

# Door Security+Safety

DHI'S PUBLICATION FOR DOOR SECURITY + SAFETY PROFESSIONALS

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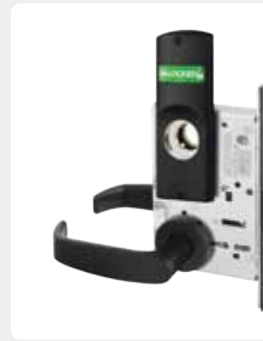


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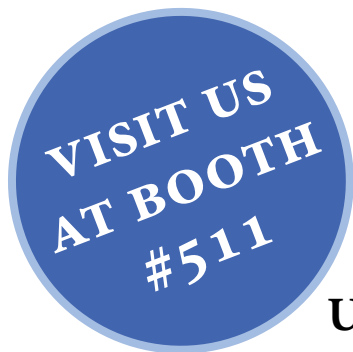
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## ABOUT THE COVER

The bullet and blast-resistant security interlock room at the Washington Memorial is an essential part of the security infrastructure of this iconic American landmark. It protects visitors while enabling full accessibility for everyone.



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# A FRESH PERSPECTIVE ON A LONGSTANDING MAGAZINE



**CRAIG A. CHABOT, AHC, CDC, CSI,** is the owner of Norwood Hardware and Supply Company and Chair of the DHI Media + Editorial Board. Email: [cchabot@norwoodhardware.com](mailto:cchabot@norwoodhardware.com).

**AS THE NEW CHAIR OF THE DHI MEDIA + EDITORIAL BOARD (M+EB), I WANT TO THANK PRIOR CHAIR GINNY POWELL OF HAGER COMPANIES FOR HER WORK AND KIND GUIDANCE. HAVING VOLUNTEERED A FEW YEARS BACK FOR THE M+EB, I CAN SAY IT IS REWARDING TO BE INVOLVED IN THE DEVELOPMENT OF EACH ISSUE OF THE MAGAZINE.**

Our industry and the magazine are at their best when thoughts and ideas are discussed and analyzed by a mix of individuals representing distributors and manufacturers who serve on the M+EB. Thank you to all M+EB members, who are listed in the masthead on page 3 of this issue. We always encourage and seek out new subject content, so please share your ideas with us.

My journey in the industry started as a distributor member in 1983. I began reading the magazine (then called *Doors & Hardware*) well before that, as it was always present in our house.

My dad, Robert Chabot, came up through the manufacturing ranks at Lockwood. While there he was fortunate to have Adon Brownell as his mentor. Brownell, author of "Builder's Hardware Handbook" and "Taking the Mystery Out Of Builders' Hardware," is considered by many to have been the dean of architectural hardware consultants. In 1959 he was awarded honorary consultant membership in the Society of Architectural Hardware Consultants (the predecessor to DHI), in recognition for his contributions to the industry.

With Brownell's help, my dad earned his Architectural Hardware Consultant (AHC) credential and found an opportunity at a distributor. His idea of remote work was taking home a set of blueprints over the weekend.

I still prefer the print copy of *Door Security + Safety*—and any magazine for that matter—and always will. My favorite articles have always been those that provide technical information and historic perspective—we all have a great deal to learn from each other.

As an industry we navigate to our greatest capabilities when real-world executable best practices are defined and shared. Performing our scope of work is always daunting given all of the codes, models and standards that sometimes work to manage us instead of the other way around.

Through it all, our industry has learned to be nimble and adapt to evolving market forces. Today's distributor embraces the myriad elements essential to deliver highly engineered final products.

In this issue of *Door Security + Safety*, we feature several articles that address accessibility and sustainability—topics that matter today to our customers. This is a new issue theme and one that was recommended by the M+EB.

As we publish future issues, we remain committed to bringing you ideas, advice and best practices on all aspects of the door and hardware industry.

Thank you for reading *Door Security + Safety*. +

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## JASON MANN, DHT, CFDAI

**PROJECT MANAGER, WESTERN PARTITIONS INC.**

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### BE A FACE OF DHI WE'D LIKE TO GET TO KNOW YOU!

Volunteering to be a "Face" of DHI is a great way to expand your professional network. It allows *Door Security + Safety* readers to get to know you better and also gives you a chance to share your accomplishments and career highlights in our industry. Not ready to be a "Face" but know someone who is? Email Alexandra Walsh at [awalsh@dhi.org](mailto:awalsh@dhi.org) with your nominee. We'll take care of the rest!

#### WHAT WERE YOUR CHILDHOOD AMBITIONS?

I always wanted to be a studio musician. Not the famous artist, but the person who plays in the studio to record the famous artist's music.

#### WHAT WAS YOUR FIRST JOB?

I had a few under-the-table jobs until I started working at McDonald's when I was 16.

#### WHAT LED YOU TO OUR INDUSTRY?

Honestly, I kind of fell into it. My interests in music and musical equipment meant that I was already used to keeping large amounts of unique and specific part numbers in my brain. I found myself in need of a job about 15 years ago. I was hired at a local building supplier, and it just fit. It has been quite the ride, but I think I have found my place.

#### WHAT'S YOUR PROUDEST PROFESSIONAL MOMENT?

Passing my CFDAI. It was the first professional credential that I have ever received. It might not seem like a big deal, but it was for me. It felt like I could have just a little confidence in what I do know. That prep class taught me how much I really do care about building openings and how they operate to keep us all safe.

#### WHAT'S BEEN YOUR BIGGEST CHALLENGE?

I worked on a large project a few years ago with more than 700 openings. It was one of the first projects that I had ever worked on by myself, and I did not have a lot of help. I had to figure out what needed to be done, how to do it and what to do if/when things didn't go according to plan. As I work

for a supplier/installer, there were extra complications in jobsite coordination as well. It was stressful, but I wouldn't trade that experience for anything.

#### WHAT'S YOUR GUILTY PLEASURE?

Ha! Board games! I don't mean your regular classics. I mean strategy board games. It is quite a niche, but I do enjoy it.

#### WHAT'S YOUR FAVORITE BOOK/MOVIE?

"Neverwhere," by Neil Gaiman.

#### WHO DO YOU CONSIDER A MENTOR OR HERO?

Brian Keys. I would say that my knowledge, in whole, about the door, frame and hardware industry is 20% experience, 30% DHI and 50% Brian Keys. He has taught me more than I think I realize.

#### WHAT'S THE BEST ADVICE YOU EVER RECEIVED?

Weigh the cost of being right.

#### WHAT'S THE BEST ADVICE YOU NEVER RECEIVED?

Listen more than you speak.

#### HOW HAS YOUR INVOLVEMENT WITH DHI SUPPORTED YOUR CAREER?

I had about 10 years of openings experience before my first DHI encounter. There were a lot of things I already knew. What DHI offers is almost a universal language for opening professionals to communicate. I am excited to be part of this community. I look forward to continuing my own education, and maybe helping someone else understand some of these complexities in the future, if I can!



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ACCESSIBILITY REQUIREMENTS FOR

# Operable Hardware and Door Control Devices

BY LORI GREENE, DAHC/CDC, FDAI, FDHI, CCPR



## Accessibility standards do not change frequently and are less prescriptive than other codes in some of the sections that address door hardware.

The requirements of the accessibility standards have not changed as frequently and radically as some of the other codes and standards addressing door openings.

However, there are many questions about applying these mandates. This is often because the accessibility standards are less prescriptive than other codes in some of the sections that address door hardware.

One of the frequently asked questions is whether a piece of hardware can be certified as compliant with the Americans With Disabilities Act (ADA) Standards for Accessible Design or ICC A117.1 – Accessible and Usable Buildings and Facilities.

There is currently no certification standard that is referenced by the model codes or accessibility standards for determining the compliance of a product. However, there are resources to help us understand the intent of the requirements.

There are some specific exceptions in the codes and standards, but most doors are required by current codes to be accessible.

The Commentary edition of the International Building Code (IBC) states, “In the early 1990s, building codes tended to describe where accessibility was required in each occupancy, and any circumstance not specifically identified was excluded. The more recent codes represent a fundamental change in approach. Now one must think of accessibility in terms of ‘if it is not specifically exempted, it must be accessible.’”

One exception stated in the accessibility standards is related to doors that are operated only by security personnel. These doors are exempt from some (but not all) requirements.

In the ADA standards and the ICC A117.1 Commentary, all references to security personnel are related to detention and correctional facilities, courthouses and guards at security gates. An ADA advisory states that the exceptions would only apply to locations where security personnel



For hardware operated with a forward, pushing motion such as this panic hardware, the hardware must operate with 15 pounds of force or less.

have sole control of doors or gates. It is not permissible for security personnel to operate the doors for people with disabilities and allow other building occupants to have independent access.

The accessibility standards include separate sections for manually operated doors and for automatic doors. This article focuses on the requirements for the operable hardware and door control devices on manual doors. There are additional requirements related to the door itself. These include the clear width and height, maneuvering clearance, vision panels and changes in level at the threshold. Some accessibility requirements are also found in the model codes. Consult the adopted codes and standards for more information.

### Operable Parts

Accessibility standards require that the hardware used to operate a door must have a shape that is easy to grasp with one hand. In addition, the hardware must not require tight grasping, pinching or twisting of the wrist. The standards are not specific about how this operability is evaluated. However, an ADA advisory states hardware that is operable with a closed fist or a loose grip accommodates the widest range of users.

Operable hardware that requires simultaneous hand and finger movements is not recommended. This is because greater dexterity and coordination are needed.

Although hardware that is operable with a closed fist would meet the intent of the requirement,

this type of operation is not mandated by the standards. Most lever handles are acceptable. Knobs do not typically comply because they require twisting of the wrist.

Thumbturns, such as those used to project and retract deadbolts, may or may not be compliant with the standards. It depends on the size and shape. Elongated thumbturns that pivot from the end instead of the center are usually operable without tight grasping, pinching or twisting of the wrist. Many code officials use the side of their palm or the tip of a pencil to test operable parts.

Questions often arise about keys, as well as fobs or cards used for electronic access control. Although these credentials may require the user to grasp them and insert them into a key cylinder or a reader, they are technically not prohibited by the accessibility standards. This is because they are not considered operable parts.

An operable part is defined by the ADA standards and ICC A117.1 as a component of an element used to insert or withdraw objects or to activate, deactivate or adjust the element (e.g., telephone coin slots, push buttons, switches and handles).

An element is defined by the standards as an architectural or mechanical component of a building, facility, space or site (e.g. telephones, curb ramps, doors, drinking fountains, seating and water closets).

Based on these definitions, keys and access control credentials are not operable parts. Therefore they are not subject to the requirements of the standards. However, accommodations may need to be made for building occupants who do not have the physical dexterity to use some types of credentials. For example, a proximity fob that can be placed near a reader would likely be easier to use than a card that must be inserted into a reader.

### Operable Force

Limits on operable force for hardware are now included in ICC A117.1 and the IBC, as well as the ADA Standards.

The ADA and ICC A117.1 requirements are fairly consistent with regard to door openings. But there is an important difference when it comes to the limits on operable force.



Prior to the 2010 edition of the ADA standards and the 2017 edition of ICC A117.1, these publications did not include a limitation on the amount of force permitted to operate door hardware. In the 2010 edition of the ADA standards, which went into effect in 2012, an editorial change was made. Door hardware had to comply with Section 309.4 – Operable Parts. This section limits the force to activate operable parts to a maximum of 5 pounds.

The ICC A117.1 standard was modified in the 2017 edition to include prescriptive requirements for the force to operate door hardware. Note the limits differ from the force stated in the ADA standards.

For hardware operated with a forward, pushing or pulling motion (e.g., panic hardware), the hardware must operate with 15 pounds of force or less. For hardware operated with a rotational motion (e.g., lever handles), the limit on operable force is 28 inch-pounds.

These limitations are based on values specified by the ANSI/BHMA standards for hardware and model code requirements. The forces included in ICC A117.1 have also been incorporated into the 2021 edition of the IBC.

The U.S. Access Board's Guide to the ADA Accessibility Standards recommends 1 1/2 inches of clearance behind door pulls and other hardware.

## Hardware Clearance

To help ensure that the majority of building occupants are able to operate door hardware, sufficient clearance is needed. The amount of clearance that is required behind or beside a door pull, lever handle or other operable hardware is not specified by the accessibility standards. But it is addressed in the U.S. Access Board's Guide to the ADA Accessibility Standards.

