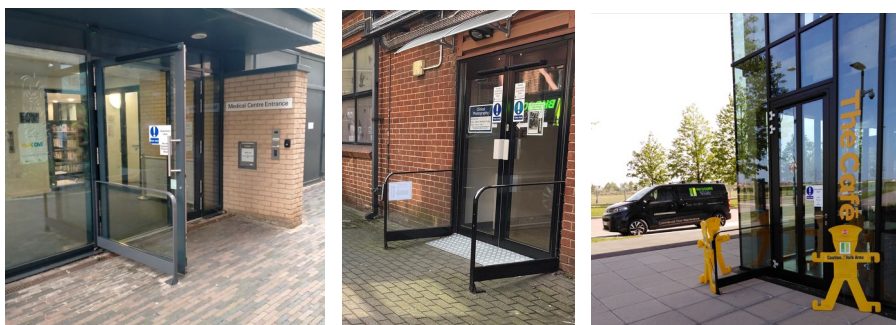


Everything you need to know about barriers for automatic doors



Barriers are installed on automatic swing doors primarily for safety and regulatory compliance, to prevent people from entering the door's swing path and getting hit by the moving door, especially in busy public areas. They also help to direct foot traffic, preventing crowding and damage to the door, and to meet the requirements of standards like [BS EN 16005](#).

Why would you specify or retrospectively recommend the installation of Barriers?

- The activation sensors do not detect persons approaching from the side and the door does not open
- Persons can walk past into an opening door as it is not apparent the door will open outwards
- The distance between the open door and a side wall or structure creates a body trap
- If the door fails to open, what about a person approaching who has no idea it stops and impacts the door or who has to hesitate
- Persons can congregate in the area thus putting them at risk of impact or crushing
- There are items in the area attracting persons to where they could be at risk of impact or crushing even if the door opens at full speed
- There are devices to activate the door in this area such as access control readers, push pads, press to exit buttons, so operationally the door does not open fully or stops and putting people at risk in the area
- Protecting the Door, Barriers shield the door panels and mechanisms from impacts from trolleys, wheelchairs, preventing damage and costly repairs.
- To provide a location away from the sweep area of the door to mount security, access control or activation devices, such as push pads

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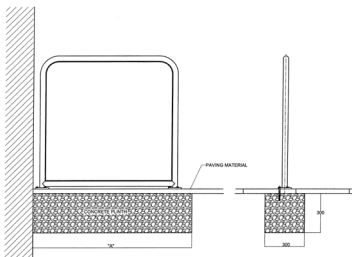


Everything you need to know about barriers for automatic doors

Key Reasons for Installing Barriers

- **Preventing Collisions:** The main purpose is to stop pedestrians from walking into the door as it opens or closes. This is particularly important for people who may be unobservant or have mobility issues.
- **Directing Foot Traffic:** Barriers help organize pedestrian flow, ensuring people enter and exit through a clear, designated pathway, which reduces confusion and improves safety in high-traffic areas.
- **Mitigating "Side Approach" Hazards:** Barriers can prevent pedestrians approaching from an angle from walking into the door's operating range.

Key Characteristics of Barriers



- **Height:** They are typically at least 900mm high to prevent children from climbing over them.
- **Placement:** They are installed at a 90-degree angle to the door's plane, extending beyond the door's edge.
- **Gap Control:** The design prevents a 100mm sphere from passing through the barrier to avoid smaller children crawling underneath.
- **Regulatory Compliance:** UK and European building regulations (like BS EN 16005) mandate barriers for doors that swing more than 100mm into an access route to ensure pedestrian safety.

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Extracts from EN16005

7 Safety during the opening cycle for swing doorsets

Provision should be made to deter persons from occupying the swept area of the door. If a residual risk remains after the appropriate safety measures have been selected, appropriate signage should be fitted to draw the user's attention to the risk, e.g. "Automatic door", "Keep clear", "No entry", "Direction of travel".

NOTE BS EN 16005:2012 covers the following safety provisions:

- *safety distances [see BS EN 16005:2012, 4.6.3, Figure 3a)];*
- *speed limitation (see BS EN 16005:2012, Annex G);*
- *protective devices (see BS EN 16005:2012, 4.6.8);*
- *guards (finger protection) [see BS EN 16005:2012, 4.6.3, Figure 3b)];*
- *barriers (see BS EN 16005:2012, 4.6.10);*
- *low energy movement (see BS EN 16005:2012, 4.6.4);*
- *mats conforming to BS EN 1760-1.*

Extracts from BS7036-0

5 Environment and management

5.1.1 At the design specification stage, the specifier should seek specialist advice from, and work in close liaison with, the power operated door manufacturers or their approved distributors. The specifier should also consult other relevant authorities (e.g. fire and building control authorities, and end user organizations) since each has particular, but related, responsibilities.

5.1.2 The specifier should establish predicted user characteristics and precise operational requirements, to enable account to be taken of the volume and type of pedestrian traffic (such as elderly, infirm and disabled people and young children) that is likely to pass through the particular installation at different times of the day.

5.1.3 It is essential that appropriate safety devices and safety measures are chosen. The specifier should, therefore, ensure that a full hazard analysis and risk assessment is undertaken to confirm that the final installation is safe for its predicted use.

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References

EN 12150-1:2015+A1:2019, *Glass in building — Thermally toughened soda lime silicate safety glass — Part 1: Definition and description*

EN 12433-1:1999, *Industrial, commercial and garage doors and gates — Terminology — Part 1: Types of doors*

EN 12433-2:1999, *Industrial, commercial and garage doors and gates — Terminology — Part 2: Parts of doors*

EN 12978:2003+A1:2009, *Industrial, commercial and garage doors and gates — Safety devices for power operated doors and gates — Requirements and test methods*

EN 14351-1:2006+A2:2016, *Windows and doors — Product standard, performance characteristics — Part 1: Windows and external pedestrian doorsets*

EN 60335-2-103:2015, *Household and similar electrical appliances — Safety — Part 2-103: Particular requirements for drives for gates, doors and windows*

EN 60529:1991, 1 *Degrees of protection provided by enclosures (IP Code) (IEC 60529:1989)*

EN IEC 60664-1:2020, 2 *Insulation coordination for equipment within low-voltage supply systems — Part 1: Principles, requirements and tests (IEC 60664-1:2020)*

EN ISO 4413:2010, *Hydraulic fluid power — General rules and safety requirements for systems and their components (ISO 4413:2010)*

EN ISO 4414:2010, *Pneumatic fluid power — General rules and safety requirements for systems and their components (ISO 4414:2010)*

EN ISO 12100:2010, *Safety of machinery — General principles for design — Risk assessment and risk reduction (ISO 12100:2010)*

EN ISO 13849-1:2015, *Safety of machinery — Safety-related parts of control systems — Part 1: General principles for design (ISO 13849-1:2015)*

EN ISO 13850:2015, *Safety of machinery — Emergency stop function — Principles for design (ISO 13850:2015)*

EN ISO 13854:2019, *Safety of machinery — Minimum gaps to avoid crushing of parts of the human body (ISO 13854:2017)*

EN ISO 13856-2:2013, *Safety of machinery — Pressure-sensitive protective devices — Part 2: General principles for the design*

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