

## HEADLINES

**Mark The Date - Gulf States Region Leadership Conference is June 7 - 8, 2019. Sponsorship opportunities are available.**

**Mark the Date - Little Rock Chapter Annual Golf Tournament set for May 3, 2019**



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# Little Rock Chapter Notes



By: Billy J. Mathis, FCSI, CDT

There is a lot going on in the CSI World and we are just beginning to see many of the “great things to come” that our Board of Directors at the Institute Level have been working on for the last few years. Many of you may not have been fans of the governance change that was enacted a few years ago, however, we are seeing the progress and the increase in value the Institute is developing. This is beginning to filter down in small doses starting with the Communities on the new and very much improved website. If you haven’t been monitoring and conversing in one or more of the communities, you are missing out on a great deal of good and interesting discussions.

Our new Chief Learning Officer, Tracy Petrillo, EdD, CAE is getting her feet on the ground and is making great strides towards making our new and improved education program correspond with the needs of the modern construction industry.

Our Institute Board of Directors as fiscally managing the program and budget at levels unheard of in previous years before the new governance system was implemented. We all need to support and help William Sundquist, Director from the Gulf States Region, keep up the progress and let him know we all appreciate the hard work he is beginning to be involved with.

Finally, your leadership at the Chapter and Region levels all need your support in their endeavors to provide the services needed to make CSI Strong. We especially need everyone’s support for the upcoming Gulf States Region Leadership Conference being held in Little Rock, Arkansas in 2019. Your help will be needed but more than that, your attendance and willingness to learn about what it takes to be a leader at these levels is paramount to the success in the future.

I will leave you with a statement that I find very profound:

**"We make a living by what we get, but we make a life by what we give."**

**Winston Churchill**

# CSI Names Award Winners for 2018

*From the Construction Specifier Online Edition - August 2018*

CSI has announced the organization's award winners for 2018, as well as those elevated to the College of Fellows and those named Distinguished Members.

Joining the Ranks of Distinguished Members are **Gregory J. Markling, FCSI, Lifetime Member, CSC, CCS, CCCA** and **Robert W. Simmons, FCSI, Lifetime Member, CCPR.**

The 2018 Class of Fellows includes **Michael G. Young, CSI, CCCA; David A Stutzman, CSI, CCS; Ross Mori, CSI; Gener Fosheim, CSI; Jack Morgan, CSI, CCS, CCCA; Scott M. Conwell, CSI, CDT;** and **Cynthia Belise, CSI, CDT.**

Following is a list of the Service Awards selected this year:

Distinguished Service Award

**Daniel Hargreaves, FCSI, CDT**

Robert P Brosseau Award for the Advancement of CSI

**Shane David, CSI, CDT**

Andrew J. Drozda Mentorship Award

**Sheryl Dodd-Hansen, FCSI, CCS, CCCA**

**Kurt Moehlmann, CSI, CDT**

Norman Hunter Award for Innovative Allied Organization Cooperation

**CSI Chicago's Contractor Engagement Committee**

Ben John Small Technical Writing Award

**Robert Haddock, CSI**

Specifier Article of the Year Award

**Wendy Talarico, CSI**

**Frederick C. Baumert, CCS**

Outstanding Contribution Award

Laura Jean Derrick, CSI

South East Region Training Leadership Committee

Communication Awards: **Jeffrey Parnell, CSI** (Memphis Website); **Robert Bailey CSI, CCS** (Pittsburgh Chapter Newsletter); **Richard J. Leub, FCSI, CCS, CCCA** (Oklahoma City Chapter Newsletter); **Memphis Chapter** (PerSPECTive Publication); **John Dunaway, CSI, CCS** (Gulf States Leader E-Newsletter); **John Dunaway, CSI, CCS** (Event Promotional Materials); **John Dunaway, CSI, CCS** (Mississippi Chapter Newsletter); **Chicago Chapter** (Chapter Marketing Materials); **Chicago Chapter** (Website Re-Design); **J. Chambers, CSI-EP** (Year in Review—Lehigh Valley Booklet); and **CSINext Chapter** (CSINext Website).

Outstanding Chapter Awards (Gulf States Region Only): Little Rock Chapter, Mississippi Chapter, Memphis Chapter, Chattanooga Chapter, Knoxville Chapter, Nashville Chapter, and New Orleans Chapter.



## REFRESH: RH CONCRETE MOISTURE TESTING

Contributed by Jason Spangler

For years now, the in situ relative humidity (RH) test for measuring the moisture condition of concrete has been shown to be the most reliable, accurate test available.

As far back as the 1960s, laboratories at the Portland Cement Association conducted controlled tests that verified the accuracy of RH testing. This research was followed by years of additional testing at Lund University in Sweden and elsewhere. In 2002, ASTM International first established the F2170 standard for conducting RH tests on concrete slabs.

The research confirmed two key discoveries:

An RH test's accuracy is dependent on taking a measurement of the moisture below the surface of the slab. The RH percentage at a specific depth indicates the actual amount of moisture that the finished floor product will "see" once the flooring installation is completed.

Other methods typically involve taking measurements only at the surface of the slab. As the research has found, a surface-based moisture test can't provide an accurate measure of a slab's true moisture condition. That's because it doesn't account for the moisture conditions deeper within the slab, and those conditions are typically quite different than conditions at the surface.

