

DHI'S PUBLICATION FOR DOOR SECURITY + SAFETY PROFESSIONALS

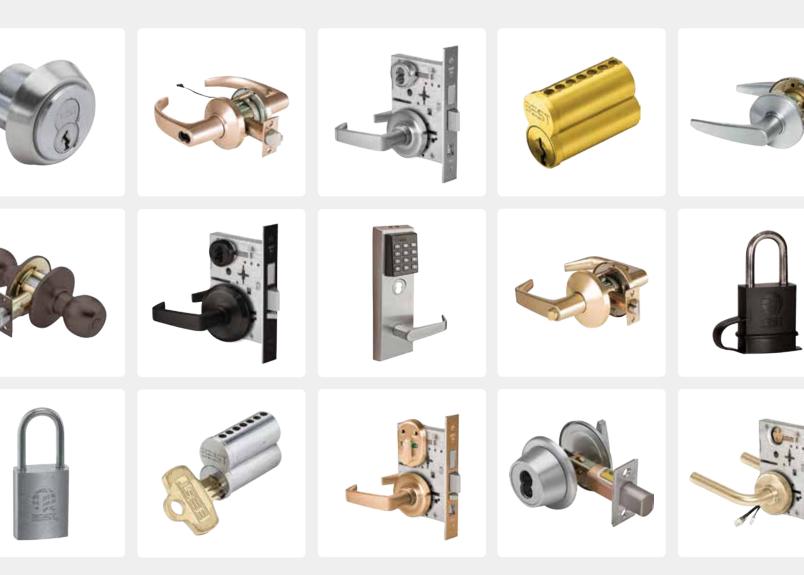
NOVEMBER/DECEMBER 2023

Designing Entrances for Fire Safety

INSIDE:

- UNDERSTANDING FIRE-RATED GLAZING
- + DESIGNING ENTRY VESTIBULES FOR SCHOOLS
- + 2023 DHI ACHIEVEMENT AWARD RECIPIENTS
- + 2023 DSSF SCHOLARSHIP RECIPIENTS

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SPREADING OUR KNOWLEDGE TO IMPROVE SECURITY



JAMES R. TARTRE, CDC, FDHI, is National Sales Manager at Kelley Bros. and President of the Door Security and Safety Foundation.

I AM PLEASED TO ANNOUNCE THAT THE DOOR SECURITY & SAFETY FOUNDATION (DSSF), IN COLLABORATION WITH DHI, HAS PUBLISHED AN IMPORTANT DOCUMENT, "ARE YOUR DOOR OPENINGS SECURE?" THIS IS AN EXCITING NEW INITIATIVE TO MOVE THE INDUSTRY FORWARD BY LAUNCHING A NEW REFERENCE STANDARD FOR FUTURE DEVELOPMENT AROUND OPENING SECURITY GUIDELINES.

Many of you are certified by DHI to handle inspections, specify and manage major projects, ensure adherence to applicable codes and much more. Yet education for anyone not familiar with our industry has no reference material to turn to for guidance and direction around opening security options, nor the risk associated with improper use.

This is critical in today's world–2022 was the most violent year of school shootings in history, and 2023 is shaping up to be just as bad. In our industry, safety and security measures, when followed, have provided the safest application of openings, yet we are seeing breaches due to downgraded means of operation and negligence of the opening itself. When users prop a door open, modify the hardware operation or use other means to prevent the natural function of the opening, it degrades its security aspects, creating an avenue for adversarial behavior.

This creates a complex problem as openings are designed by us, the professionals, to satisfy the security needs of our customers. However, the opening is the weakest point in any structure in terms of security when improperly used. It is vital that we deliver as much knowledge and support around proper opening applications to those that are outside the industry, which is why it is so important that this reference standard is widely shared in the marketplace.

This publication is a comprehensive resource that establishes a national reference standard of recommended guidelines for door security. It outlines three levels of security and is a valuable tool for educating the public, as well as providing a framework for specifying and furnishing the necessary attributes of a secure opening on any project. Even in its beginning stages today, it is being utilized by local legislators and other government municipalities to help stop proposed bills promoting secondary locking devices. By use of the publication, we are educating legislators on the methods of attaining security for door openings that meet code requirements while still maintaining the highest levels of security.

DSSF recognizes that a publication like this provides vital information. This document is meant to channel readers back to DHI's Find a Pro resource, offering a network of certified industry professionals who can provide guidance and suggestions around improving opening security measures.

DHI's Find a Pro (*www.dhi.org/findpro-fessional*) provides a vast range of companies and individuals with expertise in all aspects of door security and safety. In connection with our new publication, we will promote this online network far and wide to everyone who can benefit from your knowledge and expertise.

You can download "Are your Door Openings Secure?" from the DSSF homepage (www.doorsecuritysafety.org). We will continue to update DHI members, DSSF supporters and others on our efforts in this important area.

In addition to this important DSSF program, I would be remiss if I didn't take a moment to congratulate the 2023 DSSF Scholarship Recipients, who are profiled starting on page 32 of this issue of *Door Security* + *Safety*. +

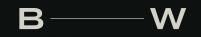
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Volunteering to be a "Face" of DHI is a great way to expand your professional network. It allows *Door Security* + *Safety* readers to get to know you better and also gives you a chance to share your accomplishments and career highlights in our industry.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

VIRGIL STUTTS, AOC, DHC, DHT, CFDAI

SENIOR PROJECT MANAGER, DIVISION 8, DOORS & HARDWARE LOTSPEICH CO. OF FLORIDA, INC. DHI MEMBER SINCE 2006

WHAT WERE YOUR CHILDHOOD AMBITIONS?

I was drawn to the architecture and construction industries. Since I was young, my goal has been to be a part of building things in a role that would allow me to still prioritize preaching to others about God.

WHAT WAS YOUR FIRST JOB?

Installing doors with Ron Rivera gave me confidence to tackle any size project.

WHAT'S YOUR PROUDEST PROFESSIONAL MOMENT?

Earning my AOC credential, seeing a student become a great teacher, and my daughter Mia showing interest in my work because I enjoy my career.

WHAT'S BEEN YOUR BIGGEST CHALLENGE?

Staying focused. I don't shy away from complex or custom applications, but in dealing with attention-deficit/ hyperactivity disorder (ADHD), I've had to develop and refine a process that keeps me on track and focused.

HOW HAS YOUR INVOLVEMENT WITH DHI SUPPORTED YOUR CAREER?

DHI has given my "drive to learn" a place to thrive. DHI introduced me to a community of people with amazing minds like Christina Duffek, Carrie Hunt, Eric Miles and Josh Hauser, who have become lifelong friends. I would not have connected with Lotspeich, and my very supportive manager Jeff Fee, without the training I received at DHI.

WHO DO YOU CONSIDER A MENTOR OR HERO?

My heroes are my brother, Joel, and my father, Virgil Sr. They are men of action, very selfless and God-fearing men that have spent their lives serving others. They set a high moral bar by example and have always been a big influence on my life.

Early in my career, my mentor was Ron Rivera. I'm grateful he introduced me to the door industry and gave me a foundation to build on. As I advanced, Scott Sabatini taught me at DHI and mentored me in complex applications. When teaching at DHI, fellow teachers Kevin Tish, Brian Clark and Erin Wilson became like family, instilling confidence in me to continue teaching.

WHAT'S THE BEST ADVICE YOU EVER RECEIVED?

Unless you improve significantly each year, you will not have 10 years of experience, you will only have one year of experience repeated 10 times.

WHAT'S THE BEST ADVICE YOU NEVER RECEIVED?

Slow down and refine your process. It will speed you up in the long run.

WHAT'S YOUR GUILTY PLEASURE?

I love sailing but I'm not very good at it yet! Hoping my close friend and fellow DHI student Steven Simpson can teach me in his sailing classes!

WHAT'S YOUR FAVORITE BOOK/ MOVIE?

"Imitate Their Faith" and "Goonies."



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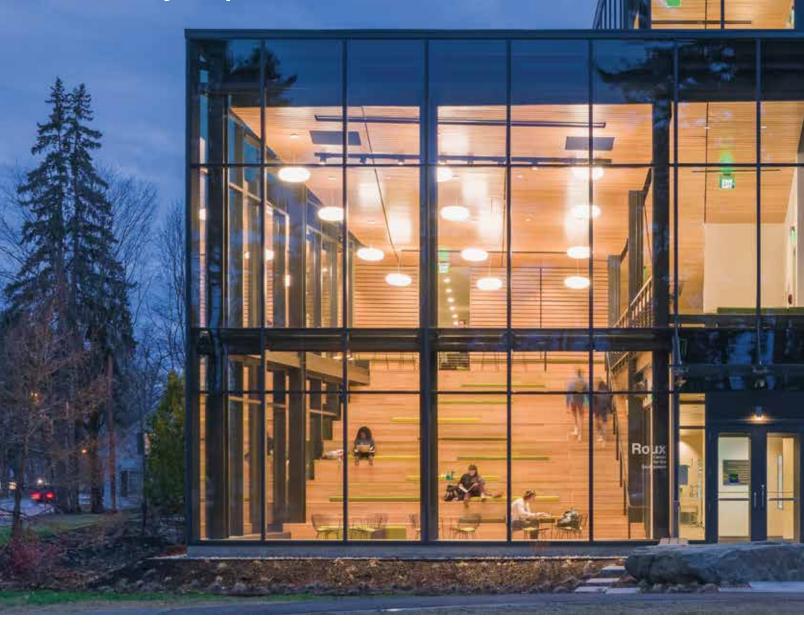




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UNDERSTANDING FIRE-RATED GLAZING

A new technical resource from the National Glass Association addresses life safety requirements and aesthetics.





The National Glass Association (NGA) has published a new technical resource, "Fire-Rated Glazing 101."

This five-page document addresses how to incorporate fire-rated glazing systems in a manner that provides protection to building occupants from fire and considers other design goals, such as daylight, privacy and security. It was developed by the NGA Fire-Rated Glazing Task Group.

"As chair of the task group, I am excited to share this technical paper with the industry," says Diana San Diego, SAFTI FIRST. "It is the result of true collaboration between fire-rated manufacturers and suppliers, other glass fabricators, test lab managers, NGA code consultants and NGA staff. By providing an understanding of what fire-rated glass is, we hope that building teams can leverage the daylighting, views, security, aesthetics and other performance benefits that this versatile product provides all while meeting fire and life safety requirements."

The technical paper also outlines what products are considered fire resistive and fire protective, including a summary of tests the product must undergo to achieve different safety ratings. Further, it discusses the challenges of visual integration, door hardware and the incorporation of more complex glass assemblies.

"Fire-rated glazing can achieve nearly any design requirement or request with proper collaboration and specification," explains Karen Wegert, NGA Associate Director of Advocacy and Technical Services. "Fire-rated glazing is considered a protective glazing product and can also be combined with other protective products, including those for forced entry, blast and windstorm, to create a safe and secure space for building occupants while retaining view."

The text of the technical paper follows.

Introduction to Fire-Rated Glazing

Fire-rated glazing systems offer benefits to building occupants and design beyond protection from accidental fire. Fire-rated glass provides the benefit of daylight, transparency and additional security meeting fire-safety and life-safety requirements while providing aesthetically pleasing views.

Fire-Rated Glazing Basics

Fire-rated glazing is unique in that it is specifically designed to control the spread of flame, smoke, hot gases and, if necessary, heat transfer from one area of a building to another. It performs critical life safety functions by allowing building occupants to safely exit a building in the event of fire, while allowing first responders to enter the building.

All fire-rated glazing is tested, listed and labeled under the follow-up services of nationally recognized testing laboratories. In order to have their products be listed and labeled as fire-rated glass, manufacturers must submit their products to a certified laboratory to be (i) fire tested for periods lasting from 20 minutes to 3 hours, (ii) thermal transfer tested, if necessary, and (iii) hose stream tested in most cases. If the product passes the required tests, the test lab awards it a listing and label either as a fire-protection or a fire-resistance rated glass.

Fire Protective vs. Fire Resistive: The Difference

Two different classifications exist for fire-rated glass. The key to understanding fire-rated glazing lies in knowing the difference between *fire-protective (or fireprotection rated)* and fire-resistive (*or fire-resistance rated*).

This terminology is very important because it conveys the fire performance level of the glass relative to applicable code requirements. In addition, these terms are referenced (by special letter designations), both on the laboratory label that is affixed to the glass and in tables found in Section 716 of the 2021 International Building Code (IBC).

Matching the performance level found on the label affixed to the glass and in the tables found in the IBC enables architects, glaziers, code officials and other stakeholders to be sure that the correct fire-rated glass is being used in the right location.

Fire protective glazing is tested to NFPA 257/UL 9 in fire window assemblies and NFPA 252/UL 10C and UL 10B in fire door assemblies. Fire window and fire door assemblies are referred to in the IBC as opening protectives. Fire windows and fire doors can be designed using fire-rated glass to prevent the passage of smoke, flames, hot gases, and, if necessary, heat or thermal transfer. All fire-rated glass is subjected to a fire endurance test. This determines the length of time (in minutes or hours) that the fire-rated assembly will withstand the fire of a test furnace that can exceed 1900 degrees Fahrenheit. The fire in a test furnace follows a fixed time and temperature curve designed to simulate an actual fire in which temperatures rise quickly, then gradually increase over time. To be listed and labeled, the glass and its entire assembly must remain intact for the full duration of the test, which can last from 20 minutes to 3 hours depending on the type of listing required.

Immediately following the fire endurance test, the glazing assembly is subjected to a hose-stream test, where the water pressure is 30-45 pounds per square inch (psi), depending on the fire rating. Water from a fire hose play pipe strikes the assembly in a prescribed pattern and duration, depending on the size, from 20 feet away. If the glass remains in place without exceeding the allowable limit of openings, it passes the test. Most, but not all, fire-rated glazing applications require the hose stream test. In the United States, in 20-minute fire door assemblies installed in 1-hour fire partitions (e.g., corridor walls and smoke barriers), the protective glazing shall be exempt from the hose stream test. In Canada, all fire-rated glass must pass the hose stream test.

Fire-resistive glazing is tested as a wall assembly pursuant to ASTM E119/UL 263. Like opaque fire-rated construction materials, fire-resistance rated glass is designed to prohibit the passage of smoke, flame, hot gases and the radiant heat from a fire.

