JERRY SANDERS
I am Razorback born, Razorback bred, and when I die, I will be Razorback dead
In This Issue

- Obituary—Jerry Sanders
- CSI Volunteer Opportunities / President’s Thoughts
- CSI Announcement - New Fellows of the Institute
- Technology Cartoons
- Little Rock Chapter, CSI - September Webinar “Spec for Success: Natural Thin Veneer”.
- Utility Savings Initiative (USI) - Fact Sheet - “Setback Temperature Control”
- “What I Learned From CSI - “Sweating Ductwork” by Gary Bergeron, CSI, CCS, GSR Technical Chair
- I Dig Hardware Blog - “Wordless Wednesday - E for Effort” / “Flash Flood” by Lori Greene
- I Dig Hardware Blog - “Wordless Wednesday - Stairwell Reentry” by Lori Greene
- I Dig Hardware Blog - Quick Questions (QQ) - Quick Question: Does NFPA 80 “trump” the ADA by Lori Greene
- CSI Announces Membership Deferment Program / CSI Portland Chapter Announces CDT Boot Camp Open to All / CSI Project Delivery Practice Guide (PDPG) 3rd Edition Release / CSI Sponsors AEC Hackathon
- Latest News from CSI Institute / Little Rock Chapter Information
On August 13, 2020, Jerry Sanders, beloved husband of Jan (Janie) Marie Howe Sanders, devoted father of Michael Layne Sanders and R. Michelle Sanders Christen, loving ‘Pop’ to Lance P. Howe, left this earth and is now at home with his Lord, Jesus Christ. Born on December 30, 1933 in Camden, Arkansas, he is survived by his identical twin brother, John Sanders of Camden, Arkansas and cousin Fred Hester of Sherwood, Arkansas. He was preceded in death by his parents Robert and Mary Lynn Sanders; his brothers Gordon Sanders, Jack Sanders, Robert (Bill) Sanders; and sisters Sue Sanders Diffie, Bobbie Sanders Buckler, and Virginia Sanders Hood. Jerry treasured his extended family of nieces and nephews in Arkansas, Louisiana, Illinois, Indiana, Idaho, Tennessee, Virginia, and Mississippi.

In addition to his wife, son, daughter, brother-in-law, brother & cousin, Jerry is survived by three granddaughters, T. Nicole Sanders & Emily Sanders Gleason of Conway, Arkansas, Rhiannon Beard Thompson of Longview, Texas, and one grandson Kendall M. Beard of Greenbrier, Arkansas. He leaves his precious great-grandsons Kye Beard, Silas Sanders-Copeland, and Davis Gleason who will very much miss their Papa.

Jerry served his country in the United States Army during the Korean War with a Top-Secret clearance. He was also an avid, multi-sport Razorback fan. As a child of the traumatic era dubbed “America’s Great Depression”, and with a widowed mother to help support, Jerry began a long and arduous climb toward the pinnacle of the construction industry in his home state. From 1952 to 1963, Jerry demonstrated a tenacious determination to achieve a university level education despite the odds against it. He enrolled in the engineering program at Southern State College in Magnolia, Arkansas and then transferred – graduating with degrees in Art and Architecture from the University of Arkansas in Fayetteville. Jerry began his building career as a laborer on projects ranging from bridge and pipeline construction to a ten-story dormitory building–also functioning as an engineering aid doing field survey work, interpreting air survey maps. After graduation, Jerry practiced architecture in Fayetteville, AR, Newport News, VA and Memphis, TN, then returned to Arkansas in 1966. Along with his twin brother, also an architect, Jerry opened an architectural firm in North Little Rock, AR, and within two years had additional offices in Camden, Arkadelphia, and Conway, Arkansas. Always attracted to challenging work, in 1975, Jerry accepted the position of Arkansas’ first State Architect taking on the responsibility of establishing design criteria, writing construction standards for all State-owned buildings, and overseeing the hiring protocol of design professionals by State agencies. From the outset, Jerry
established an “open-door” policy for the office, and no one requesting assistance from him and/or his staff was turned away, nor was any challenge avoided. At first, the new office met resistance, but the industry’s concerns were soon eased. While in public service, Jerry’s influence in the construction industry touched many individuals, organizations, and businesses. His legacy remains in the State’s various agencies, boards, committees and organizations, with the impact of his service both apparent, and respected. Jerry was in State government fifteen years—under five administrations—serving Governors David Pryor, Frank White and Bill Clinton. He was named Interim Director of Arkansas State Building Services by Gov. White. Jerry retired from State government in 1991 and from the practice of architecture in 2012—turning his boundless energy into a promising second career in abstract art. Having trained diligently under private art instructors, public school art teachers and university professors, over the years Jerry developed a unique style in concept and execution of building design and abstract art pieces. Presenting a mixed medium of skillful inclusion, he wove a spiritual presence into each and every piece of his work. His professional leadership, vivid canvases, biting humor, and loving spirit will be missed not only by his family but also by his many friends and peers throughout the State of Arkansas, and beyond.

