

Automatic Doors as a Design Element:

How Architects Can Integrate Touchless Entries for Accessibility, Aesthetics, and High-Performance Building Flow

Automatic doors are no longer simply functional building components. In contemporary architecture, they must balance accessibility, efficient energy performance, security, and design intent. They represent a powerful design opportunity that is often underutilized.

Professionals who work with automatic door systems every day say architects increasingly want entrances that are seamless, minimalist, code-compliant, and adaptable, though they may not always be aware of the full range of available options.

Most automatic door manufacturers have people within their organizations available to work closely with architects to make sure they get precisely the doors they need for a given project.

“Most architects already have a basic understanding of what automatic doors can bring to a project,” said Deborah Rutherford, architectural consultant with Horton Automatics, a manufacturer of automatic door systems. “I hear feedback from architects on what they want to know. They care about minimalist design with clean, clear sight lines and functional efficiency. Something that works seamlessly with the building and the user experience.”

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Shawn Boerst, national specification manager with Record USA, a supplier of automatic door systems, says architectural firms that specialize in healthcare or retail generally have the greatest awareness. “They’re well-informed on the benefits that automatic doors can bring to a building. We help them navigate how functionality can vary depending on door type,” Boerst said.

Education as partnership

Architects licensed through the American Institute of Architects require continuing education hours annually, with Health, Safety, and Welfare (HSW) credits particularly valued. Automatic door manufacturers increasingly provide accredited continuing education programs that address accessibility, energy performance, safety standards, and system integration. Rutherford leads these kinds of classes for Horton.



**The American
Institute
of Architects**

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“It goes beyond advice on how to blend in with the rest of design aesthetic,” said Rutherford. “With paint, coatings, and cladding, the industry has done an excellent job of providing architects with choice. I’ve never heard anyone say, ‘I can’t get this to match with my façade.’”

These programs do more than satisfy licensure requirements. They equip architects with the knowledge to make informed design decisions, avoid specification errors, and successfully employ automatic doors as intentional architectural elements. Automatic doors are not merely building hardware. They are architectural instruments that shape how occupants move, how buildings perform, and how design intent is realized at the most critical threshold of all.



Doors—at the entry and throughout the interior—play a critical role in shaping the building experience. They influence first impressions, traffic flow, accessibility, and operational efficiency. When thoughtfully specified and integrated, automatic doors support design aesthetics, meet evolving codes, conserve energy, and enhance security while remaining visually cohesive.

The key is early collaboration. When architects engage manufacturers during design development rather than after documents are finalized, they unlock configuration flexibility, performance optimization, and seamless aesthetic integration.

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Accessibility as design strategy

When specifying automatic doors for a project, it is important to first determine the application needs. There are many things to consider including usage level, safety, code concerns, and potential security requirements. Industry standards and certifications from the American Association of Automatic Door Manufacturers (AAADM) should be followed to ensure safety and proper installation, and installers are recommended to be factory trained and AAADM-certified.



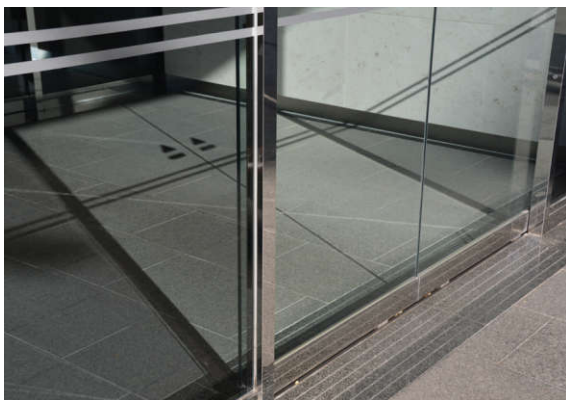
While the touchless entry afforded by automatic doors has become standard in healthcare and higher education environments, it has rapidly expanded across retail, corporate, and civic buildings, as well. Architects must evaluate required maneuvering clearances, placement of activation devices and distance from the opening, door hold-open timing, opening force limitations, and traffic flow patterns.

Automatic sliding systems offer reduced opening modes, allowing doors to partially open during low-traffic periods to conserve energy while maintaining accessibility. Swing door operators with advanced power assist or push-and-go functionality can compensate for stack pressure or high wind loads, conditions that can otherwise make doors difficult to operate manually.