The recommended knuckle clearance for bars, pulls and similar hardware is a minimum 1 1/2 inches. This is consistent with the clearance requirements for handrails and grab bars.

To meet the intent of the standards, the minimum clearance should also be provided on each side of a vertical pull handle.

For example, the accessibility standards require hardware for sliding doors to be exposed and usable from both sides when the doors are



in the fully open position. Surface-mounted pull handles are typically used to satisfy this requirement. When a sliding door is in the fully open or fully closed position, the distance from the pull handle to the jamb should be at least 1 1/2 inches.

## Mounting Height

The accessibility standards include limitations on the reach ranges for building elements and operable parts. The intent is to accommodate the majority of building occupants, including people using wheelchairs. The allowable mounting height range for door hardware is more restrictive than the reach ranges specified in the standards. Operable hardware must be mounted 34 inches minimum and 48 inches maximum above the floor or ground.

Some state codes and standards differ regarding the allowable mounting height for door hardware. For example, Chapter 11 of the California Building Code limits the range for door hardware to a minimum of 34 inches and a maximum of 44 inches above the floor. This can result in difficulties coordinating hardware installation so that all operable parts are within the allowable range.

The recommended knuckle clearance for bars, pulls and similar hardware is a minimum 1 1/2 inches. This is consistent with the clearance requirements for handrails and grab bars.



Door closers must be adjusted to meet the opening force and closing speed limitations of the accessibility standards.

A common question related to hardware mounting heights is whether the entire operable part must be within the range specified in the codes and standards. Components such as lever handles, thumbturns and panic hardware should fall completely within the allowable range. However, there are some products, such as vertical door pulls, that could extend above or below the range if a usable portion of the pull is within the 34- to 48-inch area.

Careful coordination is needed for components that fall near the limits of the mounting height. For example, if a deadbolt is installed with the centerline of the lock at 48 inches above the floor, there may be operable parts of the lock that are above the 48-inch mark.

There are several exceptions to the mounting-height requirements. The ADA standards allow existing locks in any location when installed on certain doors and grilles. These exceptions extend to existing glazed doors without stiles, existing overhead rolling doors or grilles and similar existing doors or grilles that are designed with locks activated only at the top or bottom rail.

There is also an exception in the codes and standards related to swimming pool doors and gates. The exception helps to ensure that small children cannot enter the pool area unaccompanied by an adult.

### Opening Force

Opening force limitations for manually operated doors are addressed separately from operable force requirements for door hardware.

For interior, non-fire-rated, swinging, sliding and folding doors, the codes and standards limit the opening force to a maximum of 5 pounds. The accessibility standards do not address the opening force for exterior doors and fire doors.

The model building codes and fire codes, however, do include opening force limitations for these doors.

The opening force for manually operated exterior doors and fire doors is limited to 30 pounds to set the door in motion. The limit is 15 pounds to move the door to the fully open position.

An advisory in the ADA standards clarifies that the maximum opening force pertains to the continuous application of force that is needed to open a door fully. It does not pertain to the initial force that is necessary to overcome the inertia of the door.

The force required to retract or disengage latching hardware is not measured in conjunction with the opening force. The IBC specifies that the opening force is measured by applying force to the latch side of the door. In addition, the IBC Commentary states that the door will be unlatched before the force is measured.

Door closers must be adjusted to meet the opening force and closing speed limitations of the accessibility standards.

The U.S. Access Board's ADA Guide includes a recommendation for how to measure the opening force of a door; Annex A of ANSI/BHMA A156.4 – Standard for Door Controls – Closers also includes a recommended method that varies slightly.

According to the ADA Guide, the door is unlatched and opened so that the push-side face of the door aligns with the pull-side face of the door frame. A force gauge is placed immediately above the operable hardware. It should be positioned about 2 1/2 inches from the latch edge of the door. Keeping the gauge perpendicular

to the face of the door, the door is pushed open to a position of 70 degrees. Subsequently, the required force is noted on the gauge.

### Closing Speed

To help ensure building occupants can safely move through openings that are equipped with door closers or spring hinges, both the ADA standards and ICC A117.1 include limitations on the closing speed of doors.

If a door has a door closer, it must take at least 5 seconds for the door to move from the 90-degree position to a point 12 degrees from closed. For doors with spring hinges, the minimum time permitted for the door to move from the 70-degree position to the closed position is 1.5 seconds.

The delayed action feature of a door closer holds the door open for 1 to 2 minutes when the door is opened to approximately 90 degrees. This feature is not required by the accessibility standards. However, it may be helpful in some applications as it gives a person more time to maneuver through a doorway.

In the past, there were questions about whether delayed-action closers were allowed to be used on fire door assemblies. This was clarified in the 2018 edition of the IBC. The code now specifically states that delayed action closers are permitted on fire doors.

Appendix A of ANSI/BHMA A156.4 includes a recommended method for measuring closing time to determine compliance with the ADA standards.

A point is located on the center line of the push plate or lock trim, or at 30 inches from the hinge edge of the door, whichever is greater. The floor is marked at this point with the door

open to 90 degrees. A second mark on the floor is made with the door at the 12-degree position. The closing time is measured as the door moves from one point to the other.

A similar process could be used for a door equipped with spring hinges.

### Conclusion

Because some of the language related to door hardware found in the accessibility standards is not prescriptive, interpretations may be inconsistent.

In some cases, more than one set of accessibility requirements may apply to a particular project. And state and local codes are sometimes more restrictive than the national standards. In many jurisdictions, ICC A117.1 is the referenced standard used during design and construction. However, the ADA applies throughout the life of the building as it is a federal law.

Given the potential for conflicting requirements and interpretations, it is important to be familiar with all of the codes and standards that apply in a particular jurisdiction.

Information found in the Commentary and Handbook editions of the codes and standards, the U.S. Access Board's ADA Guide, the ANSI/BHMA standards and other supplementary sources can be very informative. But, they are not technically part of the enforceable codes and standards. The safest approach is to comply with the most stringent requirements. Also consult the Authority Having Jurisdiction when questions arise. +

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# ACCESSIBLE DESIGN

## MADE EASIER





# Sliding doors can go beyond ADA requirements.

BY TYSEN GANNON, LEED AP



Sliding doors provide premium acoustic performance.

(PHOTO COURTESY OF ALEX NYE PHOTOGRAPHY.)

Creating built environments that are accessible for all is not just a good design practice, it is a legal requirement for most public buildings.

In 1990, the Americans With Disabilities Act (ADA) was passed, legally protecting people with disabilities from experiencing discrimination in all aspects of public life. For building professionals, Title III of the ADA directly affects how buildings are constructed and renovated. This part of the act secures minimum accessibility requirements from the parking lot to the building's interior.

While the ADA outlines minimum requirements, it does not prescribe exact methods for achieving building accessibility. In fact, designers and specifiers have many paths to satisfying ADA requirements.

When it comes to creating ADA-compliant openings, commercial sliding doors contribute to accessible design in multiple ways. Among these are creating accommodating opening widths, being available with no-twist hardware, meeting operating force requirements and more. They also allow designers to take a step beyond minimum requirements by eliminating maneuvering clearances and minimizing infection risks.

With these benefits in mind, building professionals can specify sliding doors throughout a project to ensure a structure meets or exceeds ADA requirements.



Sliding doors can create wide openings to better accommodate mobility-assistive devices.

(PHOTO COURTESY OF AD SYSTEMS.)

## ADA and Door Specifications

It is important to understand how the ADA impacts the built environment, particularly opening specifications. In general, two large categories govern building accessibility: entrances and paths of travel.

The ADA explains that entrances should be accessible to all. Most conspicuously, this means creating ramps or sloped entries. It also means that doorways are wide enough to accommodate mobility-assistive devices and they must operate with ease. This requirement extends beyond the exterior entryway and includes all doors within the built environment.

The second broad category is ensuring an accessible path of travel. Individuals with disabilities should have a clear and unobstructed route from entrances to various areas within a facility. These include restrooms, service counters and seating areas. While not as obvious as accessible entrances, accessible paths of travel can be compromised if a swing door is left opened.

Within these larger categories, there are more specific requirements. Door dimensions, maneuvering clearances, hardware types and location, threshold height, force limitations and closing speed are all addressed.

While the ADA is national in scope, it is important to note that some locations may

have additional requirements beyond what is outlined. It is recommended that building professionals consult with an Authority Having Jurisdiction (AHJ) to ensure a design will meet the necessary minimum requirements for a particular location.

## Beyond Minimum Opening Widths

For most doors, the ADA requires a minimum width of 32 inches when fully opened. While this is a general benchmark, there are exceptions and door applications that may need larger widths. This underscores the importance of consulting with an AHJ to clarify code requirements.

Though the 32-inch mark may be achieved in many applications, it can prove difficult in spaces where square footage is at a premium. This is due to the area that has to be sacrificed to accommodate for swing arc trajectories.

The efficient use of space bears particular importance in health care settings. Exam rooms often need planning to fit all necessary equipment while still allowing a maximum number of rooms throughout the facility.

Commercial sliding doors eliminate swing arc trajectories. This allows larger door openings without additional square footage to accommodate their use and can save up to 30 square feet per door. This may not initially seem like much for commercial spaces, but the amount of space sliding doors save accumulates. Hundreds of square feet per level could be freed with sliding doors. Sliding doors can help designers meet or exceed ADA requirements without having to sacrifice space efficiency.

A secondary benefit of not having a swing arc is that when opened, these doors will not create obstacles along paths of travel. Unlike swing doors, commercial sliding doors will not block corridors when left open. Because sliding doors can be specified with a top-hung roller system and drop-down perimeter seal, as well, they sideline the need for a threshold. This further contributes to an unobstructed floorplan.

## Maneuvering Clearances With Ease

Because sliding doors do not swing outward, they help make it easier for designers to plan spaces with adequate clearance for maneuvering. The ADA typically requires a space of 18 inches beyond the latch side of the door and 60 inches

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Sliding doors easily incorporate no-twist hardware and eliminate swing arc trajectories for a more accessible interior.

(PHOTO COURTESY OF AD SYSTEMS.)

in front of the door. This allows individuals with mobility devices to comfortably approach and open the door. While achieving adequate maneuvering clearances is possible with swing doors, it adds additional space requirements. Sliding doors reduce the need to plan additional space for openings.

It's also important for specifiers to consider how door operation can be made easier for those with mobility challenges. Sliding doors ensure an occupant doesn't need to lean forward to open a door, reducing the potential risk of falling. While not necessarily an ADA requirement, this consideration can help a building plan go beyond

the bare minimum to create more accessible spaces for all.

### **Incorporating No-twist Hardware**

The ADA also impacts which door hardware is allowed and where on the door it can be located. Door hardware should usually be installed between 34 inches and 48 inches above the finished floor level in order to be accessible for those using wheelchairs or other mobility assistive devices.

Door hardware is also required to be operated without tight grasping, pinching or twisting of the wrist. This helps ensure door operation is possible for a wide range of individuals. Often, panic hardware, push paddles and lever handles are recommended over round doorknobs to satisfy this requirement.

Commercial sliding doors can readily incorporate latching or locking hardware that does not require pinching, twisting or grasping to operate. This allows physical security while maintaining accessibility.

These options also include electronic access control integration with the use of electric strikes. Commercial sliding doors often feature soft closing mechanisms. They can be an important safety and accessibility feature that protects occupants against doors closing with excessive speed.

It is also quite common for automatic operators to be specified for sliding doors. They greatly contribute to their ease of use for occupants of all abilities.

### **Sidelining Force Requirements**

Automatic operators can minimize effort by allowing occupants to open a door with a wave of a hand or a push of a button. Currently, the ADA limits the amount of opening force to five pounds. Door weight and size can affect both opening and operating force. That complicates specification for larger opening sizes.

While a large opening is in some ways more accessible, it's also harder to operate. Automatic operators reduce this complication and may even eliminate it with hands-free functionality. Hands-free automatic doors also reduce touch points to ensure a more hygienic facility.



Because operators can be set to open and close at predetermined speeds, they can also support HVAC and air change systems to improve a facility's indoor air quality (IAQ). While not specified in the ADA, both qualities help create spaces that are more accessible to immunocompromised and immunosuppressed individuals.