In consideration of safety issues linked to the frightening Covid-19 pandemic, and valid concerns for the safety of Jerry’s friends and family, there will not be a formal memorial service at this time. At his request, his cremains will soon be interred at Bethesda Cemetery in Senatobia, Mississippi and a celebration of his life by his family and friends will be held at that time. As this location is deep in Ole Miss Rebel territory, and in keeping with the 54+ year family rivalry, his cremains are encased in a custom Razorback urn. Jerry Sanders lived and died – an Arkansas Razorback! He was fond of ‘misquoting’ his favorite comedian, Lewis Gizzard, “I am Razorback born, Razorback bred, and when I die, I will be Razorback dead.”

Jerry was an AIA Member Emeritus, a CSI Member Emeritus, and a longtime member of Pickles Gap Baptist Church. Aligning with his lifelong philosophy, it is requested that any memorials for Jerry be directed to the Pickles Gap Baptist Church Benevolence Fund, 2 Pickles Gap Road, Conway, AR 72032.

The family wishes to express their deepest appreciation to the Conway Regional Medical Center, its outstanding medical staff, and to Drs. Robert Rook and Tyrone Lee for their excellent services and compassionate care in responding to our loved one’s needs. May God continue to anoint these healing hands and compassionate spirits.
The Little Rock Chapter, CSI Family wishes to convey their deepest sympathies to the Family and Friends of Mr. Jerry Sanders.

Jerry was one of the “Bedrock” members of the Little Rock Chapter and his ever present smile and positive attitude will be sorely missed.
Customize Your Volunteer Experience with CSI's Volunteer Portal

Are you interested in...

- Reaching out to educators to bring CSI principles into the classroom?
- Meeting and greeting with fellow members at Construct 2018?
- Guiding others studying for the CSI certification exams – lead an online study group?

Sign up for these opportunities and more at CSI's NEW Volunteer Portal:

- See all volunteer opportunities in one location
- Easily apply for options that interest you and work with your schedule
- Opt into the volunteering pool, sit back and have volunteering invitations come directly to you

Join your fellow members... Jump into the volunteer pool and make a difference!

See how you can volunteer today on the Volunteer Portal.

If you have any questions about volunteering, please email volunteer@csinet.org.
President’s Thinking
By Billy J. Mathis, FCSI, CDT

In the past week, the Little Rock Chapter, has suffered another loss of one of our “Bedrock” members. Mr. Jerry Sanders joined the Heavenly AIA Board on August 13, 2020. Jerry was a friend, both personally and professionally, who always had a smile and a kind word for everyone. Jerry was a great ambassador for the Little Rock Chapter and had friends all over the US and abroad. Jerry will be sorely missed. I would ask that everyone keep Jan, Michael, Michele and the rest of their extended family in their thoughts and prayers.

I have talked about the Pandemic and its effect on our day-to-day life over the past couple of articles. I will continue this by saying this pandemic has hit people at home the hardest. People basically stuck at home and trying to find ways to do business, keep up contacts in the business world while still seeking escapes from the day-to-day drudgery of working from home (something I thought I would ever say). The challenges here are many and as varied as there are people. Balancing Work and Home, keeping the bosses happy (both home and work), and staying health have become the challenges of today.

We are finding ourselves personally challenged to get along with our significant other as well as any children and especially pets as we seek to stay working. One of the nice things about the way work was is that there are a set of hours in which we are away from our homes, our spouse, our kids and our pets. While we love all of them, spending 16 to 18 hours a day in close association with anyone can create problems.

Just like when you first got married or started living together, people have habits and have developed systems by which they live their lives which included being separated for 8 to 10 hours a day while one or both of you worked. There are habits of daily life that we develop which defined how we interacted with those we work with and those we live with. I am not saying that people who are married or in a close personal relationship with cannot coexist together for a time together. We do that when we go on vacation, but this is different. We have the pressures of work and the pressures of home on our shoulders at the same time. How we balance these pressures will determine just how well we do during this difficult situation.