The Standard Evolves as the Science Tells Us More

The initial ASTM F2170 for in situ RH testing was established in 2002, after continuing research at Scandinavian universities in the 1990s identified the exact specifications for conducting a reliably accurate RH test—placing the test probe at 40 percent depth for slabs poured on grade or 20 percent for slabs drying from both sides. After these scientifically-validated specifications were firmly established, ASTM International published a usable standard.

Until now, the ASTM F2170 standard has required a 72-hour waiting period between drilling the test holes where the RH probes are placed and taking official RH measurements. In practice, readings are often taken before the 72 hours has passed, so contractors have an idea of how things are trending. But because the official readings couldn't be taken before 72 hours, that meant all decisions and work were basically on hold for those three days. Full stop.

Yet we've seen how the research on the RH test method has helped to refine our understanding of how best to use it. This trend continues. In 2014, a Precision and Bias (P&B) study, commissioned by the ASTM committee, tested for differences in RH readings at various intervals within the 72-hour period. In part, the idea was to assess if it is actually necessary to wait the full 72 hours for an accurate, actionable moisture readings.

The P&B study results clearly documented that readings taken at the 24-hour mark were statistically equivalent to those taken at the 72-hour mark. They weren't identical, but the differences were statistically insignificant.

This is big news.

So big that the P&B results motivated the ASTM F2170 committee to revise and publish an updated F2170 standard reflecting these new findings.

### Two Full Days Shaved Off Your Project Schedule

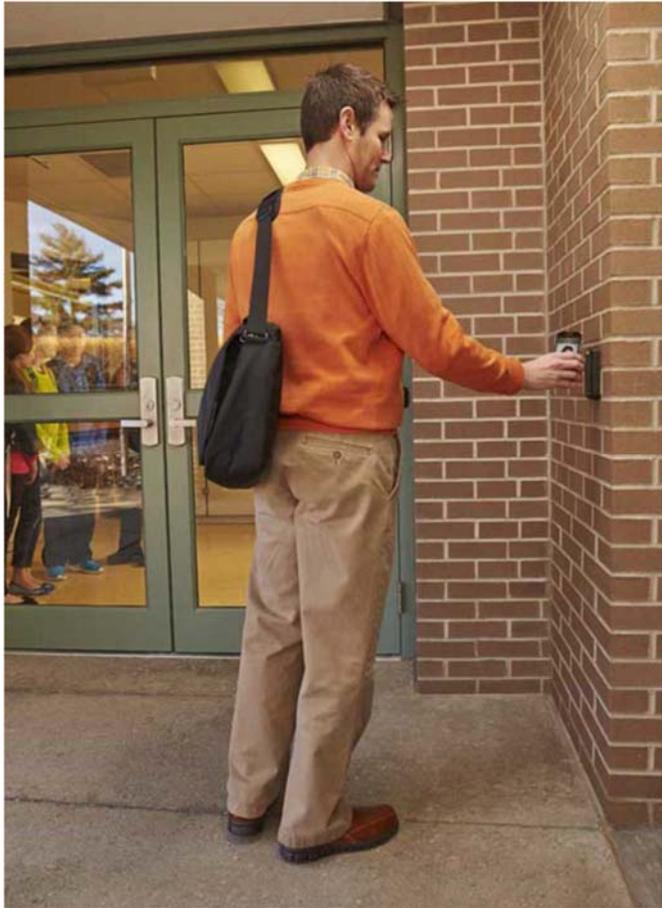
Now instead of putting things on hold for three full days while waiting for test results, contractors and flooring installers can take action in a day and be in full compliance with the F2170 standard. After properly inserting the RH probes into the concrete slab, general contractors and flooring professionals can expect to make decisions on how to move forward in just 24 hours.

If the 24-hour reading shows the concrete slab is still retaining too much moisture, mitigation steps can be taken immediately to accelerate the drying process. If the 24-hour reading shows that the slab's moisture condition is within manufacturer specifications for the finished floor products, then the flooring installation can begin right away. Either way, no more sitting on your hands an extra 48 hours to satisfy the ASTM F2170 requirements.

With the updated ASTM standard, contractors can now shave two days off any project schedule, just by ensuring the RH test is specified for the project. No other test method is as fast or as reliable. As we've seen, surface-based tests don't yield reliable results because they don't take into account the moisture conditions deeper down.

The science validating the RH test as the more accurate and reliable test for concrete moisture continues to pile up. And now, with the updated ASTM F2170 standard reducing the RH test time by a full two days, your project's timeline can benefit from the science too.

(Editor's Note: This article was originally published in Concrete Contractor (June/July 2018 issue) and on the Wagner Meter's Blog as 'Updated ASTM F2170 Reflects the Newest Science about RH Testing')



## Fail Safe vs. Fail Secure: When and Where to Specify.

by Lori Greene, AHC/CDC, CCPR, FDAI, FDHI

Many specifiers are uncertain of the difference between fail-safe and fail-secure security products, and how these functions apply to electric strikes, electromechanical locks, panic hardware, and electromagnetic locks. The two terms have both life safety and security implications.

While fail-safe products are unlocked when power is removed (*i.e.* power is applied to lock the door), fail-secure products are locked when power is removed (*i.e.* power is applied to unlock the door). Fail safe/fail secure refers to the status of the secure side (key side, outside) of the door. Most products provide free egress whether they are fail safe or fail secure.