### **Accommodating Visible and Invisible Disabilities**

Not all disabilities are visible, and not all disabilities are physical. The ADA does much to keep public spaces physically accessible. It's important to note, however, that meeting these standards often ensures a minimum level of accessibility.

When a project owner wants to go above and beyond ADA requirements, this may involve

designing spaces that specifically accommodate neurodivergent occupants, including those with ADHD or autism.

Commercial sliding doors can provide Noise Isolation Class (NIC) ratings up to 39. That stops a substantial amount of noise transfer between adjacent spaces. These types of doors can limit distractions and help reduce sensory overload that many neurodivergent people experience.

Commercial sliding doors can do all this while meeting and exceeding ADA accessibility requirements, making them particularly valuable in public architecture. +

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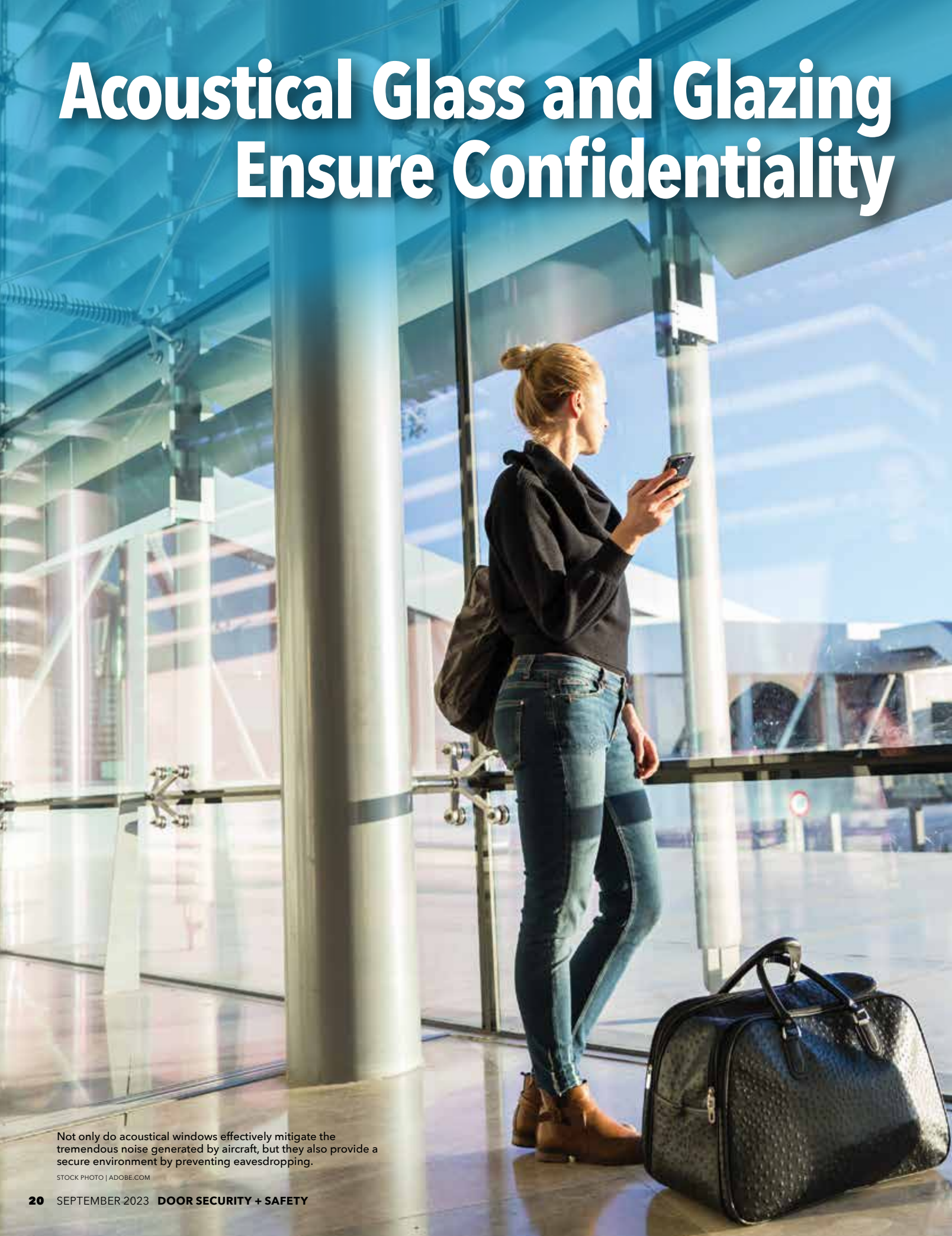
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# Acoustical Glass and Glazing Ensure Confidentiality



Not only do acoustical windows effectively mitigate the tremendous noise generated by aircraft, but they also provide a secure environment by preventing eavesdropping.

STOCK PHOTO | ADOBE.COM



## Acoustic dampening windows absorb sound, reduce noise and provide privacy and peace of mind.

BY WADE ARNOLD, CSI, CDT, AND TOM HAINES

Acoustical glass, also commonly known as soundproof glass, is an effective sound-dampening glazing material for window and door applications.

This form of glazing functions by reflecting, absorbing and dissipating sound waves that may transfer through the glass. Acoustical windows incorporate specialized laminated glass panes encompassing varying thicknesses of glass. The panes are bonded together with varying acoustic dampening interlayers. This process forms a permanent barrier, reducing noise transmission entering or leaving a building.

The variations in glass thickness and interlays ensure exterior noise is minimized and internal communication remains private.

### Can You Hear Me Now?

The use of sound control products has increased in recent years. Advances in technology have made material more effective at blocking unwanted noise. The latest soundproof glass is constructed with multiple layers of glass and glazing, acoustic-insulating

materials and other sound-dampening coatings.

These patented, multilayer systems reduce the transmission of both low and high frequency sounds, allowing for higher levels of acoustic privacy.

As cities grow more dense, sound-control glazing helps to maintain comfortable indoor noise levels. Occupants can work and live in peace without disruption from outside noises. Acoustical glass is often used in commercial and residential buildings that are positioned near high levels of traffic, stadiums or industrial areas.

When manufactured as a high-performance insulating glass unit that includes a low emissivity coating, laminated acoustical glass also provides greater thermal comfort. It accomplishes this by reducing heat transfer between interior and exterior spaces. The result helps to reduce energy costs associated with air conditioning and heating.

Additionally, laminated glass can be configured for specific applications. These include bullet resistance, hurricane protection, glare control, solar control and architectural design flexibility.

### Security

Acoustical glass is also an effective counter-surveillance tool for protecting against unwanted eavesdropping. As a physical barrier, it blocks out noise and reverberations that can be used by outside sources to glean information from within the space.

Acoustical glass reflects sound waves, making it difficult for audio amplifiers to pick up conversations in the area. In these situations, soundproof glass helps prevent the transmission of audio signals from outside sources into sensitive areas, ensuring classified or confidential information remains secure.



High-security facilities, such as federal government buildings, will typically have a sensitive compartmented information facility (SCIF) located in the center of the building. For these rooms, there may be solutions that allow you to ground the entire room to secure the transmission of sound.

Historically, this may have been done with a wire mesh covering the entire room. However, modern solutions may incorporate a low-emissivity coating with a metallic substance that helps achieve the same overall result.

### Applications

Acoustical glass can be installed on its own or as a system with ballistic/

blast-rated glazing. Common applications are to harden and shield corporate headquarters, law enforcement/courts and data centers against audio surveillance.

Airports are ideal applications for acoustical control glazing as they prevent eavesdropping, in addition to sound dampening the high level of noise created by aircraft.

Acoustical glass is especially beneficial in military facilities where sound attenuation must be maintained for operational security. It provides quieter, private environments, reducing sound transmission levels within the facility. Excessive external noise from training, including live fire exercises, is

Soundproof glass offers significant advantages in military facilities, thanks to its exceptional durability and long-term performance. Excessive external noise, such as live fire exercises, is effectively blocked, making it an indispensable tool for ensuring security at military bases.

PHOTO COURTESY OF U.S. BULLET PROOFING

blocked. That makes it an essential tool for maintaining security at military bases.

Soundproof glass is also beneficial in military facilities due to its durability and long-term performance. The material is designed to withstand harsh weather conditions and impact. As a result, it can provide reliable soundproofing for many years to come. This makes it an ideal choice for protecting sensitive information and preventing the entry of unwanted noise into sensitive areas.

### Measuring Sound Transmission

The Outdoor-Indoor Transmission Class (OITC) rating is an internationally recognized system for measuring how much sound energy is lost when passing through a wall or other structure. An OITC rating specifies noise transmission from outside to inside. A high OITC rating provides security from unwanted surveillance and protects valuable data.

To accurately measure the OITC rating, tests must be performed in qualified laboratories using standardized procedures outlined by ASTM E1332-22 Standard Classification for Rating Outdoor-Indoor Sound Attenuation. This rating system is commonly used to evaluate the performance of walls, ceilings, roofs, doors, windows and other elements of a building.

The Sound Transmission Class (STC) rating is a measure of how well a building material or structure blocks sound. An STC rating specifies noise transmission from room to room, like hotel rooms, condo units or offices.

In addition to being used in home and business settings, the STC rating is also commonly utilized when assessing a structure's acoustic performance in more sensitive environments, such as recording studios or concert halls. In these cases, much higher ratings are necessary in order to achieve the desired level of sound control and clarity.







Acoustical glass offers significant advantages in secure facilities where maintaining sound attenuation is crucial for operational security. It creates quieter and more private environments, effectively reducing sound transmission levels.

STOCK PHOTO | ADOBE.COM

STC and OITC ratings are often provided as part of their glass specification and performance criteria. However, the true evaluation of the performance would be a combination of the system as a whole that includes the glass and framing.

Specific testing can be completed to determine the appropriate performance and rating required to achieve the desired sound dampening.

### Radio Frequency Shielding

Radio Frequency/Infrared (RF/IR) shielding windows are another type of counter-surveillance glazing. They are an important consideration for military bases or other applications where security is critical. A different product makeup than acoustical windows, RF/IR windows provide an effective way to protect against RF and IR eavesdropping or signal jamming between two locations. RF/IR shielding windows appear like regular windows; they allow light transmission and block out unwanted radio frequencies. They are ideal for covert operations.

In addition, because they block most signals that are not desired, RF/IR shielding windows can protect sensitive electronic components from damage due to electromagnetic interference. RF/IR shielding windows offer a reliable way to ensure secure communication and maintain the integrity of data transmissions. By using these windows, maximum security can be achieved while eliminating the need for expensive dedicated shielding materials.

RF shielding windows use proprietary materials that block or attenuate RF signals. By blocking out most of the unwanted signals, they improve the signal-to-noise ratio. They also keep sensitive components safe from interference.

In addition, RF shielding windows reduce radiation leakage. This makes them suitable for use in medical settings where limiting exposure to electromagnetic fields is important. They are also used in industrial applications. These include remote control systems and telecommunication networks, as well

as providing a secure connection between two locations with an air gap.

As with sound control glass, RF shielding windows can be used in a variety of enclosures, including wall panels, doors, windows and ceilings.

### Improved Privacy and Peace of Mind

Including acoustic glazing windows or RF/IR shielding in a new construction project, or even as a retrofit renovation, is effective. It ensures your space is secure from unwanted surveillance and protects valuable data from prying eyes. By taking preventative measures, you can rest assured knowing your data and private conversations are safe from outside monitoring. +

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24  
**INCREASING  
ACCESSIBILITY TO THE  
ARTS**

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**SAFEGUARDING  
THE WASHINGTON  
MONUMENT**

## Increasing Accessibility to the Arts

*Operators and more at a cornerstone of the  
arts community in the nation's capital.*

**BY NICHOLE BOTTINI**

The Atlas Performing Arts Center on H street in northeast Washington, D.C. is a pillar of the community. It is also an essential element in the recent revitalization of the city's H Street corridor.



The main entrance was fitted with a touchless actuator and automatic operator to facilitate accessibility.





The historic façade of the original Atlas Movie Theater has been restored similar to the original.

The Atlas holds four performance spaces and three dance studios that host local artist groups and companies. The mission of the Atlas is “to bring people together through the arts and expand the reach and strengthen the bonds of [its] community.”