Following the codes

As building codes evolve, particularly at the state level, early coordination with manufacturers helps ensure compliance without compromising design intent.

There is more than accessibility to keep in mind. Codes dictating a building's energy efficiency are becoming more stringent. "The latest versions of the International Energy Conservation Code (IECC) require increasingly more stringent U-factor performance," said Boerst. This measures how well a building material insulates against temperature fluctuation.



Some states adopt even more aggressive thresholds. Florida is even requiring water infiltration testing, the first state to do so. "Manufacturers typically design their systems to meet or exceed those of the strictest requirements," said Boerst.

Because every building occupant interacts with a door, entrance performance directly affects building flow and energy use. Automatic doors can open and close quickly and predictably, which reduces air infiltration compared to manual swing doors that can more easily be left ajar.

Reduced opening modes, tighter gasketing, improved glazing systems, and rapid cycle operators all contribute to HVAC efficiency. For high-traffic facilities, these incremental performance gains can translate into measurable savings over the life of a building.

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Security integration

Security is no longer a secondary consideration in entrance design. Healthcare facilities, behavioral health centers, financial institutions, schools, and public buildings increasingly require integrated access control and, in some cases, ballistic-rated assemblies.

Automatic sliding doors present unique specification challenges. If electrified locking is specified to secure the sliding function, thought must also be given as to how to secure the breakout function. “Will these doors be manually locked after hours? Is panic hardware needed to ensure that the breakout function is secured from the exterior while still allowing egress? These are some questions to ask,” said Boerst. “Missing components can create vulnerabilities, such as the ability to pry open a locked panel.”



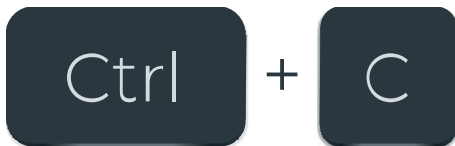
“Egress compliance is essential,” said Rutherford. “For example, sliding doors must be capable of swinging out in the direction of egress, require a maximum force of 50 pounds, and must remain free of obstacles.”

Early manufacturer consultation ensures that electrified locks, access control wiring, breakout capabilities, and life-safety hardware are correctly coordinated.

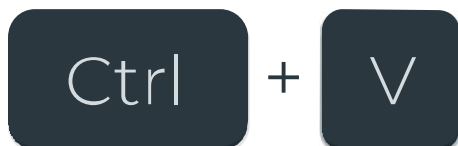
As facilities move away from keypad systems toward keycards or other credential-based access, architects often request wiring diagrams to coordinate with security consultants and electricians. These conversations typically require only one or two focused meetings but significantly reduce downstream conflicts.

No copy-and-paste specification

Automatic doors are sometimes specified using legacy language carried forward from previous projects. While this may work in similar facility types, it can also overlook the evolving codes, security needs, and energy requirements.



Manufacturers emphasize the importance of treating each project individually. Early dialogue enables the team to determine traffic patterns, local codes, whether access control is required, and if full or partial breakout will be needed.



Because doors sit at the intersection of architecture, mechanical systems, security, and life safety, they benefit from integrated coordination.

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Customization doesn't cost more

A common misconception is that “custom” equates to “expensive.” In practice, most automatic door systems are built to opening dimensions using extrusions cut to length. Most manufacturers will offer some standard sizes, but custom sizing does not necessarily introduce additional cost. In fact, Rutherford says more than half of Horton’s projects are custom.



However, spatial constraints must be understood early. For example, a six-foot clear opening cannot always be achieved within an eight-foot rough opening using a bi-parting slider. Instead, a telescoping door configuration may be required. Similarly, certain healthcare environments—such as ICU settings—introduce additional constraints around breakout requirements, glazing size, and infection control.

When all parties understand the relationship between rough opening, clear opening, and door configuration, they can plan the best option.

Ultimately, automatic doors perform best when they are considered early and treated as part of the total architectural language of a building rather than as a late-stage hardware decision. When architects collaborate with manufacturers and consultants during design development, they can gain a deeper range of solutions that support accessibility, energy performance, security, and aesthetics simultaneously.

The result is an entrance that does more than open and close. It guides movement, protects the building envelope, and reinforces the design vision at one of the most visible and frequently used elements of the structure. As touchless technology, code requirements, and performance expectations continue to evolve, automatic doors will remain a key tool for architects seeking to create buildings that are welcoming, efficient, and resilient.