There is a need of most human beings to have some time away from the stresses of life and the expectations of others in our lives. “Alone time” is very important to a good relationship as it gives us time to relax and be the person we are instead of the person we are expected to be. Based our your location and the people you are with, there are specific expectations placed on individuals based on past association. So with all this psycho-babble, basically I am saying that when you are alone you can relax and not worry about pleasing anyone but yourself. This is probably the only time you do not need to worry about what another person is thinking, how your actions will directly influence the other person, or whether you need to do something to please or otherwise placate the other person present.

I can only speak about my experiences in this situation. Luckily my wife and I are able to separate ourselves into our own little worlds, tuning out the other person even though we are in the same room. I have my job to do and she has hers. They are not related in any fashion and I don’t understand what she does and she, for the most part, doesn’t understand what I do. Our kids are both grown up and while one is living with us now, he is mostly in his room or gone to work or a friend’s house. Our daughter is married and working from their house. While we have contact by phone, text or email, we are not constantly in her presence. The only ones demanding our time during the day are the two cats we have and they are learning that there are times they need to sleep and leave us alone.
The CSI College of Fellows has selected five new members to the 2020 class. Each was nominated through a rigorous application process, then elected by the Jury of Fellows for membership.

The 2020 Fellows are: Alan Mitchell Horne Sr., CSI, CDT®, AIA, LEED AP, NCARB, USGBC; Elias S. Saltz, CSI, CCS, CDT®; Lee Ann M. Slattery, CSI, CDT®, CCPR; Robin E. Snyder, Esq, CSI, CCS; and William Sundquist, CSI.

The new Fellows will be inducted during the virtual Honors and Awards Ceremony taking place later this fall.

“CSI has been a valuable resource for me from the early days of my career. I could always depend on CSI members nationwide to give me honest information for design and it is the one AEC industry organization that best integrates all the players involved.”

- Alan Mitchell Horne, Sr., CSI, CDT, AIA, LEED AP, NCARB, USGBC
  MCA Architecture, Inc. (retired)
  CSI Greenville
"I first joined CSI when I became a specifier because I thought it would be a great way to network with and learn from professionals in my field. That was and is still true, but I also discovered CSI was a diverse community of people who came together with the similar goal of making design and construction better for everyone. Some of those members persuaded me to get more involved. Critically, once I was involved - volunteering, speaking and writing - I found that my contributions were being valued, amplified and taken seriously by the most respected members in the Institute. Through them and CSI, I found exciting professional work and high-profile volunteer opportunities, and lifelong friends."

-Elias S. Saltz, CSI, CCS, CDT
Conspectus, Inc.
CSI Chicago

“My involvement in CSI has been the most beneficial investment of time in advancing my career in the AEC industry. From earning the CDT® and CCPR certifications, to volunteering on a variety of committees, to leadership positions within my local chapter, the region, and now the Institute board, the network of friends and colleagues and knowledge gained over the past 18 years have proven invaluable. CSI membership has provided me with many opportunities for personal and professional growth, and I am very honored to be chosen for inclusion in the 2020 Class of Fellows.”

-Lee Ann Slattery, CSI, CCPR, CDT, LEED AP
ATAS International, Inc.
CSI Greater Lehigh Valley

“CSI is one of the most significant influences in making me the person I am today, and I am honored to receive this recognition. The knowledge provided by CSI has been instrumental to my professional growth and my ability to thrive as a Specification Consultant. I am also immensely grateful for the numerous relationships I have developed through CSI and I am thankful for the support from all my friends and colleagues!”

-Robin Snyder, Esq., CSI, CCS, CDT, SCIP
Spectra Consulting, LLC
CSI Las Vegas, CSI Phoenix

“My membership in CSI, and all the people I have met in this journey, is the reason I have the good fortune to achieve this honor. I graduated college with a degree in public relations and a pilot’s license, but it was the industry knowledge I gained from the members of CSI that taught me the language of construction. CSI has been an anchor for me in my career and I am forever grateful.”

-William Sundquist, CSI
Whitacre Greer
CSI Chattanooga
Technology Cartoons

“So noon is out. You can’t do 11:00, and I’m busy until 2:00. How’s 2:15 look?”