Accessibility to the facilities is critical in meeting its mission and maximizes the community impact of the Atlas.

### RIISING FROM THE RUBBLE

The Atlas Theater was originally constructed as a movie theater in 1938. It served as a beacon of community engagement in the thriving commercial center of the H Street corridor.

According to J. Samuel Walker in his historic retelling, “Most of 14th Street Is Gone,” the Atlas’ status as a community gathering place proved instrumental in its survival during the riots of 1968. The majority of the H street corridor and surrounding areas was burned to rubble following the assassination of Martin Luther King Jr. The Atlas, however, remained relatively unscathed.

The recovery and reconstruction following the riots would prove difficult due to funding and cooperation from administrative offices. Due to the lengthy restoration process and bureaucratic difficulties, “large parts of the areas most affected by destruction and violence remained an unproductive wasteland for decades.” Enthusiasm to rebuild waned.

Due to the desolation, the H Street corridor became rife with crime, deterring investors and businesses from the area. During the prolonged reconstruction of the surrounding areas, the Atlas managed to stay functional as a movie theater until 1976 when the impact of the neglect of the surrounding areas caused it to close permanently. The area did not see significant plans and motivation for reconstruction until the early 2000s.

Jane Lang, an attorney, philanthropist and arts enthusiast, purchased the Atlas “parcel” (the historic theater, adjacent retail storefront and rear alley) in 2001. Her vision was to create a 59,000-square-foot performing arts

center and venue that would lead to the revitalization of H Street.

The project was funded through the generosity and fundraising efforts of Lang along with grants from the government. The Atlas Performing Arts Center opened in 2006. Today, it serves the local community by providing a space for arts, fundraisers, galas, events and gatherings.

### OPEN ACCESS

Lang was the catalyst for changes in accessibility at the Atlas. She spoke candidly that until it became a personal need, she did not realize the necessity of accessibility in businesses.

She came to realize that the simple act of easily opening a door can dramatically affect the welcoming atmosphere of a facility. Her partner currently uses a walker and Lang wanted him to be able to get from the front entrance to any other point in the building without having to physically push or pull a door. The facilities manager at the Atlas reached out to Comdor, LLC to facilitate the necessary changes. The accessibility upgrades were made over 18 months when the center was closed during the pandemic.

The Atlas is on the National Register of Historic Places, so any aesthetic changes had to be approved. The front entrance to the foyer was fitted with historic full lite wood doors with exit devices. An operator was installed at the far-left entrance door with touchless actuators that did not dramatically impact the aesthetics of the building façade. The stage entrance in the dance studios (previously the retail storefront) was also fitted with an operator and push-button actuators.

Accessibility changes to the interior of the building were also necessary to meet Lang’s goals. The original movie theater



Upper left: STC assemblies were retrofit with waiver actuators and automatic operators to allow accessible entrance.

Upper right: The main foyer is used for community fundraisers, galas, gallery showings and other community engagement events.

Left: The original parcel included the Atlas movie theater, adjacent storefront and rear alley.

was refurbished to be the Lang Theater, the main stage for the center.

The vestibule entrance to the theater had previously been renovated by Comdor, LLC to create a sound and light trap with the use of sound transmission class (STC) assemblies. This sound trap comprises four pairs of STC assemblies. The main vestibule entry pairs are 90-minute fire rated.

The trap was successful in eliminating the transmission of sound to and from the theater. Now the main foyer of the center could host events while performances occurred.

The STC assemblies were retrofitted with automatic operators with wave actuators. This installation proved

more challenging due to the complex electrical work that was required.

The restrooms were fitted with the same operators and actuators. There is now a clear path of travel from both entrances to the Lang Theater and restrooms without physically operating a door.

### AN EXAMPLE FOR ALL

"We are living now," Lang says. "The historical preservation is important, but so is being a welcoming facility for all."

Lang believes that the accessibility renovations to the Atlas serve as a good example to other historic buildings. "There is a way to match the aesthetics and make it accessible," she says. "Too many places use the historic status as an

excuse to avoid the changes needed. It can and should be done."

Douglas Yeuell, Executive Director, elaborated on Lang's sentiments: "The Atlas prides itself in being one of the primary catalysts for growth and change in the H Street corridor. Creating an inviting and accessible entrance to its facility adds to its goals to inspire, incite, educate and entertain the local community." +

**NICHOLE BOTTINI** is Project Accountant at COMDOR LLC.  
Email: [nicholeb@comdor-dist.com](mailto:nicholeb@comdor-dist.com)





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# Safeguarding the Washington Monument

*A national landmark is protected with bullet-resistant and blast-rated glass and metal.*

BY WADE ARNOLD, CSI, CDT



In 2016, the National Park Service closed the Washington Monument for the construction of an upgraded security screening facility and elevator, ensuring a safer and more accessible experience for visitors.

**The Washington Monument was closed in 2016 by the National Park Service to construct an upgraded security screening facility and elevator. This state-of-the-art structure, made of glass and steel, replaces the previous temporary security building erected after September 11, 2001.**

## HARDENED STRUCTURE

"The whole security facility is basically just a bullet-resistant, giant glass box," Jordan Sandvik, Director of International Operations at US Bullet Proofing, says. "There is no standoff perimeter. Anybody can walk up and touch it, so the authorities wanted an extreme level of protection. Most other secure buildings are controlled with an access perimeter. The Washington Monument is unique."

## DOUBLE FAÇADE

The security facility has a double skin façade with two glass walls. The interior façade, developed by Pulp Studio, features insulating glass units with an architectural mesh for shading performance and privacy. The exterior façade and entrance doors feature ballistic protection. One of the project goals was an all-glass façade with minimal mullions to maximize sightlines. As a result, many of the Vitro Solarban 60 over low iron Starphire windows were up to 100-inches wide.

"With a double façade, you have a cavity in between the two façades," Oscar I. Echevarria, General Manager at glazing contractor Innovo Construction, says. "We created thermal models of the project and were concerned about condensation inside the cavity. We designed a large aluminum desiccant tube to capture any moisture from the glazing."

## PROTECTING PEOPLE AND HISTORY

Visitors to America's famous obelisk begin their experience at the airport-level security checkpoint. There they are required to pass through a metal detector, a magnetometer and have their belongings scanned. Next, they enter and pass through bunker doors into one of the most secure vestibules on the planet.

The bullet and blast-resistant security interlock room at the Washington Memorial is an essential part of the security infrastructure of this iconic American landmark.

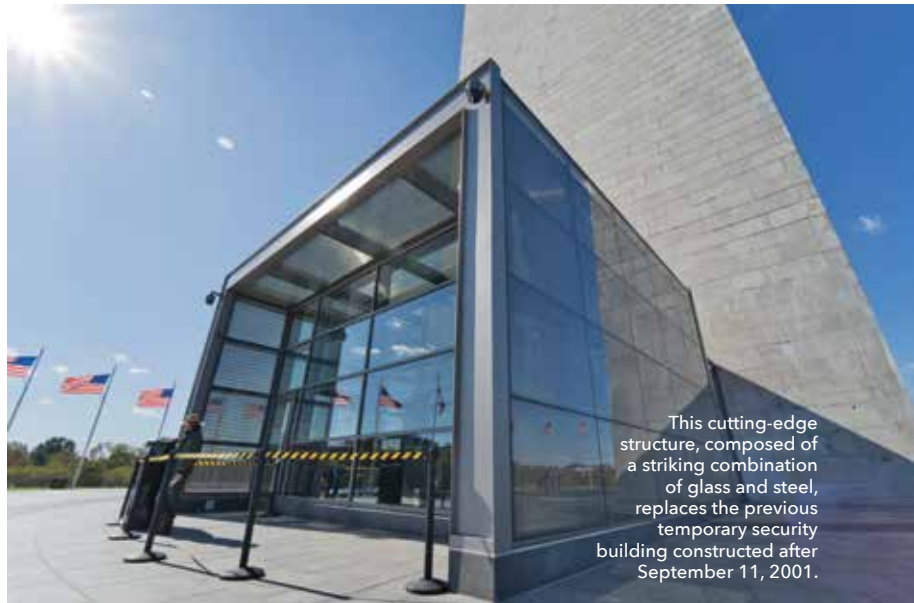
The vault-like room protects visitors and the monument from potential explosions or other destructive events. This interlock is made up of blast-rated walls and steel doors designed to contain any explosions and stop damage to the monument. The interior walls and glazing are reinforced to absorb the energy of explosions. The steel bunkers doors are rated as some of the strongest available.

This secure area also accesses a reinforced guard room with a forced-entry, blast-rated door and blast-rated windows. These high-security windows provide critical sightlines to monitor the interlock bunker, the screening area and the exterior of the monument.

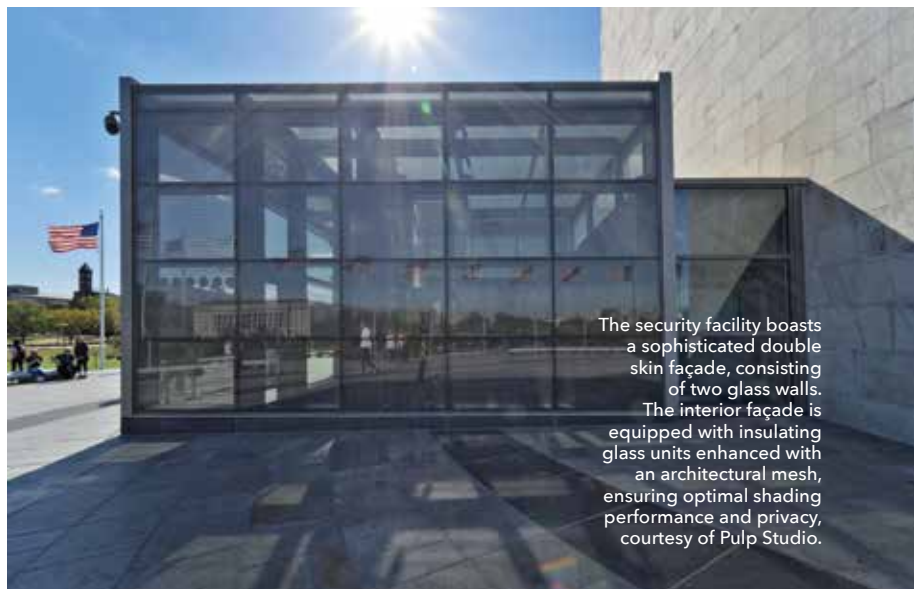
## NEVER BEEN DONE

"It was a very interesting project, and there were a lot of details," Sandvik says. "We went through a lot of reviews with the blast consultants. We collaborated at length with the architects on how to achieve the look they wanted. We worked with the National Park Service, National Trust for Historic Preservation and other stakeholders to address their interests. As it is the Washington Monument, there were a lot of eyes on this project. There was not a lot of wiggle room to change aesthetics or performance and a lot of review submittals were conducted to achieve the vision."

"Innovo Construction tends to do nontypical jobs, and it doesn't get more nontypical than the Washington Monument," Echevarria says. "The blast rating is unique, and the doors and windows



This cutting-edge structure, composed of a striking combination of glass and steel, replaces the previous temporary security building constructed after September 11, 2001.



The security facility boasts a sophisticated double skin façade, consisting of two glass walls. The interior façade is equipped with insulating glass units enhanced with an architectural mesh, ensuring optimal shading performance and privacy, courtesy of Pulp Studio.

in the interlock area are designed to the same rating as an 18-inch-thick reinforced concrete wall. The engineering technology existed, but it had never been done with glass before."