Just like fire-protective glazing, fire-resistant glass is subjected to a fire endurance test and a hose stream test. The difference is that during the fire endurance test, thermocouples are placed on the surface of the glass on the non-fire side to measure the heat transmitted through the glass. The average temperature calculated from these readings cannot exceed 250 F, nor exceed an individual temperature rise of 325 F, above the initial starting temperature for the entire duration of the test.

It should be noted that neither ASTM E119 nor the IBC distinguish between a fire-resistant glass wall and a fire-resistant opaque wall. Consequently, although it may be used in fire window and fire door assemblies, if evaluated for these end use applications, fire-resistance rated glazing tested to ASTM E119/UL 263 is treated by the IBC as a fire-resistance rated wall, not an opening protective.

Key Takeaway

The ability to limit heat transfer is a critical distinction between the terms "fire-protective" and "fire-resistant." Fire-rated products are application driven as much as they are code driven. The duration rating should not be the sole feature determining code compliance. Fire-protective glazing is subject to various size and application limitations in the IBC because it does not prevent heat transfer. Where fire protective glazing is limited or prohibited by code, fire-resistant glazing can be considered when evaluated for the end use condition.

Fire-Rated Glazing Standards

Several standards apply to different types of fire-rated glazed products. They include:

- Fire tests applicable to fire door systems are covered by NFPA 252 *Standard Methods of Fire Tests of Door Assemblies*, UL 10C Standard for Positive Pressure Fire Tests of Door Assemblies, or UL 10B Fire Tests of Door Assemblies.
- Fire tests applicable to windows, glass block and other light-transmitting assemblies are covered by NFPA 257 Standard on Fire Test for Window and Glass Block Assemblies or UL 9 Standard for Fire Tests of Window Assemblies.
- A fire-resistance rated wall test determines how long the product can contain a fire, as well as its ability to limit temperature rise on the unexposed surface to no more than 250 F and a maximum temperature rise of any thermocouple to not exceed 325 F above the starting surface temperature. Applicable standards include ASTM E119 Standard Test Methods for Fire Tests of Building Construction and Materials or UL 263 Fire Tests of Building Construction and Materials.
- An installation and maintenance standard regulating the assemblies used to protect fire doors and openings against the spread of flames and smoke is NFPA 80 *Standard for Fire Doors and Other Opening Protectives*.

Challenge: Congestion/Urbanization

In areas where buildings are built close together, horizontal fire spread from building to building is a concern. Fire-rated glazing can be used to address that concern in the exterior walls of buildings constructed near lot lines, the center lines of roadways or nearby buildings.

Typically, one- and two-hour fire-ratings are required, depending on the fire separation distance, building height and occupancy type (see IBC Table 705.8 *Maximum Area of Exterior Wall Openings on Fire Separation Distance and Degree of Opening Protection* for more information).

The use of fire-rated glazing in exterior walls can prevent the spread of fire horizontally from one building to the next. Moreover, fire-rated glazing systems in these exterior wall applications can be designed using narrow framing profiles to complement overall building facade designs.

Fire resistive glazing assemblies that meet ASTM E119 can be used where fire-resistance rated walls are required. This is why fire-resistant glazing can be used even in zero lot line applications. Fire-resistant glazing can also be used to exceed the area limitation for protected openings.

Challenge: Visual Mismatch of Fire-Rated and Non-Rated Glazing Systems

A variety of fire-rated framing solutions are available to satisfy a broad range of aesthetic requirements. Some fire-rated framing systems may cause aesthetic discrepancies compared to non-rated glazing systems, impeding sightlines and limiting transparency.

An example of firerated glazing in a high school corridor. Photo by Rachel Dancks, courtesy of Vetrotech.



Fire-rated glazing suppliers offer varying profiles for fire-rated framing systems. They can incorporate custom cover caps and surface finishes to more closely match surrounding curtain wall and door applications to ensure a smooth visual integration with non-rated assemblies.

Challenge: Door Hardware

Projects that include complicated hardware such as access control products may negate the fire rating of some fire-rated systems. Fire-rated glazing suppliers can assist in specifying fire-rated door hardware to integrate intricate hardware and ensure fire-rated glazing and hardware needs are met.

"A 2003 study found that classrooms with the most daylighting had a 20% better learning rate in math, and a 26% improved rate in reading, compared to classrooms with little or no daylighting."

Challenge: Operable Windows

Fire-rated glazing suppliers can assist in specifying fire-rated operable windows to ensure fire-rated glazing and hardware needs are met.

Challenge: Daylighting and Views

Glass is essential to the well-being of occupants. However, ordinary window glass cannot withstand the high heat generated from structural building fires, necessary in areas of egress. Traditional opaque firerated materials like concrete and gypsum board block daylight and views.

A fire-rated wall assembly with fire-resistive glazing can enhance daylighting design freedom. Building design teams can incorporate large expanses of glass meeting fire-rated building codes without being limited to smaller windows and viewing panes in doors.

Fire-rated glazing can provide these benefits:

- Elevate design with a modern look and feel.
- Provide clear and unobstructed views of the outside.
- Contribute to wayfinding, which becomes critical during active shooter events and other security threats.

• Enhance daylight transfer and visibility, which promotes occupant well-being, reduces absenteeism and accidents, and increases productivity and mental performance.

The following studies show how daylight, in particular, benefits students:

- The "Policy Insights From the Behavioral and Brain Sciences" publication found that daylight can help create environments in which students learn better over the course of an academic year.
- According to the U.S. Department of Education, "A 2003 study found that classrooms with the most daylighting had a 20% better learning rate in math, and a 26% improved rate in reading, compared to classrooms with little or no daylighting."
- According to the National University of Malaysia, "Students who attend schools with good daylighting exhibited enhanced health, well-being and student performance based on the result of test scores."

Challenge: Insulating Glass Unit (IGU)

A fire-rated IGU can be constructed to include other glass types to achieve multiple functionalities without negating the fire rating, when listed and labeled for this application. For example, a fire-rated IGU could incorporate acid-etched, patterned or printed imaging for decorative installations. Improved energy efficiency could be achieved by incorporating high-performance low-e glass into a fire-rated IGU.

ACOUSTICS

Fire-rated glazing manufacturers generally evaluate their products for acoustic sound reduction. Additional noise mitigation may be achieved by incorporating the required fire-rated glazing into a laminate and/or insulating glass units.

Challenge: Multiple Threats

Fire-rated glazing can be combined with many types of additional protection including smoke, heat transfer, forced-entry, ballistics, blast and windstorm. When multifunctional products are created, it is important that the characteristics of one product do not negate the performance of another. For example, security glazing may have difficulty passing the fire endurance test to qualify as fire-rated glazing due to construction specifications for security glazing.

System-based approvals are becoming more prevalent than component-based approvals. Refer to the product's listing to ensure compliance to all required tests. Consult the product manufacturer for further information.

SECURITY GLAZING

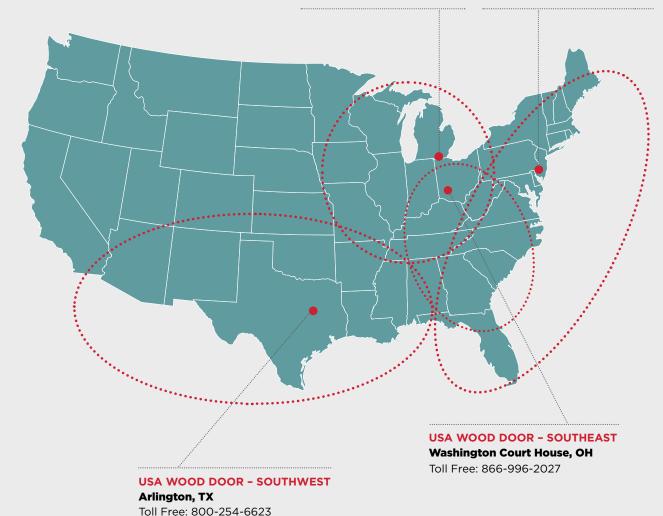
While building codes require the use of fire-rated glazing in specific applications, they do not currently



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NGA FIRE-RATED GLAZING TASK GROUP MEMBERS

NGA thanks the task group members who developed this resource for the industry:

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> **THOMAS ZAREMBA** Roetzel & Andress

mandate the use of security glazing. Security glazing can include forced entry resistance, ballistics resistance and/or blast resistance.

However, the industry is working to tighten regulations and manufacturers are working to develop multifunctional products to meet these needs. Refer to NGA Glass Technical Paper FB43-14, "Security Glazing," for information about security glazing makeup and testing.

For educational facilities, specifically, the Partner Alliance for Safer School (PASS) Guidelines were developed by the Security Industry Association and the National Systems Contractors Association to answer questions from the education community about what can be done to better secure K-12 schools and how these security projects can be funded (*http://passk12. org/*). Refer to NGA Glass Technical Paper FB71-21, "School Security Glazing," for details about testing glazing for school security applications.

WINDSTORM

In areas where hurricanes, tornadoes and other natural disasters are a concern, solutions that incorporate firerated glass and systems exist.

Additional Resources

- ASTM F3561, "Standard Test Method for Forced-Entry-Resistance of Fenestration Systems After Simulated Active Shooter Attack"
- NGA Glass Technical Paper FB16-07, "Bullet Resistant Glazing"
- NGA Glass Technical Paper FB43-14, "Security Glazing"
- NGA Glass Technical Paper FB71-21, "School Security Glazing"
- NGA/PGCI, "Protective Glazing Manual"
- NGA, "Laminated Glazing Reference Manual"

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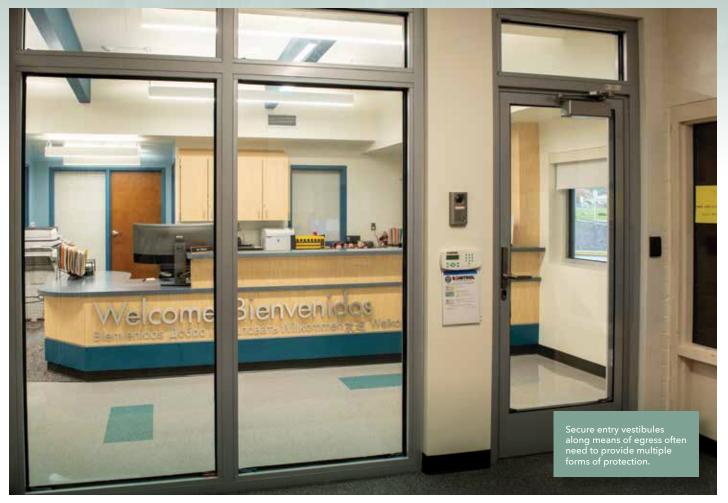
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Designing Entry Vestibules for Schools

Creating access that is safe, secure and supports student needs.

BY DEVIN BOWMAN



Designing entry vestibules for educational occupancies can be a delicate balancing act. Often, if they're part of a means of egress, vestibules must meet several critical requirements to allow the safe and accessible egress of a building in the event of a fire. Given that the National Fire Protection Association (NFPA) estimates there are, on average, 3,000 fires on school grounds annually, maintaining the egress function of an entry vestibule along a path of egress is a crucial consideration for designing safer schools.

In addition, entry vestibules are increasingly called on to enhance the safety and security of school buildings across the country.

States such as Texas, Missouri and Tennessee have passed house bills that require schools to harden exteriors with security-rated materials such as bullet-resistant glazing. Ohio passed several grants awarding more than \$42 million to support physical security upgrades in hundreds of schools across the state. These official initiatives are in addition to school districts voluntarily enhancing school building security.

Beyond playing a critical role in protecting students and staff, entry vestibules provide the first impression of a campus. A welcoming and supportive atmosphere can be a subtle way of building trust and transparency between students and faculty. Supporting the mental health of adolescents has been endorsed as a school violence prevention method by the American Psychology Association, National Educational Association and several Department of Justice reports.

The mix of code-driven requirements and voluntary security and aesthetic goals complicates the construction of entry vestibules. Designing for each of these functions individually can potentially impact the others. However, when considered together, building professionals can create entry vestibules that are safe, secure and support student needs.

Material choice can be key to creating entry vestibules that meet a variety of code and design criteria. While several materials come together in an entry vestibule, glass can be key in realizing a design that meets the desired performance capabilities.

Code Requirements for Entry Vestibules

Though the specific requirements can vary from location to location, generally entry vestibules need to provide a safe means of egress, should evacuation be necessary.

These requirements can range from meeting accessibility standards listed in the Americans With Disabilities Act (ADA) to providing fire ratings and safeguard exiting in the case of a fire. Model codes like the International Building Code (IBC) and NFPA 101: Life Safety Code exemplify what fire ratings and material considerations are required for educational occupancies. However, locations can choose to adopt or modify these requirements, making it important to clarify with an Authority Having Jurisdiction (AHJ) the exact specifications for materials and hardware along a path of egress.

In application, building codes may require entry vestibules to incorporate fire-resistive-rated materials throughout their assemblies—including the interior and exterior doors.

Fire-rated glass, whether used as a sidelite or full-lite glass door, or in a vision panel, can help specifiers

achieve code compliance without sacrificing open sightlines, which are also key for security and other design considerations. If entry vestibule doors are required to be fire rated, the frame and all component parts must also comply with code requirements.

Examples include hardware that meets egress requirements outlined in the various building code manuals, seals that slow the spread of smoke and some form of panic hardware. This type of exit device simplifies operation by releasing a latch when pressure is applied in the direction of egress.

While it is important that these doors help facilitate quick and easy egress in an emergency, school administration may also want them to support a safer school design.

Designing for Security and Egress

Entry vestibules along a means of egress do more than preserve a swift and easy exit—they can also be a line of defense against violent intruders. This can include providing access control systems that limit who can and cannot enter the building.

To help administrators and specifiers navigate school security measures, the Partner Alliance for Safer Schools (PASS) has developed a set of best practice guidelines that identify which systems and considerations meet a baseline for access control and which provide security beyond the minimum. These recommendations are echoed to some extent in the International Code Council's (ICC) 2022 Building Safety and Security Report.



