

HEADLINES

New Fiscal Year - New Chapter Board of Directors

Building for the Future- GSR Leadership Meeting at Little Rock this FY.



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Little Rock Chapter Notes



By: Billy J. Mathis, FCSI, CDT

Well, we are entering a new Fiscal Year and this one is going to be a very busy one for the Little Rock Chapter. As most of you know, the new leadership for the Chapter has taken over effective July 1, This means that we have to begin preparations for two major events in our future.

First will be the Annual Golf Tournament. This is our primary fundraiser for Chapter Scholarship and Operations for the Fiscal year. This coming year, we are hoping to couple this with our second big event, the Gulf States Region Leadership Conference in which the Little Rock Chapter is the host. The dates for these two major events are as follows:

Annual Golf Tournament is Friday, May 3, 2019.

Gulf States Region Leadership Conference is June 7 & 8, 2019.

What can you do, you may ask yourself. Well we will need volunteers for each of these events. We will need people to help set up committees to plan and execute both events, and we will need sponsors to help offset our costs so both events will be successful. Much more information will be forthcoming on this.

Finally, the Chapter is facing it's worst crisis since its inception over 50 years ago. We are losing members almost as fast as new members come on board. We need your help, recruitment is key to keeping us alive and getting new, younger members to pick up and take us to the next level. But by the same token, we need our more seasoned members to stay involved and be there to help the new members through their knowledge and leadership. We need everyone to stay active and constantly talk CSI to people around them. We need to get back to the level we once were where being a member of the Little Rock Chapter, CSI., was something people sought out because of our reputation and what we had to offer. All of this is impossible without an active membership, out there in the trenches showing just how CSI helps their careers.

Basically, we need you to get involved.

Building Strength During Summer Storm Season

Written by Stephen Wieroniey, Director of the Center for the Polyurethanes Industry

Summer thunderstorms and severe windstorms, known as “derechos,” bring with them strong winds, heavy rain, and sleet that can damage roofs and walls of homes and buildings. In fact, winds from severe thunderstorms [cost more than \\$266 million in property damage across the U.S. in 2017](#), according to the National Weather Service.

Though these weather events are not always easy to predict, architects and builders can help homeowners prepare for summer storm season by investing in high-quality building materials. Applying closed cell spray polyurethane foam (ccSPF) roofing on top of the roof deck can secure roofing to help prevent or minimize damage to homes and buildings during severe storms. SPF roofing is particularly helpful on low slope residential homes and commercial buildings.

Traditional low slope roofing systems are especially vulnerable when exposed to a severe thunderstorm or derecho. During these storms, roofs are often subject to damage from wind uplift. This occurs when a roof is secured with fasteners and seams that allow air to get trapped beneath the membrane, causing fluttering that can blow the roof off. SPF’s seamless and fluid application method help bond the roof deck to the trusses and rafters acting like an adhesive, minimizing the risk to roofs from wind uplift.

In addition to enhancing buildings’ ability to withstand high winds, SPF roofing systems on low sloped roofs can decrease the risk of water damage. SPF accommodates unique roof designs and can be applied in various thicknesses to create a positive slope and improve drainage on flat roofs. Furthermore, because SPF’s application method conforms around seams, penetrations, HVAC curves, vents and skylights, it can help to eliminate water leakage problems.

While damage is sometimes unavoidable even with the strongest roofing materials, roofing systems made with SPF are often easier to repair and replace. SPF roofs are not typically removed during repair, unlike many other roofing materials. Once the damage is identified, the area can usually be re-foamed without ever having to remove and replace the entire roof.

In pitched roof housing, ccSPF insulation can be applied below the roof deck to help secure the roof by essentially gluing the roof deck to the structure. [In one study by a researcher at the University of Florida](#), a roof deck insulated with ccSPF demonstrated an ability to withstand wind speeds found in category 4 hurricanes (130-156 mph), which far exceed winds associated with summer thunderstorms. Moreover, ccSPF below the roof deck performs as a secondary water barrier in the event shingles and underlayment are torn off by high winds.

When it comes to unpredictable summer storms, it makes sense to be proactive, rather than to wait until after the damage is done. So, as you work with clients, consider SPF roofing systems provide strength and durability during summer storm season and all year long. Please visit www.whysprayfoam.org for more information.

**Article Submitted by Sheldon Wolfe, RA, FCSI,
CCS, CCCA, CSC—Construction Specifier,
Curmudgeon, Heretic Architect**



Head to Head: Clancy vs. Wolfe



It's been thirty-three years since I took my first job as a specifier. This glorious career came to an early end a few months ago when I left my last office, where I had worked for twenty-two years. Add to that the years I worked in "real" architecture after graduating from architecture school in 1975, and it's been a long road.

My last firm regularly announced milestone anniversaries, and, beginning with the tenth anniversary, each honoree was given the opportunity to say a few words. At my tenth and fifteenth anniversaries, I took a project manual to the lectern, opened it, and intoned, "And now for an interpretive reading of a specification section." The next time

you speak, try it; it's always good for a laugh.

