

SPECWORK



Hello Winter and December!

In This Issue



- President's Thoughts / Cartoon
- \LRCSI Events / December Festive Holiday Night
- CSI Nashville - CDT Course Information
- Fixed-It Friday: What Would You Specify? - By: Lori Greene, I Dig Hardware Blog
- Fixed-It Friday: Fire Exit Hardware - By: Lori Greene, I Dig Hardware Blog
- Wordless Wednesday: Elopement Prevention - By: Lori Greene, I Dig Hardware Blog
- Wordless Wednesday: Obstacle Course - By: Lori Greene, I Dig Hardware Blog
- Wordless Wednesday: The Stockyards / What Would You Do? Stockyards Follow-Up - By: Lori Greene, I Dig Hardware Blog
- FDAI: Inspection Criteria 3 - By: Devin Bowman , Technical Glass Products
- FDAI: Inspection Criteria 4 - By: Jason Allen, Allegion
- The Hidden Building Defect Costing Companies in Lost Productivity - By Ron Blank and Associates
- Eco Brutalism: The Bold New Frontier Where Raw Architecture Meets Radical Sustainability - By: Ron Blank, Ron Blank and Associates
- Little Rock Chapter Information

President's Thoughts

By: Billy J. Mathis, FCSI, CDT, Little Rock Chapter President



One thing is given for every organizational leadership, they will age out and become a hinderance. Not because of their actions (although there are exceptions to this) but rather their inability to adapt and keep the organization relevant to today's society.

Over the next few decades, the rising generation of future leaders will be leading our organizations through radical change. Fostering and focusing on this talent does not just future-proof your organization – it allows you to create the future.

Organizations need to reshape the ways in which they attract, retain and reward future leaders, enabling them to remain agile, innovative and a step ahead of the competition. Equipping future leaders with the skills, mindsets, and behaviors to drive their own learning and take responsibility for their development is critical.

At the heart of all organizational performance is the ability for individuals to work effectively together. Building high-performing teams is not simply about assembling talented individuals. It's crucial to establish trust, alignment and shared direction.



Impact sees teamwork development as integral to building more human-centered organizations. Team development is the process of strengthening the collective effectiveness and alignment of teams to ensure they lead with clarity and impact across the organisation.

Since every team's obstacles are unique, each organization will need to evaluate their needs based on the particular obstacles known and develop a method of reviewing actions based on the unknowns as they arise.



Barrels

OF CHEER &
EVENINGS MADE

Bright

JOIN US FOR A
FESTIVE HOLIDAY NIGHT

THURSDAY, DEC 4 2025

6 PM - 9:30 PM

SOUTHERN TAIL BREWING

900 E 9TH ST, LITTLE ROCK, AR

wear your best plaid

RSVP BY: DEC 2



AMERICAN
SOCIETY OF
INTERIOR
DESIGNERS





Certification

The CSI Certifications are designed to educate, inform and validate those in all areas of design and construction. The Nashville CSI Chapter aggressively promotes the Construction Documents Technology (CDT) certification program which is the basis for the other three certifications: CCS, CCCA and CCPR. Starting in February each year the Nashville Chapter provides 10 weeks of two hour classes focused on the CDT criteria. The CDT Certification is a comprehensive overview for anyone who writes, interprets, enforces, or manages construction documents. Classes are open to anyone (within the Gulf States Region) interested. CSI membership is not required and there is no cost to attend the classes. The CDT classes cover MasterFormat, UniFormat, AIA A201 – 2017 General Conditions and various other documents commonly used in construction. To find out more about CSI and the CDT and other Certification programs visit csiresources.org/home and click on Certification. In addition to the CDT classes, the chapter may provide assistance for candidates who intend to take the CCS, CCCA or CCPR exams. For more information contact: Carl Manka CManka@comcast.net or Lynn Jolley LJolley@comcast.net Class information is shown below.

CSI CDT Classes will be live online using Zoom – Thursdays from 5:00 pm until 7:00 pm CST starting February 12, 2026 and running for 10 weeks. Invitation is open to anyone in the CSI Gulf States Region. Membership in CSI is not required to attend these classes. A 2025 CDT Registration form is available on the CSI Nashville website: <https://csinashville.org/> Click on Certification.

We will use the CSI Project Delivery Practice Guide (PDPG) – Third Edition as our class text. Students should have access to a digital or hard copy of the PDPG-3. It is available from <https://www.csiresources.org/home> or check around to borrow a copy. We will also use AIA A201-2017 General Conditions and related documents. Each class is eligible for 2 CEU's. Upon request we will issue an attendance certificate for each class.