### Electric strikes

An electric strike replaces the regular strike for a lockset or panic hardware to electrically control access. For a single door, the electric strike mounts in the frame, and for a pair, it mounts in the inactive leaf or on a mullion. The lockset or panic hardware still functions as it normally would—free egress is available at all times, except in the case of double-cylinder institutional function locks.

The spring-loaded keeper on the electric strike controls the latchbolt of the lock or panic hardware. When access is allowed, the keeper is free and the latchbolt can be pulled through the keeper, so the door can be opened. When the strike is secure, the keeper secures the latchbolt and prevents the door from being opened. In most cases, a key can be used to retract the latchbolt from the secure side of the door to allow access if a manual override is needed. Since the lock or panic hardware functions independently of the electric strike, you can exit by turning the lever or pushing the touchpad of the panic hardware, regardless of whether the electric strike is fail safe or fail secure.

For electric strikes on fire-rated doors, fail-secure strikes must be used per the National Fire Protection Association (NFPA) 80, *Standard for Fire Doors and Other Opening Protectives*. Fail-secure strikes are typical for most applications, except when access is required upon fire alarm. There are very limited situations where access upon fire alarm is required. It is also important to know the use of an electric strike does not affect firefighter access. Their method for access on a door with a mechanical lockset (*e.g.* key or access-control credential in the key box or a tool) can still be used.

Additionally, there are security concerns with fail-safe hardware. Should the building or area be unlocked and free access be provided every time there is a power failure? A breach of security can be extremely dangerous for building occupants, along with the potential for loss or damage.

## Electromechanical locks

An electromechanical lock is a lockset which has been electrified so it can be controlled by a card reader, remote release, or other access control device. Most electromechanical locksets allow free egress at all times. There are double-cylinder electromechanical locksets which do not allow free egress, just like a double-cylinder mechanical lockset, but neither of those should be used on doors required for egress. Note a lock with two key-cylinders may be a classroom security lock, which allows free egress, and not an institutional function lock, which does not allow free egress.

A fail-secure electromechanical lockset is locked on the secure side when there is no power to the lock. To unlock it, power is applied and the lever can then be turned to retract the latch. The latch remains projected until the lever is turned.

A fail-safe electromechanical lockset is locked when power is applied. When power is removed, the lever can be turned to retract the latch. Fail-safe electromechanical locks are used for stairwell doors providing re-entry. The lock is constantly powered so the lever on the stair side is locked. During a fire alarm, the lever on the stair side is unlocked (power removed) either by the fire alarm or a signal from the fire command center, depending on which code has been adopted. Building occupants may then leave the stair to find another exit if necessary. The stair doors would also be unlocked during a power failure. The locks always allow free egress into the stair, with the exception of the stair discharge door, which can be mechanically or electrically locked on the outside but allows egress out of the stairwell.

## Electrified panic hardware trim

Electrified panic hardware trim refers to the outside lever on panic hardware or fire exit hardware. It operates the same way as an electromechanical lock does—the power controls the whether the outside lever can be turned or not. The latch remains projected until the lever is turned, and free egress is always available by pushing the touchpad or crossbar of the panic hardware.



*Electric latch retraction panic hardware automatically latches upon loss of power, so it is appropriate for fail-secure applications.*



## Electric Strike

Electric strikes installed on fire doors are required to be fail secure to provide positive latching.

Fail-safe electrified panic hardware trim is used for stairwell doors providing re-entry. Most other doors are not required to allow access upon fire alarm, so fail-secure electrified panic hardware trim is more common in locations other than stairwell doors. Design professionals must keep in mind the stair discharge door is not typically required by code to unlock upon fire alarm. The door between the stairwell and the roof may be required, or desired, to be fail safe. This is not typical and is not a requirement of the *International Building Code (IBC)* or NFPA 101, *The Life Safety Code*, except in rare instances where the path of egress leads onto the roof.

### **Electric latch retraction**

Electric latch retraction is an optional function for panic hardware or fire exit hardware. This hardware is available in two variations—EL for standard electric latch retraction and QEL for the “quiet” version. The sound of hardware operation can cause interruptions that may decrease productivity and can even affect patient recovery in healthcare facilities. Devices with electric latch retraction are only available fail secure. When power is applied, the latch retracts automatically and stays retracted as long as power is applied. When power is removed, the latch is projected, securing the door. Again, free egress is provided via the touchpad of the panic hardware. EL/QEL devices are sometimes used on fire doors to allow push/pull function during normal use and provide positive latching during a fire alarm. A signal from the fire alarm system to the power supply is needed.

EL devices are often used with automatic operators, so the latch is retracted before the door begins to open. Electric strikes can perform this function as well. Fail-safe or fail-secure products can be used in this application, but fail secure is typically used except in the very rare case where access is required upon fire alarm. Electromechanical locks and electrified panic hardware trim are not used with automatic operators because the latch is not retracted until someone turns the lever, which would prevent the auto operator from opening the door.

### **Electromagnetic locks**

An electromagnetic lock mounts on the frame with a steel armature mounted on the door. When power is applied to the magnet, it bonds to the armature, securing the door. Electromagnetic locks are only available fail safe. When power is removed, the electromagnetic lock unlocks.

Since magnetic locks do not provide free egress like other electrified hardware, release devices are required by code to allow egress. An electromagnetic lock released by door-mounted hardware (e.g. a request-to-exit switch in panic hardware) is required to unlock upon loss of power. If the electromagnetic lock is released by a sensor, it must also unlock upon actuation of a push button located beside the door, upon actuation of the fire alarm or sprinkler system, and loss of power.