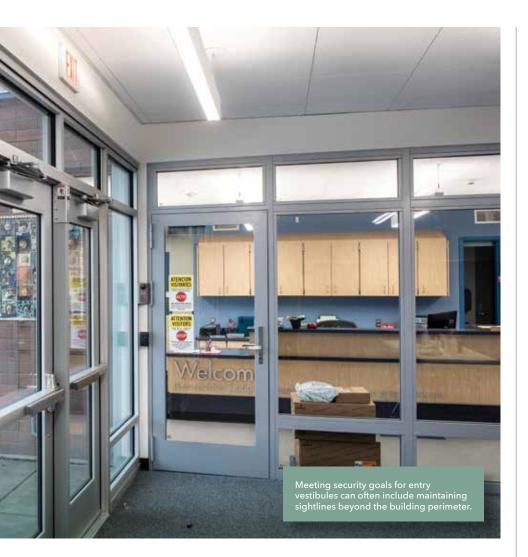
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Both PASS and the ICC include systems that allow school administrators to visually assess visitors as a best practice. While PASS states this could be a CCTV system, the ICC report recommends using transparent, ballistic-resistant glazing in critical places throughout an entry vestibule. Both also recommend that entry vestibules be secured with a mechanical lock on either or both sets of doors.

It is important to note that these locks should be code compliant with local and ADA building standards to safeguard egress. Equally important, neither PASS nor the ICC recommend barricade devices or other measures that may impede evacuation efforts.

In addition, PASS and the ICC underscore the importance of hardening the exterior of a building with security-rated products as a part of a comprehensive school safety plan. For entry vestibules, this may mean specifying forced-entry or bulletresistant glass, or applying securityrated films since glazing can often be seen as a weak point in the building's perimeter.

While PASS states the application of security-rated films meets the first tier of its best practice guidelines, specifiers are encouraged to research the limitations of films to ensure they are choosing products that meet the security needs of a specific project.

Security Film Limitations and Component Compatibility

Security films can be a viable first step in enhancing the level of security a school provides. That said, these products are not without limits.

Speaking at the National Glazing Association conference, Darrel Smith, The Nation's Most Trusted Security Door Hardware Wholesaler





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Executive Director of the International Window Film Association (IWFA), explained that there is confusion around the use of security films. They are actually meant to keep the glass relatively intact if pierced with bullets and to help protect those on the inside of the building by delaying entry.

When these films are applied to rated glass, they may enhance the protections the glazing provides.

In addition to how security films interact with non-rated glass, it is important to understand how these products can affect fire-rated glazing.

Because films are often plastic based, they can burn quickly and intensely—potentially exceeding firetest parameters. This could reduce or entirely negate a full system's fire rating. Since rated components are often only tested to the protocols that govern their ratings, it may be difficult to know if a combination of components will be compatible. Further, a film added to a fire-rated door assembly would either need to be listed for that purpose or approved as a field modification in most locations. This would involve the approval of an AHJ, the laboratory that tested the door and potentially the door manufacturer, all of which could complicate and slow the process of enhancing school safety.

To streamline the specification process, multifunctional, fire-rated glazing assemblies that are tested to multiple protocols or utilize compatible products ensure security, as well as fire and life safety. They do this all while preserving open sightlines so occupants can monitor parking lots and other adjacent areas.

Man-traps and After-market Devices Impede Egress

When planning an entry vestibule along a path of egress, safeguarding egress during fires and other emergencies cannot be ignored. This



is a critical part of designing safer schools. As such, barricade and other after-market locking devices are not recommended by the ICC or PASS, since these products often hinder a swift exit and may not be within accessibility standards.

Likewise, it is important to note that a secure entry vestibule is different from a sally port design (also called a man-trap). This design is a space between two doors, in which one set of doors cannot be operated until the other set has closed.

The use of sally port design and after-market barricade devices is extraneous in the presence of code-compliant locking hardware. When these locking devices are supplemented with multifunctional, fire-rated glazing in entry vestibules along paths of egress, they can enhance the security of a building's perimeter without compromising fire and life safety considerations.

Conclusion

As school security receives added emphasis, it is important for designers, specifiers, security professionals and school administrators to note that safer school design encompasses more than keeping intruders out. It also means planning for evacuation during fires and other emergencies.

While these two goals can seem at odds with one another, multifunctional, firerated glazing can support security goals while maintaining free egress in areas that need to protect occupants against multiple types of threats to life safety. +

DEVIN BOWMAN is General Manager of Technical Glass Products (TGP) and AD Systems. With nearly 20 years of industry experience, Bowman is actively involved in advancing fire and life safety codes and sits on the Glazing Industry Code Committee (GICC). Phone: (800) 426-0279. Email: Devin.Bowman@allegion.com



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2023 DHI ACHIEVEMENT AWARD RECIPIENTS

BY SARAH MULLEN, DHI OPERATIONS MANAGER

DHI offers congratulations and thanks to the many people who give so much to the door security and safety industry. We are proud to highlight the award winners who demonstrate exemplary effort and dedication. This year's award recipients are highlighted on the following pages.

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FOUNDERS AWARD

The Founders Award is DHI's highest and most prestigious award and recognizes significant and outstanding service to DHI and the door security and safety industry over an extended period of time.



MALCOLM B. EYRE, FDHI 51 YEARS IN THE INDUSTRY



What does DHI mean to you today compared to when you first joined?

DHI has changed tremendously in the way we are teaching students. When I first joined DHI, classes were presented at the chapter level as well as classes at Geneva Park in Ontario. Canada and the schools in Lansdowne, Virginia, and Phoenix, Arizona. Today schools are available all over Canada and the United States, making it easier to attend more schools in a year.

What would you tell young professionals today who are entering the industry?

I would advise them to work hard and get as much education as possible offered by DHI and DHI Canada. This is a great industry to work in and there are many opportunities to make a good living and have a great time doing what you do best.

How did you get started?

I got my start in 1972 working for a distributor in Edmonton in Alberta, Canada, called Midway Sales. The company sold hollow metal doors and frames, roofing, decking, etc. I was working for the Hollow Metal Division. I must have interviewed well because I knew absolutely nothing about hollow metal doors and frames.

I learned quickly when the branch manager asked me to price each individual piece of the frame, stick material and the doors. It took me two days to price everything. When I gave the pricing back to the branch manager, he told me I didn't take out the federal sales tax. Two days later, I gave it back to him. I knew the price book front to back after four days trying to locate every item.

When I became a member of DHI in 1975 in Edmonton, I did not know much about DHI. I had joined at that time because other people I knew were members and talked to me about the meetings and courses available.

I was moved from Edmonton to Toronto in 1985 and about three years later I met Gerry McGuire, AHC, who served on the Ontario Chapter Board of Directors. He asked if I would be interested in

joining the Ontario Chapter Board as the Hollow Metal Door and Frame Liaison as Courney Shane, the current board member, was moving to the United States. I immediately said yes, as it fit in with my job working for a hollow metal door and frame manufacturer.

Today, DHI means a lot to me. I have been heavily involved with the organization since 1988 and have been on many committees over the years, including the Education Council. Serving as DHI Canada President for two years was a highlight. Updating modules, as well as writing COR118 with my great friend Ros Shender, DAHC, CDC, was a great experience.

What does it mean to you to be recognized by your peers for this award?

It means a lot to be awarded such a prestigious award. I would never have thought someone would put my name up for this.

When Richard Bradbury, DEHC, DHC, DHT, CFDAI, called to tell me I was receiving the Founder's Award, I had a difficult time speaking. It was very emotional for me to think I would ever be worthy of such an award. Thank you, Richard.

What do you consider your greatest accomplishment?

I believe my greatest accomplishment was being able to mentor young people over my career and seeing them go on to be very successful in what they do and are still doing.

Where do you see our Industry going in five to 10 years?

I can see our industry growing and hope that DHI continues to develop new modules for electronics and Division 10.

2023 DHI ACHIEVEMENT AWARD RECIPIENTS

FELLOW AWARDS

The Fellow Award is DHI's second highest award, based on service, and is conferred on any DHI member who is deemed to have contributed significant and outstanding service to DHI and the door security and safety industry.



RON COUCH, AHC, CFDAI, FDHI CEO APTURA GROUP 39 YEARS IN THE INDUSTRY

What drives you to stay involved with DHI, and how can you share that enthusiasm with members new to DHI and the industry?

It is incredibly easy to stay involved with something that brings such a sense of fulfillment and gratification, and that's exactly how I feel about DHI and our industry. From the outset of my career, I've been driven by a genuine love for what I do. One of the aspects I truly enjoy is the technical challenges that come with resolving customers' fire and life safety concerns. The constant need to innovate and find solutions keeps me engaged and excited about my work.

I deeply appreciate the opportunity our industry provides to contribute to making facilities safer and more secure. Knowing that

our efforts directly impact the safety and well-being of people is a powerful motivator.

However, what has truly glued me to this industry is the remarkable people I've had the privilege to meet and the relationships I've built over the years. There are so many passionate and dedicated individuals in this industry, always willing to collaborate and share their experience and expertise.

For newcomers to DHI and our industry, I would encourage them to embrace the technical challenges, learn continuously and seek out opportunities to contribute. But beyond that, I would emphasize the importance of networking and building relationships. It's through these connections that you'll find support, guidance and endless opportunities for growth.

How did you get started?

My journey in this industry began in February 1984 when I started working on the factory floor in the Finishing Department of Best Lock Corporation. My first exposure to DHI came in 1987. At that point, I was young and filled with enthusiasm for what lay ahead. DHI, with its reputation for providing educational opportunities, seemed like the perfect avenue to expand my knowledge.

I remember attending my first DHI class, which was called AH-1 at the time. It was a pivotal moment in my career. I realized that my experience was going to be much broader and more impactful than just learning technical fundamentals.

What made DHI truly special for me was the opportunity to meet like-minded individuals who were as committed to the industry as I was. I forged lifelong friendships with people who shared a common goal: providing great service and value to our clients and communities. Those early experiences and interactions at DHI helped me make a choice. I decided that this wasn't just a job-it was the beginning of a lifelong and enjoyable career.

What do you consider your greatest accomplishment?

It would undoubtedly be assuming the role of DHI President in June 2021. This was a momentous milestone in my journey-one that filled me with excitement and gratitude. As DHI President, I had the privilege of representing an organization that plays a pivotal role in our industry. It allowed me to contribute to the advancement of the profession and the betterment of the community of professionals within it.

Where do you see our industry going in five to 10 years?

As we peer into the future, it's clear that our industry is poised for significant evolution. The needs and expectations of our customers are continuously changing, driven by advancements in technology, life safety and labor market shifts.

In the coming years, customers will require even higher levels of service and expertise. Our industry must be prepared to adapt and innovate to meet these demands effectively. Customers will seek solutions and providers that not only meet their immediate needs but also contribute to a more sustainable and resilient future.

New opportunities will require new learning, so continuous education and training will remain paramount. Professionals in our industry must be adaptable and well-informed to navigate the complexities of evolving product and service demands. Our future is strong.



SCOTT K. SUPPES, AHC, FDHI

CEO/PRESIDENT CP DISTRIBUTORS LTD. 30+ YEARS IN THE INDUSTRY

What drives you to stay involved with DHI and how can you share that enthusiasm with members new to DHI and the industry?

DHI was instrumental to my career. Like many others, I never set out to be a door and hardware professional. If it were not for a family connection I would not even have known about the industry. DHI helped open my horizons and trained me for a very rewarding career. I have said on more than one occasion that I have gotten way more out of the time and efforts than I have put into DHI.

How did you get started?

I was born into the business; my father was one of the original founders of CP Distributors and I grew up around it. I have had the good fortune of doing almost every job there, from sweeping floors in the summer as a kid to welding door frames, shipping/receiving, working on the order desk and many other roles.

What do you consider your greatest accomplishment?

I don't know if I could narrow this down to one greatest accomplishment. Achieving my AHC at a very young age would be one. Buying the company from my father and his partner and continuing on to grow the business beyond his expectations would be another.

Where do you see our industry going in five to 10 years?

I see major advances in how buildings are constructed and the technology that will be used and incorporated into the built environment. We will see big leaps and changes in the next five to 10 years. The distributor as we know it today will not survive without adapting to this. A company that is good at providing things in boxes, even with adding knowledge and expertise to the value proposition, will be a thing of the past.

Companies that keep up with technology and provide innovative solutions will thrive. Construction in general has been mostly stagnant for the last 100 years or so; we will see major change in how buildings are constructed. The great news is, compared with other industries that are being disrupted out of existence, buildings and the openings industry will always be needed.

DISTINGUISHED CONSULTANT AWARDS

This award is based on technical expertise and may be conferred on any DHI consultant member (AOC, AHC, EHC or CDC) with a minimum of 10 years as a contributing member of DHI.



RICHARD J. BRADBURY, DEHC, DHC, DHT, CFDAI, AAADM OWNER LOGICAL ACCESS SOLUTIONS CORP. 25 YEARS IN THE INDUSTRY

How has earning DHI certification and taking education helped your career?

Gaining DHI certifications has given me the ability and confidence to provide my customers with professional advice and recommendations from a knowledgeable standpoint, gained through DHI education.

I was so happy with the education I received that I wanted to give back by becoming a DHI Instructor, to help others on their journey to gaining knowledge and credentials. I now know people from coast to coast in the United States and Canada, many of whom have become good friends.

I know that if I am ever in a situation where I need help with something I have not encountered before, there is always someone somewhere in North America, at the other end of the phone, that I can count on. I will of course reciprocate that for others when called upon to do so. DHI is more than a professional association; it is also a big family that helps one another, and attending DHI educational opportunities is the way to become part of this family.

What does the Distinguished designation mean to you?

This means so much to me-it is an absolute privilege to be recognized by my peers and awarded this prestigious distinction. To all who were involved in my nomination, I cannot thank you enough.

What advice would you have for someone just starting in the industry?

Don't be too proud to ask questions. We are all here to help, whether it is somebody within your company or someone you met at a DHI educational event. Two of my former students who had no credentials when I first met them both went on to become AOCs with many other credentials after their names. Both now have very good positions and became DHI instructors too. Never stop learning and keeping abreast of new technology relevant to our industry. Strive to be the best at what you do, and everything will work out for you.

Where do you see our Industry going in five to 10 years?

The more prevalent electrified systems become in the next five to 10 years, the better our channels of communication have to be. The importance of coordination with Divisions 26 and 28 will be paramount in the seamless delivery of a commercial or industrial project. Making sure everybody is on the same page is so important, and it is up to us to step up and be the industry experts everybody looks to in order for this to happen.

We are also the source of knowledge regarding codes and life safety. Our seat at the low-voltage meetings will become crucial in ensuring smooth coordination with other associated trades on any project.



BRIAN C. CLARKE, DAHC, EHC, DHC, DHT, CFDAI, CDT, CSI DIRECTOR, ARCHITECTURAL SPECIFICATIONS HAGER COMPANIES 23 YEARS IN THE INDUSTRY

How has earning DHI certification and taking education helped your career?