Agenda and Class Schedule

- Week 1 – February 12 Fundamentals – Domain 1, Chapter 1 plus Introduction & Formats (CM)
- Week 2 – February 19 Project Conception & Delivery – Domain 2, Chapter 2&3 (CM)
- Week 3 – February 26 Design Process – Domain 3, Chapter 4 (LJ)
- Week 4 – March 5 AIA A-201 General Conditions (JWP)
- Week 5 – March 12 AIA A-201 General Conditions (JWP)
- Week 6 – March 19 Construction Documents – Domain 4, Chapter 5 (LJ)
- Week 7 – March 26 Procurement & Preconstruction – Domain 5&6, Chapters 6&7 (SP)
- Week 8 – April 2 Construction – Domain 7, Chapter 8 (CC)
- Week 9 – April 9 Life Cycle Activities – Domain 8, Chapter 9 & General Review (CM – LJ)
- Week 10 – April 16 Mock Exam

Fixed-It Friday: What Would You Specify?

By: [Lori Greene](#), I Dig Hardware Blog

TJ Gottwalt of Allegion sent me today's Fixed-it Friday photo, taken on a Canadian ferry pier. The added surface bolts are a common (and non-compliant!) "fix" for vertical rod panic problems. What would you have specified instead, and why?



Fixed-It Friday: Fire Exit Hardware

By: [Lori Greene](#), I Dig Hardware Blog

John Danes of Allegion sent me today's Fixed-it Friday photo...I'm sure someone thought they were solving a problem with this "fix." Fire exit hardware is not available with mechanical dogging, because fire doors are required to have hardware with an active latch bolt. This helps to ensure that the door will stay closed and latched during a fire.

In the photo below, someone has modified the hardware to have mechanical dogging via the hex key – this is not permitted – not to mention the wood wedge propping open the fire door. If a fire occurs, the fire door assembly designed to help contain the fire and protect the means of egress will instead create a big hole in the fire protective barrier. The modification also voids the listing of the hardware.



Wordless Wednesday: Elopement Prevention

Posted by [Lori Greene](#), July 2nd, 2025

I received today's Wordless Wednesday photo from an AHJ – the photo was taken in a school, where the mag-lock was added to deter elopement. Note the height of the push button!

If a door is equipped with an electromagnetic lock, it must be released for egress either by a switch in the door-mounted hardware (+ loss of power), or by a sensor on the egress side and an auxiliary push button that meets specific requirements (+ loss of power + fire alarm/sprinkler activation). You can read more about the requirements for mag-locks in this article: [Decoded: Applications for Electromagnetic Locks](#).

An alternative for deterring elopement from a classroom would be an exit alarm or a delayed egress lock (if the classroom has an occupant load of less than 50 people). Mounting the hardware – or in this case the release switch – above the allowable mounting height is not a solution!



Wordless Wednesday: Obstacle Course

Posted by [Lori Greene](#), July 2nd, 2025

Paul Timm of Allegion sent me today's Wordless Wednesday photo, taken in a school. This door is clearly marked as an exit, but egress will definitely be a challenge!



Wordless Wednesday: The Stockyards

By: [Lori Greene](#), I Dig Hardware Blog

The more I look at today's Wordless Wednesday photos, the more deja vu I'm feeling. Do these doors look familiar to anyone else? I saw them at the Stockyards last week but I'm thinking someone may have sent me photos of the same doors previously. I looked, but I didn't find them in my archives.

I guess the delayed egress locks weren't providing this enough security for this western wear store, but I'm sure the padlocked gate on the outside stops shoplifters in their boots. Unfortunately, it also prevents egress in an emergency.



