

Prescription for Automatic Door Selection and Maintenance

By: Christopher Johnson, The American Association of Automatic Door Manufacturers (AAADM)

Most people, especially those in the healthcare industry, are familiar with sayings such as “an apple a day keeps the doctor away” and “an ounce of prevention is worth a pound of cure.” These adages serve to remind individuals that by taking proactive measures to safeguard their health, they can help avoid potential health problems in the long run. When it comes to automatic doors, a variation of this same straightforward logic applies. To circumvent costly, bothersome and potentially dangerous problems with the automatic doors in your healthcare facility, prevention entails proper selection, planned maintenance and daily safety checks.

SELECTION

To choose the right automatic door for any application, the facility layout, types of users, density of traffic, desired visual impression and expected abuse must all be considered. Additionally, there are often many added and complex requirements to take into account when selecting automatic doors for healthcare facilities. Automatic doors in hospitals, doctors offices, surgical centers and other healthcare settings frequently play an important role in keeping patients, employees, pharmaceuticals, sensitive medical records and expensive medical equipment safe and secure. Furthermore, large access areas are often compulsory in healthcare facilities to enable easy transfer of beds and gurneys, so the design of the selected doors must support this as well. Together, the facility owner, designer and door supplier must take the responsibility of ensuring the doors work with the facility’s security system.

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.

One of the first challenges in automatic door selection for any facility is settling upon a manufacturer. It is vital that potential manufacturers fully understand the specific needs and preferences of your facility so they can appropriately advise you of their product offerings and arm you with all of the information you will require to make an informed decision as to whether or not they are the right match.

The American Association of Automatic Door Manufacturers, a trade association of manufacturers of automatic pedestrian door systems, advocates proper specification, installation and maintenance of all automatic doors. When meeting with prospective manufacturers, AAADM recommends asking them for proof of compliance with codes and standards for all of their automatic door products. Underwriters Laboratories (UL), and other nationally recognized test agencies, label and list products for compliance with their regulations. You should also verify that qualified technicians with AAADM certification would be responsible for installing the selected automatic doors. Besides obtaining input from the potential manufacturer, AAADM also advises facility owners to confer with an architect or consultant knowledgeable of applicable codes and regulations.

There are many questions that the owner and architect should answer in the initial phase of their discussions, including:

- Will the door serve as an emergency exit during evacuations?
- Does the door need to comply with the Americans with Disabilities Act Accessibility Guidelines (ADAAG)?
- How will it meet fire regulations?
- Does it need to be locked?

MAINTENANCE

Once all critical issues have been considered and the selection process is completed, it's time to consider a planned-maintenance program for your new doors. Steps need to be taken to protect any investment, and automatic doors are no exception. A planned maintenance program can significantly reduce the cost of ownership by increasing performance life and keeping emergency service calls to a minimum.

There are numerous kinds of planned maintenance programs available. The number of automatic doors the facility owns, the amount of customer traffic, the age of the automatic doors and the proprietor's overall attitude toward maintenance programs typically influence which program is chosen. Manufacturers generally offer a range of programs that extend from basic to full-service.

Basic Planned Maintenance

A basic planned maintenance contract usually provides a facility with minimal on-site inspections. The number of visits varies and is dependent on the manufacturer. At these basic maintenance visits, the inspector checks that the doors comply with AAADM requirements. If necessary, repairs are made, with costs generally dictated by service time and materials.

During a basic inspection, the doors' sensors are tuned, opening and closing speeds are checked and adjusted, when needed to comply with ANSI Standard 156.10, the national consensus standard that defines and governs requirements for pedestrian automatic door systems. Components, belts, gears and lubricants, pivots, glass and guide rails are also checked.

Full Service Maintenance

A full service contract includes all of the advantages of a basic planned maintenance contract, but usually has a set price per door for repairs. A full service contract can generally be structured per year or per visit. In most agreements, it includes all parts and labor, routine service calls and any calls during business hours.

According to AAADM, one of the biggest benefits of a full service contract is that it gives customers the ability to fairly accurately budget every dollar they will spend on door service costs throughout the fiscal year and predict the dollars ahead of time. Furthermore, a full service plan ensures that doors are operating in prime condition and unscheduled downtime is reduced.

No matter the type of door maintenance program, customized reports should be created so that costs for each specific door can be tracked and analyzed. These types of detailed reports not only readily allow operators to identify exact costs and issues, the data also provides useful information that can help businesses make more well-informed buying decisions when it's time for future door purchases.

DAILY SAFETY CHECKS

Daily safety checks play a vital role in ensuring your automatic doors are operating properly and safely. These routine checks reduce maintenance costs by calling small problems to operators' attention before they become larger, more costly issues. Make sure your automatic door supplier has provided you with access to AAADM Daily Safety Check videos. You should contact your automatic door supplier or AAADM if you do not have a copy. These videos are excellent training tools.

You should perform daily safety checks on each automatic door. For clients' safety and your own protection, you may wish to perform these checks while traffic is light. It does not matter when you conduct your daily safety checks, but it is a good idea to get in the habit of doing them at the same time every day. It is advisable to check your door each morning when the power is turned on to the door system or after any loss of electrical power. **Always** exercise caution when performing daily safety checks

Case Closed

With 50 billion safe automatic door openings and closings every year in the United States alone, automatic doors hold an exceptional safety record. Automatic doors are manufactured with the most sophisticated technologies that ensure the safest and most efficient performance from each component of the door system. The key to safety is proper specification, installation and maintenance.

SIDEBAR

Sensor Activation/Presence Detection Safety Checks

In general, start by checking the electronic sensor by walking toward the door opening at a moderate speed at various angles. The door should start opening as you approach, should swing or slide open smoothly and stop without impact. As you move slowly toward the door, it should remain open. For doors that are used for two-way traffic, you should repeat this process from the other side of the opening.

Now, step out of the sensor zone or off the floor mat. After a brief time delay, the door should close.

Approach the safety side of the swinging door first, then have someone else approach the activating side of the door. As long as you are in the safety area of the door, it should not open. It is recommended that you observe the traffic coming to the door and plan the traffic patterns so that people will approach the doors from straight on and not from an angle.

Further, if your doors are equipped with electronic holding beams, you should cover each doorway holding the beam with your hand and stand motionless for several seconds. The door should remain open. Remove your hand and the door should close after the time delay expires. If other safety devices are being used, crouch motionless in the door opening for ten seconds. The door should not close. If door continues to close, this would reflect a malfunction of the safety sensor.