“I can build a better mousetrap, but the implications!”
"Back in my day they’d build an actual physical maze."

"The bad news is someone hacked your computer and stole some nude photos of you. The good news is they were almost immediately returned along with a free gym membership."

"Hey, remember how you debugged that code? I think I just rebugged it."

"If you’re watching this then I’m dead and my lawyer was able to find a functioning VCR on Ebay."
Join the Little Rock CSI Chapter for our September Webinar Lunch Program

Spec for Success: The Nature of Natural Thin Veneer

1 HSW AIA/LACES Credit

Learning Objectives:
Describe how quarried stone becomes thin veneer
Discuss four application methods, adhered veneer codes, and general installation steps
Analyze comparisons between full, thin, & manufactured veneers
Recognize sustainable-design and health-safety-welfare qualities of natural thin veneer stone, as well as in its fabrication process, and installation techniques

September 9, 2020
12:00 – 1:00 pm
Online Presentation (Webinar)
Join Zoom Meeting on Day of Program
https://us02web.zoom.us/j/83730349364?pwd=ZWlybTGfeFVYINEUMzQ0W9FZ1Z3dz09

Tim Shanahan, Minick Materials, will provide each attendee a $10 gift card.
**Introduction**

Space heating and cooling accounts for over 50% of the energy use in a building. One of the most cost effective means of reducing energy consumption is by setting the temperature back when the building is unoccupied. Typical thermostats are set between 65°F to 70°F for heating and 72°F to 78°F for cooling. These settings vary depending upon the age of occupants, their activity level, the relative humidity, the air tightness of the building, and specific energy policies of the building owners. DOE projects an energy cost reduction of 5% - 12% with a 3°F to 10°F setback and a 9% - 18% energy cost reduction with a 10°F to 20°F setback.

**Heat Loss and Setback Temperature**

The graph at the right shows the effect a given temperature difference between a room set point temperature (70°F) and outside air temperature (70°F to -20°F) has on heat loss. A lower setback temperature results in less heat loss as the outside temperature drops through the night. The energy savings is much greater during the warmer months of the heating season, and less pronounced during the coldest time of the year. This graph is only representative for a heating load, as cooling loads are much more dependent on the sun’s radiant energy influence and building fenestration. From the graph it shows that a 20°F setback will result in a 67% lower heat loss than if there was no setback at all. The 10°F setback would result in a 33% less heat loss than at 70°F and the 3°F setback would only save about 4% of the energy loss as compared to no setback at all. How much to setback is often evaluated in terms of the building envelope’s rate of heat losses (U) and the HVAC equipment sizing capacity for next day loss recovery. However, the next day loss energy recovery is normally less than the heat loss if no setback had taken place, unless the building is poorly insulated.

<table>
<thead>
<tr>
<th>Setback @ 70 °F</th>
<th>Outside T @ 40°F</th>
<th>ΔT</th>
<th>Heat Loss $Q = UA\Delta T$</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 °F</td>
<td>40 °F</td>
<td>67 - 40 °F</td>
<td>$Q = UA(27 °F)$</td>
</tr>
<tr>
<td>10 °F</td>
<td>40 °F</td>
<td>60 - 40 °F</td>
<td>$Q = UA(20 °F)$</td>
</tr>
<tr>
<td>20 °F</td>
<td>40 °F</td>
<td>50 - 40 °F</td>
<td>$Q = UA(10 °F)$</td>
</tr>
</tbody>
</table>

**Estimating Cost Savings From Setbacks**

It is possible to estimate cost savings resulting from a temperature setback to a building/area zone or room knowing the energy cost and climate conditions prevailing during the time period of energy cost billings. Suppose for the month of February the building or rooms consumed 50% of the electrical billing (for ventilation fan power, hydronic hot water pump power, and control regulation power) of 21,200 kWh @ $0.086/kWh = $1,823. Additionally, natural gas consumption was 1,950 therms at $1.16 /therm or $2,262. The total heating bill for the month would be $3,174. Based upon an average temperature of 40 °F what is the cost savings for a 3 °F, 10 °F, and 20 °F setback at night. Since the unoccupied portion of the day is 14 hours in 24 hours or 58 % of the heat loss should be allocated to the nighttime setback energy use or

<table>
<thead>
<tr>
<th>11 pm</th>
<th>6 am</th>
<th>4 pm</th>
<th>11 pm</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Setback</strong></td>
<td><strong>70 °F</strong></td>
<td><strong>Setback</strong></td>
<td></td>
</tr>
</tbody>
</table>

$1,841 for the month of February. If there were no change in setback then the energy losses would cost $1,841. At 3°F the cost savings would be $1,841 - ($1,841 x 0.9) = $184 and similarly $607 @ 10°F setback and $1,233 at 20°F.