What Would You Do? Stockyards Follow-Up

By: [Lori Greene](#), I Dig Hardware Blog

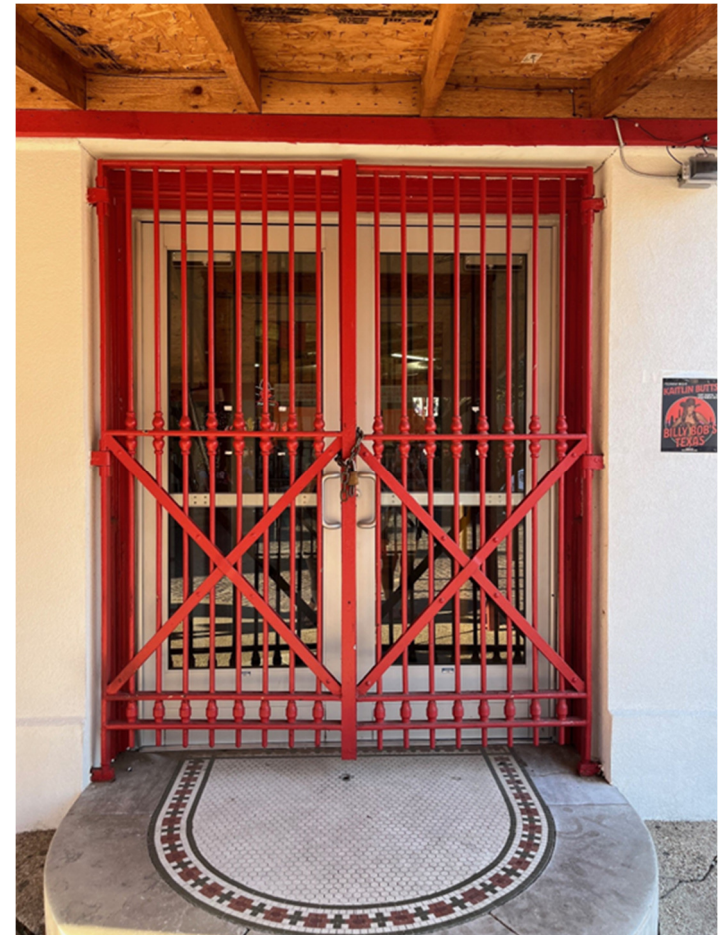
Last week I posted some photos that I took during my recent trip to Fort Worth for the DHI ConNextions conference. The photos were taken in a busy western wear store while it was open for business. From the inside there were some egress challenges, and on the outside there was a padlocked swinging gate that would have definitely prevented any attempts to exit (or enter).

A reader asked me whether the locked gate would be permitted by code if the building was not occupied – a fair question. The 2024 IBC addresses “security grilles” and permits their use in certain occupancy types after hours. BUT – the IBC section specifically permits horizontal sliding or vertical security grilles and limits their use to the main exit (not secondary exits). The code also states that the exit must be openable from the inside without the use of a key or special knowledge or effort when the space is occupied.

Because the security gate in question (see photo) is not a horizontal sliding or vertical security grille, the following section of the 2024 IBC would apply, in my opinion:

1010.4 Gates. Gates serving the means of egress system shall comply with the requirements of this section. Gates used as a component in a means of egress shall conform to the applicable requirements for doors.

The gate in the photo would not meet the IBC requirements for doors, regardless of whether the building was occupied or not. I’m interested to hear your thoughts on this...why would a horizontal or vertical grille be acceptable but not a swinging gate (I have some ideas). Is there any model code language that would permit the application shown in the photo to be used when the store was closed?



FDAI: Inspection Criteria 3

By: Devin Bowman , Technical Glass Products

Today's post is the third post exploring the inspection criteria for fire door assemblies. The third criterion listed in NFPA 80 for the inspection of swinging doors is:

(3) Glazing, vision light frames, and glazing beads are intact and securely fastened in place, if so equipped.

In today's guest blog post, Devin Bowman, General Manager of Technical Glass Products (TGP) and AD Systems, shares information about glazing in fire door assemblies.



This full-lite fire-resistance-rated glass door offers narrow profile frames to maximize the glazing area along the project's central stairwell. Credit: Courtesy of TGP

It's What You Don't See: Fire-Rated Glazing in Door Assemblies

In the past, model building codes limited the use of fire-rated glazing—typically for one of two reasons. First, when a fire door assembly includes glazing, the assembly is tested with glazing of a specific size to ensure proper performance during the test. Vision lights larger than the size tested may require a different fire rating, depending on the assembly, to meet code requirements. The other issue in the past was the traditional wired glass that was commonly used in fire door assemblies. This type of glass does not meet the impact requirements for doors and has been slowly phased out for most applications since the 2006 edition of the International Building Code (IBC).

These limitations made it difficult to design for increased daylight access and improved visual connection. To help sideline these limitations, manufacturers refined, improved and diversified their offerings. In doing so, not only did the performance of fire-rated glass improve but so did its aesthetic appeal and ability to more closely mimic the look of non-rated glazing assemblies.

Currently, designers and specifiers have a wide range of fire-rated glazing options that they can use as sidelights, transoms and vision panels. They can even create full-lite fire doors that meet code requirements for most fire door assemblies. This is true of both temperature-rise doors and non-temperature-rise systems.

Given the rise in fire-rated glazing options, it is important for building professionals, from architects and specifiers to inspectors and code officials, to understand the possibilities with these materials and systems. One of the key considerations is knowing the difference between fire-protection-rated and fire-resistance-rated glazing.

Fire-protection-rated vs fire-resistance-rated: know the difference

For the full assembly to be considered code-compliant, each component of a fire door must meet the minimum requirements for the door's use within the built environment. This includes any glass used. While there are several data points that determine a product or systems' appropriateness for an application, often determining if a fire rating is fire-protective or fire-resistive is the first hurdle in achieving code compliance.