Having a grandfather who was a master locksmith and a father who is an AHC and locksmith, it was brought to my attention early in my life that education could provide a foundation for my future. I moved into different occupations as I worked through the DHI education classes. Receiving my AHC certification was a proud moment, but I continue to take courses to learn and grow for my career and myself.

What does the Distinguished designation mean to you?

I feel like I've come full circle. I'm grateful for my peers who think I've contributed to this industry and DHI. As an instructor, I aim to ensure that the light bulb goes off for every student, no matter the class topic.

What advice would you have for someone just starting in the industry?

I suggest getting involved with the community that DHI builds. There are so many mentors with

a vast knowledge base to learn from, not only in the education classes. Network at your local DHI chapter events or through the many volunteer committees DHI offers. I would also suggest reaching out to manufacturers and taking any education they offer. The Carpenters Union is another great source of education, as is ALOA Security Professionals Association, Inc. for locks and keying.

Where do you see our industry going in five to 10 years?

While I don't believe mechanical hardware will ever disappear, the industry must learn more about access control. For years, we have given up that market share to Division 28. It's essential to gain that back as we understand what is required to ensure a door opening complies with all building codes and standards.



ROSLYN SHENDER, DAHC/ CDC, CFDAI, CDEC PRESIDENT W. LEWIS FRAME N DOOR INC. 36 YEARS IN THE INDUSTRY

How has earning DHI certification and taking education helped your career?

Taking DHI classes with experienced individuals sharing real-life knowledge empowered me to advance my career. Knowledge sharpens understanding and problem-solving skills. Knowledge is potential power to have a competitive edge.

Education becomes your most important weapon in a setting where expertise is highly valued. After taking DHI classes and earning my credentials, I was elevated as an expert resource for my associates and end users. I personally gained confidence to supply the best products.

What does the Distinguished designation mean to you?

I am overwhelmed and honored to be placed into this category of renowned colleagues. This award, based on being recognized and nominated by a peer, came as a complete surprise. While volunteering my time to DHI, I felt I was always paying forward as a result of the many instructor volunteers who provided my education. It made me stop and think about how many lives I may have affected over the years as an instructor, just as I was educated and mentored.

What advice would you have for someone just starting in the industry?

My advice to anyone in the industry, regardless of experience level, is to continue taking classes. Credentials are a great reward on their own, but continuing to learn is a more important process. Education is critical for advancement within your company and building your reputation as that trusted resource.

Where do you see our industry going in five to 10 years?

I don't believe this industry will ever be irrelevant. Five to 10 years into the future, I expect electronics to run more hardware items from digital devices as the virtual environment expands into electronics controlling our door openings. As the industry evolves, so will the need for education, because you cannot fall behind in new technology.

2023 DHI ACHIEVEMENT AWARD RECIPIENTS

AWARDS OF MERIT

This award is presented to any individual (member or nonmember) who has rendered outstanding contributions to the advancement of the aims and objectives of DHI and the door security and safety industry in any capacity.



BRIAN C. CLARKE, DAHC, EHC, DHC, DHT, CFDAI, CDT, CSI DIRECTOR, ARCHITECTURAL SPECIFICATIONS HAGER COMPANIES 23 YEARS IN THE INDUSTRY

What does it mean to you to be recognized by your peers for this award?

Giving back to an industry that has provided tremendous career opportunities is essential to me. Being recognized by my peers for the volunteer work I've demonstrated through DHI is an honor I appreciate. It's truly a full-circle moment.

What advice would you have for someone just starting in the industry and how should they get involved with DHI?

Surround yourself with a community of knowledgeable people. Join the local DHI chapter. If a chapter isn't available, work to create an online chapter for those members who may not have a local chapter. Volunteering for a committee is another way to get involved. For additional education, reach out to manufacturersmany have their own training courses.

Where do you see our industry going in five to 10 years?

While I don't believe mechanical hardware will ever disappear, the industry must learn more about access control. For years, we have given up that market share to Division 28. It's essential to gain that back as we understand what is required to ensure a door opening complies with all building codes and standards.



DAVID J. JENOSKY, AHC PRESIDENT JENOSKY CONSULTING, INC. 50 YEARS IN THE INDUSTRY

What does it mean to you to be recognized by your peers for this award?

It was an honor to learn that I had been nominated. The nomination itself was just as meaningful as receiving the DHI Award of Merit because my peers who made it happen are people I respect and look up to.

I have been working in the industry over the last 50 years. I have met and worked with many of the past consultants who have been recognized for their dedication to the industry. To be included in these rankings is indeed humbling.

What advice would you have for someone just starting in the industry and how should they get involved with DHI?

My first suggestion would be to get involved by attending DHI technical training courses. These training programs will build a sound foundation for a successful career in our industry. The skills I acquired 35 years ago help me every day working as an independent architectural hardware consultant. Paying it forward by sharing your time and talents with DHI at the local or national level is advice I would give to anyone whose career has been positively impacted by the industry professionals who came before them.

Where do you see our industry going in five to 10 years?

I have seen the number of independent hardware consultants diminish to the point of near extinction. I fear that in the next five to 10 years the independent consultant will be a thing of the past. Our industry is in desperate need of new Architectural Hardware Consultants to aid the architectural community to write hardware specifications and help them work through complicated applications and code issues.



KEVIN J. TISH, AOC, DHC, DHT, CFDAI, CDT MANAGER, ARCHITECTURAL SPECIFICATION WRITERS HAGER COMPANIES 17 YEARS IN THE INDUSTRY

What does it mean to you to be recognized by your peers for this award?

This award is truly an honor. This is a challenging industry and the amount of help I have received and continue to receive is amazing. I dedicate this award as a tribute to those who have helped me along the way.

The best way to thank them is by paying it forward, and my peers nominating me reflects all of their arduous work. Thank you to all my mentors and peers, as I could not have gotten here without all of you.

What advice would you have for someone just starting in the industry and how should they get involved with DHI?

I recommend that everyone, regardless of their time in the industry, pursue as much education as they can to complement their on-the-job training. The knowledge and contacts gained from these classes are worth every penny and effort. These classmates and instructors have helped me in countless ways, both professionally and personally.

Where do you see our industry going in five to 10 years?

The advancements in technology we are seeing will lead us to new levels of security and vulnerabilities. We need to welcome and prepare for these rapidly changing products with as much education as possible. The next generation in this industry will not only have to understand doors, frames and hardware, but will also need to know programming and cybersecurity to advance it.



ERIN C. WILSON, AOC, DHC, DHT, CFDAI, CDT, CCPR, CSI MANAGER, INFLUENCER EDUCATION DORMAKABA 30 YEARS IN THE INDUSTRY

What does it mean to you to be recognized by your peers for this award?

It is an honor to be recognized for this award by my peers. I'm grateful to be part of a profession—a family, really—that supports the industry and one another. It is difficult to put into words what it means to be recognized like this by my peers.

What advice would you have for someone just starting in the industry and how should they get involved with DHI?

First, get involved not just in your local chapter but at the national level too. There are several national committees where you can learn about the industry and network with others from all over the country. Second, learn and never stop learning. Our industry changes constantly with new products but also new building codes. Earn your credentials with DHI education; the knowledge, experiences and relationships gained will stay with you forever.

Where do you see our industry going in five to 10 year?

The industry is changing rapidly, faster than it ever has. We must adapt and do so quickly. The younger generations want to have purpose. What better way to have purpose than being in an industry that keeps buildings safe and secure? Technology is going to play a larger role in everything we do, including security. Knowledge and education are going to play bigger roles in joining technology and building codes together for safe, secure and usable facilities.

MARY ROTH AWARD

This award is conferred to a DHI chapter for presenting an outstanding chapter education program or series of programs.



DHI New England Chapter President Jim White, DAOC, FDHI, CFDAI (left), presented the chapter's Mary Roth Award trophy to outgoing President Kim Salvo-Conlon, DHT, FDAI (right), to recognize her outstanding work in leading the chapter to a Mary Roth Award last year. DHI 2022-2023 President David Beckham, AHC, FDAI (center), looks on. The chapter won the Mary Roth Award again this year.

Sample Class Topic

"Post-Pandemic Sustainable Design for Restrooms, Locker Rooms and Public Spaces," presented by Shelia Violette, CSI, CDT, via a Zoom meeting.

How do you create engaging education and events for your chapter?

All of the obvious methods such as surveys, in-person asks, word of mouth, discounts and package deals are used to reach out to our members. The one method that generally works the best is delivering presentations based on current industry trends. Last year we conducted our first live meeting since the pandemic with DHI President David Beckham, AHC, FDAI, informing us about DHI changes and future goals. A Zoom meeting in February was presented, titled "Post-Pandemic Sustainable Design for Restrooms, Locker Rooms and Public Spaces." Three other Zoom meetings based on code updates were conducted under our annual subscription service. We also recently developed a video aimed at high school vocational technical students to introduce them to our industry and a codes update class for architects held at the 2023 DHI conNextions.

What advice do you have for other chapters, to increase participation and engagement?

Developing strong meeting topics is No. 1! We provide topics that are current with today's trends or new industry developments. We offer continuing education points, both technical and



CHAPTER LEADERS

President

Jim White, DAOC, FDHI, CFDAI

President-Elect Jenna Ford

Treasurer William R. Hillman, DHT

Secretary Cheryl Orsi

President-Emeritus and Education Committee Chair Kim Salvo-Conlon, DHT, FDAI

non-technical, for all programs and meetings. By providing timely and relevant topics, members will look to the chapter to keep them informed.

Are your chapter leaders willing to be a resource for other chapter leaders who may want to reach out and learn from your experiences and success?

Yes. The leaders of our chapter are always willing to help others in our industry.

ROBERT G. RYAN EDITORIAL AWARDS

This award is presented to the best volunteer authors of an article in *Door Security* + *Safety* magazine written during the previous calendar year. Awards are presented for business and technical topics.

BUSINESS ARTICLES



1ST PLACE

BILL TRIMBLE, AHC, FDHI, PRESIDENT WM. S. TRIMBLE COMPANY "PLAYING CONTRACTOR CONTRACT ROULETTE" AUGUST 2022 ISSUE



2ND PLACE IAN OXMAN, CO-OWNER SOFTWARE FOR HARDWARE "DISTRIBUTORS OVERCOMING CHALLENGES TO SEIZE NEW OPPORTUNITIES" JUNE-JULY 2022 ISSUE

TECHNICAL ARTICLES



1ST PLACE BRIAN MOSES, ELECTRONIC ACCESS CONTROL TECHNICAL SALES AND SERVICES HAGER COMPANIES

"LOCKDOWN OPTIONS FOR SCHOOL SAFETY" MAY 2022 ISSUE



2ND PLACE MIKE DELIN, BUSINESS DEVELOPMENT MANAGER FOR INTERIOR PRODUCT SOLUTIONS CONSTRUCTION SPECIALTIES

"THE DOOR TO IMPROVING HEALTH CARE OUTCOMES" APRIL 2022 ISSUE

Meet the 2023 Door Security & Safety Foundation Scholarship Recipients



BY SARAH MULLEN, DHI OPERATIONS MANAGER

The Door Security & Safety Foundation (DSSF) Scholarship Program awards funds to deserving individuals to attend courses offered by DHI.

Since 1997, DSSF has provided more than 240 scholarships. This scholarship program is designed for those seeking technical education from DHI or who plan to earn a DHI certification.

The 10 recipients of the 2023 scholarships are profiled on the following pages, and the named scholarship that each received is noted in their profile. DSSF and DHI offer their warm congratulations to this distinguished group.



ALEX STAPLETON

Project Manager/Estimator, Schiller Architectural Hardware & Door Systems, Lexington, KY

Number of years in the industry: 5 years AWARDED THE JOSEPH G. LESNIAK,

DAHC, MEMORIAL FUND

How did you get started in the door and hardware industry?

I fell into it by chance. I

graduated college with a Bachelor of Science in biology, but I had no desire to pursue a career in that field. I was in search of a new career path when I heard Schiller was hiring through a friend. I had no experience in the construction industry, but I have never been intimidated by learning new things, so I figured I would give it a shot. I interviewed shortly after, got a job as Estimator/Special Projects Coordinator, and the rest is history.

What is the most rewarding aspect of your job?

A large portion of my construction work is done within the state I live in. It is fun being able to point out finished work.

If you weren't a door security and safety professional, what would you be?

I would likely pursue a similar field, such as architecture or engineering.

Who is your mentor/hero?

My mom is my hero. I grew up in a single-income household due to my dad's kidney disease. She was an ever-present and loving mom, but she also valued excelling in her career. As a new mom myself, I am increasingly impressed by her ability to thrive in all aspects of her life despite the juggling act of my dad's illness being thrown at her. Her perseverance and work ethic are qualities I have observed my whole life, and I know they played a key role in framing who I am today. I continue to look to her for guidance anytime I feel I'm lost.

What is the best advice you've ever received?

The importance of being a lifelong learner. Lifelong learning prevents your work life from going stale, expands skill sets and aids in adapting to an ever-changing market.



ANESHA WOODS

Project Manager/Estimator, Allen Commercial Door and Specialty Hardware, Bossier City, LA

Number of years in the industry: 2 years

AWARDED THE CHARLES W. MULLINS, DAHC, MEMORIAL SCHOLARSHIP

How did you get started in the door and hardware industry?

I didn't find this industry, it

found me. I was already in commercial construction (coatings) but looking for a change of pace. I was lucky enough to reach out to a previous coworker who informed me that his company was hiring and thought I'd be a great fit. The rest is history.

What is the most rewarding aspect of your job?

I love watching something come together from design inception, to plans and final product. Seeing everyone do their part to build something great is very rewarding.

If you weren't a door security and safety professional, what would you be?

Either a writer, a public speaker or a backup singer. I can't decide.

What is your advice to someone considering taking DHI technical education?

Half of what you gain will be knowledge, the other half is the wonderful connections you will make with industry professionals. People are truly there to help you grow. Throw yourself out there, make friends and offer your help and insight. I now have a bevy of friends across the United States who I can reach out to and I enjoy reconnecting with them at each class series.

What is the best advice you've ever received?

It was a question that made me look at everything differently: "If you could do one thing that would completely change the trajectory of your life, what would it be?"



AUSTIN PECK

Project Manager, Architectural Products of Virginia (APV), Ashland, VA

Number of years in the industry: 4 years

AWARDED THE SHARON ASHTON, AHC, FDAI, CDT, TRIBUTE FUND FOR EDUCATION (OLD DOMINION CHAPTER SCHOLARSHIP)

How did you get started in the door and hardware industry?