**Setback Strategies**

Setbacks temperatures are often dependent on recovery time of the HVAC equipment capacity to reestablish the normal occupied building temperature prior to people arriving for work or students for school. The worst case scenario is when a sustained extreme temperature excursion below (winter) or above (summer) the setback temperature for a short period of time (several days). Under these conditions HVAC capacity will determine the transitional time to reach occupied building setpoint and thus probably an earlier start in the morning for ramping to the accepted room temperature. Additionally, it is
important for the larger hvac equipment horsepower motors to be started sequentially with non-overlapping run sequences to prevent demand electrical charges.

**Programmable Thermostats/Energy Management Systems**

Thermostats typically control room (s) temperature within a relatively narrow band (2°F to 3°F) by activating the cooling and heating system. Programmable thermostats allow the building operator to vary the building temperature automatically based upon building use. By setting the temperature back during the unoccupied periods of summer cooling and winter heating energy can be reduced. While a variety of styles and brands are available, they can be classified into the following three types.

**Electromechanical Thermostat** - use an electrical clock and a series of pins and levers to control temperature. This is usually the least expensive with ease of operation but have limited flexibility.

**Digital Thermostat** - offer more flexibility to tailor settings to differing schedules for different days of the week or up to 4 setpoints per day.

**Occupancy Sensor Thermostats** - maintain the setback temperature until triggered by a person entering the controlled space. The trigger mechanism can be a switch, button, light, or motion sensor.

**Energy Management Systems** - have applications on larger buildings with multiple scheduling requirements and with several hvac cooling and heating systems. Typically, the setback temperatures are weighed against available equipment efficiencies, optimum electric power rate savings, and temperature ranges that are adaptive to climate changes. Manufacturer's control strategy and building use requirements. It is no doubt the most difficult.

**Home Applications - Programmable Thermostats**

Did you know that properly using a programmable thermostat in your home is one of the easiest ways you can save energy, money, and help fight global warming? An ENERGY STAR qualified programmable thermostat helps make it easy for you to save by offering four pre-programmed settings to regulate your home's temperature in both summer and winter — when you are asleep or away.

The average household spends more than $2,000 a year on energy bills — nearly half of which goes to heating and cooling. Homeowners can save about $180 a year by properly setting their programmable thermostats and maintaining those settings. The pre-programmed settings that come with ENERGY STAR qualified programmable thermostats are intended to deliver savings without sacrificing comfort. Depending on your family’s schedule, you can see significant savings by sticking with those settings or adjust them as appropriate for your family. The key is to establish a program that automatically reduces heating and cooling in your home when you don’t need as much. Use the ENERGY STAR Programmable Thermostat Calculator to see what you can save with set-back temperatures that work for your family. The pre-programmed settings for an ENERGY STAR qualified programmable thermostat are:

<table>
<thead>
<tr>
<th>Setting</th>
<th>Time</th>
<th>Setpoint Temperature (Heat)</th>
<th>Setpoint Temperature (Cool)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wake</td>
<td>6:00 am</td>
<td>≤ 70°F</td>
<td>≥ 78°F</td>
</tr>
<tr>
<td>Day</td>
<td>8:00 am</td>
<td>Setback at least 8°F</td>
<td>Setup at least 7°F</td>
</tr>
<tr>
<td>Evening</td>
<td>6:00 pm</td>
<td>≤ 70°F</td>
<td>≥ 78°F</td>
</tr>
<tr>
<td>Sleep</td>
<td>10:00 pm</td>
<td>Setback at least 8°F</td>
<td>Setup at least 4°F</td>
</tr>
</tbody>
</table>

Reference:
http://www.energystar.gov/index.cfm?fuseaction=find_a_product.showProductGroup&pgw_code=TH

Revised by Waste Reduction Partners — 04/2010

Sponsored by the State Energy Office, N.C. Department of Administration and the U.S. Department of Energy, with State Energy Program funds, in cooperation with the Land-of-Sky Regional Council (Waste Reduction Partners) and the NCDPPEA. However, any opinion, findings, conclusions, or recommendations expressed herein are those of the author(s) and do not necessarily reflect the views of either the N.C. Department of Administration or the U.S. Department of Energy. An online version of this fact sheet is available at: [www.wastereductionpartners.com](http://www.wastereductionpartners.com) and [www.energync.net](http://www.energync.net)
What I Learned From CSI - SWEATING DUCTWORK