Fire-protective glass undergoes the fire test and hose stream test, depending on its rating duration. In a certified, third-party lab, the glass and its frames are heated at a specified, repeatable rate until the temperature reaches a maximum that mimics conditions commonly observed in actual building fires. To be certified as fire-protective, these glazing systems must defend against the spread of fire and smoke for their rating duration—usually between 20 and 180 minutes. It is important to note that fire-protective glazing does not need to block the transfer of heat. As such, these systems are subject to area and size limitations under the applicable building code for a project.



Fire-protection-rated glass stops the spread of smoke and fire while fire-resistance-rated glass blocks smoke fire, radiant and conductive heat. Credit: Courtesy of TGP

Fire-resistance-rated glazing systems are subjected to similar testing standards as fire-protection-rated ones, but they go a step beyond fire-protective glazing. To achieve a fire-resistive classification, the glazing assembly must block fire and smoke as well as radiant and conductive heat, as determined by standards developed by the National Fire Protection Association (NFPA), ASTM International (ASTM) and UL Solutions (UL). Since systems with fire-resistive ratings block heat transfer from both sides of the assembly, their size, area and scope is not limited—as long as they meet the durational requirements for their application these glazing solutions can be specified as floor-to-ceiling walls and as full-lite fire doors.

For ease of reference, applicable test standards can be found on the glazing's fire label, which is standardized according to the IBC. Labels typically include the fire rating category, which application criteria it meets (window, wall, ceiling/floor and

door), if it passes the hose stream test, its duration and if it meets temperature rise criteria. Technical Glass Products (TGP) provides a reference tool that breaks down what each mark on a fire label means. It can be used in tandem with the online version of TGP's product SpecifIRE tool to help project teams find the right glazing systems for their fire door needs.

Rising to the challenge: types of fire doors

In knowing the difference between fire-protection-rated and fire-resistance-rated glass and other basics of fire-rated door specification, designers can more efficiently create fire door assemblies that meet code requirements and improve sightlines between adjacent spaces. This knowledge allows these professionals to more accurately specify the correct products and systems early in the design process, reducing time spent on respecification or redesign.

For example, in critical areas like exit enclosures and other 2-hour rated fire barriers, the potential for high heat buildup is a major concern. To prevent the radiant heat from igniting materials on the safe side of the wall, sidelights and transoms are typically required to use fire-resistive glass. Without it, vision panels are limited to a small size, usually under 100 square inches (sq in), to minimize heat transfer.

By comparison, in a typical 1-hour corridor, the fire safety strategy is less about heat containment and more about limiting the spread of fire and smoke. For this reason, fire-protective glass can be used more extensively in door vision panels, sidelights, and transoms. The rating requirements for fire doors and other opening protectives can be found in Table 716.1(2) of the 2024 edition of the International Building Code (IBC).

In addition, according to this table, there are certain applications, such as exit access stairways and ramps, that require glazing to contribute to a fire door's ability to meet temperature-rise criteria. Also known as temperature-rise doors, these systems block heat such that the ambient temperature on the non-fire side of a door will not exceed a specified temperature for at least 30 minutes during the fire tests—this helps ensure safe passage for occupants during a fire emergency. Common temperature benchmarks for temperature-rise doors are 250, 450 and 650 degrees Fahrenheit, with 250 degrees being the most stringent.

Full-lite fire-rated door assemblies that meet temperature-rise criteria can contribute to designs that prioritize increasing daylight access and improving visual connectivity. When these systems utilize narrow-profile fire-rated frames, they can offer a close visual match to adjacent non-rated assemblies. In fact, the renovation of Alan Magee Scaife Hall at the University of Pittsburgh includes Fireframes® Heat Barrier Series fire-rated doors. These doors increase the glazing area along the building's central stairwell while the framing profiles create a cohesive design aesthetic between the fire-rated systems and the neighboring, non-rated exterior curtain wall.

Staying in frame and going beyond the glass

Again, it is crucial to understand that each component of a fire door must meet the minimum requirements for the door's application within the built environment to be considered code-compliant. In addition to the glazing, this includes hardware, framing and other component parts. When it comes to framing, this component must meet the requirements for the fire door's specific application and context. Additionally, its design, specifically profile dimensions and material, is often crucial to meeting project goals outside of code-driven minimums.



Versatile cover caps allow a wide range of code-compliant design options for fire doors and adjacent assemblies. Credit: Courtesy of TGP

For framing profile dimensions, there are many things that impact its design. First, the frame itself, like the glass it holds, must pass fire test standards. Further, it must have the strength to hold fire-rated glazing, which can be three to four times the weight of non-rated glass. In the past, these conditions resulted in fire-rated frames with wider profiles and bulkier edges than non-rated frames. This can be distracting when multiple glazing systems are in close proximity, such as a stairwell enclosure.

A more recent alternative is rollformed steel frames, which can be made narrow enough to closely resemble non-rated systems. Strong enough to hold high-performance fire-rated glass, this type of framing system can also incorporate cover caps in different materials—from aluminum to real wood veneer—without significantly increasing profile width. Not only does this help maximize code-compliant glazing areas but it also widens the contexts where this type of framing can be seamlessly integrated into the built environment.

