

BS 5656-1:2013



BSI Standards Publication

# Safety rules for the construction and installation of escalators and moving walks

Part 1: Examination and test of new escalators before putting into service – Specification for means of determining compliance with BS EN 115-1:2008+A1:2010

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Published by BSI Standards Limited 2013

ISBN 978 0 580 81448 8

ICS 91.140.90

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

Committee reference MHE/4

Draft for comment 13/30275811 DC

**Publication history**

First published December 1997

Second (present) edition, November 2013

**Amendments issued since publication**

<b>Date</b>	<b>Text affected</b>
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### Summary of pages

This document comprises a front cover, an inside front cover, pages i to iv, pages 1 to 22, an inside back cover and a back cover.

## Foreword

### Publishing information

This part of BS 5656 is published by BSI Standards Limited, under licence from The British Standards Institution, and came into effect on 30 November 2013. 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

Together with BS 5656-3 (currently in preparation <sup>1)</sup>), this part of BS 5656 will supersede BS 5656-1:1997, which will be withdrawn upon the publication of BS 5656-3.

### Relationship with other publications

BS 5656 is published in two parts <sup>1)</sup>:

- Part 1: *Examination and test of new escalators before putting into service – Specification for means of determining compliance with BS EN 115-1:2008+A1:2010;*
- Part 2: *Code of practice for the selection, installation and location of new escalators and moving walks.*

This part of BS 5656 is intended to be read in conjunction with BS EN 115-1:2008+A1:2010.

### Information about this document

This is a full revision of the standard. The principal change is to update the standard to take into account the publication of BS EN 115-1:2008+A1:2010.

The Machinery Directive 2006/42/EC [1] requires the manufacturer of an escalator to take responsibility for its design and manufacture.

The Directive requires that before putting an escalator into service it shall have undergone certain procedures including final inspection and test.

The inspection and test procedures in this part of BS 5656 may be undertaken by the supplier or their representative, provided that they have an appropriate quality assurance system and/or can demonstrate the necessary competence to undertake the work.

The level of quality assurance can vary in accordance with which conformity assessment route applies, details of which are given in BS EN ISO 9000.

In order to prove the competence of the persons carrying out the testing of the escalator it is necessary that they operate in accordance with a quality assurance system monitored by a Notified Body, under the requirements of the Supply of Machinery (Safety) Regulations 2008 [2]. It might be necessary to make available certification of the quality assurance system in order to prove compliance.

This part of BS 5656 specifies a means of determining compliance with BS EN 115-1:2008+A1:2010. It does not cover every clause in BS EN 115-1:2008+A1:2010 as many requirements are covered by the manufacturer's quality control procedures.

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<sup>1)</sup> At the time of publication of this part of BS 5656, it is expected that a new part 3 will be developed to cover the examination and test of moving walks before putting into service. BS 5656-1:1997 will remain current until the specifications for both escalators and moving walks have been revised.

This part of BS 5656 covers the tests in BS EN 115-1:2008+A1:2010, 7.3, as well as tests that do not fall within the manufacturer's quality control system; for example, the surroundings of the escalator to ensure conformity to arrangement drawings.

### 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.

Attention is particularly drawn to the recommendations for safe working practices provided in BS 7801.

BSI permits the reproduction of the tables in this part of BS 5656. This reproduction is only permitted where it is necessary for the user to record findings on the tables during each application of the standard.

The following documents are required for the examination and tests to be carried out:

- general arrangement drawing;
- electrical schematic drawing;
- copies of test certificates;
- Notified Body approvals, certificates of incorporation, certificates of conformity (if applicable);
- risk assessments for deviations from BS EN 115-1:2008+A1:2010 (if any).

This part of BS 5656 is not intended to be used for existing installations, for which the relevant test procedures are those that were applicable at the time of installation. BS 5656-1:1997 may still be used to carry out any examinations or testing required when changes are made to escalators installed in conformity to BS EN 115:1995, BS EN 115:1995 incorporating Amendment No. 1 (5.1.5.8 pertaining to hand rails) and BS EN 115:1995 incorporating Amendment No. 2 (5.1.5.6.3 pertaining to deflector devices).

Relevant tests from this part of BS 5656 may be applied to existing escalators that are upgraded in accordance with either BS EN 115-1:2008+A1:2010 or BS EN 115-2, where for example, components are fitted that were not available at the time of installation and which require examination and test, e.g. the installation of deflector devices.

Although this standard specifically addresses conformity with BS EN 115-1:2008+A1:2010, it also includes provisions for the testing of other commonly installed features on new escalators, e.g. comb lighting.

### 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.*

It is recognized that certain tests/checks can be carried out more effectively before installation, and that others should only be made on site. Answer boxes in this part of BS 5656 that contain a shaded square imply that the test should be carried out on site.

**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.**

Particular attention is drawn to the following legislation:

- Supply of Machinery (Safety) Regulations 2008 [2];
- Equality Act 2010 [3];
- Electricity at Work Regulations 1989 [4];
- Electromagnetic Compatibility Regulations 1992 [5];
- Electric Equipment (Safety) Regulations 1994 [6];
- Health and Safety at Work etc. Act 1974 [7];
- Provision and Use of Work Equipment Regulations 1998 [8];
- Workplace (Health, Safety and Welfare) Regulations 1992 [9].

*NOTE This list is not exhaustive.*

## 1 Scope

This part of BS 5656 specifies one means of determining compliance with the provisions for examination, testing and recording results for new escalators specified in BS EN 115-1:2008+A1:2010, before putting into service.

## 2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

BS 7801:2011, *Escalators and moving walks – Code of practice for safe working on escalators and moving walks*

BS EN 115-1:2008+A1:2010, *Safety of escalators and moving walks – Construction and installation*

## 3 Terms and definitions

For the purposes of this part of BS 5656 the terms and definitions given in BS EN 115-1:2008+A1 apply.

## 4 Examination and test of escalators and components

*NOTE 1 It is essential to ensure that the safety requirements of BS EN 115-1:2008+A1 are all met and the associated risks addressed.*

When the examination and tests specified in BS EN 115-1:2008+A1 are carried out, the results shall be recorded using the questionnaires given in Table 1 to Table 12 of this part of BS 5656.

All questions on the questionnaires shall be answered.

*NOTE 2 Answer boxes in the questionnaires that contain a shaded square indicate that the test/answer should be made on site. Plain answer boxes should be completed by the vendor's design office.*

*NOTE 3 The word "Specified" in a questionnaire indicates information to be provided by the equipment designer.*

For identification purposes, all details are based upon looking from the bottom of the escalator irrespective of the direction of travel and shall be marked by numbers or letters reading from left to right.

Escalators shall be tested for both directions of travel regardless of the intended final direction of travel.