*Electromagnetic locks are unlocked when power is removed, so they are only used where fail-safe hardware is acceptable.*

## Conclusion

Whether the electrified hardware for a specific location should be fail safe or fail secure depends more on security requirements than on life safety, as most applications allow free egress regardless of whether the hardware is fail safe or fail secure. Fail-safe locks should be used on stairwell doors requiring reentry and any other doors that need free access upon fire alarm or power failure. Fail-safe electric strikes cannot be used for stairwell reentry because fire doors require fail-secure electric strikes for positive latching. An obvious security risk for fail-safe products is that the door will be unlocked whenever power is removed.

For some types of hardware, the fail safe or fail secure function is inherent. For example, electric latch retraction panic hardware is only available fail secure (the latch projects when power is removed), whereas electromagnetic locks are only available fail safe (there is no magnetic bond when power is removed). Other types of electrified hardware, including electromechanical locks, electric strikes, and electrified trim for panic hardware, are available either fail safe or fail secure. Some hardware must be ordered as the desired function, while other products are field-selectable.

Fail-secure products are more common than fail safe due to security concerns; power consumption may also be an issue. Fail-secure products provide security when no power is applied, so when deciding which function to use, consider what needs to happen to the outside lever when power is removed. If the hardware is required to allow access when power is removed, specify fail-safe products. If a secure outside lever is needed when power is removed, specify fail-secure hardware. Finally, verify the hardware on the egress side of the door will function as required by the applicable code requirements.



*Lori Greene, AHC/CDC, CCPR, FDAI, FDHI, is the manager of codes and resources for Allegion. She has been in the industry for more than 30 years, and used to be a hardware consultant writing specifications. Greene is a member of CSI, the Door and Hardware Institute (DHI), the International Code Council (ICC), the National Fire Protection Association (NFPA), and the Builders Hardware Manufacturers Association (BHMA) Codes and Government Affairs Committee. She blogs at [www.iDigHardware.com](http://www.iDigHardware.com). Greene can be contacted at [lori.greene@allegion.com](mailto:lori.greene@allegion.com).*

LITTLE ROCK CHAPTER  
CONSTRUCTION SPECIFICATIONS INSTITUTE

**LUNCH AND A SEMINAR—WEDNESDAY, SEPTEMBER 12, 2018**

Lunch 11:30 am  
Seminar 12:00 p.m.



Please make reservations online at  
[Http://littlerock.csinet.org](http://littlerock.csinet.org)

Cost of the Meal is being Sponsored by  
Mr. Lee Smith

Questions or Problems should be sent to  
Billy Mathis - [bjmathis@taggarch.com](mailto:bjmathis@taggarch.com)

**LOCATION:**

Baldwin & Shell Construction Conference  
Room

1000 West Capitol, Little Rock, AR  
72201

**Reservation Deadline: Please RSVP  
by Noon, Tuesday, September 11,  
2018** (LRCSI must guarantee meal  
count for the Presentation)

**SPEAKER:**

**Lee Smith, TechReps, Independent Technical  
Representatives**

**PROGRAM:**

**[AVM Waterproofing the Building Envelope \(1 AIA LU/HSW\)](#)**

**Program Summary:**

- Terminology and approaches to waterproofing
- Types of waterproofing products and their intended applications (below grade and plaza decks)
- Challenges of pre and post-applied waterproofing
- Deck waterproofing
- Detailing / design considerations
- Warranties

**Learning Objectives**

- Designing / creating / selecting the appropriate waterproofing and drainage systems and accessories for the building envelope
- The importance of quality control measures for desired performance of waterproofing system



If you are interested in following the Little Rock Chapter, our links are as follows (*for Facebook and LinkedIn look for the CSI Little Rock Chapter*):

**Website:** <https://csilittlerock.org>

**Facebook:** [www.facebook.com](http://www.facebook.com)

**LinkedIn:** [www.linkedin.com](http://www.linkedin.com)

If you are interested in Joining CSI or if you are just interested in keeping up with the information provided by CSI, follow this link to the Institute Website Membership Pages:

For Membership Information:

<https://www.csiresources.org/communities/membership/individual-membership>

To Join CSI:

[https://higherlogicdownload.s3.amazonaws.com/CSIRESOURCES/143a718d-6df6-484a-8a79-76d79635b741/UploadedImages/PDFs/CSI\\_MembershipFormFY18.pdf](https://higherlogicdownload.s3.amazonaws.com/CSIRESOURCES/143a718d-6df6-484a-8a79-76d79635b741/UploadedImages/PDFs/CSI_MembershipFormFY18.pdf)

To See what CSI is all about:

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## HELP WANTED\* (\*SOME EXCLUSIONS APPLY)

Contributed by [Eric D. Lussier](#)

Earlier today, while researching job ads on Craigslist, I came across a help wanted post for flooring installers that had some interesting exclusions and language:

My immediate thought was 'boy, does this guy have some nerve to post an ad like this!'.

But then I thought about it more.

I put myself in the post creator's shoes for a minute and I immediately knew where he was coming from. Having written ads on Craigslist for flooring installers and laborers myself, and even going so far as to register the domain [workinflooring.com](#) to find potential applicants, I know full well that there are very good reasons why these requirements were listed in the above ad.