Fire-rated design almost always comes with challenges

Whether a project needs a fire door that incorporates some amount of fire-rated glass or its design includes multiple fire-rated glazing assemblies across several elevations, designing, specifying and installing fire-rated glazing systems can come with several challenges. As such, project teams are encouraged to consult local building codes and to clarify ambiguities with an Authority Having Jurisdiction (AHJ) to help ensure the systems they specify meet the code-driven requirements.

Beyond this, architects and design firms can contact fire-rated glazing manufacturers, like TGP, to request literature or presentations that either clarify the basics of fire-rated design or speak directly to a project-, application-, or performance-based challenge. Project teams can also work closely with manufacturers to design systems that meet code requirements without compromising building goals for occupant wellness and comfort.

Meeting fire and life safety requirements begins with design, but it also entails routine maintenance and continued inspection to ensure no in-field modifications void a fire door's labeling. Stay tuned for the next post in this series, which will examine inspecting the door, frame and hardware to ensure they are in proper working order.

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

FDAI: Inspection Criteria 4

By: Jason Allen, Allegion

In today's guest blog post, Jason Allen, product support representative for Allegion, discusses the importance of maintaining fire doors in proper working order.



Ensuring Fire Door Safety: The Critical Role of Properly Functioning Doors, Frames, and

Fire doors are essential components of building safety, designed to contain fires and protect occupants. For these doors to perform effectively during an emergency, they must be in proper working order. But what exactly does this mean, and how can you verify it?

What Is Proper Working Order?

A fire door in proper working order is one that operates as intended—closing fully and latching without obstruction. This includes the door and its hardware, such as hinges, latches, and closers, functioning correctly and without damage or misalignment. Proper operation ensures that in case of a fire, the door will effectively contain flames and smoke, deterring their spread and helping to protect the means of egress.

How to Check for Proper Functionality

Regular inspections are vital. Start by manually testing the door: disconnect power to any hold-open devices, then release the door to see if it closes fully and latches securely. Check for debris in the closer track, sagging or dragging hinges, debris or paint build-up, or any sticking parts that prevent smooth operation. Also, verify that the door swings freely with minimal force—indicating proper hinge and frame alignment. Additionally, ensure that the door closer's spring and force settings are correctly adjusted, and that the door doesn't drag or bind during closure.

Common Issues and Their Causes

Many problems stem from improper installation, damage, or lack of maintenance. Common issues include:

- Sagging or dragging doors due to misaligned hinges or warped frames
- Sticky latches or latches that don't fully engage
- Closers set with incorrect spring or force settings, preventing proper closure
- Missing or broken hardware, such as screws or spacers, which can impair operation
- Debris or obstructions in the closer track or threshold

Addressing Issues Effectively

Most operational problems can be fixed through proper adjustment or replacing damaged parts. For example, ensuring the hinges are correctly installed, adjusting the door closer, or checking the alignment of the latch and strike can restore proper function. If hardware is missing or broken, consult the parts guide for compatible replacements. Regular maintenance and timely repairs are crucial—if unsure, consult with a qualified technician or refer to available resources.

Additional Resources

Allegion offers comprehensive support tools, including detailed parts guides, installation instructions, and troubleshooting resources available on our website. The technical support team is also ready to assist with application advice, installation guidance, and parts identification—helping ensure your fire doors remain reliable and compliant. For ongoing safety, schedule routine inspections and leverage these resources to keep your fire doors in optimal condition.

Conclusion

A fire door's ability to perform during an emergency hinges on its proper operation. Regular checks, understanding common issues, and prompt maintenance are key to ensuring safety. Remember, well-maintained fire doors are a vital line of defense in protecting lives and property.

The Hidden Building Defect Costing Companies in Lost Productivity

By Ron Blank and Associates



There's a phantom haunting even the most meticulously designed sustainable buildings. It sabotages productivity, triggers stress, and undermines occupant satisfaction, yet it appears on no energy model, no daylighting analysis, and no material specification. Sound—the forgotten dimension of sustainable design—is quietly writing the soundtrack of failure in many high-performance projects. For architects, interior designers, and engineers pursuing LEED certification, understanding acoustic ecology isn't just another box to check; it's the key to creating truly sustainable environments that support human wellbeing.

The Revolutionary Framework of R. Murray Schafer

In the 1960s, Canadian composer R. Murray Schafer noticed something troubling: the world was getting louder, and nobody was paying attention. Rather than simply complaining about noise pollution, Schafer did something revolutionary—he created an entirely new field of study called acoustic ecology. Through the World Soundscape Project at Simon Fraser University, he began systematically documenting acoustic environments as complex ecosystems worthy of the same attention given to visual environments or natural habitats.