I was working in an outside sales role in the logistics industry when a recruiter approached me about a career change. Once I met the APV team and learned about the project management role, I was sold. I was not even aware of the industry before then; now I cannot walk into a building without analyzing the hardware at every door.

What is the most rewarding aspect of your job?

Problems over the course of a job are inevitable, but coming up with accurate and quick solutions to resolve those issues to keep the project moving forward is extremely rewarding. I enjoy being able to work as a consultant to my customers and educate them throughout the job.

How do you de-stress?

Cooking! Nothing is better than a great plate of food after a long day of work. Focusing on prepping dinner with my fiancé allows us to both disconnect from our phones, forget about the daily stresses of life and work together in the kitchen.

If you weren't a door security and safety professional, what would you be?

A physical therapist, preferably working with the world's greatest football team, the Philadelphia Eagles. In middle school I suffered an injury during a lacrosse game that resulted in knee surgery, and I was drawn to the idea of becoming a physical therapist as I worked through my own rehabilitation.

What is your advice to someone considering taking DHI technical education?

Take advantage of the wealth of experience that your instructors and fellow classmates have. If you attend in-person courses, take the time to meet other individuals from around the country and learn how their geography can affect their processes and/or type of products they work with.



BRIANA MONTENEGRO

Assistant Project Manager, G&G Door Products, Buena Park, CA

Number of years in the industry: 3 years

AWARDED THE TCH SCHOLARSHIP, IN MEMORY OF GEORGE H. BOOMER, SR.

How did you get started in the door and hardware industry?

I joined the door and hardware

industry because of a friend from college who was working in a door and hardware company during the pandemic. Thanks to her I was able to get the opportunity to start working for the company where she worked. I started as an assistant to the manager for detailing and engineering and slowly decided to transition from the engineering department to the operations department. I had originally started with a quality control background but coming into the operations teams I realized that I really did enjoy being part of the door and hardware industry. I am now about three years in, with a lot left to learn.

Who is your mentor/hero?

My mentor/hero has always been my mother. She has always been someone I am able to look up to. As a child, I saw my mother struggle to get ahead on her own. My mother had no support and had no one to guide her as a young mother. She was born in the United States but was raised in Mexico until she was about 12 years old.

English was not her first language and no one in our family knew about higher education, but she went out of her way to go to a trade school and is currently a medical biller for UCLA Health. When I feel like giving up or when days are too hard for me, I look at where she is and how she got here. She tried paving a road for me and it gives me the little push I need to get back up and keep trying to be better. I try to make the road a little easier for my younger siblings, too.

2023 DSSF SCHOLARSHIP RECIPIENTS



IAN ESPINA

Project Coordinator, CP Distributors, Regina, Saskatchewan, Canada

Number of years in the industry: 2 years

AWARDED THE DANNY L. CAMPBELL MEMORIAL FUND

How did you get started in the door and hardware industry?

A little over two years ago, I joined CP Distributors after

more than five years in the flooring world. Prior to my flooring experience, I worked in the accounting, purchasing and project management arena.

I wanted to stay in the construction business as I experienced how the industry survived even during the height of the pandemic. I recognized an interesting opportunity in CP as a company and the entire door and hardware industry. I always want to learn something new; it literally opens doors for me and makes this a career that I can be proud of.

Being an immigrant from the Philippines was a challenge for me in making a choice about which career path to take and how to make it work with my growing family and our needs. The rest is history in the making.

What is the most rewarding aspect of your job?

Being able to see finished and installed doors in different buildings and offices. It feels good that at some point I was part of the team that made good-looking doors in these commercial buildings and even public offices. One of the first big projects I was part of was at Peepeekisis Cree Nation in Balcarres in Saskatchewan, Canada. One of the wood doors has a natural wood color that looks like a buffalo from afar.

How do you de-stress?

I love music, and this is one way of channeling my emotion to my inner self and back. I write songs and play in a band in Regina. We are planning to complete an album within the next two years. Being a vocalist in a band is like an alter ego for me.

If you weren't a door security and safety professional, what would you be?

A touring musician with my band or an event organizer.

What is your advice to someone considering taking DHI technical education?

Allocate time to be a student of the field and keep on learning.



JEFFREY FRANCE

Estimator/Project Manager, Allen Commercial Door and Specialty Hardware, Bossier City, LA

Number of years in the industry: 1 year

AWARDED THE HAGER COMPANIES SCHOLARSHIP

How did you get started in the door and hardware industry?

Leaving the fire protection

industry after 17 years, a friend of mine told me that he had a career opportunity that would keep me in town and have amazing growth opportunity, so I jumped in feet first.

What is the most rewarding aspect of your job?

The connections we make and being able to work with an amazing group of people.

How do you de-stress?

I de-stress by going to the gym. Anyone who knows me knows I love the gym.

If you weren't a door security and safety professional, what would you be?

I am not sure; I still have a lot of growing up to do before I become an adult.

Who is your mentor/hero?

My father is my hero and I have several mentors.

What is your advice to someone considering taking DHI technical education?

Get ready to drink from the fire hose and just try to take it all in.

What is the best advice you've ever received?

Worry is sin and gives the devil a foothold into your life. Instead of worrying, focus on finding a solution. If you can't find it, ask for help.



JEREMY KILLEY

Estimator II, ISEC Inc., Bothell, WA

Number of years in the industry: 25 years

AWARDED THE PUGET SOUND SCHOLARSHIP IN HONOR OF H. STEPHEN BETTGE, DAHC, FDAI

How did you get started in the door and hardware industry?

I was promoted from residential sales to commercial sales and

project management at the wholesale door supplier I was working for in Seattle. I made the move to the commercial side somewhat reluctantly as I knew how demanding it could be. It turned out to be the best possible scenario for me at the time and for my future. This promotion afforded me more than just a job; it provided a career.

What is the most rewarding aspect of your job?

I've always appreciated how valuable the professional relationships are that we build in this industry. Long-term partnerships with manufacturers, distributors, factory representatives, the shops and the customers allow for partnerships that result in successful projects. It's rewarding to work in an industry where so many different companies can come together with the common goal of successfully supplying and installing a door and hardware package even when there are misunderstandings, mistakes, damage or delivery time issues to work through.

How do you de-stress?

Golf, travel, cooking, family time with my wife and daughters. And watching just a little more football and basketball than I probably should.

What is your advice to someone considering taking DHI technical education?

In my experiences with DHI technical classes I would advise to be prepared for a long week of hard work and know that there will be a lot of information to take in. Make the most of the opportunity your company is paying for.

What is the best advice you've ever received?

A local legend in the industry once told me that "being effective in our business is not so much about memorizing and knowing everything, but rather learning where and how to find the answers you need, when you need them." I think this advice has never been truer than it is today with all the electrified and technical advances being made within our industry. What we memorize today can become obsolete tomorrow and, in the meantime, some new item shows up in a specification we have never seen before. We all do well to learn to utilize the resources available to be as efficient and accurate as we can be.



JOSEPH KING

Account Executive/Sale, Kamco Lock Solutions, Londonderry, NH

Number of years in the industry: 6 years

AWARDED THE COLORADO DOORWAYS, INC. SCHOLARSHIP IN MEMORY OF C.H. JOHNSON, DAHC

How did you get started in the door and hardware industry?

I stumbled into this industry

with help from my friend working at Kamco. I was working a dead-end job and looking for a change. I started off as a technician, learned the trade for three years and was moved into sales where I have been working for almost four years now.

What is the most rewarding aspect of your job?

Helping customers solve problems and passing along the knowledge I have been taught.

How do you de-stress?

I de-stress by taking long walks with my dog. Not only are the walks great for him, but they allow me to reset and take a deep breath. My fiancé and I enjoy traveling to national parks around the country as well. Unfortunately, we cannot do that every day.

If you weren't a door security and safety professional, what would you be?

An electrician. I enjoy working with my hands and wiring has always interested me.

What is your advice to someone considering taking DHI technical education?

The education and nuggets you receive are extremely helpful in our industry. The networking and wealth of knowledge everyone has makes it a great learning experience. There are not many people I meet who are thrilled to talk about doors, so it is nice to have a community that shares similar stories and interests.



LISA MEISSNER, DHT

Project Manager, Hull Supply Co, Inc., Austin TX (works remotely from Wisconsin)

Number of years in the industry: 8 years AWARDED THE WISCONSIN CHAPTER

SCHOLARSHIP

How did you get started in the door and hardware industry?

I started in an entry-level position as a bid board coordinator for the estimating department of a door, frame and hardware distributor.

What is the most rewarding aspect of your job?

Helping contractors meet their timelines with material that is going to work for the desired application, in addition to stepping in and solving issues as quickly as possible when they arise. I love being that knowledgeable commercial door, frame and hardware source they need.

If you weren't a door security and safety professional, what would you be?

I would probably be a technician in the medical field. Something that combines technical knowledge with helping others.

What is your advice to someone considering taking DHI technical education?

Take advantage if you get the opportunity. Soak it all in. Take good notes. You get a lot of good practical information from awesome instructors.

What is the best advice you've ever received?

Understand that most people in this industry have been here for a very long time. The veterans tend to think everyone knows this job as well as they do. It can be hard when you are new to the industry. This is a very specialized industry and requires a lot of learning. You cannot just step into a position and start doing the work. Find a co-worker who is willing to be your mentor and guide you through the process.



RYAN SUFFRIDGE

Senior Project Engineer, Taylor Trim & Supply, San Diego, CA

Number of years in the industry: 5 years

AWARDED THE CORBIN RUSSWIN/ ASSA ABLOY SCHOLARSHIP IN MEMORY OF SHIRLEY HENRY, AHC

How did you get started in the door and hardware industry?

As the son of a framer, I've been

around construction my whole life. I was looking for a way back into the construction industry after a few years hiatus and applied for a position at Taylor Trim. The rest is history!

What is the most rewarding aspect of your job?

Collaboration. Whether I am working with a builder to shore up their plans or my field team to ensure an issue is alleviated, I love working with folks from all walks of life toward a common goal. In this case, creating housing in a city that sorely needs it.

How do you de-stress?

Disc golf and improv comedy. I get to work through my stress physically with disc golf and mentally through theater. It's a great combination.

If you weren't a door security and safety professional, what would you be?

A teacher. It doesn't really matter what I'm teaching. I love to work with people and create spaces.

Who is your mentor/hero?

My dad, Ken Suffridge. He is the epitome of a good personhardworking, kind, insightful and a fantastic person to look up to.

What is your advice to someone considering taking DHI technical education?

You have to do it. If you want to learn something, why not go to the experts?

What is the best advice you've ever received?

As simple as it is, Dory's "Just keep swimming" from "Finding Nemo" is perfect. If you just keep going, things will eventually fall into place.

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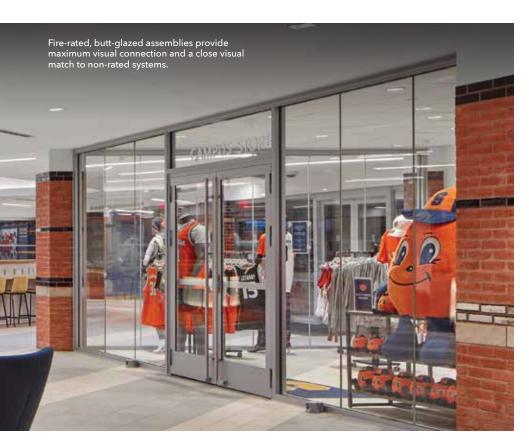
40 A DRAMATIC SHIFT 43 CLEAR VIEW OF THE PIRATES

A Dramatic Shift

Recreating the Schine Student Center to be vibrant, inclusive and new.

BY DEVIN BOWMAN

The Schine Student Center has been a focal point for student activities on Syracuse University's campus since its construction in 1985. It hosts a wide range of programs, including dining services, student and staff offices, an auditorium, campus store and several spaces for students to gather.



Nearly 35 years after the student center was completed, design trends, student expectations and material capabilities had shifted considerably. These shifts prompted the university to reevaluate the building's design in 2019.

Featuring the talents of several Syracuse alumni, Mackey Mitchel Architects and Ashley McGraw Architects partnered to transform the Schine Student Center with current design best practices and Syracuse student feedback. Gathering student comments from online surveys, informal suggestions and other forms of input, the design firms planned the 108,000-square-foot renovation to prioritize visual and physical connection, accessible circulation and a comfortable and memorable environment.

The Schine Student Center has a central atrium with four adjoining quadrants. The connections between these spaces are important to the renovation's design as they help promote a sense of openness between—as well as within—the built environment. However, fire-and life-safety codes required the use of fire-rated materials at these crucial points.

This posed two challenges to the design teams: achieving code compliance without sacrificing visual connection, and creating a cohesive design with fire-rated materials.

The architects turned to Technical Glass Products (TGP), a supplier of fire-rated glazing assemblies, for assistance with solving for code compliance without compromising their design intent.

MINIMIZING DESIGN COMPROMISE

"Visual connection was the primary driver for the design of the renovation," Benjamin Darby, architect at Ashley McGraw Architects, says. This was partially achieved by replacing isolated zones in the central atrium with inviting vistas. It was actualized by preserving visual connection between the quadrants and atrium through the use of transparent, fire-rated glazing assemblies and adjacent non-rated assemblies.

The use of full-lite, fire-rated glass doors within narrow-profile, fire-rated glass storefronts balance the visual connection central to the renovation. They also protect egress stairwells and compartmentalize the building.

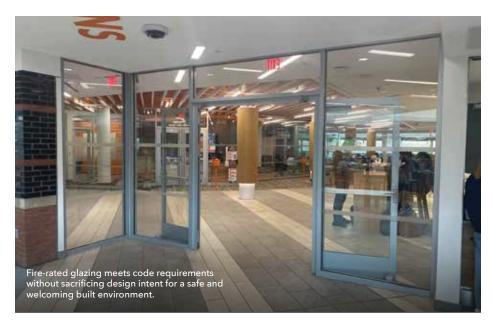
Previously, this level of protection may have only been achievable with opaque materials or with limited amounts of glazing. Now, TGP's Fireframes® Designer Series Doors and Fireframes ClearView® systems (both with Pilkington Pyrostop® fire-rated glass) allowed the architects to meet requisite codes without hindering the desire for visual connection.

The building's openness fosters a sense of connection to the campus and supports easy directional guidance, too. "When a student walks into the building, they are given sightlines into each of the quadrants, as well as clear wayfinding to help navigate through the expansive building," Darby says. This helps create a welcoming atmosphere that encourages students to connect with each other and the programs housed in the student center.