Much like the list of terms and conditions that my company has in our proposals to clients, there are legitimate explanations for each and every one of those items being there. Typically, an item is added to our terms because at least one time in the past, a situation arose on a project jobsite that necessitated declaration for potential future work. I don't even need to jump to conclusions to know that every item listed above is spelled out, in ALL CAPITAL LETTERS at that, because he's seen it first-hand.

But without even knowing who this person was, I could easily envision the scenario, and it hits very close to home. They're a small business. They're owner-operated, and chances are, the owner is the lead installer, as well as chief cook and bottle washer. They don't have a marketing division, nor a human resources department. They have more than enough work to keep them busy at peak times and when times are lean, everyone in the company feels the pinch. I could just as well be describing my day job. I could also be describing thousands of other small businesses across the nation.

In early June, the United States Department of Labor released the news that for the first time since statistics were tracked in 2000, the number of American job openings exceeded the number of job seekers. As a result of this ratio, business owners may feel that they have to say yes to someone who comes along unqualified, because they answered an ad. Chances are the Owner is short on time. They're short on employees. They have bigger fish to fry and more important tasks to accomplish. And that is why, out of sheer frustration, after hiring and firing a times over, Mr. Craigslist Ad posted the above.

No matter where you turn, we're faced with the news that there is a severe disinterest in the skilled trades industry from the younger generation, whether that is from the Millennials or Generation Z. Our Millennial Generation, whom are defined as ages 22 to 37 and number 71 million in the US as of 2017 are the future of our workforce. With the Baby Boomers (ages 54 to 72) presently numbering 74 million, but retiring in droves, Millennials will be overtaking Boomers in population in 2019 while quickly becoming the majority of the workforce.

So, where does this leave Mr. Craigslist Ad and the other small businesses that are looking for help in 2018? If there is little to no interest in the construction industry now in the younger generations, and we're not demonstrating any reason for them to venture into it, how can we expect Mr. Craigslist Ad to have a better pool to draw from in the future, especially with my opinion that we haven't yet witnessed the bottom of the skilled trades gap?

We certainly need to start with demonstrating the broad scope of construction. We need to get rid of the image of the Carhartt's, hammer and the hardhat. While those positions still exist, construction has always entailed a plethora of occupations in the built environment: Architects, interior designers, engineers, code officials, specifiers, carpenters, construction managers, specialty contractors, building product representatives, electricians, heavy equipment operators, ironworkers, masons, roofers, welders, plumbers and many more.

If you couple the laundry list above with more modern-day offerings due to 2018's massive integration with technology and changing pace, you now have a slew of possibilities within the construction industry that were not offered in the past. Technology alone offers BIM (Building Information Modeling), AR (Augmented Reality) and VR (Virtual Reality) positions, along with the hardware and software development in and around those offerings. New construction apps are popping up in droves, especially with the heavy integration of tablets and wearables on the jobsite and with our mobile phones getting larger and more sophisticated. With the collection of information from our wearables and completed projects, the need for data manipulation and analysis could be the next boom in construction jobs as companies will need to be doing more (work) with less (employees). Tech and data are just the tip of the iceberg for what future construction could look like.

The work is out there, and so are the employees. The construction industry, in general, needs to do a much better job of showing what construction IS, and not what construction WAS.

# Classroom security considerations

By: Lori Greene, DAHC/CDC, FDAI, FDHI, CCPR

In recent years, dozens of retrofit security devices have entered the market with promises of being less expensive, more secure and easier to procure and install than traditional security hardware. Considering the immediate need to address classroom security—often within tight budgetary constraints—these retrofit products may seem like the answer school administrators have been searching for. But it's crucial that all aspects of the available security products are considered when evaluating potential solutions. What might initially appear to be a cost-effective way to secure classroom doors may have negative impacts on life safety, fire protection, accessibility and protection from internal threats.



*Classroom barricade devices may seem appealing at first glance, but further consideration reveals life-safety concerns.*

Traditional locksets which meet the requirements of the model codes are readily available; in fact, most classroom doors are already equipped with locksets. These locks provide the necessary level of security and allow free egress and evacuation, are certified for use on fire door assemblies and are compliant with the standards of the Americans With Disabilities Act (ADA). Compliance with these requirements is part of the duty of care that is the responsibility of each school district. Relying on untested security methods that can be deployed by an unauthorized person could increase a district's risk and liability. So why are some school districts considering expenditures of tens of thousands of dollars—even hundreds of thousands of dollars—to purchase retrofit security devices, especially if their classroom doors already have locksets?

## School security misconceptions

There are several inaccurate perceptions that may contribute to hasty decisions when evaluating classroom security methods: §

**The belief that mass school shootings are a common occurrence and all schools are under immediate threat.** In reality, according to James Alan Fox and Emma E. Fridel in “The Three R’s of School Shootings: Risk, Readiness, and Response,” mass school shootings are incredibly rare events. Their research found that on average, a total of 20 to 30 mass murders occur per year, and typically one of those incidents takes place at a school. Of course, every school shooting is tragic and everything possible should be done to prevent these events from happening. But the news media has influenced our perception of school violence, and social media amplifies the headlines—some of which are misleading. The news of 18 school shootings in the first six weeks of 2018 was repeated millions of times by news sources, public figures and the general public. This gave the impression that school shootings were occurring multiple

times each week, when only three of the 18 reported incidents involved multiple gunshots and resulted in deaths or injuries inside of a school. This does not diminish the importance of those three shootings, but rushed decisions made while feeling under attack may not result in the best long-term solutions. It's best to take the time needed for careful consideration rather than purchasing devices that seem like a quick solution but may instead lead to a false sense of security. §