By: Gary Bergeron, CSI, CCS, GSR Technical Chair

Summer heat is upon us and your air conditioning system should get a check-up. Many in the building design and construction industry have observed sweating ducts, but some of the reasons are not always evident. The colder the air temperature in the ducts, the greater the chance of sweating ductwork. This is similar to the manner an ice-cold drink glass sweats in the summertime. Most of us use coasters to prevent water damage to the furniture. The cold drink is similar to the cold air in the duct and the drink glass surface is analogous to the metal ductwork surface.

We were called to a recent building renovation jobsite to look at some proposed pipe routing and were also asked to review the sweating ductwork which was exposed view in the ballroom. For several previous summers, this ductwork had a history of sweating. The building is an event center with a large two-story ballroom, a wood floor, and pitched shingled roof. An adjoining flat roof building is where the ballroom HVAC unit is located and includes a commercial kitchen. The commercial kitchen features a large cooking rangehood and a conveyor dishwasher with a condensation removal hood. The exterior walls of the building are painted concrete block with the window sills indicating signs of moisture intrusion. The building was built in several phases and started life as a church, which was expanded several times. Our recommendations are listed below in order of complexity:

1. Check the HVAC unit air filter(s) for routine filter changes. The “Fancy Vents” return air grille has evidence of dust buildup. Dirty air filters reduce airflow and make the supply air temperature in the ductwork much cooler which can cause sweating ductwork.

2. Check the HVAC unit condensate drain pan and condensate drain line. If the drain pan is dirty and allowing standing water, the water can re-evaporate into the air stream which causes higher humidity and sweating ductwork.

3. If the condensate drain line is partially blocked with “slime” build up, the condensate can back up into the drain pan. A drain pan tablet, chemical sock, or some periodic maintenance can resolve many condensate drain issues and reduce duct sweating. Do not use household bleach since it can corrode the HVAC coil.

4. Check the rooftop HVAC unit’s setting for the outside air intake damper. If the outside air quantity is set too high, more humid air is introduced into the space which can cause the sweating ductwork. If the HVAC unit is equipped with an economizer, ask yourself if the outside air and relief air dampers are operating correctly.

5. Check the refrigerant charge on the HVAC system. If it is low on refrigerant, the coil might not be operating at the coldest temperature and not de-humidifying correctly; which causes sweating ductwork.

6. Change the thermostat fan setting to the “on” position during occupied periods. The fan running “on” will reduce the stratification of the warmest air rising to the roof/ceiling and reduce the duct sweating. The fan setting in the “auto” position turns the fan on only when the unit’s cooling compressor is running.

7. Check the programmable thermostat “setback” temperature and time schedule. If the HVAC system is completely “off” instead of a setback mode of 10 degrees from the summer setpoint, the ductwork will sweat due to the temperature extremes and the hot humid air rising to the roof/ceiling. https://files.nc.gov/ncdeq/Environmental%20Assistance%20and%20Customer%20Service/IAS%20Energy%20Efficiency/Opportunities/Setback_Temperature_Control.pdf

8. Check for a building negative pressure relationship with the kitchen cooking hood and dishwasher hoods running. Crack one of the ballroom exterior doors partially open about 1” and put a piece of toilet paper in the door crack. If the toilet paper rushes in, the make-up air system for the hood(s) is not balanced correctly. A negative air pressure will result in more humid outside air to be drawn into the building every time the loading dock door is opened, or guests are entering the building; and the ductwork will sweat.
9. If the cooking rangehood switches have separate exhaust and supply fan switches, re-work them so that one switch turns on both fans. Connecting the two switches will result in a better air balanced (not negative air balance) building and less ductwork sweating.

10. Insulate the ductwork with sheets of closed cell Armaflex insulation. The insulation is normally matte black which would be well disguised in the space. Insulated ductwork will sweat less because the cold duct surface is not exposed to the humid air.

11. Remove the sheet metal ductwork and replace with fabric ductwork such as Ductsox https://www.ductsox.com/resources/photo-gallery or Hero Fabriduct http://herofabriduct.com/completed-work/gallery/. If the correct manlift and installation method is used, the wood gym floor will not be damaged.