The upgraded and hardened facility will maintain the integrity and beauty of this historic site for future generations while providing safety to visitors. +

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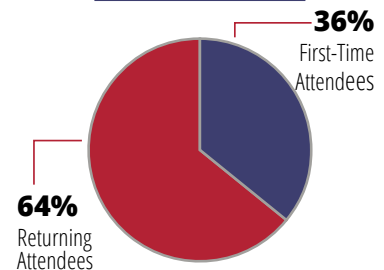
**1,217 Attendees**



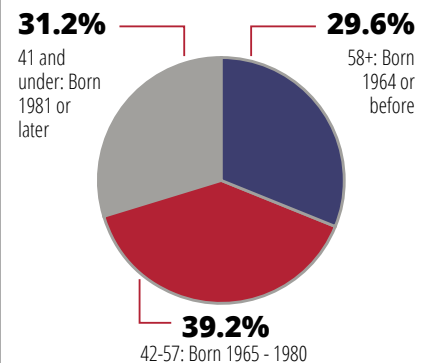
IT WAS IMPORTANT FOR ME TO BE HERE BECAUSE I WANTED TO MAKE SURE I WAS ENGAGING MYSELF IN NEW PRODUCTS, NEW UPDATES, NEW PEOPLE AND NEW RELATIONSHIPS. I'VE SEEN SOME PRODUCTS I'D NEVER SEEN BEFORE AND THERE'S A LOT OF EDUCATIONAL OPPORTUNITIES THAT HAVE BEEN GOOD FOR ME.

ALAN KASTLER, SENIOR QUALITY SPECIALIST, J.E. DUNN CONSTRUCTION

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#### AGE DIVERSITY



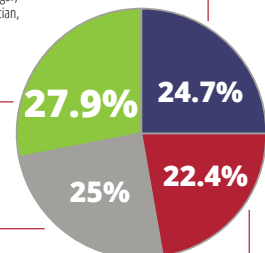
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## ★ EVENT SCHEDULE

### MONDAY, OCTOBER 24

**8:00 AM - 5:00 PM**

Registration Open

**12:00 PM - 3:30 PM**

Pre-Conference Workshop

### WEDNESDAY, OCTOBER 25

**7:00 AM - 4:30 PM**

Registration Open

**8:00 AM - 12:00 PM**

Conference Sessions

**12:00 PM - 4:30 PM**

Exhibit Hall Open

**1:00 PM - 3:20 PM**

Innovation Theater in Exhibit Hall

**3:30 PM - 4:30 PM**

Happy Hour Networking Reception in Exhibit Hall

**6:00 PM - 8:00 PM**

Influencer Party

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### THURSDAY, OCTOBER 26

**7:00 AM - 4:30 PM**

Registration Open

**8:00 AM - 12:00 AM**

Conference Sessions

**11:00 AM - 12:00 PM**

DHI President's Remarks & Panel Presentation

**12:00 PM - 4:30 PM**

Exhibit Hall Open

**12:30 PM - 3:20 PM**

Innovation Theater in Exhibit Hall

**6:00 PM - 9:00 PM**

DHI conNextions After Party

**SPONSORED BY:**

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**Note:** Hours and schedule subject to change, please refer to [www.dhiconnextions.com](http://www.dhiconnextions.com) for up-to-date schedule.

DHI  
conNextions

### THURSDAY, OCTOBER 26

11:00 AM–12:00 PM

PANEL PRESENTATION

#### **DOOR SECURITY & SAFETY FOUNDATION: CREATING STANDARDS TO PROPEL OUR INDUSTRY FORWARD**

Join leaders from the Door Security and Safety Foundation for a glimpse into the recent work of the Door Security Working Group. The leaders will detail the purpose and process of the recent standards development project, including discussing desired outcomes and who all has a seat at the table for this project. They will discuss all the work that has been done to date and will seek feedback from the audience on the standards as the program is finalized.





# INNOVATION THEATER

The DHI conNextions Innovation Theater is an exciting space on the tradeshow floor where exhibitors take the stage to showcase their latest products and groundbreaking innovations. The goal of the Innovation Theater sessions is to provide industry professionals like yourself valuable insights into the future of the door and hardware space, and showcase the groundbreaking products that are driving innovation that can help enhance and advance the industry as a whole. This is an opportunity that you won't want to miss!

## ★ GET A SNEAK PEEK AT WHAT THIS YEAR'S INNOVATION THEATER WILL SHOWCASE:

- **Advanced door switch technology showcased for security and access control**
- **Curve Appeal: How Construction Specialties partnered with University of Virginia Hospital to bring a unique solution to a common problem**
- **Elevate your multi-family projects with aesthetically pleasing steel doors**
- **And more to come!**

In addition to the exciting new products presented at the Innovation Theater, remember the tradeshow floor is brimming with more opportunities to explore and connect with exhibitors. There is plenty of time to visit their booths, ask questions and discover even more exciting advancements!

As we continue to embrace innovation, let us remember that progress is a collaborative effort.

**TOGETHER, WE CAN SHAPE A BRIGHTER AND MORE SUSTAINABLE FUTURE FOR THE NON-RESIDENTIAL DOOR AND HARDWARE INDUSTRY THROUGH INNOVATION.**



## TUESDAY, OCTOBER 24

12:00 PM–3:30 PM

PRE-CONFERENCE WORKSHOP



### HARNESSING AI: A BEGINNER'S GUIDE TO CHATGPT, REVOLUTIONARY ARTIFICIAL INTELLIGENCE (AI)

Matt Carollo, Founder & Chief Marketing Officer, Carollo Marketing

In this session, participants will embark on a journey through the world of ChatGPT, a revolutionary artificial intelligence (AI) model developed by OpenAI. Join to learn more about ChatGPT's function as an advanced language model and its fundamental design architecture. We will delve into the art of prompt engineering, a crucial skill for effective interaction with the ChatGPT model as well as potential use-cases like generating product descriptions, drafting emails, writing articles and more!

#### EDUCATION TRACKS:

LEADERSHIP

CODES

TRENDS AND/OR TECHNOLOGY

ELECTRONIC ACCESS CONTROL

SALES AND MARKETING

SAFE SCHOOLS

TECHNICAL

BUSINESS OPERATIONS

## WEDNESDAY, OCTOBER 25

8:00 AM–9:30 AM

LEADERSHIP



### THE FOUR TENDENCIES - GETTING CONSISTENT PERFORMANCE BY TAILORING THE ASK

Taylor Fischer, Director of Projects Management, Negwer Door Systems

In today's industry, a strong relationship with your clients, co-workers, and/or trainees can make a huge impact on your business. That is why Gretchen Rubin developed the "Four Tendencies" personality framework to explain the different ways people respond to expectations.

The Four Tendencies Workshop equips participants to understand the differences among the four types of relationships:

- Upholders
- Questioners
- Obligers
- Rebels

In addition, this workshop provides participants the opportunity to run through scenarios and put their newfound knowledge to practice through lively discussions packed with information.

During this workshop, participants will learn how to:

- Understand the difference between the four tendencies in various types of situations.
- Improve team health and relationships through communication.
- Leverage each person's tendency to help them achieve results more consistently.

ELECTRONIC ACCESS CONTROL



### PLAY THE CHD GAME: A TOOL FOR YOUR ONBOARDING KIT

Peter Wilson, Field Training Manager, Allegion

Does the thought of playing a board game to learn something often sound too good to be true? Premiering at this year's DHI conNextions conference, Peter Wilson will be hosting Euro games which are suited to having fun while you learn. Euro games focus on strategic thinking – there is no right move, no random punishment or penalties, and knowledge of the subject matter is not required to win!

Designed exclusively for the architectural hardware industry, "The CHD Game" is an action-based strategy Euro game that simulates running a contract hardware company and is specifically targeted toward early career professionals in our industry. In this session you will get to play the game and see how to use it to support your onboarding efforts.

Every contract hardware company attending this session will receive a game for you to utilize when you return to work. The first 40 individuals will be admitted to this session.

8:30 AM–9:30 AM

TRENDS AND/OR TECHNOLOGY



### SPC ALLIANCE – A NEW AND BOLD ALLIANCE OF INDEPENDENTS WORKING TOGETHER

Peter Sedgwick, Executive Director, SPC Alliance

SPC Alliance's goal is to help lead a united front for independent manufacturers in the sector, which faces many challenges including competition from larger corporations, limited resources and a lot of collective bargaining power. By forming an alliance, independent manufacturers can pool their resources, share knowledge and best practices, and collectively address common industry issues.

During this session, participants will learn:

- How independent manufacturers, representatives and specification writers survive in the current status of the specifications of door and openings which are currently controlled by larger players.
- How to develop specifications for independent manufacturers and how that in turn makes better specifications.
- Why distribution is important and how this program will increase their business as well.
- Which technology may be best for your application.

DHI CEP-APPROVED SESSION



NON-TECHNICAL



TECHNICAL

9:45 AM–10:45 AM

#### TRENDS AND/OR TECHNOLOGY



### HEALTHY BUILDING MATERIALS

*Amy Musanti, Director of Sustainability, ASSA ABLOY*

The green building marketplace is rapidly shifting; material transparency identifies the health risks in building materials and recognizes healthy materials. This presentation will detail an introduction to LEED, the Living Building Challenge and the WELL Building Standard in order to understand the market drivers for healthy buildings and the crossover between them. This course will teach architects and designers to follow a five-step implementation process, to achieve these standards, minimize health risks and promote healthy buildings across industries.

During this session, participants will learn:

- How to recognize LEED v4 and v4.1 BD+C, the Living Building Challenge, the WELL Building Standard and how to evaluate healthy materials to contribute to building certifications.
- A deeper understanding and knowledge of material ingredient transparency tools, including Health Product Declarations, Declare Labels and the Red List.
- How to implement a five-step process for incorporating healthy materials into buildings.
- How to review additional healthy material resources for use in architectural design work.

#### LEADERSHIP



### LEADERSHIP IS THE SECRET INGREDIENT

*Jonathan Morse, General Manager, Allen Commercial Door & Specialty Hardware*

Successful leadership at the general manager level is crucial for the overall success and effectiveness of a company. The general manager is responsible for overseeing the entire organization and making strategic decisions that drive the company towards its goals. Some reasons why successful leadership at the general manager level is important include:

- **Vision and Direction:** A general manager sets the vision and direction for the company. They establish long-term goals, define the company's mission, and develop strategies to achieve success.
- **Decision-Making:** General managers make critical decisions that impact the company's performance and future. They analyze market trends, evaluate risks, and determine the best course of action.
- **Team Building and Motivation:** General managers build and lead high-performing teams. They create a positive work culture, foster collaboration, and inspire employees to give their best.
- **Resource Allocation:** General managers allocate resources such as budget, manpower, and technology to different areas of the company. They prioritize initiatives, optimize resource utilization, and ensure that the organization has the necessary tools to achieve its objectives.

When leadership exists throughout the company, it enhances agility, innovation, employee engagement, and customer focus, ultimately driving the organization's success.

During this session, participants will learn:

- The importance of successful leadership that is required at the general manager level.
- The importance of having leaders at every level of the company, including shop workers, estimators/project managers, and management.
- The value that your company can bring when you have leadership at every level of your company.

#### SAFE SCHOOLS



### THE 5 Ps—A SYSTEMATIC APPROACH TO SECURING THE CLASSROOM

*Ron Shaffer, Industry Solutions Leader – Education, SALTO Systems*

Unfortunately, today's students face threats never imagined by previous generations when attending school. Even with the tragedies that have struck, schools lack the basic physical security infrastructure to prevent these incidents, or to respond appropriately. This is due to the diversity and structure in different schools and districts across the country. Because of this, a universal school safety plan does not exist.

The "5 Ps" approach can serve as a systematic framework for evaluating and improving the safety of classrooms and campuses. Each of these components has an important contribution to a comprehensive school safety plan:

- **Prevention:** Focus on prevention strategies that aim to minimize the likelihood of incidents occurring.
- **Protection:** Implementing physical security measures to protect students and staff.
- **Preparedness:** Developing comprehensive emergency plans and conducting regular training exercises to ensure that students and staff are well-prepared to respond effectively in crisis situations.
- **Partnership:** Collaboration and partnerships with various stakeholders are essential for comprehensive school safety.
- **Policy and Legislation:** Establishing clear policies and legislation that support school safety initiatives.

During this session, participants will learn:

- The importance of a universal plan to protect schools and districts.
- The importance of understanding both physical and mental security measures.
- How to work towards creating safer learning environments using the "5 Ps"



**THE SHOW IS  
FANTASTIC.  
THERE'S LOTS  
OF TRAFFIC, LOTS  
OF DISTRIBUTORS  
AND PEOPLE  
FROM THE  
INDUSTRY. THERE'S  
ENGAGEMENT  
AND ENERGY - IT'S  
AWESOME!**

QIANYAN CHENG,  
CO-FOUNDER AND VICE  
PRESIDENT OF PRODUCT  
DEVELOPMENT, INOX



## WEDNESDAY, OCTOBER 25

9:45 AM-10:45 AM CONTINUED

### CODES



#### WINDSTORM RESISTANCE REQUIREMENTS FOR DOORS - APPLICATIONS AND PERFORMANCE

*Yuriy Farber, Product Development Manager, Securitech Group, Inc.*

Architectural opening requirements for tornado and hurricane resistant applications share some similarities but also have notable differences. These requirements are significant to the door and hardware industry as they guide the design and manufacturing of products that can withstand extreme wind forces and protect buildings and their occupants during severe weather events.