**The push to prioritize security over mitigation of other hazards.** Although active-shooter events are statistically much less likely to occur than other potential hazards, many parents, students and school staff members place security concerns at the top of their list. But school administrators must also consider hazards such as weather-related emergencies including windstorm events, fires, bomb threats, incidents related to drugs or alcohol, mental health issues like suicide, bullying, fights and other non-fatal victimizations. The model codes adopted in most jurisdictions across the U.S. require doors in a means of egress to allow immediate evacuation with one operation to unlatch the door. This helps to ensure free egress regardless of the type of hazard that is occurring. Some situations, particularly assaults and other non-fatal victimizations, can also be impacted by unauthorized lockdown. When a classroom barricade device is used by an unauthorized person to secure a classroom and commit a crime, a school district may be held responsible because their duty of care has not been met. Even in states where legislators or code officials have modified state codes to reduce the cost of security by allowing classroom barricade devices, a school district may be exposing itself to the possibility of a lawsuit if those devices are used to impede egress. §



*Classroom barricade devices that can be installed by an unauthorized person may delay or prevent access by staff and emergency responders, increasing risk and liability.*

**The tendency to focus only on intruders and shootings without considering internal threats and nonfatal victimizations.** According to the 2016 Indicators of School Crime and Safety, published by the National Center for Education Statistics, “In 2015, among students ages 12–18, there were about 841,100 nonfatal victimizations (theft and violent victimization) at school.” The same report states that during the 2013–2014 school year, there were a total of 48 school-associated violent deaths with 12 homicides and eight suicides of students ages 5–18. Again, one student death is one too many, but these statistics give perspective to the situation; the risk of nonfatal victimization is much higher than the potential for an active shooter to enter a school. As the Door Security & Safety Foundation noted in its publication on the liability of classroom barricades, published on [lockdontblock.org](http://lockdontblock.org): “Storing a barricade device in a classroom makes crimes easier to carry out. When used by an unauthorized person, barricades have the significant potential to facilitate unintended consequences such as bullying, harassment, or physical violence. According to the Centers for Disease Control and Prevention (CDC) and the FBI, a member of the student body is most likely to commit violence on school grounds.” Focusing only on protection against intruders without considering the misuse of devices intended to provide security increases risk and liability. §

**The idea that traditional locks are not secure enough.** (For example, thinking the intruder will shoot the lock off.) Although this happens in movies, it has not been documented in a school shooting. The Final Report of the Sandy Hook Advisory Commission states: “The testimony and other evidence presented to the Commission reveals that there has never been an event in which an active shooter breached a locked classroom door.” I have never heard of a classroom lock forcibly breached by an active shooter—before the shooting at Sandy Hook or in the years since. Unfortunately, there have been several cases where first responders had to breach a classroom door by force because a perpetrator had barricaded himself inside with hostages. Traditional locks provide the necessary level of security for classrooms, and there is a wide range of security products available to secure and monitor exterior doors and compartmentalize a building to limit access from one area to another. All of this can be accomplished without ignoring model codes and state or federal laws.

### Model Code Update

During the code development cycle for the 2018 model codes, the issue of how schools can enhance classroom security without compromising life safety was discussed and debated at length. Stakeholders asked, should existing code requirements be relaxed in order to allow less expensive security devices to be installed? Should the requirements remain as-is or should additional mandates be included in the model codes? Fortunately the outcome of this code development process was an overwhelming decision to not only maintain the existing egress requirements for classroom doors, but to add an additional safety mandate. The 2018 editions of the International Building Code (IBC), the International Fire Code (IFC) and NFPA 101—The Life Safety Code include the following requirements for classroom doors:



*The ADA required releasing hardware to be mounted between 34 inches and 48 inches above the floor. Devices mounted outside of that range may be difficult or impossible for some building occupants to operate.*

Egress doors must be unlatched by one releasing operation from the egress side.

Hardware used to release the latch(es) must be mounted between 34 inches and 48 inches above the floor. One operation must release all latches simultaneously—the model codes do not allow separate operations to release each individual security device.

§

Operation of the hardware for egress must be accomplished without tight grasping, pinching or twisting of the wrist, and without the use of a key, tool, special knowledge or effort. Whether the lock is electrified or mechanical, it must allow free egress from the classroom side of the door. §

Locked classroom doors must be able to be unlocked from the outside with a key or other approved means, to allow access for school staff and emergency responders. This is the new requirement that was added to the 2018 model codes. §

Door closers, panic hardware and fire exit hardware may not be modified by retrofit locking devices, and modifications to fire door assemblies must be in accordance with NFPA 80—Standard for Fire Doors and Other Opening Protectives. §

The facility’s emergency plan must address the locking and unlocking of classroom doors, and staff must be drilled in these operations.

In addition, NFPA 101 requires the doors to be lockable from within the classroom without opening the door.

