

What options should I examine when selecting a new automatic door system for my facility and who should be involved in the decision-making process?

A.W., Denver

Selecting the right automatic door for your particular operation is a challenge, because there are so many possible door combinations. Appearance certainly is key, but the most important considerations are safety issues, codes and available space. Performance and installation timing are also critical factors. The door suppliers need to get the product to the job site and install it on time and correctly.

Work with Qualified Professionals

Choosing the appropriate automatic door is a decision that should be made by qualified professionals who can properly evaluate the desired traffic flow, types of users of the facility and visual impression, such as an architect or consultant familiar with the applicable codes.

Some considerations to discuss are whether the door will serve as a means of egress for emergency evacuation, and whether it needs to comply with the Americans with Disabilities Act Accessibility Guidelines (ADAAG), meet fire regulations and need to be locked.

Federal, state and local codes must all be met. In general, codes for automatic doors for pedestrian use require that the door swing out in emergencies when pushed in the direction of egress. The code requires that the net door opening be a certain width based on the size of the facility.

Ask the manufacturer for proof of compliance with codes. A stamp of approval from Underwriters Laboratories or another nationally recognized test agency is acceptable proof.

To meet minimum ADA guidelines, there must be sufficient area around the door for maneuvering, a clear opening of 32 inches and a tapered threshold that is not higher than half an inch. Additionally, the door should open with minimum effort.

ANSI A156.10, Standard for Power-Operated Doors, is the best source for specifying automatic doors. It covers all required safety-related codes. To ensure the door is properly installed, an AAADM-certified inspector should inspect the door.

Fitting the Door to the Application

The facility's floor plan and layout also influence selecting automatic doors. Is the traffic flow one- or two-way? How large an opening is required to meet traffic conditions? Will carts be pushed through the doors?

Properly equipped automatic sliding, swinging and folding doors cost about the same, but climate is a major consideration. A vestibule may be necessary to control heating and cooling costs as well as to maintain the comfort of employees stationed near the door.

Finally, consider aesthetics and the different finishes available, such as painted, clad, anodized aluminum, stainless steel, brass and powder-coated.

Automatic Door Types

Automatic Sliding Doors: In the 1990s, demand shifted from automatic swinging doors to sliding doors because of the latter's improved reliability. Also, sliding doors allow effective two-way traffic to pass through a single door.

Automatic sliding doors do require a sufficient amount of side room through which the door can slide. And, they must be equipped with the emergency swing

feature (SX) for code compliance.

Automatic Swinging Doors: Once a swinging door is automated, two doors are required: one to swing in and the other to swing out. This provides for passage of two-way traffic.

Two-way traffic through a single automatic swinging door is not generally advised. The exception is the use of a low-energy swing operator that has different characteristics than a fully automatic door.

Swinging doors also must be well marked to indicate their direction of travel. Provide for a minimum 12-inch space between the two doors for separation and to eliminate sensor interference between the two doors.

Automatic Folding Doors: This type of door has been in use for about five years. A bifolding door requires less space to install, yet delivers adequate clear door space (a critical issue when space is limited). The doors should have an emergency swing feature if they are used in an egress location.

Regardless of the door type, the door system should be designed so that traffic approaches the door in full view and users walk directly toward the door. Pedestrians should have excellent visibility of the door and its markings and be able to observe the direction of door travel. Avoid placing vending machines, pay telephones or other items that could distract users within four feet of the moving door.

Performance and Maintenance

Carefully consider several factors when choosing the door supplier. Providing automatic door equipment is only part of an effective door automation program.

For instance, setting up a planned maintenance program can ensure your automatic doors stay in top working order. Such programs uncover small problems before they turn into large, costly repairs.

These planned programs are usually based on the number of automatic doors, the amount of traffic, the age of the automatic doors and the facility's overall maintenance philosophy. Regardless of which program you choose, select a supplier who employs AAADM-trained technicians.

AAADM Guidelines for Automatic Doors

AAADM's guidelines include the following:

- The automatic door should be properly specified to suit the intended use and ANSI A156.10, Standard for Power-Operated Doors, should be followed.

- Qualified technicians with AAADM certification should install automatic doors.

- Planned maintenance and daily inspections are strongly recommended. Daily safety check procedures are outlined on a label that can be obtained from AAADM or any certified inspector.

- Doors should be properly marked as automatic.

- Door-closing speed and force should be adjusted for the intended public. Time delay should be set, and activating devices properly positioned and adjusted.

*American Association of
Automatic Door Manufacturers*