

SAFETY AND INDEPENDENCE:

Automatic Doors for Elder Care Facilities

Do you have questions about the many ways automatic doors can benefit facilities for aging populations? AAADM has answers.

Approximately 8.3 million people live in U.S. elder care facilities, including 1.3 million in nursing homes, 811,500 in assisted living facilities, and 286,300 in daily-based caregiving. Beyond the skilled professionals needed to administer care to these populations, there is also a responsibility to make the physical building as safe as possible. The American Association of Automatic Door Manufacturers (AAADM) believes that automatic doors are a vital part of creating a safe place to live for elder residents and patients. They are uniquely suited for increasing mobility and independence while at the same time limiting access where necessary. Automatic doors protect residents, reduce the spread of germs by eliminating door touchpoints, and increase overall convenience and staff efficiency within the facility.



For caregivers, automatic doors are an extra tool to help safeguard residents. They can be used all over a campus, at main entrances, corridors, resident rooms, and common areas such as activity and recreation areas, dining spaces, and restrooms.

In addition to the benefits to residents, automatic doors help maintain a high level of security for visitors, and decrease energy costs by limiting the escape of conditioned air from manual doors that would have to be propped open to allow mobility.

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The coronavirus pandemic demonstrated how residential elder care facilities can become incubators for virus spread, with a high volume of people living in close proximity, sharing common spaces, and using the same doorways. For these reasons, in the current COVID era, facility managers have been moved to seek as many touchless doorway options as possible to help reduce the spread of germs by eliminating common shared touchpoints. Automatic doors provide the best solution to accomplish this objective, too.

Types of elder care facilities

The automatic door needs of your facility will vary, obviously, on the level of care your facility provides. For the purposes of this paper, we will divide them into three broad categories:



Assisted living.

This covers a scale of the functioning of residents with some degree of independence. These types of facilities might need automatic doors for general security, common areas like dining rooms, hallways for added staff convenience, and possibly even resident room access.



Convalescent care.

For residents requiring a higher frequency of staff interaction, including Alzheimer's/memory care. These facilities require the most stringent access control and the addition of wander management, as some residents may be at risk for facility elopement.

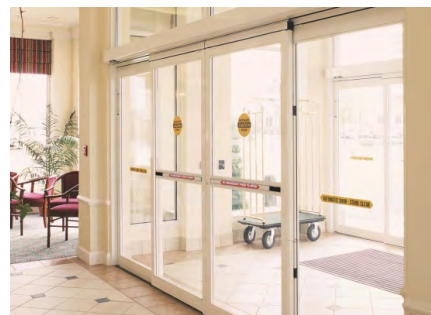


Hospice.

Residents are generally confined to their own rooms. Automatic doors are required for general security and staff convenience. They facilitate hands-free passage of medical equipment into rooms, and close after entry, addressing patient privacy concerns.

Components of an automatic door system

Generally, automatic door systems for elder care facilities require **three main components: an access control system, wander management, and the door itself**. Some door manufacturers offer a total solution that includes all three. Many do not, requiring facilities to get their access control and wander management from a company different from the door manufacturer. It is up to each facility management team to determine the best course of action. It's important to remember, no matter which door company you choose, the door WILL be compatible with any access control system. Your choice of door manufacturer will not limit your access control and wander management options.



An **access control system** uses sophisticated sequencing logic components to interface with the mechanical automatic door system. It coordinates the keypads, card readers, and/or wave plates that permit access to specific doors by specific people. It controls automatic magnetic locking of doors during lockdown emergencies, as well as automatic unlocking of doors in events such as fires.

Wander management is an additional layer of security for memory care and other residents at risk of attempting to leave the facility unannounced. Roughly half of all nursing home residents

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(47.8%) are living with Alzheimer’s Disease, demonstrating the need for such a system. With wander management, typically, memory care residents wear a specially encoded wristband that recognizes when they are near a door. An alert is delivered to staff while simultaneously the door delays opening, usually for a period of 15 seconds. This is usually enough time for staff to intercept the resident or for the resident to self-redirect.



Meanwhile, **each individual door** is also equipped with its own safety, security, and access measures.