For my twentieth anniversary, I couldn't help but think back on my career. I decided I should compare myself to another writer, and, for reasons I can't explain, I chose Tom Clancy. That might sound crazy, but we're both prolific writers, and there is a resemblance...

Mr. Clancy's statistics are easy to find. I found the number of books in print, number of video games sold, number of books rated number one on the New York Times best seller list, number of weeks the hardcover version of Hunt for Red October was on the best seller list, number of weeks the paperback version was on the list, number of words per book, and so on. Clancy began in 1984, and I wrote my first specifications in 1985. Unfortunately for him, Clancy died in 2013, so I had the benefit of a few more years. The time we had been writing could have been a factor, but in the end, it played no part.

Oddly, my own statistics were harder to find. I started with the number of project manuals I had issued, then estimated the number of specification sections, the number of words per page, and the number of pages to determine the total number of words. I discounted the mechanical and electrical volumes, and took partial credit for civil and structural specifications, mixed in a few other considerations, and decided I had published the equivalent of 400 books. With that as a start, I thought, I could at least be competitive.

Tom Clancy is credited with writing over 100 books. I didn't include mechanical and electrical specs in my total, so I didn't include the many books Clancy co-wrote. Also, because much of his celebrity is based on his fiction writing, I decided to not include his non-fiction work. In the end, I gave him credit for 25 books. So, coming out of the gate, I am far ahead, 400 books to 25.

Other than the number of books written, I wondered, how else could I compare our work?

Although I had written more than Clancy, none of my books made the New York Times Best Sellers list. Clancy scored 17.

Producing best sellers obviously means an author's books are being read; Clancy wins this category as well. Assuming all the books he sold were read, more than 100 million people read his books. It's likely that many of those books were passed on to others, so the total could easily be twice that number.

No one bought any of my project manuals, but, at least in theory, each of my project manuals was read by at least the project architect, other staff architects working on the project, our consultants, several people on the owners' staffs, and all the contractors, subcontractors, suppliers, and installers working on my projects. Even though I could throw modesty aside and claim all those people had read my project manuals, we all know better. In reality, the number of my project manuals that were read is probably closer to three, and those only partially.

With all the best sellers he wrote, Clancy was an obvious candidate for Hollywood. Of the books he wrote alone, five were made into successful movies. Because of the number of project manuals I issued, I'm sure someone from Hollywood has tried to contact me, but they're probably using an old email address.

And then there are the games. More than forty video games and a few board games bear Clancy's name. Although none of my project manuals have been made into games, there have been occasions when one contractor or another seemed to think they were games.

Finally, I compared our incomes. When I learned his net worth was estimated at more than \$780 million, I didn't bother to find out what Clancy made for each of his books. I'm still counting on the lottery to get me to millionaire status, but who knows, maybe I'll win one of those billion-dollar Powerball payouts.

With money comes property, and here again I come up just a bit short. According to Wikipedia, Clancy had an 80-acre estate that was once a summer camp in Maryland, with a panoramic view of the Chesapeake Bay. His \$2 million home had 24 rooms and a shooting range in the basement; in the yard was an M4 Sherman tank. He also had a condo in Baltimore's Inner Harbor. My wife and I have a five-acre plot in rural Minnesota, with a pond in the back yard. We had a 1949 Ford F3 pickup in the yard, but that's gone.

With that sobering view of my career, you might think I am disappointed. Although it would be fun to publish a real book, and even more fun to have it be a best seller, I don't think I've wasted my time. Working in construction offers a satisfaction unknown in most other occupations; I can point to many buildings that fulfill the owner's needs - and will continue to be useful for decades - and say, 'I had a hand in that!'

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[Agree? Disagree? Leave your comments at https://swconstructivethoughts.blogspot.com/2018/05/head-to-head.html](https://swconstructivethoughts.blogspot.com/2018/05/head-to-head.html)



7 AREAS OF TECHNOLOGY CHANGE IN CONSTRUCTION

Contributed by Eric Weisbrot

Construction as an industry has noticeably lagged in moving operations toward a more digital realm compared to other business verticals. A report published by McKinsey in 2017 highlighted this truth, citing a near stagnant rate of productivity growth among construction businesses. Comparing that to the 1,500 percent growth of industries like manufacturing and agriculture, it is clear construction is ripe for disruption. But those who have earned a living from the construction business, including licensed and bonded contractors and project managers, have been slow to adopt new technology over the years.

Now, however, the industry is in dire need of change. Many statistics show a labor shortage in construction, high occurrences of waste and inefficiencies on job sites, as well as skyrocketing budgets and capital spending for substantial projects. In order to combat these growing concerns and bring technology into the fold, the construction environment is starting to grasp the power of the following revolutionary changes fueled by technological tools and resources. Here are seven ways technology is influencing construction today.

Autonomous Machinery

Countless technology firms are focusing their energy on developing autonomous construction machinery, some led by former tech company engineers and designers. Self-operating machines, including bulldozers, excavators, and cranes, are already operating on sites around the world. Their mainstream entrance into the market is imminent in the next several years. Machines that do not require a human touch can be used to tackle repetitive, simple tasks that take skilled workers significant time and effort to complete. The inclusion of robotics in construction has the potential to reduce waste and inefficiencies across the board.