12. The exterior Concrete Masonry Unit (CMU) walls were originally painted with air barrier/epoxy, but it was not applied at a thickness great enough to seal the CMU. The exterior was repainted, but the window sills are still showing signs of water intrusion. If the CMU is still “leaking”, then the HVAC system might never be able to de-humidify the space correctly.

13. Insulate the roof with rigid sheets of insulation as part of the new roof, as the architect recommended, to reduce the heat gain from the roof surface. This measure can also reduce duct sweating.
Someone really went to a lot of trouble to turn this door from “exit” to “no exit”, but they missed a few things. Like checking in with the local fire marshal.

“I Dig Hardware” Blog, Lori Green
Wordless Wednesday  
Flash Flood

These are some of the most wordless Wordless Wednesday photos ever; I've never seen anything like this.

The photos are from a university and show door damage from a major rainfall where hail blocked the roof drains. The rainwater built up on the roof until it forced the blockages out of the drains and then all of the water rushed down the drainpipe. The pipe burst and the water filled a mechanical room (4 feet x 20 feet) to a level 8 feet deep. Eventually, the lock on the mechanical room door failed, and the water then filled a small vestibule causing that door to fail as well. The water entered a stairwell, rising to a depth of over 12 feet until the stair door was forced open – in the opposite direction of its normal swing – and the water swept through the building causing significant damage.

The door shown in the photos to the right is the stairwell door.

“I Dig Hardware” Blog, Lori Green
Today’s Wordless Wednesday photos require a little explanation. Hopefully, most of you already know that:

Stairwell doors are typically fire doors.

Fire door assemblies require listed components.

An open hole through a fire door is not allowed.

Most interior stairwell doors must have a method of opening the door from the stair side, to allow building occupants to find another exit route if the stairwell becomes compromised during a fire (AKA stairwell reentry).

These photos were taken from two sides of a fire-rated stairwell door. On the push side is a non-listed exit alarm. To meet the stairwell reentry requirements, an experienced carpenter has drilled a hole through the fire door and installed a handle on the pull side that is connected to the exit alarm. When someone in the stairwell pulls the handle, it depresses the paddle of the exit alarm, releasing the latch to allow access (also actuating the alarm).

While this does allow building occupants to leave the stairwell, it also voids the label on the fire door assembly. #wordless #dontdothis

“I Dig Hardware” Blog, Lori Green
Quick Question: Does NFPA 80 “trump” the ADA?
By: Lori Green, “I Dig Hardware” Blog

Quite a few questions came up during my webinar on touchless door openings, and here’s one of them:

*Do the requirements of NFPA 80 “trump” the ADA requirements? Is fire protection more important than accessibility?*

The short answer: No. Here’s the long(er) answer…

The ADA is a federal civil rights law and it applies nationwide – the ADA Standards for Accessible Design establish the criteria for accessible buildings. ICC A117.1 is the accessibility standard referenced by the International Building Code (IBC) and other model codes. These two publications are very similar, but states or local jurisdictions may also have their own accessibility requirements. It’s important to be aware of all of the applicable standards.

Thirty years ago, buildings typically had designated accessible routes, and the doors on those routes were required to comply with the accessibility standards; that philosophy has changed. There’s a lot of great background information on this in the IBC Commentary. Here’s an excerpt:

*The fundamental philosophy of the code on the subject of accessibility is that everything is required to be accessible. This is reflected in the basic applicability requirement (see Section 1103.1). The code’s scoping requirements then address the conditions under which accessibility is not required in terms of exceptions to this general mandate. In the early 1990s, building codes tended to describe where accessibility was required in each occupancy, and any circumstance not specifically identified was excluded. The more recent codes represent a fundamental change in approach. Now one must think of accessibility in terms of “if it is not specifically exempted, it must be accessible.”*

There are some locations that are exempt from the accessibility requirements, but they are very limited. For example, employee work areas are exempt, BUT – the entrances and exits to those areas must comply, AND – corridors, toilet rooms, kitchenettes, and break rooms are not considered employee work areas. There is more information about the exempted areas in this post, and employee work areas are covered here.