Manufacturers must produce doors, windows, frames, and hardware components that are tested and certified to meet or exceed the relevant building codes and standards for tornado and hurricane-resistant applications. This includes utilizing impact-resistant glazing, reinforced door frames, strong hinges and hardware and advanced locking mechanisms.

Architectural opening requirements play a crucial role in ensuring the safety and resilience of buildings in tornado and hurricane-prone regions by providing products that meet the demanding requirements of these applications.

During this session, participants will learn:

- Performance, limitations, compliance and certifications of door openings for Tornado Safe Rooms and Shelters. Ref. FEMA P-361, ICC500-2020.
- Performance, limitations, compliance and certifications of exterior openings for buildings in HVHZ (High Velocity Hurricane Zone). Ref. Florida Building Code 2017, IBC-2021.
- Performance, limitations, compliance and certifications of door openings in EHPA (Enhanced Hurricane Protection) areas, Risk Category IV facilities and Hurricane Shelters. Ref. FEMA P-361, ICC500-2020, Florida Building Code 2017, IBC-2021.

11:00 AM-12:00 PM

### LEADERSHIP



#### CHANGING THE FACE AND FACING THE CHANGE IN SECURITY

*Sabrina Wilson, SVP Human Resources, dormakaba*

The historically uniform tapestry of the security industry is steadily transforming into a vibrant fabric of diverse talents, thoughts and backgrounds. Is your company truly capitalizing on this demographic dividend? Are you leading this change? Are you a fast follower? Or are you simply waiting to see how the chips land?

In the war for talent, and with women often bearing the professional brunt, what does it take for companies to attract, retain and offer development opportunities for women and talent from other minority groups? Although most companies offer diversity, equity and inclusion (DEI) programs, only a quarter of employees from diverse backgrounds feel they have personally benefited from them. Whether you're an executive, a mid-level manager or an individual contributor, you have the power to influence change. You are part of the solution.

This panel discussion on best practices to promote and harness DEI will have some actionable insights that you can put to practice. From parental leave and remote work policies to wellness and mentorship programs, this motley group of panelists will provide their unfiltered view of designing, making a business case for and successfully establishing programs that deliver results for employees and the company, drawing from experiences driving these changes through the course of their careers.

During this session, participants will learn how to:

- Create an inclusive workplace for women to feel empowered, bring their authentic selves and achieve their full potential through tried and tested methods.
- Understand the changing face of the security industry and how to make the most of it.
- Be a DEI champion in your company.
- Be the expert on what makes some companies stand out from the rest when it comes to employee satisfaction.

### TRENDS AND/OR TECHNOLOGY



#### EMERGING TECHNOLOGY, TRAINING, PROMOTING SAVINGS AND COMPLIANCE TO THE END CUSTOMER

*Jeff Dunham, Codes and Standards Manager, BEA Sensors*

Emerging technologies are creating new ways to re-think and utilize new methods to solve otherwise previous application constraints. This creates a new opportunity to utilize industry methods for Low Energy Operators, safety and energy conservation with the same concepts from these emerging technologies. Examples are Virtual Push Button (VPB) and battery-powered Touchless Wave to Open devices which will be covered during this session.

During this session, participants will learn:

- How to discuss the various types of energy saving technologies and tools with your customers.
- Product liability and avoidance measures to ensure safe usage of these new products.
- Training tips and tricks for your company to properly install and operate these emerging laser-based technologies available resources.

## THURSDAY, OCTOBER 26

8:00 AM-9:30 AM

### LEADERSHIP



#### UNLOCKING THE SECRETS TO TALENT RETENTION

*Lisa Ryan, Chief Appreciation Strategist, Grategy*

Are you tired of losing your top talent to the competition or another industry? Do you want to ensure that your company is a fortress, impenetrable to the threat of losing your best and brightest employees? Welcome to "Unlocking the Secrets to Talent Retention" - the program that will equip you with the strategies you need to lock down your top talent.

Let's face it, losing your top talent is like leaving your front door wide open to intruders - it's a major security risk that could compromise the safety and success of your business. But fear not because this program will provide actionable strategies to keep your team secure and successful. In this session's industry-specific insights, you'll gain the knowledge and skills to create a fortress that will stand the test of time.

So, grab your keys and get ready to unlock the secrets to talent retention in the door security and safety industry. This program will equip you with the tools you need to keep your top performers on your team and ensure that your company is the strongest and most secure in the industry.

As a result of attending this session, participants will:

- Explore the unique challenges and opportunities in talent retention for the door security and safety industry. No more getting caught with a malfunctioning lock when competitors come knocking!
- Create a company culture that values and rewards top performers. Say goodbye to employees who feel stuck in a jam and hello to a team ready to open doors and break down barriers.
- Discover communication strategies that promote collaboration and teamwork. Plus, you'll explore how you can establish career development opportunities that retain top talent and encourage employee growth.

Don't leave your talent retention plan to chance. Join us for "Unlocking the Secrets to Talent Retention" and learn how to measure, evaluate and adjust your strategies to ensure sustainable growth and success in the industry. Just like a well-installed lock, your talent retention plan should be rock-solid. You'll leave this session with strategies to help you keep your top talent from becoming someone else's.

#### CODES



### CODE UPDATE - WHAT'S NEW IN THE 2024 MODEL CODES?

*Lori Greene, Manager – Codes & Resources, Allegion*

Although it often takes several years for a new model code to be adopted in a particular jurisdiction, there are many changes to the codes and standards that are more like clarifications than actual changes. In addition to the importance of being aware of upcoming changes, the clarifications may be helpful immediately to demonstrate the intent of the code requirements.

The 2024 editions of the I-Codes and the NFPA codes will include important changes related to door openings; in this interactive class, Lori Greene will discuss the effects these modifications will have on the doors and hardware we specify, supply and install. If you have questions about access control hardware that allows free egress, UL 294 vs. UL 1034, stairwell reentry, locks on elevator lobby doors, latching requirements in health care facilities, mandates for automatic operators on public entrances or the newly-modified code section addressing flush bolts, don't miss this class!

During this session, participants will learn how to:

- Understand the model code changes affecting electrified hardware used for access control, stairwell reentry, elevator lobby doors and other applications.
- Become familiar with the new code section addressing manual

and automatic flush bolts, as well as latching requirements for corridor and smoke barrier doors in health care facilities.

- Learn about recent changes to requirements for automatic operators, including where operators are now mandated by code and when safety sensors are required.

8:30 AM–9:30 AM

#### TRENDS AND/OR TECHNOLOGY



### ARTIFICIAL INTELLIGENCE: FROM "WARGAMES," TO ALEXA AND SIRI, TO WHAT'S NEXT

*Erin Wilson, Manager Influencer Education, dormakaba*

Whether you know it or not, you have experienced artificial intelligence (AI) somewhere in your daily life. Even if you do not use Alexa, you probably do use Siri. Or you have experienced when calling customer service for....anything: electric company, phone company, Amazon. If you have called and been answered by a computer, you have experienced AI.

Technology has dramatically increased in the last 5 to 10 years but more so in the last couple of years. Technology provides ways to make life easier. How better to make life easier than technology that understands what we want or think we want.

Some of the first forms of AI in construction have been Building Information Modeling (BIM) and programs for scheduling. As AI increases and advances, how will AI affect everything in construction from pre-design to project turnover? How will AI affect architects, general contractors and suppliers? Will AI provide increased productivity, better efficiency, safer project sites and increased revenue?

During this session, participants will learn how to:

- Identify where AI is used in construction currently
- Recognize advantages and disadvantages of AI in construction
- Differentiate where AI should and should not be used in construction
- Predict future possibilities of AI in construction

#### CODES



### KEYING IN HOUSE

*Lloyd Seliber, Director, Keying Solutions*

Providing locally master keyed products is an excellent way to expand your service offering and strengthen your relationship with contractors, end users and factories. If you're new to key system work, this seminar will cover what you need to know to get started. If you're already keying cylinders, you'll learn about trends in equipment and methods that can save you time and money.



**THERE'S ALWAYS SO MANY PEOPLE AT THE DHI CONNEXIONS CONFERENCE EACH YEAR! I'VE BEEN TO EVERY SHOW FOR PROBABLY 15 TO 20 YEARS AND IT'S ALWAYS A PLEASURE TO SEE PEOPLE COMING BACK AS WELL AS MEETING NEW INDUSTRY PEERS.**

**NATHAN DAVIS, DOOR DESIGN CONSULTANT, DAVIS DESIGN CONSULTING**

## CONTINUED

During this session, participants will learn:

- Tips and advice to properly set up a commercial key shop
- The correct equipment requirements, workflow and shop layout
- How to get factory support and training
- How to avoid common pitfalls

### TECHNICAL



## RADIO FREQUENCY SHIELDING

*Bob McCluney, CEO, Krieger Specialty Products*

Radio frequency (RF) fields are a widespread occurrence produced by high-power broadcast systems, such as AM/FM radio, television, and other communications systems. Other RF sources include power lines, transformers, electromechanical switches, computers, cellular phones, medical equipment and natural sources like lightning.

The potential hazards of RF fields include the disruption of radio and TV signals, poor connectivity between communication points and systems, electronic eavesdropping, malfunctioning medical equipment and, in some cases, the detonation of explosives.

RF doors are an integral component of a room designed to contain radio frequencies. The conductive surfaces on the ceiling, floor, walls and door assembly all interface together to form an impermeable RF shielded enclosure. RF shielding is designed to reduce electromagnetic emissions to prevent the transmission of sensitive information outside of the shielded facility as well as to exclude external RF noise from penetrating the shielded enclosure and adversely affecting sensitive equipment or test environments.

RF shielding doors are installed in a variety of facilities such as embassies, X-ray imaging and medical facilities, military installations, government buildings, communication centers, sensitive compartmented information facilities (SCIF), radio stations, computer rooms and transient electromagnetic pulse emanation surveillance technology (TEMPEST) sites.

### SALES AND MARKETING



## THE IMPORTANCE OF DEVELOPING A BRAND VOICE AND LEVERAGING SOCIAL MARKETING FOR YOUR BUSINESS

*Anesha Woods, Project Manager/Estimator, Allen Commercial Door & Specialty Hardware*

In today's digital age, where countless businesses are competing for consumers' attention, developing a strong brand voice and leveraging social marketing have become crucial strategies for success.

By developing a brand voice and leveraging social marketing, you can give you and your business a leg up in today's competitive landscape. They help differentiate your brand, build trust and authenticity, ensure consistent communication, target messaging to the right audience, enhance brand awareness, leverage user-generated content, and drive customer loyalty and advocacy. By investing in these practices, you can strengthen your brand's presence and increase your chances of success in the modern marketplace.

During this session, participants will learn:

- Attention is the new currency. The idea of build it and they will come is a thing of the past.
- You have a product or service that your end user needs – It's your responsibility to let them know you're out there and ready to service them.
- If you're speaking to everyone, you're speaking to no one. Develop a brand voice and know your audience. Sell the things that set you apart.
- You can start small! There is a ton of FREE technology at your fingertips! You just need to be brave enough or creative enough to leverage it. (Social media, I'm looking at you!)
- Fear not, there are programs out there to help you build content/graphics, many of which are free.

9:45 AM–10:45 AM

### BUSINESS OPERATIONS



## ATTRACTING DIVISION 8 TALENT

*Brian Calsyn, Vice President, Bunner-Parrott, LLC*

The inability to find, hire and retain productive talent encumbers door/hardware distributor growth. Division 8 executive search and recruitment firm, Bunner-Parrott, LLC, will share current trends and case studies affecting why Division 8 project managers, detailers, salespeople and estimators change jobs. While increased compensation is frequently part of the motivation, recent trends like aging ownership, lack of succession planning, inferior software, failure to provide regular reviews/raises, lack of operations support resources, nonsensical and arbitrary bonus structures, and similar shortcomings are equally pushing employees away.

