

Specification for

Lifts, escalators, passenger conveyors and paternosters —

**Part 8: Modernization or reconstruction
of lifts, escalators and paternosters**

UDC 621.876

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

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
County Councils Association	Greater London Council
Department of Health and Social Security	Institution of Electrical Engineers
Electrical, Electronic, Telecommunications, Plumbing Trades Union, EET/PTU	Institution of Municipal Engineers
Engineers Surveyors' Association	Mechanical Handling Engineers' Association
Federation of Wire Rope Manufacturers of Great Britain	National Association of Lift Makers
	Post Office
	Retail Trading Standards Association

This British Standard, having been approved by the Mechanical Engineering Industry Standards Committee, was published under the authority of the Executive Board on 19 March 1971

© BSI 06-1999

The following BSI references relate to the work on this standard:
Committee reference MEE/49
Draft for comment 70/3855

ISBN 580 06468 9

Amendments issued since publication

Amd. No.	Date	Comments
1575	October 1974	
3019	May 1979	Indicated by a sideline in the margin

Contents

	Page
Co-operating organizations	Inside front cover
Foreword	ii
1 Scope	1
2 Electric lifts	1
3 Hydraulic lifts	5
4 Escalators	8
5 Paternosters	9
Appendix A Check list for the major modernization or reconstruction of electric lifts	10
Appendix B Check list for the major modernization or reconstruction of hydraulic lifts	12

Foreword

In order to keep abreast of progress in the industries concerned, British Standards are subject to periodical review. Suggestions for improvements will be recorded and in due course brought to the notice of the committees charged with the revision of the standards to which they refer.

A complete list of British Standards, numbering over 9,000, fully indexed and with a note of the contents of each, will be found in the BSI Catalogue which may be purchased from BSI Sales Department. The Catalogue may be consulted in many public libraries and similar institutions.

This British Standard, prepared under the authority of the Mechanical Engineering Industry Standards Committee, is a revision of and supersedes the 1965 edition of BS 2655, which was entitled "Electric lifts".

The new title reflects the extension of the scope of this British Standard. An amendment to Part 2 of this standard has been published, and implements the change in title. The revised Parts 1 and 3 and additional new Parts are being published separately and, together with Part 2, 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 2655-1, 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 2613¹⁾ 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, speed and car internal 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 surfaces remain parallel to the direction of motion and are 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 axle 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.

CP407:1972, *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.

¹⁾ BS 2613, "The electrical performance of rotating electrical machinery".

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 specifies engineering and safety requirements relevant to the modernization or reconstruction of lifts, escalators and paternosters, and is the first issue of BS 2655 which covers this aspect.

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

Such modernization or reconstruction of existing lifts as is commissioned before 31 May 1984, for use in existing buildings that were built before 31 May 1979, are permitted to be in accordance with either this standard or BS 5655-1. After 31 May 1984, the requirements of BS 5655-1 only are applicable unless it can be shown that, owing to space limitations, compliance is not reasonably practicable. Special provisions are permissible to meet certain site conditions often present in buildings that have been in use for many years. It is intended that the use of new equipment should not automatically be restricted because certain site conditions are now more rigorous than formerly.

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 13 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.

