

BS 6440:2011



BSI Standards Publication

Powered vertical lifting platforms having non-enclosed or partially enclosed liftways intended for use by persons with impaired mobility – Specification

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ISBN 978 0 580 65634 7

ICS 11.180.10; 53.020.99

The following BSI references relate to the work on this standard:

Committee reference MHE/4

Draft for comment 11/30194294 DC

Publication history

First published December 1983

Second edition, October 1999

Third (present) edition, August 2011

Amendments issued since publication

Date	Text affected
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This document comprises a front cover, an inside front cover, pages i to iv, pages 1 to 60, an inside back cover and a back cover.

Foreword

Publishing information

This British Standard is published by BSI and came into effect on 31 August 2011. It was prepared by Technical Committee MHE/4, *Lifts, hoists and escalators*. A list of organizations represented on this committee can be obtained on request to its secretary.

Supersession

This British Standard supersedes BS 6440:1999, which is withdrawn.

Relationship with other publications

Related standards for similar devices for use by persons with impaired mobility are BS EN 81-40, BS EN 81-41 and BS 5900 (the latter relates to private dwellings only).

Those items relevant to lifting platforms referenced within BS EN 81-70 have been included within this edition of BS 6440.

Information about this document

This is a full revision of the standard, and introduces the following principal changes:

- change from a code of practice to a specification;
- changes to meet the essential health and safety requirements of Machinery Directive 2006/42/EC [1] as enacted as the Supply of Machinery (Safety) Regulations 2008 [2].

BS 6440:1999 applied to lifting platforms with fully and partially enclosed liftways travelling over stated distances. A new standard, BS EN 81-41, applies to lifting platforms with enclosed liftways. However, BS EN 81-41 does not specify requirements for lifting platforms with a non-enclosed liftway, which are common on the UK market. The revised BS 6440 specifies requirements for lifting platforms with non-enclosed and partially enclosed liftways.

Use of this document

It has been assumed in the preparation of this British Standard that the execution of its provisions will be entrusted to appropriately qualified and experienced people, for whose use it has been produced.

BSI permits the reproduction of Figure F.1 and Figure G.1. This reproduction is only permitted where it is necessary to use the sample certificates given in these figures during each application of the standard.

Presentational conventions

The provisions of this standard are presented in roman (i.e. upright) type. Its requirements are expressed in sentences in which the principal auxiliary verb is "shall".

Commentary, explanation and general informative material is presented in smaller italic type, and does not constitute a normative element.

Contractual and legal considerations

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

Compliance with a British Standard cannot confer immunity from legal obligations.

Introduction

This British Standard may be used as a means to address relevant health and safety requirements of Machinery Directive 2006/42/EC [1], and additionally specifies minimum requirements for the provision of lifting platforms in buildings/constructions.

It is assumed that the lifting platform operates in an ambient temperature in the range 5 °C to 40 °C. For temperatures outside this range, additional measures might be necessary.

This British Standard does not specify requirements for:

- severe conditions (e.g. extreme climates, strong magnetic fields);
- lightning protection;
- potentially explosive atmospheres;
- the handling of materials, the nature of which could lead to dangerous situations;
- lifting platforms of which the primary function is the transportation of goods;
- lifting platforms prone to vandalism;
- earthquakes or flooding;
- fire-fighting, evacuation and behaviour during a fire;
- vibrations;
- the design of concrete, hardcore, timber or other foundation or building arrangement;
- the design of anchorage bolts to the supporting structure;
- type C wheelchairs as defined in BS EN 12183 and/or BS EN 12184;
- balancing weights or counterweights.

This revision of BS 6440 deals with all significant hazards relevant to lifting platforms, when they are used as intended and under the conditions foreseen by the manufacturer. A list of significant hazards is given in Annex A.

In order to determine the specific characteristics of the lifting platform, at least the following issues need to be discussed between the supplier and the specifier:

- environmental conditions;
- civil engineering considerations;
- other aspects related to the place of installation, including safe use of the lifting platform;
- the use and places of use of the machinery;
- fire protection requirements;
- suitability for the user.

Annex B gives information on issues which specifiers are expected to discuss with the supplier in order to select and specify a suitable powered lifting platform.

It is assumed that a powered lifting platform conforming to this standard is for the use of persons either:

- capable of using the lifting platform safely and unaided, either after having been fully instructed in its use, or having observed clear and simple instructions permanently displayed on the equipment; or
- if not capable of safe unaided use of the lifting platform, transported under the care of a fully instructed able-bodied accompanying person for whom additional control facilities can be provided if required. Recommendations for specially adapted control devices are given in Annex C.

1 Scope

This British Standard specifies requirements for the design, manufacture, installation, commissioning, testing, maintenance and dismantling of new permanently installed electrically powered vertical lifting platforms with the following characteristics:

- travelling vertically between predefined levels along a guided path where the inclination to the vertical does not exceed 15°;
- supported or sustained by wire ropes, chains, rack and pinion, hydraulic cylinder (direct or indirect), screw and nut or scissors mechanisms;
- having non-enclosed or partially enclosed liftways;
- having non-enclosed or partially enclosed carriers;
- having a rated speed that is not greater than 0.15 m/s;
- having a travel distance that is not greater than 3.0 m;
- sized for use with type A or type B wheelchairs conforming to BS EN 12183 and/or BS EN 12184.

It is applicable to lifting platforms that are intended primarily for the transport of persons with impaired mobility, with or without a wheelchair.

NOTE 1 The lifting platforms specified in this standard can be used in domestic or non-domestic premises, and can be installed indoors or outdoors. Their installation in some premises might not be practicable.

NOTE 2 Although this British Standard is applicable to new lifting platforms, it can also be used as guidance for the refurbishment and re-installation of existing lifting platforms.

2 Normative references

The following referenced documents may be used in the application of this British Standard. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

BS 7671, *Requirements for electrical installations – IEE Wiring Regulations – Seventeenth edition*

BS EN 81-1:1998+A3:2009, *Safety rules for the construction and installation of lifts – Part 1: Electric lifts*

BS EN 81-2:1998+A3:2009, *Safety rules for the construction and installation of lifts – Part 2: Hydraulic lifts*

BS EN 349, *Safety of machinery – Minimum gaps to avoid crushing of parts of the human body*