During this session, participants will learn:

- The different reasons Division 8 talent leaves besides money.
- What distributors can do to retain talent better.
- The going rate compensation for sales, project managers, detailing and estimating talent based on abilities, experience and location.

### BUSINESS OPERATIONS



## MORE THAN JUST SECURITY—A COMPETITIVE ADVANTAGE FOR RETAILERS

*John Wright, Industry Solutions Leader – Retail, SALTO Systems*

Modern access control systems may give savvy retailers a leg up on the competition.

Businesses across all industries are striving to keep up with the rapid pace of technological change. By now, we've all become familiar with the term digital transformation. Although this concept can seem complex, it simply recognizes the importance of adopting new technologies and solutions to stay competitive.

In recent years, digital transformation has been dramatically impacting the retail industry. Brick-and-mortar stores are increasingly adopting new digital solutions such as IoT devices, mobile payments, smart shelves and more. These systems and devices can improve customer experiences, reduce costs, prevent shrinkage and create new, more efficient business processes.

Maybe one of the most significant technology advancements, and perhaps the most overlooked, is access control. Locks on entryways, storage rooms, merchandise cabinets, offices and other secure areas are a given. But today, locks may just be the smartest tech in the building.



This talk will feature examples of real retailers using electronic access control as a business advantage:

- Fast food chain leverages electronic access control to give food distributors secure after-hours access for food and supplies delivery, a groundbreaking process improvement.
- Retail chain coordinates with cash management vendor, Brinks, to streamline cash deliveries and pick-ups.
- CX (customer experience) leads the way for this retailer as they use access control to give customers control of their shopping experience.

#### SAFE SCHOOLS



### ONE SCHOOL'S QUEST TO SECURE THEIR SCHOOL, THROUGH PARTNERSHIPS WITH INDUSTRY EXPERTS AND OUTSIDE GRANT FUNDING

*Christin Kinman, End User Consultant, Allegion*

Studies and after-action reports have all shown that one particular measure is highly effective and predictive of saving lives – the ability to lockdown a facility and secure classroom doors from the interior of the space.

However, in today's ever changing and evolving school security landscape, it can be difficult to properly advise and educate schools on how to best secure their facilities. Solutions abound, often with little evidence to support the measures being marketed. While this single solution seems intuitive and simple to accomplish, this is a complex endeavor to do so in a code compliant manner with vendors that are not versed in the latest recommendations for school security. Adding to the complexity of the project alone are funding challenges to completing the work.

In this case study, we will explore one school's quest to secure their school with appropriate mechanical and electronic locks throughout, including the perimeter, large gathering spaces and classrooms while unifying and integrating their access control, intrusion detection system and video monitoring. We will also explore the creative ways in which they were able to obtain over \$500,000 in grants to fully fund the project. This project was completed in 2022 and the school is now operating with a fully functional system, paid for in cash with outside funding, and the knowledge of knowing that they can initiate lockdowns or other special case conditions instantaneously.

After this talk, participants will be able to:

- Identify hardware applications appropriate to the opening (primary, secondary, classroom) based upon extensive review of After Action Reports, the Federal Commission on School Safety and CPTED principles.
- Understand how to build relationships and get buy in from vendors and integrators to work with schools to secure grant funding.
- Understand the grant process and how to help schools target and identify funding sources to accomplish security projects.

#### TRENDS AND/OR TECHNOLOGY



### REVOLUTIONARY SLIDING DOOR LOCKING SOLUTIONS FOR HEALTH CARE, CLASS A OFFICE AND RETAIL SPACES

*Qjanyan Cheng, Vice President of Product Development, INOX*

The use of sliding doors in commercial applications is increasing at an exponential rate as facilities embrace the ability to reclaim previously unused space and create wider paths of travel. This presentation is designed to provide a comprehensive understanding of sliding door locking solutions in commercial spaces and the role of door hardware in ensuring safety, security and accessibility. By analyzing case studies and exploring the features and benefits of sliding door locking solutions, participants will be able to make informed decisions when specifying sliding door systems for commercial spaces.

During this session, participants will learn how to:

- Develop a comprehensive understanding of the different types of sliding door locking systems and their practical applications.
- Evaluate the commercial functionality of mechanical and electrified hardwired sliding door hardware applications in promoting safety, security and accessibility.
- Analyze actual case studies that showcase the emerging trend of incorporating sliding doors into architectural floor plans, along with their locking and access solutions.
- Evaluate how these solutions can improve the design and functionality of health care facilities and Class A retail spaces.
- Consider the implications of the Americans with Disabilities Act (ADA) when specifying and installing sliding door locks.

#### TRENDS AND/OR TECHNOLOGY



### SLIDING INTO NEW POSSIBILITIES: INNOVATIONS IN POCKET DOOR SYSTEMS

*Laurie McCowan, President, Cavity Sliders USA*

Pocket doors have always been a source of contention for builders and architects. In this presentation, we delve into the history of pocket door technology and discuss how cutting-edge advancements are transforming the perception of these once-troublesome openings. Discover how modern solutions have instilled confidence in builders and architects, allowing them to integrate pocket doors into their projects and take their interior designs to breathtaking new heights.

During this engaging session, project photo/video footage will be presented to explain the history of pocket doors and modern innovations in pocket/sliding door technology. The presentation will end with a Q&A portion, where the speaker will accept questions from the audience.



**I'M MEETING A LOT OF NEW PEOPLE, A LOT OF VENDORS, A LOT OF PRODUCTS THAT YOU DIDN'T KNOW WERE OUT THERE - SO IN SHORT I AM I'M LEARNING A LOT OF NEW STUFF AT DHI CONNEXIONS!**

LEE HICKMAN, INSIDE SALES REPRESENTATIVE,  
GEORGE L WILSON CO.

# EXHIBITOR LIST

VISIT THE EXHIBIT HALL TO EVALUATE THE LATEST PRODUCTS AND SOLUTIONS FROM  
**INDUSTRY-LEADING VENDORS.** COMPANIES ALREADY SIGNED UP TO EXHIBIT INCLUDE:

**Company .....Booth #**

|  |     |
|--|-----|
| ABH Manufacturing Inc.....               | 600 |
| Access It/ContractERP.....               | 518 |
| Accurate Lock and Hardware.....          | 514 |
| Activar Construction Products Group..... | 515 |
| Alarm Lock Systems, LLC.....             | 409 |
| Allegion.....                            | 301 |
| AMBICO Limited.....                      | 501 |
| American Direct.....                     | 117 |
| Architectural Concepts, LLC.....         | 715 |
| ASSA ABLOY.....                          | 201 |
| BEA Sensors.....                         | 509 |
| Boccam, Inc.....                         | 425 |
| Bridgeport Worldwide.....                | 711 |
| Bulldog Fasteners.....                   | 500 |
| Bunner-Parrott, LLC.....                 | 608 |
| Burns Manufacturing, Inc.....            | 102 |
| Cal-Royal Products/DKS.....              | 401 |
| Cendrex.....                             | 603 |
| Cleary Millwork / Wholesale Doors.....   | 325 |
| Cline Aluminum Doors Inc.....            | 604 |
| Comsense Inc.....                        | 315 |
| Crown Fire Door Products, Inc.....       | 810 |
| Custom Metal Products.....               | 610 |
| DAYBAR Industries.....                   | 309 |
| Dayton Industries Inc.....               | 407 |
| De La Fontaine Inc.....                  | 420 |
| Detex.....                               | 516 |
| Door & Hardware Institute (DHI).....     | 801 |
| dormakaba.....                           | 109 |
| Dortronics Systems, Inc.....             | 517 |
| Emullion Corporation.....                | 421 |
| FISO Door.....                           | 807 |
| Five Lakes Manufacturing.....            | 511 |
| Frame Material Supply.....               | 115 |
| General Lock.....                        | 606 |
| Gensteel Doors.....                      | 508 |
| Glassopolis.....                         | 100 |
| Goldstar Co., Ltd.....                   | 701 |
| Hager Companies.....                     | 209 |
| Imperial Hardware Taiwan LTD.....        | 814 |
| Imperial USA.....                        | 705 |
| Inox / Unison.....                       | 700 |
| JR Metal Frames Mfg., Inc.....           | 605 |
| Keri Systems Inc.....                    | 503 |

**Company .....Booth #**

|  |     |
|--|-----|
| Krieger Specialty Products.....                              | 423 |
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**DATE:** Wednesday, October 25 | **TIME:** 6:00 PM-8:00 PM

**VENUE:** Cheeky Monkey Brewing Co. | **ADDRESS:** 3 Lansdowne Street



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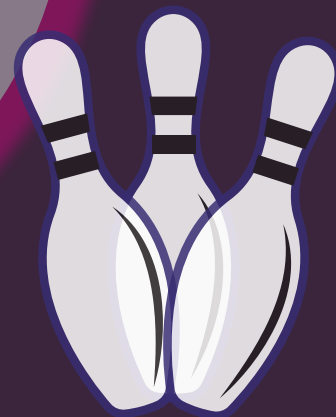
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# Lucky Strike

DHI  
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# After Party



**DATE:** Thursday, October 26

**TIME:** 6:00 p.m. - 9:00 p.m.

**VENUE:** Lucky Strike

**ADDRESS:** 145 Ipswich Street

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(List current as of August 1, 2023)



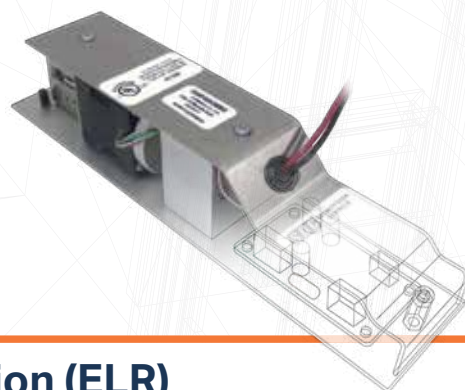
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# DRIVING CURIOSITY IN THE DISTRIBUTION ORGANIZATION



**JASON BADER** is Principal of The Distribution Team. He is a holistic distribution adviser who is passionate about helping business owners solve challenges, generate wealth and achieve personal goals. His podcast, "Distribution Talk," can be found at [www.distributiontalk.com](http://www.distributiontalk.com) and through most podcast applications. Phone: 503-282-2333. Email: [jason@distributionteam.com](mailto:jason@distributionteam.com). Website: [www.thedistributionteam.com](http://www.thedistributionteam.com).

**HOW DO YOU SPARK CURIOSITY, NOT ONLY AMONG COMPANY EXECUTIVES, BUT IN THOSE THAT DO THE REAL HEAVY LIFTING? CURIOSITY IS THE DESIRE TO EXPLORE, LEARN AND UNDERSTAND THE WORLD AROUND US. IT IS A CATALYST FOR CREATIVITY, PROBLEM SOLVING AND CONTINUOUS IMPROVEMENT.**

By creating a culture of curiosity, we can tap into the collective creativity of the people that work with us and for us. It stimulates critical thinking. It encourages us to be open to possibilities. It leads us to explore a deeper understanding of customers, markets and developments in our chosen vertical.

Innovation is a natural byproduct of curiosity.

## BARRIERS TO CURIOSITY

Fear of failure is one of the largest deterrents to developing curiosity in team members. If team members have been conditioned to believe that there will be negative consequences from trying something different, they will be less likely to seek alternatives.

Business owners, especially second-generation owners, may have developed a risk-adverse mentality born by the fear of sinking the family business.

Sometimes the rapid nature of our business can be a deterrent to creativity and innovation. Meeting customer deadlines and hitting performance goals may encourage associates to stick to what they know. They avoid looking for new ways to solve problems. When teams fall into a routine based on hitting certain goals and objectives, complacency tends to creep in.

Business owners can also fall into this trap. The leader can also lose this creative spark. They can find themselves focusing on operational efficiencies rather than seeking new opportunities.

## INSPIRING CURIOSITY IN ASSOCIATES

Business owners must lead by example. If the leader is constantly tinkering with the process, others will recognize this as a core value of the organization. Several owners should add the title "Company Meddler" to their business card. But is that such a bad thing? Change can be exhausting, but it is infectious.