The type of automatic door you choose for a given application will depend on a number of factors. There is no “one type fits all” automatic door. Discuss your needs in detail with your automatic door provider before making final decisions. The provider can suggest the door features and types that best suit the needs of the facility and the project budget.

New construction vs. retrofit

The automatic door options for elder care facilities are deep and vast, too great to cover in detail for the purposes of this paper. But we can provide a robust overview of the things to consider before making a decision about what is right for your facility.

The first item to consider is whether your facility is new construction or a retrofit. With new construction, it is much easier and more economical to incorporate just about any type of automatic door into your build.

With retrofits, there are also plenty of options, but many decisions will center on balancing the necessary safety requirements with budgetary concerns. In general, automatic door decisions in retrofit situations will come in three options: good, better, and best.



Here is an example of how those options might look:

- **Good.** *A low-energy operator is added to a manual swing door.*
- **Better.** *Introducing a low-energy operator to a manual swing door, and incorporating it into perimeter access control or a day/night automatic function (to restrict areas at certain times) to better control accessibility.*
- **Best.** *Replace the manual door with a new automatic slider. It offers optimum function with the smallest footprint.*

Elder care facilities also often try to incorporate attractive aesthetics into their designs to ease the transition for residents from at-home living. Automatic doors are versatile enough to fit many different architectural styles and color palettes. They can be designed to beautifully complement the environment of the facility.

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Sophisticated equipment

Automatic doors are sophisticated equipment, perhaps even more than you realize. Every door placed within your facility must be manufactured to comply with standards from at least four overseeing bodies: **ANSI (American National Standards Institute)**, **NFPA (National Fire Protection Association)**, **AHCA (American Health Care Association)**, and **AAADM**.

Some of the provisions covered by NFPA and AHCA include so-called life safety codes that dictate automatic override of magnetic lock systems in case of fire or other emergencies to give residents



(and staff) the ability to make a clear escape from the building. They also inform on how doors must be able to withstand fire for a certain length of time in the event a door needs to close to contain a fire started in a specific area and prevent it from spreading to other parts of the building. Hold-open devices that release when the door is pushed or pulled are permitted.



ANSI and AAADM standards cover the force with which the door closes and the functioning of sensors to prevent someone from being trapped between closing doors. AAADM has a detailed course for installation and maintenance of automatic doors to encourage their continued safe operation.

Because of the complexities inherent to compliance with these governing bodies, it's helpful to limit the number of additional contractors needed for proper execution of the automatic door system. It helps ensure the best results and creates a single point of contact during the project and for any post-install troubleshooting.

There are a variety of automatic door categories, and often sub-categories within each.

Sliding doors are what most people think of when they hear the term "automatic door." They are engineered to meet the challenging demands of nursing homes, which operate 24 hours a day, seven days a week. They are available in single, bi-part, telescopic, and small-footprint telescopic.



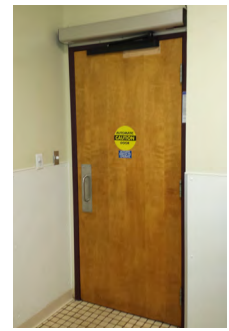
Swing and folding doors provide ADA-compliant handicap door openers and high-traffic automatic access. They can be installed with new construction but also easily upgrade an existing door. Folding doors are versatile and provide a solution for large openings as well as for narrow corridors that require wide openings in a narrow space.



Resident room door systems are a versatile solution that facilitate user convenience for entry into their living quarters and reduce potential injury by eliminating the need to negotiate usage of a heavy manual door. NFPA code requires doors that open in or out of a corridor to be fire rated and have the ability to self-close and latch. For manual doors on resident rooms

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to comply, they must be outfitted with a closer mechanism that creates a scenario in which elder residents, who may already be living with weakness and mobility issues, have to “fight with the door” to open it. Automatic doors alleviate this concern, with the added benefit of both opening and closing automatically, while still complying with the NFPA fire code.



AAADM is here to help

Regardless of what type of door best fits your facility’s needs, make sure you are contracting with an AAADM certified company that employs AAADM Certified Technicians to ensure your doors are installed to the ANSI 156.10 or ANSI 156.19 pedestrian safety standards. You can find a directory of AAADM members here:

<https://www.aaadm.com/member-directory/index.html>

