imperial systems are used side by side, but it is important that each contract shall use either the metric system throughout or the imperial system throughout. A mixture of the two may lead to complications, particularly in relation to ratings of lifts and lift speeds.

Section 2 of this Part of this standard is rendered obsolescent concurrently with the publication of BS 5655 “*Lifts and service lifts*” — Part 1:1979 “*Safety rules for the construction and installation of electric lifts*” and Part 2:1983 “*Specification for hydraulic lifts*”, under the implementation conditions stated in those standards.

The relevant requirements of section 2 of BS 2655-6:1970 remain current only

- 1) when applied to service lifts, hand-powered lifts, paternosters, escalators and passenger conveyors as specified in sections 3, 4, 5 and 6 and when specific clauses in section 2 are invoked in those sections;
- 2) when required for the future maintenance and inspection of existing electric or hydraulic installations constructed in accordance with BS 2655.

Although BS 2655-4:1969 “*General requirements for escalators and passenger conveyors*” has also been made obsolescent by the publication of BS 5656 “*Safety rules for the construction and installation of escalators and passenger conveyors*” the building requirements specified in section 6 are still relevant pending the transfer of those requirements to a specification related to BS 5656.

A British Standard does not purport to include all the necessary provisions of a contract. Users of British Standards are responsible for their correct application.

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

Summary of pages

This document comprises a front cover, an inside front cover, pages i to iv, pages 1 to 9 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.