Inspiration doesn't always come from within. Leaders that encourage associates to explore educational opportunities are often rewarded with new ways of tackling age-old distribution challenges. Peer collaboration is one of the best ways to get unstuck.

Create a safe environment for challenging the status quo. Encourage associates to break down processes and question why we are doing things a certain way. Sometimes these new ideas aren't going to work. Heck, many of these ideas will fail; but we should foster a culture that encourages learning from these missteps.

As I look back on my life, the biggest growth opportunities came from getting my teeth kicked in a few times.

## REKINDLING CURIOSITY IN THE BUSINESS OWNER

Business owners need to reflect on the journey. We all get bogged down in the present challenges and the machine that we have created. I always start off interviews for my podcast by asking the guest to share their professional journey with the audience. How did they get



*By creating a culture of curiosity, we can tap into the collective creativity of the people that work with us and for us.*

here? This often leads to a reflection of the struggles and subsequent breakthroughs that brought them the success they now enjoy.

I find that reflection on that journey helps them remember what was really important when they started that business or took over the reins from another. This is where passion resides. This reflection can be the spark that ignites the desire to be creative and innovative.

While personal reflection may be the spark, engagement with their industry is the fuel. Again, sometimes business owners get mired down in the day-to-day operations or short-term goals. When they are hyper focused on their entity, they can become oblivious to the world around them.

I would encourage business owners to stay up to date with current industry

trends, new concepts and emerging technologies. Take time to read trade publications because this is where you find the gold. The folks that produce the publication that you are reading right now spend countless hours curating industry information with the hope that their work will make your organization just a little bit better.

Seek fresh perspectives. Beyond the plethora of online and print-based information, business owners need to get out of the office and mingle with their peers.

Many years ago when I was a distributor, I used to love one particular segment of my industry trade show—the rap session. Essentially, this was where distributors, manufacturers and their representative agencies would sit at round tables to discuss some predetermined questions. I didn't care if I was sitting with a competitor or a manufacturer we didn't

carry, I always walked away from that table with some nugget of wisdom. I was always baffled, and a bit disappointed, that these sessions were not better attended.

It is really easy to fall into predictive patterns of thought and action. This is not uncommon for both business owners and business associates. The trick is to recognize when we are falling into a mode of professional complacency and find ways to steer out of the rut.

Give yourself the space to be spontaneous and curious. When you find that spark, share it. Innovation and passion will be soon to follow.

Stay curious. +





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## THANK YOU TO OUR PREMIER CONTRIBUTORS!

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## LOCKED OR BLOCKED?

BY MARK J. BERGER, FDHI

We see them every day: Exit doors that have been “improved upon” with signage, additional locks or items placed that inhibit safe exiting. None of these matter, until they do. That’s why codes take the least reliable element out of ensuring safe exiting—humans.



### A DOUBLE OBSTRUCTION

Which do you think would be harder to remove—the television monitor or the counter behind it? Unfortunately, this type of blockage is all too common in hotels and convention centers.

### B HISTORIC DOOR

Historic doors are always tricky to convert into code-compliant exits. Sometimes there is ornate millwork on them which inhibits exit device placement. This one was easy—the gap between the raised molding was the correct height for an exit device. They wisely selected one with a small chassis to eliminate any conflicts.

I would never have taken this picture if only they had removed the deadbolt and turnpiece when they added the exit device to the door.







### C FIND THE EXIT

I visited a customer and was invited to smoke a cigar in the evening. The relaxation station was at the loading dock door. I happened to glance to the right and pointed out what I thought was an exit door.

The dealer had been in the space for more than 10 years. They let me know they were surprised there was even a door there and it had never been opened while they were there.

The good news was they were moving out at the end of the month. I asked him to please check the exit doors at the new place and make sure they don't stack inventory that blocks the door.



### D WHAT'S MOST CONFUSING

This locked and blocked entry has multiple points of confusion. We'll start with a pull handle on a door that is pushed open. I'm sure the pull handle was added to help shut the door, but anyone approaching the door to exit would be inclined to pull instead of push the door open.

Then there's the absence of an exit device on this clearly marked exit door. An exit device might not be required if the door is push/pull and unlatched. However, the deadbolt below the push plate gives the game away—this door can be deadbolted and locked using a key. That is a pretty good indication this is a perimeter door and should have an exit device.

### E TRASHED

This is an issue regularly seen outside a building. The sign is clear but ineffective. It also looks like this sign is covering the area formerly occupied by another sign, based on the paint job. I'm betting that sign wasn't any more effective.



**MARK J. BERGER, FDHI**, is the President and Chief Product Officer of Securitech Group, and a Past President of DHI and Chair of the Builders Hardware Manufacturers Association Codes & Government Affairs Committee. All “Real Openings” photos were taken in public spaces with the goal of highlighting the prevalence of code violations and the need for vigilance to save lives. **If you see something, say something.** To submit a photo for this column, email [real.openings.dhi@gmail.com](mailto:real.openings.dhi@gmail.com).

*The images shown here are not intended to reflect upon any specific manufacturer or products but are intended to help build awareness around the everyday code violations that occur in buildings over time, despite our members’ best efforts to provide solutions to secure the life safety and security of the building occupants.*

**F**



## F MADE YOU LOOK

If I see signs on a door as I look down a corridor, nine times out of 10 a picture will end up in this column. This was a triple whammy.

The 1-inch lettering sign above the header states, “These doors are to remain unlocked...” Except there’s an exit device on one of the doors, which means the other inactive door is locked.

There’s the handwritten warning sign on the exit device door falsely claiming this is “Not An Exit.” What is it then?

Finally, there’s an explanation on the door that is bolted in place, stating this door is only to be used by employees. This is the least troublesome sign, but nonetheless one that adds to the confusion.

**G**



## G NOTICE THE NOTICE

Once again, the human element is at play here. The notice states the door is to remain unlocked during business hours, but there’s a keyed deadbolt on the door. I wonder whose responsibility it is to unlock that door when the building is occupied and then lock it up again at night. I’m guessing not a C-level executive, and I’d be willing to bet there isn’t a formal procedure in place.

## COMMERCIAL AND MULTIFAMILY STARTS DECLINED IN THE FIRST HALF OF 2023

NEW DATA FROM DODGE CONSTRUCTION NETWORK FOUND THAT THE VALUE OF COMMERCIAL AND MULTIFAMILY CONSTRUCTION STARTS ACROSS THE TOP 10 METROPOLITAN AREAS OF THE UNITED STATES FELL 10% DURING THE FIRST HALF OF 2023 COMPARED TO THE SAME PERIOD IN 2022. NATIONALLY, COMMERCIAL AND MULTIFAMILY CONSTRUCTION STARTS FELL 14% ON A YEAR-TO-DATE BASIS THROUGH JUNE.

Commercial and multifamily construction has suffered thus far in 2023 as tighter lending standards, higher interest rates, slowing demand and societal changes, such as continued remote work, impact the sector.

Commercial and multifamily starts comprise office buildings, stores, hotels, warehouses, commercial garages and multifamily housing. Not included in this ranking are institutional projects (e.g., educational facilities, hospitals, convention centers, casinos, transportation terminals), manufacturing buildings, single family housing, public works and electric utilities/gas plants.

2023 Top U.S. Metropolitan Areas  
Commercial Buildings and Multifamily Housing Construction Starts  
Millions of Dollars, Data through June Each Year

|  | 2021    | 2022    | 2023    | 2021-2022 | 2022-2023 |
|--|---------|---------|---------|-----------|-----------|
| 1 New York-Northern New Jersey-Long Island, NY-NJ-PA | 12,762  | 15,538  | 10,774  | 22%       | -31%      |
| 2 Dallas-Fort Worth-Arlington, TX                    | 4,743   | 8,076   | 6,667   | 70%       | -17%      |
| 3 Atlanta-Sandy Springs-Marietta, GA                 | 2,495   | 4,584   | 5,411   | 84%       | 18%       |
| 4 Miami-Fort Lauderdale-Miami Beach, FL              | 3,514   | 4,701   | 4,720   | 34%       | 0%        |
| 5 Houston-Baytown-Sugar Land, TX                     | 2,723   | 3,628   | 4,696   | 33%       | 29%       |
| 6 Los Angeles-Long Beach-Santa Ana, CA               | 4,040   | 4,193   | 4,258   | 4%        | 2%        |
| 7 Chicago-Naperville-Joliet, IL-IN-WI                | 2,376   | 2,549   | 4,168   | 7%        | 64%       |
| 8 Phoenix-Mesa-Scottsdale, AZ                        | 2,808   | 4,394   | 3,458   | 56%       | -21%      |
| 9 Boston-Cambridge-Quincy, MA-NH                     | 4,309   | 3,360   | 3,305   | -22%      | -2%       |
| 10 Washington-Arlington-Alexandria, DC-VA-MD-WV      | 4,032   | 5,475   | 3,122   | 36%       | -43%      |
| Top 10 Total   | 43,803  | 56,498  | 50,579  | 29%       | -10%      |
| Total U.S.   | 118,516 | 151,369 | 130,322 | 28%       | -14%      |

Source: Dodge Construction Network

"The wind has gone out of the sails for the commercial and multifamily sectors," Richard Branch, Chief Economist for Dodge Construction Network, says. "Starts are likely to worsen in the second half of the year, as interest rates head even higher."

The chart above shows how each of the top 10 metropolitan areas fared along with total U.S. figures.

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SEPTEMBER 2023

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# DEMONSTRATING DISABILITY CHALLENGES



**JON MCKINNEY, DHT, DHC**, is Senior Project Manager at Jeske Hardware Distributors.  
Email: [jmckinney@jeskehardware.com](mailto:jmckinney@jeskehardware.com).

### WHEN I ENTERED THE COMMERCIAL DOOR AND HARDWARE INDUSTRY, I WAS INITIALLY OVERWHELMED AND CONFUSED BY THE INTRICACIES OF THE JOB.

The most baffling aspect was understanding certain accessibility codes, such as the requirement for the bottom 10 inches of the push side of a door to be smooth and unobstructed.

At first, it seemed nitpicky—would it really matter if a person had to flip a deadbolt and then turn a lever in a public restroom?

In my experience, such confusion is commonplace when learning about unfamiliar concepts, especially when they don't directly affect us. However, having spent a significant part of my career in the industry, I now understand the crucial role these codes play, much like most readers of this article.

Often, when industry insiders discuss codes and compliance, it comes across as a game of gotcha—with the door expert advising on necessary changes or updates to a door for it to comply with the latest version of ICC A117.1, the International Code Council Standard for Accessible and Usable Buildings and Facilities.

I recently discovered content created by Sarah Todd Hammer (Instagram: @sarahtoddhammer), a disability advocate. Much of it focuses on doors and hardware and how improper installation or maintenance can turn a seemingly simple task—such as passing through a door opening—into an insurmountable challenge for people with certain disabilities.

Instead of talking about things like codes, forces, maneuvering clearances and operating speed, Hammer uses video clips to show viewers exactly what happens when a door opening doesn't meet code. After seeing some of her clips, viewers understand why accessibility codes exist and what happens when they aren't followed.

Her content got me thinking about how we, as professionals in the door and hardware industry, can help:

- **Design:** Architects are responsible for ensuring that their designs are code-compliant, but the scope of their responsibility is broad, potentially overshadowing best practices such as those in our industry. We shouldn't settle for the bare minimum compliance level. Whether you're a spec writer, detailer or installer, we should proactively suggest ways to enhance accessibility, such as advocating for more automatic operators.
- **Maintenance:** Many door openings suffer from maintenance issues, including broken actuators, improperly adjusted closers or doors binding in frames. Maintenance should be a primary consideration throughout a building's lifecycle. Distributors and installers could provide installation and maintenance instructions, along with the hardware model numbers used in a project. This way, when something goes wrong, the building owner has the necessary resources and information for a swift resolution.
- **Education and Awareness:** The most significant contribution we can make as an industry aligns perfectly with Hammer's work: raising awareness and educating about accessibility. Despite our best efforts in specifying, detailing and installing code-compliant openings, building occupants seldom give them a second thought. It's up to us to ensure that people understand the importance of accessibility, even if it doesn't directly affect them. After all, accessibility isn't a privilege—it's a basic human right. +

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