Schafer's groundbreaking book, "The Soundscape: Our Sonic Environment and the Tuning of the World," wasn't just academic theory—it was a call to action. He argued that we needed to become "ear cleaners," actively working to improve acoustic environments just as environmentalists work to clean up water and air pollution. This radical idea—that acoustic quality is as important to human health as clean air or water—is now increasingly validated by contemporary research and embedded in the LEED framework.

Understanding Soundscapes: Beyond Decibel Measurements

A soundscape, as Schafer defined it, is the acoustic environment as perceived by people within it. This definition is crucial: a soundscape isn't just objective sound pressure levels—it's the subjective, holistic experience of an acoustic environment. It includes what we hear, how we interpret those sounds, what meanings they carry, and how they make us feel.

Schafer identified three fundamental elements that compose any soundscape. First are keynote sounds—the background sounds that define a place, like the constant hum of HVAC systems in most contemporary buildings. Second are sound signals—foreground sounds meant to be heard and responded to, such as phone rings, door chimes, and fire alarms. Finally, there are soundmarks—unique sounds specific to a particular place that give it acoustic identity, like a distinctive water feature in a lobby or the particular acoustic character of a significant space.

This framework shifts acoustic design from problem-solving ("how do we reduce noise?") to composition ("what acoustic environment do we want to create for this space?"). For design professionals, this opens creative possibilities that go far beyond simply meeting minimum standards.

The Health Imperative: Why Acoustics Matter

The research connecting acoustic quality to human health is compelling and clear. The World Health Organization has identified noise pollution as a major environmental health threat. Chronic noise exposure, even at levels below those that cause hearing damage, significantly impacts cardiovascular health, increasing blood pressure, heart rate, and stress hormone levels. Long-term exposure is associated with increased risk of heart disease and stroke.

Sleep disturbance is another critical issue. Noise interferes with sleep onset, causes awakenings, and reduces sleep quality, leading to daytime fatigue and decreased cognitive performance. For spaces where people work or learn, the implications are profound. Research consistently shows that noise impairs concentration, memory, and complex cognitive tasks. Studies have found that office workers in poor acoustic environments are 66% less productive on complex tasks, and eliminating a single nearby conversation can improve productivity by 48%.

When translated to economic terms, the cost of acoustic problems far exceeds the investment required to solve them. For a typical office building where poor acoustics reduces productivity by just 5%, the cost of that lost productivity across all occupants over a year is staggering. This is why the LEED rating system has evolved to treat acoustic performance not as a luxury, but as fundamental to building sustainability.

LEED v4.1 and Acoustic Performance

The LEED v4.1 BD+C and ID+C Acoustic Performance credit reflects Schafer's acoustic ecology philosophy. Its intent is clear: "To provide workspaces and classrooms that promote occupants' wellbeing, productivity, and communication through effective acoustic design." Notice the language—it's not about eliminating noise; it's about promoting wellbeing, productivity, and communication through thoughtful acoustic composition.

The credit requires projects to meet two of three criteria: HVAC background noise levels, sound transmission requirements, and reverberation time specifications. These requirements vary by space type, recognizing that different spaces have different acoustic needs. Conference rooms need hi-fi conditions where sounds are distinct and clear. Open offices benefit from some acoustic masking that provides privacy without creating stress. Restaurants can tolerate more lo-fi conditions where background sound actually enhances the dining experience.

Practical Strategies for Design Professionals

Integrating acoustic ecology principles into LEED projects requires intentional design from day one. Start by actually listening to the environments you're designing—not just measuring with instruments, but spending time understanding their acoustic character at different times of day.

For keynote sounds, instead of just trying to make mechanical systems quiet, consider the quality of sound they produce. Smooth, consistent white noise is generally less annoying than tonal sounds or fluctuations. Consider incorporating natural sounds as keynote elements—water features provide pleasant acoustic masking while contributing to biophilic design, and carefully designed natural ventilation can introduce gentle, varying sounds that connect occupants to exterior conditions.

Material selection must balance acoustic performance with other sustainability criteria. Mineral fiber ceiling tiles offer high acoustic absorption with recycled content and low VOC emissions. Fabric-wrapped panels can provide wall absorption while meeting indoor air quality standards. The key is systems thinking—considering how choices affect acoustic performance, environmental impact, indoor air quality, and maintenance simultaneously.

For exterior noise isolation, the building envelope is critical. Windows are typically the weakest link, requiring laminated glass or increased airspace between panes for better performance. Operable windows present a particular challenge, creating tension between natural ventilation strategies and acoustic performance. Solutions include providing both operable windows and mechanical backup, or locating operable windows on quieter facades.