A classroom security checklist published by the National Association of State Fire Marshals (NASFM) reflects the requirements of the updated model codes and the need for code-compliant security. “The state fire marshals understand the security concerns and the need to protect schools and businesses from senseless acts of violence,” said Jim Narva, executive director of NASFM. “However, some of the proposed solutions may compromise life safety, despite the manufacturers’ good intentions. The NASFM guidelines for classroom security are aligned with the model codes, and underscore the importance of the requirement for new and existing classroom doors to unlatch with one operation, ensuring free and immediate egress. Classroom doors must also meet federal accessibility laws and other requirements of the building codes and fire codes.”

In some jurisdictions, accessibility requirements and the ADA have been ignored with regard to classroom barricade devices, as the operation of many designs would be beyond the abilities of many occupants with disabilities. Classroom doors nationwide are required to comply with the ADA, so it’s unclear how security products can be used that are in conflict with a federal law. As noted in a letter written to the NFPA Standards Council by Curt Decker, the executive director of the National Disability Rights Network (NDRN), allowing these devices to be utilized in classrooms would be “discriminatory to those with physical or visual impairments, impedes egress, and is in violation of standards and laws regarding accessibility.”

### **Locks save lives**

In each school shooting, we learn new lessons about physical security. Many lessons were learned at Columbine High School, including the potential for explosives and fires to be used in a planned attack and the need to address both security and egress. From the shootings at Virginia Tech, Platte Canyon High School and West Nickel Mines Amish Schoolhouse, we learned that when active shooters take hostages and barricade themselves inside with their victims, law enforcement response can be delayed and the number of casualties may increase. From Sandy Hook Elementary School we learned that teachers—including substitute teachers—must have the ability to lock their classroom doors quickly. We also learned that the glass adjacent to school entrance doors is a weak point and must be addressed. From Red Lake High School we learned that sidelights and vision lights in classroom doors should have impact-resistant glazing to deter access to the inside lever or touchpad. From Marshall County High School we learned that the ability to evacuate freely may reduce casualties, and from Rancho Tehama Elementary School we learned that locked doors can delay or prevent an assailant from entering a school.

We will learn more about the shooting in Parkland, Florida as official information becomes available in the coming months. For now, we only have news reports and eyewitness accounts to learn from. And what is evident from those accounts is that many of the classroom doors were closed and locked when the shooting occurred. While it is horrific to read that shots were fired through the glass, killing and injuring students and teachers who were in the line of fire, it does not appear that the shooter was able to open doors and enter the classrooms. If he had, the number of fatalities would have undoubtedly been much higher. The locks that protected those lives were traditional locksets—not retrofit gadgets.

### **Code-compliant security**

Although the intent of the model codes is perfectly clear, there is more work to be done. Information on the recent code changes must be shared with school administrators, code officials and others involved in school-security decisions. School districts can enhance security by evaluating their existing classroom locking hardware and procedures, distributing keys to all staff including substitute teachers, installing impact-resistant glazing or security film adjacent to door hardware, improving perimeter security by locking and monitoring exterior doors, standardizing visitor protocols, and conducting regular training and drills for students and staff. Many of these best practices are addressed in the Guidelines for School Security published by the Partner Alliance for Safer Schools (PASS).

When making these decisions, considering all of the potential concerns and consequences will help to ensure that safety is not overlooked in the rush to increase security. A reactionary response based on fear can lead to a decision that may have unintended consequences. Summarizing the issue, Robert Boyd, the executive director of the Secure Schools Alliance noted, “You don’t have to sacrifice life safety for security. You don’t have to destroy fire codes or violate laws that help to ensure access for all people - including those with disabilities. You won’t save money by using inappropriate products, when affordable solutions that meet codes and laws exist; you only expose yourself to new liabilities. It is irresponsible to make it difficult to flee a hazardous situation...Schools house our most vulnerable population, our children, and their safety should be first.”

About the author: Lori Greene, DAHC/CDC, FDAI, CCPR, is manager of codes and resources for Allegion. She has worked in the door and hardware industry since 1986, and in her current role she provides support and education on code requirements that apply to door openings. Her website, [iDigHardware.com](http://iDigHardware.com), includes numerous resources such as online training, videos and a downloadable code reference guide. The site is updated each weekday with new information, and readers can subscribe to receive daily or weekly notifications of new posts. Lori can be reached at [lori.greene@allegion.com](mailto:lori.greene@allegion.com).



*Traditional Locksets are tested and certified to ensure their performance on doors in the means of egress, and they provide the necessary level of security.*

## Proposed Asbestos Rules Make Headlines

August 9, 2018

Asbestos is the subject of a risk evaluation by the U.S. Environmental Protection Agency, and proposed new rules will allow the Agency to regulate new uses of the material. Shown is asbestos insulation on piping.

The U.S. Environmental Protection Agency (EPA) in June released proposed regulations related to asbestos. In the agency's press release, it describes "a significant new use rule (SNUR) proposal enabling the Agency to prevent new uses of asbestos—the first such action on asbestos ever proposed."

Environmental critics have voiced their disapproval and mainstream media have picked up on the story. An article suggesting asbestos rules would be weakened under the EPA proposal appeared in Fast Company in June. The Architects Newspaper in early August reported, "EPA is now allowing asbestos back into manufacturing."

The federal agency is defending its actions. "The press reports on this issue are inaccurate," EPA spokesman James Hewitt said in a statement reported by CBS News. "Without the proposed Significant New Use Rule (SNUR) EPA would not have a regulatory basis to restrict manufacturing and processing for the new asbestos uses covered by the rule. The EPA action would prohibit companies from manufacturing, importing, or processing for these new uses of asbestos unless they receive approval from EPA."