Drones and 3D Printing

In addition to self-operating machinery, the technology behind drones and 3D printing is also making its debut in the construction field. Drones have been used to help monitor job site progress, as well as lend a hand in the inspection process for projects both small and large. 3D printing offers a new way of designing projects and creating some structures that would otherwise require ample time and effort by individual construction professionals. These technologies have other far-reaching implications in construction as they become more developed and more widely used.

Software Solutions for Business Management

One of the most relatable ways technology is being used in the construction industry is through software solutions for business management. Construction project managers specifically are tapping into the power of digital tools to help run all aspects of the business. This includes accounting and personnel management, reporting for regulatory purposes, and budget monitoring and adjusting as the project moves forward. Having a technology boost in the business management department of construction saves both time and money for project managers, and it creates a clearer picture of the business from financial and regulatory perspectives.

Job Site Safety

Technology in construction is also helping with overall job site safety for all parties involved in a project. Enhancements to safety gear, including eye and hand protection, has the capability of alerting construction workers about potential hazards and risks on the job. Drones are also being used in this capacity to highlight concerns that may otherwise go unseen. Technology like virtual reality is also making an entrance into construction, assisting with contractor training and job site simulation to improve safety. Each of these components have the ability to create a safer environment for construction workers, which ultimately leads to a more cost-effective business model for job owners. With fewer hazards on the job, contractors and construction project managers may be able to reduce the cost of their required surety bonds and improve their success rate of job completion.

Worker Productivity

Wearables are also making waves in the construction industry, above and beyond safety implications. Worker productivity can be tracked through certain devices, giving construction project managers a sound strategy to ensure tasks are progressing each day. Data compiled from wearable tech can be sent to specific monitoring platforms that generate reports and analytics on productivity on a daily basis. This empowers job site managers with a greater level of control over project completion, deadlines, and budget constraints.

New Materials

Technology enhancements are also being used in construction in the realm of materials used for builds. Using alternative materials that are less expensive than traditional lumber or steel is beneficial in keeping costs down, and this is made possible with the help of technology. Recycling old material is also a promising endeavor with digital assistance.

Stakeholder Management

Finally, construction project management involves discussions with many stakeholders, including engineers and architects, subcontractors, suppliers, vendors, and project owners. Without technology, project managers may find it difficult to keep up with monitoring all facets of the businesses and reporting to essential parties in an accurate and timely way. Digital solutions have been developed to help with stakeholder management, taking some of the pressure off project managers and freeing up time for other critical tasks.

Technology in construction has taken some time to come to fruition, but its addition to the industry is making positive waves throughout the business.

LITTLE ROCK CHAPTER
CONSTRUCTION SPECIFICATIONS INSTITUTE

LUNCH AND A SEMINAR—WEDNESDAY, AUGUST 8, 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
Mays, Maune, McWard

Questions or Problems should be sent to
Billy Mathis - bjmathis@taggarch.com

LOCATION:

Baldwin & Shell Construction Conference
Room

1000 West Capitol, Little Rock, AR
72201

**Reservation Deadline: Please RSVP
by Noon, Tuesday, August 7, 2018**
(LRCSI must guarantee meal count
for the Presentation)

SPEAKER:

Andy Mays, Mays, Maune, McWard

PROGRAM:

[Code 10 - Opening Doors to Design Opportunities](#)
[\(1 AIA LU/HSW\)](#)

Learning Objectives: This 1-hour seminar is structured to acquaint the design team with basic building code requirements that drive the use of Fire and smoke rated wide span opening protectives.

1. Participants will be able to differentiate between fire walls and fire barriers.
2. Learners will understand the regulatory standards governing the use and application of wide span opening protectives.
3. By examining numerous case studies participants will learn the fundamental code requirements that drive the placement of fire walls and fire barriers, their openings and opening protectives.
4. By way of slides, discussion and case studies, participants will see the direct correlation between life safety, product application and open design.

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

KNOWLEDGE, INNOVATION, COLLABORATION - CONSTRUCT 2018



Excerpt from Let's "Fix Construction Blog"

Registration is now open for CONSTRUCT 2018, our MUST attend construction industry conference of the year.

The co-founders of Let's Fix Construction, Eric D. Lussier and Cherise Lakeside met at CONSTRUCT in Phoenix in 2012 and have returned in each successive year since. AT CONSTRUCT 2017 in Providence, RI, Eric and Cherise were invited to participate on the CONSTRUCT Education Advisory Council with a group of other industry professionals. This effort has continued for the 2018 Conference and much work has been done to put together a dynamic program for the conference this coming October 3-5, 2018 in Long Beach, CA.

In addition to the Education Advisory Council, CONSTRUCT 2018 will be keeping Eric and Cherise busy on all three days of the conference.

On Day 1, they are both involved in the fourth annual Young Professionals Program, Cherise will be moderating the Archispeak Interactive Luncheon titled 'Real Talk About Challenges, Opportunities & Innovations Surrounding AEC

Teams' and later that day, the Let's Fix Construction interactive problem-solving workshop will return for a second consecutive year.