Acoustic Democracy and Social Equity

One of Schafer's most provocative concepts is "acoustic imperialism"—the use of sound as an assertion of power and control over space. Throughout history, those with power have controlled soundscapes, from church bells asserting religious authority to factory whistles imposing industrial discipline. In buildings, whoever makes the loudest sound effectively controls the space.

For LEED projects committed to occupant wellbeing and social equity, addressing acoustic imperialism means creating what might be called "acoustic democracy"—environments where everyone has access to appropriate acoustic conditions, where acoustic needs are balanced rather than one group's needs dominating. This requires acoustic zoning that separates incompatible uses, sound isolation that prevents acoustic intrusion, and design that doesn't privilege some users over others.

The Path Forward

Great sustainable buildings are acoustically excellent buildings. The integration of R. Murray Schafer's acoustic ecology principles with LEED's sustainability framework offers design professionals a powerful toolkit for creating environments that truly support human wellbeing and productivity.

The challenge for architects, interior designers, and engineers is to elevate acoustic design from an afterthought to a primary consideration, to move from reactive problem-solving to proactive composition, and to recognize that the soundscape we create is as important to building sustainability as energy efficiency or water conservation. By doing so, we can ensure that every LEED project not only performs well on paper but delivers acoustic environments that allow occupants to thrive.

The opportunity is clear: to compose buildings that sound as good as they look, that support human flourishing through every sensory dimension, and that demonstrate what truly sustainable design can achieve when we attend to all aspects of human experience—including the one we too often forget to hear.



LEADERSHIP

LEADER

TEAM

SUCCESS

RESPONSIBILITY

MANAGER

ROLE

COACHING

EXPERT

MOTIVATION

SUCCEED

NEEDS

POWER

APPRECIATION

RESPECT

DELEGATING

INFORMATION

MANAGEMENT

ESTIMATE

SKILLS

DISCIPLINE

GOAL

COMPETENCE

SUPPORTING

SOCIAL

TOOLS

DIRECTING

COMMITMENT

COLLABORATING

SELF-RELIANT

ATTITUDE

BEHAVIOR

SAFETY

STYLE

TRUST

EMOTION

FEEDBACK

EMPOWERING

Eco Brutalism: The Bold New Frontier Where Raw Architecture Meets Radical Sustainability

Ron Blank, Ron Blank and Associates



The architectural world is witnessing a provocative evolution: Eco Brutalism, a movement that reconciles the uncompromising geometry of mid-century Brutalism with urgent environmental imperatives. For design professionals navigating increasingly stringent sustainability mandates while seeking architectural distinction, this emerging approach offers compelling solutions that refuse to sacrifice visual impact for environmental responsibility.

Beyond Aesthetic Contradictions

Eco Brutalism challenges a fundamental assumption that has constrained sustainable design for decades—that environmental consciousness requires architectural restraint. This movement demonstrates that buildings can simultaneously command attention through monolithic forms while operating as sophisticated environmental machines. Unlike the concrete-heavy structures that defined post-war Brutalism, contemporary eco-brutalist projects employ thermal mass strategically, integrate passive systems as primary design generators, and celebrate renewable energy infrastructure as architectural expression rather than technical necessity.

The philosophical foundation traces directly to Brutalism's original commitment to honest material expression. When Alison and Peter Smithson declared their intention to expose structure "without interior finishes wherever practicable," they established principles of transparency that naturally extend to environmental systems. Eco Brutalism amplifies this honesty, making visible not just structural forces but the building's entire relationship with natural systems—sun paths, prevailing winds, water cycles, and seasonal rhythms.

Material Innovation as Design Language

The material palette has evolved dramatically from béton brut. Today's eco-brutalist practitioners achieve visual weight and textural richness through high-performance concrete incorporating recycled aggregates and supplementary cementitious materials that dramatically reduce embodied carbon. Engineered timber systems create monolithic appearances while sequestering atmospheric carbon. Innovative composites blend sustainability with structural performance, enabling bold cantilevers and dramatic spans without environmental compromise.

Consider the Tiing resort in Bali, where architect Nic Brunsdon employed bamboo formwork to cast concrete walls, creating richly textured surfaces that honor traditional materials while achieving distinctly contemporary results. This approach demonstrates how material innovation can simultaneously reduce environmental impact and enhance architectural character—the bamboo impressions transform utilitarian concrete into expressive surfaces that respond to tropical light conditions throughout the day.

Passive Systems as Spatial Generators

Eco-brutalist design inverts conventional relationships between environmental systems and architectural form. Rather than concealing mechanical equipment, these buildings express passive strategies as primary spatial experiences. Thermal mass walls position themselves according to solar geometry, becoming sculptural elements that moderate interior temperatures through physics rather

than fossil fuels. Natural ventilation shafts transform into vertical atriums that organize circulation and create dramatic spatial sequences. Light wells and clerestories shape building volumes while eliminating artificial lighting requirements.