SEEING ORANGE

While the storefront assemblies help maintain visual connection at crucial points throughout the building's quadrants, fire-rated glazing also contributes to a sense of openness within the central atrium itself.

One of the primary examples is the Fireframes ClearView assemblies that surround the campus store. These



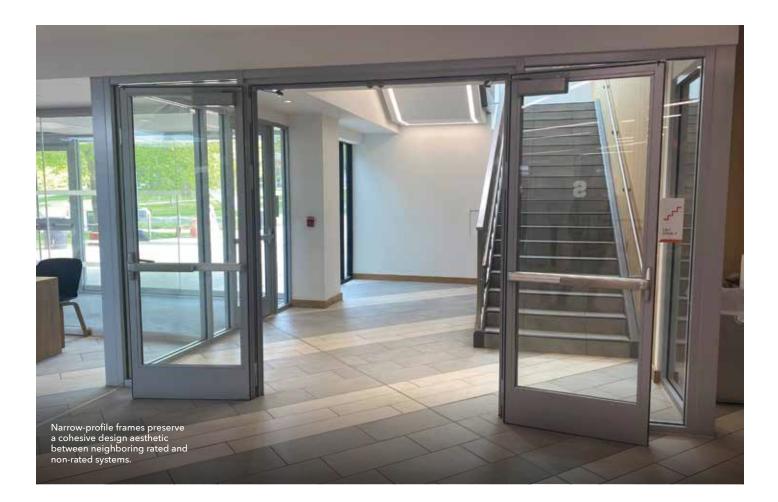


transparent, butt-glazed systems feature floor-to-ceiling, fire-rated glass wall panels that stretch between structural supports and provide a 60-minute fire rating. Rather than opaque vertical mullions, the glass wall panels come together at a five-millimeter butt-joint, which maximizes the amount of glazing within the perimeter frames.

Because the Fireframes ClearView assemblies allow uninterrupted views into and through the campus store, they facilitate easy wayfinding for new students looking to buy textbooks and visitors wanting to snag Syracuse clothing and gifts. Though the glass itself is impressive, the minimal aluminum perimeter frames and butt-glazed joints meet important design criteria as well, such as creating a coherent design throughout the student center.

UNIFORM GLAZING DESIGN

Not all the glazing within the Schine Student Center needed to be fire rated. However, throughout the building, rated and non-rated assemblies were specified near each other. To preserve a seamless look, the designers chose firerated frames and glass that provide a close visual match to non-rated systems.



"The success of these glazing applications can be found in their nonunique appearance," Darby says. "Our design team valued TGP's fire-rated systems' ability to frame views between spaces, while being non-intrusive and uniform with other interior glazing used in the project."

Since TGP's fire-rated glazing systems complement adjacent nonrated assemblies, they allowed the design firms more freedom to create impressive and visually connected spaces–whether or not a fire rating was required in a specific application. As such, the architects were able to meet code-required fire ratings without compromising their student-centered and award-winning design.

FROM DESIGN EXCELLENCE TO STUDENT EXCELLENCE

Following its completion, the Schine Student Center has won architectural excellence awards from Central New York's chapter of the American Institute of Architects (AIA), the Association of College Unions International (ACUI) and the Illumination Engineering Society (IES). These awards cite the project's commitment to the principles of universal design, student-centered design and design for diversity and inclusion.

The jury's comments for the AIA award state the renovation created a "dramatic improvement in terms of visibility, engagement and inviting spaces of this essential campus building." While several systems come together within the student center to achieve this improvement, fire-rated glazing plays a part in realizing the open design by preserving visibility and connection, where previously opaque materials might have been necessary to achieve fire- and life-safety code requirements.

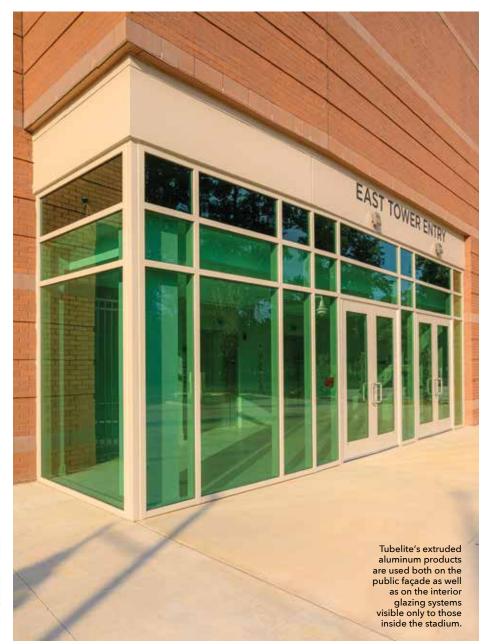
These awards underscore the original intent of the Schine Student Center-to be a central hub of student activity on campus. By supporting easy navigation and creating a welcoming environment, fire-rated glazing contributes to this design intent while also maintaining code-driven safety. +

DEVIN BOWMAN is General Manager of Technical Glass Products (TGP) and AD Systems. Email: *Devin.Bowman@allegion.com*. Phone: (800) 426-0279.

CLEAR VIEW OF THE PIRATES

East Carolina University renovates football stadium with Tubelite products.

BY BRIAN TOBIAS, LEED® AP



The first 2019 season home football game for East Carolina University (ECU) resulted in a win and ushered in the beginning of a new era for Pirates fans at Dowdy-Ficklen Stadium. The \$60 million southside renovation-completed earlier that year-added 1,000 premium seats to TowneBank Tower.

Pirates Club premium seat holders are now welcomed through entrances and façade systems created with Tubelite's doors, curtainwall, ribbon windows and storefront.

The 93,000-square-foot TowneBank Tower rises nine stories and spans the top of the southside seats between the 15yard lines. It encompasses five founders suites, 19 standard suites, 22 loge boxes and 550 club seats. The top level of the tower also houses a new press box and game-day operations center.

Along with the TowneBank Tower, renovation of the Wards Sports Medicine Building was also part of the project scope. Expansions and modernizations were made to the Ward building's football locker room, team meeting areas, athletics training headquarters and equipment room. A football team lounge also was added to the existing structure.



Above: The recently completed, \$60 million, southside renovation of East Carolina University's Dowdy-Ficklen Stadium features entrances and façade systems created with Tubelite doors, curtainwall, ribbon windows and storefront.

Right: Tubelite was excited to take on the project because of the complexity and challenges it presented.



TUBELITE IN DEMAND

Designed by architectural firm LS3P Associates Ltd. of Wilmington, North Carolina, the Dowdy-Ficklen Stadium southside renovation project team also involved AECOM and the joint venture general contractors of TA Loving Co. and Frank L. Blum Construction Co.

Early in the project's development, Apogee Renovation consulted on highperformance glass, aluminum framing and window system solutions that included Tubelite's products.

"Apogee Renovation's energy modeling tools, building analysis and specification assistance services allow building owners and project teams to better determine which window systems should be considered for replacement to gain the optimal appearance, performance, long-term value and savings," says Mary Avery, Vice President of Marketing at Tubelite. "Everyone benefits when aging buildings can be upgraded to be more effective, efficient and comfortable. This is a free service offered through any of the Apogee companies, including Tubelite."

LS3P specified Tubelite's extruded aluminum products both on the public façade that everyone sees and on the interior glazing systems visible only to those inside the stadium. These interior framing systems provide views from TowneBank Tower to the field, as well as transparency and separation between the premium suites, loge level, press level and the main concourses.

CHALLENGES ABOUND

It was a challenging project from the earliest stages, according to glazing contractor Jeffreys Aluminum Group, Inc. "Before the project began, we needed to find a system that would load structurally and withstand the stacking pressures at the top/press level of the tower on the field side," says Cameron Jeffreys, Jr., Vice President. "The biggest challenge on this project was erecting the curtainwall framing and setting the glass on the southside tower off of scaffolding. And of course, time was a big concern."

Jeffreys adds it was a project they were really excited to take on due to the complexity and challenges that it presented. "Tubelite was a big help in choosing and pre-engineering an inside glazed system that would withstand the forces on the press level," he says.

IN THE DETAILS

On both the interior and exterior, Jeffreys Aluminum Group installed all of Tubelite's products: Therml=Block® Wide Stile Entrances and 900RW Series Ribbon Window, 400CW Series Curtainwall, T14000 I/O Series Thermal storefront, and E14000 Series and E14000 I/O Series Multipane Storefront Framing systems.

All of Tubelite's architectural aluminum products on the renovated and expanded tower were finished by Linetec. The exterior curtainwall, windows and entrance systems feature a Class I clear anodize. The interior storefront systems are finished using a 70% PVDF resin-based architectural coating in a Sea Wolf light beige color. These durable finishes protect the aluminum, contribute to its lowmaintenance longevity and meet the required performance and desired appearance.

As noted, coordinated scheduling was also critical to the project's success. "Our company holds a reputation of delivering on time, and Tubelite has always been a good partner in making that a priority," Jeffreys says. "Along with the reliability, Tubelite is always competitive in pricing and with material lead times. And members of the Tubelite team are always super helpful and there for us when needed." +

RESOURCES

- Owner: East Carolina University; Greenville, North Carolina; https://www.ecu.edu
- Architect: LS3P Associates Ltd.; Wilmington, North Carolina; https://www.ls3p.com
- Associate architect: AECOM, https://www.aecom.com
- General contractor joint venture: TA Loving Co.; Goldsboro, North Carolina; https://www.taloving. com; Frank L. Blum Construction Co.; Winston-Salem, North Carolina; https://www.flblum.com
- Glazing contractor: Jeffreys Aluminum Group, Inc.; Mebane, North Carolina
- Window, curtainwall, storefront and entrance systems-insulating glass: Vitro Architectural Glass, Solarban® 70 on Atlantica®; Cheswick, Pennsylvania; http:// www.vitroglazings.com
- Window, curtainwall, storefront and entrance system–energy modeling strategist: Apogee Renovation; Minneapolis; https:// www.apogeerenovation.com
- Window, curtainwall, storefront and entrance systems– manufacturer: Tubelite; Walker, Michigan; https://tubeliteusa.com
- Window, curtainwall, storefront and entrance system–aluminum finishing: Linetec; Wausau, Wisconsin; https://linetec.com

BRIAN TOBIAS, LEED® AP is Senior Manager of Product Strategy at Tubelite and its aluminum-framed storefront, curtainwall, entrances and daylight control systems. Phone: 800-866-2227. Email: dependable@tubeliteusa.com.

DECODED

PANIC HARDWARE ON DOORS SERVING ASSEMBLY OCCUPANCIES



LORI GREENE, DAHC/CDC, FDAI, FDHI, CCPR, is Manager of Codes and Resources at Allegion. She can be reached at *lori.greene@allegion.com* or *idighardware.com*.

ASK YOUR MOST PRESSING QUESTIONS!

Decoded now features a new question-and-answer format. We are selecting some of the most pressing questions that readers have about codes and answering them here. Submit your questions at *idighardware*. *com/decoded-qa* and we'll answer as many as we can in future Decoded columns. SOMETIMES LOOKING AT A CODE QUESTION FROM A DIFFERENT PERSPECTIVE HELPS FORM A BETTER UNDERSTANDING OF THE REQUIREMENTS AND THE INTENT. CONSIDER THIS QUESTION FOR A MOMENT BEFORE MOVING ON TO THE ANSWER.

QUESTION: UNDER WHAT CIRCUMSTANCES ARE DOORS SERVING ASSEMBLY OCCUPANCIES NOT REQUIRED TO BE EQUIPPED WITH PANIC HARDWARE?

First, let's look at where panic hardware is required. There are two sets of model building codes and fire codes used in the United States. Most states adopt one of these sets or a combination of the two, along with state modifications. The I-Codes include the International Building Code (IBC) and the International Fire Code (IFC). The National Fire Protection Association (NFPA) publishes more than 300 consensus codes and standards; the NFPA code most commonly used in the door and hardware industry is NFPA 101: Life Safety Code.

The model codes require panic hardware for doors serving the following occupancy types and calculated occupant loads:

I-CODES

- Assembly (Group A) and educational (Group E) occupancies, doors serving a calculated occupant load of 50 people or more
- High hazard occupancies (Group H), doors serving any occupant load

NFPA CODES

- Assembly, educational and day care occupancies, doors serving a calculated occupant load of 100 people or more
- Areas of high hazard contents, doors serving an occupant load of more than five people

In some cases, panic hardware is also required for doors serving rooms that contain certain types of electrical equipment and for refrigeration machinery rooms. Fire exit hardware is a type of panic hardware that is listed for use on a fire door assembly in addition to being listed as panic hardware.

This article will address panic hardware in general, including devices listed only for panic and devices listed for panic and fire.

SO, BACK TO THE QUESTION: FOR ASSEMBLY OCCUPANCIES, WHICH DOORS WOULD NOT REQUIRE PANIC HARDWARE?

No lock or latch: The panic hardware requirements of the model codes apply to doors serving the applicable areas when the door is equipped with locking or latching hardware. For example, if the door has a push plate and a pull, with no lock or latch, panic hardware would not be required-even when the door is serving one of the occupancy types and occupant loads stated above.

Low occupant load: A facility that is classified as an assembly occupancy may be divided into smaller spaces with a lower calculated occupant load. Imagine a conference center with meeting rooms of various sizes, ranging from small conference rooms to large lecture halls. It's likely that the doors serving the larger rooms would require panic hardware, while panic hardware would not be mandated for the smaller rooms with an occupant load of less than 50 people (I-Codes) or less than 100 people (NFPA codes).

Not a means of egress: The model codes handle the requirements for egress/non-egress doors slightly differently. The requirements of the I-Codes apply to doors that are required for egress, as well as doors that are provided for egress purposes. If there are extra doors in quantities greater than the number of doors mandated by code, the requirements of the I-Codes must still be met if the doors are intended to be used for egress. If a door is not required for egress and not provided for egress purposes, the mandates of the I-Codes may not apply-verify with the Authority Having Jurisdiction (AHJ).

The requirements of the NFPA codes are typically applied to doors that are part of the means of egress. The AHJ may allow panic hardware to be omitted if the doors are not required for egress nor provided for egress purposes. One example may be the inactive leaf of a pair if that leaf is not required for egress or intended to be used for egress, although this can be difficult to determine.

Main entrance doors: Both the I-Codes and the NFPA codes allow key-operated locks (double cylinder deadbolts) on the main entrance door(s) to a building or tenant space if certain criteria are met. The lock must be readily distinguishable as locked, and the door opening must have signage stating: "This door to remain unlocked when this space is occupied."