On day 2, Eric and Cherise will co-host a new program 'Facing Danger: Public Speaking for Non-Public Speakers' and the evening will conclude with the 2nd annual Let's Fix Construction 'Partners & Pints' party, sponsored by ClarkDietrich.

Day 3 will feature a new addition to CONSTRUCT in 2018, as Cherise will moderate the 'Millennial Power Panel' session, with more details below.

While Cherise and Eric (Let's Fix Construction) will be busy this year at CONSTRUCT in their continuing total world domination effort, there are a host of great educational sessions from many well respected members of the AEC Community in addition to project tours, networking events, parties, show floor education, product information and much more. Check out the official CONSTRUCT Press Release below and register soon and save up to \$230 with Early Bird Pricing when you register by 06/13.

Contributed by [Eric D. Lussier](#) & [Cherise Lakeside](#)

CONSTRUCT, the only national show dedicated to commercial building teams that spec and source materials, has announced a slight change in the show's format for 2018. CONSTRUCT is introducing Thought Leader and Power Panel Sessions this year, replacing the Keynote Speaker and Game Changer Speaker. These four new sessions will feature key industry leaders speaking on trending topics that are affecting the AEC industry today. The Thought Leader speakers include Rosa T. Sheng, Brok Howard, and Paul Doherty. The Power Panel session will involve successful millennial professionals.

Rosa T. Sheng, FAIA, LEED AP BD+C, is a Principal and Director of Equity, Diversity, Inclusion at SmithGroupJJR and AIA SF President 2018. She is also the Founding Chair for Equity by Design, which has launched a national movement for achieving equitable practice and design in architecture since 2018. Rosa's session, titled 'Why Equity Matters for everyone – A New Value Proposition for Design', will frame the discussion on how we can adopt a culture of equity, diversity and inclusion.

Brok Howard, is a Technical Account Manager at dRofus Inc. where he leads the effort in implementation, training, and support for all North America. He has over 20 years of experience in the AEC industry, including teaching at Washington University in St. Louis and as a BIM Manager at HOK. Brok's session titled 'Knowledge Transfer – An Ethical Responsibility for AEC Professionals', will focus on our responsibility and duty to prepare the next generation with the knowledge we share.

Paul Doherty, the President and CEO of the Digit Group, is an award-winning architect, specifier, and adviser to Fortune 500 organizations and government agencies. He is also one of the co-founders of the AEC Hackathon. His current work is focused on Smart City real estate developments for the USA and abroad. Paul's session titled 'The Digital Transformation of Specifications' will discuss a new age of specifications driving digital transformations that could only have been dreamed about just a few years ago.

The Power Panel session will be moderated by Cherise Lakeside, Specifier at LSW Architects and co-founder of LetsFixConstruction.com. She will be leading a panel of four millennials through an in-depth discussion where they will dispel some commonly held beliefs about their generation, and what they want for the future of the industry. The panel will consist of Tiffany Coppock from Owens Corning, Cam Featherstonhaugh from TruexCullins Architecture & Interior Design, Kyhla Pollard from Juneau Construction Company, and Michael Riscica from the YoungArchitect.com.

The change in format, initiated by feedback from our participants, allows for more in-depth discussions in a more intimate setting. "Education has always been key for our participants, and we are excited to be able to provide them with multiple sessions from key industry leaders," said Keith Huegel, Associate Director for CONSTRUCT. In addition to the Thought Leader Sessions, CONSTRUCT will feature over 50 accredited educational sessions, technical tours and live product demonstrations. Attendees will be able to earn 18 plus hours of CEU's.

In addition to our thought leader speakers, we have a number of notable industry professionals that will be presenting on topics that are current to the AEC industry." Said Jennifer Hughes, Sr. Education Manager for CONSTRUCT. "With the help of our 2018 Education Advisory Council, we have created an exciting program that will provide solutions to the challenges facing AEC professionals today."

CONSTRUCT 2018 is being held October 3 -5, 2018 in Long Beach, CA at the Long Beach Convention Center. Registration is now open, and Early Bird pricing ends on June 13, 2018. To register or for more information, visit www.CONSTRUCTshow.com.

“ Additional show information:

- Facebook at <http://www.facebook.com/CONSTRUCTShow>
- LinkedIn at <https://www.linkedin.com/company/construct-show/>
- Twitter at <http://www.twitter.com/CONSTRUCTShow>
- Instagram at <http://www.instagram.com/CONSTRUCTevent>
- YouTube at <https://www.youtube.com/user/hwconstructshow>
- #CONSTRUCT #CONSTRUCT2018

About the Event

CONSTRUCT is your most cost-effective strategy for combining educational opportunities with practical, real-world, product and service solutions for your business success. This event is dedicated to the institutional, industrial and commercial building industry. If you design, build, specify, engineer, renovate or operate in the built environment, this is your event. The show is owned and produced by Informa Exhibitions U.S., Construction & Real Estate. For additional information, contact CONSTRUCT at P.O. Box 612128, Dallas, Texas 75261-2128; call the main show line at (866) 475-6707 or (972) 536-6450.