Back to fire doors…

Fire doors are not exempt from the accessibility standards. However, there is at least one compromise that I can think of. The ADA Standards and ICC A117.1 require interior doors to be opened with no more than 5 pounds of opening force. Fire doors and exterior doors are not required to comply with this limitation, because they may not close and latch properly given the amount of closing force generated by a closer that opens with 5 pounds of force. Although exempt from the opening force requirement, fire doors (and exterior doors) would still have to comply with other accessibility requirements, like closing speed, clear opening width, and hardware operation.
Fire doors and exterior doors are not allowed to have unlimited opening force – the maximum opening force for these doors is addressed by the IBC. Fire doors and exterior doors must not require more than 15 pounds to release the latch, 30 pounds to set the door in motion, and 15 pounds to open the door to the fully-open position. There are additional egress requirements that also apply to the vast majority of doors.

The bottom line is that most fire doors have to comply with requirements for egress, fire protection, and accessibility, and there may be multiple codes and standards that apply to a particular project. All of those requirements must be considered in order to ensure that the door in question will provide free egress, be operable by all building occupants, and if it's a fire door – help to compartmentalize the building and protect the means of egress.

CSI ANNOUNCES MEMBERSHIP DEFERRMENT PROGRAM

As the economic realities caused by COVID-19 are unfolding, CSI is creating ways to support members at your time and place of need. Beginning today, CSI is launching a Member Support Program to offer a three-month dues deferment to individual members who are experiencing financial hardship.

To apply for the Member Support Program, you must be:

• An active member of CSI with an expiration date on or after March 31st, 2020
• Undergoing financial hardship due to the economic crisis

A member who wishes to apply must contact CSI to begin the process. Email memberservices@csinet.org or call 1-800-689-2900

Please note: Chapters can opt-out of participating in this program. If a Chapter does not participate, a member will be responsible for 3-months' worth of their Chapter(s) dues before the deferment begins.

Looking forward, CSI continues to evaluate how to support its members during this unprecedented time. If changes or extensions to the program are made, CSI will communicate with members as soon as possible.

For more information on the program, please visit the Member Support Program FAQs.

Want more information related to how this affects chapters? Check out our Member Support Program: What Chapters and Regions Need to Know guide.

Please don't hesitate to reach out with any questions you may have.
Completing a successful construction project today depends on moving intent and information from the owner’s mind, through the design team, and to the job site. It’s organizing thousands of moving parts so they work towards the same goal. It’s mastering how to integrate concepts, documents, and activities to deliver a project that performs to its fullest capacity. It’s understanding the latest theories, technologies, and team structures so that design concepts become reality.

Considered the instruction manual connecting the architecture, engineering, construction, and owner (AECO) sector, the PDPG focuses on the art and science of common project delivery methods. Learn the roles and responsibilities of every player in the project, how construction is delivered, what needs to happen during each phase of the facility life cycle, and the types of information flow— including agreements, drawings, and specifications— that help ensure a successful project.


CSI Sponsors AEC Hackathon

The AEC (Architecture, Engineering, Construction) Hackathon was created to give those designing, building, and maintaining our built environment the opportunity to collaborate with cutting edge technologies and its developers and designers. It’s a weekend of geeking at its finest for improving the industries that affect all that live or work in a house or building. It has quickly become a global community of innovators that include all elements of the built environment.

CSI, along with several industry partners, is sponsoring this year's AEC Hackathon.

Learn more at AECHackathon.com, and follow along on Twitter at @aechackathon.
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
- **LinkedIn:** 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

To See what CSI is all about:
https://higherlogicdownload.s3.amazonaws.com/CSIRESOURCES/143a718d-6df6-484a-8a79-76d79635b741/UploadedImages/CSI_ResourcesCatalogFinalLowRes.pdf
LITTLE ROCK CHAPTER INFORMATION

Chapter Officers

President: Billy J. Mathis, FCSI, CDT
President-Elect: Melissa Aguiar, CSI, CCS, CDT, SCIP
Immediate Past President: Open
Secretary: Melissa Aguiar, CSI, CCS, CDT, SCIP
Treasurer: Billy J. Mathis, FCSI, CDT

Directors

Operations
Honors
Membership
Education / Certification

Rachal Belanger, CSI
Melissa Aguiar, CSI, CCS, CDT, SCIP
Carlie Massery, CSI

Open

Chapter Info

Chapter Website: https://csilittlerock.org
Chapter Newsletter: SpecWork
Chapter Meeting Day and Time: 2nd Wednesday of Each Month unless otherwise specified by the Chapter President
Chapter Board Meeting Day and Time: 1st Friday of each Month unless otherwise specified by Chapter President

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