

Code of practice for

Safety at powered doors for pedestrian use

Part 3. Swing doors and balanced doors

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Committees responsible for this British Standard

The preparation of this British Standard was entrusted to Technical Committee MHE/31, Automatic power operated pedestrian doors, upon which the following bodies were represented:

- Association of Builders' Hardware Manufacturers
- Automatic Door Suppliers' Association
- British Retail Consortium
- Chartered Institute of Environmental Health
- Department of Health
- Health and Safety Executive
- Institute of Architectural Ironmongers

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Foreword

This Part of BS 7036 has been prepared by Technical Committee MHE/31. Together with Parts 1 and 2 it supersedes BS 7036 : 1988 which is withdrawn.

The purpose of this Part of BS 7036 is to provide guidance to manufacturers, suppliers, installers, specifiers, occupiers and property owners on the specific recommendations for the provision, installation, safe operation and maintenance of powered swing door systems with a view to safeguarding traffic against the risk of accidents. It is not intended to cover the manufacture or design of powered swing door operating systems except where the products, components or devices have a bearing on safety.

It is essential that this Part of BS 7036 is read in conjunction with Part 1.
General.

Copyright is waived by BSI in respect of the authorized technician check list in annex A and the occupier safety check list in annex B. Enquiries concerning bulk printed supplies of these check lists should be addressed to Customer Services, BSI, 389 Chiswick High Road, London W4 4AL.

The initial text of this code of practice was provided by the Automatic Door Suppliers' Association and due acknowledgement is made to this organization.

As a code of practice, this British Standard takes the form of guidance and recommendations. It should not be quoted as if it were a specification and particular care should be taken to ensure that claims of compliance are not misleading.

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

1 Scope

This Part of BS 7036 provides guidance on the specific safety recommendations applicable to powered swing and balanced doors.

It is essential that this Part of BS 7036 is read in conjunction with Part 1. *General*.

NOTE. This Part of BS 7036 does not apply to low energy swing doors with kinetic energy levels below 1.6 J during normal operation. See Part 4 for low energy swing doors.

2 References

2.1 Normative references

This Part of BS 7036 incorporates, by dated or undated reference, provisions from other publications. These normative references are made at the appropriate places in the text and the cited publications are listed on the inside back cover. For dated references, only the edition cited applies; any subsequent amendments to or revisions of the cited publication apply to this Part of BS 7036 only when incorporated in the reference by amendment or revision. For undated references, the latest edition of the cited publication applies, together with any amendments.

2.2 Informative references

This Part of BS 7036 refers to other publications that provide information or guidance. Editions of these publications current at the time of issue of this standard are listed on the inside back cover, but reference should be made to the latest editions.

3 Definitions

For the purposes of this British Standard the definitions given in BS 7036 : Part 1 apply.

4 General

4.1 Powered swing and balanced doors should be installed following the general recommendations given in Part 1, together with the specific recommendations of this Part.

4.2 Operational checking and maintenance should be in accordance with 4.6 of Part 1 and should use the authorized technician check list and the occupier safety check list given in annexes A and B respectively of this Part.

4.3 Powered swing and balanced doors have potential hazards in the following five areas:

- a) during the opening cycle – traffic can be struck, trapped or walk into the door;
- b) during the closing cycle – traffic can be struck, trapped or walk into the door;
- c) tripping hazards (see 4.3.2 of Part 1);
- d) congestion (see 4.4 of Part 1);
- e) other hazards due, for example, to lack of supervision (see 4.5 of Part 1).

4.4 Special consideration should be given to the potentially increased risk that may arise when swing doors are specified for two-way traffic operation.

5 Safety during the opening and closing cycle

5.1 Provision should be made to protect traffic occupying the swept area.

5.2 For two-way doors the following signs should be applied:

- a) an automatic door sign (see 11.6 of Part 1) fixed to both sides of the door leaf or leaves;
- b) a keep clear sign (see 11.3 of Part 1) fixed to the side of the door leaf or leaves that opens towards the user.

5.3 For one-way doors, the following signs should be applied:

- a) a direction of travel sign (see 11.4 of Part 1) and an automatic door sign (see 11.6 of Part 1) fixed to the side of the door leaf or leaves visible to traffic approaching in the direction of travel;
- b) a no entry sign (see 11.2 of Part 1) and a keep clear sign (see 11.3 of Part 1) fixed to the side of the door leaf or leaves visible to traffic approaching against the direction of travel.

5.4 One of the following types of safety device should be fitted.

NOTE. The protection level required is determined by the Hazard Analysis and Risk Assessment (see 4.1.4 of Part 1).

- a) Presence sensing device which interrupts door movement at any point during its cycle (see 8.3 of Part 1).
- b) Presence sensing device or safety mat (see 8.2.2 of Part 1 and 8.3 of Part 1) which gives limited protection by preventing a fully open or fully closed door from moving.

Item b above should only be considered where the Hazard Analysis and Risk Assessment indicates that the risk is low.