About the Construction Specifications Institute (CSI) – Official Partner

Founded March 1948, the Construction Specifications Institute (www.csiresources.org) is a national association of more than 7,500 members dedicated to improving the communication of construction information throughout continuous development and transformation of standards and formats, education and certification of professionals to improve project deliver processes. CSI members work tirelessly to effectively communicate the designers' vision, the material producers' solutions and the constructors' techniques to create outstanding facilities that meet facility owners' objectives.

About Informa Exhibitions U.S., Construction & Real Estate

Informa operates at the heart of the Knowledge and Information economy. It is one of the world's leading business intelligence, knowledge and events businesses with more than 6,000 employees in over 100 offices across 25 countries. The Dallas Exhibitions team produces a portfolio of 15 trade shows in various sectors of the construction and real estate industry. To learn more, visit www.informaexhibitions.com.

Little Rock Chapter Website has Moved

The Little Rock Chapter Website is currently up and running at it's new location (link <https://csilittlerock.org>). There were several reasons for the move but the primary reason was that Institute is no longer able to support the old Microsite we have been using. Please check us out and continue to come back periodically as new features will be added. The old website has ceased to function so please go ahead and move your favorites link to the new website.

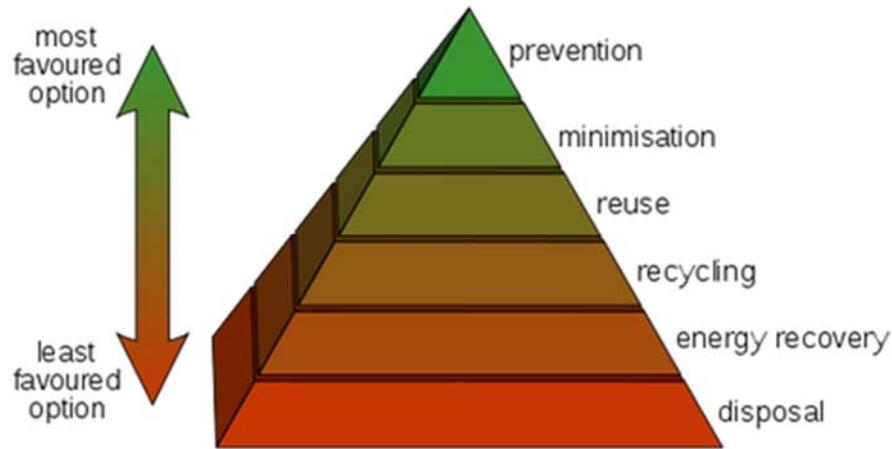


**Knowledge Today.
Innovation Tomorrow.**

**SAVE-THE-DATE FOR CONSTRUCT 2018
OCTOBER 3-5
LONG BEACH CONVENTION CENTER
LONG BEACH, CA, USA**

REPURPOSING: THE INTERSECTION OF AFFORDABILITY & SUSTAINABILITY

Contributed by Randy Nishimura



A cozy group gathered at the Eugene Builders Exchange this past Thursday for the May chapter meeting of the Construction Specifications Institute-Willamette Valley Chapter. The topic for the meeting was repurposedMATERIALS, the successful enterprise at the vanguard of the rapidly growing materials repurposing industry.

CSI-WVC member Alorie Mayer, who has a background in energy and resource conservation management, organized the presentation of a webinar

by repurposedMATERIALS president Damon Carson. Damon founded the company in 2011, and it has only grown by leaps and bounds since then. In Damon's words, repurposing occupies the intersection of affordability and sustainability. The repurposedMATERIALS business model involves taking byproducts out of the waste stream and extending their maximum practical benefit while minimizing waste and the expenditure of new energy to ready them for new uses.

Damon introduced the topic of repurposing materials by having us think about what many of us did naturally as preschoolers: taking an empty Quaker Oats canister and transforming it into a drum or a container for Lego blocks, or reimagining a Maytag refrigerator shipping box as a medieval fort or a space-age rocket. This, in his words, was our "substitutionary thinking" at work. Repurposing isn't a new concept; fundamentally, it is an innately human behavior.

Damon cited the waste hierarchy pyramid and how reuse occupies a perch near its peak. Repurposing is not the same as recycling, which typically involves energy-intensive processing of the materials (e.g. chipping, shredding, grinding, or melting) before reuse is possible. Repurposing is a means to extract the maximum practical benefit from products while minimizing the cost to the environment. As a waste-management strategy, repurposing minimizes emissions of greenhouse gases, reduces pollutants, saves energy, conserves resources, creates jobs, and stimulates the development of green technologies. Repurposing rather than reprocessing previously-used items also saves time and money, making quality products available to people and organizations who may be of limited means.

Of course, repurposing isn't a new concept. Artists (like my friend and former co-worker Rosie Nice) have long fashioned sculptures and other works out of what most people would consider junk. Habitat for Humanity ReStores and Eugene/Springfield's own BRING Recycling sell salvaged materials but tend to emphasize reuse rather than repurposing. For example, salvaged doors or windows sold by Habitat for Humanity ReStores or BRING are typically used by the purchasers for the same ends they originally were originally intended for. What distinguishes repurposedMATERIALS is its procurement of large amounts of discarded products no longer suitable for their original purposes but are otherwise practical for altogether different uses.