Asbestos is also one of the ten chemicals the EPA will evaluate under the Frank R. Lautenberg Chemical Safety for the 21st Century Act, which amended the Toxic Substances Control Act (TSCA). The Agency's problem formulation documents, released for comment in June, refine the scope of risk evaluations it will undertake. These documents are an interim step prior to completing and publishing the final risk evaluations by December 2019.

Read the EPA's asbestos announcement here:

### News Releases

#### News Releases from Headquarters: Chemical Safety and Pollution Prevention (OCSP)

EPA Takes Three Important Steps to Ensure Chemical Safety Under the Lautenberg Act, Proposes Action on Asbestos

06/01/2018

Contact Information:

EPA Press Office ([press@epa.gov](mailto:press@epa.gov)) WASHINGTON – Today, the U.S. Environmental Protection Agency (EPA) is releasing the following for public comment: (1) the first ten problem formulation documents, (2) EPA's systemic review approach document, and (3) a significant new use rule (SNUR) proposal enabling the Agency to prevent new uses of asbestos – the first such action on asbestos ever proposed.

“These actions provide the American people with transparency and an opportunity to comment on how EPA plans to evaluate the ten chemicals undergoing risk evaluation, select studies, and use the best available science to ensure chemicals in the marketplace are safe,” said EPA Administrator Scott Pruitt. “At the same time, we are moving forward to take important, unprecedented action on asbestos.”

The problem formulation documents refine the scope of risk evaluations for the first ten chemicals selected under the Frank R. Lautenberg Chemical Safety for the 21st Century Act, which amended the Toxic Substances Control Act (TSCA). The Agency’s problem formulation documents are an important interim step prior to completing and publishing the final risk evaluations by December 2019. They clarify the chemical uses that EPA expects to evaluate and describe how EPA expects to conduct the evaluations. Read the documents. Comments are due in 45 days upon publication in the Federal Register.

EPA’s systematic review approach document will guide EPA’s selection and review of studies in addition to providing the public with continued transparency regarding how the Agency plans to evaluate scientific information. Read the document. Comments are due in 45 days upon publication in the Federal Register (Docket: EPA-HQ-OPPT-2018-0210).

For asbestos, EPA is proposing a SNUR for certain uses of asbestos (including asbestos-containing goods) that would require manufacturers and importers to receive EPA approval before starting or resuming manufacturing, and importing or processing of asbestos. This review process would provide EPA with the opportunity to evaluate the intended use of asbestos and, when necessary, take action to prohibit or limit the use. Read the document. Comments are due in 60 days upon publication in the Federal Register (Docket: EPA-HQ-OPPT-2018-0159).

#### **Additional Information:**

Upon publication in the Federal Register you can comment in each of the chemical’s respective dockets below:

Asbestos: EPA-HQ-OPPT-2016-0736 (each has link)

1-Bromopropane: EPA-HQ-OPPT-2016-0741

Carbon Tetrachloride: EPA-HQ-OPPT-2016-0733

1,4-Dioxane: EPA-HQ-OPPT-2016-0723

Cyclic Aliphatic Bromide Cluster (HBCD): EPA-HQ-OPPT-2016-0735

Methylene Chloride: EPA-HQ-OPPT-2016-0742

N-Methylpyrrolidone (NMP): EPA-HQ-OPPT-2016-0743

Pigment Violet 29 (Anthra[2,1,9-def:6,5,10-d’e’f]diisoquinoline-1,3,8,10(2H,9H)-tetrone): EPA-HQ-OPPT-2016-0725

Trichloroethylene (TCE): EPA-HQ-OPPT-2016-0737

Perchloroethylene: EPA-HQ-OPPT-2016-0732

The Frank R. Lautenberg Chemical Safety for the 21st Century Act required EPA to select the first ten chemicals to undergo risk evaluations. These ten chemicals were announced on December 16, 2016. As required, EPA issued corresponding scope documents on June 22, 2017, for these chemicals, which describe the scope of the risk evaluation to be conducted, including the hazards, exposures, conditions of use, and potentially exposed or susceptible subpopulations that the Agency expects to consider. The problem formulation documents EPA issued today refine those scope documents.

# LITTLE ROCK CHAPTER INFORMATION

## Chapter Officers

President:		Garrett Shaffer, CSI
President-Elect:		Open
Immediate Past President:		Clark Wood, CSI
Secretary:	T	Clark Wood, CSI, CDT
Treasurer:		Billy J. Mathis, FCSI, CDT
Directors		
Operations		Rachal Belanger, CSI
Honors		Melissa Aguiar, CSI, CDT
Membership		Carlie Massery, CSI
Education / Certification		

## Chapter Info

<b>Chapter Website:</b>	<b><a href="https://csilittlerock.org">https://csilittlerock.org</a></b>
<b>Chapter Newsletter:</b>	<b>SpecWork</b>
<b>Chapter Meeting Day and Time:</b>	<b>2<sup>nd</sup> Wednesday of Each Month unless otherwise specified by the Chapter President</b>
<b>Chapter Board Meeting Day and Time:</b>	<b>1<sup>st</sup> Friday of each Month unless otherwise specified by Chapter President</b>

If you are interested in Joining CSI or if you are just interested in keeping up with the information provided by CSI, See the slides shown from the "Why CSI" presentation