

AS 4085—1992

Australian Standard®

Automatic sliding door assemblies

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The following interests are represented on Committee BD/55:

Australian Assembly of Fire Authorities
Australian Auto-Door Industry Forum
Australian Uniform Building Regulations Coordinating Council
Australian Institute of Building Surveyors
Australian Shopfitters Association
Metal Trades Industry Association

Additional interests participating in preparation of Standard:

Standards New Zealand

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PREFACE

This Standard was prepared by the Standards Australia Committee on Automatic Sliding Door Assemblies, following submissions from the industry concerned and regulatory authorities.

The primary purpose of the Standard is to provide minimum performance requirements aimed at ensuring the safety of ingress and egress traffic under normal operating conditions and to maintain that safety under certain abnormal and emergency situations.

A secondary but no less important purpose is to set minimum quality levels for components, fabrication and installation so that the entire assembly will not only perform satisfactorily when initially installed but, with due maintenance, will continue to do so during the assembly's intended service life.

This is the first Australian Standard devoted specifically to this subject. The Committee limited its considerations to the most frequently encountered situations and attention is drawn to Clause 1.2 in this regard.

In the preparation of this Standard, cognizance was taken of current building practices and technology. Reference was made to ANSI A156.10–1979, *American National Standard for power operated pedestrian doors*, BS 7036–1988, British Standard Code of Practice for *Provision and installation of safety devices for automatic power operated pedestrian door systems*; and Australian Standards AS 1735.2–1986 *SAA Lift Code, Part 2: Passenger and goods lifts – Electric*, and AS 1428, *Design for access and mobility*, and acknowledgment is hereby made of this source material.

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STANDARDS AUSTRALIA

Australian Standard

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SECTION 1 SCOPE AND GENERAL

1.1 SCOPE This Standard sets out functional requirements for the materials and components of automatic sliding door assemblies and requirements for operational safety and durability when assembled, installed, and commissioned. The Standard also classifies sliding doors in accordance with a duty rating according to the expected average number of operational cycles.

NOTE: Appendix A describes recommended automatic sliding door inspection and maintenance procedures.

1.2 APPLICATION This Standard applies to automatically operated, horizontally-opening, sliding door assemblies for pedestrian ingress and egress.

The Standard is not intended to apply to—

- (a) doors for vehicular ingress and egress;
- (b) vertically-opening door assemblies (roller shutters);
- (c) lift-car doors, or lift-shaft doors; or
- (d) fire doors, or smoke-resistant doors.

1.3 REFERENCED DOCUMENTS The following documents are referred to in this Standard:

AS

1163	Structural steel hollow sections
1170	SAA Loading Code
1170.2	Part 2: Wind loads
1288	Glass in buildings—Selection and installation
1538	Cold-formed Steel Structures Code
1540	Timber frames and sashes for windows
1665	SAA Aluminium Welding Code
1866	Aluminium and aluminium alloys—Extruded rod, bar, solid and hollow shapes
2047	Aluminium windows for buildings
2048	Code of practice for installation and maintenance of aluminium windows in buildings
2700S	Colour standards for general purposes (swatch)
2796	Timber—Seasoned hardwood—Milled products
3000	SAA Wiring Rules
3678	Structural steel—Hot-rolled plates, floorplates and slabs
3679	Structural steel
3679.1	Part 1: Hot-rolled bars and sections
3679.2	Part 2: Welded sections

1.4 DEFINITIONS For the purpose of this Standard, the definitions below apply.

1.4.1 Actuator The mechanism or combination of mechanisms which are attached to and power the movement of sliding leaves.

1.4.2 Clear opening The maximum opening between the floor and the lowest part of the lintel, transom, or pelmet; and between—

- (a) the leading edge and the closing jamb or mullion of a single-leaf door; or
- (b) the meeting edges or stiles of a multiple-leaf door.

1.4.3 Detector An apparatus which detects and signals—

- (a) the presence of a person or object within the detection zone (sensor); or
- (b) the existence of an emergency or failure condition.

1.4.4 Detection zone The volume of space in which the presence of a person or object will cause the sliding door leaves to open or remain open, or both.



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