Damon cited the following mnemonic device to explain his company's criteria for selecting the materials it chooses to procure and resell:

S.A.V.E.it

The materials should be Standardized, readily Available, Versatile, and well-Engineered (possessing desirable characteristics or attributes).

At its core, repurposedMATERIALS is a thrift store on an industrial scale, with branch offices/warehouses in Denver, Chicago, Dallas, Atlanta, and Philadelphia. The company conducts online auctions as well as selling products directly to customers at preestablished prices through its website. Recently, repurposedMATERIALS expanded its mission/concept to include the repurposing of things like chemicals and other ingredients (as opposed to finished products), and even real estate. Anything that is obsolete to its primary industry is of interest to the company.

Damon described how his customers have imaginatively found new uses for old stuff. The products repurposedMATERIALS regularly procures and stocks include salvaged heavy timber beams, industrial storage tanks, and worn gymnasium floor boards. Some of the other used construction materials currently available include rubber playground tiles, salvaged wood from bleachers, 500-gallon propane tanks, concrete barrier blocks, and galvanized steel cable. The company also specializes in “all kinds of crazy” as well—offbeat industrial castoffs like aircraft wheel chocks, conveyor belts, used truck tires, and pool covers to name a few.

To Damon, much of the satisfaction he derives from his business comes from seeing how creative his customers can be. repurposedMATERIALS doesn't always know how the materials it procures might be used. Street sweeper brushes enjoy a second life as backscratchers for horses and cattle. Old escalator handrails (which are made of thick rubber with reinforcing cables) become loading dock bumpers. Retired military cargo parachutes are used as wedding party tents. Used billboard vinyl (which is tremendously tough and intended to handle the worst Mother Nature can throw at it) is normally just thrown away, but Damon discovered the vinyl can be reused not only as drop cloths but also as hay covers, pond liners, and even slip n' slides. He sold ten to a U.S. Army Ranger battalion for use as curtain walls in a training maze.

Given that 40% of the materials in the nation's landfills can be attributed to construction waste, the key takeaway from the presentation is how significant our attention toward managing the waste hierarchy can be when viewed from a holistic, green perspective. Construction should be defined by good engineering and efficiency. Many salvaged or recovered materials are heavy duty and are ready for the tough jobs. It behooves architects to consider the possibilities inherent in the significant resources available from repurposedMATERIALS, and other similar vendors. We should use our imagination and creativity to help the construction industry minimize its environmental impact through repurposing.



Why is CSI going to Thrive

By: Cam Featherstonhaugh CSI, CDT, AIA

I have been a member of CSI for almost 10 years now. It started with a face to face request from a colleague to come and sit in on a meeting. The Chapter was in need of a newsletter editor.

Boy, was I a terrible Newsletter editor.

But almost immediately, I fell in love with the promise of CSI. Here I mean "promise" as defined by Dictionary.com's 4th definition: "indication of future excellence or achievement". As in: 'That young lady shows real promise.'

The truth is, that I spent those first years doing volunteer work for both the Vermont Chapter of CSI, and also the Vermont Chapter of AIA. During that time I also founded the Vermont Emerging Professionals Network, a component of the AIA for young architects and interns.

As those early years wore on, I came to realize that CSI was different. CSI had some edge that I was attracted to.

What struck me most was that CSI had persons with lots of variety of experience in leadership, and they all brought their different experiences to bear on the issues at hand. I was reminded of the design lesson that interdisciplinary thinking is necessary to solving complex problems, like the ones commonly faced by Architects.

There was also a strong sense of camaraderie, and also a sort of gumption; An understand that we would get it done, whatever was needed. That culture was also unique. Meetings were not confrontational, they were productive. We always had something to work on, and it was always geared toward learning or advancing understanding of pertinent topical issues.

There was also a strong sense that we were focused on constant improvement. Almost everything I learned and heard about CSI was in this vein of making the industry work better and smarter.

I realized pretty early on that CSI was the construction industry association best positioned in our whole country, if what you wanted was to improve the construction industry itself, and not just for one discipline. Everyone in CSI shares a common bond and that bond revolves around a drive toward excellence and increased comprehension and coordination and collaboration, for the purpose of better outcomes. All the mechanisms we use and programs we generate (MasterFormat, OmniClass, the Academies, the MSR) are (in the grand scheme) temporary tools that are intended for this purpose. We will design new tools when our current ones wear out or become maladaptive, because we are committed to something higher than the tool itself. This realization led me to retire from the AIA-VT chapter and focus my volunteer work solely on CSI, because I believe it is the future.

I think that intuitively, CSI members all get this, and they also live it. Sometimes they get frustrated that we aren't already arrived at the promised land. But I think that life is about the journey, and not the destination (I know, so cliché, right?) Well in this case, it is so true. CSI provides a space for improving the Work that we do. That Work takes years of effort and culminates in a 10 second ribbon cutting and if you are lucky, a friendly drink or bite with your partners to celebrate the long delayed gratification of an open building and a happy client.