The occupancy type must allow a key-operated lock. For example, the I-Codes allow these locks on assembly occupancies with an occupant load of 300 people or less, business, factory, mercantile, storage occupancies and places of religious worship. The IBC Commentary states that the doublecylinder deadbolt addressed by this section is permitted as an alternative to panic hardware, allowing the panic hardware to be omitted.

NFPA 101 includes a similar section allowing these locks where permitted by the occupancy chapters.



Egress doors serving exterior

spaces: The 2021 IBC and IFC include a new set of requirements that apply to egress doors serving enclosed exterior areas such as roof decks and courtyards, where the means of egress passes through the interior of the building. Similar to the main entrance doors addressed above, this section permits key-operated locks that are readily distinguishable as locked, along with the required signage.

The I-Codes include additional requirements to ensure life safety for the occupants of these exterior spaces. These include a weatherproof telephone or two-way communication system in the exterior space, and a glazed vision panel or sidelight for observation of the outdoor area.

The IBC Commentary states that the key-operated locks permitted by this section may be installed instead of panic hardware if all criteria are met. The 2021 edition of NFPA 101 does not include a similar section addressing these exterior spaces.

Stadium gates: The I-Codes include a specific exception stating that panic hardware is not required on gates serving stadiums, if the gates are under constant supervision when the public is present. This exception also requires a safe dispersal area between the fence surrounding the stadium and the enclosed space. This area must provide at least 3 square feet per person and must be located at least 50 feet from the enclosed space (the stadium).

CONCLUSION

When determining whether a particular door requires panic hardware, the first question is which code has been adopted. Requirements vary between the two sets of model codes, there may be state or local modifications, and there are changes from one edition of the codes to the next.

For example, if a state has adopted the 2018 I-Codes, the new section addressing egress doors serving exterior spaces does not apply, unless the AHJ approves a code modification.

Once the applicable code is identified, the next step is to verify the occupancy classification or use group and calculate the occupant load of the space. This information will determine whether or not panic hardware is mandated by code.

If the door in question is serving a space that is required to have doors with panic hardware, the final step in the process is to decide whether any of the exceptions apply and whether all of the criteria listed in the applicable code are met.

For assistance in interpreting the adopted code, consult with the AHJ. +

THE EVOLUTION OF LOCKS: PART 1



ERIN C. WILSON, AOC, DHC, DHT, CFDAI, CDT, CCPR, CSI is Manager, Influencer Education, IMPACT Academy (Industry, Market, Product & Certification Training) at dormakaba USA Inc. Email: erin.wilson@dormakaba.com.

The rich history of the door and hardware industry is highlighted by people and companies that drove innovation for decades. This column commemorates many notable achievements.

If you have a historical story to share, please contact *Door Security* + *Safety* Editor-in-Chief Al Rickard, CAE, at *arickard@dhi.org* or 703-402-9713.



TAKE A JOURNEY THROUGH TIME TO UNDERSTAND THE EVOLUTION OF LOCKS FROM ANCIENT CIVILIZATIONS TO MODERN INNOVATIONS. PART ONE OF THIS TWO-PART SERIES COVERS ADVANCEMENTS UP THROUGH THE INDUSTRIAL REVOLUTION.

After the basic needs of food, shelter and clothing comes the need for safety. We feel safe behind a door that is secure even if a rock is holding it closed. Throughout history, we have improved upon this exponentially.

From the rudimentary wooden mechanisms of ancient civilizations to the intricate and technologically advanced systems of the modern era, locks have played a vital role in safeguarding ourselves and our belongings, fortifying our homes and shaping our societies.

ANCIENT LOCKS

The story of locks begins in the ancient civilizations of Egypt, Mesopotamia and China, where rudimentary locking

mechanisms were first created. In Egypt, around 4000 BC, the invention of wooden pin locks marked a significant milestone. These early locks consisted of a wooden bolt that would slide across the door and be secured with pins or wooden pegs.

The key was also born during this era. Egyptian craftsmen developed wooden or metal tools that could manipulate the pins within the lock, enabling the bolt to be withdrawn.

In Mesopotamia, around 2000 BC, an ancient pin lock system was discovered in the ruins of the palace of Khorsabad. This mechanism featured a wood bolt with a series of holes, each containing moveable pins. Only by aligning the pins with a corresponding key could the bolt be released, providing an early glimpse of the complexity and ingenuity that would characterize locks for centuries.

In ancient China, locks were primarily used to secure valuable possessions, including precious documents and artifacts. Chinese locksmiths were pioneers in crafting sophisticated brass locks, often adorned with intricate designs.

One notable example is the "Ban Lian," a Chinese lock believed to have originated in the Han Dynasty (202 BC - 220 AD). This lock featured a cylindrical design with a set of keyhole pins and lever-like tumblers, setting the stage for later development of lock technology.

GREEK AND ROMAN CONTRIBUTIONS

The ancient Greeks and Romans contributed greatly to the evolutions of locks, introducing new mechanisms and materials. Greek engineers developed the ward lock, a precursor to the modern pin tumbler locks, which employed metal wards inside the lock to obstruct the rotation of the bolt unless the correct key was used.

The wards created obstacles that only the corresponding key could navigate, aligning the lock's internal components to permit movement. These locks were commonly used to secure chests and small containers.

The Romans refined the concept of ward locks, enhancing them with durable iron and bronze materials. They also introduced intricate lock designs, such as the spring-operated tumbler lock, which featured multiple pins and springs that needed to be aligned precisely by the key to unlock the mechanism.

The Roman Empire's vast network of roads and trade routes facilitated the spread of lock technology, disseminating its innovations across Europe and beyond.

MEDIEVAL INNOVATIONS: CASTLES AND STRONGHOLDS

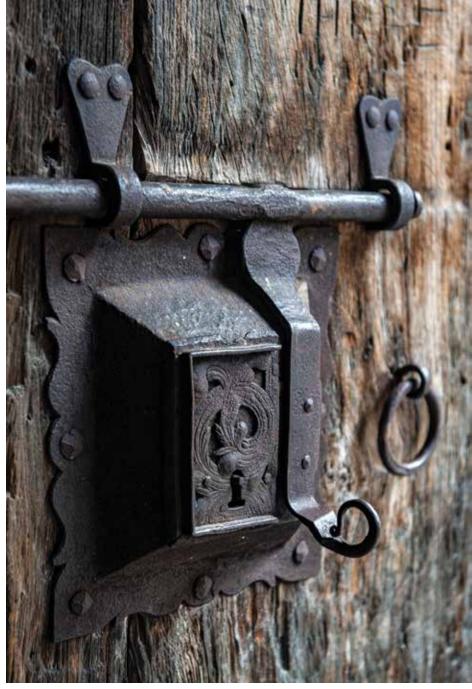
During the medieval period, the demand for robust locks surged as castles and strongholds became prevalent. The medieval locksmiths developed elaborate and formidable lock systems to defend against invasions and burglaries.

One notable advancement was the introduction of the warded lock, characterized by a set of wards within the lock that only allowed a specific key, designed with corresponding notches and grooves, to pass freely. This key and lock system became widely adopted and remained in use for centuries.

In the 14th century, the emergence of locksmith guilds in Europe led to the standardization of lock designs and improved craftsmanship. Locksmiths gained prestige as skilled artisans



A medieval lock on a wooden door. ADOBE STOCK PHOTO



An ancient steel lock bolt with a keyhole installed on an old wooden door from the medieval age.

and contributed to the development of more complex and secure locking mechanisms. During this time, locks were also adorned with decorative elements, reflecting the artistic sensibilities of the period. One of the most famous and intriguing medieval locks is the Great Lock of Gloucester Cathedral in England. Constructed in the 12th century, this enormous iron lock weighs over 200 pounds and measures more than 3 feet in length. It was used to secure the valuables of the cathedral and symbolized the importance of safeguarding treasures during this era.

As trade and commerce expanded during the medieval period, the need for portable locks increased. The padlock, a small lock designed to be attached to a hasp, chain or staple, became popular for securing luggage, chests and gates. Padlocks evolved into various designs, including combination locks, where a sequence of numbers or symbols needed to be aligned correctly to open the lock.

THE RENAISSANCE ERA AND THE ART OF LOCKSMITHING

The Renaissance era witnessed a revival of art, science and innovation, and locksmithing was no exception. Locksmiths during this period honed their craft and created ornate and intricate locks that blended functionality with artistic expression.

Locks become status symbols, and wealthy patrons commissioned elaborate locks as prized possessions. Italian locksmiths, in particular, gained prominence for their exceptional craftsmanship.

One of the most renowned Renaissance locksmiths was Leonardo da Vinci, the polymath genius. He designed a variety of innovative lock systems, including the tribolt lock, which required three different keys to operate. While many of da Vinci's lock designs were not widely adopted during his lifetime, they served as a testament to his ingenuity and curiosity about mechanical engineering.

THE INDUSTRIAL REVOLUTION AND THE BIRTH OF MODERN LOCKS

The advent of the Industrial Revolution in the 18th century transformed the world of locks. Mass production techniques allowed for the creation of intricate and complex lock mechanisms at a much larger scale. The increased availability of metal and the development of



An ornate lock on a church door.



An ornate old door lock.

machinery facilitated the production of more reliable and affordable locks.

One of the most significant breakthroughs during this period was the invention of the lever tumbler lock by Englishman Robert Barron in 1778. This lock features a series of levers that had to be lifted to specific heights by the key in order to align the bolt with the locking mechanism, thus enabling it to slide freely. The lever tumbler lock set the foundation for future lock designs and became the standard for many years.

In 1817, Jeremiah Chubb and his brother Charles Chubb patented the Detector Lock, a revolutionary lock that offered added security against lock picking and tampering. The Detector Lock employed a mechanism that triggered additional locking features when a tampering attempt was detected. The innovation earned the Chubb brothers great acclaim and solidified their reputation as leading locksmiths of their time.

During the 19th century, advancements in metallurgy and precision engineering allowed for the development of more intricate lock systems. Linus Yale Sr., an American inventor, further improved the pin tumble lock in 1848.

His design incorporated a series of pins of varying lengths controlled by springs. Only by lifting these pins to the correct height with the corresponding key could the bolt be disengaged, making the lock more secure and reliable. The Yale pin tumbler lock became widely popular and remains a staple in residential and commercial applications to this day. +

"The Evolution of Locks: Part 2" will explore advancements in lock technology during the 20th century. That column, also authored by Erin Wilson, will appear in the January/February 2024 issue of Door Security + Safety magazine.

ChatGPT was used to assist in the writing of this article.

CONGRATULATIONS!

The following door security + safety professionals recently received DHI credentials, certifications and certificates.

(List current as of October 1, 2023)



ELECTRIFIED HARDWARE CONSULTANT (EHC)

Individuals who specialize in the coordination of architectural door openings with the increased security needs of public buildings in today's society. EHCs are experts at interfacing electrified architectural hardware products into access control monitoring and fire alarm systems, while maintaining compliance with fire, life safety, accessibility and building code requirements.

Jean-Denis Carignan, EHC, DHT Dimensions C3JD Inc Mike Sanders, AHC, EHC Hinged Solutions Inc.



DOOR + HARDWARE CONSULTANT (DHC)

This certified consultant has advanced product and code application knowledge and expertise, and skills proficient to detail, estimate and project manage large and complex projects and existing facility renovations. They are qualified to provide technical consultation to architects, contractors and building owners on the most complex building projects, but do not provide specification writing services.

Tony A. Evanko, DHC, DHT Enterprise Door Chris Krausgrill, DHC, DHT, CFDAI TK Pacific Jason O'Neill, DHC, DHT, CFDAI Lanmor Services, Inc.



DOOR + HARDWARE TECHNICIAN (DHT)

This credential is earned by demonstrating the competence to provide product and code application, detailing, estimating, and project management skills on projects with an intermediate level of complexity of occupancy type. This is the first level of technical credential earned for technical competence to assist contractors and building owners with basic construction project issues.

Michael J. Ballard, AHC, DHT Allegion

Brittany Beaird, DHT North Central Supply, Inc.

Tim Evanko, Jr., DHT Enterprise Door

Christian Herb, DHT Chown Hardware Shane Johnson, DHT, CFDAI Allen Commercial Door & Specialty Hardware

Chris Krausgrill, DHC, DHT, CFDAI TK Pacific

Brian E. Ramirez, DHT Allegion

Christopher R. Resig, DHT, CFDAI N.K. Bhandari, Architecture & Engineering

For more information on DHI education, certifications, credentials and certificates, contact education@dhi.org.



DOOR + HARDWARE INDUSTRY ASSOCIATE (DHIA)

The DHIA certificate recognizes individuals who have achieved a basic technical understanding of product and code applications. Recipients have completed two online, self-paced classes and passed the exams.

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Robert Paul Alexander Frontier Door and Cabinet, LLC

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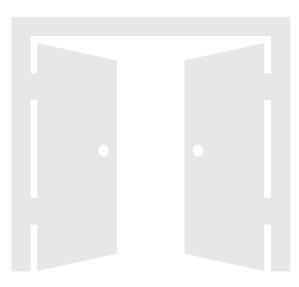
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FURTHERING THE INNOVATION JOURNEY: FUELED BY ASPIRATIONS



FLOURISHING DISTRIBUTION

MARK DANCER is a National Association of Wholesaler-Distributors (NAW) Fellow, author, distribution futurist and supply chain activist who is passionate about flourishing business, technology, the future of distribution, and building a supply chain that is resilient, responsive and regenerative.

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ASPIRATIONS DIRECT OUR DISTRIBUTOR INNOVATIONS, SO LET'S AIM HIGH AND BUILD A SUPPLY CHAIN WORTHY OF OUR FUTURE.

As humans, our drive to live differently separates us from every other living thing on the planet. We are not content to live within the boundaries of nature's forces. We bend the world to our will, making mistakes and creating problems, but always striving for something better. We innovate because we are human, and our human aspirations direct our innovations. I asked ChatGPT, a tool that's essentially a repository of all digitized human knowledge, to explain why innovation is not possible without aspirations:

"Innovation is fueled by the desire to achieve something greater, solve a problem, or break new ground; without aspirations to guide this pursuit, the motivation and focus required for innovative thinking are lacking. Aspirations act as the compass for creativity and ingenuity, directing efforts toward meaningful change and improvement."

