



FIRST IMPRESSIONS MATTER

Automatic Doors: Report for Schools and Universities

Why Automatic Doors?

Accommodating students, staff and visitors with disabilities or physical limitations is one strong reason to consider installing automatic doors. However, it's not the only one. Automatic doors can instantly modernize the aesthetics of a building and create a positive first impression by providing easy access for all users. Plus, when properly installed and maintained, automatic doors are exceptionally safe, and maintenance is straightforward.

Automatic Door Standards

The primary standard addressing automatic pedestrian doors is the American National Standard for Power Operated Pedestrian Doors, ANSI/BHMA A156.10. The latest version is dated 2005. The ANSI A156.10 standard provides details and specifications for installation that have been designed to provide a safe, properly functioning automatic door system. To order a copy, visit www.techstreet.com

Types of Automatic Doors

There are three basic types of automatic doors: automatic sliding doors, automatic swinging doors and automatic folding doors. Many manufacturers offer door models that have been specifically developed for special care facilities. These models are often designed to enable ongoing observation of patients, without the disturbance of outside noise. Some are also designed to make it possible to open the doors to the full width of the doorway in emergency situations, thereby allowing staff to move large beds and cumbersome equipment quickly and easily.

Automatic Sliding Doors: Automatic sliding doors provide effective two-way traffic. Sliding doors are equipped with a feature that allows the sliding door to swing when pushed out in emergencies. This feature, known as “breakout” or “breakaway”, qualifies them to be used in locations that require emergency egress capability. Sliding doors are offered in various configurations, including traditional biparting, single slide and telescoping models. These doors require an adequate amount of slide room in which the door can move.

Sliding doors should always include appropriate sensors or control mats and safety signage.

Automatic Swinging doors: Typically, when a swinging door is automated, two doors are used. One door swings inward and the other door swings outward. This enables two-way traffic. Two-way traffic through a single automatic swinging door is not normally recommended. The exception is a low-energy swing

operator that has different characteristics than a fully automatic door. It is crucial that these types of doors are well marked to indicate the direction of travel.

Safety zones for swinging doors are covered in Section 8.1.2 of ANSI A156.10. Different requirements are in place for different systems. Requirements depend on what combination of sensors and control mats is used. There are two types of sensors for automatic swinging doors, overhead mount and door mount. Each has different characteristics and enables different pattern sizes and performance. Swinging doors should always include guide rails, sensors or control mats and safety signage.

Automatic Folding Doors: A folding door requires minimal space to install, yet provides plenty of clear door space. This makes this type of door a preferred choice when space is at a premium. These doors should have an emergency swing feature if the door is being used as an egress location.

Automatic folding doors have two or more separate panels. The first panel swings and the second panel slides in a guide, enabling it to slide as both panels swing into a “V” shape, which is the fold. Automatic folding doors may include either a single folding door that swings in or out or a pair of doors that simultaneously fold in or out. Similar to swinging doors, folding doors should always include guide rails, sensors or control mats, and safety signage.

Other Door Types

Low Energy Swinging Doors: Automatic low-energy swinging door operators are designed for applications requiring ADA compliance or user convenience. They are available in single, pair or double egress configurations. This type of operator is usually activated with push plates. The unit includes the header, operator and drive arm.

Revolving Doors: Automatic and manual revolving doors are manufactured as complete packages. In general, they are offered in four-wing, three-wing and two-wing designs. Larger diameter four-wing and three-wing doors can also offer center core displays. Two-wing doors typically have perimeter displays that serve as integral night shields when the door is closed and locked. Revolving doors can be center or perimeter driven – depending on size and design. As a rule, manual and smaller diameter automatic doors have center shaft drive systems. Larger diameter automatic doors have perimeter drive systems. Smaller diameter doors are typically offered in a security version for controlled access.

About AAADM:

The American Association of Automatic Door Manufacturers (AAADM) is a trade association of manufacturers of automatic pedestrian door systems. AAADM was founded in 1994 to promote safety in the manufacture and operation of automatic doors throughout the industry. For more information, contact AAADM: 1300 Sumner Avenue, Cleveland, OH 44115-2851. Phone: 216-241-7333, Fax: 216-241-0105. Web: www.aaadm.com