The fact is that CSI standards are designed to provide and promote Literacy and Uniformity in Construction Documentation and Delivery methods, in a way that no other organization does, and that no other organization can. We alone have all the people needed already at our table. We alone provide that round-table big-tent style member engagement experience, diminishing the embedded hierarchy of the construction industry, where designers of the 20th century sit in ivory towers surveying the landscape beneath them, disconnected from the consequences of their decisions. CSI as an organization is egalitarian in the best possible way. This is all the edge we need.

We offer education and certification in one of the broadest and most dynamic industries in the world. The built environment is a fundamental aspect of civilization and culture. We make that better, and we strive for the practitioners of this industry to get together, work together, and play together, all in the name of making the outcomes of our work better. This is healthy. this is Good.

It is precisely because our table is round and our tent is large that this is the case. We own that space like no other association can. Our ranks are littered with folks in every discipline who are committed to constant improvement, clarity of communication, collaboration, and honest assessment of fact. This connection and understanding goes beyond all regional and political boundaries, and that is rare in this day and age. This is something every member can be proud of.

So I am not worried about the death of CSI. I am working on how to make CSI thrive in the 21st century. This means we are working together in new ways, and through new means (this community being but one example). This change won't happen overnight, but it will happen.

In the end, the reason I know we will thrive is because I have met so many of the members. The members are committed. The members are smart. The members are unified by the promise of improvement and excellence. The members are CSI. We are here, we are committed to excellence, and we are not stopping.

(GLAZIERS') ROADMAP TO SUCCESSFUL SUBSTITUTION REQUESTS

Contributed by [Joe Schiavone](#)



(Editor's note: While addressed to glaziers, this article is ideal for any building product representative or manufacturer) Substitution Requests are prevalent in construction projects of all scales. They offer several benefits to glazing contractors, such as helping them win a job; however, there is a right way and a wrong way to submit them. A firm understanding of the procedures involved in Substitution Requests can increase the likelihood of the product being accepted, and of repeat business as a result of building a favorable reputation. With architects facing increasingly tight schedules, the submitter should be aware that the odds of success often depend on how clear and concise the Substitution Request is.

The Basics

Substitution Requests are simply proposed changes in products, equipment, and/or methods of construction from those that are specified by the architect. Nearly every project—regardless of project delivery method—encounters product substitutions so opportunities are abundant.

The most opportune time in the project lifecycle to submit a Substitution Request is during the bid phase when the general contractor is seeking out a glazing contractor. This creates a level playing field amongst bidders. It's possible to submit a Substitution Request during construction, but the process can be more complicated and should only be pursued when certain issues arise such as material unavailability, excessive lead times, or a change in code requirements.

There are several scenarios where substitutions are practical and feasible. CSI's *Construction Contract Administration Practice Guide* identifies key areas in which a Substitution Request should be reviewed. They include:

- Shorter Construction Schedule
- Lower Overall Cost, Including Operation and Maintenance
- Improved Quality and Performance

- Superior Sustainable Features
- Enhanced Aesthetics
- Better Warranty and Manufacturer Reputation

The substitution should add value and present clear advantages to the architect, and ultimately the owner, if it's to be approved. It must also be equal or superior to the specified product, and cannot adversely impact the project cost or schedule.

When submitting a Substitution Request, glazing contractors and product manufacturers should work directly with the bidding general contractor. Not doing so can be detrimental to the team dynamic and slow the project's progress. Although contacting the architect is possible, you risk immediate rejection. You also risk building a detrimental reputation for not following established protocol, which can cost you future work

In some cases, a designer without formal Contract Document training writes the specifications. They may also be written in haste because of rushed schedules. This means that an experienced glazing contractor has more opportunities to spot potential conflicts that are overlooked, and suggest substitutions that will improve quality or reduce risk.

Submitting a Substitution Request

The best way to submit a Substitution Request is by reviewing the Contract Document and following the procedures set forth in Section 01 25 00 of Division 01. This includes filling out a Substitution Request Form, such as CSI Form 1.5C. If the general contractor does not readily provide the Contract Document at bid time, be sure to request it.

Substitution Request procedures vary from project to project, especially during the construction phase. Some don't allow substitutions altogether. It's critical that you read the procedures in Section 01 25 00 carefully to avoid incomplete or inapplicable submissions. These are some of the most common Substitution Request deliverables:

- The Substitution Request Form found in Division 01 of the Contract Document.
- Detailed comparison between the substitution and the specified product that clearly outlines advantages in performance, quality, aesthetics, sustainability, installation, lead time, etc.
- Product data including manufacturer name, test reports, drawings, and fabrication and installation procedures. This information should clearly show that the substitution meets specs. The test reports must verify that the product complies with local codes. In some jurisdictions, it may be beneficial to review substitutions with the Authority Having Jurisdiction.
- List of Contract Document revisions needed to accommodate the proposed substitution. Note: The less revisions needed the better.

- List of completed projects where the substitution was used. Projects should be similar to the one in question.
- Warranty and service information from the manufacturer. Must be equal to current specification.