Well, that's interesting. We humans built a machine that can master massive data sets to tell us what we already know: we are fueled by our aspirations. Pursuing aspirations creates meaning, satisfaction and happiness—as revealed by Arthur Brooks at the 2023 National Association of Wholesaler-Distributors Executive Summit (and discussed here). It's what we do. It's what distributors should do. Aim high. Strive. Fail. Try again. We can't help ourselves, so why hold back? George Pattee, Chairman of Parksite, a wholesale supplier of premium interior and exterior building products specializing in project solutions, training and education, agrees and offers insights that cut to the core of distributors' promise and peril as innovators:

"Aspirations are like hope. Hope is the belief that something wished for can happen. Aspirations are more specific, the exact things we want to achieve. Without hope, we fail. Without aspirations, we cannot innovate. Too often, distributor hiring prioritizes people with solid business acumen. We don't look for dreamers. And we don't mentor our people to become innovators. ... As an industry, we need to do more. We must reach beyond today's leaders and managers to attract and develop the next generation of innovators. We need a long-term, sustained, generational fight to avoid disruption."

As a human characteristic, aspirations are intensely personal and unique to every individual, team, organization and, perhaps, industry. Our motivations are simple and complex, known and unknown, influenced by genetics, upbringing, social environment and experiences. If distributors are to put aspirations front and center in shaping innovations, we must all explore what drives them.

This column is the first in what will be a regular column in *Door Security* + *Safety* magazine. It provides thoughtful perspective on the distribution industry and ideas for distributors to build their businesses and succeed in the security and safety industry. Send any thoughts about this column to *arickard@dhi.org*.



We must reach beyond today's leaders and managers to attract and develop the next generation of innovators.



As a start, I offer five intrinsic motivations all humans share and explain how they may be relevant for modern distributors operating as intermediaries in a digital-age value chain. Motivations are like fertilizer for aspirations—providing dreams to sprout ideas and energy to help them grow and flourish. This is just a start. Your motivations are likely different, but consider these:

1. Competence. Distributors are known as skilled providers of products, often from inventory stocked in expertly managed warehouses. But they are much more than that. They are local, people-centric businesses embedded in the communities they serve. Distributors thrive as committed, real-world problem solvers, and many channel this competence to achieve innovations, aiming high for the most significant effect.

- 2. Community. Distributors live and work side-by-side with their customers in towns, counties, states and regions. Distributors help businesses operate, contribute to economic health, and help communities create jobs, attract new companies and generate wealth. Distributors innovate to help communities thrive because it is the right thing to do.
- 3. Curiosity. Distributors know that what has made them successful in the past will not ensure their success in the future. A torrent of advice floods every leader's inbox, offered by vendors, technology experts, startup founders and more. But as intermediaries, distributors are at the center of commerce, pulling solutions together for customers and focused on day-to-day, practical progress. More and more, noticing change, exploring its cause, and considering new possibilities are the hallmarks of a high-performing distributor culture. Curious distributors see opportunities and innovate to make them happen.

- 4. Regret. In social media, FOMO stands for "Fear of Missing Out," which captures personal anxieties that flow from missing events, experiences and opportunities. FOMO can lead to destructive behaviors, but with the right mindset, individuals can confront their fears and take action to overcome them. Does FOMO freeze distributors? Will distributors sit back and watch the future of work and markets evolve, accepting what happens? No. Leaders embrace their FOMO by overcoming doubts, investing in their people and innovating to shape the future.
- 5. Growth. Acquisitive distributors achieve growth through scaleamassing brand power, leverage to demand supplier concessions, and funds to invest in technology, talent and process improvements. But as distributors aim higher to achieve their aspirations, new definitions of growth emerge. Growing people skills and hiring new talent may enable distributors to pursue new opportunities. Or distributors may redefine what it means to be an intermediary-by bringing more than products together for customer solutions and innovating to create experiences centered on knowledge, data, artificial intelligence, sustainability and more. Growth, achieved in old and new ways, will continue to motivate distributors, leading to new aspirations achieved through unheard-of innovations.

After revisiting motivations and resetting aspirations, distributors are ready to pursue disciplined acts of innovation. But one final mind shift is required. During times of epic change, best practices are risky. There is no tried-and-true innovation process because the sands are shifting. Customer preferences are unsettled. Known solutions may not work, or they may lead to less-than-expected outcomes. Suppliers are skittish– startled, fickle and timid–retreating to their own devices and noncommittal about distributor partnerships. In this environment, savvy innovators take a step back, reconsider what they know to be true and build an innovation process around their first principles, the fundamental factors that guide innovations in good times and bad because they are at the core of their culture, capabilities and, of course, aspirations.

Talking with distributor leaders and innovators, I've identified several first principles. Again, these are a starting point. Every distributor must create their own, expressed in their own words:

1. Profits are not our purpose.

Distributors exist to create value for customers and suppliers. Success requires a clear purpose that each party cannot achieve by itself. Profits are the measure of operating a successful, purpose-driven company.

- 2. Authentic customer conversations reveal sustainable business models. Manufacturers prefer to serve customers directly and won't embrace distributors unless customers demand that they do. Distributors uncover their rightful roles (and innovations) by understanding customers better than suppliers.
- 3. Helping customers is helping ourselves. Distributors will not survive by tweaking their business models to build fences around customers, eking out profits to cover costs. The only path forward is to help customers get to their future, helping them innovate and then working back to redesign their business model for sustainable customer collaborations. Then, distributors can lead in redefining partnerships with traditional suppliers and new entities, providing essential value for digital-age customer solutions.
- 4. We add value to data, not products. Soon, data will become more important than products for creating customer value. In part, that data will come from sensorenabled smart products. But as

intermediaries, distributors can leverage their data, add data from customers, and aggregate new data that illuminates the customer's competitive environment, the costs of labor and knowledge inputs and the ongoing evolution of markets and the economy.

5. Our survival hinges on creating innovation hypotheses and testing them. Distributors must listen to expert advice about the future of technology, work, education, the environment and more. Futurists are often practiced prognosticators, conferring confidence that they have the insights essential for making business strategies and decisions. But this is false. Distributors are on the front lines of serving customers; through trial and error, they will determine the future. There is an art and science for innovating around hypotheses. Distributors must learn it, master it and bet their future on it.

FINAL THOUGHTS

Aspirations are essential for innovation. Individuals and organizations cannot act on their aspirations until they are in touch with the motivations that drive them. And, during a time of epic change, the established ways of innovating may not work. It's essential to revisit and confirm the first principles of how you understand customer needs and market functioning, as well as your business processes for generating ideas, testing hypotheses and moving forward in reasonable steps. Distributors must do that, as individuals and organizations, to thrive in the digital age and build a supply chain worthy of our times. +

CHAPTER EVENTS **HAPTER**

NEW ENGLAND CHAPTER LAUNCHES INDUSTRY VIDEO FOR VOCATIONAL SCHOOLS

Video to be made available to all DHI chapters for nationwide exposure.





Calling All DHI Chapters: We Want to Hear From You!

Have you recently completed an event or educational session with your DHI chapter? *Door Security* + *Safety* Magazine wants to spotlight your work! Send your submissions to Editor-in-Chief Al Rickard at *arickard@dhi.org*.



Many in the door security and safety industry have talked about the growing need to bring more young people into the profession to succeed many people who are now retiring.

The DHI New England Chapter did something about it. The group created a 15-minute educational video about the door security and safety industry, designed to be used by vocational schools to draw students in the industry.

Funded jointly by DHI and the DHI New England Chapter, the video was shown in the DHI booth at the 2023 conNextions event in Boston in late October.

"This video exposes young people to a job market they don't even know exists," explains Kimberly Conlon, DHT, FDAI, former President of the New England Chapter and Chair of the Chapter Education Committee. "It is a logical progression for them because many of these students are trained in drafting, so they know what plans look like. They have taken shop classes so they know something about manufacturing. Then they just need to learn about the products. The career options it opens for them gives them a leg up and they can make a good living at it." Conlon said showing the video at conNextions is just the beginning for the exposure this video will receive.

"We are spending the next year promoting this video to hundreds of vocational schools across New England," Conlon says. "We are also offering it to any chapter that wants to use it for vocational and technical schools in their area. Companies may also want to show it to apprentices to entice them into building a career in this industry. The sky is the limit!"

In communicating with vocational schools, the New England Chapter is also driving students to the DHI website where they can find and connect with chapters in their areas. They encourage industry representatives in other areas of the country to do the same.

To learn more, contact Conlon at kconlon@kamcoboston.com. +



THANK YOU TO OUR PREMIER CONTRIBUTORS!

The following contributors are committed to making a difference. (List current as of October 1, 2023.)

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For more information on becoming a contributor, visit www.doorsecuritysafety.org

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A TRIP IN THE WAYBACK MACHINE

BY MARK J. BERGER, FDHI

Towards the end of Arlo Guthrie's brilliant "Alice's Restaurant Massacree," there is a lyric that I always love hearing. It simply says, "And friends, they may think it's a movement."

I think this is a reflection of things that just "happened" and then other people reacted to them. It reminds me of what happened with this column, which I started in 2010.

It became a movement. Over the years I have been very pleased to see all the Facebook, Instagram, TikTok and LinkedIn posts highlighting door issues, code violations and head-scratching situations that we have used in the column. I'm proud that we have educated so many readers through images and accompanying commentaries that have been instructional and humorous.

But now this column will change, appearing less often and perhaps in a shorter format. I will still happily accept more examples of door issues at *real.openings.dhi@gmail.com*, so keep them coming!

As we sunset our current format, I thought we should travel back in time to some pictures from my first collection of photos from the early 2000s.



A EXIT DEVICE X2

The work order said install a new exit device. Lucky for the installer it fit right below the other one.

B ANCIENT MAGLOCK RELEASE

We don't see too many of these situations anymore and codes have certainly improved.

C CODE REASON FOR TOUCHBAR DEVICES

You can't use a piece of wood to prevent using a touchbar device. I've seen many terrible things done to them, but perhaps none were as easy as jamming a piece of wood under the rod of this crossbar device.



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*.

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.



D BEFUDDLING

I've always wanted to write that word. I can't for the life of me understand what led to this pull handle and lever handle arrangement.

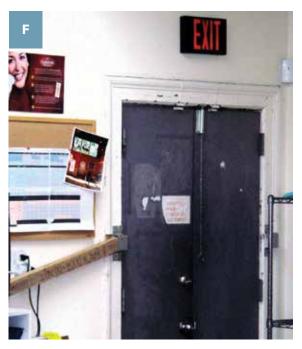
E DO NOT WHAT?

Maybe the signage was too small? We've seen some great improvement over the years.

F KEEP THIS 2X4

While there is an exit sign, I think the inswing doors and deadbolt are a bit problematic. Never mind the 2x4 that is slid between the brackets. Evidently the standard procedure is to remove the 2x4 during the day, but the old one must have gotten tossed, so they wrote a note "Back Door - Do Not Throw Out" on the replacement board.





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NOVEMBER/DECEMBER 2023

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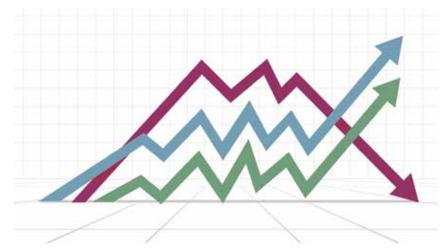
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EMPLOYMENT PARADOX: NONRESIDENTIAL CONSTRUCTION EMPLOYMENT DIPS AS OVERALL CONSTRUCTION JOBS INCREASE



THE CONSTRUCTION INDUSTRY ADDED 11,000 JOBS IN SEPTEMBER 2023 AS UNEMPLOYMENT RATES FOR THE SECTOR REMAINED AT HISTORICALLY LOW LEVELS, PROMPTING CONTRACTORS TO RAISE PAY FASTER THAN FOR OTHER JOBS, ACCORDING TO AN ANALYSIS OF GOVERNMENT DATA FROM THE ASSOCIATED GENERAL CONTRACTORS OF AMERICA (AGC).

CONSTRUCTION EMPLOYMENT CHANGE

SEPTEMBER 2023	
Overall Construction	+ 11,000 Jobs
Nonresidential Construction	- 1,300 Jobs
Residential Construction	+ 12,600 Jobs

However, AGC noted that the number of people working on nonresidential construction projects declined for the month as firms struggle to find enough workers to hire amid tight labor conditions.

"Construction firms have plenty of projects but a dip in nonresidential employment last month shows how hard it has been to find enough skilled workers," said Ken Simonson, AGC Chief Economist. "Job openings remain stubbornly high, even though the industry has been raising hourly pay at an elevated rate."

The longer-term trend was more positive: nonresidential construction employment increased by 161,600 (3.5%) since September 2022.

Nevertheless, AGC believes too few future workers are exposed to construction as a possible career opportunity, despite the fact the profession pays very well and typically does not require workers to have a college degree. The association urged public officials to boost investments in programs that expose workers to construction as a career opportunity and called on Congress and the Biden administration to find ways to allow more people with construction skills to lawfully enter the country and work in the profession.

BIG THINGS. SMALL PACKAGES.

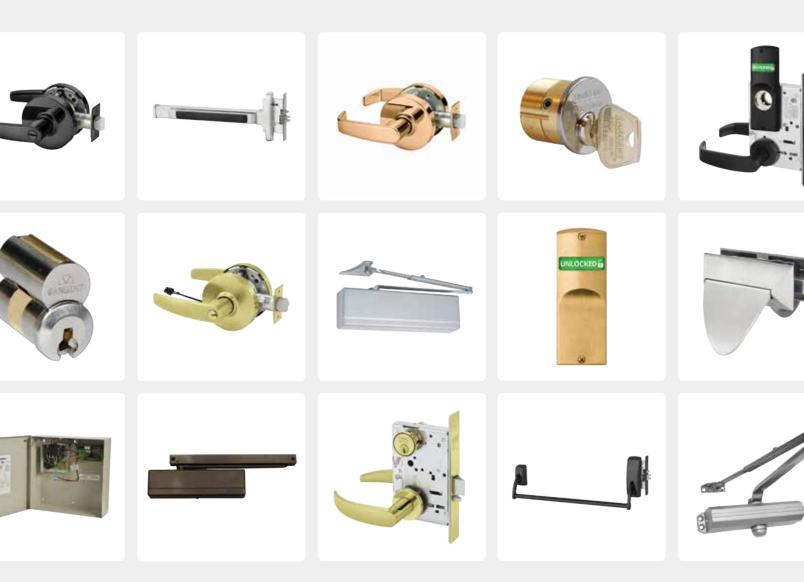


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