Studio MK27's Jungle House in Brazil exemplifies this integration. The residence dissolves boundaries between interior and exterior through floor-to-ceiling glazing positioned to capture forest breezes while framing living tableaux of tropical vegetation. The structure floats above the forest floor on minimal supports, reducing site disturbance while maximizing natural ventilation through stack effect. Every design decision serves both environmental performance and experiential richness—sustainability becomes inseparable from architectural quality.

LEED Integration and Performance Metrics

For practitioners pursuing LEED certification, eco-brutalist strategies align remarkably well with multiple credit categories. The integrative design process fundamental to successful eco-brutalist projects directly supports the Integrative Process prerequisite, as these buildings demand early collaboration between architects, engineers, and sustainability consultants to achieve their ambitious environmental goals.

The thermal mass characteristic of eco-brutalist design provides significant advantages in Energy and Atmosphere credits. Thick walls moderate interior temperatures, reducing mechanical system loads by 30-50% compared to lightweight construction. When combined with building-integrated photovoltaics designed as geometric facade elements, these projects routinely achieve net-zero energy performance. Hotel Marcel in New Haven demonstrates this potential—the adaptive reuse of Marcel Breuer's 1970 Brutalist structure achieved both LEED Platinum and Passive House certification through triple-glazed windows, comprehensive insulation, all-electric heat pumps, and over 1,000 solar panels generating 100% of electrical demand.

Materials and Resources credits benefit from eco-brutalism's emphasis on durability and recycled content. The movement's focus on robust construction methods and timeless design approaches extends building useful life, reducing long-term environmental impact through eliminated renovation cycles. Regional materials common in eco-brutalist projects support local economies while reducing transportation impacts.

Indoor Environmental Quality credits align with dramatic daylighting strategies integral to eco-brutalist design. Light wells and strategically positioned openings bring natural illumination deep into building cores, creating ever-changing patterns while reducing artificial lighting energy. Natural ventilation systems provide superior air quality compared to mechanical alternatives, while thermal mass moderates temperature swings for consistent comfort.

Addressing Critical Perspectives

Design professionals must acknowledge legitimate concerns surrounding cost and scalability. Eco-brutalist projects often involve higher initial construction costs due to integrated systems complexity and specialized materials. However, lifecycle analysis frequently demonstrates economic advantages through reduced operational costs, minimal maintenance requirements, and extended building lifespans.

Scalability concerns deserve serious consideration. Many celebrated projects represent unique, high-budget commissions on exceptional sites. The challenge for practitioners is adapting eco-brutalist principles—honest material expression, passive system integration, bold geometric clarity—to typical project budgets and urban contexts. This requires focusing on fundamental strategies

rather than signature aesthetics, prioritizing thermal mass optimization, solar orientation, and natural ventilation over dramatic formal gestures.

Cultural appropriateness demands sensitivity to local building traditions and climatic conditions. Eco Brutalism should not impose Western design values universally but rather adapt core environmental principles to regional materials, construction methods, and cultural preferences. Projects like Art Villas Costa Rica demonstrate this potential, integrating locally sourced wood and stone with concrete to reflect Central American craft traditions while maintaining bold geometric expression.

Future Trajectories

The evolution of Eco Brutalism will be shaped by advancing materials science, digital fabrication technologies, and circular economy principles. Climate adaptation will become increasingly crucial as buildings must respond to extreme weather while maintaining architectural character. Advanced computational design tools enable more precise integration of environmental systems with complex geometries. Growing emphasis on design for disassembly will influence material selection and connection details to facilitate future reuse.

For design professionals, Eco Brutalism offers more than aesthetic options—it presents a comprehensive framework for creating buildings that acknowledge environmental realities while delivering the cultural significance and spatial richness that distinguished architecture demands. These structures demonstrate that sustainability and monumentality need not conflict but can amplify each other, creating architecture worthy of our environmental challenges and our human aspirations.



LITTLE ROCK CHAPTER INFORMATION

Chapter Officers

President:
President-Elect:
Immediate Past President:
Secretary:
Treasurer:
Directors
 Operations
 Honors
 Membership
 Education / Certification

Billy J. Mathis, FCSI, CDT
Mindy Burton, CSI, CDT
Open
Carrie J. Gray, CSI, CDT
Clark Wood, CSI

Open
Billy J. Mathis, FCSI, CDT
Clark Wood, CSI
Open

Chapter Info

Chapter Website:

<https://csilittlerock.org>

Chapter Newsletter:

<https://csilittlerock.org> and Click on the Current Newsletter Tab

Chapter Meeting Day and Time:

As Determined by the Chapter Board of Directors and based on availability of the presenters.

Chapter Board Meeting Day and Time:

As determined by the Chapter President

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