When submitting a Substitution Request, it's very important to be thorough, concise, accurate, and clear. This is particularly critical because of the tight schedules that architects face. You should clearly point out where the substitution adds value, and where it's superior to the specified product. If the substitution does not meet the specs, do not proceed with the request.

A Substitution Request is an involved process, which is why it becomes necessary to seek the assistance of a product manufacturer representative. An experienced representative will quickly respond to questions, and can supply all the documentation needed for the Substitution Request. This includes test reports, drawings, fabrication and installation details, performance data, LEED Statements, costs, and lead times. They will make sure there's no guesswork involved at any point in the process.

The Architect's Perspective

Architects regularly look for ways to reduce lead times and costs, while improving performance and aesthetics. This is why Substitution Requests are distinctly relevant. The purpose of a Substitution Request is to convince the project architect(s) to accept your product. In order to do so, you must understand what the architect is looking for.

Architects use several methods to specify products. For example, they can list performance criteria, industry standards the product must meet, or they can name a specific product and manufacturer. Understanding these methods can help you and the manufacturer representative identify in what areas the substitution is superior. Interestingly enough, the more control the architect demonstrates in the selection of a product, and the more detailed they are, the more opportunity there is for a substitution.

As previously mentioned, one of the most important things in a Substitution Request is to be thorough, concise, accurate, and clear. Explain exactly how the product meets specs and provide supporting documentation. If the architect does not have enough information to evaluate the substitution, or if the information is poorly organized, the request will be rejected. Make it easy for the architect to find the key information they need to compare the substitution and send a recommendation for approval to the owner.

"Making the comparison of products as easy and straightforward as possible for the architect increases your chances of approval," said Brian McClure, Associate, RA, CSI, CCCA at Stantec. "The information provided should be complete and presented in an orderly fashion. Avoid conflicting test data because it makes it more difficult to determine equivalency between products."

When reviewing a Substitution Request, architects typically ask:

- Does the product manufacturer have a good reputation?
- Does the product comply with Contract Documents?
- Will there be any issues with schedule or installation?
- Is the warranty and service comparable?
- Does it meet sustainability objectives and code?
- Is the product compatible with other trades?

Becoming familiar with, and addressing the questions an architect asks will help a glazing contractor put together an effective Substitution Request. Remember that the less time-consuming it is to review, the more likely it will be approved.

AIA Document A701-1997, *Instructions to Bidders*, provides basic requirements for submitting Substitution Requests in Section 3.3. The procedures defined therein essentially give architects only six days to review substitutions, which is not a lot of time. That's why it shouldn't be left up to the architect to research the product. The burden of proof lies with the submitter, and they must ensure that their submittal is clear and concise to give architects enough time to make informed decisions.

"We don't have much time to review Substitution Requests because of demanding schedules," said Cherise Lakeside, Specification Writer, CSI, CDT, SCIP at LSW Architects, and co-founder of Letsfixconstruction.com. "If you submit a side-by-side comparison of the products with your request, it will save us valuable time and significantly increase your chances of getting the approval." Be aware that Substitution Requests often translate to additional services and billable hours on behalf of the architect. Because of this and strict schedules, it isn't possible for the architect to research every substitution to determine if it can be used in the project.

Conclusion

Product substitutions are commonplace in construction. General contractors and architects are well aware that substitutions can have a positive impact on costs, lead times, and quality. When submitting a Substitution Request, be sure that your product meets specs, and can clearly benefit the project. Architects are facing tighter schedules so make it as organized and concise as possible to save them time.

It's very important that a glazing contractor carefully follow the Substitution Request procedures set forth in Division 01, Section 01 25 00 of the Contract Document. They should also seek the assistance of the product manufacturer when organizing all deliverables. Reducing costs, lead times, or increasing performance can help them win a job. It can also get the product included in the specs of a future project.

With every successful Substitution Request, a glazing contractor builds a stronger reputation because they've shown they can add value to projects. As a result, they have the opportunity to establish favorable relationships and increase the likelihood of repeat business.

LetsFixConstruction.com

What is it?

Let's Fix Construction is an avenue to offer creative solutions, separate myths from facts and erase misconceptions about the architecture, engineering and construction (AEC) industry.

Possessing hundreds of years of combined experience in all facets of construction, the contributors of 'Let's Fix Construction' demonstrate the way things are supposed to be in AEC. It is sometimes too easy to offer complaints without offering a resolution and that is why 'Let's Fix Construction' was born.

While we aren't here to offer solutions to *all* of the problems you face, we are here to let you know that you aren't the only one seeing issues in the office or in the field. We are here to offer a new point of view, our thoughts on what we see and perhaps an answer or two along the way that you may be able to use.

Would you like to contribute your voice? Read here for how

WHO?

Let's Fix Construction was co-founded by two opposing coast AEC professionals.

Eric D. Lussier of [Precision Athletic Surfaces](#), hailing from the East, just outside of Burlington, Vermont and Cherise Lakeside, Specifier for [LSW Architects](#) of Vancouver, WA and representing the West.

Having met through the Construction Specifications Institute and keeping in touch through social media, Eric and Cherise decided to do more than just gripe about issues plaguing the industry, and created [LetsFixConstruction.com](#) on August 15, 2016.

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

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